

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Land Management Administration • Solid Waste Program
1800 Washington Boulevard • Suite 605 • Baltimore Maryland 21230-1719
410-537-3315 • 800-633-6101 x3315 • www.mde.maryland.gov

**Groundwater Discharge Permit Application
For Unlined Rubble Landfills**

Authority: Title 9, Environment Article, Annotated Code of Maryland, and Code of Maryland Regulations (COMAR) 26.08.04

Application for: ☐ New Permit ☒ Renewal Permit

Existing Permit No. 2020 -GWD- 2297 Issued Date: 5 / 12 / 2021 Expiration Date: 5 / 11 / 2026

Applicant's Legal Name: Ritchie Land Reclamation LLC

Applicant's Status: ☐ Individual ☒ Corporation ☐ Government ☐ Other: _____

Corporation or Government Federal Tax Identification No.: 521435785

Maryland State Department of Assessments and Taxation (SDAT) ID No.: W12836391

Please note that a business/entity must be registered to do business in Maryland before a permit can be issued. The business or entity's information provided in this application must match the information in the SDAT register.

Proof of workers' compensation coverage is required under § 1-202 of the Environment Article. Please provide one of the following:

(1) A copy of a Certificate of Compliance issued by the Maryland Workers' Compensation Commission; or

(2) Workers' Compensation Insurance Policy/Binder Number: ZAWCI9791301

Applicant's Mailing Address: 24024 Frederick Road, Suite 200 City: Clarksburg State: MD Zip Code: 20871

Applicant's Telephone No.: (301) 428 - 0800 Facsimile No.: (301) 428 - 1736

Emergency Contact Name & Title: Michael Ensor, Sr. V.P. Telephone No.: (301) 428 - 0800

Facility/Site Name: Ritchie Land Rubble Landfill

Facility/Site Address: 2001 Ritchie Marlboro Road City: Upper Marlboro State: MD Zip Code: 20774

County: Prince George's County Maryland Grid Coordinates: N433500 / E136000 - _____

County Zoning Map No.: 82/52 Lot/Parcel No.: 334 and 70 Deed/Liber/Folio No.: 6236@470:13756@019

State Legislative District: 25 Local Council/Election District: 06

Bay Tributary Watershed Code: 02131103 Latitude/Longitude (Deg/Min/Sec): 38 - 51 - 34.74 / 76 - 49 - 54.389

Site Acreage: 288.28 Landfill Acreage: 43

Nature of Business (describe briefly): Rubble landfill activities, including land clearing, construction and building demolition rubble (concrete, rock, brick, lumber, trees, etc.). mulching activities, along with recycling activities.

List Other Environmental Permits Held For the Site: (e.g., NPDES-surface water; PSD-air emissions; RCRA-hazardous waste, etc).

Refuse Disposal Permit No. 2023-WRF-0590A (MDE), Discharge Authorization Permit No. 08101 (WSSC)

General Discharge Permit 15-MM No. MDG499953 (MDE), Stormwater Construction Activity No. 20CPQ086O

Wastewater (Leachate) Description:

Wastewater (leachate) that permeates through the top 2-foot cover layer enters the existing waste, then permeates through the waste until it reaches the cell floor. The leachate then flows through the existing cell floor compacted soil layer and through the strata below the cell floor.

Flow Calculations:

See attachment.

Groundwater Characteristics

(Attach Latest Groundwater Sample Results)

Map Of The Facility

This application must be accompanied by a copy of a U.S. Geological Survey topographical map or road map with a scale of 1" = 2000 feet, showing the exact location of the facility.

By signing this form, I the applicant or duly authorized representative, do solemnly affirm under the penalties of perjury that the contents of this application are true to the best of my knowledge, information, and belief. I hereby authorize the representatives of the Department to have access to the site of the facility for inspection and to records relating to this application at any reasonable time. I acknowledge that depending on the type of facility applied for, other permits or approvals may be required.

Michael Ensor

Signature of Applicant

12-29-2025

Date

Michael Ensor

Applicant's Name (Print)

Senior Vice President

Title

This Notice is provided pursuant to §10-624 of the State Government Article of the Maryland Code. The personal information requested on this form is intended to be used in processing your application. Failure to provide the information requested may result in your application not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment ("MDE") is a public agency and subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by Federal or State law.

Privacy Act Notice: This Notice is provided pursuant to the Federal Privacy Act of 1974, 5 U.S.C. §552.a. Disclosure of your Social Security Number or Federal Employer Identification Number on this application is mandatory pursuant to the provisions of §1-203 (2003), Environment Article, Annotated Code of Maryland, which requires the MDE to verify that an applicant for a permit has paid all undisputed taxes and unemployment insurance. Social Security or Federal Employer Identification Numbers will not be used for any purposes other than those described in this Notice.

Instructions for Completing the
Groundwater Discharge Permit Application
For Unlined Rubble Landfills

INTRODUCTION

Section 9-322 of the Environment Article, Annotated Code of Maryland, requires that a permit be obtained to discharge any pollutant into surface or ground waters of the State. "Discharge" means the addition, introduction, leaking, spilling, or emitting of any pollutant to State waters or the placing of any pollutant in a location where it is likely to pollute. Unlined rubble landfills are required by the Department to obtain a Groundwater Discharge Permit.

You are required to supply information concerning the quality of rainwater percolating through the rubble landfill cell floor. The Department will evaluate your completed application and notify you of any additional requirements if necessary.

WASTEWATER (LEACHATE) DESCRIPTION

Provide a description of the process(es) generating the wastewater (leachate) discharge through the landfill cell floor.

FLOW CALCULATIONS

Determine the daily average volume of wastewater (leachate) discharged through the landfill cell floor. The volume must be reported in gallons per day.

GROUNDWATER CHARACTERISTICS

Attach a list of the parameters being sampled in the groundwater, their Practical Quantitation Limits (PQL), and a copy of the latest laboratory analysis report for these parameters. Groundwater samples must be representative of the quality of the groundwater at the facility. Sample collection, transportation, storage and analysis shall be performed in accordance with a plan approved by the Department. The Department reserves the right to require additional groundwater sampling and analysis if necessary.

For questions regarding this application, please contact the Department at (410) 537-3315.

FLOW CALCULATIONS

**DAILY AVERAGE VOLUME OF LEACHATE DISCHARGED
UNLINED AREA (45 Acres) OF RITCHIE RUBBLE LANDFILL**

1. 35,620 Gallons per day ([GPD]; 1,738,354.70 cubic feet / year for 45 Acres)
2. 792 GPD / Acre

HYDROLOGIC EVALUATION OF LANDFILL PERFORMANCE
HELP MODEL VERSION 4.0 BETA (2018)
DEVELOPED BY USEPA NATIONAL RISK MANAGEMENT RESEARCH LABORATORY

Title: RITCHIE LF- PHASE I-Unlined **Simulated On:** 12/26/2025 10:52

Layer 1

Type 1 - Vertical Percolation Layer (Cover Soil)

C - Clay (Low Density)

Material Texture Number 15

Thickness	=	24 inches
Porosity	=	0.475 vol/vol
Field Capacity	=	0.378 vol/vol
Wilting Point	=	0.265 vol/vol
Initial Soil Water Content	=	0.3713 vol/vol
Effective Sat. Hyd. Conductivity	=	1.70E-05 cm/sec

Layer 2

Type 1 - Vertical Percolation Layer (Waste)

Municipal Solid Waste (MSW) (900 pcy)

Material Texture Number 18

Thickness	=	900 inches
Porosity	=	0.671 vol/vol
Field Capacity	=	0.292 vol/vol
Wilting Point	=	0.077 vol/vol
Initial Soil Water Content	=	0.2932 vol/vol
Effective Sat. Hyd. Conductivity	=	1.00E-03 cm/sec

Layer 3

Type 3 - Barrier Soil Liner

C - Clay (Low Density)

Material Texture Number 15

Thickness	=	24 inches
Porosity	=	0.475 vol/vol
Field Capacity	=	0.378 vol/vol
Wilting Point	=	0.265 vol/vol
Initial Soil Water Content	=	0.475 vol/vol
Effective Sat. Hyd. Conductivity	=	1.70E-05 cm/sec

Note: Initial moisture content of the layers and snow water were

computed as nearly steady-state values by HELP.

General Design and Evaporative Zone Data

SCS Runoff Curve Number	=	90.3
Fraction of Area Allowing Runoff	=	99 %
Area projected on a horizontal plane	=	45 acres
Evaporative Zone Depth	=	9 inches
Initial Water in Evaporative Zone	=	2.936 inches
Upper Limit of Evaporative Storage	=	4.275 inches
Lower Limit of Evaporative Storage	=	2.385 inches
Initial Snow Water	=	0 inches
Initial Water in Layer Materials	=	284.16 inches
Total Initial Water	=	284.16 inches
Total Subsurface Inflow	=	0 inches/year

Note: SCS Runoff Curve Number was calculated by HELP.

Evapotranspiration and Weather Data

Station Latitude	=	39.26 Degrees
Maximum Leaf Area Index	=	1
Start of Growing Season (Julian Date)	=	104 days
End of Growing Season (Julian Date)	=	296 days
Average Wind Speed	=	9.3 mph
Average 1st Quarter Relative Humidity	=	60 %
Average 2nd Quarter Relative Humidity	=	62 %
Average 3rd Quarter Relative Humidity	=	68 %
Average 4th Quarter Relative Humidity	=	65 %

Note: Evapotranspiration data was obtained for Clarksburg, Maryland

Normal Mean Monthly Precipitation (inches)

<u>Jan/Jul</u>	<u>Feb/Aug</u>	<u>Mar/Sep</u>	<u>Apr/Oct</u>	<u>May/Nov</u>	<u>Jun/Dec</u>
0	0	0	0	0	0
0	0	0	0	0	0

Note: Precipitation was simulated using HELP v3.07 data files for the following location:
LYNCHBURG, VIRGINIA

Normal Mean Monthly Temperature (Degrees Fahrenheit)

<u>Jan/Jul</u>	<u>Feb/Aug</u>	<u>Mar/Sep</u>	<u>Apr/Oct</u>	<u>May/Nov</u>	<u>Jun/Dec</u>
31.4	33.6	42.4	53.3	62.4	70.7
75.5	74.3	67.4	55.3	44.8	35.1

Note: Temperature was simulated using HELP v3.07 data files for the following location:
WASHINGTON DISTRICT OF, COLUMBIA
Solar radiation was simulated using HELP v3.07 data files for the following location:
WASHINGTON DISTRICT OF, COLUMBIA (Latitude: 39.26)

Daily Output for Year 1

Column key: Head #1: drainage from Layer 3

Title: RITCHIE LF- PHASE I-Unlined

Simulated On: 12/26/2025 10:53

Leak #1: leakage thru Layer 3

Day	Freezing Status*		Rain (inches)	Runoff (inches)	ET (inches)	Evap. Zone	Head #1 (inches)	Drain #1 (inches)	Leak #1 (inches)
	Air	Soil				Water (in/in)			
1	*		0.02	0.000	0.054	0.3224	0.0264	0.0000	8.03E-02
2	*		0.03	0.000	0.048	0.3204	0.0268	0.0000	8.14E-02
3	*		0.16	0.000	0.042	0.3226	0.0271	0.0000	8.23E-02
4	*		0.14	0.000	0.032	0.3248	0.0274	0.0000	8.31E-02
5	*		0.00	0.000	0.044	0.3270	0.0276	0.0000	8.38E-02
6			0.00	0.000	0.049	0.3352	0.0278	0.0000	8.44E-02
7	*		0.02	0.000	0.053	0.3315	0.0280	0.0000	8.49E-02
8			0.00	0.000	0.047	0.3264	0.0281	0.0000	8.53E-02
9			0.54	0.001	0.054	0.3802	0.0282	0.0000	8.57E-02
10	*		0.03	0.000	0.044	0.3787	0.0283	0.0000	8.60E-02
11	*		0.11	0.000	0.046	0.3790	0.0304	0.0000	9.45E-02
12	*		0.00	0.000	0.043	0.3769	0.0319	0.0000	9.66E-02
13	*		0.00	0.000	0.038	0.3710	0.0318	0.0000	9.61E-02
14	*		0.00	0.000	0.000	0.3697	0.0306	0.0000	7.42E-02
15	*		0.00	0.000	0.000	0.3685	0.0014	0.0000	3.88E-03
16	*		0.00	0.000	0.000	0.3677	0.0022	0.0000	6.36E-03
17	*		0.00	0.000	0.043	0.3624	0.0028	0.0000	9.42E-03
18	*		0.01	0.000	0.053	0.3576	0.0045	0.0000	1.36E-02
19			0.00	0.000	0.066	0.3503	0.0043	0.0000	1.29E-02
20			0.00	0.000	0.075	0.3419	0.0041	0.0000	1.23E-02
21			1.70	0.387	0.082	0.4074	0.0020	0.0000	5.92E-03
22			0.00	0.000	0.066	0.3769	0.0132	0.0000	2.94E-02

23		0.00	0.000	0.081	0.3656	0.0002	0.0000	6.19E-03
24		0.34	0.000	0.083	0.3935	0.0106	0.0000	2.91E-02
25		0.14	0.000	0.071	0.3995	0.0004	0.0000	6.63E-04
26		0.48	0.032	0.064	0.4116	0.0175	0.0000	4.53E-02
27		0.02	0.000	0.067	0.4018	0.0142	0.0000	2.48E-02
28		0.20	0.000	0.066	0.3966	0.0033	0.0000	1.22E-02
29		0.00	0.000	0.063	0.3886	0.0191	0.0000	4.69E-02
30		0.00	0.000	0.072	0.3775	0.0000	0.0000	0.00E+00
31		0.00	0.000	0.063	0.3678	0.0000	0.0000	0.00E+00
32		0.00	0.000	0.055	0.3594	0.0000	0.0000	7.40E-04
33	*	0.03	0.000	0.052	0.3551	0.0019	0.0000	6.02E-03
34		0.13	0.000	0.059	0.3617	0.0047	0.0000	1.53E-02
35	*	0.00	0.000	0.048	0.3559	0.0074	0.0000	2.33E-02
36	*	0.00	0.000	0.050	0.3503	0.0090	0.0000	2.74E-02
37	*	0.51	0.000	0.041	0.3525	0.0095	0.0000	2.92E-02
38		0.00	0.000	0.024	0.3997	0.0126	0.0000	4.41E-02
39		0.58	0.036	0.072	0.4038	0.0325	0.0000	9.86E-02
40		0.00	0.000	0.069	0.3746	0.0324	0.0000	9.83E-02
41		0.00	0.000	0.088	0.3645	0.0277	0.0000	7.74E-02
42		0.00	0.000	0.091	0.3536	0.0062	0.0000	1.47E-02
43		0.00	0.000	0.089	0.3426	0.0000	0.0000	0.00E+00
44		0.00	0.000	0.093	0.3313	0.0000	0.0000	0.00E+00
45		0.00	0.000	0.089	0.3213	0.0023	0.0000	8.34E-03
46		0.00	0.000	0.087	0.3117	0.0039	0.0000	1.23E-02
47		0.46	0.000	0.071	0.3549	0.0056	0.0000	1.79E-02
48		0.00	0.000	0.081	0.3460	0.0077	0.0000	2.42E-02
49		0.00	0.000	0.082	0.3368	0.0110	0.0000	4.19E-02
50		0.12	0.000	0.068	0.3426	0.0239	0.0000	7.29E-02
51		0.00	0.000	0.077	0.3339	0.0247	0.0000	7.59E-02
52		0.00	0.000	0.089	0.3240	0.0254	0.0000	7.71E-02

53		0.22	0.000	0.060	0.3418	0.0259	0.0000	7.87E-02
54	*	0.00	0.000	0.063	0.3348	0.0264	0.0000	8.01E-02
55		0.00	0.000	0.063	0.3278	0.0267	0.0000	8.12E-02
56	*	0.00	0.000	0.059	0.3212	0.0271	0.0000	8.21E-02
57		0.00	0.000	0.070	0.3135	0.0273	0.0000	8.29E-02
58		0.00	0.000	0.087	0.3039	0.0276	0.0000	8.36E-02
59		0.00	0.000	0.083	0.2947	0.0278	0.0000	8.42E-02
60		0.02	0.000	0.065	0.2897	0.0279	0.0000	8.47E-02
61	*	0.02	0.000	0.059	0.2854	0.0281	0.0000	8.51E-02
62	*	0.00	0.000	0.000	0.2854	0.0282	0.0000	8.55E-02
63		0.00	0.000	0.066	0.2781	0.0283	0.0000	8.58E-02
64		0.00	0.000	0.099	0.2671	0.0284	0.0000	8.60E-02
65		0.10	0.000	0.029	0.2750	0.0284	0.0000	8.63E-02
66	*	0.01	0.000	0.031	0.2727	0.0285	0.0000	8.64E-02
67		0.00	0.000	0.050	0.2671	0.0286	0.0000	8.48E-02
68		0.00	0.000	0.015	0.2654	0.0030	0.0000	9.08E-03
69		0.00	0.000	0.003	0.2651	0.0029	0.0000	8.75E-03
70	*	0.49	0.000	0.045	0.2672	0.0028	0.0000	8.44E-03
71	*	0.35	0.000	0.043	0.2694	0.0027	0.0000	8.15E-03
72	*	0.00	0.000	0.040	0.2716	0.0026	0.0000	7.89E-03
73		0.00	0.000	0.047	0.2738	0.0025	0.0000	7.63E-03
74		0.00	0.001	0.019	0.3368	0.0024	0.0000	7.40E-03
75		0.24	0.000	0.083	0.3542	0.0024	0.0000	7.18E-03
76		0.00	0.000	0.069	0.3465	0.0023	0.0000	6.97E-03
77		0.00	0.000	0.079	0.3377	0.0022	0.0000	6.77E-03
78		0.10	0.000	0.110	0.3366	0.0022	0.0000	6.58E-03
79		0.20	0.000	0.103	0.3473	0.0021	0.0000	6.40E-03
80		0.74	0.062	0.084	0.4133	0.0021	0.0000	6.23E-03
81		0.00	0.000	0.123	0.3859	0.0010	0.0000	1.53E-03
82		0.00	0.000	0.132	0.3704	0.0021	0.0000	7.11E-03

83	0.00	0.000	0.127	0.3562	0.0033	0.0000	9.05E-03
84	0.00	0.000	0.134	0.3397	0.0001	0.0000	1.20E-04
85	0.00	0.000	0.145	0.3218	0.0000	0.0000	0.00E+00
86	0.00	0.000	0.124	0.3076	0.0020	0.0000	7.33E-03
87	0.00	0.000	0.129	0.2932	0.0036	0.0000	1.08E-02
88	0.17	0.000	0.133	0.2965	0.0017	0.0000	2.64E-03
89	0.52	0.000	0.131	0.3397	0.0024	0.0000	8.97E-03
90	0.00	0.000	0.148	0.3233	0.0034	0.0000	1.02E-02
91	0.00	0.000	0.121	0.3098	0.0032	0.0000	9.80E-03
92	0.19	0.000	0.119	0.3177	0.0031	0.0000	9.42E-03
93	0.02	0.000	0.125	0.3060	0.0030	0.0000	9.06E-03
94	1.89	0.440	0.111	0.3982	0.0029	0.0000	8.74E-03
95	0.34	0.002	0.115	0.3883	0.0041	0.0000	1.73E-02
96	0.00	0.000	0.085	0.3779	0.0020	0.0000	9.33E-03
97	0.00	0.000	0.098	0.3671	0.0119	0.0000	3.53E-02
98	0.30	0.000	0.081	0.3909	0.0043	0.0000	1.10E-02
99	0.02	0.000	0.069	0.3839	0.0012	0.0000	4.94E-03
100	0.00	0.000	0.151	0.3662	0.0054	0.0000	1.64E-02
101	0.00	0.000	0.135	0.3513	0.0084	0.0000	2.56E-02
102	0.00	0.000	0.119	0.3379	0.0088	0.0000	2.64E-02
103	0.06	0.000	0.128	0.3290	0.0164	0.0000	5.07E-02
104	0.01	0.000	0.084	0.3195	0.0126	0.0000	5.64E-02
105	0.00	0.000	0.122	0.3058	0.0229	0.0000	6.80E-02
106	0.00	0.000	0.160	0.2880	0.0224	0.0000	6.83E-02
107	0.05	0.000	0.174	0.2742	0.0233	0.0000	7.10E-02
108	0.00	0.000	0.066	0.2669	0.0241	0.0000	7.32E-02
109	0.00	0.000	0.013	0.2655	0.0247	0.0000	7.50E-02
110	0.00	0.000	0.003	0.2651	0.0252	0.0000	7.65E-02
111	0.00	0.000	0.001	0.2650	0.0091	0.0000	2.29E-02
112	0.10	0.000	0.008	0.2752	0.0056	0.0000	1.69E-02

113	0.13	0.000	0.022	0.2872	0.0053	0.0000	1.58E-02
114	0.00	0.000	0.016	0.2854	0.0049	0.0000	1.49E-02
115	0.00	0.000	0.024	0.2828	0.0047	0.0000	1.40E-02
116	0.00	0.000	0.022	0.2803	0.0044	0.0000	1.33E-02
117	0.00	0.000	0.021	0.2780	0.0042	0.0000	1.26E-02
118	0.00	0.000	0.020	0.2758	0.0040	0.0000	1.20E-02
119	0.00	0.000	0.019	0.2737	0.0038	0.0000	1.14E-02
120	0.00	0.000	0.018	0.2716	0.0036	0.0000	1.09E-02
121	0.00	0.000	0.014	0.2701	0.0035	0.0000	1.04E-02
122	0.53	0.000	0.025	0.3262	0.0033	0.0000	1.00E-02
123	0.44	0.001	0.024	0.3723	0.0032	0.0000	9.61E-03
124	0.00	0.000	0.199	0.3502	0.0031	0.0000	9.25E-03
125	0.41	0.000	0.128	0.3815	0.0030	0.0000	8.90E-03
126	0.00	0.000	0.220	0.3499	0.0014	0.0000	4.33E-03
127	0.00	0.000	0.227	0.3222	0.0000	0.0000	0.00E+00
128	0.00	0.000	0.181	0.3015	0.0004	0.0000	3.75E-03
129	0.69	0.008	0.080	0.3683	0.0040	0.0000	1.20E-02
130	0.00	0.000	0.208	0.3453	0.0038	0.0000	1.15E-02
131	0.07	0.000	0.144	0.3370	0.0036	0.0000	1.09E-02
132	0.94	0.063	0.209	0.4112	0.0031	0.0000	9.85E-03
133	0.00	0.000	0.222	0.3465	0.0075	0.0000	1.13E-02
134	0.00	0.000	0.195	0.3206	0.0012	0.0000	5.75E-03
135	0.00	0.000	0.245	0.2910	0.0056	0.0000	2.02E-02
136	0.00	0.000	0.211	0.2676	0.0120	0.0000	3.96E-02
137	0.10	0.000	0.040	0.2742	0.0126	0.0000	3.74E-02
138	0.18	0.000	0.036	0.2902	0.0109	0.0000	3.27E-02
139	0.00	0.000	0.032	0.2866	0.0097	0.0000	2.90E-02
140	0.00	0.000	0.034	0.2828	0.0087	0.0000	2.60E-02
141	0.00	0.000	0.030	0.2794	0.0079	0.0000	2.36E-02
142	0.00	0.000	0.028	0.2763	0.0072	0.0000	2.16E-02

143	0.28	0.000	0.031	0.3039	0.0066	0.0000	1.99E-02
144	0.00	0.000	0.133	0.2892	0.0061	0.0000	1.84E-02
145	0.00	0.000	0.030	0.2859	0.0057	0.0000	1.71E-02
146	0.32	0.000	0.035	0.3175	0.0053	0.0000	1.60E-02
147	0.13	0.000	0.154	0.3149	0.0050	0.0000	1.51E-02
148	0.00	0.000	0.185	0.2944	0.0047	0.0000	1.42E-02
149	0.11	0.000	0.162	0.2886	0.0045	0.0000	1.34E-02
150	0.21	0.000	0.082	0.3028	0.0042	0.0000	1.27E-02
151	0.45	0.000	0.065	0.3455	0.0040	0.0000	1.21E-02
152	0.20	0.000	0.212	0.3442	0.0038	0.0000	1.15E-02
153	0.86	0.099	0.243	0.4018	0.0037	0.0000	1.10E-02
154	0.00	0.000	0.250	0.3736	0.0035	0.0000	7.94E-03
155	0.00	0.000	0.210	0.3473	0.0015	0.0000	2.26E-03
156	0.00	0.000	0.207	0.3218	0.0000	0.0000	0.00E+00
157	0.02	0.000	0.185	0.3028	0.0001	0.0000	3.47E-03
158	0.00	0.000	0.155	0.2838	0.0021	0.0000	6.38E-03
159	0.00	0.000	0.083	0.2746	0.0043	0.0000	1.31E-02
160	0.00	0.000	0.065	0.2674	0.0041	0.0000	1.24E-02
161	0.02	0.000	0.031	0.2662	0.0039	0.0000	1.18E-02
162	0.00	0.000	0.004	0.2657	0.0037	0.0000	1.13E-02
163	0.00	0.000	0.004	0.2652	0.0036	0.0000	1.08E-02
164	0.13	0.000	0.016	0.2778	0.0034	0.0000	1.03E-02
165	0.49	0.000	0.022	0.3298	0.0033	0.0000	9.89E-03
166	0.25	0.000	0.186	0.3369	0.0032	0.0000	9.51E-03
167	0.06	0.000	0.172	0.3245	0.0030	0.0000	9.15E-03
168	0.00	0.000	0.235	0.2984	0.0029	0.0000	8.81E-03
169	0.00	0.000	0.187	0.2776	0.0028	0.0000	8.50E-03
170	0.00	0.000	0.081	0.2686	0.0027	0.0000	8.21E-03
171	0.00	0.000	0.025	0.2658	0.0026	0.0000	7.94E-03
172	0.09	0.000	0.018	0.2738	0.0025	0.0000	7.68E-03

173	0.00	0.000	0.024	0.2711	0.0025	0.0000	7.45E-03
174	0.01	0.000	0.035	0.2684	0.0024	0.0000	7.22E-03
175	0.00	0.000	0.015	0.2667	0.0023	0.0000	7.01E-03
176	0.49	0.000	0.026	0.3182	0.0023	0.0000	6.81E-03
177	0.04	0.000	0.043	0.3179	0.0022	0.0000	6.62E-03
178	0.13	0.000	0.045	0.3274	0.0021	0.0000	6.42E-03
179	0.14	0.000	0.046	0.3378	0.0021	0.0000	6.27E-03
180	0.00	0.000	0.206	0.3148	0.0020	0.0000	6.11E-03
181	0.00	0.000	0.042	0.3102	0.0020	0.0000	5.95E-03
182	0.16	0.000	0.045	0.3230	0.0019	0.0000	5.81E-03
183	0.00	0.000	0.039	0.3186	0.0019	0.0000	5.67E-03
184	0.00	0.000	0.037	0.3145	0.0009	0.0000	2.28E-03
185	0.00	0.000	0.040	0.3101	0.0000	0.0000	0.00E+00
186	0.06	0.000	0.041	0.3122	0.0000	0.0000	0.00E+00
187	0.00	0.000	0.043	0.3073	0.0000	0.0000	7.40E-05
188	0.00	0.000	0.040	0.3029	0.0000	0.0000	0.00E+00
189	0.00	0.000	0.039	0.2985	0.0000	0.0000	0.00E+00
190	0.00	0.000	0.041	0.2940	0.0000	0.0000	0.00E+00
191	0.00	0.000	0.037	0.2898	0.0000	0.0000	0.00E+00
192	0.00	0.000	0.047	0.2846	0.0000	0.0000	0.00E+00
193	0.00	0.000	0.048	0.2792	0.0001	0.0000	3.57E-04
194	0.00	0.000	0.050	0.2736	0.0000	0.0000	0.00E+00
195	0.00	0.000	0.053	0.2677	0.0000	0.0000	0.00E+00
196	0.00	0.000	0.020	0.2654	0.0000	0.0000	0.00E+00
197	0.00	0.000	0.004	0.2650	0.0000	0.0000	0.00E+00
198	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
199	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
200	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
201	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
202	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00

203	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
204	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
205	0.28	0.000	0.026	0.2932	0.0000	0.0000	0.00E+00
206	0.00	0.000	0.035	0.2894	0.0000	0.0000	0.00E+00
207	1.97	0.554	0.043	0.4130	0.0000	0.0000	0.00E+00
208	0.02	0.000	0.146	0.3761	0.0059	0.0000	1.75E-02
209	0.00	0.000	0.196	0.3541	0.0085	0.0000	2.79E-02
210	0.35	0.000	0.214	0.3679	0.0084	0.0000	2.33E-02
211	0.00	0.000	0.218	0.3418	0.0028	0.0000	1.02E-02
212	0.00	0.000	0.258	0.3131	0.0074	0.0000	2.56E-02
213	0.00	0.000	0.262	0.2840	0.0087	0.0000	2.61E-02
214	0.67	0.006	0.202	0.3354	0.0079	0.0000	2.37E-02
215	0.97	0.139	0.197	0.4058	0.0072	0.0000	2.16E-02
216	0.58	0.040	0.182	0.3976	0.0040	0.0000	6.09E-03
217	0.01	0.000	0.161	0.3751	0.0010	0.0000	1.19E-02
218	0.02	0.000	0.137	0.3586	0.0190	0.0000	5.89E-02
219	0.01	0.000	0.150	0.3406	0.0138	0.0000	4.32E-02
220	0.29	0.000	0.179	0.3507	0.0143	0.0000	4.04E-02
221	0.35	0.000	0.151	0.3720	0.0131	0.0000	4.04E-02
222	0.00	0.000	0.218	0.3478	0.0136	0.0000	3.99E-02
223	0.00	0.000	0.206	0.3249	0.0110	0.0000	3.30E-02
224	1.05	0.083	0.155	0.4151	0.0105	0.0000	3.18E-02
225	0.01	0.000	0.136	0.3700	0.0181	0.0000	6.51E-02
226	0.00	0.000	0.181	0.3497	0.0200	0.0000	5.94E-02
227	0.00	0.000	0.223	0.3248	0.0142	0.0000	4.12E-02
228	0.00	0.000	0.196	0.3010	0.0081	0.0000	2.17E-02
229	0.00	0.000	0.236	0.2748	0.0113	0.0000	3.76E-02
230	0.00	0.000	0.066	0.2650	0.0151	0.0000	5.34E-02
231	0.35	0.000	0.085	0.2945	0.0190	0.0000	5.83E-02
232	0.00	0.000	0.119	0.2812	0.0206	0.0000	6.31E-02

233	0.16	0.000	0.163	0.2809	0.0219	0.0000	6.68E-02
234	0.10	0.000	0.101	0.2808	0.0229	0.0000	6.80E-02
235	0.00	0.000	0.120	0.2675	0.0079	0.0000	2.38E-02
236	0.00	0.000	0.020	0.2653	0.0073	0.0000	2.18E-02
237	0.00	0.000	0.002	0.2651	0.0067	0.0000	2.00E-02
238	0.42	0.000	0.056	0.3055	0.0062	0.0000	1.85E-02
239	0.20	0.000	0.072	0.3197	0.0057	0.0000	1.73E-02
240	0.04	0.000	0.118	0.3111	0.0054	0.0000	1.61E-02
241	0.39	0.000	0.083	0.3452	0.0050	0.0000	1.52E-02
242	0.00	0.000	0.195	0.3235	0.0047	0.0000	1.43E-02
243	0.38	0.000	0.149	0.3492	0.0045	0.0000	1.33E-02
244	0.11	0.000	0.127	0.3473	0.0043	0.0000	1.28E-02
245	1.55	0.372	0.160	0.3971	0.0040	0.0000	9.19E-03
246	0.31	0.000	0.155	0.3895	0.0000	0.0000	0.00E+00
247	0.06	0.000	0.181	0.3751	0.0013	0.0000	9.17E-03
248	0.00	0.000	0.168	0.3564	0.0110	0.0000	3.10E-02
249	3.06	1.371	0.142	0.4245	0.0018	0.0000	2.72E-03
250	0.09	0.000	0.134	0.4015	0.0317	0.0000	8.41E-02
251	0.00	0.000	0.126	0.3853	0.0000	0.0000	0.00E+00
252	0.00	0.000	0.133	0.3685	0.0000	0.0000	0.00E+00
253	0.13	0.000	0.128	0.3673	0.0000	0.0000	0.00E+00
254	0.00	0.000	0.138	0.3496	0.0000	0.0000	0.00E+00
255	0.07	0.000	0.125	0.3419	0.0000	0.0000	0.00E+00
256	0.00	0.000	0.130	0.3271	0.0000	0.0000	0.00E+00
257	0.00	0.000	0.107	0.3152	0.0006	0.0000	2.93E-03
258	0.00	0.000	0.162	0.2972	0.0031	0.0000	1.04E-02
259	0.00	0.000	0.128	0.2829	0.0057	0.0000	1.84E-02
260	0.02	0.000	0.098	0.2742	0.0082	0.0000	2.58E-02
261	0.00	0.000	0.083	0.2651	0.0170	0.0000	5.54E-02
262	0.00	0.000	0.000	0.2650	0.0248	0.0000	7.53E-02

263	0.00	0.000	0.000	0.2650	0.0255	0.0000	7.75E-02
264	0.00	0.000	0.000	0.2650	0.0261	0.0000	7.92E-02
265	0.01	0.000	0.010	0.2650	0.0266	0.0000	8.07E-02
266	0.00	0.000	0.000	0.2650	0.0270	0.0000	8.19E-02
267	0.00	0.000	0.000	0.2650	0.0273	0.0000	8.29E-02
268	0.00	0.000	0.000	0.2650	0.0276	0.0000	8.38E-02
269	0.00	0.000	0.000	0.2650	0.0278	0.0000	8.45E-02
270	0.03	0.000	0.017	0.2665	0.0280	0.0000	8.51E-02
271	0.10	0.000	0.018	0.2756	0.0282	0.0000	8.56E-02
272	0.01	0.000	0.021	0.2743	0.0284	0.0000	8.61E-02
273	0.00	0.000	0.021	0.2720	0.0285	0.0000	8.65E-02
274	0.00	0.000	0.019	0.2698	0.0286	0.0000	8.68E-02
275	0.00	0.000	0.019	0.2678	0.0287	0.0000	8.70E-02
276	0.00	0.000	0.014	0.2662	0.0288	0.0000	8.73E-02
277	0.00	0.000	0.009	0.2652	0.0288	0.0000	8.75E-02
278	0.00	0.000	0.001	0.2650	0.0289	0.0000	8.76E-02
279	0.00	0.000	0.000	0.2650	0.0289	0.0000	8.77E-02
280	0.00	0.000	0.000	0.2650	0.0290	0.0000	8.78E-02
281	0.00	0.000	0.000	0.2650	0.0290	0.0000	8.79E-02
282	0.00	0.000	0.000	0.2650	0.0290	0.0000	8.80E-02
283	0.00	0.000	0.000	0.2650	0.0290	0.0000	7.50E-02
284	0.00	0.000	0.000	0.2650	0.0026	0.0000	7.74E-03
285	0.00	0.000	0.000	0.2650	0.0025	0.0000	7.50E-03
286	0.00	0.000	0.000	0.2650	0.0024	0.0000	7.27E-03
287	0.00	0.000	0.000	0.2650	0.0023	0.0000	7.06E-03
288	0.00	0.000	0.000	0.2650	0.0023	0.0000	6.85E-03
289	0.31	0.000	0.023	0.2969	0.0022	0.0000	6.66E-03
290	0.00	0.000	0.011	0.2956	0.0021	0.0000	6.48E-03
291	0.00	0.000	0.014	0.2941	0.0021	0.0000	6.31E-03
292	0.07	0.000	0.029	0.2986	0.0020	0.0000	6.14E-03

293	0.00	0.000	0.013	0.2972	0.0020	0.0000	5.99E-03
294	0.00	0.000	0.014	0.2956	0.0019	0.0000	5.84E-03
295	0.00	0.000	0.013	0.2941	0.0019	0.0000	5.70E-03
296	0.00	0.000	0.013	0.2927	0.0014	0.0000	3.55E-03
297	0.00	0.000	0.013	0.2913	0.0000	0.0000	0.00E+00
298	0.00	0.000	0.012	0.2899	0.0000	0.0000	0.00E+00
299	0.00	0.000	0.012	0.2886	0.0000	0.0000	0.00E+00
300	0.00	0.000	0.012	0.2872	0.0000	0.0000	0.00E+00
301	0.00	0.000	0.012	0.2859	0.0000	0.0000	0.00E+00
302	0.00	0.000	0.012	0.2846	0.0000	0.0000	0.00E+00
303	0.00	0.000	0.012	0.2833	0.0000	0.0000	0.00E+00
304	0.00	0.000	0.011	0.2821	0.0000	0.0000	0.00E+00
305	0.00	0.000	0.011	0.2808	0.0000	0.0000	0.00E+00
306	0.00	0.000	0.011	0.2796	0.0000	0.0000	0.00E+00
307	0.00	0.000	0.011	0.2783	0.0000	0.0000	0.00E+00
308	0.00	0.000	0.011	0.2771	0.0000	0.0000	0.00E+00
309	0.13	0.000	0.023	0.2890	0.0000	0.0000	0.00E+00
310	0.00	0.000	0.012	0.2877	0.0000	0.0000	0.00E+00
311	0.00	0.000	0.012	0.2864	0.0000	0.0000	0.00E+00
312	0.00	0.000	0.012	0.2851	0.0000	0.0000	0.00E+00
313	0.00	0.000	0.012	0.2838	0.0000	0.0000	0.00E+00
314	0.00	0.000	0.011	0.2825	0.0000	0.0000	0.00E+00
315	0.06	0.000	0.022	0.2867	0.0000	0.0000	0.00E+00
316	0.69	0.012	0.023	0.3595	0.0000	0.0000	0.00E+00
317	0.00	0.000	0.011	0.3583	0.0000	0.0000	0.00E+00
318	0.28	0.000	0.023	0.3868	0.0000	0.0000	0.00E+00
319	0.00	0.000	0.080	0.3754	0.0000	0.0000	0.00E+00
320	0.00	0.000	0.080	0.3661	0.0001	0.0000	1.69E-03
321	0.00	0.000	0.066	0.3579	0.0010	0.0000	1.77E-03
322	0.12	0.000	0.060	0.3629	0.0000	0.0000	0.00E+00

323		0.01	0.000	0.064	0.3558	0.0000	0.0000	0.00E+00
324		0.25	0.000	0.068	0.3758	0.0009	0.0000	3.12E-03
325		0.00	0.000	0.048	0.3704	0.0023	0.0000	6.90E-03
326		0.00	0.000	0.049	0.3650	0.0022	0.0000	6.70E-03
327		0.00	0.000	0.044	0.3601	0.0022	0.0000	6.52E-03
328		0.00	0.000	0.044	0.3552	0.0021	0.0000	6.34E-03
329		0.14	0.000	0.059	0.3642	0.0020	0.0000	6.18E-03
330		0.00	0.000	0.057	0.3578	0.0020	0.0000	6.02E-03
331		0.00	0.000	0.046	0.3527	0.0019	0.0000	5.87E-03
332		0.00	0.000	0.047	0.3475	0.0019	0.0000	5.73E-03
333		0.00	0.000	0.042	0.3428	0.0018	0.0000	4.76E-03
334		0.06	0.000	0.048	0.3441	0.0000	0.0000	0.00E+00
335		1.21	0.160	0.045	0.4008	0.0000	0.0000	0.00E+00
336		0.01	0.000	0.048	0.3600	0.0000	0.0000	0.00E+00
337		0.00	0.000	0.047	0.3546	0.0075	0.0000	2.89E-02
338		0.00	0.000	0.040	0.3502	0.0119	0.0000	3.35E-02
339		0.00	0.000	0.041	0.3454	0.0069	0.0000	2.00E-02
340		0.00	0.000	0.049	0.3395	0.0063	0.0000	1.77E-02
341		0.85	0.050	0.051	0.4094	0.0068	0.0000	1.42E-02
342		0.58	0.042	0.053	0.4022	0.0167	0.0000	6.47E-02
343		0.00	0.000	0.051	0.3824	0.0159	0.0000	7.23E-02
344		0.00	0.000	0.039	0.3759	0.0184	0.0000	3.97E-02
345	*	0.00	0.000	0.031	0.3705	0.0000	0.0000	0.00E+00
346	*	0.06	0.000	0.030	0.3713	0.0000	0.0000	0.00E+00
347	*	0.00	0.000	0.010	0.3708	0.0000	0.0000	0.00E+00
348	*	0.00	0.000	0.000	0.3702	0.0000	0.0000	0.00E+00
349	*	0.13	0.000	0.038	0.3717	0.0000	0.0000	0.00E+00
350		0.52	0.012	0.000	0.3927	0.0003	0.0000	5.10E-04
351		0.00	0.000	0.053	0.3716	0.0325	0.0000	7.39E-02
352		0.00	0.000	0.039	0.3655	0.0235	0.0000	5.98E-02

353	*	0.00	0.000	0.033	0.3599	0.0041	0.0000	9.69E-03
354	*	0.02	0.000	0.020	0.3585	0.0004	0.0000	5.50E-04
355	*	0.00	0.000	0.000	0.3572	0.0001	0.0000	1.52E-04
356		0.00	0.000	0.039	0.3516	0.0016	0.0000	6.52E-03
357		0.00	0.000	0.049	0.3454	0.0049	0.0000	1.73E-02
358		0.00	0.000	0.057	0.3390	0.0083	0.0000	2.54E-02
359		0.06	0.000	0.064	0.3386	0.0091	0.0000	2.81E-02
360		0.00	0.000	0.053	0.3327	0.0104	0.0000	3.66E-02
361		0.08	0.000	0.060	0.3349	0.0233	0.0000	7.12E-02
362		0.00	0.000	0.065	0.3276	0.0243	0.0000	7.40E-02
363		0.00	0.000	0.057	0.3213	0.0251	0.0000	7.62E-02
364		0.00	0.000	0.054	0.3152	0.0257	0.0000	7.80E-02
365		0.16	0.000	0.056	0.3268	0.0262	0.0000	7.95E-02

* = Frozen (air or soil)

Annual Totals for Year 1			
	inches	cubic feet	percent
Precipitation	40.04	6,540,534.0	100.00
Runoff	3.973	648,912.5	9.92
Evapotranspiration	26.439	4,318,794.1	66.03
Percolation/Leakage through Layer 3	9.608417	1,569,534.8	24.00
Average Head on Top of Layer 3	0.0087	---	---
Change in Water Storage	0.0202	3,292.5	0.05
Soil Water at Start of Year	284.1603	#####	709.69
Soil Water at End of Year	284.1805	#####	709.74
Snow Water at Start of Year	0.0000	0.0000	0.00
Snow Water at End of Year	0.0000	0.0000	0.00
Annual Water Budget Balance	0.0000	0.0000	0.00

Daily Output for Year 2

Column key: Head #1: drainage from Layer 3

Title: RITCHIE LF- PHASE I-Unlined

Simulated On: 12/26/2025 10:53

Leak #1: leakage thru Layer 3

Day	Freezing Status*		Rain (inches)	Runoff (inches)	ET (inches)	Evap. Zone	Head #1 (inches)	Drain #1 (inches)	Leak #1 (inches)
	Air	Soil				Water (in/in)			
1			0.00	0.000	0.054	0.3208	0.0266	0.0000	8.08E-02
2			0.00	0.000	0.045	0.3158	0.0270	0.0000	8.19E-02
3	*		0.10	0.000	0.047	0.3180	0.0273	0.0000	8.27E-02
4	*		0.18	0.000	0.045	0.3202	0.0275	0.0000	8.35E-02
5			0.00	0.000	0.039	0.3324	0.0277	0.0000	8.41E-02
6			0.27	0.000	0.061	0.3556	0.0279	0.0000	8.47E-02
7			0.00	0.000	0.055	0.3495	0.0281	0.0000	8.52E-02
8	*		0.16	0.000	0.045	0.3517	0.0282	0.0000	8.56E-02
9	*		0.00	0.000	0.035	0.3539	0.0283	0.0000	8.59E-02
10	*		0.23	0.000	0.031	0.3561	0.0284	0.0000	8.62E-02
11	*		0.45	0.000	0.023	0.3583	0.0285	0.0000	8.64E-02
12	*		0.40	0.000	0.032	0.3605	0.0286	0.0000	8.66E-02
13	*		0.25	0.000	0.022	0.3626	0.0286	0.0000	8.68E-02
14	*		0.00	0.000	0.023	0.3648	0.0287	0.0000	8.69E-02
15	*		0.00	0.000	0.027	0.3670	0.0287	0.0000	7.26E-02
16	*		0.00	0.000	0.031	0.3692	0.0029	0.0000	8.64E-03
17	*		0.00	0.000	0.038	0.3714	0.0028	0.0000	8.34E-03
18	*		0.03	0.000	0.000	0.3736	0.0027	0.0000	8.06E-03
19			0.04	0.000	0.000	0.3819	0.0026	0.0000	7.79E-03
20	*		0.68	0.000	0.039	0.3841	0.0025	0.0000	7.55E-03
21			0.00	0.000	0.041	0.3900	0.0024	0.0000	7.32E-03
22	*		0.00	0.000	0.038	0.3922	0.0024	0.0000	7.10E-03

23	*		0.00	0.000	0.041	0.3944	0.0023	0.0000	6.89E-03
24	*	*	0.27	0.000	0.033	0.3944	0.0022	0.0000	6.70E-03
25	*	*	0.55	0.000	0.034	0.3944	0.0022	0.0000	6.52E-03
26	*	*	0.10	0.000	0.028	0.3944	0.0021	0.0000	6.34E-03
27	*	*	0.00	0.000	0.040	0.3944	0.0020	0.0000	6.18E-03
28		*	0.00	0.000	0.043	0.3944	0.0020	0.0000	6.02E-03
29	*	*	0.00	0.000	0.036	0.3944	0.0019	0.0000	5.87E-03
30	*	*	0.00	0.000	0.034	0.3944	0.0019	0.0000	5.73E-03
31	*	*	0.11	0.000	0.000	0.3944	0.0018	0.0000	4.73E-03
32		*	0.17	0.033	0.000	0.4087	0.0000	0.0000	0.00E+00
33	*	*	0.35	0.000	0.039	0.4087	0.0000	0.0000	0.00E+00
34	*	*	0.00	0.000	0.035	0.4087	0.0000	0.0000	0.00E+00
35	*	*	0.90	0.000	0.000	0.4087	0.0000	0.0000	0.00E+00
36	*	*	0.04	0.000	0.038	0.4087	0.0000	0.0000	0.00E+00
37	*	*	0.11	0.000	0.040	0.4087	0.0000	0.0000	0.00E+00
38		*	0.00	0.000	0.045	0.4087	0.0000	0.0000	0.00E+00
39		*	0.00	0.160	0.012	0.4208	0.0000	0.0000	0.00E+00
40		*	0.00	0.709	0.000	0.4325	0.0000	0.0000	0.00E+00
41		*	0.00	0.510	0.000	0.4394	0.0000	0.0000	0.00E+00
42		*	0.21	0.508	0.000	0.4443	0.0000	0.0000	0.00E+00
43		*	0.32	1.630	0.000	0.4495	0.0000	0.0000	0.00E+00
44	*	*	0.00	0.000	0.000	0.4495	0.0000	0.0000	0.00E+00
45	*	*	0.00	0.000	0.000	0.4495	0.0000	0.0000	0.00E+00
46	*	*	0.00	0.000	0.000	0.4495	0.0000	0.0000	0.00E+00
47		*	0.08	0.060	0.004	0.4512	0.0000	0.0000	0.00E+00
48	*	*	0.09	0.000	0.044	0.4512	0.0000	0.0000	0.00E+00
49	*	*	0.02	0.000	0.042	0.4512	0.0000	0.0000	0.00E+00
50	*	*	0.00	0.000	0.023	0.4512	0.0000	0.0000	0.00E+00
51		*	0.00	0.000	0.000	0.4512	0.0000	0.0000	0.00E+00
52		*	0.00	0.000	0.000	0.4512	0.0000	0.0000	0.00E+00

53	*	*	0.00	0.000	0.000	0.4512	0.0000	0.0000	0.00E+00
54	*	*	0.05	0.000	0.050	0.4512	0.0000	0.0000	0.00E+00
55		*	0.32	0.297	0.004	0.4533	0.0000	0.0000	0.00E+00
56	*	*	0.00	0.000	0.000	0.4533	0.0000	0.0000	0.00E+00
57	*	*	0.00	0.000	0.000	0.4533	0.0000	0.0000	0.00E+00
58		*	0.00	0.000	0.000	0.4533	0.0000	0.0000	0.00E+00
59	*	*	0.00	0.000	0.000	0.4533	0.0000	0.0000	0.00E+00
60	*	*	0.06	0.000	0.060	0.4533	0.0000	0.0000	0.00E+00
61	*	*	0.00	0.000	0.000	0.4533	0.0000	0.0000	0.00E+00
62	*	*	0.00	0.000	0.000	0.4533	0.0000	0.0000	0.00E+00
63	*	*	0.00	0.000	0.000	0.4533	0.0000	0.0000	0.00E+00
64	*	*	0.00	0.000	0.000	0.4533	0.0000	0.0000	0.00E+00
65		*	0.00	0.000	0.000	0.4533	0.0000	0.0000	0.00E+00
66		*	0.36	0.339	0.004	0.4552	0.0000	0.0000	0.00E+00
67		*	0.00	0.000	0.000	0.4552	0.0000	0.0000	0.00E+00
68		*	0.00	0.000	0.000	0.4552	0.0000	0.0000	0.00E+00
69		*	0.51	0.489	0.004	0.4570	0.0000	0.0000	0.00E+00
70		*	0.00	0.000	0.000	0.4570	0.0000	0.0000	0.00E+00
71		*	0.10	0.086	0.004	0.4581	0.0000	0.0000	0.00E+00
72		*	1.39	1.363	0.004	0.4607	0.0000	0.0000	0.00E+00
73		*	0.89	0.870	0.004	0.4625	0.0000	0.0000	0.00E+00
74		*	0.00	0.000	0.000	0.4625	0.0000	0.0000	0.00E+00
75		*	0.80	0.782	0.004	0.4640	0.0000	0.0000	0.00E+00
76			0.35	0.303	0.085	0.3495	0.0061	0.0000	9.25E-03
77			0.74	0.024	0.109	0.4151	0.0030	0.0000	1.04E-02
78			1.74	0.726	0.067	0.4035	0.0158	0.0000	2.40E-02
79	*		0.00	0.000	0.094	0.3728	0.0317	0.0000	7.21E-02
80	*		0.00	0.000	0.087	0.3619	0.0000	0.0000	0.00E+00
81			0.03	0.000	0.103	0.3518	0.0000	0.0000	0.00E+00
82			0.00	0.000	0.096	0.3388	0.0000	0.0000	0.00E+00

83	1.05	0.097	0.100	0.4117	0.0000	0.0000	0.00E+00
84	0.00	0.000	0.144	0.3818	0.0165	0.0000	3.90E-02
85	0.00	0.000	0.157	0.3639	0.0047	0.0000	8.49E-03
86	0.00	0.000	0.169	0.3443	0.0000	0.0000	0.00E+00
87	0.03	0.000	0.111	0.3329	0.0000	0.0000	0.00E+00
88	0.76	0.022	0.101	0.4020	0.0000	0.0000	0.00E+00
89	0.43	0.008	0.104	0.3991	0.0054	0.0000	1.16E-02
90	0.00	0.000	0.156	0.3814	0.0300	0.0000	8.60E-02
91	0.03	0.000	0.100	0.3721	0.0085	0.0000	2.01E-02
92	0.00	0.000	0.160	0.3526	0.0017	0.0000	3.73E-03
93	0.34	0.000	0.185	0.3682	0.0022	0.0000	8.46E-03
94	0.00	0.000	0.173	0.3490	0.0070	0.0000	2.06E-02
95	0.00	0.000	0.141	0.3333	0.0066	0.0000	2.03E-02
96	0.00	0.000	0.154	0.3162	0.0078	0.0000	2.42E-02
97	0.00	0.000	0.122	0.3027	0.0095	0.0000	2.94E-02
98	0.00	0.000	0.124	0.2889	0.0149	0.0000	4.96E-02
99	0.00	0.000	0.141	0.2726	0.0284	0.0000	8.05E-02
100	0.11	0.000	0.083	0.2756	0.0254	0.0000	7.73E-02
101	0.06	0.000	0.034	0.2785	0.0261	0.0000	7.95E-02
102	0.00	0.000	0.038	0.2742	0.0267	0.0000	8.12E-02
103	0.00	0.000	0.032	0.2706	0.0272	0.0000	8.26E-02
104	0.06	0.000	0.033	0.2737	0.0276	0.0000	8.38E-02
105	0.24	0.000	0.031	0.2969	0.0279	0.0000	8.48E-02
106	0.00	0.000	0.114	0.2842	0.0282	0.0000	8.57E-02
107	0.00	0.000	0.029	0.2809	0.0285	0.0000	8.64E-02
108	0.02	0.000	0.030	0.2798	0.0287	0.0000	8.70E-02
109	0.06	0.000	0.029	0.2832	0.0288	0.0000	8.75E-02
110	0.00	0.000	0.027	0.2803	0.0290	0.0000	8.79E-02
111	0.00	0.000	0.026	0.2774	0.0291	0.0000	8.83E-02
112	0.00	0.000	0.025	0.2747	0.0292	0.0000	8.86E-02

113	0.00	0.000	0.023	0.2721	0.0293	0.0000	8.89E-02
114	0.61	0.001	0.027	0.3367	0.0294	0.0000	8.91E-02
115	0.21	0.000	0.112	0.3476	0.0294	0.0000	8.93E-02
116	0.00	0.000	0.160	0.3298	0.0295	0.0000	8.94E-02
117	0.00	0.000	0.163	0.3117	0.0295	0.0000	8.95E-02
118	0.16	0.000	0.150	0.3129	0.0296	0.0000	8.96E-02
119	0.23	0.000	0.139	0.3230	0.0296	0.0000	8.97E-02
120	0.18	0.000	0.140	0.3274	0.0296	0.0000	8.97E-02
121	0.43	0.002	0.175	0.3556	0.0296	0.0000	8.97E-02
122	0.00	0.000	0.164	0.3374	0.0296	0.0000	8.97E-02
123	0.52	0.002	0.179	0.3750	0.0296	0.0000	8.97E-02
124	0.03	0.000	0.137	0.3632	0.0296	0.0000	8.97E-02
125	0.00	0.000	0.218	0.3390	0.0296	0.0000	8.97E-02
126	0.00	0.000	0.213	0.3153	0.0296	0.0000	8.96E-02
127	0.00	0.000	0.198	0.2933	0.0295	0.0000	8.95E-02
128	0.00	0.000	0.153	0.2763	0.0271	0.0000	6.51E-02
129	0.03	0.000	0.079	0.2708	0.0021	0.0000	6.31E-03
130	0.26	0.000	0.060	0.2930	0.0020	0.0000	6.14E-03
131	0.00	0.000	0.030	0.2896	0.0020	0.0000	5.99E-03
132	0.02	0.000	0.033	0.2882	0.0019	0.0000	5.84E-03
133	0.00	0.000	0.027	0.2852	0.0019	0.0000	5.70E-03
134	0.00	0.000	0.027	0.2822	0.0014	0.0000	3.53E-03
135	0.51	0.000	0.027	0.3358	0.0000	0.0000	0.00E+00
136	0.46	0.004	0.083	0.3773	0.0000	0.0000	0.00E+00
137	0.10	0.000	0.141	0.3702	0.0000	0.0000	0.00E+00
138	0.60	0.012	0.169	0.4054	0.0010	0.0000	1.80E-03
139	0.00	0.000	0.187	0.3611	0.0029	0.0000	4.45E-03
140	0.00	0.000	0.230	0.3349	0.0038	0.0000	1.24E-02
141	0.00	0.000	0.225	0.3083	0.0034	0.0000	7.15E-03
142	0.00	0.000	0.214	0.2833	0.0036	0.0000	1.60E-02

143	0.00	0.000	0.165	0.2650	0.0068	0.0000	2.03E-02
144	0.00	0.000	0.000	0.2650	0.0063	0.0000	1.88E-02
145	0.03	0.000	0.010	0.2672	0.0058	0.0000	1.75E-02
146	0.02	0.000	0.009	0.2684	0.0054	0.0000	1.63E-02
147	0.01	0.000	0.009	0.2685	0.0051	0.0000	1.53E-02
148	0.00	0.000	0.010	0.2674	0.0048	0.0000	1.44E-02
149	1.10	0.093	0.032	0.3758	0.0045	0.0000	1.36E-02
150	1.84	0.711	0.157	0.4087	0.0022	0.0000	3.29E-03
151	0.58	0.044	0.133	0.4098	0.0000	0.0000	0.00E+00
152	1.07	0.246	0.176	0.4072	0.0316	0.0000	6.16E-02
153	0.00	0.000	0.212	0.3750	0.0045	0.0000	6.75E-03
154	0.00	0.000	0.206	0.3503	0.0000	0.0000	0.00E+00
155	0.00	0.000	0.218	0.3236	0.0000	0.0000	0.00E+00
156	0.53	0.000	0.234	0.3557	0.0000	0.0000	0.00E+00
157	0.00	0.000	0.268	0.3259	0.0000	0.0000	0.00E+00
158	0.00	0.000	0.230	0.3002	0.0000	0.0000	0.00E+00
159	0.00	0.000	0.256	0.2717	0.0000	0.0000	0.00E+00
160	0.00	0.000	0.060	0.2650	0.0003	0.0000	1.63E-03
161	0.08	0.000	0.020	0.2717	0.0036	0.0000	1.22E-02
162	0.55	0.000	0.038	0.3286	0.0069	0.0000	2.21E-02
163	1.29	0.291	0.199	0.4174	0.0164	0.0000	5.09E-02
164	0.00	0.000	0.233	0.3431	0.0332	0.0000	9.75E-02
165	0.00	0.000	0.219	0.3187	0.0209	0.0000	5.86E-02
166	0.14	0.000	0.248	0.3068	0.0118	0.0000	3.39E-02
167	0.00	0.000	0.177	0.2865	0.0095	0.0000	2.34E-02
168	0.00	0.000	0.185	0.2659	0.0094	0.0000	2.86E-02
169	0.00	0.000	0.006	0.2652	0.0099	0.0000	3.03E-02
170	0.00	0.000	0.002	0.2651	0.0110	0.0000	3.95E-02
171	0.00	0.000	0.000	0.2650	0.0236	0.0000	7.18E-02
172	0.00	0.000	0.000	0.2650	0.0245	0.0000	7.47E-02

173	0.00	0.000	0.000	0.2650	0.0253	0.0000	7.69E-02
174	0.00	0.000	0.000	0.2650	0.0259	0.0000	7.88E-02
175	0.00	0.000	0.000	0.2650	0.0264	0.0000	8.03E-02
176	1.07	0.083	0.032	0.3712	0.0269	0.0000	8.16E-02
177	0.00	0.000	0.204	0.3485	0.0272	0.0000	8.27E-02
178	0.01	0.000	0.140	0.3341	0.0275	0.0000	8.36E-02
179	0.04	0.000	0.213	0.3149	0.0278	0.0000	8.43E-02
180	0.00	0.000	0.164	0.2967	0.0280	0.0000	8.50E-02
181	0.00	0.000	0.085	0.2872	0.0282	0.0000	8.55E-02
182	0.00	0.000	0.070	0.2795	0.0283	0.0000	8.60E-02
183	0.00	0.000	0.066	0.2722	0.0285	0.0000	8.64E-02
184	0.02	0.000	0.062	0.2675	0.0286	0.0000	8.67E-02
185	0.49	0.000	0.039	0.3175	0.0287	0.0000	8.70E-02
186	0.00	0.000	0.046	0.3124	0.0288	0.0000	8.73E-02
187	0.01	0.000	0.048	0.3082	0.0288	0.0000	8.75E-02
188	0.10	0.000	0.039	0.3150	0.0289	0.0000	8.76E-02
189	0.00	0.000	0.040	0.3105	0.0289	0.0000	8.77E-02
190	0.00	0.000	0.044	0.3057	0.0290	0.0000	8.79E-02
191	0.77	0.035	0.043	0.3825	0.0290	0.0000	8.79E-02
192	0.07	0.000	0.295	0.3511	0.0304	0.0000	9.42E-02
193	0.15	0.000	0.188	0.3444	0.0317	0.0000	9.35E-02
194	0.56	0.002	0.221	0.3811	0.0000	0.0000	3.00E-03
195	0.72	0.066	0.173	0.4092	0.0039	0.0000	8.79E-03
196	0.76	0.102	0.195	0.4126	0.0074	0.0000	1.31E-02
197	0.04	0.000	0.187	0.3644	0.0158	0.0000	2.54E-02
198	0.00	0.000	0.283	0.3322	0.0024	0.0000	1.47E-02
199	0.73	0.018	0.213	0.3874	0.0049	0.0000	8.87E-03
200	0.00	0.000	0.269	0.3575	0.0000	0.0000	0.00E+00
201	0.00	0.000	0.262	0.3284	0.0000	0.0000	0.00E+00
202	0.00	0.000	0.302	0.2949	0.0000	0.0000	0.00E+00

203	0.00	0.000	0.269	0.2650	0.0013	0.0000	5.10E-03
204	0.00	0.000	0.000	0.2650	0.0043	0.0000	1.42E-02
205	0.00	0.000	0.000	0.2650	0.0070	0.0000	2.22E-02
206	0.00	0.000	0.000	0.2650	0.0160	0.0000	5.38E-02
207	0.00	0.000	0.000	0.2650	0.0239	0.0000	7.27E-02
208	0.00	0.000	0.000	0.2650	0.0246	0.0000	7.48E-02
209	0.00	0.000	0.000	0.2650	0.0252	0.0000	7.65E-02
210	0.00	0.000	0.000	0.2650	0.0257	0.0000	7.79E-02
211	0.00	0.000	0.000	0.2650	0.0261	0.0000	7.91E-02
212	0.00	0.000	0.000	0.2650	0.0264	0.0000	8.01E-02
213	0.00	0.000	0.000	0.2650	0.0267	0.0000	8.10E-02
214	0.00	0.000	0.000	0.2650	0.0269	0.0000	8.17E-02
215	0.00	0.000	0.000	0.2650	0.0271	0.0000	8.23E-02
216	0.00	0.000	0.000	0.2650	0.0273	0.0000	6.84E-02
217	1.33	0.172	0.049	0.3883	0.0041	0.0000	1.25E-02
218	0.00	0.000	0.275	0.3557	0.0020	0.0000	6.00E-03
219	0.02	0.000	0.153	0.3387	0.0009	0.0000	1.31E-03
220	0.00	0.000	0.216	0.3135	0.0007	0.0000	4.62E-03
221	0.00	0.000	0.113	0.3010	0.0046	0.0000	1.38E-02
222	0.00	0.000	0.096	0.2903	0.0043	0.0000	1.30E-02
223	0.00	0.000	0.080	0.2814	0.0041	0.0000	1.24E-02
224	0.00	0.000	0.077	0.2729	0.0039	0.0000	1.18E-02
225	0.00	0.000	0.071	0.2650	0.0037	0.0000	1.12E-02
226	1.88	0.431	0.070	0.4182	0.0036	0.0000	1.07E-02
227	0.88	0.184	0.198	0.3916	0.0031	0.0000	4.70E-03
228	0.00	0.000	0.235	0.3640	0.0000	0.0000	0.00E+00
229	0.00	0.000	0.228	0.3379	0.0078	0.0000	2.70E-02
230	0.00	0.000	0.179	0.3180	0.0108	0.0000	2.94E-02
231	0.00	0.000	0.201	0.2957	0.0048	0.0000	1.38E-02
232	0.56	0.000	0.140	0.3424	0.0038	0.0000	1.19E-02

233	0.00	0.000	0.207	0.3193	0.0049	0.0000	1.54E-02
234	0.00	0.000	0.228	0.2940	0.0066	0.0000	2.08E-02
235	0.00	0.000	0.212	0.2677	0.0121	0.0000	3.41E-02
236	0.00	0.000	0.022	0.2653	0.0215	0.0000	6.59E-02
237	0.00	0.000	0.003	0.2650	0.0226	0.0000	6.89E-02
238	0.00	0.000	0.000	0.2650	0.0235	0.0000	7.15E-02
239	0.00	0.000	0.000	0.2650	0.0242	0.0000	7.36E-02
240	0.00	0.000	0.000	0.2650	0.0248	0.0000	7.54E-02
241	0.00	0.000	0.000	0.2650	0.0253	0.0000	7.68E-02
242	0.00	0.000	0.000	0.2650	0.0257	0.0000	7.10E-02
243	0.01	0.000	0.010	0.2650	0.0056	0.0000	1.67E-02
244	0.00	0.000	0.000	0.2650	0.0052	0.0000	1.57E-02
245	0.00	0.000	0.000	0.2650	0.0049	0.0000	1.47E-02
246	0.00	0.000	0.000	0.2650	0.0046	0.0000	1.39E-02
247	0.00	0.000	0.000	0.2650	0.0044	0.0000	1.32E-02
248	0.00	0.000	0.000	0.2650	0.0041	0.0000	1.25E-02
249	0.12	0.000	0.015	0.2767	0.0039	0.0000	1.19E-02
250	0.61	0.002	0.028	0.3411	0.0038	0.0000	1.13E-02
251	0.00	0.000	0.043	0.3363	0.0036	0.0000	1.08E-02
252	0.30	0.000	0.049	0.3642	0.0034	0.0000	1.04E-02
253	0.00	0.000	0.131	0.3496	0.0033	0.0000	9.95E-03
254	0.01	0.000	0.143	0.3348	0.0032	0.0000	9.56E-03
255	0.55	0.001	0.156	0.3785	0.0030	0.0000	9.19E-03
256	0.00	0.000	0.195	0.3568	0.0029	0.0000	8.86E-03
257	0.00	0.000	0.203	0.3342	0.0028	0.0000	8.54E-03
258	0.00	0.000	0.117	0.3212	0.0027	0.0000	8.25E-03
259	0.00	0.000	0.066	0.3139	0.0026	0.0000	7.97E-03
260	0.00	0.000	0.065	0.3067	0.0026	0.0000	7.72E-03
261	0.43	0.000	0.066	0.3471	0.0025	0.0000	7.48E-03
262	0.07	0.000	0.121	0.3415	0.0024	0.0000	7.25E-03

263	1.18	0.179	0.060	0.3940	0.0023	0.0000	5.30E-03
264	0.05	0.000	0.126	0.3796	0.0074	0.0000	2.19E-02
265	1.42	0.337	0.107	0.4022	0.0007	0.0000	9.04E-03
266	0.87	0.165	0.114	0.3972	0.0000	0.0000	0.00E+00
267	0.99	0.208	0.146	0.4012	0.0158	0.0000	2.40E-02
268	0.76	0.104	0.124	0.4015	0.0159	0.0000	2.41E-02
269	0.06	0.000	0.095	0.3817	0.0000	0.0000	0.00E+00
270	0.00	0.000	0.120	0.3653	0.0000	0.0000	0.00E+00
271	0.00	0.000	0.111	0.3497	0.0000	0.0000	0.00E+00
272	0.00	0.000	0.131	0.3326	0.0000	0.0000	0.00E+00
273	0.00	0.000	0.121	0.3177	0.0000	0.0000	0.00E+00
274	0.00	0.000	0.068	0.3097	0.0000	0.0000	0.00E+00
275	0.01	0.000	0.072	0.3028	0.0000	0.0000	0.00E+00
276	0.00	0.000	0.089	0.2930	0.0003	0.0000	1.59E-03
277	0.00	0.000	0.102	0.2816	0.0034	0.0000	1.17E-02
278	0.00	0.000	0.116	0.2687	0.0068	0.0000	2.17E-02
279	0.00	0.000	0.033	0.2650	0.0096	0.0000	3.02E-02
280	0.00	0.000	0.000	0.2650	0.0210	0.0000	7.11E-02
281	0.46	0.000	0.041	0.3116	0.0265	0.0000	8.07E-02
282	0.00	0.000	0.076	0.3032	0.0272	0.0000	8.25E-02
283	0.11	0.000	0.071	0.3075	0.0277	0.0000	8.41E-02
284	0.00	0.000	0.073	0.2995	0.0281	0.0000	8.54E-02
285	0.00	0.000	0.088	0.2896	0.0285	0.0000	8.65E-02
286	0.00	0.000	0.086	0.2801	0.0144	0.0000	6.54E-02
287	0.00	0.000	0.104	0.2685	0.0290	0.0000	8.79E-02
288	0.00	0.000	0.028	0.2654	0.0292	0.0000	8.86E-02
289	0.03	0.000	0.019	0.2667	0.0294	0.0000	8.92E-02
290	1.77	0.373	0.060	0.4153	0.0296	0.0000	8.97E-02
291	0.01	0.000	0.098	0.3723	0.0317	0.0000	9.70E-02
292	0.00	0.000	0.117	0.3583	0.0258	0.0000	7.58E-02

293	0.00	0.000	0.099	0.3459	0.0230	0.0000	7.50E-02
294	0.00	0.000	0.095	0.3342	0.0263	0.0000	7.92E-02
295	0.00	0.000	0.077	0.3256	0.0243	0.0000	7.17E-02
296	0.00	0.000	0.065	0.3183	0.0239	0.0000	7.28E-02
297	0.00	0.000	0.072	0.3103	0.0248	0.0000	7.56E-02
298	0.00	0.000	0.082	0.3012	0.0256	0.0000	7.78E-02
299	0.02	0.000	0.080	0.2945	0.0262	0.0000	7.96E-02
300	0.00	0.000	0.080	0.2856	0.0267	0.0000	8.11E-02
301	0.00	0.000	0.079	0.2768	0.0271	0.0000	8.24E-02
302	0.02	0.000	0.073	0.2709	0.0275	0.0000	8.34E-02
303	0.00	0.000	0.050	0.2653	0.0278	0.0000	8.43E-02
304	0.00	0.000	0.002	0.2651	0.0280	0.0000	8.50E-02
305	0.00	0.000	0.001	0.2650	0.0282	0.0000	8.57E-02
306	0.00	0.000	0.000	0.2650	0.0284	0.0000	8.62E-02
307	0.00	0.000	0.000	0.2650	0.0286	0.0000	8.66E-02
308	0.00	0.000	0.000	0.2650	0.0287	0.0000	8.70E-02
309	0.00	0.000	0.000	0.2650	0.0288	0.0000	8.74E-02
310	0.00	0.000	0.000	0.2650	0.0289	0.0000	8.76E-02
311	0.35	0.000	0.022	0.3014	0.0290	0.0000	8.79E-02
312	0.00	0.000	0.022	0.2990	0.0290	0.0000	8.81E-02
313	0.00	0.000	0.025	0.2962	0.0291	0.0000	8.82E-02
314	0.14	0.000	0.031	0.3083	0.0291	0.0000	8.83E-02
315	0.00	0.000	0.023	0.3057	0.0292	0.0000	8.84E-02
316	2.19	0.739	0.034	0.3931	0.0292	0.0000	8.85E-02
317	0.01	0.000	0.051	0.3883	0.0295	0.0000	9.97E-02
318	0.00	0.000	0.059	0.3816	0.0161	0.0000	4.44E-02
319	0.00	0.000	0.066	0.3721	0.0038	0.0000	1.61E-02
320	0.00	0.000	0.066	0.3622	0.0087	0.0000	3.59E-02
321	0.00	0.000	0.062	0.3531	0.0211	0.0000	6.46E-02
322	0.00	0.000	0.064	0.3444	0.0103	0.0000	4.70E-02

323		0.00	0.000	0.068	0.3360	0.0201	0.0000	6.12E-02
324		0.00	0.000	0.067	0.3285	0.0190	0.0000	5.74E-02
325		0.24	0.000	0.065	0.3480	0.0202	0.0000	6.19E-02
326		0.00	0.000	0.063	0.3410	0.0216	0.0000	6.60E-02
327		0.00	0.000	0.046	0.3359	0.0227	0.0000	6.92E-02
328	*	0.00	0.000	0.039	0.3315	0.0235	0.0000	7.17E-02
329		0.00	0.000	0.058	0.3251	0.0242	0.0000	7.37E-02
330		0.00	0.000	0.052	0.3192	0.0248	0.0000	7.54E-02
331		0.02	0.000	0.065	0.3142	0.0157	0.0000	4.45E-02
332		0.00	0.000	0.072	0.3062	0.0059	0.0000	1.77E-02
333		0.00	0.000	0.072	0.2982	0.0055	0.0000	1.66E-02
334		0.01	0.000	0.068	0.2918	0.0052	0.0000	1.55E-02
335		0.07	0.000	0.070	0.2918	0.0049	0.0000	1.46E-02
336		0.00	0.000	0.065	0.2846	0.0046	0.0000	1.38E-02
337		0.00	0.000	0.072	0.2766	0.0043	0.0000	1.31E-02
338		0.00	0.000	0.052	0.2708	0.0041	0.0000	1.24E-02
339		0.00	0.000	0.045	0.2658	0.0039	0.0000	1.18E-02
340		0.04	0.000	0.018	0.2683	0.0037	0.0000	1.13E-02
341		0.61	0.002	0.028	0.3327	0.0036	0.0000	1.08E-02
342	*	0.23	0.000	0.033	0.3349	0.0034	0.0000	1.03E-02
343	*	0.08	0.000	0.026	0.3371	0.0033	0.0000	9.88E-03
344	*	0.00	0.000	0.026	0.3393	0.0031	0.0000	9.49E-03
345	*	0.00	0.000	0.032	0.3415	0.0030	0.0000	9.14E-03
346	*	0.00	0.000	0.027	0.3437	0.0029	0.0000	8.80E-03
347	*	0.00	0.000	0.028	0.3458	0.0028	0.0000	8.49E-03
348	*	0.00	0.000	0.040	0.3436	0.0027	0.0000	8.20E-03
349	*	0.09	0.000	0.029	0.3458	0.0026	0.0000	7.93E-03
350	*	0.00	0.000	0.037	0.3463	0.0025	0.0000	7.68E-03
351		0.00	0.000	0.043	0.3415	0.0025	0.0000	7.44E-03
352	*	0.00	0.000	0.033	0.3378	0.0024	0.0000	7.21E-03

353	*		0.00	0.000	0.000	0.3378	0.0023	0.0000	7.00E-03
354	*		0.00	0.000	0.033	0.3341	0.0023	0.0000	6.80E-03
355	*		0.03	0.000	0.042	0.3328	0.0022	0.0000	6.61E-03
356			0.00	0.000	0.042	0.3281	0.0021	0.0000	6.43E-03
357			0.00	0.000	0.047	0.3229	0.0021	0.0000	6.26E-03
358			0.00	0.000	0.044	0.3180	0.0020	0.0000	6.10E-03
359	*		0.45	0.000	0.037	0.3202	0.0020	0.0000	5.95E-03
360	*		0.76	0.000	0.031	0.3223	0.0019	0.0000	5.80E-03
361	*		0.00	0.000	0.025	0.3245	0.0019	0.0000	5.66E-03
362	*	*	0.00	0.000	0.021	0.3245	0.0009	0.0000	2.07E-03
363	*	*	0.00	0.000	0.029	0.3245	0.0000	0.0000	0.00E+00
364		*	0.39	0.964	0.000	0.3728	0.0000	0.0000	0.00E+00
365		*	1.59	1.383	0.006	0.3951	0.0000	0.0000	0.00E+00

* = Frozen (air or soil)

Annual Totals for Year 2			
	inches	cubic feet	percent
Precipitation	55.60	9,082,260.0	100.00
Runoff	15.973	2,609,205.3	28.73
Evapotranspiration	27.051	4,418,775.6	48.65
Percolation/Leakage through Layer 3	13.330716	2,177,572.5	23.98
Average Head on Top of Layer 3	0.0122	---	---
Change in Water Storage	-0.7548	-123,293.4	-1.36
Soil Water at Start of Year	284.1805	#####	511.12
Soil Water at End of Year	283.4257	#####	509.76
Snow Water at Start of Year	0.0000	0.0000	0.00
Snow Water at End of Year	0.0000	0.0000	0.00
Annual Water Budget Balance	0.0000	0.0000	0.00

Daily Output for Year 3

Column key: Head #1: drainage from Layer 3

Title: RITCHIE LF- PHASE I-Unlined

Simulated On: 12/26/2025 10:53

Leak #1: leakage thru Layer 3

Day	Freezing Status*		Rain (inches)	Runoff (inches)	ET (inches)	Evap. Zone	Head #1 (inches)	Drain #1 (inches)	Leak #1 (inches)
	Air	Soil				Water (in/in)			
1		*	0.01	0.000	0.005	0.3957	0.0000	0.0000	0.00E+00
2		*	0.00	0.000	0.000	0.3957	0.0000	0.0000	0.00E+00
3		*	0.33	0.248	0.006	0.4041	0.0000	0.0000	0.00E+00
4		*	0.00	0.000	0.000	0.4041	0.0000	0.0000	0.00E+00
5		*	0.00	0.000	0.000	0.4041	0.0000	0.0000	0.00E+00
6		*	0.00	0.000	0.000	0.4041	0.0000	0.0000	0.00E+00
7		*	0.38	0.309	0.006	0.4114	0.0000	0.0000	0.00E+00
8	*	*	0.00	0.000	0.000	0.4114	0.0000	0.0000	0.00E+00
9	*	*	0.00	0.000	0.000	0.4114	0.0000	0.0000	0.00E+00
10	*	*	0.00	0.000	0.000	0.4114	0.0000	0.0000	0.00E+00
11		*	0.07	0.031	0.006	0.4150	0.0000	0.0000	0.00E+00
12		*	0.00	0.000	0.000	0.4150	0.0000	0.0000	0.00E+00
13		*	0.05	0.019	0.006	0.4178	0.0000	0.0000	0.00E+00
14		*	0.00	0.000	0.000	0.4178	0.0000	0.0000	0.00E+00
15		*	0.00	0.000	0.000	0.4178	0.0000	0.0000	0.00E+00
16			0.00	0.000	0.050	0.3521	0.0067	0.0000	2.02E-02
17			0.00	0.000	0.056	0.3458	0.0135	0.0000	4.11E-02
18			0.00	0.000	0.046	0.3405	0.0122	0.0000	3.54E-02
19			0.00	0.000	0.051	0.3348	0.0107	0.0000	3.18E-02
20			0.00	0.000	0.066	0.3276	0.0095	0.0000	2.83E-02
21			0.00	0.000	0.057	0.3213	0.0085	0.0000	2.55E-02
22			0.00	0.000	0.063	0.3142	0.0077	0.0000	2.31E-02

23		0.00	0.000	0.051	0.3085	0.0071	0.0000	2.12E-02
24		0.00	0.000	0.063	0.3015	0.0065	0.0000	1.96E-02
25	*	0.26	0.000	0.039	0.3037	0.0060	0.0000	1.81E-02
26	*	0.55	0.000	0.035	0.3059	0.0056	0.0000	1.69E-02
27	*	1.05	0.000	0.035	0.3080	0.0053	0.0000	1.58E-02
28		0.00	0.000	0.046	0.3102	0.0049	0.0000	1.49E-02
29	*	0.00	0.000	0.040	0.3124	0.0047	0.0000	1.40E-02
30		0.00	0.000	0.000	0.3711	0.0044	0.0000	1.33E-02
31		0.00	0.085	0.000	0.4007	0.0021	0.0000	6.38E-03
32		0.46	0.076	0.000	0.3999	0.0000	0.0000	0.00E+00
33		0.00	0.000	0.071	0.3721	0.0000	0.0000	0.00E+00
34		0.08	0.000	0.057	0.3730	0.0004	0.0000	5.58E-03
35		0.00	0.000	0.061	0.3658	0.0000	0.0000	0.00E+00
36		0.00	0.000	0.066	0.3572	0.0000	0.0000	0.00E+00
37		0.00	0.000	0.080	0.3465	0.0000	0.0000	0.00E+00
38		0.00	0.000	0.064	0.3382	0.0000	0.0000	0.00E+00
39		0.00	0.000	0.070	0.3303	0.0000	0.0000	0.00E+00
40	*	0.00	0.000	0.057	0.3239	0.0011	0.0000	4.17E-03
41		0.00	0.000	0.073	0.3158	0.0037	0.0000	1.22E-02
42		0.00	0.000	0.067	0.3084	0.0063	0.0000	2.00E-02
43		0.00	0.000	0.078	0.2998	0.0087	0.0000	2.89E-02
44		0.03	0.000	0.085	0.2937	0.0239	0.0000	9.08E-02
45		0.00	0.000	0.069	0.2860	0.0247	0.0000	7.53E-02
46		0.00	0.000	0.075	0.2777	0.0254	0.0000	7.71E-02
47	*	0.00	0.000	0.059	0.2696	0.0290	0.0000	8.26E-02
48	*	0.01	0.000	0.051	0.2650	0.0259	0.0000	7.86E-02
49		0.40	0.000	0.034	0.3057	0.0263	0.0000	7.98E-02
50	*	0.00	0.000	0.043	0.3009	0.0266	0.0000	8.09E-02
51	*	0.00	0.000	0.058	0.2944	0.0269	0.0000	8.18E-02
52	*	0.08	0.000	0.056	0.2966	0.0272	0.0000	8.25E-02

53		0.92	0.055	0.084	0.3839	0.0274	0.0000	8.32E-02
54		0.00	0.000	0.072	0.3758	0.0276	0.0000	8.37E-02
55	*	0.00	0.000	0.074	0.3673	0.0287	0.0000	8.67E-02
56	*	0.00	0.000	0.066	0.3598	0.0278	0.0000	8.56E-02
57		0.00	0.000	0.077	0.3511	0.0281	0.0000	8.49E-02
58		0.00	0.000	0.085	0.3416	0.0280	0.0000	8.56E-02
59		0.00	0.000	0.091	0.3306	0.0205	0.0000	5.66E-02
60		0.00	0.000	0.077	0.3220	0.0037	0.0000	1.12E-02
61		0.00	0.000	0.086	0.3125	0.0035	0.0000	1.07E-02
62	*	0.00	0.000	0.070	0.3044	0.0026	0.0000	7.72E-03
63		0.00	0.000	0.103	0.2929	0.0033	0.0000	1.00E-02
64		0.00	0.000	0.103	0.2814	0.0032	0.0000	9.61E-03
65		0.45	0.000	0.078	0.3227	0.0031	0.0000	9.25E-03
66		0.00	0.000	0.109	0.3106	0.0030	0.0000	8.90E-03
67		0.00	0.000	0.109	0.2985	0.0028	0.0000	8.59E-03
68		0.10	0.000	0.076	0.3012	0.0027	0.0000	8.29E-03
69		1.06	0.102	0.088	0.3978	0.0027	0.0000	8.01E-03
70		0.00	0.000	0.078	0.3687	0.0027	0.0000	8.23E-03
71	*	0.00	0.000	0.076	0.3598	0.0036	0.0000	1.16E-02
72	*	0.05	0.000	0.046	0.3595	0.0036	0.0000	9.13E-03
73		0.02	0.000	0.071	0.3523	0.0008	0.0000	2.19E-03
74	*	0.00	0.000	0.082	0.3414	0.0002	0.0000	1.31E-03
75		0.00	0.000	0.104	0.3287	0.0021	0.0000	7.79E-03
76		0.19	0.000	0.077	0.3414	0.0056	0.0000	1.69E-02
77		0.00	0.000	0.089	0.3314	0.0053	0.0000	1.58E-02
78		0.00	0.000	0.101	0.3202	0.0049	0.0000	1.49E-02
79		0.00	0.000	0.093	0.3099	0.0047	0.0000	1.40E-02
80		0.00	0.000	0.087	0.3002	0.0044	0.0000	1.33E-02
81		0.05	0.000	0.090	0.2958	0.0042	0.0000	1.26E-02
82		0.00	0.000	0.110	0.2836	0.0040	0.0000	1.20E-02

83		0.00	0.000	0.114	0.2709	0.0038	0.0000	1.14E-02
84		0.00	0.000	0.052	0.2651	0.0036	0.0000	1.09E-02
85		0.11	0.000	0.013	0.2759	0.0035	0.0000	1.04E-02
86		0.00	0.000	0.048	0.2705	0.0033	0.0000	1.00E-02
87		0.03	0.000	0.048	0.2684	0.0032	0.0000	9.61E-03
88	*	0.00	0.000	0.012	0.2671	0.0031	0.0000	9.24E-03
89		0.39	0.000	0.029	0.3072	0.0029	0.0000	8.90E-03
90		0.00	0.000	0.069	0.2995	0.0028	0.0000	8.58E-03
91		1.62	0.340	0.052	0.4117	0.0027	0.0000	6.24E-03
92		0.03	0.000	0.087	0.3873	0.0059	0.0000	1.80E-02
93		0.00	0.000	0.121	0.3717	0.0067	0.0000	2.10E-02
94		0.00	0.000	0.129	0.3543	0.0033	0.0000	8.79E-03
95		0.05	0.000	0.113	0.3446	0.0034	0.0000	1.18E-02
96		0.00	0.000	0.109	0.3304	0.0058	0.0000	1.81E-02
97		0.00	0.000	0.143	0.3135	0.0084	0.0000	2.57E-02
98		0.00	0.000	0.096	0.3026	0.0116	0.0000	3.47E-02
99		0.00	0.000	0.136	0.2875	0.0088	0.0000	2.87E-02
100		0.00	0.000	0.149	0.2710	0.0093	0.0000	2.77E-02
101		0.00	0.000	0.054	0.2650	0.0083	0.0000	2.50E-02
102		0.00	0.000	0.000	0.2650	0.0076	0.0000	2.27E-02
103		0.00	0.000	0.000	0.2650	0.0070	0.0000	2.09E-02
104		0.00	0.000	0.000	0.2650	0.0064	0.0000	1.93E-02
105		0.00	0.000	0.000	0.2650	0.0060	0.0000	1.79E-02
106		0.00	0.000	0.000	0.2650	0.0055	0.0000	1.67E-02
107		0.00	0.000	0.000	0.2650	0.0052	0.0000	1.56E-02
108		0.00	0.000	0.000	0.2650	0.0049	0.0000	1.47E-02
109		0.00	0.000	0.000	0.2650	0.0046	0.0000	1.39E-02
110		0.00	0.000	0.000	0.2650	0.0044	0.0000	1.31E-02
111		0.00	0.000	0.000	0.2650	0.0041	0.0000	1.25E-02
112		0.00	0.000	0.000	0.2650	0.0039	0.0000	1.19E-02

113	0.10	0.000	0.006	0.2754	0.0038	0.0000	1.13E-02
114	0.00	0.000	0.011	0.2743	0.0036	0.0000	1.08E-02
115	0.00	0.000	0.015	0.2726	0.0034	0.0000	1.04E-02
116	0.10	0.000	0.020	0.2815	0.0033	0.0000	9.93E-03
117	0.00	0.000	0.013	0.2801	0.0032	0.0000	9.54E-03
118	0.00	0.000	0.015	0.2783	0.0030	0.0000	9.18E-03
119	0.00	0.000	0.015	0.2767	0.0029	0.0000	8.84E-03
120	0.00	0.000	0.014	0.2751	0.0028	0.0000	8.53E-03
121	0.00	0.000	0.014	0.2736	0.0027	0.0000	8.24E-03
122	1.65	0.313	0.024	0.4195	0.0026	0.0000	7.96E-03
123	0.00	0.000	0.196	0.3632	0.0057	0.0000	1.51E-02
124	0.00	0.000	0.177	0.3433	0.0066	0.0000	2.01E-02
125	0.00	0.000	0.177	0.3237	0.0077	0.0000	2.31E-02
126	0.00	0.000	0.195	0.3020	0.0070	0.0000	2.11E-02
127	0.00	0.000	0.180	0.2820	0.0065	0.0000	1.95E-02
128	0.00	0.000	0.075	0.2736	0.0060	0.0000	1.81E-02
129	0.00	0.000	0.058	0.2671	0.0056	0.0000	1.69E-02
130	0.00	0.000	0.019	0.2650	0.0053	0.0000	1.58E-02
131	0.00	0.000	0.000	0.2650	0.0049	0.0000	1.48E-02
132	0.14	0.000	0.020	0.2783	0.0047	0.0000	1.40E-02
133	0.00	0.000	0.015	0.2766	0.0044	0.0000	1.33E-02
134	0.00	0.000	0.023	0.2740	0.0042	0.0000	1.26E-02
135	0.03	0.000	0.026	0.2745	0.0040	0.0000	1.20E-02
136	0.67	0.007	0.027	0.3452	0.0038	0.0000	1.14E-02
137	0.10	0.000	0.162	0.3383	0.0036	0.0000	1.09E-02
138	0.00	0.000	0.207	0.3153	0.0035	0.0000	1.04E-02
139	0.05	0.000	0.173	0.3016	0.0033	0.0000	1.00E-02
140	0.00	0.000	0.074	0.2934	0.0032	0.0000	9.60E-03
141	0.00	0.000	0.057	0.2870	0.0031	0.0000	9.23E-03
142	0.00	0.000	0.048	0.2817	0.0029	0.0000	8.89E-03

143	0.00	0.000	0.044	0.2768	0.0028	0.0000	8.58E-03
144	0.00	0.000	0.041	0.2722	0.0027	0.0000	8.28E-03
145	0.00	0.000	0.039	0.2678	0.0027	0.0000	8.01E-03
146	0.44	0.000	0.039	0.3122	0.0026	0.0000	6.69E-03
147	0.02	0.000	0.038	0.3102	0.0025	0.0000	7.57E-03
148	0.01	0.000	0.032	0.3078	0.0024	0.0000	7.34E-03
149	0.00	0.000	0.028	0.3048	0.0024	0.0000	7.12E-03
150	1.61	0.384	0.034	0.4086	0.0023	0.0000	6.91E-03
151	0.27	0.000	0.245	0.3947	0.0057	0.0000	1.70E-02
152	0.33	0.002	0.231	0.3996	0.0104	0.0000	2.36E-02
153	0.81	0.139	0.264	0.4032	0.0060	0.0000	9.07E-03
154	0.37	0.002	0.272	0.4036	0.0064	0.0000	9.70E-03
155	0.02	0.000	0.268	0.3733	0.0211	0.0000	4.67E-02
156	0.00	0.000	0.283	0.3393	0.0123	0.0000	4.03E-02
157	0.00	0.000	0.272	0.3061	0.0064	0.0000	2.19E-02
158	0.00	0.000	0.284	0.2746	0.0110	0.0000	3.08E-02
159	0.00	0.000	0.086	0.2650	0.0064	0.0000	1.88E-02
160	0.00	0.000	0.000	0.2650	0.0057	0.0000	1.74E-02
161	0.00	0.000	0.000	0.2650	0.0066	0.0000	2.04E-02
162	0.00	0.000	0.000	0.2650	0.0081	0.0000	2.51E-02
163	0.00	0.000	0.000	0.2650	0.0158	0.0000	5.06E-02
164	0.75	0.014	0.038	0.3426	0.0230	0.0000	7.00E-02
165	0.00	0.000	0.227	0.3174	0.0238	0.0000	7.24E-02
166	0.01	0.000	0.049	0.3131	0.0245	0.0000	7.44E-02
167	0.00	0.000	0.045	0.3081	0.0250	0.0000	7.60E-02
168	0.83	0.034	0.044	0.3916	0.0255	0.0000	7.74E-02
169	0.39	0.005	0.243	0.3988	0.0258	0.0000	7.46E-02
170	0.00	0.000	0.246	0.3693	0.0041	0.0000	1.23E-02
171	1.21	0.191	0.216	0.4008	0.0030	0.0000	4.50E-03
172	1.50	0.505	0.192	0.4031	0.0000	0.0000	0.00E+00

173	0.04	0.000	0.244	0.3620	0.0158	0.0000	4.80E-02
174	0.00	0.000	0.270	0.3300	0.0000	0.0000	0.00E+00
175	0.00	0.000	0.245	0.2994	0.0000	0.0000	0.00E+00
176	0.00	0.000	0.227	0.2741	0.0000	0.0000	0.00E+00
177	0.70	0.008	0.206	0.3281	0.0000	0.0000	0.00E+00
178	0.01	0.000	0.182	0.3090	0.0000	0.0000	0.00E+00
179	0.00	0.000	0.202	0.2865	0.0000	0.0000	0.00E+00
180	0.00	0.000	0.154	0.2694	0.0000	0.0000	0.00E+00
181	0.00	0.000	0.030	0.2660	0.0016	0.0000	6.32E-03
182	0.70	0.008	0.052	0.3371	0.0053	0.0000	1.74E-02
183	0.00	0.000	0.176	0.3176	0.0084	0.0000	2.94E-02
184	0.00	0.000	0.211	0.2941	0.0246	0.0000	7.49E-02
185	0.11	0.000	0.197	0.2845	0.0253	0.0000	7.70E-02
186	0.00	0.000	0.133	0.2698	0.0259	0.0000	7.88E-02
187	0.00	0.000	0.036	0.2657	0.0264	0.0000	8.02E-02
188	0.03	0.000	0.018	0.2671	0.0268	0.0000	8.14E-02
189	0.63	0.002	0.036	0.3327	0.0271	0.0000	8.24E-02
190	0.00	0.000	0.217	0.3086	0.0274	0.0000	8.33E-02
191	0.00	0.000	0.068	0.3011	0.0277	0.0000	8.40E-02
192	0.00	0.000	0.063	0.2940	0.0279	0.0000	8.46E-02
193	0.00	0.000	0.063	0.2870	0.0281	0.0000	8.51E-02
194	0.17	0.000	0.071	0.2979	0.0282	0.0000	8.56E-02
195	0.00	0.000	0.235	0.2718	0.0283	0.0000	8.60E-02
196	0.00	0.000	0.051	0.2661	0.0284	0.0000	8.63E-02
197	0.00	0.000	0.008	0.2653	0.0285	0.0000	8.66E-02
198	0.02	0.000	0.015	0.2658	0.0286	0.0000	8.68E-02
199	0.00	0.000	0.005	0.2653	0.0287	0.0000	8.70E-02
200	0.00	0.000	0.002	0.2651	0.0287	0.0000	8.71E-02
201	0.00	0.000	0.001	0.2650	0.0288	0.0000	8.73E-02
202	0.00	0.000	0.000	0.2650	0.0288	0.0000	8.74E-02

203	0.00	0.000	0.000	0.2650	0.0288	0.0000	7.79E-02
204	0.21	0.000	0.030	0.2850	0.0027	0.0000	8.27E-03
205	0.00	0.000	0.026	0.2821	0.0026	0.0000	7.99E-03
206	0.00	0.000	0.040	0.2777	0.0026	0.0000	7.73E-03
207	0.00	0.000	0.042	0.2730	0.0025	0.0000	7.49E-03
208	0.00	0.000	0.046	0.2679	0.0024	0.0000	7.26E-03
209	0.00	0.000	0.022	0.2654	0.0023	0.0000	7.05E-03
210	0.04	0.000	0.016	0.2681	0.0023	0.0000	6.85E-03
211	0.00	0.000	0.005	0.2675	0.0022	0.0000	6.65E-03
212	0.08	0.000	0.020	0.2742	0.0021	0.0000	6.47E-03
213	0.00	0.000	0.029	0.2710	0.0021	0.0000	6.30E-03
214	0.00	0.000	0.038	0.2668	0.0020	0.0000	6.14E-03
215	0.00	0.000	0.013	0.2654	0.0020	0.0000	5.98E-03
216	0.00	0.000	0.003	0.2651	0.0019	0.0000	5.83E-03
217	0.00	0.000	0.000	0.2650	0.0019	0.0000	5.69E-03
218	0.00	0.000	0.000	0.2650	0.0013	0.0000	3.33E-03
219	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
220	0.28	0.000	0.035	0.2922	0.0000	0.0000	0.00E+00
221	0.01	0.000	0.037	0.2892	0.0000	0.0000	0.00E+00
222	0.00	0.000	0.036	0.2852	0.0000	0.0000	0.00E+00
223	0.00	0.000	0.039	0.2809	0.0000	0.0000	0.00E+00
224	0.00	0.000	0.051	0.2753	0.0000	0.0000	0.00E+00
225	0.00	0.000	0.047	0.2700	0.0000	0.0000	0.00E+00
226	0.00	0.000	0.039	0.2658	0.0000	0.0000	0.00E+00
227	0.00	0.000	0.006	0.2651	0.0000	0.0000	0.00E+00
228	0.60	0.001	0.029	0.3285	0.0000	0.0000	0.00E+00
229	0.00	0.000	0.174	0.3092	0.0000	0.0000	0.00E+00
230	0.00	0.000	0.194	0.2876	0.0000	0.0000	0.00E+00
231	0.00	0.000	0.177	0.2679	0.0000	0.0000	0.00E+00
232	0.00	0.000	0.023	0.2652	0.0003	0.0000	9.13E-04

233	0.00	0.000	0.002	0.2650	0.0000	0.0000	0.00E+00
234	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
235	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
236	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
237	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
238	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
239	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
240	0.01	0.000	0.010	0.2650	0.0000	0.0000	0.00E+00
241	0.17	0.000	0.039	0.2795	0.0000	0.0000	0.00E+00
242	0.00	0.000	0.026	0.2766	0.0000	0.0000	0.00E+00
243	0.00	0.000	0.047	0.2714	0.0000	0.0000	0.00E+00
244	0.00	0.000	0.042	0.2667	0.0000	0.0000	0.00E+00
245	0.00	0.000	0.014	0.2652	0.0000	0.0000	0.00E+00
246	0.31	0.000	0.032	0.2961	0.0000	0.0000	0.00E+00
247	0.00	0.000	0.038	0.2918	0.0000	0.0000	0.00E+00
248	0.00	0.000	0.045	0.2868	0.0000	0.0000	0.00E+00
249	0.00	0.000	0.048	0.2815	0.0000	0.0000	0.00E+00
250	0.00	0.000	0.049	0.2760	0.0000	0.0000	0.00E+00
251	0.00	0.000	0.044	0.2711	0.0000	0.0000	0.00E+00
252	0.00	0.000	0.036	0.2672	0.0000	0.0000	0.00E+00
253	0.00	0.000	0.017	0.2653	0.0000	0.0000	0.00E+00
254	0.21	0.000	0.035	0.2847	0.0000	0.0000	0.00E+00
255	0.00	0.000	0.017	0.2828	0.0000	0.0000	0.00E+00
256	0.00	0.000	0.026	0.2799	0.0000	0.0000	0.00E+00
257	0.00	0.000	0.027	0.2769	0.0000	0.0000	0.00E+00
258	0.00	0.000	0.025	0.2742	0.0000	0.0000	0.00E+00
259	1.53	0.256	0.041	0.4112	0.0000	0.0000	0.00E+00
260	0.00	0.000	0.104	0.3752	0.0000	0.0000	0.00E+00
261	0.00	0.000	0.136	0.3587	0.0011	0.0000	2.23E-03
262	0.00	0.000	0.134	0.3432	0.0036	0.0000	8.97E-03

263	0.00	0.000	0.131	0.3270	0.0001	0.0000	8.75E-04
264	0.00	0.000	0.110	0.3143	0.0031	0.0000	1.06E-02
265	0.00	0.000	0.095	0.3038	0.0047	0.0000	1.42E-02
266	0.00	0.000	0.132	0.2891	0.0045	0.0000	1.34E-02
267	0.00	0.000	0.128	0.2749	0.0042	0.0000	1.27E-02
268	0.00	0.000	0.089	0.2650	0.0040	0.0000	1.21E-02
269	0.00	0.000	0.000	0.2650	0.0038	0.0000	1.15E-02
270	0.22	0.000	0.042	0.2848	0.0037	0.0000	1.10E-02
271	0.91	0.065	0.052	0.3729	0.0035	0.0000	1.05E-02
272	0.00	0.000	0.107	0.3611	0.0033	0.0000	1.01E-02
273	0.00	0.000	0.085	0.3517	0.0032	0.0000	9.70E-03
274	1.88	0.551	0.097	0.4212	0.0016	0.0000	4.71E-03
275	0.15	0.000	0.132	0.3879	0.0000	0.0000	0.00E+00
276	1.15	0.293	0.109	0.4014	0.0039	0.0000	5.86E-03
277	0.00	0.000	0.127	0.3725	0.0317	0.0000	7.20E-02
278	0.01	0.000	0.105	0.3612	0.0000	0.0000	0.00E+00
279	0.00	0.000	0.128	0.3452	0.0000	0.0000	0.00E+00
280	0.00	0.000	0.098	0.3338	0.0000	0.0000	0.00E+00
281	0.27	0.000	0.109	0.3516	0.0000	0.0000	0.00E+00
282	0.97	0.114	0.104	0.3966	0.0000	0.0000	0.00E+00
283	2.98	1.692	0.103	0.4011	0.0164	0.0000	4.96E-02
284	0.00	0.000	0.113	0.3808	0.0163	0.0000	2.48E-02
285	0.00	0.000	0.109	0.3642	0.0000	0.0000	0.00E+00
286	0.00	0.000	0.084	0.3515	0.0000	0.0000	0.00E+00
287	0.00	0.000	0.102	0.3375	0.0000	0.0000	0.00E+00
288	0.00	0.000	0.127	0.3212	0.0000	0.0000	0.00E+00
289	0.00	0.000	0.091	0.3099	0.0000	0.0000	0.00E+00
290	0.36	0.000	0.086	0.3403	0.0000	0.0000	0.00E+00
291	0.48	0.001	0.086	0.3840	0.0002	0.0000	1.40E-03
292	0.00	0.000	0.063	0.3770	0.0031	0.0000	1.06E-02

293		0.00	0.000	0.050	0.3699	0.0031	0.0000	1.14E-02
294		2.00	0.653	0.067	0.4261	0.0182	0.0000	5.48E-02
295	*	0.00	0.000	0.050	0.3846	0.0173	0.0000	5.25E-02
296	*	0.00	0.000	0.045	0.3780	0.0173	0.0000	3.43E-02
297		0.00	0.000	0.049	0.3720	0.0000	0.0000	0.00E+00
298		0.37	0.000	0.065	0.4052	0.0000	0.0000	0.00E+00
299		2.16	0.988	0.070	0.4043	0.0000	0.0000	0.00E+00
300		0.00	0.000	0.084	0.3678	0.0353	0.0000	6.88E-02
301		0.00	0.000	0.088	0.3575	0.0000	0.0000	0.00E+00
302		0.00	0.000	0.077	0.3482	0.0000	0.0000	0.00E+00
303		0.00	0.000	0.080	0.3393	0.0000	0.0000	0.00E+00
304		0.36	0.000	0.071	0.3714	0.0000	0.0000	0.00E+00
305		0.14	0.000	0.083	0.3778	0.0000	0.0000	0.00E+00
306		0.00	0.000	0.080	0.3687	0.0000	0.0000	0.00E+00
307		0.00	0.000	0.080	0.3599	0.0019	0.0000	7.77E-03
308		0.00	0.000	0.061	0.3530	0.0066	0.0000	2.16E-02
309		0.00	0.000	0.075	0.3447	0.0103	0.0000	3.25E-02
310		0.00	0.000	0.076	0.3363	0.0166	0.0000	5.71E-02
311		0.00	0.000	0.093	0.3260	0.0291	0.0000	8.85E-02
312		0.00	0.000	0.068	0.3184	0.0298	0.0000	9.04E-02
313		0.00	0.000	0.056	0.3122	0.0303	0.0000	9.20E-02
314		0.00	0.000	0.054	0.3062	0.0307	0.0000	9.32E-02
315		0.00	0.000	0.060	0.2995	0.0311	0.0000	9.43E-02
316		0.10	0.000	0.069	0.3029	0.0314	0.0000	9.52E-02
317		0.19	0.000	0.074	0.3158	0.0316	0.0000	9.59E-02
318		0.00	0.000	0.059	0.3093	0.0318	0.0000	9.65E-02
319		0.00	0.000	0.063	0.3023	0.0320	0.0000	9.70E-02
320		0.02	0.000	0.070	0.2968	0.0321	0.0000	9.75E-02
321		0.00	0.000	0.080	0.2879	0.0322	0.0000	9.78E-02
322		0.00	0.000	0.069	0.2803	0.0323	0.0000	9.81E-02

323		0.00	0.000	0.059	0.2719	0.0343	0.0000	1.04E-01
324		0.00	0.000	0.060	0.2653	0.0321	0.0000	9.75E-02
325		0.00	0.000	0.002	0.2650	0.0322	0.0000	9.77E-02
326		0.00	0.000	0.000	0.2650	0.0323	0.0000	9.79E-02
327		0.00	0.000	0.000	0.2650	0.0323	0.0000	9.81E-02
328		0.00	0.000	0.000	0.2650	0.0324	0.0000	9.82E-02
329		0.00	0.000	0.000	0.2650	0.0324	0.0000	9.83E-02
330		0.00	0.000	0.000	0.2650	0.0324	0.0000	9.83E-02
331		0.15	0.000	0.025	0.2789	0.0324	0.0000	9.83E-02
332		0.07	0.000	0.023	0.2840	0.0324	0.0000	9.83E-02
333	*	0.72	0.000	0.027	0.2862	0.0324	0.0000	9.83E-02
334		0.13	0.000	0.000	0.3028	0.0324	0.0000	9.83E-02
335		0.00	0.000	0.036	0.3073	0.0324	0.0000	9.82E-02
336		0.00	0.000	0.019	0.3275	0.0324	0.0000	9.82E-02
337		0.00	0.000	0.022	0.3501	0.0324	0.0000	9.81E-02
338	*	0.00	0.000	0.041	0.3523	0.0323	0.0000	9.80E-02
339	*	0.00	0.000	0.036	0.3545	0.0323	0.0000	9.79E-02
340	*	0.00	0.000	0.024	0.3558	0.0322	0.0000	9.78E-02
341	*	0.20	0.000	0.023	0.3579	0.0322	0.0000	9.76E-02
342	*	1.13	0.000	0.024	0.3601	0.0322	0.0000	9.75E-02
343	*	0.33	0.000	0.023	0.3623	0.0321	0.0000	9.74E-02
344	*	0.00	0.000	0.034	0.3645	0.0321	0.0000	9.72E-02
345		0.00	0.000	0.040	0.3667	0.0320	0.0000	9.71E-02
346		0.00	0.000	0.013	0.3910	0.0320	0.0000	9.69E-02
347	*	0.22	0.000	0.034	0.3906	0.0337	0.0000	1.02E-01
348		0.00	0.000	0.036	0.3949	0.0325	0.0000	1.00E-01
349	*	0.00	0.000	0.035	0.3959	0.0317	0.0000	9.88E-02
350		0.16	0.002	0.000	0.4080	0.0334	0.0000	1.01E-01
351	*	0.02	0.000	0.033	0.3994	0.0333	0.0000	9.94E-02
352	*	0.00	0.000	0.032	0.4006	0.0262	0.0000	8.02E-02

353	*		0.00	0.000	0.031	0.3996	0.0323	0.0000	9.91E-02
354	*	*	0.00	0.000	0.034	0.3996	0.0283	0.0000	7.90E-02
355		*	0.42	0.170	0.000	0.4215	0.0244	0.0000	7.44E-02
356		*	0.00	0.012	0.034	0.4243	0.0252	0.0000	7.66E-02
357		*	0.00	0.077	0.022	0.4305	0.0258	0.0000	7.84E-02
358		*	0.00	0.312	0.000	0.4396	0.0263	0.0000	7.99E-02
359		*	0.00	0.212	0.019	0.4436	0.0267	0.0000	8.11E-02
360		*	0.27	0.227	0.007	0.4475	0.0270	0.0000	8.21E-02
361	*	*	0.08	0.000	0.032	0.4475	0.0273	0.0000	8.30E-02
362	*	*	0.00	0.000	0.033	0.4475	0.0276	0.0000	8.37E-02
363	*	*	0.00	0.000	0.014	0.4475	0.0278	0.0000	8.44E-02
364	*	*	0.00	0.000	0.000	0.4475	0.0280	0.0000	8.49E-02
365	*	*	0.00	0.000	0.000	0.4475	0.0281	0.0000	8.54E-02

* = Frozen (air or soil)

Annual Totals for Year 3			
	inches	cubic feet	percent
Precipitation	44.72	7,305,012.0	100.00
Runoff	8.505	1,389,242.2	19.02
Evapotranspiration	23.598	3,854,726.8	52.77
Percolation/Leakage through Layer 3	11.316856	1,848,608.5	25.31
Average Head on Top of Layer 3	0.0104	---	---
Change in Water Storage	1.3005	212,434.5	2.91
Soil Water at Start of Year	283.4257	#####	633.78
Soil Water at End of Year	284.7262	#####	636.69
Snow Water at Start of Year	0.0000	0.0000	0.00
Snow Water at End of Year	0.0000	0.0000	0.00
Annual Water Budget Balance	0.0000	0.0000	0.00

Daily Output for Year 4

Column key: Head #1: drainage from Layer 3

Title: RITCHIE LF- PHASE I-Unlined

Simulated On: 12/26/2025 10:53

Leak #1: leakage thru Layer 3

Day	Freezing Status*		Rain (inches)	Runoff (inches)	ET (inches)	Evap. Zone	Head #1 (inches)	Drain #1 (inches)	Leak #1 (inches)
	Air	Soil				Water (in/in)			
1		*	0.00	0.000	0.000	0.4475	0.0283	0.0000	8.58E-02
2	*	*	0.00	0.000	0.000	0.4475	0.0284	0.0000	8.61E-02
3		*	0.00	0.000	0.000	0.4475	0.0285	0.0000	8.64E-02
4	*	*	0.00	0.000	0.000	0.4475	0.0286	0.0000	8.66E-02
5		*	0.00	0.000	0.000	0.4475	0.0286	0.0000	8.68E-02
6		*	0.09	0.062	0.007	0.4499	0.0287	0.0000	8.70E-02
7		*	0.20	0.170	0.007	0.4524	0.0287	0.0000	8.71E-02
8		*	0.10	0.077	0.007	0.4541	0.0288	0.0000	8.72E-02
9		*	0.00	0.000	0.000	0.4541	0.0158	0.0000	3.54E-02
10		*	0.47	0.444	0.007	0.4561	0.0028	0.0000	8.30E-03
11	*	*	0.02	0.000	0.020	0.4561	0.0027	0.0000	8.03E-03
12	*	*	0.00	0.000	0.000	0.4561	0.0026	0.0000	7.77E-03
13	*	*	0.00	0.000	0.000	0.4561	0.0025	0.0000	7.52E-03
14	*	*	0.00	0.000	0.000	0.4561	0.0024	0.0000	7.29E-03
15	*	*	0.66	0.000	0.028	0.4561	0.0023	0.0000	7.08E-03
16	*	*	0.00	0.000	0.026	0.4561	0.0023	0.0000	6.87E-03
17	*	*	0.00	0.000	0.022	0.4561	0.0022	0.0000	6.68E-03
18	*	*	0.00	0.000	0.031	0.4561	0.0021	0.0000	6.50E-03
19	*	*	0.00	0.000	0.033	0.4561	0.0021	0.0000	6.32E-03
20	*	*	0.00	0.000	0.035	0.4561	0.0020	0.0000	6.16E-03
21	*	*	0.00	0.000	0.027	0.4561	0.0020	0.0000	6.00E-03
22	*	*	0.00	0.000	0.032	0.4561	0.0019	0.0000	5.85E-03

23	*	*	0.00	0.000	0.036	0.4561	0.0019	0.0000	5.71E-03
24		*	0.00	0.080	0.035	0.4561	0.0018	0.0000	4.09E-03
25		*	0.15	0.363	0.000	0.4585	0.0000	0.0000	0.00E+00
26		*	0.00	0.000	0.041	0.4585	0.0000	0.0000	0.00E+00
27		*	0.00	0.000	0.000	0.4585	0.0000	0.0000	0.00E+00
28		*	0.00	0.000	0.000	0.4585	0.0000	0.0000	0.00E+00
29		*	0.07	0.056	0.007	0.4593	0.0000	0.0000	0.00E+00
30		*	0.00	0.000	0.000	0.4593	0.0000	0.0000	0.00E+00
31		*	0.00	0.000	0.000	0.4593	0.0000	0.0000	0.00E+00
32		*	0.00	0.000	0.000	0.4593	0.0000	0.0000	0.00E+00
33		*	0.00	0.000	0.000	0.4593	0.0000	0.0000	0.00E+00
34		*	0.00	0.000	0.000	0.4593	0.0000	0.0000	0.00E+00
35			0.00	0.000	0.047	0.3540	0.0035	0.0000	5.28E-03
36	*		0.00	0.000	0.053	0.3451	0.0049	0.0000	2.03E-02
37	*		0.00	0.000	0.061	0.3362	0.0127	0.0000	3.69E-02
38	*		0.00	0.000	0.000	0.3348	0.0082	0.0000	2.38E-02
39	*		0.00	0.000	0.050	0.3282	0.0056	0.0000	1.66E-02
40	*	*	0.00	0.000	0.000	0.3282	0.0070	0.0000	2.06E-02
41		*	0.00	0.000	0.000	0.3282	0.0063	0.0000	1.92E-02
42		*	0.00	0.000	0.000	0.3282	0.0071	0.0000	2.21E-02
43		*	0.00	0.000	0.000	0.3282	0.0086	0.0000	2.66E-02
44		*	0.05	0.000	0.007	0.3330	0.0161	0.0000	5.82E-02
45		*	0.01	0.000	0.005	0.3335	0.0231	0.0000	7.03E-02
46		*	0.00	0.000	0.000	0.3335	0.0239	0.0000	7.27E-02
47		*	0.00	0.000	0.000	0.3335	0.0245	0.0000	7.46E-02
48		*	0.00	0.000	0.000	0.3335	0.0251	0.0000	7.62E-02
49		*	0.00	0.000	0.000	0.3335	0.0255	0.0000	7.75E-02
50		*	0.03	0.000	0.007	0.3361	0.0259	0.0000	7.86E-02
51		*	0.00	0.000	0.000	0.3361	0.0062	0.0000	1.74E-02
52			0.00	0.000	0.088	0.3262	0.0045	0.0000	1.45E-02

53		0.00	0.000	0.065	0.3189	0.0048	0.0000	1.44E-02
54		0.00	0.000	0.082	0.3097	0.0045	0.0000	1.36E-02
55		0.00	0.000	0.076	0.3012	0.0039	0.0000	1.24E-02
56		0.41	0.000	0.065	0.3395	0.0041	0.0000	1.23E-02
57		0.00	0.000	0.068	0.3320	0.0039	0.0000	1.17E-02
58		0.00	0.000	0.074	0.3238	0.0037	0.0000	1.12E-02
59		0.11	0.000	0.068	0.3284	0.0036	0.0000	1.07E-02
60		0.00	0.000	0.085	0.3190	0.0034	0.0000	1.03E-02
61	*	0.00	0.000	0.066	0.3117	0.0033	0.0000	9.84E-03
62	*	0.00	0.000	0.072	0.3037	0.0031	0.0000	9.46E-03
63	*	0.00	0.000	0.062	0.2968	0.0030	0.0000	9.10E-03
64	*	0.16	0.000	0.054	0.2990	0.0029	0.0000	8.77E-03
65		0.00	0.000	0.084	0.2993	0.0028	0.0000	8.46E-03
66		0.32	0.000	0.068	0.3273	0.0027	0.0000	8.17E-03
67		0.00	0.000	0.078	0.3186	0.0026	0.0000	7.90E-03
68		0.00	0.000	0.091	0.3085	0.0025	0.0000	7.65E-03
69		0.00	0.000	0.079	0.2997	0.0025	0.0000	7.41E-03
70		0.00	0.000	0.097	0.2890	0.0024	0.0000	7.19E-03
71		0.00	0.000	0.096	0.2784	0.0023	0.0000	6.98E-03
72		0.06	0.000	0.076	0.2748	0.0012	0.0000	3.65E-03
73		0.61	0.002	0.079	0.3336	0.0024	0.0000	7.14E-03
74	*	0.00	0.000	0.058	0.3272	0.0023	0.0000	6.93E-03
75	*	0.00	0.000	0.073	0.3191	0.0022	0.0000	6.74E-03
76	*	0.00	0.000	0.080	0.3101	0.0022	0.0000	6.55E-03
77		0.00	0.000	0.096	0.2994	0.0021	0.0000	6.37E-03
78		0.03	0.000	0.081	0.2938	0.0021	0.0000	6.21E-03
79		0.09	0.000	0.079	0.2950	0.0020	0.0000	6.05E-03
80		0.75	0.017	0.125	0.3626	0.0020	0.0000	5.90E-03
81		0.00	0.000	0.099	0.3516	0.0019	0.0000	5.75E-03
82		0.65	0.025	0.097	0.4102	0.0019	0.0000	5.62E-03

83		0.00	0.000	0.092	0.3870	0.0001	0.0000	1.72E-04
84		0.00	0.000	0.088	0.3734	0.0000	0.0000	0.00E+00
85	*	0.00	0.000	0.075	0.3622	0.0000	0.0000	0.00E+00
86		0.00	0.000	0.109	0.3476	0.0000	0.0000	0.00E+00
87		0.00	0.000	0.120	0.3321	0.0000	0.0000	0.00E+00
88		0.00	0.000	0.133	0.3163	0.0007	0.0000	5.21E-03
89		0.00	0.000	0.102	0.3050	0.0045	0.0000	1.36E-02
90		0.04	0.000	0.075	0.3011	0.0043	0.0000	1.29E-02
91		0.00	0.000	0.089	0.2912	0.0041	0.0000	1.23E-02
92		0.00	0.000	0.097	0.2805	0.0039	0.0000	1.17E-02
93		0.05	0.000	0.122	0.2725	0.0037	0.0000	1.11E-02
94		0.15	0.000	0.068	0.2816	0.0035	0.0000	1.07E-02
95		2.00	0.561	0.117	0.4233	0.0034	0.0000	7.69E-03
96		0.53	0.038	0.095	0.4070	0.0056	0.0000	1.82E-02
97		0.00	0.000	0.142	0.3869	0.0124	0.0000	3.09E-02
98		0.00	0.000	0.152	0.3650	0.0188	0.0000	5.64E-02
99		0.00	0.000	0.172	0.3423	0.0158	0.0000	4.71E-02
100		0.00	0.000	0.154	0.3225	0.0152	0.0000	4.63E-02
101		0.00	0.000	0.145	0.3053	0.0150	0.0000	4.59E-02
102		0.00	0.000	0.166	0.2868	0.0156	0.0000	4.59E-02
103		0.00	0.000	0.160	0.2690	0.0131	0.0000	3.90E-02
104		0.00	0.000	0.027	0.2650	0.0148	0.0000	3.85E-02
105		0.00	0.000	0.000	0.2650	0.0193	0.0000	5.91E-02
106		0.00	0.000	0.000	0.2650	0.0170	0.0000	4.93E-02
107		0.00	0.000	0.000	0.2650	0.0096	0.0000	2.87E-02
108		0.00	0.000	0.000	0.2650	0.0086	0.0000	2.58E-02
109		0.00	0.000	0.000	0.2650	0.0078	0.0000	2.34E-02
110		0.80	0.021	0.029	0.3483	0.0071	0.0000	2.14E-02
111		0.00	0.000	0.170	0.3294	0.0066	0.0000	1.97E-02
112		0.00	0.000	0.156	0.3120	0.0061	0.0000	1.83E-02

113	0.00	0.000	0.160	0.2942	0.0057	0.0000	1.70E-02
114	0.45	0.000	0.077	0.3356	0.0053	0.0000	1.59E-02
115	0.79	0.063	0.128	0.4022	0.0050	0.0000	1.50E-02
116	0.00	0.000	0.161	0.3844	0.0047	0.0000	1.41E-02
117	0.00	0.000	0.197	0.3622	0.0045	0.0000	1.16E-02
118	0.00	0.000	0.200	0.3399	0.0043	0.0000	1.29E-02
119	0.07	0.000	0.184	0.3257	0.0027	0.0000	5.89E-03
120	0.00	0.000	0.147	0.3082	0.0002	0.0000	3.67E-03
121	0.00	0.000	0.177	0.2882	0.0024	0.0000	1.01E-02
122	0.00	0.000	0.075	0.2799	0.0042	0.0000	1.26E-02
123	0.00	0.000	0.058	0.2734	0.0040	0.0000	1.20E-02
124	0.01	0.000	0.054	0.2685	0.0038	0.0000	1.14E-02
125	0.09	0.000	0.039	0.2741	0.0036	0.0000	1.09E-02
126	0.40	0.000	0.022	0.3161	0.0035	0.0000	1.04E-02
127	0.00	0.000	0.030	0.3128	0.0033	0.0000	1.00E-02
128	0.09	0.000	0.037	0.3187	0.0032	0.0000	9.60E-03
129	0.00	0.000	0.199	0.2965	0.0031	0.0000	9.24E-03
130	0.00	0.000	0.032	0.2930	0.0029	0.0000	8.90E-03
131	0.00	0.000	0.032	0.2894	0.0028	0.0000	8.58E-03
132	0.00	0.000	0.028	0.2863	0.0027	0.0000	8.28E-03
133	0.00	0.000	0.027	0.2833	0.0027	0.0000	8.01E-03
134	0.00	0.000	0.026	0.2804	0.0026	0.0000	7.75E-03
135	0.00	0.000	0.026	0.2775	0.0025	0.0000	7.51E-03
136	0.00	0.000	0.025	0.2748	0.0024	0.0000	7.28E-03
137	0.00	0.000	0.026	0.2719	0.0023	0.0000	7.06E-03
138	0.00	0.000	0.025	0.2691	0.0023	0.0000	6.86E-03
139	0.00	0.000	0.023	0.2666	0.0022	0.0000	6.67E-03
140	0.00	0.000	0.012	0.2653	0.0021	0.0000	6.48E-03
141	0.00	0.000	0.002	0.2650	0.0021	0.0000	6.31E-03
142	0.00	0.000	0.000	0.2650	0.0020	0.0000	6.15E-03

143	0.00	0.000	0.000	0.2650	0.0020	0.0000	5.99E-03
144	0.00	0.000	0.000	0.2650	0.0019	0.0000	5.84E-03
145	0.16	0.000	0.016	0.2810	0.0019	0.0000	5.70E-03
146	0.67	0.010	0.021	0.3520	0.0015	0.0000	3.69E-03
147	0.03	0.000	0.125	0.3414	0.0000	0.0000	0.00E+00
148	0.00	0.000	0.174	0.3221	0.0000	0.0000	0.00E+00
149	0.00	0.000	0.178	0.3024	0.0000	0.0000	0.00E+00
150	0.05	0.000	0.083	0.2987	0.0000	0.0000	0.00E+00
151	0.00	0.000	0.061	0.2920	0.0000	0.0000	0.00E+00
152	0.00	0.000	0.050	0.2864	0.0000	0.0000	0.00E+00
153	0.32	0.000	0.053	0.3160	0.0000	0.0000	0.00E+00
154	0.00	0.000	0.045	0.3111	0.0000	0.0000	0.00E+00
155	0.00	0.000	0.044	0.3062	0.0000	0.0000	0.00E+00
156	0.00	0.000	0.042	0.3016	0.0000	0.0000	0.00E+00
157	0.00	0.000	0.040	0.2972	0.0000	0.0000	0.00E+00
158	0.25	0.000	0.045	0.3199	0.0000	0.0000	0.00E+00
159	0.00	0.000	0.037	0.3158	0.0000	0.0000	0.00E+00
160	0.04	0.000	0.039	0.3160	0.0000	0.0000	0.00E+00
161	0.30	0.000	0.040	0.3448	0.0000	0.0000	0.00E+00
162	0.00	0.000	0.248	0.3171	0.0003	0.0000	4.75E-04
163	0.00	0.000	0.037	0.3131	0.0000	0.0000	0.00E+00
164	0.04	0.000	0.041	0.3129	0.0000	0.0000	0.00E+00
165	0.00	0.000	0.036	0.3089	0.0000	0.0000	0.00E+00
166	0.40	0.000	0.040	0.3489	0.0000	0.0000	0.00E+00
167	0.00	0.000	0.265	0.3193	0.0000	0.0000	1.38E-03
168	0.05	0.000	0.242	0.2979	0.0000	0.0000	0.00E+00
169	0.92	0.050	0.195	0.3729	0.0000	0.0000	0.00E+00
170	0.05	0.000	0.234	0.3511	0.0000	0.0000	0.00E+00
171	0.00	0.000	0.233	0.3237	0.0010	0.0000	1.51E-03
172	0.00	0.000	0.258	0.2942	0.0010	0.0000	3.15E-03

173	0.00	0.000	0.198	0.2722	0.0020	0.0000	6.18E-03
174	0.14	0.000	0.094	0.2773	0.0020	0.0000	6.03E-03
175	0.17	0.000	0.038	0.2920	0.0019	0.0000	5.88E-03
176	0.15	0.000	0.049	0.3032	0.0019	0.0000	5.73E-03
177	0.15	0.000	0.051	0.3142	0.0019	0.0000	5.00E-03
178	0.00	0.000	0.155	0.2970	0.0000	0.0000	0.00E+00
179	0.00	0.000	0.051	0.2912	0.0000	0.0000	0.00E+00
180	0.41	0.000	0.061	0.3300	0.0000	0.0000	0.00E+00
181	0.00	0.000	0.240	0.3034	0.0000	0.0000	0.00E+00
182	0.00	0.000	0.058	0.2970	0.0000	0.0000	0.00E+00
183	0.00	0.000	0.057	0.2907	0.0000	0.0000	0.00E+00
184	0.00	0.000	0.057	0.2843	0.0000	0.0000	0.00E+00
185	0.00	0.000	0.056	0.2781	0.0000	0.0000	0.00E+00
186	0.00	0.000	0.057	0.2718	0.0000	0.0000	0.00E+00
187	0.00	0.000	0.051	0.2661	0.0000	0.0000	0.00E+00
188	0.00	0.000	0.006	0.2654	0.0000	0.0000	0.00E+00
189	0.00	0.000	0.004	0.2650	0.0000	0.0000	0.00E+00
190	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
191	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
192	0.01	0.000	0.010	0.2650	0.0000	0.0000	0.00E+00
193	0.18	0.000	0.028	0.2819	0.0000	0.0000	0.00E+00
194	0.03	0.000	0.030	0.2819	0.0000	0.0000	0.00E+00
195	0.00	0.000	0.040	0.2774	0.0000	0.0000	0.00E+00
196	0.00	0.000	0.038	0.2732	0.0000	0.0000	0.00E+00
197	0.00	0.000	0.042	0.2685	0.0000	0.0000	0.00E+00
198	0.00	0.000	0.020	0.2663	0.0000	0.0000	0.00E+00
199	0.00	0.000	0.009	0.2653	0.0000	0.0000	0.00E+00
200	0.00	0.000	0.002	0.2651	0.0000	0.0000	0.00E+00
201	0.00	0.000	0.001	0.2650	0.0000	0.0000	0.00E+00
202	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00

203	0.03	0.000	0.015	0.2667	0.0000	0.0000	0.00E+00
204	0.00	0.000	0.005	0.2662	0.0000	0.0000	0.00E+00
205	0.00	0.000	0.008	0.2653	0.0000	0.0000	0.00E+00
206	0.00	0.000	0.002	0.2650	0.0000	0.0000	0.00E+00
207	0.36	0.000	0.032	0.3015	0.0000	0.0000	0.00E+00
208	0.00	0.000	0.040	0.2970	0.0000	0.0000	0.00E+00
209	0.00	0.000	0.050	0.2915	0.0000	0.0000	0.00E+00
210	0.00	0.000	0.048	0.2861	0.0000	0.0000	0.00E+00
211	0.54	0.000	0.057	0.3398	0.0000	0.0000	0.00E+00
212	0.00	0.000	0.222	0.3151	0.0000	0.0000	0.00E+00
213	0.00	0.000	0.267	0.2855	0.0000	0.0000	0.00E+00
214	0.00	0.000	0.144	0.2694	0.0000	0.0000	0.00E+00
215	0.00	0.000	0.032	0.2659	0.0000	0.0000	0.00E+00
216	0.00	0.000	0.008	0.2650	0.0000	0.0000	0.00E+00
217	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
218	0.10	0.000	0.020	0.2739	0.0000	0.0000	0.00E+00
219	0.07	0.000	0.045	0.2767	0.0000	0.0000	0.00E+00
220	0.53	0.000	0.055	0.3294	0.0000	0.0000	4.91E-08
221	1.55	0.443	0.130	0.4018	0.0000	0.0000	5.41E-08
222	0.00	0.000	0.242	0.3592	0.0093	0.0000	2.27E-02
223	0.09	0.000	0.229	0.3433	0.0106	0.0000	2.84E-02
224	0.90	0.056	0.223	0.4099	0.0026	0.0000	9.60E-03
225	0.00	0.000	0.236	0.3558	0.0060	0.0000	2.05E-02
226	0.06	0.000	0.211	0.3373	0.0149	0.0000	4.20E-02
227	1.05	0.106	0.226	0.4163	0.0167	0.0000	4.84E-02
228	0.00	0.000	0.226	0.3650	0.0055	0.0000	2.66E-02
229	0.00	0.000	0.218	0.3366	0.0192	0.0000	6.07E-02
230	0.83	0.037	0.149	0.4051	0.0144	0.0000	4.39E-02
231	0.03	0.000	0.212	0.3678	0.0158	0.0000	4.64E-02
232	0.00	0.000	0.207	0.3419	0.0185	0.0000	4.65E-02

233	0.00	0.000	0.208	0.3164	0.0123	0.0000	3.69E-02
234	0.00	0.000	0.163	0.2979	0.0107	0.0000	3.33E-02
235	0.00	0.000	0.169	0.2792	0.0077	0.0000	2.25E-02
236	0.00	0.000	0.128	0.2650	0.0063	0.0000	1.92E-02
237	0.24	0.000	0.092	0.2815	0.0069	0.0000	2.13E-02
238	0.00	0.000	0.105	0.2698	0.0082	0.0000	2.54E-02
239	0.00	0.000	0.034	0.2660	0.0157	0.0000	4.87E-02
240	0.00	0.000	0.008	0.2651	0.0114	0.0000	5.18E-02
241	0.00	0.000	0.001	0.2650	0.0234	0.0000	7.13E-02
242	0.00	0.000	0.000	0.2650	0.0242	0.0000	7.35E-02
243	0.28	0.000	0.051	0.2904	0.0247	0.0000	7.52E-02
244	0.00	0.000	0.038	0.2862	0.0252	0.0000	7.67E-02
245	0.00	0.000	0.058	0.2798	0.0157	0.0000	4.37E-02
246	0.00	0.000	0.055	0.2737	0.0056	0.0000	1.68E-02
247	0.00	0.000	0.053	0.2678	0.0052	0.0000	1.57E-02
248	0.00	0.000	0.022	0.2653	0.0049	0.0000	1.48E-02
249	0.05	0.000	0.022	0.2684	0.0046	0.0000	1.39E-02
250	0.00	0.000	0.006	0.2677	0.0044	0.0000	1.32E-02
251	0.34	0.000	0.036	0.3015	0.0042	0.0000	1.25E-02
252	0.43	0.000	0.047	0.3440	0.0040	0.0000	1.19E-02
253	0.75	0.049	0.094	0.4115	0.0038	0.0000	1.14E-02
254	0.00	0.000	0.132	0.3692	0.0066	0.0000	1.72E-02
255	0.00	0.000	0.150	0.3503	0.0056	0.0000	1.37E-02
256	0.00	0.000	0.145	0.3317	0.0021	0.0000	8.05E-03
257	0.00	0.000	0.156	0.3128	0.0053	0.0000	1.69E-02
258	0.00	0.000	0.133	0.2981	0.0095	0.0000	2.83E-02
259	0.00	0.000	0.139	0.2826	0.0085	0.0000	2.55E-02
260	0.66	0.005	0.158	0.3379	0.0077	0.0000	2.32E-02
261	0.01	0.000	0.127	0.3248	0.0071	0.0000	2.12E-02
262	0.00	0.000	0.129	0.3104	0.0065	0.0000	1.87E-02

263	0.00	0.000	0.113	0.2978	0.0061	0.0000	1.83E-02
264	0.00	0.000	0.106	0.2861	0.0057	0.0000	1.70E-02
265	0.00	0.000	0.107	0.2742	0.0053	0.0000	1.59E-02
266	0.00	0.000	0.083	0.2650	0.0050	0.0000	1.50E-02
267	0.00	0.000	0.000	0.2650	0.0047	0.0000	1.41E-02
268	0.00	0.000	0.000	0.2650	0.0044	0.0000	1.33E-02
269	0.00	0.000	0.000	0.2650	0.0042	0.0000	1.27E-02
270	0.01	0.000	0.010	0.2650	0.0040	0.0000	1.20E-02
271	0.00	0.000	0.000	0.2650	0.0038	0.0000	1.15E-02
272	0.00	0.000	0.000	0.2650	0.0036	0.0000	1.10E-02
273	0.00	0.000	0.000	0.2650	0.0035	0.0000	1.05E-02
274	0.00	0.000	0.000	0.2650	0.0033	0.0000	1.00E-02
275	0.46	0.000	0.031	0.3126	0.0032	0.0000	9.65E-03
276	0.06	0.000	0.042	0.3146	0.0031	0.0000	9.28E-03
277	0.00	0.000	0.025	0.3118	0.0030	0.0000	8.94E-03
278	0.00	0.000	0.023	0.3093	0.0029	0.0000	8.62E-03
279	0.00	0.000	0.021	0.3069	0.0028	0.0000	8.32E-03
280	0.00	0.000	0.020	0.3046	0.0027	0.0000	8.04E-03
281	0.00	0.000	0.020	0.3024	0.0026	0.0000	7.78E-03
282	0.16	0.000	0.037	0.3161	0.0025	0.0000	7.53E-03
283	0.63	0.026	0.038	0.3790	0.0024	0.0000	7.30E-03
284	0.00	0.000	0.104	0.3675	0.0023	0.0000	7.09E-03
285	0.00	0.000	0.101	0.3563	0.0023	0.0000	6.88E-03
286	0.00	0.000	0.097	0.3456	0.0022	0.0000	6.69E-03
287	0.23	0.000	0.126	0.3571	0.0022	0.0000	6.51E-03
288	0.87	0.092	0.115	0.3982	0.0021	0.0000	4.76E-03
289	0.00	0.000	0.086	0.3681	0.0029	0.0000	9.93E-03
290	0.69	0.030	0.093	0.3960	0.0111	0.0000	2.34E-02
291	0.00	0.000	0.089	0.3706	0.0062	0.0000	9.43E-03
292	0.00	0.000	0.056	0.3621	0.0174	0.0000	3.55E-02

293		0.00	0.000	0.052	0.3542	0.0142	0.0000	4.32E-02
294		0.00	0.000	0.065	0.3450	0.0084	0.0000	2.32E-02
295		0.00	0.000	0.077	0.3344	0.0050	0.0000	2.03E-02
296		0.00	0.000	0.078	0.3244	0.0034	0.0000	1.61E-02
297		0.00	0.000	0.068	0.3165	0.0083	0.0000	2.63E-02
298		0.00	0.000	0.057	0.3102	0.0095	0.0000	2.87E-02
299		0.01	0.000	0.063	0.3043	0.0094	0.0000	2.86E-02
300		2.59	0.887	0.072	0.3832	0.0101	0.0000	3.65E-02
301		0.07	0.000	0.063	0.3837	0.0319	0.0000	9.67E-02
302		0.00	0.000	0.072	0.3757	0.0159	0.0000	3.29E-02
303		0.00	0.000	0.053	0.3696	0.0000	0.0000	0.00E+00
304		0.00	0.000	0.061	0.3626	0.0000	0.0000	0.00E+00
305		0.00	0.000	0.054	0.3566	0.0000	0.0000	0.00E+00
306		0.03	0.000	0.061	0.3532	0.0000	0.0000	0.00E+00
307		0.06	0.000	0.078	0.3511	0.0002	0.0000	1.29E-03
308		0.38	0.000	0.071	0.3855	0.0032	0.0000	1.11E-02
309		0.23	0.000	0.082	0.4004	0.0066	0.0000	1.42E-02
310		0.36	0.000	0.075	0.4085	0.0194	0.0000	6.58E-02
311		1.58	0.657	0.079	0.4147	0.0163	0.0000	7.43E-02
312		0.27	0.000	0.083	0.4054	0.0326	0.0000	9.89E-02
313		0.01	0.000	0.083	0.3912	0.0163	0.0000	2.47E-02
314		0.00	0.000	0.071	0.3798	0.0000	0.0000	0.00E+00
315		0.00	0.000	0.082	0.3690	0.0000	0.0000	0.00E+00
316		0.00	0.000	0.085	0.3590	0.0000	0.0000	0.00E+00
317		0.00	0.000	0.081	0.3483	0.0000	0.0000	0.00E+00
318		0.00	0.000	0.066	0.3391	0.0000	0.0000	0.00E+00
319		0.00	0.000	0.055	0.3318	0.0005	0.0000	2.36E-03
320		0.00	0.000	0.046	0.3264	0.0050	0.0000	1.63E-02
321	*	0.55	0.000	0.035	0.3286	0.0038	0.0000	1.72E-02
322		0.35	0.034	0.000	0.4145	0.0087	0.0000	2.71E-02

323		0.00	0.000	0.051	0.3756	0.0240	0.0000	8.34E-02
324		0.00	0.000	0.053	0.3697	0.0211	0.0000	5.97E-02
325		0.00	0.000	0.064	0.3624	0.0130	0.0000	3.62E-02
326		0.07	0.000	0.061	0.3616	0.0036	0.0000	1.67E-02
327		0.79	0.038	0.059	0.3982	0.0076	0.0000	2.27E-02
328		0.06	0.000	0.050	0.3892	0.0224	0.0000	8.54E-02
329		0.00	0.000	0.059	0.3816	0.0329	0.0000	9.27E-02
330		0.40	0.000	0.066	0.3993	0.0114	0.0000	3.16E-02
331		0.00	0.000	0.056	0.3880	0.0049	0.0000	3.64E-02
332		0.07	0.000	0.050	0.3887	0.0159	0.0000	3.77E-02
333		0.00	0.000	0.041	0.3825	0.0023	0.0000	4.91E-03
334		0.01	0.000	0.054	0.3757	0.0005	0.0000	8.05E-04
335		0.48	0.004	0.048	0.3995	0.0027	0.0000	6.21E-03
336		0.07	0.000	0.051	0.3896	0.0171	0.0000	3.37E-02
337		0.00	0.000	0.046	0.3802	0.0203	0.0000	6.22E-02
338	*	0.00	0.000	0.037	0.3734	0.0147	0.0000	4.28E-02
339		0.16	0.000	0.052	0.3830	0.0080	0.0000	2.30E-02
340	*	0.70	0.000	0.037	0.3835	0.0066	0.0000	1.99E-02
341		0.00	0.000	0.038	0.3842	0.0066	0.0000	2.01E-02
342	*	0.00	0.000	0.033	0.3854	0.0082	0.0000	2.54E-02
343	*	0.00	0.000	0.030	0.3871	0.0101	0.0000	3.12E-02
344	*	0.09	0.000	0.029	0.3889	0.0104	0.0000	3.31E-02
345	*	0.00	0.000	0.035	0.3911	0.0132	0.0000	4.00E-02
346		0.00	0.000	0.019	0.3904	0.0188	0.0000	9.75E-02
347	*	0.00	0.000	0.037	0.3915	0.0193	0.0000	5.99E-02
348		0.00	0.000	0.026	0.4087	0.0092	0.0000	4.09E-02
349	*	0.87	0.000	0.034	0.4039	0.0299	0.0000	9.31E-02
350	*	0.00	0.000	0.029	0.4027	0.0224	0.0000	8.73E-02
351	*	0.00	0.000	0.029	0.4021	0.0224	0.0000	6.63E-02
352	*	0.52	0.000	0.030	0.4029	0.0192	0.0000	5.84E-02

353	*	0.23	0.000	0.026	0.4037	0.0213	0.0000	6.60E-02
354	*	0.00	0.000	0.028	0.4038	0.0245	0.0000	7.50E-02
355	*	0.15	0.000	0.000	0.4037	0.0256	0.0000	7.78E-02
356		0.00	0.075	0.000	0.4121	0.0342	0.0000	1.04E-01
357		0.00	0.114	0.000	0.4176	0.0171	0.0000	5.17E-02
358		0.00	0.000	0.067	0.4045	0.0170	0.0000	8.34E-02
359		0.11	0.000	0.061	0.4062	0.0000	0.0000	0.00E+00
360		0.14	0.000	0.052	0.4110	0.0000	0.0000	0.00E+00
361		0.00	0.000	0.053	0.4009	0.0000	0.0000	0.00E+00
362		0.00	0.000	0.045	0.3944	0.0000	0.0000	0.00E+00
363		0.00	0.000	0.045	0.3867	0.0000	0.0000	0.00E+00
364	*	0.00	0.000	0.037	0.3786	0.0000	0.0000	0.00E+00
365	*	0.20	0.000	0.041	0.3779	0.0040	0.0000	1.40E-02

* = Frozen (air or soil)

Annual Totals for Year 4			
	inches	cubic feet	percent
Precipitation	38.65	6,313,477.5	100.00
Runoff	4.689	766,008.9	12.13
Evapotranspiration	24.137	3,942,814.0	62.45
Percolation/Leakage through Layer 3	7.037283	1,149,540.1	18.21
Average Head on Top of Layer 3	0.0063	---	---
Change in Water Storage	2.7861	455,114.5	7.21
Soil Water at Start of Year	284.7262	#####	736.68
Soil Water at End of Year	287.4349	#####	743.69
Snow Water at Start of Year	0.0000	0.0000	0.00
Snow Water at End of Year	0.0774	12,649.8	0.20
Annual Water Budget Balance	0.0000	0.0000	0.00

Daily Output for Year 5

Column key: Head #1: drainage from Layer 3

Title: RITCHIE LF- PHASE I-Unlined

Simulated On: 12/26/2025 10:53

Leak #1: leakage thru Layer 3

Day	Freezing Status*		Rain (inches)	Runoff (inches)	ET (inches)	Evap. Zone	Head #1 (inches)	Drain #1 (inches)	Leak #1 (inches)
	Air	Soil				Water (in/in)			
1			0.05	0.000	0.041	0.3857	0.0051	0.0000	2.32E-02
2			0.01	0.000	0.060	0.3785	0.0117	0.0000	3.63E-02
3			0.00	0.000	0.051	0.3714	0.0124	0.0000	3.90E-02
4	*		0.00	0.000	0.036	0.3664	0.0191	0.0000	5.87E-02
5	*		0.00	0.000	0.000	0.3663	0.0229	0.0000	6.90E-02
6	*		0.00	0.000	0.047	0.3611	0.0235	0.0000	7.18E-02
7			0.25	0.000	0.062	0.3821	0.0249	0.0000	7.59E-02
8			0.00	0.000	0.063	0.3751	0.0260	0.0000	7.91E-02
9			1.96	0.654	0.069	0.4203	0.0309	0.0000	9.39E-02
10	*		0.05	0.000	0.044	0.3920	0.0351	0.0000	8.03E-02
11			0.00	0.000	0.053	0.3861	0.0202	0.0000	5.25E-02
12	*		0.00	0.000	0.000	0.3836	0.0000	0.0000	0.00E+00
13	*		0.04	0.000	0.036	0.3816	0.0000	0.0000	0.00E+00
14	*		1.23	0.000	0.038	0.3819	0.0000	0.0000	0.00E+00
15	*		0.12	0.000	0.033	0.3826	0.0000	0.0000	0.00E+00
16	*		0.02	0.000	0.023	0.3835	0.0020	0.0000	6.63E-03
17	*		0.02	0.000	0.029	0.3842	0.0051	0.0000	1.69E-02
18	*		0.85	0.000	0.029	0.3851	0.0088	0.0000	2.76E-02
19	*		0.00	0.000	0.026	0.3861	0.0109	0.0000	3.58E-02
20	*	*	0.59	0.000	0.023	0.3861	0.0163	0.0000	5.43E-02
21	*	*	0.41	0.000	0.027	0.3861	0.0248	0.0000	7.57E-02
22	*	*	0.00	0.000	0.033	0.3861	0.0261	0.0000	7.95E-02

23		*	0.00	0.000	0.046	0.3861	0.0271	0.0000	8.24E-02
24		*	0.00	0.000	0.044	0.3861	0.0279	0.0000	8.47E-02
25		*	0.00	0.004	0.039	0.3911	0.0285	0.0000	8.66E-02
26		*	2.28	3.562	0.000	0.4247	0.0290	0.0000	8.81E-02
27		*	0.14	0.895	0.000	0.4354	0.0294	0.0000	8.94E-02
28		*	0.00	0.199	0.049	0.4354	0.0298	0.0000	9.05E-02
29		*	0.00	0.000	0.000	0.4354	0.0301	0.0000	9.14E-02
30		*	0.00	0.000	0.000	0.4354	0.0304	0.0000	9.21E-02
31		*	0.00	0.000	0.000	0.4354	0.0306	0.0000	9.27E-02
32		*	0.00	0.000	0.000	0.4354	0.0307	0.0000	9.33E-02
33		*	0.00	0.000	0.000	0.4354	0.0309	0.0000	9.37E-02
34			0.18	0.048	0.068	0.3618	0.0351	0.0000	1.06E-01
35	*		0.00	0.000	0.055	0.3554	0.0308	0.0000	8.73E-02
36	*		0.00	0.000	0.057	0.3489	0.0065	0.0000	3.03E-02
37	*		0.01	0.000	0.053	0.3435	0.0073	0.0000	2.07E-02
38	*		0.00	0.000	0.060	0.3365	0.0058	0.0000	1.87E-02
39	*	*	0.00	0.000	0.000	0.3365	0.0078	0.0000	2.43E-02
40	*	*	0.00	0.000	0.000	0.3365	0.0090	0.0000	2.80E-02
41	*	*	0.00	0.000	0.000	0.3365	0.0107	0.0000	3.31E-02
42	*	*	0.00	0.000	0.000	0.3365	0.0141	0.0000	5.03E-02
43	*	*	0.00	0.000	0.000	0.3365	0.0261	0.0000	7.96E-02
44	*	*	0.00	0.000	0.000	0.3365	0.0270	0.0000	8.20E-02
45	*	*	0.03	0.000	0.030	0.3365	0.0276	0.0000	8.40E-02
46	*	*	0.01	0.000	0.010	0.3365	0.0282	0.0000	8.56E-02
47	*	*	0.00	0.000	0.000	0.3365	0.0286	0.0000	8.70E-02
48	*	*	0.04	0.000	0.040	0.3365	0.0290	0.0000	8.81E-02
49		*	0.00	0.000	0.000	0.3365	0.0293	0.0000	8.90E-02
50		*	0.00	0.000	0.000	0.3365	0.0296	0.0000	8.98E-02
51		*	0.00	0.000	0.000	0.3365	0.0298	0.0000	9.05E-02
52		*	0.00	0.000	0.000	0.3365	0.0300	0.0000	9.10E-02

53		*	0.05	0.000	0.004	0.3416	0.0302	0.0000	9.15E-02
54		*	0.10	0.000	0.004	0.3522	0.0303	0.0000	9.19E-02
55		*	0.00	0.000	0.000	0.3522	0.0304	0.0000	9.22E-02
56		*	0.00	0.000	0.000	0.3522	0.0305	0.0000	9.25E-02
57		*	0.00	0.000	0.000	0.3522	0.0306	0.0000	9.27E-02
58		*	0.00	0.000	0.000	0.3522	0.0306	0.0000	9.29E-02
59		*	0.00	0.000	0.000	0.3522	0.0307	0.0000	9.30E-02
60	*	*	0.12	0.000	0.054	0.3522	0.0307	0.0000	9.32E-02
61	*	*	0.13	0.000	0.053	0.3522	0.0307	0.0000	9.32E-02
62		*	0.22	0.115	0.017	0.3779	0.0308	0.0000	9.33E-02
63		*	0.41	0.208	0.004	0.3999	0.0308	0.0000	9.33E-02
64			0.00	0.000	0.082	0.3576	0.0321	0.0000	9.94E-02
65	*		0.00	0.000	0.068	0.3490	0.0257	0.0000	8.16E-02
66			0.00	0.000	0.060	0.3407	0.0285	0.0000	8.68E-02
67			0.02	0.000	0.076	0.3330	0.0302	0.0000	9.02E-02
68			0.45	0.000	0.112	0.3697	0.0279	0.0000	8.31E-02
69			0.02	0.000	0.139	0.3565	0.0255	0.0000	7.67E-02
70			0.92	0.095	0.137	0.3968	0.0255	0.0000	7.77E-02
71			0.00	0.000	0.120	0.3783	0.0293	0.0000	7.77E-02
72			0.03	0.000	0.090	0.3676	0.0203	0.0000	5.98E-02
73			0.00	0.000	0.106	0.3528	0.0166	0.0000	5.16E-02
74			0.28	0.000	0.110	0.3691	0.0171	0.0000	5.33E-02
75			0.00	0.000	0.144	0.3515	0.0176	0.0000	5.31E-02
76			0.02	0.000	0.164	0.3353	0.0181	0.0000	5.44E-02
77			0.00	0.000	0.113	0.3227	0.0162	0.0000	4.88E-02
78			0.00	0.000	0.133	0.3079	0.0197	0.0000	6.04E-02
79			0.00	0.000	0.101	0.2966	0.0214	0.0000	6.55E-02
80			0.00	0.000	0.133	0.2818	0.0228	0.0000	6.94E-02
81			0.00	0.000	0.107	0.2700	0.0238	0.0000	7.25E-02
82			0.00	0.000	0.034	0.2650	0.0243	0.0000	8.02E-02

83	0.00	0.000	0.000	0.2650	0.0248	0.0000	7.54E-02
84	0.00	0.000	0.000	0.2650	0.0254	0.0000	7.73E-02
85	0.31	0.000	0.027	0.2964	0.0259	0.0000	7.88E-02
86	1.00	0.096	0.054	0.3909	0.0264	0.0000	8.01E-02
87	0.01	0.000	0.109	0.3633	0.0295	0.0000	8.33E-02
88	0.00	0.000	0.099	0.3520	0.0244	0.0000	7.35E-02
89	0.00	0.000	0.134	0.3371	0.0235	0.0000	7.16E-02
90	0.00	0.000	0.120	0.3238	0.0243	0.0000	7.40E-02
91	0.02	0.000	0.118	0.3129	0.0250	0.0000	7.59E-02
92	0.00	0.000	0.099	0.3019	0.0255	0.0000	7.74E-02
93	0.00	0.000	0.100	0.2908	0.0259	0.0000	7.87E-02
94	0.00	0.000	0.136	0.2757	0.0263	0.0000	7.98E-02
95	0.00	0.000	0.096	0.2650	0.0266	0.0000	8.08E-02
96	0.00	0.000	0.000	0.2650	0.0269	0.0000	8.16E-02
97	0.01	0.000	0.009	0.2651	0.0271	0.0000	8.22E-02
98	0.00	0.000	0.000	0.2650	0.0273	0.0000	8.28E-02
99	0.00	0.000	0.000	0.2650	0.0275	0.0000	8.33E-02
100	0.00	0.000	0.000	0.2650	0.0158	0.0000	4.45E-02
101	0.00	0.000	0.000	0.2650	0.0038	0.0000	1.16E-02
102	0.13	0.000	0.014	0.2779	0.0037	0.0000	1.11E-02
103	0.00	0.000	0.014	0.2763	0.0035	0.0000	1.06E-02
104	0.00	0.000	0.021	0.2740	0.0034	0.0000	1.02E-02
105	0.00	0.000	0.020	0.2719	0.0032	0.0000	9.74E-03
106	0.00	0.000	0.019	0.2698	0.0031	0.0000	9.37E-03
107	0.00	0.000	0.018	0.2678	0.0030	0.0000	9.02E-03
108	0.00	0.000	0.014	0.2663	0.0029	0.0000	8.69E-03
109	0.31	0.000	0.023	0.2982	0.0028	0.0000	8.39E-03
110	0.14	0.000	0.020	0.3115	0.0027	0.0000	8.11E-03
111	0.00	0.000	0.019	0.3094	0.0026	0.0000	7.84E-03
112	0.00	0.000	0.019	0.3073	0.0025	0.0000	7.54E-03

113	0.00	0.000	0.018	0.3053	0.0024	0.0000	7.36E-03
114	0.00	0.000	0.017	0.3033	0.0024	0.0000	7.14E-03
115	0.00	0.000	0.017	0.3015	0.0023	0.0000	6.93E-03
116	1.02	0.098	0.020	0.4017	0.0022	0.0000	6.74E-03
117	3.67	2.275	0.155	0.4017	0.0011	0.0000	1.65E-03
118	0.02	0.000	0.126	0.3713	0.0000	0.0000	0.00E+00
119	0.00	0.000	0.206	0.3474	0.0022	0.0000	3.40E-03
120	0.00	0.000	0.191	0.3248	0.0000	0.0000	0.00E+00
121	0.03	0.000	0.191	0.3059	0.0000	0.0000	0.00E+00
122	0.00	0.000	0.151	0.2892	0.0000	0.0000	0.00E+00
123	0.00	0.000	0.140	0.2721	0.0000	0.0000	0.00E+00
124	0.00	0.000	0.064	0.2650	0.0000	0.0000	0.00E+00
125	2.21	0.621	0.106	0.4299	0.0011	0.0000	4.61E-03
126	0.01	0.000	0.135	0.3686	0.0163	0.0000	6.85E-02
127	0.00	0.000	0.189	0.3476	0.0075	0.0000	3.51E-02
128	0.14	0.000	0.206	0.3403	0.0044	0.0000	1.33E-02
129	1.14	0.127	0.260	0.4144	0.0007	0.0000	1.51E-03
130	0.03	0.000	0.182	0.3807	0.0151	0.0000	5.40E-02
131	0.00	0.000	0.164	0.3600	0.0061	0.0000	1.84E-02
132	0.00	0.000	0.188	0.3360	0.0035	0.0000	1.17E-02
133	0.06	0.000	0.161	0.3222	0.0017	0.0000	2.07E-02
134	1.81	0.444	0.246	0.3969	0.0055	0.0000	2.39E-02
135	0.08	0.000	0.192	0.3700	0.0165	0.0000	5.00E-02
136	0.31	0.000	0.182	0.3838	0.0252	0.0000	7.14E-02
137	0.11	0.000	0.176	0.3763	0.0013	0.0000	1.96E-03
138	0.00	0.000	0.177	0.3566	0.0000	0.0000	0.00E+00
139	0.00	0.000	0.167	0.3376	0.0000	0.0000	0.00E+00
140	0.00	0.000	0.205	0.3127	0.0000	0.0000	0.00E+00
141	0.00	0.000	0.221	0.2878	0.0041	0.0000	1.63E-02
142	0.00	0.000	0.198	0.2658	0.0038	0.0000	1.71E-02

143	0.00	0.000	0.008	0.2650	0.0087	0.0000	2.71E-02
144	0.24	0.000	0.080	0.2828	0.0105	0.0000	3.48E-02
145	0.00	0.000	0.046	0.2777	0.0243	0.0000	7.39E-02
146	0.00	0.000	0.041	0.2732	0.0252	0.0000	7.66E-02
147	0.00	0.000	0.039	0.2689	0.0259	0.0000	7.87E-02
148	0.00	0.000	0.032	0.2653	0.0265	0.0000	8.04E-02
149	0.00	0.000	0.002	0.2651	0.0269	0.0000	8.19E-02
150	0.27	0.000	0.020	0.2928	0.0274	0.0000	8.31E-02
151	0.28	0.000	0.029	0.3207	0.0277	0.0000	8.41E-02
152	0.00	0.000	0.149	0.3041	0.0280	0.0000	8.49E-02
153	0.00	0.000	0.033	0.3004	0.0282	0.0000	8.56E-02
154	0.00	0.000	0.033	0.2968	0.0284	0.0000	8.62E-02
155	0.66	0.006	0.034	0.3657	0.0286	0.0000	8.68E-02
156	0.00	0.000	0.207	0.3426	0.0287	0.0000	8.72E-02
157	0.00	0.000	0.218	0.3184	0.0289	0.0000	8.76E-02
158	0.00	0.000	0.208	0.2953	0.0290	0.0000	8.79E-02
159	0.01	0.000	0.173	0.2772	0.0291	0.0000	8.81E-02
160	0.33	0.000	0.086	0.3043	0.0291	0.0000	8.84E-02
161	0.01	0.000	0.067	0.2979	0.0292	0.0000	8.85E-02
162	0.00	0.000	0.055	0.2918	0.0292	0.0000	8.87E-02
163	0.00	0.000	0.052	0.2859	0.0293	0.0000	8.88E-02
164	0.00	0.000	0.049	0.2805	0.0293	0.0000	8.89E-02
165	0.37	0.000	0.047	0.3165	0.0293	0.0000	8.90E-02
166	0.00	0.000	0.218	0.2923	0.0294	0.0000	8.90E-02
167	0.00	0.000	0.040	0.2878	0.0294	0.0000	8.90E-02
168	0.00	0.000	0.038	0.2836	0.0294	0.0000	8.90E-02
169	0.00	0.000	0.038	0.2794	0.0294	0.0000	8.90E-02
170	0.00	0.000	0.038	0.2752	0.0294	0.0000	8.90E-02
171	0.15	0.000	0.039	0.2875	0.0293	0.0000	8.30E-02
172	0.08	0.000	0.039	0.2921	0.0023	0.0000	6.85E-03

173	0.16	0.000	0.043	0.3051	0.0022	0.0000	6.66E-03
174	0.50	0.003	0.205	0.3376	0.0021	0.0000	6.47E-03
175	0.00	0.000	0.216	0.3135	0.0021	0.0000	6.30E-03
176	0.00	0.000	0.184	0.2931	0.0020	0.0000	6.14E-03
177	0.37	0.000	0.176	0.3147	0.0020	0.0000	5.98E-03
178	0.57	0.007	0.255	0.3489	0.0019	0.0000	5.84E-03
179	0.15	0.000	0.274	0.3351	0.0019	0.0000	5.70E-03
180	0.00	0.000	0.266	0.3055	0.0013	0.0000	3.42E-03
181	0.00	0.000	0.263	0.2763	0.0000	0.0000	0.00E+00
182	0.00	0.000	0.085	0.2669	0.0000	0.0000	0.00E+00
183	0.00	0.000	0.017	0.2650	0.0000	0.0000	0.00E+00
184	0.36	0.000	0.035	0.3011	0.0000	0.0000	0.00E+00
185	0.36	0.000	0.050	0.3356	0.0000	0.0000	0.00E+00
186	0.04	0.000	0.196	0.3182	0.0000	0.0000	0.00E+00
187	0.00	0.000	0.066	0.3108	0.0000	0.0000	0.00E+00
188	0.00	0.000	0.062	0.3040	0.0000	0.0000	0.00E+00
189	0.00	0.000	0.058	0.2975	0.0000	0.0000	0.00E+00
190	0.10	0.000	0.056	0.3024	0.0000	0.0000	0.00E+00
191	0.00	0.000	0.062	0.2955	0.0000	0.0000	0.00E+00
192	0.02	0.000	0.064	0.2906	0.0000	0.0000	0.00E+00
193	0.08	0.000	0.058	0.2931	0.0000	0.0000	0.00E+00
194	0.00	0.000	0.062	0.2862	0.0000	0.0000	0.00E+00
195	0.00	0.000	0.057	0.2798	0.0000	0.0000	0.00E+00
196	0.33	0.000	0.066	0.3092	0.0000	0.0000	0.00E+00
197	0.00	0.000	0.295	0.2764	0.0000	0.0000	0.00E+00
198	0.99	0.061	0.073	0.3716	0.0000	0.0000	0.00E+00
199	0.00	0.000	0.320	0.3361	0.0000	0.0000	0.00E+00
200	0.00	0.000	0.328	0.2997	0.0000	0.0000	0.00E+00
201	0.00	0.000	0.258	0.2711	0.0000	0.0000	0.00E+00
202	0.00	0.000	0.041	0.2650	0.0010	0.0000	2.92E-03

203	0.00	0.000	0.000	0.2650	0.0019	0.0000	5.73E-03
204	0.74	0.012	0.056	0.3396	0.0019	0.0000	4.96E-03
205	0.00	0.000	0.229	0.3141	0.0000	0.0000	0.00E+00
206	0.61	0.005	0.230	0.3557	0.0000	0.0000	0.00E+00
207	0.02	0.000	0.247	0.3305	0.0000	0.0000	0.00E+00
208	0.00	0.000	0.283	0.2990	0.0003	0.0000	5.04E-04
209	0.00	0.000	0.251	0.2711	0.0000	0.0000	0.00E+00
210	0.01	0.000	0.051	0.2650	0.0010	0.0000	2.92E-03
211	0.00	0.000	0.000	0.2650	0.0019	0.0000	5.73E-03
212	0.00	0.000	0.000	0.2650	0.0019	0.0000	5.01E-03
213	1.17	0.114	0.073	0.3743	0.0000	0.0000	0.00E+00
214	0.00	0.000	0.231	0.3486	0.0000	0.0000	0.00E+00
215	0.00	0.000	0.221	0.3240	0.0000	0.0000	0.00E+00
216	0.34	0.000	0.219	0.3374	0.0000	0.0000	0.00E+00
217	0.01	0.000	0.208	0.3155	0.0000	0.0000	0.00E+00
218	0.00	0.000	0.212	0.2919	0.0000	0.0000	0.00E+00
219	0.27	0.000	0.145	0.3058	0.0000	0.0000	0.00E+00
220	0.05	0.000	0.257	0.2827	0.0000	0.0000	0.00E+00
221	0.07	0.000	0.113	0.2780	0.0000	0.0000	0.00E+00
222	0.06	0.000	0.089	0.2747	0.0000	0.0000	0.00E+00
223	0.04	0.000	0.072	0.2711	0.0000	0.0000	0.00E+00
224	0.01	0.000	0.035	0.2684	0.0000	0.0000	0.00E+00
225	0.00	0.000	0.017	0.2665	0.0002	0.0000	2.68E-04
226	0.01	0.000	0.021	0.2653	0.0000	0.0000	0.00E+00
227	0.00	0.000	0.002	0.2651	0.0000	0.0000	5.80E-05
228	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
229	0.02	0.000	0.017	0.2654	0.0000	0.0000	0.00E+00
230	0.00	0.000	0.002	0.2652	0.0000	0.0000	1.63E-07
231	0.00	0.000	0.001	0.2651	0.0000	0.0000	0.00E+00
232	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00

233	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
234	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
235	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
236	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
237	0.00	0.000	0.000	0.2650	0.0000	0.0000	0.00E+00
238	0.33	0.000	0.037	0.2975	0.0000	0.0000	0.00E+00
239	0.00	0.000	0.050	0.2920	0.0000	0.0000	0.00E+00
240	0.03	0.000	0.059	0.2887	0.0000	0.0000	0.00E+00
241	0.41	0.000	0.066	0.3269	0.0000	0.0000	0.00E+00
242	0.15	0.000	0.137	0.3283	0.0000	0.0000	0.00E+00
243	0.89	0.130	0.136	0.3976	0.0000	0.0000	0.00E+00
244	1.20	0.312	0.213	0.3979	0.0000	0.0000	0.00E+00
245	0.00	0.000	0.226	0.3697	0.0127	0.0000	3.92E-02
246	0.00	0.000	0.204	0.3460	0.0118	0.0000	3.68E-02
247	0.00	0.000	0.174	0.3253	0.0130	0.0000	4.10E-02
248	0.00	0.000	0.161	0.3074	0.0152	0.0000	4.49E-02
249	0.00	0.000	0.146	0.2911	0.0131	0.0000	4.35E-02
250	0.00	0.000	0.123	0.2775	0.0197	0.0000	6.03E-02
251	0.00	0.000	0.113	0.2650	0.0155	0.0000	4.56E-02
252	0.00	0.000	0.000	0.2650	0.0093	0.0000	2.79E-02
253	0.00	0.000	0.000	0.2650	0.0084	0.0000	2.52E-02
254	0.00	0.000	0.000	0.2650	0.0076	0.0000	2.29E-02
255	0.00	0.000	0.000	0.2650	0.0070	0.0000	2.10E-02
256	0.00	0.000	0.000	0.2650	0.0064	0.0000	1.94E-02
257	0.00	0.000	0.000	0.2650	0.0060	0.0000	1.80E-02
258	0.00	0.000	0.000	0.2650	0.0056	0.0000	1.68E-02
259	0.00	0.000	0.000	0.2650	0.0052	0.0000	1.57E-02
260	0.00	0.000	0.000	0.2650	0.0049	0.0000	1.48E-02
261	0.00	0.000	0.000	0.2650	0.0046	0.0000	1.39E-02
262	0.00	0.000	0.000	0.2650	0.0044	0.0000	1.32E-02

263	0.00	0.000	0.000	0.2650	0.0042	0.0000	1.25E-02
264	0.00	0.000	0.000	0.2650	0.0040	0.0000	1.19E-02
265	0.00	0.000	0.000	0.2650	0.0038	0.0000	1.14E-02
266	0.01	0.000	0.010	0.2650	0.0036	0.0000	1.08E-02
267	0.00	0.000	0.000	0.2650	0.0034	0.0000	1.04E-02
268	0.01	0.000	0.010	0.2650	0.0033	0.0000	9.96E-03
269	0.00	0.000	0.000	0.2650	0.0032	0.0000	9.57E-03
270	0.00	0.000	0.000	0.2650	0.0030	0.0000	9.20E-03
271	0.00	0.000	0.000	0.2650	0.0029	0.0000	8.86E-03
272	0.00	0.000	0.000	0.2650	0.0028	0.0000	8.55E-03
273	0.00	0.000	0.000	0.2650	0.0027	0.0000	8.26E-03
274	0.00	0.000	0.000	0.2650	0.0026	0.0000	7.98E-03
275	0.01	0.000	0.010	0.2650	0.0026	0.0000	7.72E-03
276	0.00	0.000	0.000	0.2650	0.0025	0.0000	7.48E-03
277	0.00	0.000	0.000	0.2650	0.0024	0.0000	7.25E-03
278	0.28	0.000	0.025	0.2934	0.0023	0.0000	7.04E-03
279	0.43	0.000	0.030	0.3378	0.0023	0.0000	6.84E-03
280	0.00	0.000	0.017	0.3360	0.0022	0.0000	6.65E-03
281	0.00	0.000	0.018	0.3340	0.0021	0.0000	6.47E-03
282	0.00	0.000	0.018	0.3320	0.0021	0.0000	6.29E-03
283	0.00	0.000	0.017	0.3302	0.0020	0.0000	6.13E-03
284	0.00	0.000	0.016	0.3284	0.0020	0.0000	5.98E-03
285	0.00	0.000	0.017	0.3265	0.0019	0.0000	5.83E-03
286	0.00	0.000	0.016	0.3247	0.0019	0.0000	5.69E-03
287	0.00	0.000	0.016	0.3229	0.0011	0.0000	3.13E-03
288	0.04	0.000	0.030	0.3240	0.0000	0.0000	0.00E+00
289	0.00	0.000	0.015	0.3223	0.0000	0.0000	0.00E+00
290	0.05	0.000	0.030	0.3246	0.0000	0.0000	0.00E+00
291	0.00	0.000	0.015	0.3229	0.0000	0.0000	0.00E+00
292	0.00	0.000	0.015	0.3213	0.0000	0.0000	0.00E+00

293	0.03	0.000	0.027	0.3216	0.0000	0.0000	0.00E+00
294	0.00	0.000	0.014	0.3200	0.0000	0.0000	0.00E+00
295	0.00	0.000	0.014	0.3185	0.0000	0.0000	0.00E+00
296	0.00	0.000	0.014	0.3170	0.0000	0.0000	0.00E+00
297	0.00	0.000	0.013	0.3155	0.0000	0.0000	0.00E+00
298	0.00	0.000	0.013	0.3140	0.0000	0.0000	0.00E+00
299	0.00	0.000	0.013	0.3125	0.0000	0.0000	0.00E+00
300	0.00	0.000	0.013	0.3111	0.0000	0.0000	0.00E+00
301	0.00	0.000	0.013	0.3096	0.0000	0.0000	0.00E+00
302	0.00	0.000	0.013	0.3082	0.0000	0.0000	0.00E+00
303	0.00	0.000	0.013	0.3068	0.0000	0.0000	0.00E+00
304	0.00	0.000	0.013	0.3054	0.0000	0.0000	0.00E+00
305	0.00	0.000	0.012	0.3040	0.0000	0.0000	0.00E+00
306	0.00	0.000	0.012	0.3026	0.0000	0.0000	0.00E+00
307	0.00	0.000	0.011	0.3014	0.0000	0.0000	2.56E-06
308	0.00	0.000	0.012	0.3000	0.0000	0.0000	0.00E+00
309	0.00	0.000	0.012	0.2987	0.0000	0.0000	0.00E+00
310	0.00	0.000	0.012	0.2974	0.0000	0.0000	0.00E+00
311	0.00	0.000	0.012	0.2961	0.0000	0.0000	0.00E+00
312	0.05	0.000	0.023	0.2991	0.0000	0.0000	0.00E+00
313	0.12	0.000	0.023	0.3099	0.0000	0.0000	0.00E+00
314	0.00	0.000	0.011	0.3087	0.0000	0.0000	0.00E+00
315	0.00	0.000	0.011	0.3074	0.0000	0.0000	0.00E+00
316	0.00	0.000	0.011	0.3062	0.0000	0.0000	0.00E+00
317	0.00	0.000	0.011	0.3050	0.0000	0.0000	0.00E+00
318	0.00	0.000	0.011	0.3038	0.0000	0.0000	0.00E+00
319	0.00	0.000	0.011	0.3026	0.0000	0.0000	0.00E+00
320	0.19	0.000	0.022	0.3213	0.0000	0.0000	0.00E+00
321	0.58	0.011	0.021	0.3822	0.0000	0.0000	0.00E+00
322	0.51	0.034	0.077	0.4009	0.0000	0.0000	0.00E+00

323		0.05	0.000	0.070	0.3937	0.0025	0.0000	4.39E-03
324		0.00	0.000	0.070	0.3822	0.0000	0.0000	0.00E+00
325		0.00	0.000	0.071	0.3718	0.0000	0.0000	0.00E+00
326		0.00	0.000	0.059	0.3635	0.0022	0.0000	6.68E-03
327		0.00	0.000	0.061	0.3550	0.0018	0.0000	5.86E-03
328		0.23	0.000	0.072	0.3716	0.0039	0.0000	1.24E-02
329		0.00	0.000	0.069	0.3639	0.0059	0.0000	1.97E-02
330		0.00	0.000	0.068	0.3563	0.0067	0.0000	2.01E-02
331		0.13	0.000	0.073	0.3627	0.0062	0.0000	1.86E-02
332		0.73	0.048	0.070	0.3963	0.0057	0.0000	1.73E-02
333		0.00	0.000	0.078	0.3698	0.0079	0.0000	2.37E-02
334		0.63	0.018	0.078	0.3984	0.0147	0.0000	4.31E-02
335		0.00	0.000	0.047	0.3841	0.0046	0.0000	6.92E-03
336		0.00	0.000	0.042	0.3742	0.0096	0.0000	3.35E-02
337		0.00	0.000	0.041	0.3666	0.0101	0.0000	2.68E-02
338	*	0.30	0.000	0.035	0.3666	0.0028	0.0000	7.94E-03
339		0.62	0.064	0.000	0.4121	0.0004	0.0000	6.34E-04
340		0.31	0.000	0.053	0.3920	0.0081	0.0000	3.64E-02
341		0.00	0.000	0.052	0.3815	0.0319	0.0000	8.70E-02
342		0.00	0.000	0.042	0.3736	0.0000	0.0000	0.00E+00
343		0.00	0.000	0.047	0.3661	0.0000	0.0000	0.00E+00
344		1.18	0.178	0.056	0.4119	0.0000	0.0000	0.00E+00
345		0.00	0.000	0.054	0.3947	0.0207	0.0000	5.59E-02
346		0.00	0.000	0.043	0.3873	0.0000	0.0000	0.00E+00
347		0.00	0.000	0.056	0.3778	0.0000	0.0000	0.00E+00
348		0.00	0.000	0.059	0.3685	0.0000	0.0000	0.00E+00
349		0.00	0.000	0.056	0.3603	0.0000	0.0000	0.00E+00
350		0.00	0.000	0.043	0.3535	0.0000	0.0000	0.00E+00
351		0.10	0.000	0.048	0.3573	0.0000	0.0000	0.00E+00
352		0.00	0.000	0.049	0.3504	0.0005	0.0000	4.35E-03

353		0.00	0.000	0.041	0.3448	0.0053	0.0000	1.66E-02
354	*	0.21	0.000	0.040	0.3460	0.0073	0.0000	2.27E-02
355	*	0.06	0.000	0.041	0.3475	0.0098	0.0000	3.05E-02
356	*	0.04	0.000	0.031	0.3496	0.0057	0.0000	4.43E-02
357	*	0.00	0.000	0.035	0.3518	0.0228	0.0000	6.95E-02
358	*	0.00	0.000	0.039	0.3540	0.0240	0.0000	7.31E-02
359	*	0.83	0.000	0.033	0.3562	0.0249	0.0000	7.59E-02
360		0.00	0.000	0.033	0.3636	0.0257	0.0000	7.82E-02
361	*	0.00	0.000	0.034	0.3658	0.0263	0.0000	8.00E-02
362		0.00	0.000	0.038	0.3680	0.0268	0.0000	8.15E-02
363		0.00	0.010	0.000	0.3819	0.0273	0.0000	8.28E-02
364		0.00	0.000	0.045	0.3823	0.0281	0.0000	7.67E-02
365		0.03	0.000	0.057	0.3783	0.0176	0.0000	5.15E-02

* = Frozen (air or soil)

Annual Totals for Year 5			
	inches	cubic feet	percent
Precipitation	44.26	7,229,871.0	100.00
Runoff	10.454	1,707,706.4	23.62
Evapotranspiration	23.903	3,904,574.5	54.01
Percolation/Leakage through Layer 3	11.916239	1,946,517.6	26.92
Average Head on Top of Layer 3	0.0107	---	---
Change in Water Storage	-2.0136	-328,927.5	-4.55
Soil Water at Start of Year	287.4349	#####	649.42
Soil Water at End of Year	285.4987	#####	645.05
Snow Water at Start of Year	0.0774	12,649.8	0.17
Snow Water at End of Year	0.0000	0.0000	0.00
Annual Water Budget Balance	0.0000	0.0000	0.00

Average Annual Totals Summary

Title: RITCHIE LF- PHASE I-Unlined

Simulated on: 12/26/2025 10:53

	Average Annual Totals for Years 1 - 5*			
	(inches)	[std dev]	(cubic feet)	(percent)
Precipitation	44.65	[6.66]	7,294,230.9	100.00
Runoff	8.719	[4.859]	1,424,215.1	19.53
Evapotranspiration	25.026	[1.596]	4,087,937.0	56.04
Subprofile1				
Percolation/leakage through Layer 3	10.641902	[2.417157]	1,738,354.7	23.83
Average Head on Top of Layer 3	0.0097	[0.0023]	---	---
Water storage				
Change in water storage	0.2677	[1.8521]	43,724.1	0.60

* Note: Average inches are converted to volume based on the user-specified area.

Peak Values Summary

Title: RITCHIE LF- PHASE I-Unlined

Simulated on: 12/26/2025 10:54

	Peak Values for Years 1 - 5*	
	(inches)	(cubic feet)
Precipitation	3.67	599,494.5
Runoff	3.562	581,846.5
Subprofile1		
Percolation/leakage through Layer 3	0.106272	17,359.5
Average head on Layer 3	0.0353	
Other Parameters		
Snow water	3.4510	563,717.3
Maximum vegetation soil water	0.4640 (vol/vol)	
Minimum vegetation soil water	0.2650 (vol/vol)	

Final Water Storage in Landfill Profile at End of Simulation Period

Title: RITCHIE LF- PHASE I-Unlined

Simulated on: 12/26/2025 10:54

Simulation period: 5 years

Layer	Final Water Storage	
	(inches)	(vol/vol)
1	9.6553	0.4023
2	264.4434	0.2938
3	11.4000	0.4750
Snow water	0.0000	---

GROUNDWATER CHARACTERISTICS

TABLE 3
APPENDIX II CONSTITUENTS MONITORED

Ritchie Rubble Landfill
Upper Marlboro, Maryland

Appendix II Constituent	Analytical Method	Laboratory Reporting Limit	Laboratory Method Detection Limit	Permit Required PQL
<i>Volatile Organic Compounds</i>				
1,1,1,2-Tetrachloroethane	SW-846 8260D	0.50	0.070	1.00
1,1,1-Trichloroethane	SW-846 8260D	0.50	0.080	1.00
1,1,2,2-Tetrachloroethane	SW-846 8260D	0.50	0.100	1.00
1,1,2-Trichloroethane	SW-846 8260D	0.50	0.080	1.00
1,1-Dichloroethane	SW-846 8260D	0.50	0.100	1.00
1,1-Dichloroethene	SW-846 8260D	0.50	0.100	1.00
1,2,3-Trichloropropane	SW-846 8260D	1.00	0.100	1.00
1,2-Dibromo-3-Chloropropane	SW-846 8011	0.02	0.0086	0.04
1,2-Dibromoethane	SW-846 8011	0.02	0.0087	0.04
1,2-Dichlorobenzene	SW-846 8260D	0.50	0.070	1.00
1,2-Dichloroethane	SW-846 8260D	0.50	0.070	1.00
1,2-Dichloropropane	SW-846 8260D	0.50	0.100	1.00
1,4-Dichlorobenzene	SW-846 8260D	0.50	0.070	1.00
2-Butanone (MEK)	SW-846 8260D	5.00	1.00	5.00
2-Hexanone	SW-846 8260D	5.00	2.00	5.00
4-Methyl-2-pentanone (MIBK)	SW-846 8260D	5.00	1.00	5.00
Acetone	SW-846 8260D	5.00	1.50	5.00
Acrylonitrile	SW-846 8260D	5.00	0.400	5.00
Benzene	SW-846 8260D	0.50	0.100	1.00
Bromoform	SW-846 8260D	1.00	0.300	1.00
Bromomethane	SW-846 8260D	0.50	0.100	1.00
Carbon disulfide	SW-846 8260D	1.00	0.100	1.00
Carbon tetrachloride	SW-846 8260D	0.50	0.100	1.00
Chlorobenzene	SW-846 8260D	0.50	0.070	1.00
Chlorobromomethane	SW-846 8260D	0.50	0.080	1.00
Chlorodibromomethane	SW-846 8260D	0.50	0.080	1.00
Chloroethane	SW-846 8260D	0.50	0.100	1.00
Chloroform	SW-846 8260D	0.50	0.090	1.00
Chloromethane	SW-846 8260D	0.50	0.100	1.00
cis-1,2-Dichloroethene	SW-846 8260D	0.50	0.080	1.00
cis-1,3-Dichloropropene	SW-846 8260D	0.50	0.100	1.00
Dibromomethane	SW-846 8260D	0.50	0.080	1.00
Dichlorobromomethane	SW-846 8260D	0.50	0.080	1.00
Ethylbenzene	SW-846 8260D	0.50	0.080	1.00
Iodomethane	SW-846 8260D	0.50	0.080	1.00
Methylene Chloride	SW-846 8260D	0.50	0.200	1.00
Styrene	SW-846 8260D	0.50	0.070	1.00
Tetrachloroethene	SW-846 8260D	0.50	0.200	1.00
Toluene	SW-846 8260D	0.50	0.080	1.00
trans-1,2-Dichloroethene	SW-846 8260D	0.50	0.100	1.00
trans-1,3-Dichloropropene	SW-846 8260D	0.50	0.080	1.00
trans-1,4-Dichloro-2-butene	SW-846 8260D	5.00	2.00	5.00
Trichloroethene	SW-846 8260D	0.50	0.080	1.00
Trichlorofluoromethane	SW-846 8260D	0.50	0.100	1.00
Vinyl acetate	SW-846 8260D	1.00	0.300	1.00
Vinyl chloride	SW-846 8260D	0.50	0.100	1.00
Xylenes, Total	SW-846 8260D	1.00	0.070	1.00

TABLE 3
APPENDIX II CONSTITUENTS MONITORED

Ritchie Rubble Landfill
Upper Marlboro, Maryland

Appendix II Constituent	Analytical Method	Laboratory Reporting Limit	Laboratory Method Detection Limit	Permit Required PQL
<i>Semivolatile Organic Compounds</i>				
Anthracene	8270E LL	0.190	0.049	NA
<i>Metals</i>				
Antimony	SW-846 6020B	1.00	0.200	2.00
Arsenic	SW-846 6020B	2.00	0.680	2.00
Barium	SW-846 6020B	2.00	0.746	10.0
Beryllium	SW-846 6020B	0.50	0.119	2.00
Cadmium	SW-846 6020B	0.50	0.151	4.00
Chromium	SW-846 6020B	2.00	0.550	10.0
Cobalt	SW-846 6020B	0.50	0.156	10.0
Copper	SW-846 6020B	1.00	0.850	10.0
Lead	SW-846 6020B	0.50	0.120	2.00
Mercury	SW-846 7470A	0.20	0.087	0.200
Nickel	SW-846 6020B	1.00	0.400	11.0
Selenium	SW-846 6020B	1.00	0.278	35.0
Silver	SW-846 6020B	0.50	0.100	10.0
Thallium	SW-846 6020B	0.50	0.130	2.00
Vanadium	SW-846 6020B	4.00	0.794	10.0
Zinc	SW-846 6020B	10.0	4.00	10.0

Notes:

SW-846 - Test methods for evaluating solid waste, physical/chemical methods", third edition, November 1986 and subsequent updates.

PQL - Practical Quantitation Limit

All values are in micrograms per liter

TABLE 4
OTHER PERMIT REQUIRED CONSTITUENTS MONITORED

Ritchie Rubble Landfill
Upper Marlboro, Maryland

Constituent	Analytical Method	Units	Laboratory Reporting Limit	Laboratory Method Detection Limit	Permit Required PQL
<i>Volatiles Organic Compounds</i>					
Methyl tert-butyl ether (MTBE)	SW-846 8260D	µg/L	0.50	0.080	2.00
<i>Metals, Total and Dissolved</i>					
Calcium	SW-846 6020B	µg/L	120	50.0	80.0
Iron	SW-846 6020B	µg/L	50.0	20.0	5.00
Magnesium	SW-846 6020B	µg/L	50.0	16.0	4.00
Manganese	SW-846 6020B	µg/L	2.00	0.950	10.0
Potassium	SW-846 6020B	µg/L	200	65.0	390
Sodium	SW-846 6020B	µg/L	200	90.0	200
<i>PFAs</i>					
Perfluorooctanoic acid (PFOA)	EPA 537 Modified	ng/L	2.00	0.500	2.00
Perfluorooctanesulfonic acid (PFOS)	EPA 537 Modified	ng/L	2.00	0.500	2.00
Perfluorononanoic acid (PFNA)	EPA 537 Modified	ng/L	2.00	0.500	2.00
Perfluorohexanesulfonic acid (PFHxS)	EPA 537 Modified	ng/L	2.00	0.500	2.00
Perfluorobutanesulfonic acid (PFBS)	EPA 537 Modified	ng/L	2.00	0.500	2.00
Hexafluoropropylene oxide dimer acid (HFPO-DA)	EPA 537 Modified	ng/L	2.00	1.60	2.00
<i>General Chemistry Parameters Analyzed by Laboratory</i>					
Alkalinity	SM 2320 B-2011	mg/L	5.0	5.0	1.00
Ammonia Nitrogen	EPA 350.1	mg/L	0.10	0.0879	1.00
Chloride	EPA 300	mg/L	1.0	0.712	0.39
Chemical Oxygen Demand	EPA 410.4	mg/L	10.0	9.05	10.0
Specific Conductivity	SW-846 9050A	µmhos/cm	1.0	1.0	1.00
Nitrate	EPA 300	mg/L	0.10	0.023	0.06
Hardness	SM 2340 B-2011	mg/L	0.506	0.191	0.50
Sulfate	EPA 300	mg/L	1.0	0.756	0.38
Total Dissolved Solids	SM 2540 C-2011	mg/L	10.0	10.0	10.0
Turbidity	EPA 180.1	NTU	0.85	0.0504	0.11
<i>Field Parameters</i>					
Dissolved Oxygen	Field Water Quality Meter	mg/L	0.01	0.01	NA
Specific Conductivity		µS/cm	1.0	1.0	1.00
pH		SU	0.1	0.1	0.1
Oxidation Reduction Potential		mV	1.0	1.0	NA
Turbidity		NTU	1.0	1.0	0.11

Notes:

SW-846 - Test methods for evaluating solid waste, physical/chemical methods", third edition, November 1986 and subsequent updates.

SM - Standard methods for the examination of water and wastewater.

EPA - Methods for chemical analysis of water and wastes, EPA-600-4-79-020, March 1983 and subsequent updates.

mg/L - milligrams per liter

µg/L - micrograms per liter

ng/L - nanograms per liter

µS/cm - micro Siemens per centimeter

SU - standard units

mV - millivolts

NTU - Nephelometric Turbidity Units

PQL - Practical Quantitation Limit

PFAs - per- and polyfluoroalkyls

Bold - Laboratory reporting limit or method detection limit does not meet permit required PQL value.



ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Girod
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

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JOB DESCRIPTION

Ritchie Rubble LF

JOB NUMBER

180-191456-1

Eurofins Pittsburgh

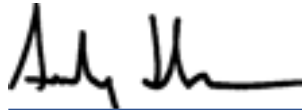
Job Notes

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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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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF

Job ID: 180-191456-1

Job ID: 180-191456-1

Eurofins Pittsburgh

Job Narrative 180-191456-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The sample was received on 6/5/2025 9:15 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C.

HPLC/IC

Method 300_ORGFMS: The following samples were diluted due to the nature of the sample matrix: M-21 (180-191456-1), (180-191456-F-1 MS) and (180-191456-F-1 MSD). 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.

Metals

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

General Chemistry

Method 180.1: The holding time was missed due to lab error: M-21 (180-191456-1).

Method 2320B: pH for the affected analytes was equal to or less than 4.5 so ND results are expected for the following samples: M-21 (180-191456-1)

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

Eurofins Pittsburgh

Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF

Job ID: 180-191456-1

Qualifiers

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
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
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
Project/Site: Ritchie Rubble LF

Job ID: 180-191456-1

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00690	06-28-25
California	State	3122	05-30-26
Connecticut	State	PH-0820	09-30-26
Florida	NELAP	E871008	06-30-25
Georgia	State	PA 02-00416	04-30-26
Illinois	NELAP	200005	07-31-25
Kansas	NELAP	E-10350	01-31-26
Kentucky (UST)	State	162013	04-30-26
Kentucky (WW)	State	KY98043	12-31-25
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-25
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-25
New Hampshire	NELAP	2030	04-04-26
New Jersey	NELAP	PA005	06-30-25
New York	NELAP	11182	03-31-26
North Carolina (WW/SW)	State	434	12-31-25
North Dakota	State	R-227	04-30-24 *
Oregon	NELAP	PA-2151	02-06-26
Pennsylvania	NELAP	02-00416	04-30-26
Rhode Island	State	LAO00375	12-30-25
South Carolina	State	89014	04-30-25 *
Texas	NELAP	T104704528	03-31-26
US Fish & Wildlife	US Federal Programs	A21930	04-30-26
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462024-14	03-31-24 *
Virginia	NELAP	460189	09-14-25
West Virginia DEP	State	142	01-31-26
Wisconsin	State	998027800	08-31-25

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-25
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-25
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-25
Connecticut	State	PH-0746	06-30-25
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	06-30-25
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26

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

Eurofins Pittsburgh

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF

Job ID: 180-191456-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-25
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-25
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-25
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-25
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Oklahoma	NELAP	9804	08-31-25
Oregon	NELAP	PA200001	09-11-25
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-25
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-26
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-25
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

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

Eurofins Pittsburgh

Sample Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF

Job ID: 180-191456-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-191456-1	M-21	Water	06/03/25 13:16	06/05/25 09:15

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Method Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF

Job ID: 180-191456-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	ELLE
410.4	COD	EPA	ELLE
EPA 180.1	Turbidity, Nephelometric	EPA	EET PIT
EPA 350.1	Nitrogen, Ammonia	EPA	EET PIT
EPA 9050A	Specific Conductance	SW846	EET PIT
SM 2320B	Alkalinity	SM	EET PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF

Job ID: 180-191456-1

Client Sample ID: M-21

Lab Sample ID: 180-191456-1

Date Collected: 06/03/25 13:16

Matrix: Water

Date Received: 06/05/25 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	EPA 300.0 R2.1		2	1 mL	1 mL	497223	06/05/25 12:47	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50.0 mL	50.0 mL	659208	06/18/25 07:35	X3ZX	ELLE
Total Recoverable	Analysis	6020B		1			659516	06/18/25 14:14	SAM2	ELLE
		Instrument ID: E08 - 30647								
Total/NA	Prep	7470A			20.0 mL	20.0 mL	659263	06/18/25 09:45	X3ZX	ELLE
Total/NA	Analysis	7470A		1			659755	06/18/25 20:28	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			652557	06/17/25 05:45	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	658768	06/17/25 07:14	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			497796	06/13/25 16:08	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			497348	06/07/25 12:07	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			497712	06/12/25 20:48	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1			497748	06/12/25 18:03	ELS	EET PIT
		Instrument ID: PCTITRATOR								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	497427	06/09/25 17:39	LWM	EET PIT
		Instrument ID: NOEQUIP								

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

Analyst References:

Lab: EET PIT

Batch Type: Analysis

BAB = Brooke Batyi

ELS = Edwin Shireman

ERP = Evan Papak

LWM = Leslie McIntire

RAO = Rachel Oster

Lab: ELLE

Batch Type: Prep

X3ZX = Skyler Ruf

Batch Type: Analysis

IJ3I = Elizabeth Brittingham

SAM2 = Matthew Olley

USAE = Susan Engle

USJM = Sandra Miller

Eurofins Pittsburgh

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF

Job ID: 180-191456-1

Client Sample ID: M-21

Lab Sample ID: 180-191456-1

Date Collected: 06/03/25 13:16

Matrix: Water

Date Received: 06/05/25 09:15

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	190		2.0	1.4	mg/L			06/05/25 12:47	2
Nitrate as N	ND		0.20	0.046	mg/L			06/05/25 12:47	2
Sulfate	61		2.0	1.5	mg/L			06/05/25 12:47	2

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		06/18/25 07:35	06/18/25 14:14	1
Arsenic	ND		2.0	0.68	ug/L		06/18/25 07:35	06/18/25 14:14	1
Barium	84		2.0	0.75	ug/L		06/18/25 07:35	06/18/25 14:14	1
Beryllium	3.0		0.50	0.12	ug/L		06/18/25 07:35	06/18/25 14:14	1
Cadmium	7.5		0.50	0.15	ug/L		06/18/25 07:35	06/18/25 14:14	1
Calcium	52000		120	50	ug/L		06/18/25 07:35	06/18/25 14:14	1
Chromium	ND		2.0	0.55	ug/L		06/18/25 07:35	06/18/25 14:14	1
Cobalt	11		0.50	0.16	ug/L		06/18/25 07:35	06/18/25 14:14	1
Copper	1.4		1.0	0.85	ug/L		06/18/25 07:35	06/18/25 14:14	1
Iron	15000		50	20	ug/L		06/18/25 07:35	06/18/25 14:14	1
Lead	0.66		0.50	0.12	ug/L		06/18/25 07:35	06/18/25 14:14	1
Magnesium	16000		50	16	ug/L		06/18/25 07:35	06/18/25 14:14	1
Manganese	180		2.0	0.95	ug/L		06/18/25 07:35	06/18/25 14:14	1
Nickel	79		1.0	0.40	ug/L		06/18/25 07:35	06/18/25 14:14	1
Potassium	11000		200	65	ug/L		06/18/25 07:35	06/18/25 14:14	1
Selenium	ND		1.0	0.28	ug/L		06/18/25 07:35	06/18/25 14:14	1
Silver	ND		0.50	0.10	ug/L		06/18/25 07:35	06/18/25 14:14	1
Sodium	44000		200	90	ug/L		06/18/25 07:35	06/18/25 14:14	1
Thallium	0.28	J	0.50	0.13	ug/L		06/18/25 07:35	06/18/25 14:14	1
Tin	ND		2.0	0.60	ug/L		06/18/25 07:35	06/18/25 14:14	1
Vanadium	ND		4.0	0.79	ug/L		06/18/25 07:35	06/18/25 14:14	1
Zinc	220		10	4.0	ug/L		06/18/25 07:35	06/18/25 14:14	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		06/18/25 09:45	06/18/25 20:28	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	200		0.51	0.19	mg/L			06/17/25 05:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	8.0	J	10	5.0	mg/L			06/17/25 07:14	1
Turbidity (EPA 180.1)	9.8	H	0.85	0.05	NTU			06/13/25 16:08	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			06/07/25 12:07	1
Specific Conductance (SW846 EP/ 9050A)	820		1.0	1.0	umhos/cm			06/12/25 20:48	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	ND		5.0	5.0	mg/L			06/12/25 18:03	1
Total Dissolved Solids (SM 2540C)	420		10	10	mg/L			06/09/25 17:39	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF

Job ID: 180-191456-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-497223/6

Matrix: Water

Analysis Batch: 497223

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			06/05/25 10:33	1
Nitrate as N	ND		0.10	0.023	mg/L			06/05/25 10:33	1
Sulfate	ND		1.0	0.76	mg/L			06/05/25 10:33	1

Lab Sample ID: LCS 180-497223/7

Matrix: Water

Analysis Batch: 497223

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.4		mg/L		99	90 - 110
Nitrate as N	2.50	2.46		mg/L		99	90 - 110
Sulfate	50.0	49.6		mg/L		99	90 - 110

Lab Sample ID: 180-191456-1 MS

Matrix: Water

Analysis Batch: 497223

Client Sample ID: M-21

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	190		100	287		mg/L		95	90 - 110
Nitrate as N	ND		5.00	4.98		mg/L		100	90 - 110
Sulfate	61		100	158		mg/L		97	90 - 110

Lab Sample ID: 180-191456-1 MSD

Matrix: Water

Analysis Batch: 497223

Client Sample ID: M-21

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	190		100	287		mg/L		95	90 - 110	0	20
Nitrate as N	ND		5.00	5.21		mg/L		104	90 - 110	4	20
Sulfate	61		100	157		mg/L		96	90 - 110	0	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-659208/1-A

Matrix: Water

Analysis Batch: 659516

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 659208

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		06/18/25 07:35	06/18/25 14:01	1
Arsenic	ND		2.0	0.68	ug/L		06/18/25 07:35	06/18/25 14:01	1
Barium	ND		2.0	0.75	ug/L		06/18/25 07:35	06/18/25 14:01	1
Beryllium	ND		0.50	0.12	ug/L		06/18/25 07:35	06/18/25 14:01	1
Cadmium	ND		0.50	0.15	ug/L		06/18/25 07:35	06/18/25 14:01	1
Calcium	ND		120	50	ug/L		06/18/25 07:35	06/18/25 14:01	1
Chromium	ND		2.0	0.55	ug/L		06/18/25 07:35	06/18/25 14:01	1
Cobalt	ND		0.50	0.16	ug/L		06/18/25 07:35	06/18/25 14:01	1
Copper	ND		1.0	0.85	ug/L		06/18/25 07:35	06/18/25 14:01	1
Iron	ND		50	20	ug/L		06/18/25 07:35	06/18/25 14:01	1
Lead	ND		0.50	0.12	ug/L		06/18/25 07:35	06/18/25 14:01	1
Magnesium	ND		50	16	ug/L		06/18/25 07:35	06/18/25 14:01	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF

Job ID: 180-191456-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-659208/1-A
Matrix: Water
Analysis Batch: 659516

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 659208

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		2.0	0.95	ug/L		06/18/25 07:35	06/18/25 14:01	1
Nickel	ND		1.0	0.40	ug/L		06/18/25 07:35	06/18/25 14:01	1
Potassium	ND		200	65	ug/L		06/18/25 07:35	06/18/25 14:01	1
Selenium	ND		1.0	0.28	ug/L		06/18/25 07:35	06/18/25 14:01	1
Silver	ND		0.50	0.10	ug/L		06/18/25 07:35	06/18/25 14:01	1
Sodium	ND		200	90	ug/L		06/18/25 07:35	06/18/25 14:01	1
Thallium	ND		0.50	0.13	ug/L		06/18/25 07:35	06/18/25 14:01	1
Tin	ND		2.0	0.60	ug/L		06/18/25 07:35	06/18/25 14:01	1
Vanadium	ND		4.0	0.79	ug/L		06/18/25 07:35	06/18/25 14:01	1
Zinc	ND		10	4.0	ug/L		06/18/25 07:35	06/18/25 14:01	1

Lab Sample ID: LCS 410-659208/2-A
Matrix: Water
Analysis Batch: 659516

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 659208

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	99.6		ug/L		100	85 - 115
Arsenic	500	499		ug/L		100	86 - 111
Barium	500	498		ug/L		100	86 - 114
Beryllium	50.0	52.3		ug/L		105	80 - 120
Cadmium	50.0	50.4		ug/L		101	86 - 114
Calcium	5000	4920		ug/L		98	84 - 113
Chromium	500	507		ug/L		101	84 - 113
Cobalt	500	514		ug/L		103	85 - 112
Copper	500	515		ug/L		103	86 - 111
Iron	5000	5160		ug/L		103	84 - 114
Lead	50.0	51.3		ug/L		103	86 - 114
Magnesium	5000	5020		ug/L		100	84 - 113
Manganese	500	509		ug/L		102	84 - 113
Nickel	500	508		ug/L		102	85 - 113
Potassium	5000	4920		ug/L		98	87 - 111
Selenium	100	101		ug/L		101	86 - 111
Silver	50.0	50.7		ug/L		101	88 - 116
Sodium	5000	4990		ug/L		100	84 - 114
Thallium	100	101		ug/L		101	86 - 113
Tin	100	102		ug/L		102	84 - 115
Vanadium	500	501		ug/L		100	84 - 112
Zinc	500	512		ug/L		102	86 - 112

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-659124/1-A
Matrix: Water
Analysis Batch: 659755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 659124

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		06/18/25 09:00	06/18/25 23:34	1

Eurofins Pittsburgh

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF

Job ID: 180-191456-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 410-659124/2-A
Matrix: Water
Analysis Batch: 659755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 659124

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	0.933		ug/L		93	80 - 120

Lab Sample ID: LCSD 410-659124/3-A
Matrix: Water
Analysis Batch: 659755

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 659124

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	1.00	0.927		ug/L		93	80 - 120	1	20

Lab Sample ID: MB 410-659263/1-A
Matrix: Water
Analysis Batch: 659755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 659263

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		06/18/25 09:45	06/18/25 20:24	1

Lab Sample ID: LCS 410-659263/2-A
Matrix: Water
Analysis Batch: 659755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 659263

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.04		ug/L		104	80 - 120

Lab Sample ID: 180-191456-1 MS
Matrix: Water
Analysis Batch: 659755

Client Sample ID: M-21
Prep Type: Total/NA
Prep Batch: 659263

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.00	1.01		ug/L		101	80 - 120

Lab Sample ID: 180-191456-1 MSD
Matrix: Water
Analysis Batch: 659755

Client Sample ID: M-21
Prep Type: Total/NA
Prep Batch: 659263

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	0.991		ug/L		99	80 - 120	2	20

Lab Sample ID: 180-191456-1 DU
Matrix: Water
Analysis Batch: 659755

Client Sample ID: M-21
Prep Type: Total/NA
Prep Batch: 659263

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		ug/L		NC	20

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF

Job ID: 180-191456-1

Method: 410.4 - COD

Lab Sample ID: MB 410-658768/4
Matrix: Water
Analysis Batch: 658768

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			06/17/25 07:14	1

Lab Sample ID: LCS 410-658768/5
Matrix: Water
Analysis Batch: 658768

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	40.0	41.6		mg/L		104	90 - 110

Method: EPA 180.1 - Turbidity, Nephelometric

Lab Sample ID: MB 180-497796/7
Matrix: Water
Analysis Batch: 497796

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	ND		0.85	0.05	NTU			06/13/25 15:56	1

Lab Sample ID: LCS 180-497796/8
Matrix: Water
Analysis Batch: 497796

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Turbidity	0.850	0.80	J	NTU		95	90 - 110

Lab Sample ID: 180-191456-1 DU
Matrix: Water
Analysis Batch: 497796

Client Sample ID: M-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Turbidity	9.8	H	10		NTU		3	20

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 180-497348/17
Matrix: Water
Analysis Batch: 497348

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.088	mg/L			06/07/25 11:11	1

Lab Sample ID: LCS 180-497348/18
Matrix: Water
Analysis Batch: 497348

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	0.500	0.524		mg/L		105	90 - 110

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF

Job ID: 180-191456-1

Method: EPA 9050A - Specific Conductance

Lab Sample ID: MB 180-497712/2

Matrix: Water

Analysis Batch: 497712

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			06/12/25 20:47	1

Lab Sample ID: LCS 180-497712/1

Matrix: Water

Analysis Batch: 497712

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	84.0	84.7		umhos/cm		101	90 - 110

Lab Sample ID: 180-191456-1 DU

Matrix: Water

Analysis Batch: 497712

Client Sample ID: M-21

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	820		821		umhos/cm		0.2	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 180-497748/29

Matrix: Water

Analysis Batch: 497748

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	ND		5.0	5.0	mg/L			06/12/25 16:28	1

Lab Sample ID: MB 180-497748/5

Matrix: Water

Analysis Batch: 497748

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	ND		5.0	5.0	mg/L			06/12/25 14:35	1

Lab Sample ID: LCS 180-497748/27

Matrix: Water

Analysis Batch: 497748

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	251	242		mg/L		97	90 - 110

Lab Sample ID: LLCS 180-497748/28

Matrix: Water

Analysis Batch: 497748

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	15.1	15.7		mg/L		104	75 - 125

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF

Job ID: 180-191456-1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-497427/1

Matrix: Water

Analysis Batch: 497427

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			06/09/25 17:39	1

Lab Sample ID: LCS 180-497427/2

Matrix: Water

Analysis Batch: 497427

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	176	156		mg/L		89	85 - 115

Lab Sample ID: 180-191456-1 DU

Matrix: Water

Analysis Batch: 497427

Client Sample ID: M-21

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	420		419		mg/L		0.5	10

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF

Job ID: 180-191456-1

HPLC/IC

Analysis Batch: 497223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191456-1	M-21	Total/NA	Water	EPA 300.0 R2.1	
MB 180-497223/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-497223/7	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-191456-1 MS	M-21	Total/NA	Water	EPA 300.0 R2.1	
180-191456-1 MSD	M-21	Total/NA	Water	EPA 300.0 R2.1	

Metals

Analysis Batch: 652557

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191456-1	M-21	Total/NA	Water	SM 2340B	

Prep Batch: 659124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-659124/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-659124/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 410-659124/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	

Prep Batch: 659208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191456-1	M-21	Total Recoverable	Water	3005A	
MB 410-659208/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-659208/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 659263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191456-1	M-21	Total/NA	Water	7470A	
MB 410-659263/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-659263/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-191456-1 MS	M-21	Total/NA	Water	7470A	
180-191456-1 MSD	M-21	Total/NA	Water	7470A	
180-191456-1 DU	M-21	Total/NA	Water	7470A	

Analysis Batch: 659516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191456-1	M-21	Total Recoverable	Water	6020B	659208
MB 410-659208/1-A	Method Blank	Total Recoverable	Water	6020B	659208
LCS 410-659208/2-A	Lab Control Sample	Total Recoverable	Water	6020B	659208

Analysis Batch: 659755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191456-1	M-21	Total/NA	Water	7470A	659263
MB 410-659124/1-A	Method Blank	Total/NA	Water	7470A	659124
MB 410-659263/1-A	Method Blank	Total/NA	Water	7470A	659263
LCS 410-659124/2-A	Lab Control Sample	Total/NA	Water	7470A	659124
LCS 410-659263/2-A	Lab Control Sample	Total/NA	Water	7470A	659263
LCSD 410-659124/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	659124
180-191456-1 MS	M-21	Total/NA	Water	7470A	659263
180-191456-1 MSD	M-21	Total/NA	Water	7470A	659263
180-191456-1 DU	M-21	Total/NA	Water	7470A	659263

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QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF

Job ID: 180-191456-1

General Chemistry

Analysis Batch: 497348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191456-1	M-21	Total/NA	Water	EPA 350.1	
MB 180-497348/17	Method Blank	Total/NA	Water	EPA 350.1	
LCS 180-497348/18	Lab Control Sample	Total/NA	Water	EPA 350.1	

Analysis Batch: 497427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191456-1	M-21	Total/NA	Water	SM 2540C	
MB 180-497427/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-497427/2	Lab Control Sample	Total/NA	Water	SM 2540C	
180-191456-1 DU	M-21	Total/NA	Water	SM 2540C	

Analysis Batch: 497712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191456-1	M-21	Total/NA	Water	EPA 9050A	
MB 180-497712/2	Method Blank	Total/NA	Water	EPA 9050A	
LCS 180-497712/1	Lab Control Sample	Total/NA	Water	EPA 9050A	
180-191456-1 DU	M-21	Total/NA	Water	EPA 9050A	

Analysis Batch: 497748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191456-1	M-21	Total/NA	Water	SM 2320B	
MB 180-497748/29	Method Blank	Total/NA	Water	SM 2320B	
MB 180-497748/5	Method Blank	Total/NA	Water	SM 2320B	
LCS 180-497748/27	Lab Control Sample	Total/NA	Water	SM 2320B	
LLCS 180-497748/28	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 497796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191456-1	M-21	Total/NA	Water	EPA 180.1	
MB 180-497796/7	Method Blank	Total/NA	Water	EPA 180.1	
LCS 180-497796/8	Lab Control Sample	Total/NA	Water	EPA 180.1	
180-191456-1 DU	M-21	Total/NA	Water	EPA 180.1	

Analysis Batch: 658768

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-191456-1	M-21	Total/NA	Water	410.4	
MB 410-658768/4	Method Blank	Total/NA	Water	410.4	
LCS 410-658768/5	Lab Control Sample	Total/NA	Water	410.4	

Eurofins Pittsburgh

Environment Testing

6/19/2025

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/test/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.

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-191456-1

Login Number: 191456

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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 $<6\text{mm}$ (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: 180-191456-1

Login Number: 191456

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 06/13/25 12:51 PM

Creator: Bui, Anthony

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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	N/A	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, not frozen).	N/A	
WV: Container 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	
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 $> 6\text{mm}$ in diameter (none, if from WV)?	N/A	



ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Girod
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 9/30/2025 6:11:49 PM

JOB DESCRIPTION

Ritchie Rubble LF Semi-Annual GW

JOB NUMBER

180-195467-1

Eurofins Pittsburgh

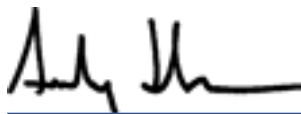
Job Notes

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
Andy Johnson, Senior Project Manager
Andy.Johnson@et.eurofinsus.com
(615)818-9567

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Job ID: 180-195467-1

Eurofins Pittsburgh

Job Narrative 180-195467-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/9/2025 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.8°C and 1.9°C.

GC/MS VOA

Method 8260D_LL: The continuing calibration verification (CCV) associated with batch 410-698874 recovered outside acceptance criteria, low biased, for trans-1,4-Dichloro-2-butene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are 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 8011: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 410-699747 and analytical batch 410-700053 recovered outside control limits for the following analytes: 1,1,2,2-Tetrachloroethane, 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

HPLC/IC

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

Metals

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

General Chemistry

Method 180.1: The following samples were diluted due to the nature of the sample matrix: M-16 (180-195467-2) and (180-195467-B-2 DU) at 5.0 and 5.0. Elevated reporting limits (RLs) are provided.

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 180-502782 were outside control limits for ammonia. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Eurofins Pittsburgh

Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

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 Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

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.

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
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00690	06-28-25 *
California	State	3122	05-30-26
Connecticut	State	PH-0820	09-30-26
Florida	NELAP	E871008	06-30-25 *
Georgia	State	PA 02-00416	04-30-26
Illinois	NELAP	200005	07-31-25 *
Kansas	NELAP	E-10350	01-31-26
Kentucky (UST)	State	162013	04-30-26
Kentucky (WW)	State	KY98043	12-31-25
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-25 *
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-25
New Hampshire	NELAP	2030	04-04-26
New Jersey	NELAP	PA005	06-30-25 *
New York	NELAP	11182	03-31-26
North Carolina (WW/SW)	State	434	12-31-25
North Dakota	State	R-227	04-30-24 *
Oregon	NELAP	PA-2151	02-06-26
Pennsylvania	NELAP	02-00416	04-30-26
Rhode Island	State	LAO00375	12-30-25
South Carolina	State	89014	04-30-25 *
Texas	NELAP	T104704528	03-31-26
US Fish & Wildlife	US Federal Programs	A21930	04-30-26
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462024-14	03-31-24 *
Virginia	NELAP	460189	09-14-25
West Virginia DEP	State	142	01-31-26
Wisconsin	State	998027800	08-31-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26

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

Eurofins Pittsburgh

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Ohio	State	87787	01-31-26
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-26
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

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

Eurofins Pittsburgh

Sample Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195467-1	M-01A	Water	09/08/25 13:50	09/09/25 09:20	Maryland
180-195467-2	M-16	Water	09/08/25 13:25	09/09/25 09:20	Maryland
180-195467-3	TRIP-BLANK-01	Water	09/08/25 00:00	09/09/25 09:20	Maryland

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Method Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	ELLE
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	ELLE
410.4	COD	EPA	ELLE
EPA 180.1	Turbidity, Nephelometric	EPA	EET PIT
EPA 350.1	Nitrogen, Ammonia	EPA	EET PIT
EPA 9050A	Specific Conductance	SW846	EET PIT
SM 2320B	Alkalinity	SM	EET PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
8011	Microextraction	SW846	ELLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Client Sample ID: M-01A

Date Collected: 09/08/25 13:50

Date Received: 09/09/25 09:20

Lab Sample ID: 180-195467-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	25 mL	25 mL	698874	09/13/25 13:43	N7YK	ELLE
		Instrument ID: 10193								
Total/NA	Prep	8011			36.7 mL	2 mL	699747	09/15/25 23:30	USL7	ELLE
Total/NA	Analysis	8011		1			700053	09/16/25 23:29	URS0	ELLE
		Instrument ID: 19853								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502618	09/09/25 15:52	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	701128	09/23/25 06:40	UJL8	ELLE
Total Recoverable	Analysis	6020B		1			703408	09/23/25 13:14	F7JF	ELLE
		Instrument ID: E09 - 30921								
Total/NA	Prep	7470A			20 mL	20 mL	701300	09/19/25 07:30	UJL8	ELLE
Total/NA	Analysis	7470A		1			701955	09/19/25 14:05	X3ZX	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			691814	09/12/25 06:05	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	699197	09/15/25 06:10	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502641	09/09/25 16:06	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			502782	09/11/25 09:22	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502871	09/12/25 14:05	A1K	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	502845	09/12/25 13:32	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	502751	09/11/25 09:30	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: M-16

Date Collected: 09/08/25 13:25

Date Received: 09/09/25 09:20

Lab Sample ID: 180-195467-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	25 mL	25 mL	698874	09/13/25 14:05	N7YK	ELLE
		Instrument ID: 10193								
Total/NA	Prep	8011			36.6 mL	2 mL	699747	09/15/25 23:30	USL7	ELLE
Total/NA	Analysis	8011		1			700053	09/16/25 23:46	URS0	ELLE
		Instrument ID: 19853								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502618	09/09/25 16:07	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	701128	09/23/25 06:40	UJL8	ELLE
Total Recoverable	Analysis	6020B		1			703408	09/23/25 13:12	F7JF	ELLE
		Instrument ID: E09 - 30921								

Eurofins Pittsburgh

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Client Sample ID: M-16

Lab Sample ID: 180-195467-2

Date Collected: 09/08/25 13:25

Matrix: Water

Date Received: 09/09/25 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			20 mL	20 mL	701300	09/19/25 07:30	UJL8	ELLE
Total/NA	Analysis	7470A		1			701955	09/19/25 14:03	X3ZX	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			691814	09/12/25 06:05	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	699197	09/15/25 06:10	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		5			502641	09/09/25 16:01	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			502782	09/11/25 09:17	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502871	09/12/25 14:06	A1K	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	502845	09/12/25 13:36	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	502751	09/11/25 09:30	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: TRIP-BLANK-01

Lab Sample ID: 180-195467-3

Date Collected: 09/08/25 00:00

Matrix: Water

Date Received: 09/09/25 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	25 mL	25 mL	698874	09/13/25 12:36	N7YK	ELLE
		Instrument ID: 10193								
Total/NA	Prep	8011			36.6 mL	2 mL	699747	09/15/25 23:30	USL7	ELLE
Total/NA	Analysis	8011		1			700053	09/17/25 00:02	URS0	ELLE
		Instrument ID: 19853								

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

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Analyst References:

- Lab: EET PIT
- Batch Type: Analysis
 - A1K = Agnes Komlos
 - BAB = Brooke Batyi
 - ELS = Edwin Shireman
 - ERP = Evan Papak
 - RAO = Rachel Oster

- Lab: ELLE
- Batch Type: Prep
 - UJL8 = James Mertz
 - USL7 = Sherry Morrow
 - Batch Type: Analysis
 - F7JF = Dennis Dick
 - N7YK = Eric Ressler
 - URS0 = Richard Shober
 - USAE = Susan Engle
 - USJM = Sandra Miller
 - X3ZX = Skyler Ruf

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Client Sample ID: M-01A

Lab Sample ID: 180-195467-1

Date Collected: 09/08/25 13:50

Matrix: Water

Date Received: 09/09/25 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/13/25 13:43	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/13/25 13:43	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/13/25 13:43	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/13/25 13:43	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/13/25 13:43	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/13/25 13:43	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/13/25 13:43	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/13/25 13:43	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/13/25 13:43	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/13/25 13:43	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/13/25 13:43	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/13/25 13:43	1
2-Hexanone	ND		5.0	2.0	ug/L			09/13/25 13:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/13/25 13:43	1
Acetone	ND		5.0	1.5	ug/L			09/13/25 13:43	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/13/25 13:43	1
Benzene	ND		0.50	0.10	ug/L			09/13/25 13:43	1
Bromoform	ND		1.0	0.30	ug/L			09/13/25 13:43	1
Bromomethane	ND		0.50	0.10	ug/L			09/13/25 13:43	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/13/25 13:43	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/13/25 13:43	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/13/25 13:43	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/13/25 13:43	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/13/25 13:43	1
Chloroethane	ND		0.50	0.10	ug/L			09/13/25 13:43	1
Chloroform	ND		0.50	0.090	ug/L			09/13/25 13:43	1
Chloromethane	ND		0.50	0.10	ug/L			09/13/25 13:43	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/13/25 13:43	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/13/25 13:43	1
Dibromomethane	ND		0.50	0.080	ug/L			09/13/25 13:43	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/13/25 13:43	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/13/25 13:43	1
Iodomethane	ND		0.50	0.080	ug/L			09/13/25 13:43	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/13/25 13:43	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/13/25 13:43	1
Styrene	ND		0.50	0.070	ug/L			09/13/25 13:43	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/13/25 13:43	1
Toluene	ND		0.50	0.080	ug/L			09/13/25 13:43	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/13/25 13:43	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/13/25 13:43	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/13/25 13:43	1
Trichloroethene	ND		0.50	0.080	ug/L			09/13/25 13:43	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/13/25 13:43	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/13/25 13:43	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/13/25 13:43	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/13/25 13:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		80 - 120		09/13/25 13:43	1
4-Bromofluorobenzene (Surr)	86		80 - 120		09/13/25 13:43	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Client Sample ID: M-01A

Lab Sample ID: 180-195467-1

Date Collected: 09/08/25 13:50

Matrix: Water

Date Received: 09/09/25 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	110		80 - 120		09/13/25 13:43	1
Toluene-d8 (Surr)	93		80 - 120		09/13/25 13:43	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.019	0.0095	ug/L		09/15/25 23:30	09/16/25 23:29	1
1,2-Dibromoethane	ND	*+	0.019	0.0095	ug/L		09/15/25 23:30	09/16/25 23:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	134		46 - 136	09/15/25 23:30	09/16/25 23:29	1
1,1,2,2-Tetrachloroethane	126		46 - 136	09/15/25 23:30	09/16/25 23:29	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	32		1.0	0.71	mg/L			09/09/25 15:52	1
Nitrate as N	ND		0.10	0.023	mg/L			09/09/25 15:52	1
Sulfate	18		1.0	0.76	mg/L			09/09/25 15:52	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/23/25 06:40	09/23/25 13:14	1
Arsenic	1.5	J	2.0	0.68	ug/L		09/23/25 06:40	09/23/25 13:14	1
Barium	9.9		2.0	0.75	ug/L		09/23/25 06:40	09/23/25 13:14	1
Beryllium	ND		0.50	0.12	ug/L		09/23/25 06:40	09/23/25 13:14	1
Cadmium	0.47	J	0.50	0.15	ug/L		09/23/25 06:40	09/23/25 13:14	1
Calcium	21000		120	50	ug/L		09/23/25 06:40	09/23/25 13:14	1
Chromium	ND		2.0	0.55	ug/L		09/23/25 06:40	09/23/25 13:14	1
Cobalt	1.7		0.50	0.16	ug/L		09/23/25 06:40	09/23/25 13:14	1
Copper	ND		1.0	0.85	ug/L		09/23/25 06:40	09/23/25 13:14	1
Iron	17000		50	20	ug/L		09/23/25 06:40	09/23/25 13:14	1
Lead	ND		0.50	0.12	ug/L		09/23/25 06:40	09/23/25 13:14	1
Magnesium	1900		50	16	ug/L		09/23/25 06:40	09/23/25 13:14	1
Manganese	190		2.0	0.95	ug/L		09/23/25 06:40	09/23/25 13:14	1
Nickel	17		1.0	0.40	ug/L		09/23/25 06:40	09/23/25 13:14	1
Potassium	3700		200	65	ug/L		09/23/25 06:40	09/23/25 13:14	1
Selenium	ND		1.0	0.28	ug/L		09/23/25 06:40	09/23/25 13:14	1
Silver	ND		0.50	0.10	ug/L		09/23/25 06:40	09/23/25 13:14	1
Sodium	3300		200	90	ug/L		09/23/25 06:40	09/23/25 13:14	1
Thallium	ND		0.50	0.13	ug/L		09/23/25 06:40	09/23/25 13:14	1
Tin	1.2	J B	2.0	0.60	ug/L		09/23/25 06:40	09/23/25 13:14	1
Vanadium	ND		4.0	0.79	ug/L		09/23/25 06:40	09/23/25 13:14	1
Zinc	92		10	4.0	ug/L		09/23/25 06:40	09/23/25 13:14	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/19/25 07:30	09/19/25 14:05	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	60		0.51	0.19	mg/L			09/12/25 06:05	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Client Sample ID: M-01A

Lab Sample ID: 180-195467-1

Date Collected: 09/08/25 13:50

Matrix: Water

Date Received: 09/09/25 09:20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	ND		10	5.0	mg/L			09/15/25 06:10	1
Turbidity (EPA 180.1)	12		0.85	0.05	NTU			09/09/25 16:06	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/11/25 09:22	1
Specific Conductance (SW846 EPA 9050A)	240		1.0	1.0	umhos/cm			09/12/25 14:05	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	98		5.0	5.0	mg/L			09/12/25 13:32	1
Total Dissolved Solids (SM 2540C)	190		10	10	mg/L			09/11/25 09:30	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Client Sample ID: M-16

Lab Sample ID: 180-195467-2

Date Collected: 09/08/25 13:25

Matrix: Water

Date Received: 09/09/25 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/13/25 14:05	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/13/25 14:05	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/13/25 14:05	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/13/25 14:05	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/13/25 14:05	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/13/25 14:05	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/13/25 14:05	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/13/25 14:05	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/13/25 14:05	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/13/25 14:05	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/13/25 14:05	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/13/25 14:05	1
2-Hexanone	ND		5.0	2.0	ug/L			09/13/25 14:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/13/25 14:05	1
Acetone	5.5		5.0	1.5	ug/L			09/13/25 14:05	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/13/25 14:05	1
Benzene	ND		0.50	0.10	ug/L			09/13/25 14:05	1
Bromoform	ND		1.0	0.30	ug/L			09/13/25 14:05	1
Bromomethane	ND		0.50	0.10	ug/L			09/13/25 14:05	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/13/25 14:05	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/13/25 14:05	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/13/25 14:05	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/13/25 14:05	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/13/25 14:05	1
Chloroethane	ND		0.50	0.10	ug/L			09/13/25 14:05	1
Chloroform	ND		0.50	0.090	ug/L			09/13/25 14:05	1
Chloromethane	ND		0.50	0.10	ug/L			09/13/25 14:05	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/13/25 14:05	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/13/25 14:05	1
Dibromomethane	ND		0.50	0.080	ug/L			09/13/25 14:05	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/13/25 14:05	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/13/25 14:05	1
Iodomethane	ND		0.50	0.080	ug/L			09/13/25 14:05	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/13/25 14:05	1
Methylene Chloride	0.20 J		0.50	0.20	ug/L			09/13/25 14:05	1
Styrene	ND		0.50	0.070	ug/L			09/13/25 14:05	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/13/25 14:05	1
Toluene	ND		0.50	0.080	ug/L			09/13/25 14:05	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/13/25 14:05	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/13/25 14:05	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/13/25 14:05	1
Trichloroethene	ND		0.50	0.080	ug/L			09/13/25 14:05	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/13/25 14:05	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/13/25 14:05	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/13/25 14:05	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/13/25 14:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		80 - 120		09/13/25 14:05	1
4-Bromofluorobenzene (Surr)	87		80 - 120		09/13/25 14:05	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Client Sample ID: M-16

Lab Sample ID: 180-195467-2

Date Collected: 09/08/25 13:25

Matrix: Water

Date Received: 09/09/25 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		80 - 120		09/13/25 14:05	1
Toluene-d8 (Surr)	94		80 - 120		09/13/25 14:05	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.019	0.0096	ug/L		09/15/25 23:30	09/16/25 23:46	1
1,2-Dibromoethane	ND	*+	0.019	0.0096	ug/L		09/15/25 23:30	09/16/25 23:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	134		46 - 136	09/15/25 23:30	09/16/25 23:46	1
1,1,2,2-Tetrachloroethane	124		46 - 136	09/15/25 23:30	09/16/25 23:46	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		1.0	0.71	mg/L			09/09/25 16:07	1
Nitrate as N	ND		0.10	0.023	mg/L			09/09/25 16:07	1
Sulfate	16		1.0	0.76	mg/L			09/09/25 16:07	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/23/25 06:40	09/23/25 13:12	1
Arsenic	1.5	J	2.0	0.68	ug/L		09/23/25 06:40	09/23/25 13:12	1
Barium	200		2.0	0.75	ug/L		09/23/25 06:40	09/23/25 13:12	1
Beryllium	0.39	J ^5-	0.50	0.12	ug/L		09/23/25 06:40	09/23/25 13:12	1
Cadmium	1.8		0.50	0.15	ug/L		09/23/25 06:40	09/23/25 13:12	1
Calcium	49000		120	50	ug/L		09/23/25 06:40	09/23/25 13:12	1
Chromium	ND		2.0	0.55	ug/L		09/23/25 06:40	09/23/25 13:12	1
Cobalt	1.0	^5-	0.50	0.16	ug/L		09/23/25 06:40	09/23/25 13:12	1
Copper	ND		1.0	0.85	ug/L		09/23/25 06:40	09/23/25 13:12	1
Iron	21000		50	20	ug/L		09/23/25 06:40	09/23/25 13:12	1
Lead	0.22	J	0.50	0.12	ug/L		09/23/25 06:40	09/23/25 13:12	1
Magnesium	2500		50	16	ug/L		09/23/25 06:40	09/23/25 13:12	1
Manganese	140		2.0	0.95	ug/L		09/23/25 06:40	09/23/25 13:12	1
Nickel	6.5		1.0	0.40	ug/L		09/23/25 06:40	09/23/25 13:12	1
Potassium	4300		200	65	ug/L		09/23/25 06:40	09/23/25 13:12	1
Selenium	ND		1.0	0.28	ug/L		09/23/25 06:40	09/23/25 13:12	1
Silver	ND		0.50	0.10	ug/L		09/23/25 06:40	09/23/25 13:12	1
Sodium	3200		200	90	ug/L		09/23/25 06:40	09/23/25 13:12	1
Thallium	ND		0.50	0.13	ug/L		09/23/25 06:40	09/23/25 13:12	1
Tin	0.95	J B	2.0	0.60	ug/L		09/23/25 06:40	09/23/25 13:12	1
Vanadium	ND		4.0	0.79	ug/L		09/23/25 06:40	09/23/25 13:12	1
Zinc	34		10	4.0	ug/L		09/23/25 06:40	09/23/25 13:12	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/19/25 07:30	09/19/25 14:03	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	130		0.51	0.19	mg/L			09/12/25 06:05	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Client Sample ID: M-16

Lab Sample ID: 180-195467-2

Date Collected: 09/08/25 13:25

Matrix: Water

Date Received: 09/09/25 09:20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	5.2	J	10	5.0	mg/L			09/15/25 06:10	1
Turbidity (EPA 180.1)	95		4.2	0.25	NTU			09/09/25 16:01	5
Ammonia (EPA 350.1)	ND	F1	0.10	0.088	mg/L			09/11/25 09:17	1
Specific Conductance (SW846 EPA 9050A)	350		1.0	1.0	umhos/cm			09/12/25 14:06	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	150		5.0	5.0	mg/L			09/12/25 13:36	1
Total Dissolved Solids (SM 2540C)	250		10	10	mg/L			09/11/25 09:30	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Client Sample ID: TRIP-BLANK-01

Lab Sample ID: 180-195467-3

Date Collected: 09/08/25 00:00

Matrix: Water

Date Received: 09/09/25 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/13/25 12:36	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/13/25 12:36	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/13/25 12:36	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/13/25 12:36	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/13/25 12:36	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/13/25 12:36	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/13/25 12:36	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/13/25 12:36	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/13/25 12:36	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/13/25 12:36	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/13/25 12:36	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/13/25 12:36	1
2-Hexanone	ND		5.0	2.0	ug/L			09/13/25 12:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/13/25 12:36	1
Acetone	1.5	J	5.0	1.5	ug/L			09/13/25 12:36	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/13/25 12:36	1
Benzene	ND		0.50	0.10	ug/L			09/13/25 12:36	1
Bromoform	ND		1.0	0.30	ug/L			09/13/25 12:36	1
Bromomethane	ND		0.50	0.10	ug/L			09/13/25 12:36	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/13/25 12:36	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/13/25 12:36	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/13/25 12:36	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/13/25 12:36	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/13/25 12:36	1
Chloroethane	ND		0.50	0.10	ug/L			09/13/25 12:36	1
Chloroform	ND		0.50	0.090	ug/L			09/13/25 12:36	1
Chloromethane	ND		0.50	0.10	ug/L			09/13/25 12:36	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/13/25 12:36	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/13/25 12:36	1
Dibromomethane	ND		0.50	0.080	ug/L			09/13/25 12:36	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/13/25 12:36	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/13/25 12:36	1
Iodomethane	ND		0.50	0.080	ug/L			09/13/25 12:36	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/13/25 12:36	1
Methylene Chloride	0.21	J	0.50	0.20	ug/L			09/13/25 12:36	1
Styrene	ND		0.50	0.070	ug/L			09/13/25 12:36	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/13/25 12:36	1
Toluene	ND		0.50	0.080	ug/L			09/13/25 12:36	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/13/25 12:36	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/13/25 12:36	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/13/25 12:36	1
Trichloroethene	ND		0.50	0.080	ug/L			09/13/25 12:36	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/13/25 12:36	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/13/25 12:36	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/13/25 12:36	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/13/25 12:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		80 - 120		09/13/25 12:36	1
4-Bromofluorobenzene (Surr)	86		80 - 120		09/13/25 12:36	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Client Sample ID: TRIP-BLANK-01

Lab Sample ID: 180-195467-3

Date Collected: 09/08/25 00:00

Matrix: Water

Date Received: 09/09/25 09:20

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	109		80 - 120		09/13/25 12:36	1
Toluene-d8 (Surr)	94		80 - 120		09/13/25 12:36	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.019	0.0096	ug/L		09/15/25 23:30	09/17/25 00:02	1
1,2-Dibromoethane	ND	*+	0.019	0.0096	ug/L		09/15/25 23:30	09/17/25 00:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	135		46 - 136	09/15/25 23:30	09/17/25 00:02	1
1,1,2,2-Tetrachloroethane	126		46 - 136	09/15/25 23:30	09/17/25 00:02	1

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-698874/8

Matrix: Water

Analysis Batch: 698874

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/13/25 12:14	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/13/25 12:14	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/13/25 12:14	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/13/25 12:14	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/13/25 12:14	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/13/25 12:14	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/13/25 12:14	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/13/25 12:14	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/13/25 12:14	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/13/25 12:14	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/13/25 12:14	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/13/25 12:14	1
2-Hexanone	ND		5.0	2.0	ug/L			09/13/25 12:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/13/25 12:14	1
Acetone	ND		5.0	1.5	ug/L			09/13/25 12:14	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/13/25 12:14	1
Benzene	ND		0.50	0.10	ug/L			09/13/25 12:14	1
Bromoform	ND		1.0	0.30	ug/L			09/13/25 12:14	1
Bromomethane	ND		0.50	0.10	ug/L			09/13/25 12:14	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/13/25 12:14	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/13/25 12:14	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/13/25 12:14	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/13/25 12:14	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/13/25 12:14	1
Chloroethane	ND		0.50	0.10	ug/L			09/13/25 12:14	1
Chloroform	ND		0.50	0.090	ug/L			09/13/25 12:14	1
Chloromethane	ND		0.50	0.10	ug/L			09/13/25 12:14	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/13/25 12:14	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/13/25 12:14	1
Dibromomethane	ND		0.50	0.080	ug/L			09/13/25 12:14	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/13/25 12:14	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/13/25 12:14	1
Iodomethane	ND		0.50	0.080	ug/L			09/13/25 12:14	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/13/25 12:14	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/13/25 12:14	1
Styrene	ND		0.50	0.070	ug/L			09/13/25 12:14	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/13/25 12:14	1
Toluene	ND		0.50	0.080	ug/L			09/13/25 12:14	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/13/25 12:14	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/13/25 12:14	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/13/25 12:14	1
Trichloroethene	ND		0.50	0.080	ug/L			09/13/25 12:14	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/13/25 12:14	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/13/25 12:14	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/13/25 12:14	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/13/25 12:14	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

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

Lab Sample ID: MB 410-698874/8

Matrix: Water

Analysis Batch: 698874

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		80 - 120		09/13/25 12:14	1
4-Bromofluorobenzene (Surr)	87		80 - 120		09/13/25 12:14	1
Dibromofluoromethane (Surr)	109		80 - 120		09/13/25 12:14	1
Toluene-d8 (Surr)	93		80 - 120		09/13/25 12:14	1

Lab Sample ID: LCS 410-698874/5

Matrix: Water

Analysis Batch: 698874

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	5.66		ug/L		113	80 - 122
1,1,1-Trichloroethane	5.00	5.37		ug/L		107	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.87		ug/L		97	75 - 123
1,1,2-Trichloroethane	5.00	5.13		ug/L		103	80 - 120
1,1-Dichloroethane	5.00	5.41		ug/L		108	74 - 120
1,1-Dichloroethene	5.00	6.02		ug/L		120	80 - 131
1,2,3-Trichloropropane	5.00	4.91		ug/L		98	80 - 125
1,2-Dichlorobenzene	5.00	5.49		ug/L		110	80 - 120
1,2-Dichloroethane	5.00	5.07		ug/L		101	69 - 122
1,2-Dichloropropane	5.00	5.25		ug/L		105	80 - 120
1,4-Dichlorobenzene	5.00	5.45		ug/L		109	80 - 120
2-Butanone (MEK)	62.5	69.0		ug/L		110	59 - 141
2-Hexanone	62.5	65.6		ug/L		105	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	65.8		ug/L		105	55 - 140
Acetone	62.5	74.7		ug/L		120	60 - 146
Acrylonitrile	25.0	26.4		ug/L		106	64 - 139
Benzene	5.00	5.21		ug/L		104	80 - 120
Bromoform	5.00	5.83		ug/L		117	75 - 126
Bromomethane	5.00	5.35		ug/L		107	63 - 120
Carbon disulfide	5.00	5.28		ug/L		106	67 - 130
Carbon tetrachloride	5.00	5.56		ug/L		111	64 - 141
Chlorobenzene	5.00	5.48		ug/L		110	80 - 120
Chlorobromomethane	5.00	5.66		ug/L		113	80 - 133
Chlorodibromomethane	5.00	5.40		ug/L		108	80 - 123
Chloroethane	5.00	4.77		ug/L		95	63 - 120
Chloroform	5.00	5.40		ug/L		108	80 - 120
Chloromethane	5.00	4.20		ug/L		84	56 - 124
cis-1,2-Dichloroethene	5.00	5.49		ug/L		110	80 - 122
cis-1,3-Dichloropropene	5.00	4.63		ug/L		93	67 - 121
Dibromomethane	5.00	5.31		ug/L		106	80 - 122
Dichlorobromomethane	5.00	5.30		ug/L		106	80 - 123
Ethylbenzene	5.00	5.19		ug/L		104	80 - 120
Iodomethane	5.00	5.74		ug/L		115	77 - 120
Methyl tert-butyl ether	5.00	4.62		ug/L		92	69 - 120
Methylene Chloride	5.00	5.65		ug/L		113	80 - 120
Styrene	5.00	5.38		ug/L		108	80 - 120
Tetrachloroethene	5.00	5.60		ug/L		112	80 - 120
Toluene	5.00	5.28		ug/L		106	80 - 120

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

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

Lab Sample ID: LCS 410-698874/5

Matrix: Water

Analysis Batch: 698874

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,2-Dichloroethene	5.00	5.59		ug/L		112	80 - 122
trans-1,3-Dichloropropene	5.00	4.77		ug/L		95	61 - 129
trans-1,4-Dichloro-2-butene	25.0	21.3		ug/L		85	13 - 144
Trichloroethene	5.00	5.32		ug/L		106	80 - 120
Trichlorofluoromethane	5.00	3.99		ug/L		80	53 - 136
Vinyl chloride	5.00	4.77		ug/L		95	60 - 125
Xylenes, Total	15.0	16.1		ug/L		107	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	103		80 - 120
Toluene-d8 (Surr)	97		80 - 120

Lab Sample ID: LCS 410-698874/6

Matrix: Water

Analysis Batch: 698874

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	12.5	13.0		ug/L		104	64 - 145

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	87		80 - 120
Dibromofluoromethane (Surr)	106		80 - 120
Toluene-d8 (Surr)	92		80 - 120

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 410-699747/1-A

Matrix: Water

Analysis Batch: 700053

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 699747

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.020	0.010	ug/L		09/15/25 23:30	09/16/25 22:38	1
1,2-Dibromoethane	ND		0.020	0.010	ug/L		09/15/25 23:30	09/16/25 22:38	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	136		46 - 136				09/15/25 23:30	09/16/25 22:38	1
1,1,2,2-Tetrachloroethane	128		46 - 136				09/15/25 23:30	09/16/25 22:38	1

Lab Sample ID: LCS 410-699747/2-A

Matrix: Water

Analysis Batch: 700053

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 699747

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	0.129	0.229	*+	ug/L		177	60 - 140
1,2-Dibromoethane	0.129	0.218	*+	ug/L		168	60 - 140

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCS 410-699747/2-A
Matrix: Water
Analysis Batch: 700053

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 699747

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,1,2,2-Tetrachloroethane	139	S1+	46 - 136
1,1,2,2-Tetrachloroethane	130		46 - 136

Lab Sample ID: LCSD 410-699747/3-A
Matrix: Water
Analysis Batch: 700053

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 699747

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.129	0.223	*+	ug/L		173	60 - 140	2	20
1,2-Dibromoethane	0.129	0.213	*+	ug/L		165	60 - 140	2	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,1,2,2-Tetrachloroethane	138	S1+	46 - 136
1,1,2,2-Tetrachloroethane	132		46 - 136

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-502618/6
Matrix: Water
Analysis Batch: 502618

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			09/09/25 12:00	1
Nitrate as N	ND		0.10	0.023	mg/L			09/09/25 12:00	1
Sulfate	ND		1.0	0.76	mg/L			09/09/25 12:00	1

Lab Sample ID: LCS 180-502618/7
Matrix: Water
Analysis Batch: 502618

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	46.6		mg/L		93	90 - 110
Nitrate as N	2.50	2.57		mg/L		103	90 - 110
Sulfate	50.0	48.3		mg/L		97	90 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-701128/1-A
Matrix: Water
Analysis Batch: 703408

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 701128

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/23/25 06:40	09/23/25 12:45	1
Arsenic	ND		2.0	0.68	ug/L		09/23/25 06:40	09/23/25 12:45	1
Barium	ND		2.0	0.75	ug/L		09/23/25 06:40	09/23/25 12:45	1
Beryllium	ND		0.50	0.12	ug/L		09/23/25 06:40	09/23/25 12:45	1
Cadmium	ND		0.50	0.15	ug/L		09/23/25 06:40	09/23/25 12:45	1
Calcium	ND		120	50	ug/L		09/23/25 06:40	09/23/25 12:45	1
Chromium	ND		2.0	0.55	ug/L		09/23/25 06:40	09/23/25 12:45	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-701128/1-A
Matrix: Water
Analysis Batch: 703408

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 701128

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		0.50	0.16	ug/L		09/23/25 06:40	09/23/25 12:45	1
Copper	ND		1.0	0.85	ug/L		09/23/25 06:40	09/23/25 12:45	1
Iron	ND		50	20	ug/L		09/23/25 06:40	09/23/25 12:45	1
Lead	ND		0.50	0.12	ug/L		09/23/25 06:40	09/23/25 12:45	1
Magnesium	ND		50	16	ug/L		09/23/25 06:40	09/23/25 12:45	1
Manganese	ND		2.0	0.95	ug/L		09/23/25 06:40	09/23/25 12:45	1
Nickel	ND		1.0	0.40	ug/L		09/23/25 06:40	09/23/25 12:45	1
Potassium	ND		200	65	ug/L		09/23/25 06:40	09/23/25 12:45	1
Selenium	ND		1.0	0.28	ug/L		09/23/25 06:40	09/23/25 12:45	1
Silver	ND		0.50	0.10	ug/L		09/23/25 06:40	09/23/25 12:45	1
Sodium	ND		200	90	ug/L		09/23/25 06:40	09/23/25 12:45	1
Thallium	ND		0.50	0.13	ug/L		09/23/25 06:40	09/23/25 12:45	1
Tin	0.995	J	2.0	0.60	ug/L		09/23/25 06:40	09/23/25 12:45	1
Vanadium	ND		4.0	0.79	ug/L		09/23/25 06:40	09/23/25 12:45	1
Zinc	ND		10	4.0	ug/L		09/23/25 06:40	09/23/25 12:45	1

Lab Sample ID: LCS 410-701128/2-A
Matrix: Water
Analysis Batch: 703408

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 701128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	104		ug/L		104	85 - 115
Arsenic	500	521		ug/L		104	86 - 111
Barium	500	528		ug/L		106	86 - 114
Beryllium	50.0	47.1		ug/L		94	80 - 120
Cadmium	50.0	51.6		ug/L		103	86 - 114
Calcium	5000	4960		ug/L		99	84 - 113
Chromium	500	510		ug/L		102	84 - 113
Cobalt	500	505		ug/L		101	85 - 112
Copper	500	512		ug/L		102	86 - 111
Iron	5000	5200		ug/L		104	84 - 114
Lead	50.0	51.4		ug/L		103	86 - 114
Magnesium	5000	4970		ug/L		99	84 - 113
Manganese	500	511		ug/L		102	84 - 113
Nickel	500	511		ug/L		102	85 - 113
Potassium	5000	5110		ug/L		102	87 - 111
Selenium	100	96.1		ug/L		96	86 - 111
Silver	50.0	52.9		ug/L		106	88 - 116
Sodium	5000	4930		ug/L		99	84 - 114
Thallium	100	101		ug/L		101	86 - 113
Tin	100	103		ug/L		103	84 - 115
Vanadium	500	504		ug/L		101	84 - 112
Zinc	500	523		ug/L		105	86 - 112

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 410-701128/3-A

Matrix: Water

Analysis Batch: 703408

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 701128

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	100	104		ug/L		104	85 - 115	1	20
Arsenic	500	517		ug/L		103	86 - 111	1	20
Barium	500	521		ug/L		104	86 - 114	1	20
Beryllium	50.0	47.1		ug/L		94	80 - 120	0	20
Cadmium	50.0	51.2		ug/L		102	86 - 114	1	20
Calcium	5000	4960		ug/L		99	84 - 113	0	20
Chromium	500	507		ug/L		101	84 - 113	1	20
Cobalt	500	494		ug/L		99	85 - 112	2	20
Copper	500	507		ug/L		101	86 - 111	1	20
Iron	5000	5170		ug/L		103	84 - 114	1	20
Lead	50.0	51.9		ug/L		104	86 - 114	1	20
Magnesium	5000	4840		ug/L		97	84 - 113	3	20
Manganese	500	499		ug/L		100	84 - 113	2	20
Nickel	500	504		ug/L		101	85 - 113	1	20
Potassium	5000	5010		ug/L		100	87 - 111	2	20
Selenium	100	98.0		ug/L		98	86 - 111	2	20
Silver	50.0	52.7		ug/L		105	88 - 116	0	20
Sodium	5000	4820		ug/L		96	84 - 114	2	20
Thallium	100	102		ug/L		102	86 - 113	1	20
Tin	100	99.5		ug/L		100	84 - 115	4	20
Vanadium	500	499		ug/L		100	84 - 112	1	20
Zinc	500	518		ug/L		104	86 - 112	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-701300/1-A

Matrix: Water

Analysis Batch: 701955

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 701300

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/19/25 07:30	09/19/25 13:32	1

Lab Sample ID: LCS 410-701300/2-A

Matrix: Water

Analysis Batch: 701955

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 701300

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.03		ug/L		103	80 - 120

Method: 410.4 - COD

Lab Sample ID: MB 410-699197/4

Matrix: Water

Analysis Batch: 699197

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			09/15/25 06:10	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Method: 410.4 - COD (Continued)

Lab Sample ID: LCS 410-699197/5

Matrix: Water

Analysis Batch: 699197

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	40.0	39.1		mg/L		98	90 - 110

Method: EPA 180.1 - Turbidity, Nephelometric

Lab Sample ID: MB 180-502641/7

Matrix: Water

Analysis Batch: 502641

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	ND		0.85	0.05	NTU			09/09/25 15:55	1

Lab Sample ID: LCS 180-502641/8

Matrix: Water

Analysis Batch: 502641

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Turbidity	0.850	0.90		NTU		107	90 - 110

Lab Sample ID: 180-195467-2 DU

Matrix: Water

Analysis Batch: 502641

Client Sample ID: M-16

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Turbidity	95		100		NTU		3	20

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 180-502782/17

Matrix: Water

Analysis Batch: 502782

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.088	mg/L			09/11/25 09:13	1

Lab Sample ID: LCS 180-502782/18

Matrix: Water

Analysis Batch: 502782

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	0.500	0.497		mg/L		99	90 - 110

Lab Sample ID: 180-195467-2 MS

Matrix: Water

Analysis Batch: 502782

Client Sample ID: M-16

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	ND	F1	0.500	ND	F1	mg/L		0	90 - 110

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Method: EPA 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 180-195467-2 MSD

Matrix: Water

Analysis Batch: 502782

Client Sample ID: M-16

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	ND	F1	0.500	ND	F1	mg/L		0	90 - 110	NC	20

Method: EPA 9050A - Specific Conductance

Lab Sample ID: MB 180-502871/2

Matrix: Water

Analysis Batch: 502871

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			09/12/25 13:42	1

Lab Sample ID: LCS 180-502871/1

Matrix: Water

Analysis Batch: 502871

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	84.0	84.4		umhos/cm		101	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 180-502845/26

Matrix: Water

Analysis Batch: 502845

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	ND		5.0	5.0	mg/L			09/12/25 12:18	1

Lab Sample ID: LCS 180-502845/25

Matrix: Water

Analysis Batch: 502845

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	251	235		mg/L		94	90 - 110

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-502751/1

Matrix: Water

Analysis Batch: 502751

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			09/11/25 09:30	1

Lab Sample ID: LCS 180-502751/2

Matrix: Water

Analysis Batch: 502751

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	176	160		mg/L		91	85 - 115

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QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

GC/MS VOA

Analysis Batch: 698874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195467-1	M-01A	Total/NA	Water	8260D	
180-195467-2	M-16	Total/NA	Water	8260D	
180-195467-3	TRIP-BLANK-01	Total/NA	Water	8260D	
MB 410-698874/8	Method Blank	Total/NA	Water	8260D	
LCS 410-698874/5	Lab Control Sample	Total/NA	Water	8260D	
LCS 410-698874/6	Lab Control Sample	Total/NA	Water	8260D	

GC Semi VOA

Prep Batch: 699747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195467-1	M-01A	Total/NA	Water	8011	
180-195467-2	M-16	Total/NA	Water	8011	
180-195467-3	TRIP-BLANK-01	Total/NA	Water	8011	
MB 410-699747/1-A	Method Blank	Total/NA	Water	8011	
LCS 410-699747/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 410-699747/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 700053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195467-1	M-01A	Total/NA	Water	8011	699747
180-195467-2	M-16	Total/NA	Water	8011	699747
180-195467-3	TRIP-BLANK-01	Total/NA	Water	8011	699747
MB 410-699747/1-A	Method Blank	Total/NA	Water	8011	699747
LCS 410-699747/2-A	Lab Control Sample	Total/NA	Water	8011	699747
LCSD 410-699747/3-A	Lab Control Sample Dup	Total/NA	Water	8011	699747

HPLC/IC

Analysis Batch: 502618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195467-1	M-01A	Total/NA	Water	EPA 300.0 R2.1	
180-195467-2	M-16	Total/NA	Water	EPA 300.0 R2.1	
MB 180-502618/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-502618/7	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Metals

Analysis Batch: 691814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195467-1	M-01A	Total/NA	Water	SM 2340B	
180-195467-2	M-16	Total/NA	Water	SM 2340B	

Prep Batch: 701128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195467-1	M-01A	Total Recoverable	Water	3005A	
180-195467-2	M-16	Total Recoverable	Water	3005A	
MB 410-701128/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-701128/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 410-701128/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

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QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

Metals

Prep Batch: 701300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195467-1	M-01A	Total/NA	Water	7470A	
180-195467-2	M-16	Total/NA	Water	7470A	
MB 410-701300/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-701300/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 701955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195467-1	M-01A	Total/NA	Water	7470A	701300
180-195467-2	M-16	Total/NA	Water	7470A	701300
MB 410-701300/1-A	Method Blank	Total/NA	Water	7470A	701300
LCS 410-701300/2-A	Lab Control Sample	Total/NA	Water	7470A	701300

Analysis Batch: 703408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195467-1	M-01A	Total Recoverable	Water	6020B	701128
180-195467-2	M-16	Total Recoverable	Water	6020B	701128
MB 410-701128/1-A	Method Blank	Total Recoverable	Water	6020B	701128
LCS 410-701128/2-A	Lab Control Sample	Total Recoverable	Water	6020B	701128
LCSD 410-701128/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	701128

General Chemistry

Analysis Batch: 502641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195467-1	M-01A	Total/NA	Water	EPA 180.1	
180-195467-2	M-16	Total/NA	Water	EPA 180.1	
MB 180-502641/7	Method Blank	Total/NA	Water	EPA 180.1	
LCS 180-502641/8	Lab Control Sample	Total/NA	Water	EPA 180.1	
180-195467-2 DU	M-16	Total/NA	Water	EPA 180.1	

Analysis Batch: 502751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195467-1	M-01A	Total/NA	Water	SM 2540C	
180-195467-2	M-16	Total/NA	Water	SM 2540C	
MB 180-502751/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-502751/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 502782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195467-1	M-01A	Total/NA	Water	EPA 350.1	
180-195467-2	M-16	Total/NA	Water	EPA 350.1	
MB 180-502782/17	Method Blank	Total/NA	Water	EPA 350.1	
LCS 180-502782/18	Lab Control Sample	Total/NA	Water	EPA 350.1	
180-195467-2 MS	M-16	Total/NA	Water	EPA 350.1	
180-195467-2 MSD	M-16	Total/NA	Water	EPA 350.1	

Analysis Batch: 502845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195467-1	M-01A	Total/NA	Water	SM 2320B	
180-195467-2	M-16	Total/NA	Water	SM 2320B	
MB 180-502845/26	Method Blank	Total/NA	Water	SM 2320B	

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QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195467-1

General Chemistry (Continued)

Analysis Batch: 502845 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 180-502845/25	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 502871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195467-1	M-01A	Total/NA	Water	EPA 9050A	
180-195467-2	M-16	Total/NA	Water	EPA 9050A	
MB 180-502871/2	Method Blank	Total/NA	Water	EPA 9050A	
LCS 180-502871/1	Lab Control Sample	Total/NA	Water	EPA 9050A	

Analysis Batch: 699197

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195467-1	M-01A	Total/NA	Water	410.4	
180-195467-2	M-16	Total/NA	Water	410.4	
MB 410-699197/4	Method Blank	Total/NA	Water	410.4	
LCS 410-699197/5	Lab Control Sample	Total/NA	Water	410.4	

Chain of Custody Record

Client Information		Sampler: <u>Landon Chase</u>		Lab PM: <u>Johnson, Andy</u>		Carrier Tracking No(s):		COC No: <u>180-116865-18132 1</u>	
Client Contact: <u>Helen Girod</u>		Phone: <u>202-893-1758</u>		E-Mail: <u>Andy.Johnson@et.eurofins.com</u>		State of Origin: <u>MD</u>		Page: <u>1 of 1</u>	
Company: <u>Geosyntec Consultants Inc</u>		PWSID: <u>180-116865-18132 1</u>		Job #:		Analysis Requested:		Preservation Codes: S - H2SO4 N - None D - HNO3 R - NaThioSO4 A - HCL	
Address: <u>10211 Wincopin Circle 4th Floor</u>		Due Date Requested:		TAT Requested (days): <u>Standard</u>		Compliance Project: <u>Δ Yes X No</u>		Other:	
City: <u>Columbia</u>		PO #:		WO #:		Project #:		Total Number of containers	
State, Zip: <u>MD, 21044</u>		Phone: <u>240-381-5010(Tel)</u>		Email: <u>HGirod@Geosyntec.com</u>		Project Name: <u>Ritchie Rubble LF Semi-Annual GW/UD</u>		Special Instructions/Note:	
Site: <u>M-16</u>		Sample Date: <u>09-08-25</u>		Sample Time: <u>1330</u>		Sample Type: <u>C=Comp, G=grab</u>		-2 coolers	
Matrix: <u>Water</u>		Preservation Code: <u>Water</u>		Field Filtered Sample (Yes or No) <u>X</u>		Perform MS/MSD (Yes or No) <u>X</u>		-1 PFAS only	
Sample Identification		Sample Date		Sample Time		Sample Type		Total Number of containers	
M-01A		09-08-25		1330		C		X	
M-05A		09-08-25		1325		C		X	
M-06		-		-		-		X	
M-07		-		-		-		X	
M-08		-		-		-		X	
M-08A		-		-		-		X	
M-09		-		-		-		X	
M-10		-		-		-		X	
M-11		-		-		-		X	
M-12		-		-		-		X	
M-13		-		-		-		X	
Possible Hazard Identification		Poison B ☒ Unknown ☐ Radiological ☐		Flammable ☐ Skin Irritant ☐ Other (specify)		Deliverable Requested 1, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Empty Kit Relinquished by		Date		Time		Method of Shipment:		Return To Client ☒ Disposal By Lab ☐ Archive For ☐ Months	
Relinquished by: <u>Landon Chase</u>		Date/Time: <u>09-08-25 9:30</u>		Company: <u>Geosyntec</u>		Received by: <u>Andy Johnson</u>		Date/Time: <u>09/25 3:30 PM</u>	
Relinquished by: <u>Helen Chase</u>		Date/Time: <u>09/25 11:11</u>		Company: <u>Geosyntec</u>		Received by: <u>Andy Johnson</u>		Date/Time: <u>09/25 9:20</u>	
Relinquished by: <u>Helen Chase</u>		Date/Time: <u>09/25 11:11</u>		Company: <u>Geosyntec</u>		Received by: <u>Andy Johnson</u>		Date/Time: <u>09/25 9:20</u>	
Custody Seals Intact <u>Δ Yes Δ No</u>		Custody Seal No		Cooler Temperature(s) °C and Other Remarks		Special Instructions/QC Requirements		Company	

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

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[illegible]

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195467-1

Login Number: 195467

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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 $<6\text{mm}$ (1/4").	False	
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: 180-195467-1

Login Number: 195467

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 09/11/25 10:42 AM

Creator: Fuehrer, Stephanie

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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, 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.	False	Limited volume received.
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 $> 6\text{mm}$ in diameter (none, if from WV)?	N/A	



ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Girod
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

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JOB DESCRIPTION

Ritchie Rubble LF Semi-Annual GW PFAS

JOB NUMBER

180-195468-1

Eurofins Pittsburgh

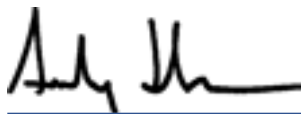
Job Notes

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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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Authorized for release by
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(615)818-9567

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195468-1

Job ID: 180-195468-1

Eurofins Pittsburgh

Job Narrative 180-195468-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/9/2025 9:20 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.8°C and 1.9°C.

PFAS

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

Eurofins Pittsburgh

Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195468-1

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
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195468-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-26
Washington	State	C457	04-11-26

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

Eurofins Pittsburgh

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195468-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

Sample Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195468-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195468-1	M-01A	Water	09/08/25 13:50	09/09/25 09:20	Maryland
180-195468-2	M-16	Water	09/08/25 13:25	09/09/25 09:20	Maryland

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Method Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195468-1

Method	Method Description	Protocol	Laboratory
537 IDA	EPA 537 Isotope Dilution	EPA	ELLE
SPE	PFAS by SPE	Lab SOP	ELLE

Protocol References:

EPA = US Environmental Protection Agency

Lab SOP = Laboratory Standard Operating Procedure

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195468-1

Client Sample ID: M-01A

Date Collected: 09/08/25 13:50

Date Received: 09/09/25 09:20

Lab Sample ID: 180-195468-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			284.5 mL	1 mL	698987	09/14/25 07:26	RC3V	ELLE
Total/NA	Analysis	537 IDA		1	1 uL	1 uL	699742	09/16/25 11:15	R7RE	ELLE
Instrument ID: 30731										

Client Sample ID: M-16

Date Collected: 09/08/25 13:25

Date Received: 09/09/25 09:20

Lab Sample ID: 180-195468-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			273.8 mL	1 mL	698987	09/14/25 07:26	RC3V	ELLE
Total/NA	Analysis	537 IDA		1	1 uL	1 uL	699742	09/16/25 11:29	R7RE	ELLE
Instrument ID: 30731										

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: ELLE

Batch Type: Prep

RC3V = Donovan Catchings

Batch Type: Analysis

R7RE = McKenzi Hartenstein

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195468-1

Client Sample ID: M-01A

Lab Sample ID: 180-195468-1

Date Collected: 09/08/25 13:50

Matrix: Water

Date Received: 09/09/25 09:20

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	1.4	ng/L		09/14/25 07:26	09/16/25 11:15	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.44	ng/L		09/14/25 07:26	09/16/25 11:15	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.44	ng/L		09/14/25 07:26	09/16/25 11:15	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.44	ng/L		09/14/25 07:26	09/16/25 11:15	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.44	ng/L		09/14/25 07:26	09/16/25 11:15	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.44	ng/L		09/14/25 07:26	09/16/25 11:15	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	85		26 - 161				09/14/25 07:26	09/16/25 11:15	1
13C3-PFBS	97		20 - 198				09/14/25 07:26	09/16/25 11:15	1
13C3-PFHxS	87		35 - 165				09/14/25 07:26	09/16/25 11:15	1
13C4-PFHpA	83		33 - 158				09/14/25 07:26	09/16/25 11:15	1
13C8-PFOA	81		35 - 146				09/14/25 07:26	09/16/25 11:15	1
13C8-PFOS	82		41 - 155				09/14/25 07:26	09/16/25 11:15	1
13C9-PFNA	83		37 - 157				09/14/25 07:26	09/16/25 11:15	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195468-1

Client Sample ID: M-16

Lab Sample ID: 180-195468-2

Date Collected: 09/08/25 13:25

Matrix: Water

Date Received: 09/09/25 09:20

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	1.5	ng/L		09/14/25 07:26	09/16/25 11:29	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.46	ng/L		09/14/25 07:26	09/16/25 11:29	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.46	ng/L		09/14/25 07:26	09/16/25 11:29	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.46	ng/L		09/14/25 07:26	09/16/25 11:29	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.46	ng/L		09/14/25 07:26	09/16/25 11:29	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.46	ng/L		09/14/25 07:26	09/16/25 11:29	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	81		26 - 161	09/14/25 07:26	09/16/25 11:29	1
13C3-PFBS	88		20 - 198	09/14/25 07:26	09/16/25 11:29	1
13C3-PFHxS	83		35 - 165	09/14/25 07:26	09/16/25 11:29	1
13C4-PFHpA	76		33 - 158	09/14/25 07:26	09/16/25 11:29	1
13C8-PFOA	81		35 - 146	09/14/25 07:26	09/16/25 11:29	1
13C8-PFOS	82		41 - 155	09/14/25 07:26	09/16/25 11:29	1
13C9-PFNA	83		37 - 157	09/14/25 07:26	09/16/25 11:29	1

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195468-1

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 410-698987/1-A

Matrix: Water

Analysis Batch: 699742

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 698987

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/14/25 07:26	09/16/25 10:48	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		09/14/25 07:26	09/16/25 10:48	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		09/14/25 07:26	09/16/25 10:48	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		09/14/25 07:26	09/16/25 10:48	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		09/14/25 07:26	09/16/25 10:48	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.50	ng/L		09/14/25 07:26	09/16/25 10:48	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	85		26 - 161				09/14/25 07:26	09/16/25 10:48	1
13C3-PFBS	82		20 - 198				09/14/25 07:26	09/16/25 10:48	1
13C3-PFHxS	79		35 - 165				09/14/25 07:26	09/16/25 10:48	1
13C4-PFHpA	74		33 - 158				09/14/25 07:26	09/16/25 10:48	1
13C8-PFOA	79		35 - 146				09/14/25 07:26	09/16/25 10:48	1
13C8-PFOS	83		41 - 155				09/14/25 07:26	09/16/25 10:48	1
13C9-PFNA	84		37 - 157				09/14/25 07:26	09/16/25 10:48	1

Lab Sample ID: LCS 410-698987/2-A

Matrix: Water

Analysis Batch: 699742

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 698987

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	25.6	25.1		ng/L		98	50 - 132
Perfluorobutanesulfonic acid (PFBS)	22.7	26.2		ng/L		115	54 - 145
Perfluorohexanesulfonic acid (PFHxS)	23.3	25.0		ng/L		107	52 - 138
Perfluorononanoic acid (PFNA)	25.6	28.4		ng/L		111	52 - 143
Perfluorooctanesulfonic acid (PFOS)	23.8	25.5		ng/L		107	52 - 139
Perfluorooctanoic acid (PFOA)	25.6	26.2		ng/L		102	53 - 147
Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits				
13C3-HFPO-DA	85		26 - 161				
13C3-PFBS	82		20 - 198				
13C3-PFHxS	80		35 - 165				
13C4-PFHpA	81		33 - 158				
13C8-PFOA	80		35 - 146				
13C8-PFOS	83		41 - 155				
13C9-PFNA	83		37 - 157				

Eurofins Pittsburgh

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195468-1

LCMS

Prep Batch: 698987

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195468-1	M-01A	Total/NA	Water	SPE	
180-195468-2	M-16	Total/NA	Water	SPE	
MB 410-698987/1-A	Method Blank	Total/NA	Water	SPE	
LCS 410-698987/2-A	Lab Control Sample	Total/NA	Water	SPE	

Analysis Batch: 699742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195468-1	M-01A	Total/NA	Water	537 IDA	698987
180-195468-2	M-16	Total/NA	Water	537 IDA	698987
MB 410-698987/1-A	Method Blank	Total/NA	Water	537 IDA	698987
LCS 410-698987/2-A	Lab Control Sample	Total/NA	Water	537 IDA	698987

ORIGIN ID: BWA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F

HANOVER, MD 21076
UNITED STATES US

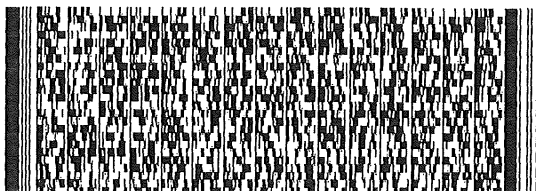
SHIP DATE: 08SEP25
ACTWGT: 50.00 LB
CAD: 1030460/INET4535

BILL RECIPIENT

TO **SAMPLE RECEIVING**
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058 REF: GEOSYNTEC
INV: DEPT:
PO:

159469-434 INTRW EXP 01/25
58GJ3780F59F2



TUE - 09 SEP 10:30Z
PRIORITY OVERNIGHT

MPS# 8842 0638 4168
Q263
Mstr# 8842 0638 4157

0201

EA AGCA

15238

PA-US PIT

Uncorrected temp 1.8 °C
Thermometer ID 25

CF 10.1 Initials JS

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



ORIGIN ID: BWA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F

HANOVER, MD 21076
UNITED STATES US

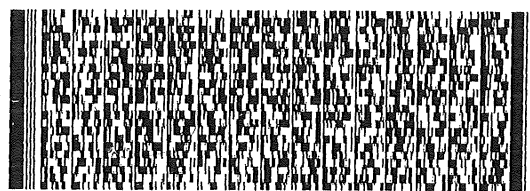
SHIP DATE: 08SEP25
ACTWGT: 50.00 LB
CAD: 1030460/INET4535

BILL RECIPIENT

TO **SAMPLE RECEIVING**
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058 REF: GEOSYNTEC
INV: DEPT:
PO:

159469-434 INTRW EXP 01/25
58GJ3780F59F2



TUE - 09 SEP 10:30Z
PRIORITY OVERNIGHT

TRK# 8842 0638 4157
0201
MASTER

15238

EA AGCA

PA-US PIT

Uncorrected temp 1.7 °C
Thermometer ID 25

CF 10.1 Initials JS

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



180-195468 Waybill

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

Chain of Custody Record



Environment Testing

[illegible]

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195468-1

Login Number: 195468

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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 $<6\text{mm}$ (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: 180-195468-1

Login Number: 195468

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 09/11/25 10:42 AM

Creator: Fuehrer, Stephanie

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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, 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 $> 6\text{mm}$ in diameter (none, if from WV)?	N/A	



ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Girod
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 10/23/2025 9:56:52 AM Revision 1

JOB DESCRIPTION

Ritchie Rubble LF Semi-Annual GW

JOB NUMBER

180-195531-1

Eurofins Pittsburgh

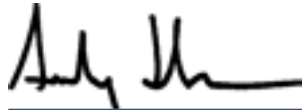
Job Notes

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



Authorized for release by
Andy Johnson, Senior Project Manager
Andy.Johnson@et.eurofinsus.com
(615)818-9567

Generated
10/23/2025 9:56:52 AM
Revision 1

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Job ID: 180-195531-1

Eurofins Pittsburgh

Job Narrative 180-195531-1

REVISION

The report being provided is a revision of the original report sent on 10/3/2025. The report (revision 1) is being revised due to qc has been corrected for 300.0 analysis.

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/10/2025 9:15 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.0°C, 2.1°C and 2.3°C.

Receipt Exceptions

The trip blank is two sodium thiosulfate vials and no hydrochloric. TRIP BLANK-02 (180-195531-9)

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): M-11B (180-195531-3). The container labels list 1115 as the sample time while the chain has 0935. Logged per the chain.

GC/MS VOA

Method 8260D_LL: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: M-11 (180-195531-5) and DUP_09092025 (180-195531-7). 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 8011: Surrogate recovery for the following samples were outside the upper control limit: M-11 (180-195531-5) and DUP_09092025 (180-195531-7). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8011: Surrogate recovery in the LCS was outside the upper control limit. Since the recovery for the target analyte(s) is within limits, the data are reported. M-10 (180-195531-2), M-12 (180-195531-4), M-11 (180-195531-5), DUP_09092025 (180-195531-7), M-07 (180-195531-8), M-07 (180-195531-8[MS]), M-07 (180-195531-8[MSD]) and TRIP BLANK-02 (180-195531-9)

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

HPLC/IC

Method 300_ORGFMS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 180-502660 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300_ORGFMS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 180-502863 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300_ORGFMS: The following samples were diluted due to the nature of the sample matrix: M-11D (180-195531-1), M-11A

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Job ID: 180-195531-1 (Continued)

Eurofins Pittsburgh

(180-195531-6), M-07 (180-195531-8), M-07 (180-195531-8[MS]) and M-07 (180-195531-8[MSD]). 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.

Metals

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

General Chemistry

Method 180.1: The following samples were diluted to bring the concentration of target analytes within the calibration range: M-11B (180-195531-3), M-11 (180-195531-5), M-11A (180-195531-6) and DUP_09092025 (180-195531-7). Elevated reporting limits (RLs) are provided.

Method 350.1: The following samples were diluted to bring the concentration of target analytes within the calibration range: M-11B (180-195531-3), M-11 (180-195531-5) and M-11A (180-195531-6). Elevated reporting limits (RLs) are provided.

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 180-502804 were outside control limits for ammonia. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 350.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: DUP_09092025 (180-195531-7). 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.

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Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Qualifiers

GC/MS 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
S1+	Surrogate recovery exceeds control limits, high biased.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

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.
B	Compound was found in the blank and sample.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
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.
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)

Eurofins Pittsburgh

Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00690	06-28-25 *
California	State	2891	04-30-26
Connecticut	State	PH-0820	09-30-26
Florida	NELAP	E871008	06-30-25 *
Georgia	State	PA 02-00416	04-30-26
Illinois	NELAP	200005	07-31-25 *
Kansas	NELAP	E-10350	01-31-26
Kentucky (UST)	State	162013	04-30-26
Kentucky (WW)	State	KY98043	12-31-25
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-25 *
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-25
New Hampshire	NELAP	2030	04-04-26
New Jersey	NELAP	PA005	06-30-25 *
New York	NELAP	11182	03-31-26
North Carolina (WW/SW)	State	434	12-31-25
North Dakota	State	R-227	04-30-24 *
Oregon	NELAP	PA-2151	02-06-26
Pennsylvania	NELAP	02-00416	04-30-26
Rhode Island	State	LAO00375	12-30-25
South Carolina	State	89014	04-30-25 *
Texas	NELAP	T104704528	03-31-26
US Fish & Wildlife	US Federal Programs	A21930	04-30-26
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462024-14	03-31-24 *
Virginia	NELAP	460189	09-14-25 *
West Virginia DEP	State	142	01-31-26
Wisconsin	State	998027800	08-31-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26

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

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Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	10-15-25
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Ohio	State	87787	01-31-26
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-27-25
Virginia	NELAP	460182	06-14-26
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

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

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Sample Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195531-1	M-11D	Water	09/09/25 09:40	09/10/25 09:15	Maryland
180-195531-2	M-10	Water	09/09/25 09:35	09/10/25 09:15	Maryland
180-195531-3	M-11B	Water	09/09/25 11:15	09/10/25 09:15	Maryland
180-195531-4	M-12	Water	09/09/25 12:35	09/10/25 09:15	Maryland
180-195531-5	M-11	Water	09/09/25 11:20	09/10/25 09:15	Maryland
180-195531-6	M-11A	Water	09/09/25 13:25	09/10/25 09:15	Maryland
180-195531-7	DUP_09092025	Water	09/09/25 00:01	09/10/25 09:15	Maryland
180-195531-8	M-07	Water	09/09/25 14:05	09/10/25 09:15	Maryland
180-195531-9	TRIP BLANK-02	Water	09/09/25 14:55	09/10/25 09:15	Maryland

Method Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	ELLE
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	ELLE
410.4	COD	EPA	ELLE
EPA 180.1	Turbidity, Nephelometric	EPA	EET PIT
EPA 350.1	Nitrogen, Ammonia	EPA	EET PIT
EPA 9050A	Specific Conductance	SW846	EET PIT
SM 2320B	Alkalinity	SM	EET PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
8011	Microextraction	SW846	ELLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-11D

Date Collected: 09/09/25 09:40

Date Received: 09/10/25 09:15

Lab Sample ID: 180-195531-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		1	1 mL	1 mL	502660	09/10/25 13:53	ERP	EET PIT
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		2	1 mL	1 mL	502863	09/13/25 07:07	ERP	EET PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	700941	09/19/25 06:58	UJL8	ELLE
Total Recoverable	Analysis	6020B Instrument ID: E08 - 30647		1			702177	09/19/25 17:18	I9IN	ELLE
Total/NA	Prep	7470A			20 mL	20 mL	700538	09/17/25 16:30	RFN5	ELLE
Total/NA	Analysis	7470A Instrument ID: M10 – 31820		1			700950	09/17/25 21:46	IJ3I	ELLE
Total/NA	Analysis	SM 2340B Instrument ID: NOEQUIP		1			698918	09/13/25 11:51	USJM	ELLE
Total/NA	Analysis	410.4 Instrument ID: 11076		1	2 mL	2 mL	699761	09/16/25 02:15	USAE	ELLE
Total/NA	Analysis	EPA 180.1 Instrument ID: NOEQUIP		1			502727	09/10/25 16:40	SNR	EET PIT
Total/NA	Analysis	EPA 350.1 Instrument ID: BLUE-ASTORIA		1			502804	09/11/25 14:58	BAB	EET PIT
Total/NA	Analysis	EPA 9050A Instrument ID: NOEQUIP		1			502871	09/12/25 14:07	A1K	EET PIT
Total/NA	Analysis	SM 2320B Instrument ID: NOEQUIP		1	50 mL	50 mL	502845	09/12/25 13:23	ELS	EET PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	502967	09/15/25 13:29	A1K	EET PIT

Client Sample ID: M-10

Date Collected: 09/09/25 09:35

Date Received: 09/10/25 09:15

Lab Sample ID: 180-195531-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D Instrument ID: 19094		1	25 mL	25 mL	700218	09/17/25 00:11	JS6E	ELLE
Total/NA	Prep	8011			36.5 mL	2 mL	700951	09/17/25 23:15	USL7	ELLE
Total/NA	Analysis	8011 Instrument ID: 19846		1			701267	09/18/25 21:31	URS0	ELLE
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		1	1 mL	1 mL	502660	09/10/25 14:08	ERP	EET PIT
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		1	1 mL	1 mL	503023	09/17/25 06:53	ERP	EET PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	700941	09/19/25 06:58	UJL8	ELLE
Total Recoverable	Analysis	6020B Instrument ID: E08 - 30647		1			702177	09/19/25 17:20	I9IN	ELLE
Total/NA	Prep	7470A			20 mL	20 mL	700538	09/17/25 16:30	RFN5	ELLE
Total/NA	Analysis	7470A Instrument ID: M10 – 31820		1			700950	09/17/25 21:48	IJ3I	ELLE

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-10

Date Collected: 09/09/25 09:35

Date Received: 09/10/25 09:15

Lab Sample ID: 180-195531-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2340B		1			698918	09/13/25 11:51	USJM	ELLE
Total/NA	Analysis	410.4 Instrument ID: 11076		1	2 mL	2 mL	699761	09/16/25 02:15	USAE	ELLE
Total/NA	Analysis	EPA 180.1 Instrument ID: NOEQUIP		1			502727	09/10/25 16:41	SNR	EET PIT
Total/NA	Analysis	EPA 350.1 Instrument ID: BLUE-ASTORIA		1			502804	09/11/25 14:56	BAB	EET PIT
Total/NA	Analysis	EPA 9050A Instrument ID: NOEQUIP		1			502871	09/12/25 14:08	A1K	EET PIT
Total/NA	Analysis	SM 2320B Instrument ID: NOEQUIP		1	50 mL	50 mL	502845	09/12/25 13:28	ELS	EET PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	502967	09/15/25 13:29	A1K	EET PIT

Client Sample ID: M-11B

Date Collected: 09/09/25 11:15

Date Received: 09/10/25 09:15

Lab Sample ID: 180-195531-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		1	1 mL	1 mL	502660	09/10/25 20:43	ERP	EET PIT
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		1	1 mL	1 mL	502863	09/13/25 07:21	ERP	EET PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	701128	09/23/25 06:40	UJL8	ELLE
Total Recoverable	Analysis	6020B Instrument ID: E09 - 30921		1			703408	09/23/25 13:08	F7JF	ELLE
Total Recoverable	Prep	3005A			50 mL	50 mL	701128	09/23/25 06:40	UJL8	ELLE
Total Recoverable	Analysis	6020B Instrument ID: E09 - 30921		2			703408	09/23/25 13:33	F7JF	ELLE
Total/NA	Prep	7470A			20 mL	20 mL	700538	09/17/25 16:30	RFN5	ELLE
Total/NA	Analysis	7470A Instrument ID: M10 - 31820		1			700950	09/17/25 21:38	IJ3I	ELLE
Total/NA	Analysis	SM 2340B Instrument ID: NOEQUIP		1			698918	09/13/25 11:51	USJM	ELLE
Total/NA	Analysis	410.4 Instrument ID: 11076		2.5	2 mL	2 mL	701061	09/18/25 06:40	USAE	ELLE
Total/NA	Analysis	EPA 180.1 Instrument ID: NOEQUIP		5			502727	09/10/25 16:43	SNR	EET PIT
Total/NA	Analysis	EPA 350.1 Instrument ID: BLUE-ASTORIA		25			502804	09/11/25 14:55	BAB	EET PIT
Total/NA	Analysis	EPA 9050A Instrument ID: NOEQUIP		1			502871	09/12/25 14:09	A1K	EET PIT
Total/NA	Analysis	SM 2320B Instrument ID: NOEQUIP		1	50 mL	50 mL	502949	09/15/25 10:35	ELS	EET PIT

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-11B

Date Collected: 09/09/25 11:15

Date Received: 09/10/25 09:15

Lab Sample ID: 180-195531-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	502967	09/15/25 13:29	A1K	EET PIT

Client Sample ID: M-12

Date Collected: 09/09/25 12:35

Date Received: 09/10/25 09:15

Lab Sample ID: 180-195531-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D Instrument ID: 19094		1	25 mL	25 mL	700218	09/17/25 00:32	JS6E	ELLE
Total/NA	Prep	8011			36.7 mL	2 mL	700951	09/17/25 23:15	USL7	ELLE
Total/NA	Analysis	8011 Instrument ID: 19846		1			701267	09/18/25 21:49	URS0	ELLE
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		1	1 mL	1 mL	502660	09/10/25 21:12	ERP	EET PIT
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		1	1 mL	1 mL	502863	09/13/25 09:17	ERP	EET PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	700941	09/19/25 06:58	UJL8	ELLE
Total Recoverable	Analysis	6020B Instrument ID: E08 - 30647		1			702177	09/19/25 17:13	I9IN	ELLE
Total/NA	Prep	7470A			20 mL	20 mL	703976	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A Instrument ID: M10 – 31820		1			704306	09/24/25 20:29	IJ3I	ELLE
Total/NA	Analysis	SM 2340B Instrument ID: NOEQUIP		1			698918	09/13/25 11:51	USJM	ELLE
Total/NA	Analysis	410.4 Instrument ID: 11076		1	2 mL	2 mL	699761	09/16/25 02:15	USAE	ELLE
Total/NA	Analysis	EPA 180.1 Instrument ID: NOEQUIP		1			502727	09/10/25 16:45	SNR	EET PIT
Total/NA	Analysis	EPA 350.1 Instrument ID: BLUE-ASTORIA		1			502804	09/11/25 14:47	BAB	EET PIT
Total/NA	Analysis	EPA 9050A Instrument ID: NOEQUIP		1			502871	09/12/25 14:10	A1K	EET PIT
Total/NA	Analysis	SM 2320B Instrument ID: NOEQUIP		1	50 mL	50 mL	502949	09/15/25 10:44	ELS	EET PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	502967	09/15/25 13:29	A1K	EET PIT

Client Sample ID: M-11

Date Collected: 09/09/25 11:20

Date Received: 09/10/25 09:15

Lab Sample ID: 180-195531-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D Instrument ID: 19094		10	25 mL	25 mL	700218	09/17/25 04:44	JS6E	ELLE

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-11

Date Collected: 09/09/25 11:20

Date Received: 09/10/25 09:15

Lab Sample ID: 180-195531-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36.5 mL	2 mL	700951	09/17/25 23:15	USL7	ELLE
Total/NA	Analysis	8011		1			701267	09/18/25 22:06	URS0	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502660	09/10/25 21:27	ERP	EET PIT
		Instrument ID: INTEGRION								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502863	09/13/25 09:32	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	701128	09/23/25 06:40	UJL8	ELLE
Total Recoverable	Analysis	6020B		1			703408	09/23/25 13:10	F7JF	ELLE
		Instrument ID: E09 - 30921								
Total/NA	Prep	7470A			20 mL	20 mL	700538	09/17/25 16:30	RFN5	ELLE
Total/NA	Analysis	7470A		1			700950	09/17/25 21:42	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			698918	09/13/25 11:51	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		2.5	2 mL	2 mL	701061	09/18/25 06:40	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		10			502727	09/10/25 16:46	SNR	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		25			502804	09/11/25 14:45	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502977	09/15/25 18:26	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	502949	09/15/25 10:48	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	502967	09/15/25 13:29	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: M-11A

Date Collected: 09/09/25 13:25

Date Received: 09/10/25 09:15

Lab Sample ID: 180-195531-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502660	09/10/25 21:56	ERP	EET PIT
		Instrument ID: INTEGRION								
Total/NA	Analysis	EPA 300.0 R2.1		5	1 mL	1 mL	502863	09/13/25 09:46	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	700941	09/19/25 06:58	UJL8	ELLE
Total Recoverable	Analysis	6020B		1			702177	09/19/25 17:16	I9IN	ELLE
		Instrument ID: E08 - 30647								
Total/NA	Prep	7470A			20 mL	20 mL	700538	09/17/25 16:30	RFN5	ELLE
Total/NA	Analysis	7470A		1			700950	09/17/25 21:44	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			698918	09/13/25 11:51	USJM	ELLE
		Instrument ID: NOEQUIP								

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-11A

Date Collected: 09/09/25 13:25

Date Received: 09/10/25 09:15

Lab Sample ID: 180-195531-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	410.4		1	2 mL	2 mL	699761	09/16/25 02:15	USAE	ELLE
Total/NA	Analysis	EPA 180.1 Instrument ID: NOEQUIP		5			502727	09/10/25 16:47	SNR	EET PIT
Total/NA	Analysis	EPA 350.1 Instrument ID: BLUE-ASTORIA		5			502804	09/11/25 14:43	BAB	EET PIT
Total/NA	Analysis	EPA 9050A Instrument ID: NOEQUIP		1			502871	09/12/25 14:16	A1K	EET PIT
Total/NA	Analysis	SM 2320B Instrument ID: NOEQUIP		1	50 mL	50 mL	502949	09/15/25 10:53	ELS	EET PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	502967	09/15/25 13:29	A1K	EET PIT

Client Sample ID: DUP_09092025

Date Collected: 09/09/25 00:01

Date Received: 09/10/25 09:15

Lab Sample ID: 180-195531-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D Instrument ID: 19094		10	25 mL	25 mL	700218	09/17/25 05:05	JS6E	ELLE
Total/NA	Prep	8011			36.6 mL	2 mL	700951	09/17/25 23:15	USL7	ELLE
Total/NA	Analysis	8011 Instrument ID: 19846		1			701267	09/18/25 22:23	URS0	ELLE
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		1	1 mL	1 mL	502660	09/10/25 22:25	ERP	EET PIT
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		1	1 mL	1 mL	502863	09/13/25 10:01	ERP	EET PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	700941	09/19/25 06:58	UJL8	ELLE
Total Recoverable	Analysis	6020B Instrument ID: E08 - 30647		1			702177	09/19/25 17:11	I9IN	ELLE
Total/NA	Prep	7470A			20 mL	20 mL	700538	09/17/25 16:30	RFN5	ELLE
Total/NA	Analysis	7470A Instrument ID: M10 – 31820		1			700950	09/17/25 21:36	IJ3I	ELLE
Total/NA	Analysis	SM 2340B Instrument ID: NOEQUIP		1			698918	09/13/25 11:51	USJM	ELLE
Total/NA	Analysis	410.4 Instrument ID: 11076		2.5	2 mL	2 mL	701061	09/18/25 06:40	USAE	ELLE
Total/NA	Analysis	EPA 180.1 Instrument ID: NOEQUIP		10			502727	09/10/25 16:49	SNR	EET PIT
Total/NA	Analysis	EPA 350.1 Instrument ID: BLUE-ASTORIA		25			502782	09/11/25 10:12	BAB	EET PIT
Total/NA	Analysis	EPA 9050A Instrument ID: NOEQUIP		1			502871	09/12/25 14:18	A1K	EET PIT
Total/NA	Analysis	SM 2320B Instrument ID: NOEQUIP		1	50 mL	50 mL	502949	09/15/25 10:57	ELS	EET PIT

Eurofins Pittsburgh

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: DUP_09092025

Lab Sample ID: 180-195531-7

Date Collected: 09/09/25 00:01

Matrix: Water

Date Received: 09/10/25 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	SM 2540C		1	100 mL	100 mL	502967	09/15/25 13:29	A1K	EET PIT

Client Sample ID: M-07

Lab Sample ID: 180-195531-8

Date Collected: 09/09/25 14:05

Matrix: Water

Date Received: 09/10/25 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	8260D Instrument ID: 19094		1	25 mL	25 mL	700218	09/17/25 00:53	JS6E	ELLE
Total/NA	Prep	8011			36.8 mL	2 mL	700951	09/17/25 23:15	USL7	ELLE
Total/NA	Analysis	8011 Instrument ID: 19846		1			701267	09/18/25 22:40	URS0	ELLE
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		1	1 mL	1 mL	502660	09/10/25 22:54	ERP	EET PIT
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		2	1 mL	1 mL	502863	09/13/25 02:02	ERP	EET PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	701128	09/23/25 06:40	UJL8	ELLE
Total Recoverable	Analysis	6020B Instrument ID: E09 - 30921		1			703408	09/23/25 12:52	F7JF	ELLE
Total/NA	Prep	7470A			20 mL	20 mL	703976	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A Instrument ID: M10 – 31820		1			704306	09/24/25 20:21	IJ3I	ELLE
Total/NA	Analysis	SM 2340B Instrument ID: NOEQUIP		1			698918	09/13/25 11:51	USJM	ELLE
Total/NA	Analysis	410.4 Instrument ID: 11076		1	2 mL	2 mL	699761	09/16/25 02:15	USAE	ELLE
Total/NA	Analysis	EPA 180.1 Instrument ID: NOEQUIP		1			502727	09/10/25 16:53	SNR	EET PIT
Total/NA	Analysis	EPA 350.1 Instrument ID: BLUE-ASTORIA		1			502804	09/11/25 14:37	BAB	EET PIT
Total/NA	Analysis	EPA 9050A Instrument ID: NOEQUIP		1			502871	09/12/25 14:19	A1K	EET PIT
Total/NA	Analysis	SM 2320B Instrument ID: NOEQUIP		1	50 mL	50 mL	502949	09/15/25 11:02	ELS	EET PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	502967	09/15/25 13:29	A1K	EET PIT

Client Sample ID: TRIP BLANK-02

Lab Sample ID: 180-195531-9

Date Collected: 09/09/25 14:55

Matrix: Water

Date Received: 09/10/25 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	8260D Instrument ID: 19094		1	25 mL	25 mL	700218	09/16/25 22:06	JS6E	ELLE

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: TRIP BLANK-02

Lab Sample ID: 180-195531-9

Date Collected: 09/09/25 14:55

Matrix: Water

Date Received: 09/10/25 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36.4 mL	2 mL	700951	09/17/25 23:15	USL7	ELLE
Total/NA	Analysis	8011		1			701267	09/19/25 00:06	URS0	ELLE
Instrument ID: 19846										

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

Analyst References:

Lab: EET PIT

Batch Type: Analysis

A1K = Agnes Komlos

BAB = Brooke Batyi

ELS = Edwin Shireman

ERP = Evan Papak

LWM = Leslie McIntire

SNR = Sabra Richart

Lab: ELLE

Batch Type: Prep

RFN5 = Aniyah Oxendine

UJL8 = James Mertz

USL7 = Sherry Morrow

Batch Type: Analysis

F7JF = Dennis Dick

I9IN = Miles Yiengst

IJ3I = Elizabeth Brittingham

JS6E = Gavin Walmer

URS0 = Richard Shober

USAE = Susan Engle

USJM = Sandra Miller

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-11D

Lab Sample ID: 180-195531-1

Date Collected: 09/09/25 09:40

Matrix: Water

Date Received: 09/10/25 09:15

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43		1.0	0.71	mg/L			09/10/25 13:53	1
Nitrate as N	ND		0.10	0.023	mg/L			09/10/25 13:53	1
Sulfate	300		2.0	1.5	mg/L			09/13/25 07:07	2

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/19/25 06:58	09/19/25 17:18	1
Arsenic	3.5		2.0	0.68	ug/L		09/19/25 06:58	09/19/25 17:18	1
Barium	23		2.0	0.75	ug/L		09/19/25 06:58	09/19/25 17:18	1
Beryllium	2.0		0.50	0.12	ug/L		09/19/25 06:58	09/19/25 17:18	1
Cadmium	2.1		0.50	0.15	ug/L		09/19/25 06:58	09/19/25 17:18	1
Calcium	49000		120	50	ug/L		09/19/25 06:58	09/19/25 17:18	1
Chromium	2.1		2.0	0.55	ug/L		09/19/25 06:58	09/19/25 17:18	1
Cobalt	9.6		0.50	0.16	ug/L		09/19/25 06:58	09/19/25 17:18	1
Copper	ND		1.0	0.85	ug/L		09/19/25 06:58	09/19/25 17:18	1
Iron	20000		50	20	ug/L		09/19/25 06:58	09/19/25 17:18	1
Lead	ND		0.50	0.12	ug/L		09/19/25 06:58	09/19/25 17:18	1
Magnesium	17000		50	16	ug/L		09/19/25 06:58	09/19/25 17:18	1
Manganese	180		2.0	0.95	ug/L		09/19/25 06:58	09/19/25 17:18	1
Nickel	31		1.0	0.40	ug/L		09/19/25 06:58	09/19/25 17:18	1
Potassium	5700		200	65	ug/L		09/19/25 06:58	09/19/25 17:18	1
Selenium	ND		1.0	0.28	ug/L		09/19/25 06:58	09/19/25 17:18	1
Silver	ND		0.50	0.10	ug/L		09/19/25 06:58	09/19/25 17:18	1
Sodium	42000		200	90	ug/L		09/19/25 06:58	09/19/25 17:18	1
Thallium	1.3		0.50	0.13	ug/L		09/19/25 06:58	09/19/25 17:18	1
Tin	0.77	J B	2.0	0.60	ug/L		09/19/25 06:58	09/19/25 17:18	1
Vanadium	4.2		4.0	0.79	ug/L		09/19/25 06:58	09/19/25 17:18	1
Zinc	330		10	4.0	ug/L		09/19/25 06:58	09/19/25 17:18	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/17/25 16:30	09/17/25 21:46	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	190		0.51	0.19	mg/L			09/13/25 11:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	17		10	5.0	mg/L			09/16/25 02:15	1
Turbidity (EPA 180.1)	0.85		0.85	0.05	NTU			09/10/25 16:40	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/11/25 14:58	1
Specific Conductance (SW846 EP/ 9050A)	740		1.0	1.0	umhos/cm			09/12/25 14:07	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	ND		5.0	5.0	mg/L			09/12/25 13:23	1
Total Dissolved Solids (SM 2540C)	500		10	10	mg/L			09/15/25 13:29	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-10

Lab Sample ID: 180-195531-2

Date Collected: 09/09/25 09:35

Matrix: Water

Date Received: 09/10/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/17/25 00:11	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 00:11	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/17/25 00:11	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 00:11	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/17/25 00:11	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 00:11	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/17/25 00:11	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 00:11	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/17/25 00:11	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/17/25 00:11	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 00:11	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/17/25 00:11	1
2-Hexanone	ND		5.0	2.0	ug/L			09/17/25 00:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/17/25 00:11	1
Acetone	ND		5.0	1.5	ug/L			09/17/25 00:11	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/17/25 00:11	1
Benzene	ND		0.50	0.10	ug/L			09/17/25 00:11	1
Bromoform	ND		1.0	0.30	ug/L			09/17/25 00:11	1
Bromomethane	ND		0.50	0.10	ug/L			09/17/25 00:11	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/17/25 00:11	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/17/25 00:11	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/17/25 00:11	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 00:11	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/17/25 00:11	1
Chloroethane	ND		0.50	0.10	ug/L			09/17/25 00:11	1
Chloroform	ND		0.50	0.090	ug/L			09/17/25 00:11	1
Chloromethane	ND		0.50	0.10	ug/L			09/17/25 00:11	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/17/25 00:11	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/17/25 00:11	1
Dibromomethane	ND		0.50	0.080	ug/L			09/17/25 00:11	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 00:11	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/17/25 00:11	1
Iodomethane	ND		0.50	0.080	ug/L			09/17/25 00:11	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/17/25 00:11	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/17/25 00:11	1
Styrene	ND		0.50	0.070	ug/L			09/17/25 00:11	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/17/25 00:11	1
Toluene	ND		0.50	0.080	ug/L			09/17/25 00:11	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 00:11	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/17/25 00:11	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/17/25 00:11	1
Trichloroethene	ND		0.50	0.080	ug/L			09/17/25 00:11	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/17/25 00:11	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/17/25 00:11	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/17/25 00:11	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/17/25 00:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		09/17/25 00:11	1
4-Bromofluorobenzene (Surr)	94		80 - 120		09/17/25 00:11	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-10

Lab Sample ID: 180-195531-2

Date Collected: 09/09/25 09:35

Matrix: Water

Date Received: 09/10/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		80 - 120		09/17/25 00:11	1
Toluene-d8 (Surr)	98		80 - 120		09/17/25 00:11	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/18/25 21:31	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/18/25 21:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	124		46 - 136	09/17/25 23:15	09/18/25 21:31	1
1,1,2,2-Tetrachloroethane	126		46 - 136	09/17/25 23:15	09/18/25 21:31	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.0		1.0	0.71	mg/L			09/10/25 14:08	1
Nitrate as N	2.6		0.10	0.023	mg/L			09/10/25 14:08	1
Sulfate	6.4		1.0	0.76	mg/L			09/17/25 06:53	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/19/25 06:58	09/19/25 17:20	1
Arsenic	ND		2.0	0.68	ug/L		09/19/25 06:58	09/19/25 17:20	1
Barium	30		2.0	0.75	ug/L		09/19/25 06:58	09/19/25 17:20	1
Beryllium	ND		0.50	0.12	ug/L		09/19/25 06:58	09/19/25 17:20	1
Cadmium	1.2		0.50	0.15	ug/L		09/19/25 06:58	09/19/25 17:20	1
Calcium	2700		120	50	ug/L		09/19/25 06:58	09/19/25 17:20	1
Chromium	ND		2.0	0.55	ug/L		09/19/25 06:58	09/19/25 17:20	1
Cobalt	1.3		0.50	0.16	ug/L		09/19/25 06:58	09/19/25 17:20	1
Copper	1.6		1.0	0.85	ug/L		09/19/25 06:58	09/19/25 17:20	1
Iron	ND		50	20	ug/L		09/19/25 06:58	09/19/25 17:20	1
Lead	ND		0.50	0.12	ug/L		09/19/25 06:58	09/19/25 17:20	1
Magnesium	2100		50	16	ug/L		09/19/25 06:58	09/19/25 17:20	1
Manganese	7.4		2.0	0.95	ug/L		09/19/25 06:58	09/19/25 17:20	1
Nickel	1.9		1.0	0.40	ug/L		09/19/25 06:58	09/19/25 17:20	1
Potassium	1300		200	65	ug/L		09/19/25 06:58	09/19/25 17:20	1
Selenium	ND		1.0	0.28	ug/L		09/19/25 06:58	09/19/25 17:20	1
Silver	ND		0.50	0.10	ug/L		09/19/25 06:58	09/19/25 17:20	1
Sodium	1200		200	90	ug/L		09/19/25 06:58	09/19/25 17:20	1
Thallium	ND		0.50	0.13	ug/L		09/19/25 06:58	09/19/25 17:20	1
Tin	ND		2.0	0.60	ug/L		09/19/25 06:58	09/19/25 17:20	1
Vanadium	ND		4.0	0.79	ug/L		09/19/25 06:58	09/19/25 17:20	1
Zinc	8.3 J		10	4.0	ug/L		09/19/25 06:58	09/19/25 17:20	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/17/25 16:30	09/17/25 21:48	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	15		0.51	0.19	mg/L			09/13/25 11:51	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-10

Lab Sample ID: 180-195531-2

Date Collected: 09/09/25 09:35

Matrix: Water

Date Received: 09/10/25 09:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	ND		10	5.0	mg/L			09/16/25 02:15	1
Turbidity (EPA 180.1)	0.25	J	0.85	0.05	NTU			09/10/25 16:41	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/11/25 14:56	1
Specific Conductance (SW846 EPA 9050A)	55		1.0	1.0	umhos/cm			09/12/25 14:08	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	21		5.0	5.0	mg/L			09/12/25 13:28	1
Total Dissolved Solids (SM 2540C)	36		10	10	mg/L			09/15/25 13:29	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-11B

Lab Sample ID: 180-195531-3

Date Collected: 09/09/25 11:15

Matrix: Water

Date Received: 09/10/25 09:15

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	99		1.0	0.71	mg/L			09/10/25 20:43	1
Nitrate as N	ND		0.10	0.023	mg/L			09/10/25 20:43	1
Sulfate	49		1.0	0.76	mg/L			09/13/25 07:21	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/23/25 06:40	09/23/25 13:08	1
Arsenic	12		2.0	0.68	ug/L		09/23/25 06:40	09/23/25 13:08	1
Barium	36		2.0	0.75	ug/L		09/23/25 06:40	09/23/25 13:08	1
Beryllium	ND		0.50	0.12	ug/L		09/23/25 06:40	09/23/25 13:08	1
Cadmium	ND		0.50	0.15	ug/L		09/23/25 06:40	09/23/25 13:08	1
Calcium	150000		120	50	ug/L		09/23/25 06:40	09/23/25 13:08	1
Chromium	2.2		2.0	0.55	ug/L		09/23/25 06:40	09/23/25 13:08	1
Cobalt	0.54		0.50	0.16	ug/L		09/23/25 06:40	09/23/25 13:08	1
Copper	ND		1.0	0.85	ug/L		09/23/25 06:40	09/23/25 13:08	1
Iron	37000		50	20	ug/L		09/23/25 06:40	09/23/25 13:08	1
Lead	0.29 J		0.50	0.12	ug/L		09/23/25 06:40	09/23/25 13:08	1
Magnesium	38000		50	16	ug/L		09/23/25 06:40	09/23/25 13:08	1
Manganese	430		4.0	1.9	ug/L		09/23/25 06:40	09/23/25 13:33	2
Nickel	1.2		1.0	0.40	ug/L		09/23/25 06:40	09/23/25 13:08	1
Potassium	21000		200	65	ug/L		09/23/25 06:40	09/23/25 13:08	1
Selenium	0.76 J		1.0	0.28	ug/L		09/23/25 06:40	09/23/25 13:08	1
Silver	ND		0.50	0.10	ug/L		09/23/25 06:40	09/23/25 13:08	1
Sodium	57000		200	90	ug/L		09/23/25 06:40	09/23/25 13:08	1
Thallium	ND		0.50	0.13	ug/L		09/23/25 06:40	09/23/25 13:08	1
Tin	1.3 J B		2.0	0.60	ug/L		09/23/25 06:40	09/23/25 13:08	1
Vanadium	1.5 J		4.0	0.79	ug/L		09/23/25 06:40	09/23/25 13:08	1
Zinc	ND		10	4.0	ug/L		09/23/25 06:40	09/23/25 13:08	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/17/25 16:30	09/17/25 21:38	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	530		0.51	0.19	mg/L			09/13/25 11:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	94		25	13	mg/L			09/18/25 06:40	2.5
Turbidity (EPA 180.1)	100		4.2	0.25	NTU			09/10/25 16:43	5
Ammonia (EPA 350.1)	6.1		2.5	2.2	mg/L			09/11/25 14:55	25
Specific Conductance (SW846 EP/ 9050A)	1400		1.0	1.0	umhos/cm			09/12/25 14:09	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	400		5.0	5.0	mg/L			09/15/25 10:35	1
Total Dissolved Solids (SM 2540C)	840		10	10	mg/L			09/15/25 13:29	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-12

Lab Sample ID: 180-195531-4

Date Collected: 09/09/25 12:35

Matrix: Water

Date Received: 09/10/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/17/25 00:32	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 00:32	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/17/25 00:32	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 00:32	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/17/25 00:32	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 00:32	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/17/25 00:32	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 00:32	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/17/25 00:32	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/17/25 00:32	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 00:32	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/17/25 00:32	1
2-Hexanone	ND		5.0	2.0	ug/L			09/17/25 00:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/17/25 00:32	1
Acetone	ND		5.0	1.5	ug/L			09/17/25 00:32	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/17/25 00:32	1
Benzene	ND		0.50	0.10	ug/L			09/17/25 00:32	1
Bromoform	ND		1.0	0.30	ug/L			09/17/25 00:32	1
Bromomethane	ND		0.50	0.10	ug/L			09/17/25 00:32	1
Carbon disulfide	0.10	J	1.0	0.10	ug/L			09/17/25 00:32	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/17/25 00:32	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/17/25 00:32	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 00:32	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/17/25 00:32	1
Chloroethane	ND		0.50	0.10	ug/L			09/17/25 00:32	1
Chloroform	ND		0.50	0.090	ug/L			09/17/25 00:32	1
Chloromethane	ND		0.50	0.10	ug/L			09/17/25 00:32	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/17/25 00:32	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/17/25 00:32	1
Dibromomethane	ND		0.50	0.080	ug/L			09/17/25 00:32	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 00:32	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/17/25 00:32	1
Iodomethane	ND		0.50	0.080	ug/L			09/17/25 00:32	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/17/25 00:32	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/17/25 00:32	1
Styrene	ND		0.50	0.070	ug/L			09/17/25 00:32	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/17/25 00:32	1
Toluene	ND		0.50	0.080	ug/L			09/17/25 00:32	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 00:32	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/17/25 00:32	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/17/25 00:32	1
Trichloroethene	ND		0.50	0.080	ug/L			09/17/25 00:32	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/17/25 00:32	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/17/25 00:32	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/17/25 00:32	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/17/25 00:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		80 - 120		09/17/25 00:32	1
4-Bromofluorobenzene (Surr)	93		80 - 120		09/17/25 00:32	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-12

Lab Sample ID: 180-195531-4

Date Collected: 09/09/25 12:35

Matrix: Water

Date Received: 09/10/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		80 - 120		09/17/25 00:32	1
Toluene-d8 (Surr)	99		80 - 120		09/17/25 00:32	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0095	ug/L		09/17/25 23:15	09/18/25 21:49	1
1,2-Dibromoethane	ND		0.019	0.0095	ug/L		09/17/25 23:15	09/18/25 21:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	133		46 - 136	09/17/25 23:15	09/18/25 21:49	1
1,1,2,2-Tetrachloroethane	131		46 - 136	09/17/25 23:15	09/18/25 21:49	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.6		1.0	0.71	mg/L			09/10/25 21:12	1
Nitrate as N	ND		0.10	0.023	mg/L			09/10/25 21:12	1
Sulfate	49		1.0	0.76	mg/L			09/13/25 09:17	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/19/25 06:58	09/19/25 17:13	1
Arsenic	ND		2.0	0.68	ug/L		09/19/25 06:58	09/19/25 17:13	1
Barium	61		2.0	0.75	ug/L		09/19/25 06:58	09/19/25 17:13	1
Beryllium	ND		0.50	0.12	ug/L		09/19/25 06:58	09/19/25 17:13	1
Cadmium	ND		0.50	0.15	ug/L		09/19/25 06:58	09/19/25 17:13	1
Calcium	19000		120	50	ug/L		09/19/25 06:58	09/19/25 17:13	1
Chromium	ND		2.0	0.55	ug/L		09/19/25 06:58	09/19/25 17:13	1
Cobalt	0.36	J	0.50	0.16	ug/L		09/19/25 06:58	09/19/25 17:13	1
Copper	ND		1.0	0.85	ug/L		09/19/25 06:58	09/19/25 17:13	1
Iron	1600		50	20	ug/L		09/19/25 06:58	09/19/25 17:13	1
Lead	ND		0.50	0.12	ug/L		09/19/25 06:58	09/19/25 17:13	1
Magnesium	2000		50	16	ug/L		09/19/25 06:58	09/19/25 17:13	1
Manganese	100		2.0	0.95	ug/L		09/19/25 06:58	09/19/25 17:13	1
Nickel	10		1.0	0.40	ug/L		09/19/25 06:58	09/19/25 17:13	1
Potassium	3000		200	65	ug/L		09/19/25 06:58	09/19/25 17:13	1
Selenium	ND		1.0	0.28	ug/L		09/19/25 06:58	09/19/25 17:13	1
Silver	ND		0.50	0.10	ug/L		09/19/25 06:58	09/19/25 17:13	1
Sodium	4700		200	90	ug/L		09/19/25 06:58	09/19/25 17:13	1
Thallium	ND		0.50	0.13	ug/L		09/19/25 06:58	09/19/25 17:13	1
Tin	0.85	J B	2.0	0.60	ug/L		09/19/25 06:58	09/19/25 17:13	1
Vanadium	ND		4.0	0.79	ug/L		09/19/25 06:58	09/19/25 17:13	1
Zinc	14		10	4.0	ug/L		09/19/25 06:58	09/19/25 17:13	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 20:29	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	56		0.51	0.19	mg/L			09/13/25 11:51	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-12

Lab Sample ID: 180-195531-4

Date Collected: 09/09/25 12:35

Matrix: Water

Date Received: 09/10/25 09:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	ND		10	5.0	mg/L			09/16/25 02:15	1
Turbidity (EPA 180.1)	0.85		0.85	0.05	NTU			09/10/25 16:45	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/11/25 14:47	1
Specific Conductance (SW846 EPA 9050A)	160		1.0	1.0	umhos/cm			09/12/25 14:10	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	22		5.0	5.0	mg/L			09/15/25 10:44	1
Total Dissolved Solids (SM 2540C)	140		10	10	mg/L			09/15/25 13:29	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-11

Lab Sample ID: 180-195531-5

Date Collected: 09/09/25 11:20

Matrix: Water

Date Received: 09/10/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.70	ug/L			09/17/25 04:44	10
1,1,1-Trichloroethane	ND		5.0	0.80	ug/L			09/17/25 04:44	10
1,1,2,2-Tetrachloroethane	ND		5.0	1.0	ug/L			09/17/25 04:44	10
1,1,2-Trichloroethane	ND		5.0	0.80	ug/L			09/17/25 04:44	10
1,1-Dichloroethane	ND		5.0	1.0	ug/L			09/17/25 04:44	10
1,1-Dichloroethene	ND		5.0	1.0	ug/L			09/17/25 04:44	10
1,2,3-Trichloropropane	ND		10	1.0	ug/L			09/17/25 04:44	10
1,2-Dichlorobenzene	ND		5.0	0.70	ug/L			09/17/25 04:44	10
1,2-Dichloroethane	ND		5.0	0.70	ug/L			09/17/25 04:44	10
1,2-Dichloropropane	ND		5.0	1.0	ug/L			09/17/25 04:44	10
1,4-Dichlorobenzene	ND		5.0	0.70	ug/L			09/17/25 04:44	10
2-Butanone (MEK)	ND		50	10	ug/L			09/17/25 04:44	10
2-Hexanone	ND		50	20	ug/L			09/17/25 04:44	10
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/L			09/17/25 04:44	10
Acetone	ND		50	15	ug/L			09/17/25 04:44	10
Acrylonitrile	ND		50	4.0	ug/L			09/17/25 04:44	10
Benzene	ND		5.0	1.0	ug/L			09/17/25 04:44	10
Bromoform	ND		10	3.0	ug/L			09/17/25 04:44	10
Bromomethane	ND		5.0	1.0	ug/L			09/17/25 04:44	10
Carbon disulfide	ND		10	1.0	ug/L			09/17/25 04:44	10
Carbon tetrachloride	ND		5.0	1.0	ug/L			09/17/25 04:44	10
Chlorobenzene	ND		5.0	0.70	ug/L			09/17/25 04:44	10
Chlorobromomethane	ND		5.0	0.80	ug/L			09/17/25 04:44	10
Chlorodibromomethane	ND		5.0	0.80	ug/L			09/17/25 04:44	10
Chloroethane	ND		5.0	1.0	ug/L			09/17/25 04:44	10
Chloroform	ND		5.0	0.90	ug/L			09/17/25 04:44	10
Chloromethane	ND		5.0	1.0	ug/L			09/17/25 04:44	10
cis-1,2-Dichloroethene	ND		5.0	0.80	ug/L			09/17/25 04:44	10
cis-1,3-Dichloropropene	ND		5.0	1.0	ug/L			09/17/25 04:44	10
Dibromomethane	ND		5.0	0.80	ug/L			09/17/25 04:44	10
Dichlorobromomethane	ND		5.0	0.80	ug/L			09/17/25 04:44	10
Ethylbenzene	ND		5.0	0.80	ug/L			09/17/25 04:44	10
Iodomethane	ND		5.0	0.80	ug/L			09/17/25 04:44	10
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			09/17/25 04:44	10
Methylene Chloride	ND		5.0	2.0	ug/L			09/17/25 04:44	10
Styrene	ND		5.0	0.70	ug/L			09/17/25 04:44	10
Tetrachloroethene	ND		5.0	2.0	ug/L			09/17/25 04:44	10
Toluene	ND		5.0	0.80	ug/L			09/17/25 04:44	10
trans-1,2-Dichloroethene	ND		5.0	1.0	ug/L			09/17/25 04:44	10
trans-1,3-Dichloropropene	ND		5.0	0.80	ug/L			09/17/25 04:44	10
trans-1,4-Dichloro-2-butene	ND		50	20	ug/L			09/17/25 04:44	10
Trichloroethene	ND		5.0	0.80	ug/L			09/17/25 04:44	10
Trichlorofluoromethane	ND		5.0	1.0	ug/L			09/17/25 04:44	10
Vinyl acetate	ND		10	3.0	ug/L			09/17/25 04:44	10
Vinyl chloride	ND		5.0	1.0	ug/L			09/17/25 04:44	10
Xylenes, Total	ND		10	0.70	ug/L			09/17/25 04:44	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		09/17/25 04:44	10
4-Bromofluorobenzene (Surr)	92		80 - 120		09/17/25 04:44	10

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-11

Lab Sample ID: 180-195531-5

Date Collected: 09/09/25 11:20

Matrix: Water

Date Received: 09/10/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	98		80 - 120		09/17/25 04:44	10
Toluene-d8 (Surr)	98		80 - 120		09/17/25 04:44	10

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/18/25 22:06	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/18/25 22:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	196	S1+	46 - 136	09/17/25 23:15	09/18/25 22:06	1
1,1,2,2-Tetrachloroethane	187	S1+	46 - 136	09/17/25 23:15	09/18/25 22:06	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86		1.0	0.71	mg/L			09/10/25 21:27	1
Nitrate as N	ND		0.10	0.023	mg/L			09/10/25 21:27	1
Sulfate	200		1.0	0.76	mg/L			09/13/25 09:32	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/23/25 06:40	09/23/25 13:10	1
Arsenic	55		2.0	0.68	ug/L		09/23/25 06:40	09/23/25 13:10	1
Barium	6.5		2.0	0.75	ug/L		09/23/25 06:40	09/23/25 13:10	1
Beryllium	ND		0.50	0.12	ug/L		09/23/25 06:40	09/23/25 13:10	1
Cadmium	ND		0.50	0.15	ug/L		09/23/25 06:40	09/23/25 13:10	1
Calcium	120000		120	50	ug/L		09/23/25 06:40	09/23/25 13:10	1
Chromium	1.5 J		2.0	0.55	ug/L		09/23/25 06:40	09/23/25 13:10	1
Cobalt	1.1		0.50	0.16	ug/L		09/23/25 06:40	09/23/25 13:10	1
Copper	ND		1.0	0.85	ug/L		09/23/25 06:40	09/23/25 13:10	1
Iron	53000		50	20	ug/L		09/23/25 06:40	09/23/25 13:10	1
Lead	ND		0.50	0.12	ug/L		09/23/25 06:40	09/23/25 13:10	1
Magnesium	46000		50	16	ug/L		09/23/25 06:40	09/23/25 13:10	1
Manganese	270		2.0	0.95	ug/L		09/23/25 06:40	09/23/25 13:10	1
Nickel	4.1		1.0	0.40	ug/L		09/23/25 06:40	09/23/25 13:10	1
Potassium	22000		200	65	ug/L		09/23/25 06:40	09/23/25 13:10	1
Selenium	0.85 J		1.0	0.28	ug/L		09/23/25 06:40	09/23/25 13:10	1
Silver	ND		0.50	0.10	ug/L		09/23/25 06:40	09/23/25 13:10	1
Sodium	100000		200	90	ug/L		09/23/25 06:40	09/23/25 13:10	1
Thallium	ND		0.50	0.13	ug/L		09/23/25 06:40	09/23/25 13:10	1
Tin	1.5 J B		2.0	0.60	ug/L		09/23/25 06:40	09/23/25 13:10	1
Vanadium	ND		4.0	0.79	ug/L		09/23/25 06:40	09/23/25 13:10	1
Zinc	ND		10	4.0	ug/L		09/23/25 06:40	09/23/25 13:10	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/17/25 16:30	09/17/25 21:42	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	490		0.51	0.19	mg/L			09/13/25 11:51	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-11

Lab Sample ID: 180-195531-5

Date Collected: 09/09/25 11:20

Matrix: Water

Date Received: 09/10/25 09:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	110		25	13	mg/L			09/18/25 06:40	2.5
Turbidity (EPA 180.1)	270		8.5	0.50	NTU			09/10/25 16:46	10
Ammonia (EPA 350.1)	5.2		2.5	2.2	mg/L			09/11/25 14:45	25
Specific Conductance (SW846 EPA 9050A)	1400		1.0	1.0	umhos/cm			09/15/25 18:26	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	460		5.0	5.0	mg/L			09/15/25 10:48	1
Total Dissolved Solids (SM 2540C)	880		10	10	mg/L			09/15/25 13:29	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-11A

Lab Sample ID: 180-195531-6

Date Collected: 09/09/25 13:25

Matrix: Water

Date Received: 09/10/25 09:15

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63		1.0	0.71	mg/L			09/10/25 21:56	1
Nitrate as N	ND		0.10	0.023	mg/L			09/10/25 21:56	1
Sulfate	240		5.0	3.8	mg/L			09/13/25 09:46	5

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/19/25 06:58	09/19/25 17:16	1
Arsenic	25		2.0	0.68	ug/L		09/19/25 06:58	09/19/25 17:16	1
Barium	10		2.0	0.75	ug/L		09/19/25 06:58	09/19/25 17:16	1
Beryllium	ND		0.50	0.12	ug/L		09/19/25 06:58	09/19/25 17:16	1
Cadmium	0.50		0.50	0.15	ug/L		09/19/25 06:58	09/19/25 17:16	1
Calcium	92000		120	50	ug/L		09/19/25 06:58	09/19/25 17:16	1
Chromium	1.8	J	2.0	0.55	ug/L		09/19/25 06:58	09/19/25 17:16	1
Cobalt	1.0		0.50	0.16	ug/L		09/19/25 06:58	09/19/25 17:16	1
Copper	ND		1.0	0.85	ug/L		09/19/25 06:58	09/19/25 17:16	1
Iron	27000		50	20	ug/L		09/19/25 06:58	09/19/25 17:16	1
Lead	0.14	J	0.50	0.12	ug/L		09/19/25 06:58	09/19/25 17:16	1
Magnesium	34000		50	16	ug/L		09/19/25 06:58	09/19/25 17:16	1
Manganese	140		2.0	0.95	ug/L		09/19/25 06:58	09/19/25 17:16	1
Nickel	3.6		1.0	0.40	ug/L		09/19/25 06:58	09/19/25 17:16	1
Potassium	16000		200	65	ug/L		09/19/25 06:58	09/19/25 17:16	1
Selenium	0.73	J	1.0	0.28	ug/L		09/19/25 06:58	09/19/25 17:16	1
Silver	ND		0.50	0.10	ug/L		09/19/25 06:58	09/19/25 17:16	1
Sodium	76000		200	90	ug/L		09/19/25 06:58	09/19/25 17:16	1
Thallium	0.20	J	0.50	0.13	ug/L		09/19/25 06:58	09/19/25 17:16	1
Tin	0.87	J B	2.0	0.60	ug/L		09/19/25 06:58	09/19/25 17:16	1
Vanadium	1.4	J	4.0	0.79	ug/L		09/19/25 06:58	09/19/25 17:16	1
Zinc	18		10	4.0	ug/L		09/19/25 06:58	09/19/25 17:16	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/17/25 16:30	09/17/25 21:44	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	370		0.51	0.19	mg/L			09/13/25 11:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	48		10	5.0	mg/L			09/16/25 02:15	1
Turbidity (EPA 180.1)	90		4.2	0.25	NTU			09/10/25 16:47	5
Ammonia (EPA 350.1)	0.86		0.50	0.44	mg/L			09/11/25 14:43	5
Specific Conductance (SW846 EP/ 9050A)	1100		1.0	1.0	umhos/cm			09/12/25 14:16	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	260		5.0	5.0	mg/L			09/15/25 10:53	1
Total Dissolved Solids (SM 2540C)	700		10	10	mg/L			09/15/25 13:29	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: DUP_09092025

Lab Sample ID: 180-195531-7

Date Collected: 09/09/25 00:01

Matrix: Water

Date Received: 09/10/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.70	ug/L			09/17/25 05:05	10
1,1,1-Trichloroethane	ND		5.0	0.80	ug/L			09/17/25 05:05	10
1,1,2,2-Tetrachloroethane	ND		5.0	1.0	ug/L			09/17/25 05:05	10
1,1,2-Trichloroethane	ND		5.0	0.80	ug/L			09/17/25 05:05	10
1,1-Dichloroethane	ND		5.0	1.0	ug/L			09/17/25 05:05	10
1,1-Dichloroethene	ND		5.0	1.0	ug/L			09/17/25 05:05	10
1,2,3-Trichloropropane	ND		10	1.0	ug/L			09/17/25 05:05	10
1,2-Dichlorobenzene	ND		5.0	0.70	ug/L			09/17/25 05:05	10
1,2-Dichloroethane	ND		5.0	0.70	ug/L			09/17/25 05:05	10
1,2-Dichloropropane	ND		5.0	1.0	ug/L			09/17/25 05:05	10
1,4-Dichlorobenzene	ND		5.0	0.70	ug/L			09/17/25 05:05	10
2-Butanone (MEK)	ND		50	10	ug/L			09/17/25 05:05	10
2-Hexanone	ND		50	20	ug/L			09/17/25 05:05	10
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/L			09/17/25 05:05	10
Acetone	ND		50	15	ug/L			09/17/25 05:05	10
Acrylonitrile	ND		50	4.0	ug/L			09/17/25 05:05	10
Benzene	ND		5.0	1.0	ug/L			09/17/25 05:05	10
Bromoform	ND		10	3.0	ug/L			09/17/25 05:05	10
Bromomethane	ND		5.0	1.0	ug/L			09/17/25 05:05	10
Carbon disulfide	ND		10	1.0	ug/L			09/17/25 05:05	10
Carbon tetrachloride	ND		5.0	1.0	ug/L			09/17/25 05:05	10
Chlorobenzene	ND		5.0	0.70	ug/L			09/17/25 05:05	10
Chlorobromomethane	ND		5.0	0.80	ug/L			09/17/25 05:05	10
Chlorodibromomethane	ND		5.0	0.80	ug/L			09/17/25 05:05	10
Chloroethane	ND		5.0	1.0	ug/L			09/17/25 05:05	10
Chloroform	ND		5.0	0.90	ug/L			09/17/25 05:05	10
Chloromethane	ND		5.0	1.0	ug/L			09/17/25 05:05	10
cis-1,2-Dichloroethene	ND		5.0	0.80	ug/L			09/17/25 05:05	10
cis-1,3-Dichloropropene	ND		5.0	1.0	ug/L			09/17/25 05:05	10
Dibromomethane	ND		5.0	0.80	ug/L			09/17/25 05:05	10
Dichlorobromomethane	ND		5.0	0.80	ug/L			09/17/25 05:05	10
Ethylbenzene	ND		5.0	0.80	ug/L			09/17/25 05:05	10
Iodomethane	ND		5.0	0.80	ug/L			09/17/25 05:05	10
Methyl tert-butyl ether	ND		5.0	0.80	ug/L			09/17/25 05:05	10
Methylene Chloride	ND		5.0	2.0	ug/L			09/17/25 05:05	10
Styrene	ND		5.0	0.70	ug/L			09/17/25 05:05	10
Tetrachloroethene	ND		5.0	2.0	ug/L			09/17/25 05:05	10
Toluene	ND		5.0	0.80	ug/L			09/17/25 05:05	10
trans-1,2-Dichloroethene	ND		5.0	1.0	ug/L			09/17/25 05:05	10
trans-1,3-Dichloropropene	ND		5.0	0.80	ug/L			09/17/25 05:05	10
trans-1,4-Dichloro-2-butene	ND		50	20	ug/L			09/17/25 05:05	10
Trichloroethene	ND		5.0	0.80	ug/L			09/17/25 05:05	10
Trichlorofluoromethane	ND		5.0	1.0	ug/L			09/17/25 05:05	10
Vinyl acetate	ND		10	3.0	ug/L			09/17/25 05:05	10
Vinyl chloride	ND		5.0	1.0	ug/L			09/17/25 05:05	10
Xylenes, Total	ND		10	0.70	ug/L			09/17/25 05:05	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		09/17/25 05:05	10
4-Bromofluorobenzene (Surr)	93		80 - 120		09/17/25 05:05	10

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: DUP_09092025

Lab Sample ID: 180-195531-7

Date Collected: 09/09/25 00:01

Matrix: Water

Date Received: 09/10/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	96		80 - 120		09/17/25 05:05	10
Toluene-d8 (Surr)	99		80 - 120		09/17/25 05:05	10

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/18/25 22:23	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/18/25 22:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	185	S1+	46 - 136	09/17/25 23:15	09/18/25 22:23	1
1,1,2,2-Tetrachloroethane	188	S1+	46 - 136	09/17/25 23:15	09/18/25 22:23	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86		1.0	0.71	mg/L			09/10/25 22:25	1
Nitrate as N	ND		0.10	0.023	mg/L			09/10/25 22:25	1
Sulfate	200		1.0	0.76	mg/L			09/13/25 10:01	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/19/25 06:58	09/19/25 17:11	1
Arsenic	51		2.0	0.68	ug/L		09/19/25 06:58	09/19/25 17:11	1
Barium	6.4		2.0	0.75	ug/L		09/19/25 06:58	09/19/25 17:11	1
Beryllium	ND		0.50	0.12	ug/L		09/19/25 06:58	09/19/25 17:11	1
Cadmium	ND		0.50	0.15	ug/L		09/19/25 06:58	09/19/25 17:11	1
Calcium	130000		120	50	ug/L		09/19/25 06:58	09/19/25 17:11	1
Chromium	1.4	J	2.0	0.55	ug/L		09/19/25 06:58	09/19/25 17:11	1
Cobalt	1.1		0.50	0.16	ug/L		09/19/25 06:58	09/19/25 17:11	1
Copper	ND		1.0	0.85	ug/L		09/19/25 06:58	09/19/25 17:11	1
Iron	52000		50	20	ug/L		09/19/25 06:58	09/19/25 17:11	1
Lead	ND		0.50	0.12	ug/L		09/19/25 06:58	09/19/25 17:11	1
Magnesium	48000		50	16	ug/L		09/19/25 06:58	09/19/25 17:11	1
Manganese	270		2.0	0.95	ug/L		09/19/25 06:58	09/19/25 17:11	1
Nickel	4.3		1.0	0.40	ug/L		09/19/25 06:58	09/19/25 17:11	1
Potassium	22000		200	65	ug/L		09/19/25 06:58	09/19/25 17:11	1
Selenium	0.71	J	1.0	0.28	ug/L		09/19/25 06:58	09/19/25 17:11	1
Silver	ND		0.50	0.10	ug/L		09/19/25 06:58	09/19/25 17:11	1
Sodium	100000		200	90	ug/L		09/19/25 06:58	09/19/25 17:11	1
Thallium	ND		0.50	0.13	ug/L		09/19/25 06:58	09/19/25 17:11	1
Tin	ND		2.0	0.60	ug/L		09/19/25 06:58	09/19/25 17:11	1
Vanadium	ND		4.0	0.79	ug/L		09/19/25 06:58	09/19/25 17:11	1
Zinc	ND		10	4.0	ug/L		09/19/25 06:58	09/19/25 17:11	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/17/25 16:30	09/17/25 21:36	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	520		0.51	0.19	mg/L			09/13/25 11:51	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: DUP_09092025

Lab Sample ID: 180-195531-7

Date Collected: 09/09/25 00:01

Matrix: Water

Date Received: 09/10/25 09:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	85		25	13	mg/L			09/18/25 06:40	2.5
Turbidity (EPA 180.1)	240		8.5	0.50	NTU			09/10/25 16:49	10
Ammonia (EPA 350.1)	5.1		2.5	2.2	mg/L			09/11/25 10:12	25
Specific Conductance (SW846 EPA 9050A)	1400		1.0	1.0	umhos/cm			09/12/25 14:18	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	460		5.0	5.0	mg/L			09/15/25 10:57	1
Total Dissolved Solids (SM 2540C)	920		10	10	mg/L			09/15/25 13:29	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-07

Lab Sample ID: 180-195531-8

Date Collected: 09/09/25 14:05

Matrix: Water

Date Received: 09/10/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/17/25 00:53	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 00:53	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/17/25 00:53	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 00:53	1
1,1-Dichloroethane	ND	F1	0.50	0.10	ug/L			09/17/25 00:53	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 00:53	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/17/25 00:53	1
1,2-Dichlorobenzene	ND	F1	0.50	0.070	ug/L			09/17/25 00:53	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/17/25 00:53	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/17/25 00:53	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 00:53	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/17/25 00:53	1
2-Hexanone	ND		5.0	2.0	ug/L			09/17/25 00:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/17/25 00:53	1
Acetone	ND		5.0	1.5	ug/L			09/17/25 00:53	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/17/25 00:53	1
Benzene	ND		0.50	0.10	ug/L			09/17/25 00:53	1
Bromoform	ND		1.0	0.30	ug/L			09/17/25 00:53	1
Bromomethane	ND		0.50	0.10	ug/L			09/17/25 00:53	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/17/25 00:53	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/17/25 00:53	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/17/25 00:53	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 00:53	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/17/25 00:53	1
Chloroethane	ND		0.50	0.10	ug/L			09/17/25 00:53	1
Chloroform	ND		0.50	0.090	ug/L			09/17/25 00:53	1
Chloromethane	ND		0.50	0.10	ug/L			09/17/25 00:53	1
cis-1,2-Dichloroethene	ND	F1	0.50	0.080	ug/L			09/17/25 00:53	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/17/25 00:53	1
Dibromomethane	ND		0.50	0.080	ug/L			09/17/25 00:53	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 00:53	1
Ethylbenzene	ND	F1	0.50	0.080	ug/L			09/17/25 00:53	1
Iodomethane	ND		0.50	0.080	ug/L			09/17/25 00:53	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/17/25 00:53	1
Methylene Chloride	ND	F1	0.50	0.20	ug/L			09/17/25 00:53	1
Styrene	ND		0.50	0.070	ug/L			09/17/25 00:53	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/17/25 00:53	1
Toluene	ND	F1	0.50	0.080	ug/L			09/17/25 00:53	1
trans-1,2-Dichloroethene	ND	F1	0.50	0.10	ug/L			09/17/25 00:53	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/17/25 00:53	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/17/25 00:53	1
Trichloroethene	ND		0.50	0.080	ug/L			09/17/25 00:53	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/17/25 00:53	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/17/25 00:53	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/17/25 00:53	1
Xylenes, Total	ND	F1	1.0	0.070	ug/L			09/17/25 00:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		09/17/25 00:53	1
4-Bromofluorobenzene (Surr)	96		80 - 120		09/17/25 00:53	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-07

Lab Sample ID: 180-195531-8

Date Collected: 09/09/25 14:05

Matrix: Water

Date Received: 09/10/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	97		80 - 120		09/17/25 00:53	1
Toluene-d8 (Surr)	99		80 - 120		09/17/25 00:53	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0095	ug/L		09/17/25 23:15	09/18/25 22:40	1
1,2-Dibromoethane	ND		0.019	0.0095	ug/L		09/17/25 23:15	09/18/25 22:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	121		46 - 136				09/17/25 23:15	09/18/25 22:40	1
1,1,2,2-Tetrachloroethane	124		46 - 136				09/17/25 23:15	09/18/25 22:40	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		1.0	0.71	mg/L			09/10/25 22:54	1
Nitrate as N	ND	F1	0.10	0.023	mg/L			09/10/25 22:54	1
Sulfate	220	F1	2.0	1.5	mg/L			09/13/25 02:02	2

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.22	J	1.0	0.20	ug/L		09/23/25 06:40	09/23/25 12:52	1
Arsenic	1.2	J	2.0	0.68	ug/L		09/23/25 06:40	09/23/25 12:52	1
Barium	24		2.0	0.75	ug/L		09/23/25 06:40	09/23/25 12:52	1
Beryllium	0.44	J	0.50	0.12	ug/L		09/23/25 06:40	09/23/25 12:52	1
Cadmium	5.3		0.50	0.15	ug/L		09/23/25 06:40	09/23/25 12:52	1
Calcium	52000		120	50	ug/L		09/23/25 06:40	09/23/25 12:52	1
Chromium	ND		2.0	0.55	ug/L		09/23/25 06:40	09/23/25 12:52	1
Cobalt	3.2		0.50	0.16	ug/L		09/23/25 06:40	09/23/25 12:52	1
Copper	2.0		1.0	0.85	ug/L		09/23/25 06:40	09/23/25 12:52	1
Iron	2800		50	20	ug/L		09/23/25 06:40	09/23/25 12:52	1
Lead	0.25	J	0.50	0.12	ug/L		09/23/25 06:40	09/23/25 12:52	1
Magnesium	13000		50	16	ug/L		09/23/25 06:40	09/23/25 12:52	1
Manganese	230		2.0	0.95	ug/L		09/23/25 06:40	09/23/25 12:52	1
Nickel	26		1.0	0.40	ug/L		09/23/25 06:40	09/23/25 12:52	1
Potassium	4300		200	65	ug/L		09/23/25 06:40	09/23/25 12:52	1
Selenium	0.49	J	1.0	0.28	ug/L		09/23/25 06:40	09/23/25 12:52	1
Silver	ND		0.50	0.10	ug/L		09/23/25 06:40	09/23/25 12:52	1
Sodium	15000		200	90	ug/L		09/23/25 06:40	09/23/25 12:52	1
Thallium	0.17	J	0.50	0.13	ug/L		09/23/25 06:40	09/23/25 12:52	1
Tin	0.96	J B	2.0	0.60	ug/L		09/23/25 06:40	09/23/25 12:52	1
Vanadium	ND		4.0	0.79	ug/L		09/23/25 06:40	09/23/25 12:52	1
Zinc	35		10	4.0	ug/L		09/23/25 06:40	09/23/25 12:52	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 20:21	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	180		0.51	0.19	mg/L			09/13/25 11:51	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: M-07

Lab Sample ID: 180-195531-8

Date Collected: 09/09/25 14:05

Matrix: Water

Date Received: 09/10/25 09:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	5.5	J	10	5.0	mg/L			09/16/25 02:15	1
Turbidity (EPA 180.1)	12		0.85	0.05	NTU			09/10/25 16:53	1
Ammonia (EPA 350.1)	ND	F1	0.10	0.088	mg/L			09/11/25 14:37	1
Specific Conductance (SW846 EPA 9050A)	510		1.0	1.0	umhos/cm			09/12/25 14:19	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	ND		5.0	5.0	mg/L			09/15/25 11:02	1
Total Dissolved Solids (SM 2540C)	350		10	10	mg/L			09/15/25 13:29	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: TRIP BLANK-02

Lab Sample ID: 180-195531-9

Date Collected: 09/09/25 14:55

Matrix: Water

Date Received: 09/10/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/16/25 22:06	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/16/25 22:06	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/16/25 22:06	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/16/25 22:06	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/16/25 22:06	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/16/25 22:06	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/16/25 22:06	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/16/25 22:06	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/16/25 22:06	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/16/25 22:06	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/16/25 22:06	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/16/25 22:06	1
2-Hexanone	ND		5.0	2.0	ug/L			09/16/25 22:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/16/25 22:06	1
Acetone	ND		5.0	1.5	ug/L			09/16/25 22:06	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/16/25 22:06	1
Benzene	ND		0.50	0.10	ug/L			09/16/25 22:06	1
Bromoform	ND		1.0	0.30	ug/L			09/16/25 22:06	1
Bromomethane	ND		0.50	0.10	ug/L			09/16/25 22:06	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/16/25 22:06	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/16/25 22:06	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/16/25 22:06	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/16/25 22:06	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/16/25 22:06	1
Chloroethane	ND		0.50	0.10	ug/L			09/16/25 22:06	1
Chloroform	ND		0.50	0.090	ug/L			09/16/25 22:06	1
Chloromethane	ND		0.50	0.10	ug/L			09/16/25 22:06	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/16/25 22:06	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/16/25 22:06	1
Dibromomethane	ND		0.50	0.080	ug/L			09/16/25 22:06	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/16/25 22:06	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/16/25 22:06	1
Iodomethane	ND		0.50	0.080	ug/L			09/16/25 22:06	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/16/25 22:06	1
Methylene Chloride	0.34	J	0.50	0.20	ug/L			09/16/25 22:06	1
Styrene	ND		0.50	0.070	ug/L			09/16/25 22:06	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/16/25 22:06	1
Toluene	ND		0.50	0.080	ug/L			09/16/25 22:06	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/16/25 22:06	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/16/25 22:06	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/16/25 22:06	1
Trichloroethene	ND		0.50	0.080	ug/L			09/16/25 22:06	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/16/25 22:06	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/16/25 22:06	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/16/25 22:06	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/16/25 22:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		09/16/25 22:06	1
4-Bromofluorobenzene (Surr)	93		80 - 120		09/16/25 22:06	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Client Sample ID: TRIP BLANK-02

Lab Sample ID: 180-195531-9

Date Collected: 09/09/25 14:55

Matrix: Water

Date Received: 09/10/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		80 - 120		09/16/25 22:06	1
Toluene-d8 (Surr)	99		80 - 120		09/16/25 22:06	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/19/25 00:06	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/19/25 00:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	129		46 - 136				09/17/25 23:15	09/19/25 00:06	1
1,1,2,2-Tetrachloroethane	122		46 - 136				09/17/25 23:15	09/19/25 00:06	1

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-700218/9

Matrix: Water

Analysis Batch: 700218

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/16/25 21:45	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/16/25 21:45	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/16/25 21:45	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/16/25 21:45	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/16/25 21:45	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/16/25 21:45	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/16/25 21:45	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/16/25 21:45	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/16/25 21:45	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/16/25 21:45	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/16/25 21:45	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/16/25 21:45	1
2-Hexanone	ND		5.0	2.0	ug/L			09/16/25 21:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/16/25 21:45	1
Acetone	ND		5.0	1.5	ug/L			09/16/25 21:45	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/16/25 21:45	1
Benzene	ND		0.50	0.10	ug/L			09/16/25 21:45	1
Bromoform	ND		1.0	0.30	ug/L			09/16/25 21:45	1
Bromomethane	ND		0.50	0.10	ug/L			09/16/25 21:45	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/16/25 21:45	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/16/25 21:45	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/16/25 21:45	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Chloroethane	ND		0.50	0.10	ug/L			09/16/25 21:45	1
Chloroform	ND		0.50	0.090	ug/L			09/16/25 21:45	1
Chloromethane	ND		0.50	0.10	ug/L			09/16/25 21:45	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/16/25 21:45	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/16/25 21:45	1
Dibromomethane	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Iodomethane	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/16/25 21:45	1
Styrene	ND		0.50	0.070	ug/L			09/16/25 21:45	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/16/25 21:45	1
Toluene	ND		0.50	0.080	ug/L			09/16/25 21:45	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/16/25 21:45	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/16/25 21:45	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/16/25 21:45	1
Trichloroethene	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/16/25 21:45	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/16/25 21:45	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/16/25 21:45	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/16/25 21:45	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

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

Lab Sample ID: MB 410-700218/9

Matrix: Water

Analysis Batch: 700218

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		09/16/25 21:45	1
4-Bromofluorobenzene (Surr)	96		80 - 120		09/16/25 21:45	1
Dibromofluoromethane (Surr)	98		80 - 120		09/16/25 21:45	1
Toluene-d8 (Surr)	98		80 - 120		09/16/25 21:45	1

Lab Sample ID: LCS 410-700218/5

Matrix: Water

Analysis Batch: 700218

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	5.24		ug/L		105	80 - 122
1,1,1-Trichloroethane	5.00	5.32		ug/L		106	78 - 126
1,1,2,2-Tetrachloroethane	5.00	5.52		ug/L		110	75 - 123
1,1,2-Trichloroethane	5.00	5.19		ug/L		104	80 - 120
1,1-Dichloroethane	5.00	5.66		ug/L		113	74 - 120
1,1-Dichloroethene	5.00	5.93		ug/L		119	80 - 131
1,2,3-Trichloropropane	5.00	5.61		ug/L		112	80 - 125
1,2-Dichlorobenzene	5.00	5.40		ug/L		108	80 - 120
1,2-Dichloroethane	5.00	5.17		ug/L		103	69 - 122
1,2-Dichloropropane	5.00	5.55		ug/L		111	80 - 120
1,4-Dichlorobenzene	5.00	5.33		ug/L		107	80 - 120
2-Butanone (MEK)	62.5	58.3		ug/L		93	59 - 141
2-Hexanone	62.5	61.1		ug/L		98	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	57.3		ug/L		92	55 - 140
Acetone	62.5	57.1		ug/L		91	60 - 146
Acrylonitrile	25.0	22.6		ug/L		91	64 - 139
Benzene	5.00	5.42		ug/L		108	80 - 120
Bromoform	5.00	5.57		ug/L		111	75 - 126
Bromomethane	5.00	5.03		ug/L		101	63 - 120
Carbon disulfide	5.00	5.53		ug/L		111	67 - 130
Carbon tetrachloride	5.00	5.44		ug/L		109	64 - 141
Chlorobenzene	5.00	5.21		ug/L		104	80 - 120
Chlorobromomethane	5.00	5.53		ug/L		111	80 - 133
Chlorodibromomethane	5.00	5.25		ug/L		105	80 - 123
Chloroethane	5.00	5.07		ug/L		101	63 - 120
Chloroform	5.00	5.39		ug/L		108	80 - 120
Chloromethane	5.00	5.00		ug/L		100	56 - 124
cis-1,2-Dichloroethene	5.00	5.62		ug/L		112	80 - 122
cis-1,3-Dichloropropene	5.00	5.11		ug/L		102	67 - 121
Dibromomethane	5.00	5.72		ug/L		114	80 - 122
Dichlorobromomethane	5.00	5.50		ug/L		110	80 - 123
Ethylbenzene	5.00	5.22		ug/L		104	80 - 120
Iodomethane	5.00	5.17		ug/L		103	77 - 120
Methyl tert-butyl ether	5.00	5.16		ug/L		103	69 - 120
Methylene Chloride	5.00	5.64		ug/L		113	80 - 120
Styrene	5.00	5.24		ug/L		105	80 - 120
Tetrachloroethene	5.00	4.85		ug/L		97	80 - 120
Toluene	5.00	5.32		ug/L		106	80 - 120

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

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

Lab Sample ID: LCS 410-700218/5

Matrix: Water

Analysis Batch: 700218

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,2-Dichloroethene	5.00	5.66		ug/L		113	80 - 122
trans-1,3-Dichloropropene	5.00	5.13		ug/L		103	61 - 129
trans-1,4-Dichloro-2-butene	25.0	21.7		ug/L		87	13 - 144
Trichloroethene	5.00	5.20		ug/L		104	80 - 120
Trichlorofluoromethane	5.00	3.97		ug/L		79	53 - 136
Vinyl chloride	5.00	5.13		ug/L		103	60 - 125
Xylenes, Total	15.0	15.5		ug/L		103	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCS 410-700218/6

Matrix: Water

Analysis Batch: 700218

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	12.5	15.0		ug/L		120	64 - 145

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCSD 410-700218/7

Matrix: Water

Analysis Batch: 700218

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
Vinyl acetate	12.5	14.3		ug/L		114	64 - 145	5	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: 180-195531-8 MS

Matrix: Water

Analysis Batch: 700218

Client Sample ID: M-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND		5.00	5.83		ug/L		117	80 - 122
1,1,1-Trichloroethane	ND		5.00	6.00		ug/L		120	78 - 126
1,1,2,2-Tetrachloroethane	ND		5.00	5.80		ug/L		116	75 - 123

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

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

Lab Sample ID: 180-195531-8 MS

Matrix: Water

Analysis Batch: 700218

Client Sample ID: M-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2-Trichloroethane	ND		5.00	5.61		ug/L		112	80 - 120
1,1-Dichloroethane	ND	F1	5.00	6.15	F1	ug/L		123	74 - 120
1,1-Dichloroethene	ND		5.00	6.55		ug/L		131	80 - 131
1,2,3-Trichloropropane	ND		5.00	5.89		ug/L		118	80 - 125
1,2-Dichlorobenzene	ND	F1	5.00	6.00		ug/L		120	80 - 120
1,2-Dichloroethane	ND		5.00	5.31		ug/L		106	69 - 122
1,2-Dichloropropane	ND		5.00	5.95		ug/L		119	80 - 120
1,4-Dichlorobenzene	ND		5.00	5.90		ug/L		118	80 - 120
2-Butanone (MEK)	ND		62.6	66.6		ug/L		106	59 - 141
2-Hexanone	ND		62.6	67.7		ug/L		108	52 - 140
4-Methyl-2-pentanone (MIBK)	ND		62.6	65.3		ug/L		104	55 - 140
Acetone	ND		62.6	62.7		ug/L		100	60 - 146
Acrylonitrile	ND		25.0	22.9		ug/L		91	64 - 139
Benzene	ND		5.00	5.86		ug/L		117	80 - 120
Bromoform	ND		5.00	5.65		ug/L		113	75 - 126
Bromomethane	ND		5.00	5.63		ug/L		112	63 - 120
Carbon disulfide	ND		5.00	5.98		ug/L		119	67 - 130
Carbon tetrachloride	ND		5.00	6.20		ug/L		124	64 - 141
Chlorobenzene	ND		5.00	5.83		ug/L		117	80 - 120
Chlorobromomethane	ND		5.00	5.82		ug/L		116	80 - 133
Chlorodibromomethane	ND		5.00	5.58		ug/L		111	80 - 123
Chloroethane	ND		5.00	5.72		ug/L		114	63 - 120
Chloroform	ND		5.00	5.89		ug/L		118	80 - 120
Chloromethane	ND		5.00	5.81		ug/L		116	80 - 120
cis-1,2-Dichloroethene	ND	F1	5.00	6.04		ug/L		121	80 - 122
cis-1,3-Dichloropropene	ND		5.00	5.24		ug/L		105	67 - 121
Dibromomethane	ND		5.00	5.94		ug/L		119	80 - 122
Dichlorobromomethane	ND		5.00	5.81		ug/L		116	80 - 123
Ethylbenzene	ND	F1	5.00	5.98		ug/L		119	80 - 120
Iodomethane	ND		5.00	5.42		ug/L		108	77 - 120
Methyl tert-butyl ether	ND		5.00	5.30		ug/L		106	69 - 120
Methylene Chloride	ND	F1	5.00	6.04	F1	ug/L		121	80 - 120
Styrene	ND		5.00	5.83		ug/L		116	80 - 120
Tetrachloroethene	ND		5.00	5.77		ug/L		115	80 - 120
Toluene	ND	F1	5.00	6.00		ug/L		120	80 - 120
trans-1,2-Dichloroethene	ND	F1	5.00	6.15	F1	ug/L		123	80 - 122
trans-1,3-Dichloropropene	ND		5.00	5.20		ug/L		104	61 - 129
trans-1,4-Dichloro-2-butene	ND		25.0	7.61		ug/L		30	13 - 144
Trichloroethene	ND		5.00	5.72		ug/L		114	80 - 120
Trichlorofluoromethane	ND		5.00	4.71		ug/L		94	53 - 136
Vinyl chloride	ND		5.00	6.21		ug/L		124	60 - 125
Xylenes, Total	ND	F1	15.0	18.0		ug/L		120	80 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	101		80 - 120

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

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

Lab Sample ID: 180-195531-8 MS

Matrix: Water

Analysis Batch: 700218

Client Sample ID: M-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	ND		12.5	14.2		ug/L		114	64 - 145
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,2-Dichloroethane-d4 (Surr)	102		80 - 120						
4-Bromofluorobenzene (Surr)	94		80 - 120						
Dibromofluoromethane (Surr)	100		80 - 120						
Toluene-d8 (Surr)	99		80 - 120						

Lab Sample ID: 180-195531-8 MSD

Matrix: Water

Analysis Batch: 700218

Client Sample ID: M-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		5.00	5.96		ug/L		119	80 - 122	2	30
1,1,1-Trichloroethane	ND		5.00	6.12		ug/L		122	78 - 126	2	30
1,1,2,2-Tetrachloroethane	ND		5.00	5.93		ug/L		119	75 - 123	2	30
1,1,2-Trichloroethane	ND		5.00	5.82		ug/L		116	80 - 120	4	30
1,1-Dichloroethane	ND	F1	5.00	6.29	F1	ug/L		126	74 - 120	2	30
1,1-Dichloroethene	ND		5.00	6.54		ug/L		131	80 - 131	0	30
1,2,3-Trichloropropane	ND		5.00	6.03		ug/L		120	80 - 125	2	30
1,2-Dichlorobenzene	ND	F1	5.00	6.10	F1	ug/L		122	80 - 120	2	30
1,2-Dichloroethane	ND		5.00	5.22		ug/L		104	69 - 122	2	30
1,2-Dichloropropane	ND		5.00	5.96		ug/L		119	80 - 120	0	30
1,4-Dichlorobenzene	ND		5.00	5.85		ug/L		117	80 - 120	1	30
2-Butanone (MEK)	ND		62.6	61.8		ug/L		99	59 - 141	7	30
2-Hexanone	ND		62.6	63.2		ug/L		101	52 - 140	7	30
4-Methyl-2-pentanone (MIBK)	ND		62.6	61.0		ug/L		98	55 - 140	7	30
Acetone	ND		62.6	62.3		ug/L		100	60 - 146	1	30
Acrylonitrile	ND		25.0	23.8		ug/L		95	64 - 139	4	30
Benzene	ND		5.00	5.97		ug/L		119	80 - 120	2	30
Bromoform	ND		5.00	5.84		ug/L		117	75 - 126	3	30
Bromomethane	ND		5.00	5.62		ug/L		112	63 - 120	0	30
Carbon disulfide	ND		5.00	6.05		ug/L		121	67 - 130	1	30
Carbon tetrachloride	ND		5.00	6.28		ug/L		126	64 - 141	1	30
Chlorobenzene	ND		5.00	5.92		ug/L		118	80 - 120	1	30
Chlorobromomethane	ND		5.00	6.04		ug/L		121	80 - 133	4	30
Chlorodibromomethane	ND		5.00	5.66		ug/L		113	80 - 123	2	30
Chloroethane	ND		5.00	5.65		ug/L		113	63 - 120	1	30
Chloroform	ND		5.00	6.01		ug/L		120	80 - 120	2	30
Chloromethane	ND		5.00	5.83		ug/L		116	80 - 120	0	30
cis-1,2-Dichloroethene	ND	F1	5.00	6.17	F1	ug/L		123	80 - 122	2	30
cis-1,3-Dichloropropene	ND		5.00	5.21		ug/L		104	67 - 121	0	30
Dibromomethane	ND		5.00	6.08		ug/L		121	80 - 122	2	30
Dichlorobromomethane	ND		5.00	5.84		ug/L		117	80 - 123	1	30
Ethylbenzene	ND	F1	5.00	6.09	F1	ug/L		122	80 - 120	2	30
Iodomethane	ND		5.00	5.59		ug/L		112	77 - 120	3	30
Methyl tert-butyl ether	ND		5.00	5.40		ug/L		108	69 - 120	2	30
Methylene Chloride	ND	F1	5.00	6.26	F1	ug/L		125	80 - 120	3	30

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

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

Lab Sample ID: 180-195531-8 MSD

Matrix: Water

Analysis Batch: 700218

Client Sample ID: M-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Styrene	ND		5.00	5.93		ug/L		118	80 - 120	2	30
Tetrachloroethene	ND		5.00	5.81		ug/L		116	80 - 120	1	30
Toluene	ND	F1	5.00	6.11	F1	ug/L		122	80 - 120	2	30
trans-1,2-Dichloroethene	ND	F1	5.00	6.30	F1	ug/L		126	80 - 122	2	30
trans-1,3-Dichloropropene	ND		5.00	5.39		ug/L		108	61 - 129	3	30
trans-1,4-Dichloro-2-butene	ND		25.0	8.59		ug/L		34	13 - 144	12	30
Trichloroethene	ND		5.00	5.72		ug/L		114	80 - 120	0	30
Trichlorofluoromethane	ND		5.00	4.72		ug/L		94	53 - 136	0	30
Vinyl chloride	ND		5.00	6.07		ug/L		121	60 - 125	2	30
Xylenes, Total	ND	F1	15.0	18.3	F1	ug/L		122	80 - 120	2	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	100		80 - 120								
4-Bromofluorobenzene (Surr)	96		80 - 120								
Dibromofluoromethane (Surr)	99		80 - 120								
Toluene-d8 (Surr)	101		80 - 120								

Lab Sample ID: 180-195531-8 MSD

Matrix: Water

Analysis Batch: 700218

Client Sample ID: M-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl acetate	ND		12.5	15.2		ug/L		121	64 - 145	7	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	102		80 - 120								
4-Bromofluorobenzene (Surr)	95		80 - 120								
Dibromofluoromethane (Surr)	99		80 - 120								
Toluene-d8 (Surr)	100		80 - 120								

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 410-700951/1-A

Matrix: Water

Analysis Batch: 701267

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 700951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.020	0.010	ug/L		09/17/25 23:15	09/18/25 20:06	1
1,2-Dibromoethane	ND		0.020	0.010	ug/L		09/17/25 23:15	09/18/25 20:06	1
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1,1,2,2-Tetrachloroethane	130		46 - 136	09/17/25 23:15	09/18/25 20:06	1			
1,1,2,2-Tetrachloroethane	131		46 - 136	09/17/25 23:15	09/18/25 20:06	1			

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCS 410-700951/2-A

Matrix: Water

Analysis Batch: 701267

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 700951

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.129	0.139		ug/L		107	60 - 140		
1,2-Dibromoethane			0.129	0.134		ug/L		104	60 - 140		
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
1,1,2,2-Tetrachloroethane	137	S1+	46 - 136								
1,1,2,2-Tetrachloroethane	131		46 - 136								

Lab Sample ID: LCSD 410-700951/3-A

Matrix: Water

Analysis Batch: 701267

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 700951

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.129	0.144		ug/L		112	60 - 140	4	20
1,2-Dibromoethane			0.129	0.134		ug/L		104	60 - 140	0	20
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
1,1,2,2-Tetrachloroethane	131		46 - 136								
1,1,2,2-Tetrachloroethane	127		46 - 136								

Lab Sample ID: 180-195531-8 MS

Matrix: Water

Analysis Batch: 701267

Client Sample ID: M-07

Prep Type: Total/NA

Prep Batch: 700951

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane	ND		0.123	0.138		ug/L		112	60 - 140		
1,2-Dibromoethane	ND		0.123	0.133		ug/L		108	60 - 140		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
1,1,2,2-Tetrachloroethane	134		46 - 136								
1,1,2,2-Tetrachloroethane	130		46 - 136								

Lab Sample ID: 180-195531-8 MSD

Matrix: Water

Analysis Batch: 701267

Client Sample ID: M-07

Prep Type: Total/NA

Prep Batch: 700951

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	ND		0.125	0.135		ug/L		108	60 - 140	2	20
1,2-Dibromoethane	ND		0.125	0.119		ug/L		95	60 - 140	11	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1,1,2,2-Tetrachloroethane	128		46 - 136								
1,1,2,2-Tetrachloroethane	125		46 - 136								

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-502660/6

Matrix: Water

Analysis Batch: 502660

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			09/10/25 08:42	1
Nitrate as N	ND		0.10	0.023	mg/L			09/10/25 08:42	1
Sulfate	ND		1.0	0.76	mg/L			09/10/25 08:42	1

Lab Sample ID: LCS 180-502660/7

Matrix: Water

Analysis Batch: 502660

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	46.0		mg/L		92	90 - 110
Nitrate as N	2.50	2.54		mg/L		102	90 - 110
Sulfate	50.0	47.8		mg/L		96	90 - 110

Lab Sample ID: 180-195531-8 MS

Matrix: Water

Analysis Batch: 502660

Client Sample ID: M-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	17		50.0	62.7		mg/L		91	90 - 110
Nitrate as N	ND	F1	2.50	2.75		mg/L		110	90 - 110

Lab Sample ID: 180-195531-8 MSD

Matrix: Water

Analysis Batch: 502660

Client Sample ID: M-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	17		50.0	62.6		mg/L		90	90 - 110	0	20
Nitrate as N	ND	F1	2.50	2.78	F1	mg/L		111	90 - 110	1	20

Lab Sample ID: MB 180-502863/26

Matrix: Water

Analysis Batch: 502863

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			09/12/25 20:56	1
Nitrate as N	ND		0.10	0.023	mg/L			09/12/25 20:56	1
Sulfate	ND		1.0	0.76	mg/L			09/12/25 20:56	1

Lab Sample ID: MB 180-502863/70

Matrix: Water

Analysis Batch: 502863

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			09/13/25 07:36	1
Nitrate as N	ND		0.10	0.023	mg/L			09/13/25 07:36	1
Sulfate	ND		1.0	0.76	mg/L			09/13/25 07:36	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 180-502863/27

Matrix: Water

Analysis Batch: 502863

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.5		mg/L		103	90 - 110
Nitrate as N	2.50	2.62		mg/L		105	90 - 110
Sulfate	50.0	51.4		mg/L		103	90 - 110

Lab Sample ID: LCS 180-502863/71

Matrix: Water

Analysis Batch: 502863

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.8		mg/L		104	90 - 110
Nitrate as N	2.50	2.67		mg/L		107	90 - 110
Sulfate	50.0	51.6		mg/L		103	90 - 110

Lab Sample ID: 180-195531-2 MS

Matrix: Water

Analysis Batch: 502863

Client Sample ID: M-10

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	2.0		50.0	52.3		mg/L		101	90 - 110
Nitrate as N	2.6		2.50	4.94		mg/L		94	90 - 110
Sulfate	8.7		50.0	56.6		mg/L		96	90 - 110

Lab Sample ID: 180-195531-2 MSD

Matrix: Water

Analysis Batch: 502863

Client Sample ID: M-10

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2.0		50.0	51.7		mg/L		99	90 - 110	1	20
Nitrate as N	2.6		2.50	4.87		mg/L		91	90 - 110	1	20
Sulfate	8.7		50.0	56.2		mg/L		95	90 - 110	1	20

Lab Sample ID: 180-195531-8 MS

Matrix: Water

Analysis Batch: 502863

Client Sample ID: M-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	220	F1	100	307	F1	mg/L		86	90 - 110

Lab Sample ID: 180-195531-8 MSD

Matrix: Water

Analysis Batch: 502863

Client Sample ID: M-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	220	F1	100	310	F1	mg/L		88	90 - 110	1	20

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-503023/79

Matrix: Water

Analysis Batch: 503023

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			09/17/25 06:24	1
Nitrate as N	ND		0.10	0.023	mg/L			09/17/25 06:24	1
Sulfate	ND		1.0	0.76	mg/L			09/17/25 06:24	1

Lab Sample ID: LCS 180-503023/80

Matrix: Water

Analysis Batch: 503023

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.1		mg/L		100	90 - 110
Nitrate as N	2.50	2.58		mg/L		103	90 - 110
Sulfate	50.0	50.2		mg/L		100	90 - 110

Lab Sample ID: 180-195531-2 MS

Matrix: Water

Analysis Batch: 503023

Client Sample ID: M-10

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1.6		50.0	51.3		mg/L		99	90 - 110
Nitrate as N	2.4	H	2.50	4.90		mg/L		99	90 - 110
Sulfate	6.4		50.0	55.8		mg/L		99	90 - 110

Lab Sample ID: 180-195531-2 MSD

Matrix: Water

Analysis Batch: 503023

Client Sample ID: M-10

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1.6		50.0	51.3		mg/L		99	90 - 110	0	20
Nitrate as N	2.4	H	2.50	4.89		mg/L		99	90 - 110	0	20
Sulfate	6.4		50.0	56.2		mg/L		99	90 - 110	1	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-700941/1-A

Matrix: Water

Analysis Batch: 702177

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 700941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/19/25 06:58	09/19/25 16:34	1
Arsenic	ND		2.0	0.68	ug/L		09/19/25 06:58	09/19/25 16:34	1
Barium	ND		2.0	0.75	ug/L		09/19/25 06:58	09/19/25 16:34	1
Beryllium	ND		0.50	0.12	ug/L		09/19/25 06:58	09/19/25 16:34	1
Cadmium	ND		0.50	0.15	ug/L		09/19/25 06:58	09/19/25 16:34	1
Calcium	ND		120	50	ug/L		09/19/25 06:58	09/19/25 16:34	1
Chromium	ND		2.0	0.55	ug/L		09/19/25 06:58	09/19/25 16:34	1
Cobalt	ND		0.50	0.16	ug/L		09/19/25 06:58	09/19/25 16:34	1
Copper	ND		1.0	0.85	ug/L		09/19/25 06:58	09/19/25 16:34	1
Iron	ND		50	20	ug/L		09/19/25 06:58	09/19/25 16:34	1
Lead	ND		0.50	0.12	ug/L		09/19/25 06:58	09/19/25 16:34	1
Magnesium	ND		50	16	ug/L		09/19/25 06:58	09/19/25 16:34	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-700941/1-A

Matrix: Water

Analysis Batch: 702177

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 700941

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		2.0	0.95	ug/L		09/19/25 06:58	09/19/25 16:34	1
Nickel	ND		1.0	0.40	ug/L		09/19/25 06:58	09/19/25 16:34	1
Potassium	ND		200	65	ug/L		09/19/25 06:58	09/19/25 16:34	1
Selenium	ND		1.0	0.28	ug/L		09/19/25 06:58	09/19/25 16:34	1
Silver	ND		0.50	0.10	ug/L		09/19/25 06:58	09/19/25 16:34	1
Sodium	ND		200	90	ug/L		09/19/25 06:58	09/19/25 16:34	1
Thallium	ND		0.50	0.13	ug/L		09/19/25 06:58	09/19/25 16:34	1
Tin	0.755	J	2.0	0.60	ug/L		09/19/25 06:58	09/19/25 16:34	1
Vanadium	ND		4.0	0.79	ug/L		09/19/25 06:58	09/19/25 16:34	1
Zinc	ND		10	4.0	ug/L		09/19/25 06:58	09/19/25 16:34	1

Lab Sample ID: LCS 410-700941/2-A

Matrix: Water

Analysis Batch: 702177

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 700941

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	96.1		ug/L		96	85 - 115
Arsenic	500	481		ug/L		96	86 - 111
Barium	500	491		ug/L		98	86 - 114
Beryllium	50.0	47.5		ug/L		95	80 - 120
Cadmium	50.0	48.4		ug/L		97	86 - 114
Calcium	5000	5020		ug/L		100	84 - 113
Chromium	500	499		ug/L		100	84 - 113
Cobalt	500	505		ug/L		101	85 - 112
Copper	500	492		ug/L		98	86 - 111
Iron	5000	5100		ug/L		102	84 - 114
Lead	50.0	50.1		ug/L		100	86 - 114
Magnesium	5000	4930		ug/L		99	84 - 113
Manganese	500	499		ug/L		100	84 - 113
Nickel	500	487		ug/L		97	85 - 113
Potassium	5000	4960		ug/L		99	87 - 111
Selenium	100	97.7		ug/L		98	86 - 111
Silver	50.0	50.3		ug/L		101	88 - 116
Sodium	5000	5010		ug/L		100	84 - 114
Thallium	100	99.9		ug/L		100	86 - 113
Tin	100	96.0		ug/L		96	84 - 115
Vanadium	500	497		ug/L		99	84 - 112
Zinc	500	486		ug/L		97	86 - 112

Lab Sample ID: MB 410-701128/1-A

Matrix: Water

Analysis Batch: 703408

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 701128

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/23/25 06:40	09/23/25 12:45	1
Arsenic	ND		2.0	0.68	ug/L		09/23/25 06:40	09/23/25 12:45	1
Barium	ND		2.0	0.75	ug/L		09/23/25 06:40	09/23/25 12:45	1
Beryllium	ND		0.50	0.12	ug/L		09/23/25 06:40	09/23/25 12:45	1
Cadmium	ND		0.50	0.15	ug/L		09/23/25 06:40	09/23/25 12:45	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-701128/1-A
Matrix: Water
Analysis Batch: 703408

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 701128

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		120	50	ug/L		09/23/25 06:40	09/23/25 12:45	1
Chromium	ND		2.0	0.55	ug/L		09/23/25 06:40	09/23/25 12:45	1
Cobalt	ND		0.50	0.16	ug/L		09/23/25 06:40	09/23/25 12:45	1
Copper	ND		1.0	0.85	ug/L		09/23/25 06:40	09/23/25 12:45	1
Iron	ND		50	20	ug/L		09/23/25 06:40	09/23/25 12:45	1
Lead	ND		0.50	0.12	ug/L		09/23/25 06:40	09/23/25 12:45	1
Magnesium	ND		50	16	ug/L		09/23/25 06:40	09/23/25 12:45	1
Manganese	ND		2.0	0.95	ug/L		09/23/25 06:40	09/23/25 12:45	1
Nickel	ND		1.0	0.40	ug/L		09/23/25 06:40	09/23/25 12:45	1
Potassium	ND		200	65	ug/L		09/23/25 06:40	09/23/25 12:45	1
Selenium	ND		1.0	0.28	ug/L		09/23/25 06:40	09/23/25 12:45	1
Silver	ND		0.50	0.10	ug/L		09/23/25 06:40	09/23/25 12:45	1
Sodium	ND		200	90	ug/L		09/23/25 06:40	09/23/25 12:45	1
Thallium	ND		0.50	0.13	ug/L		09/23/25 06:40	09/23/25 12:45	1
Tin	0.995	J	2.0	0.60	ug/L		09/23/25 06:40	09/23/25 12:45	1
Vanadium	ND		4.0	0.79	ug/L		09/23/25 06:40	09/23/25 12:45	1
Zinc	ND		10	4.0	ug/L		09/23/25 06:40	09/23/25 12:45	1

Lab Sample ID: LCS 410-701128/2-A
Matrix: Water
Analysis Batch: 703408

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 701128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	104		ug/L		104	85 - 115
Arsenic	500	521		ug/L		104	86 - 111
Barium	500	528		ug/L		106	86 - 114
Beryllium	50.0	47.1		ug/L		94	80 - 120
Cadmium	50.0	51.6		ug/L		103	86 - 114
Calcium	5000	4960		ug/L		99	84 - 113
Chromium	500	510		ug/L		102	84 - 113
Cobalt	500	505		ug/L		101	85 - 112
Copper	500	512		ug/L		102	86 - 111
Iron	5000	5200		ug/L		104	84 - 114
Lead	50.0	51.4		ug/L		103	86 - 114
Magnesium	5000	4970		ug/L		99	84 - 113
Manganese	500	511		ug/L		102	84 - 113
Nickel	500	511		ug/L		102	85 - 113
Potassium	5000	5110		ug/L		102	87 - 111
Selenium	100	96.1		ug/L		96	86 - 111
Silver	50.0	52.9		ug/L		106	88 - 116
Sodium	5000	4930		ug/L		99	84 - 114
Thallium	100	101		ug/L		101	86 - 113
Tin	100	103		ug/L		103	84 - 115
Vanadium	500	504		ug/L		101	84 - 112
Zinc	500	523		ug/L		105	86 - 112

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 410-701128/3-A

Matrix: Water

Analysis Batch: 703408

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 701128

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	100	104		ug/L		104	85 - 115	1	20
Arsenic	500	517		ug/L		103	86 - 111	1	20
Barium	500	521		ug/L		104	86 - 114	1	20
Beryllium	50.0	47.1		ug/L		94	80 - 120	0	20
Cadmium	50.0	51.2		ug/L		102	86 - 114	1	20
Calcium	5000	4960		ug/L		99	84 - 113	0	20
Chromium	500	507		ug/L		101	84 - 113	1	20
Cobalt	500	494		ug/L		99	85 - 112	2	20
Copper	500	507		ug/L		101	86 - 111	1	20
Iron	5000	5170		ug/L		103	84 - 114	1	20
Lead	50.0	51.9		ug/L		104	86 - 114	1	20
Magnesium	5000	4840		ug/L		97	84 - 113	3	20
Manganese	500	499		ug/L		100	84 - 113	2	20
Nickel	500	504		ug/L		101	85 - 113	1	20
Potassium	5000	5010		ug/L		100	87 - 111	2	20
Selenium	100	98.0		ug/L		98	86 - 111	2	20
Silver	50.0	52.7		ug/L		105	88 - 116	0	20
Sodium	5000	4820		ug/L		96	84 - 114	2	20
Thallium	100	102		ug/L		102	86 - 113	1	20
Tin	100	99.5		ug/L		100	84 - 115	4	20
Vanadium	500	499		ug/L		100	84 - 112	1	20
Zinc	500	518		ug/L		104	86 - 112	1	20

Lab Sample ID: 180-195531-8 MS

Matrix: Water

Analysis Batch: 703408

Client Sample ID: M-07

Prep Type: Total Recoverable

Prep Batch: 701128

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.22	J	100	106		ug/L		105	75 - 125
Arsenic	1.2	J	500	510		ug/L		102	75 - 125
Barium	24		500	550		ug/L		105	75 - 125
Beryllium	0.44	J	50.0	46.3		ug/L		92	75 - 125
Cadmium	5.3		50.0	55.1		ug/L		100	75 - 125
Calcium	52000		5000	58000	4	ug/L		111	75 - 125
Chromium	ND		500	494		ug/L		99	75 - 125
Cobalt	3.2		500	504		ug/L		100	80 - 125
Copper	2.0		500	494		ug/L		98	75 - 125
Iron	2800		5000	7730		ug/L		98	75 - 125
Lead	0.25	J	50.0	51.3		ug/L		102	75 - 125
Magnesium	13000		5000	17800		ug/L		97	75 - 125
Manganese	230		500	761		ug/L		106	75 - 125
Nickel	26		500	515		ug/L		98	75 - 125
Potassium	4300		5000	9280		ug/L		99	75 - 125
Selenium	0.49	J	100	99.9		ug/L		99	75 - 125
Silver	ND		50.0	50.6		ug/L		101	75 - 125
Sodium	15000		5000	19500		ug/L		98	75 - 125
Thallium	0.17	J	100	102		ug/L		102	75 - 125
Tin	0.96	J B	100	106		ug/L		105	84 - 125
Vanadium	ND		500	495		ug/L		99	75 - 125

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-195531-8 MS

Matrix: Water

Analysis Batch: 703408

Client Sample ID: M-07
Prep Type: Total Recoverable
Prep Batch: 701128

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	35		500	543		ug/L		102	75 - 125

Lab Sample ID: 180-195531-8 MSD

Matrix: Water

Analysis Batch: 703408

Client Sample ID: M-07
Prep Type: Total Recoverable
Prep Batch: 701128

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.22	J	100	104		ug/L		104	75 - 125	1	20
Arsenic	1.2	J	500	509		ug/L		102	75 - 125	0	20
Barium	24		500	537		ug/L		103	75 - 125	2	20
Beryllium	0.44	J	50.0	46.5		ug/L		92	75 - 125	0	20
Cadmium	5.3		50.0	55.2		ug/L		100	75 - 125	0	20
Calcium	52000		5000	57500	4	ug/L		99	75 - 125	1	20
Chromium	ND		500	488		ug/L		98	75 - 125	1	20
Cobalt	3.2		500	496		ug/L		99	80 - 125	2	20
Copper	2.0		500	490		ug/L		98	75 - 125	1	20
Iron	2800		5000	7540		ug/L		94	75 - 125	2	20
Lead	0.25	J	50.0	50.7		ug/L		101	75 - 125	1	20
Magnesium	13000		5000	17500		ug/L		91	75 - 125	2	20
Manganese	230		500	744		ug/L		102	75 - 125	2	20
Nickel	26		500	512		ug/L		97	75 - 125	1	20
Potassium	4300		5000	9150		ug/L		96	75 - 125	1	20
Selenium	0.49	J	100	99.1		ug/L		99	75 - 125	1	20
Silver	ND		50.0	49.2		ug/L		98	75 - 125	3	20
Sodium	15000		5000	19200		ug/L		93	75 - 125	1	20
Thallium	0.17	J	100	100		ug/L		100	75 - 125	1	20
Tin	0.96	J B	100	104		ug/L		103	84 - 125	2	20
Vanadium	ND		500	488		ug/L		98	75 - 125	1	20
Zinc	35		500	531		ug/L		99	75 - 125	2	20

Lab Sample ID: 180-195531-8 DU

Matrix: Water

Analysis Batch: 703408

Client Sample ID: M-07
Prep Type: Total Recoverable
Prep Batch: 701128

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.22	J	ND		ug/L		NC	20
Arsenic	1.2	J	0.751	J F5	ug/L		42	20
Barium	24		22.1		ug/L		9	20
Beryllium	0.44	J	0.392	J	ug/L		11	20
Cadmium	5.3		5.09		ug/L		3	20
Calcium	52000		50900		ug/L		3	20
Chromium	ND		ND		ug/L		NC	20
Cobalt	3.2		3.10		ug/L		2	20
Copper	2.0		1.72		ug/L		16	20
Iron	2800		2690		ug/L		5	20
Lead	0.25	J	0.251	J	ug/L		0.4	20
Magnesium	13000		12400		ug/L		4	20
Manganese	230		229		ug/L		2	20
Nickel	26		24.5		ug/L		7	20

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-195531-8 DU

Matrix: Water

Analysis Batch: 703408

Client Sample ID: M-07
Prep Type: Total Recoverable
Prep Batch: 701128

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Potassium	4300		4140		ug/L		5	20
Selenium	0.49	J	ND		ug/L		NC	20
Silver	ND		ND		ug/L		NC	20
Sodium	15000		14000		ug/L		4	20
Thallium	0.17	J	ND		ug/L		NC	20
Tin	0.96	J B	1.04	J	ug/L		8	20
Vanadium	ND		ND		ug/L		NC	20
Zinc	35		31.2		ug/L		12	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-700538/1-A

Matrix: Water

Analysis Batch: 700950

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 700538

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/17/25 16:30	09/17/25 21:06	1

Lab Sample ID: LCS 410-700538/2-A

Matrix: Water

Analysis Batch: 700950

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 700538

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	0.977		ug/L		98	80 - 120

Lab Sample ID: LCSD 410-700538/3-A

Matrix: Water

Analysis Batch: 700950

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 700538

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	1.00	0.869		ug/L		87	80 - 120	12	20

Lab Sample ID: MB 410-703976/1-A

Matrix: Water

Analysis Batch: 704306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 703976

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 20:18	1

Lab Sample ID: LCS 410-703976/2-A

Matrix: Water

Analysis Batch: 704306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 703976

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.11		ug/L		111	80 - 120

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 180-195531-8 MS

Matrix: Water

Analysis Batch: 704306

Client Sample ID: M-07

Prep Type: Total/NA

Prep Batch: 703976

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.00	1.08		ug/L		108	80 - 120

Lab Sample ID: 180-195531-8 MSD

Matrix: Water

Analysis Batch: 704306

Client Sample ID: M-07

Prep Type: Total/NA

Prep Batch: 703976

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	1.03		ug/L		103	80 - 120	5	20

Lab Sample ID: 180-195531-8 DU

Matrix: Water

Analysis Batch: 704306

Client Sample ID: M-07

Prep Type: Total/NA

Prep Batch: 703976

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		ug/L		NC	20

Method: 410.4 - COD

Lab Sample ID: MB 410-699761/4

Matrix: Water

Analysis Batch: 699761

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			09/16/25 02:15	1

Lab Sample ID: LCS 410-699761/5

Matrix: Water

Analysis Batch: 699761

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	40.0	40.7		mg/L		102	90 - 110

Lab Sample ID: MB 410-701061/4

Matrix: Water

Analysis Batch: 701061

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			09/18/25 06:40	1

Lab Sample ID: LCS 410-701061/5

Matrix: Water

Analysis Batch: 701061

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	40.0	42.4		mg/L		106	90 - 110

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method: EPA 180.1 - Turbidity, Nephelometric

Lab Sample ID: MB 180-502727/7

Matrix: Water

Analysis Batch: 502727

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	ND		0.85	0.05	NTU			09/10/25 16:21	1

Lab Sample ID: LCS 180-502727/8

Matrix: Water

Analysis Batch: 502727

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Turbidity	0.850	0.90		NTU		106	90 - 110

Lab Sample ID: 180-195531-2 DU

Matrix: Water

Analysis Batch: 502727

Client Sample ID: M-10

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Turbidity	0.25	J	0.25	J	NTU		8	20

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 180-502782/17

Matrix: Water

Analysis Batch: 502782

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.088	mg/L			09/11/25 09:13	1

Lab Sample ID: LCS 180-502782/18

Matrix: Water

Analysis Batch: 502782

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	0.500	0.497		mg/L		99	90 - 110

Lab Sample ID: MB 180-502804/18

Matrix: Water

Analysis Batch: 502804

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.088	mg/L			09/11/25 14:33	1

Lab Sample ID: LCS 180-502804/19

Matrix: Water

Analysis Batch: 502804

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	0.500	0.485		mg/L		97	90 - 110

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method: EPA 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 180-195531-8 MS

Matrix: Water

Analysis Batch: 502804

Client Sample ID: M-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	ND	F1	0.500	ND	F1	mg/L		0	90 - 110

Lab Sample ID: 180-195531-8 MSD

Matrix: Water

Analysis Batch: 502804

Client Sample ID: M-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	ND	F1	0.500	ND	F1	mg/L		0	90 - 110	NC	20

Method: EPA 9050A - Specific Conductance

Lab Sample ID: MB 180-502871/2

Matrix: Water

Analysis Batch: 502871

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			09/12/25 13:42	1

Lab Sample ID: MB 180-502871/30

Matrix: Water

Analysis Batch: 502871

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			09/12/25 14:12	1

Lab Sample ID: LCS 180-502871/1

Matrix: Water

Analysis Batch: 502871

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	84.0	84.4		umhos/cm		101	90 - 110

Lab Sample ID: LCS 180-502871/29

Matrix: Water

Analysis Batch: 502871

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	84.0	84.3		umhos/cm		100	90 - 110

Lab Sample ID: 180-195531-6 DU

Matrix: Water

Analysis Batch: 502871

Client Sample ID: M-11A

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	1100		1080		umhos/cm		0.5	20

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method: EPA 9050A - Specific Conductance (Continued)

Lab Sample ID: MB 180-502977/2

Matrix: Water

Analysis Batch: 502977

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			09/15/25 18:25	1

Lab Sample ID: LCS 180-502977/1

Matrix: Water

Analysis Batch: 502977

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	84.0	84.3		umhos/cm		100	90 - 110

Lab Sample ID: 180-195531-5 DU

Matrix: Water

Analysis Batch: 502977

Client Sample ID: M-11

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	1400		1410		umhos/cm		0.07	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 180-502845/26

Matrix: Water

Analysis Batch: 502845

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	ND		5.0	5.0	mg/L			09/12/25 12:18	1

Lab Sample ID: LCS 180-502845/25

Matrix: Water

Analysis Batch: 502845

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	251	235		mg/L		94	90 - 110

Lab Sample ID: MB 180-502949/2

Matrix: Water

Analysis Batch: 502949

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	ND		5.0	5.0	mg/L			09/15/25 10:30	1

Lab Sample ID: LCS 180-502949/1

Matrix: Water

Analysis Batch: 502949

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	251	257		mg/L		103	90 - 110

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: 180-195531-3 DU

Matrix: Water

Analysis Batch: 502949

Client Sample ID: M-11B

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3 to pH 4.5	400		384		mg/L		4	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-502967/1

Matrix: Water

Analysis Batch: 502967

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			09/15/25 13:29	1

Lab Sample ID: LCS 180-502967/2

Matrix: Water

Analysis Batch: 502967

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	176	154		mg/L		88	85 - 115

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

GC/MS VOA

Analysis Batch: 700218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-2	M-10	Total/NA	Water	8260D	
180-195531-4	M-12	Total/NA	Water	8260D	
180-195531-5	M-11	Total/NA	Water	8260D	
180-195531-7	DUP_09092025	Total/NA	Water	8260D	
180-195531-8	M-07	Total/NA	Water	8260D	
180-195531-9	TRIP BLANK-02	Total/NA	Water	8260D	
MB 410-700218/9	Method Blank	Total/NA	Water	8260D	
LCS 410-700218/5	Lab Control Sample	Total/NA	Water	8260D	
LCS 410-700218/6	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-700218/7	Lab Control Sample Dup	Total/NA	Water	8260D	
180-195531-8 MS	M-07	Total/NA	Water	8260D	
180-195531-8 MS	M-07	Total/NA	Water	8260D	
180-195531-8 MSD	M-07	Total/NA	Water	8260D	
180-195531-8 MSD	M-07	Total/NA	Water	8260D	

GC Semi VOA

Prep Batch: 700951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-2	M-10	Total/NA	Water	8011	
180-195531-4	M-12	Total/NA	Water	8011	
180-195531-5	M-11	Total/NA	Water	8011	
180-195531-7	DUP_09092025	Total/NA	Water	8011	
180-195531-8	M-07	Total/NA	Water	8011	
180-195531-9	TRIP BLANK-02	Total/NA	Water	8011	
MB 410-700951/1-A	Method Blank	Total/NA	Water	8011	
LCS 410-700951/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 410-700951/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
180-195531-8 MS	M-07	Total/NA	Water	8011	
180-195531-8 MSD	M-07	Total/NA	Water	8011	

Analysis Batch: 701267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-2	M-10	Total/NA	Water	8011	700951
180-195531-4	M-12	Total/NA	Water	8011	700951
180-195531-5	M-11	Total/NA	Water	8011	700951
180-195531-7	DUP_09092025	Total/NA	Water	8011	700951
180-195531-8	M-07	Total/NA	Water	8011	700951
180-195531-9	TRIP BLANK-02	Total/NA	Water	8011	700951
MB 410-700951/1-A	Method Blank	Total/NA	Water	8011	700951
LCS 410-700951/2-A	Lab Control Sample	Total/NA	Water	8011	700951
LCSD 410-700951/3-A	Lab Control Sample Dup	Total/NA	Water	8011	700951
180-195531-8 MS	M-07	Total/NA	Water	8011	700951
180-195531-8 MSD	M-07	Total/NA	Water	8011	700951

HPLC/IC

Analysis Batch: 502660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-1	M-11D	Total/NA	Water	EPA 300.0 R2.1	
180-195531-2	M-10	Total/NA	Water	EPA 300.0 R2.1	
180-195531-3	M-11B	Total/NA	Water	EPA 300.0 R2.1	

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QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

HPLC/IC (Continued)

Analysis Batch: 502660 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-4	M-12	Total/NA	Water	EPA 300.0 R2.1	
180-195531-5	M-11	Total/NA	Water	EPA 300.0 R2.1	
180-195531-6	M-11A	Total/NA	Water	EPA 300.0 R2.1	
180-195531-7	DUP_09092025	Total/NA	Water	EPA 300.0 R2.1	
180-195531-8	M-07	Total/NA	Water	EPA 300.0 R2.1	
MB 180-502660/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-502660/7	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-195531-8 MS	M-07	Total/NA	Water	EPA 300.0 R2.1	
180-195531-8 MSD	M-07	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 502863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-1	M-11D	Total/NA	Water	EPA 300.0 R2.1	
180-195531-3	M-11B	Total/NA	Water	EPA 300.0 R2.1	
180-195531-4	M-12	Total/NA	Water	EPA 300.0 R2.1	
180-195531-5	M-11	Total/NA	Water	EPA 300.0 R2.1	
180-195531-6	M-11A	Total/NA	Water	EPA 300.0 R2.1	
180-195531-7	DUP_09092025	Total/NA	Water	EPA 300.0 R2.1	
180-195531-8	M-07	Total/NA	Water	EPA 300.0 R2.1	
MB 180-502863/26	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
MB 180-502863/70	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-502863/27	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-502863/71	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-195531-2 MS	M-10	Total/NA	Water	EPA 300.0 R2.1	
180-195531-2 MSD	M-10	Total/NA	Water	EPA 300.0 R2.1	
180-195531-8 MS	M-07	Total/NA	Water	EPA 300.0 R2.1	
180-195531-8 MSD	M-07	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 503023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-2	M-10	Total/NA	Water	EPA 300.0 R2.1	
MB 180-503023/79	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-503023/80	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-195531-2 MS	M-10	Total/NA	Water	EPA 300.0 R2.1	
180-195531-2 MSD	M-10	Total/NA	Water	EPA 300.0 R2.1	

Metals

Analysis Batch: 698918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-1	M-11D	Total/NA	Water	SM 2340B	
180-195531-2	M-10	Total/NA	Water	SM 2340B	
180-195531-3	M-11B	Total/NA	Water	SM 2340B	
180-195531-4	M-12	Total/NA	Water	SM 2340B	
180-195531-5	M-11	Total/NA	Water	SM 2340B	
180-195531-6	M-11A	Total/NA	Water	SM 2340B	
180-195531-7	DUP_09092025	Total/NA	Water	SM 2340B	
180-195531-8	M-07	Total/NA	Water	SM 2340B	

Eurofins Pittsburgh

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Metals

Prep Batch: 700538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-1	M-11D	Total/NA	Water	7470A	
180-195531-2	M-10	Total/NA	Water	7470A	
180-195531-3	M-11B	Total/NA	Water	7470A	
180-195531-5	M-11	Total/NA	Water	7470A	
180-195531-6	M-11A	Total/NA	Water	7470A	
180-195531-7	DUP_09092025	Total/NA	Water	7470A	
MB 410-700538/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-700538/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 410-700538/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	

Prep Batch: 700941

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-1	M-11D	Total Recoverable	Water	3005A	
180-195531-2	M-10	Total Recoverable	Water	3005A	
180-195531-4	M-12	Total Recoverable	Water	3005A	
180-195531-6	M-11A	Total Recoverable	Water	3005A	
180-195531-7	DUP_09092025	Total Recoverable	Water	3005A	
MB 410-700941/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-700941/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 700950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-1	M-11D	Total/NA	Water	7470A	700538
180-195531-2	M-10	Total/NA	Water	7470A	700538
180-195531-3	M-11B	Total/NA	Water	7470A	700538
180-195531-5	M-11	Total/NA	Water	7470A	700538
180-195531-6	M-11A	Total/NA	Water	7470A	700538
180-195531-7	DUP_09092025	Total/NA	Water	7470A	700538
MB 410-700538/1-A	Method Blank	Total/NA	Water	7470A	700538
LCS 410-700538/2-A	Lab Control Sample	Total/NA	Water	7470A	700538
LCSD 410-700538/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	700538

Prep Batch: 701128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-3	M-11B	Total Recoverable	Water	3005A	
180-195531-5	M-11	Total Recoverable	Water	3005A	
180-195531-8	M-07	Total Recoverable	Water	3005A	
MB 410-701128/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-701128/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 410-701128/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
180-195531-8 MS	M-07	Total Recoverable	Water	3005A	
180-195531-8 MSD	M-07	Total Recoverable	Water	3005A	
180-195531-8 DU	M-07	Total Recoverable	Water	3005A	

Analysis Batch: 702177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-1	M-11D	Total Recoverable	Water	6020B	700941
180-195531-2	M-10	Total Recoverable	Water	6020B	700941
180-195531-4	M-12	Total Recoverable	Water	6020B	700941
180-195531-6	M-11A	Total Recoverable	Water	6020B	700941
180-195531-7	DUP_09092025	Total Recoverable	Water	6020B	700941

Eurofins Pittsburgh

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

Metals (Continued)

Analysis Batch: 702177 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-700941/1-A	Method Blank	Total Recoverable	Water	6020B	700941
LCS 410-700941/2-A	Lab Control Sample	Total Recoverable	Water	6020B	700941

Analysis Batch: 703408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-3	M-11B	Total Recoverable	Water	6020B	701128
180-195531-3	M-11B	Total Recoverable	Water	6020B	701128
180-195531-5	M-11	Total Recoverable	Water	6020B	701128
180-195531-8	M-07	Total Recoverable	Water	6020B	701128
MB 410-701128/1-A	Method Blank	Total Recoverable	Water	6020B	701128
LCS 410-701128/2-A	Lab Control Sample	Total Recoverable	Water	6020B	701128
LCSD 410-701128/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	701128
180-195531-8 MS	M-07	Total Recoverable	Water	6020B	701128
180-195531-8 MSD	M-07	Total Recoverable	Water	6020B	701128
180-195531-8 DU	M-07	Total Recoverable	Water	6020B	701128

Prep Batch: 703976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-4	M-12	Total/NA	Water	7470A	
180-195531-8	M-07	Total/NA	Water	7470A	
MB 410-703976/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-703976/2-A	Lab Control Sample	Total/NA	Water	7470A	
180-195531-8 MS	M-07	Total/NA	Water	7470A	
180-195531-8 MSD	M-07	Total/NA	Water	7470A	
180-195531-8 DU	M-07	Total/NA	Water	7470A	

Analysis Batch: 704306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-4	M-12	Total/NA	Water	7470A	703976
180-195531-8	M-07	Total/NA	Water	7470A	703976
MB 410-703976/1-A	Method Blank	Total/NA	Water	7470A	703976
LCS 410-703976/2-A	Lab Control Sample	Total/NA	Water	7470A	703976
180-195531-8 MS	M-07	Total/NA	Water	7470A	703976
180-195531-8 MSD	M-07	Total/NA	Water	7470A	703976
180-195531-8 DU	M-07	Total/NA	Water	7470A	703976

General Chemistry

Analysis Batch: 502727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-1	M-11D	Total/NA	Water	EPA 180.1	
180-195531-2	M-10	Total/NA	Water	EPA 180.1	
180-195531-3	M-11B	Total/NA	Water	EPA 180.1	
180-195531-4	M-12	Total/NA	Water	EPA 180.1	
180-195531-5	M-11	Total/NA	Water	EPA 180.1	
180-195531-6	M-11A	Total/NA	Water	EPA 180.1	
180-195531-7	DUP_09092025	Total/NA	Water	EPA 180.1	
180-195531-8	M-07	Total/NA	Water	EPA 180.1	
MB 180-502727/7	Method Blank	Total/NA	Water	EPA 180.1	
LCS 180-502727/8	Lab Control Sample	Total/NA	Water	EPA 180.1	
180-195531-2 DU	M-10	Total/NA	Water	EPA 180.1	

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QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

General Chemistry

Analysis Batch: 502782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-7	DUP_09092025	Total/NA	Water	EPA 350.1	
MB 180-502782/17	Method Blank	Total/NA	Water	EPA 350.1	
LCS 180-502782/18	Lab Control Sample	Total/NA	Water	EPA 350.1	

Analysis Batch: 502804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-1	M-11D	Total/NA	Water	EPA 350.1	
180-195531-2	M-10	Total/NA	Water	EPA 350.1	
180-195531-3	M-11B	Total/NA	Water	EPA 350.1	
180-195531-4	M-12	Total/NA	Water	EPA 350.1	
180-195531-5	M-11	Total/NA	Water	EPA 350.1	
180-195531-6	M-11A	Total/NA	Water	EPA 350.1	
180-195531-8	M-07	Total/NA	Water	EPA 350.1	
MB 180-502804/18	Method Blank	Total/NA	Water	EPA 350.1	
LCS 180-502804/19	Lab Control Sample	Total/NA	Water	EPA 350.1	
180-195531-8 MS	M-07	Total/NA	Water	EPA 350.1	
180-195531-8 MSD	M-07	Total/NA	Water	EPA 350.1	

Analysis Batch: 502845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-1	M-11D	Total/NA	Water	SM 2320B	
180-195531-2	M-10	Total/NA	Water	SM 2320B	
MB 180-502845/26	Method Blank	Total/NA	Water	SM 2320B	
LCS 180-502845/25	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 502871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-1	M-11D	Total/NA	Water	EPA 9050A	
180-195531-2	M-10	Total/NA	Water	EPA 9050A	
180-195531-3	M-11B	Total/NA	Water	EPA 9050A	
180-195531-4	M-12	Total/NA	Water	EPA 9050A	
180-195531-6	M-11A	Total/NA	Water	EPA 9050A	
180-195531-7	DUP_09092025	Total/NA	Water	EPA 9050A	
180-195531-8	M-07	Total/NA	Water	EPA 9050A	
MB 180-502871/2	Method Blank	Total/NA	Water	EPA 9050A	
MB 180-502871/30	Method Blank	Total/NA	Water	EPA 9050A	
LCS 180-502871/1	Lab Control Sample	Total/NA	Water	EPA 9050A	
LCS 180-502871/29	Lab Control Sample	Total/NA	Water	EPA 9050A	
180-195531-6 DU	M-11A	Total/NA	Water	EPA 9050A	

Analysis Batch: 502949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-3	M-11B	Total/NA	Water	SM 2320B	
180-195531-4	M-12	Total/NA	Water	SM 2320B	
180-195531-5	M-11	Total/NA	Water	SM 2320B	
180-195531-6	M-11A	Total/NA	Water	SM 2320B	
180-195531-7	DUP_09092025	Total/NA	Water	SM 2320B	
180-195531-8	M-07	Total/NA	Water	SM 2320B	
MB 180-502949/2	Method Blank	Total/NA	Water	SM 2320B	
LCS 180-502949/1	Lab Control Sample	Total/NA	Water	SM 2320B	
180-195531-3 DU	M-11B	Total/NA	Water	SM 2320B	

Eurofins Pittsburgh

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195531-1

General Chemistry

Analysis Batch: 502967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-1	M-11D	Total/NA	Water	SM 2540C	
180-195531-2	M-10	Total/NA	Water	SM 2540C	
180-195531-3	M-11B	Total/NA	Water	SM 2540C	
180-195531-4	M-12	Total/NA	Water	SM 2540C	
180-195531-5	M-11	Total/NA	Water	SM 2540C	
180-195531-6	M-11A	Total/NA	Water	SM 2540C	
180-195531-7	DUP_09092025	Total/NA	Water	SM 2540C	
180-195531-8	M-07	Total/NA	Water	SM 2540C	
MB 180-502967/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-502967/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 502977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-5	M-11	Total/NA	Water	EPA 9050A	
MB 180-502977/2	Method Blank	Total/NA	Water	EPA 9050A	
LCS 180-502977/1	Lab Control Sample	Total/NA	Water	EPA 9050A	
180-195531-5 DU	M-11	Total/NA	Water	EPA 9050A	

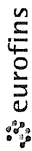
Analysis Batch: 699761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-1	M-11D	Total/NA	Water	410.4	
180-195531-2	M-10	Total/NA	Water	410.4	
180-195531-4	M-12	Total/NA	Water	410.4	
180-195531-6	M-11A	Total/NA	Water	410.4	
180-195531-8	M-07	Total/NA	Water	410.4	
MB 410-699761/4	Method Blank	Total/NA	Water	410.4	
LCS 410-699761/5	Lab Control Sample	Total/NA	Water	410.4	

Analysis Batch: 701061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195531-3	M-11B	Total/NA	Water	410.4	
180-195531-5	M-11	Total/NA	Water	410.4	
180-195531-7	DUP_09092025	Total/NA	Water	410.4	
MB 410-701061/4	Method Blank	Total/NA	Water	410.4	
LCS 410-701061/5	Lab Control Sample	Total/NA	Water	410.4	

Chain of Custody Record



Environment Testing

Client Information		Sampler	Lab PM Johnson, Andy		Carrier Tracking No(s)		COC No 180-116865-18132 3												
Client Contact: Helen Girod		Phone	E-Mail Andy.Johnson@eurofins.com		State of Origin		Page Page 3 of 4												
Company Geosyntec Consultants Inc		PWSID		Job #															
Address 10211 Wincopin Circle 4th Floor		Due Date Requested:		Analysis Requested															
City Columbia		TAT Requested (days):		Preservation Codes: S - H2SO4 N - None D - HNO3 R - NaHSO4 A - HCL															
State, Zip MD, 21044		Compliance Project: ☒ Yes ☐ No																	
Phone 240-381-5010(Tel)		PO # WO-ME1166K-5773																	
Email H.Girod@Geosyntec.com		WO #																	
Project Name Ritchie Rubble LF Semi-Annual GW/UD		Project # 18015089																	
Site		SSOW#																	
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Sewage, Oil, BT=Tissue, A=Air, DW=Drinking Water)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	350.1, 410.4	180.1, 2320B, 300_ORGMS, 9050A	2340C, 6020A, 7470A	2540C - Calcd - TDS by 2540C	8011 - EDB & DBCP by 8011	8270E - Anthracene by 8270E LL	8260D - Appendix I VOCs + MTBE by 8260D	350.1 - Ammonia by 350.1	300_ORGMS - Cl, SO4, NO3 by 300.0	6020A, 7470A	Special Instructions/Note:	
M-11D	M-11P	9-9-2025	940	G	Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	S - 3 COOLERS
M-18A	M-18		935	G	Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	D - 2 COGS
M-18A	M-11B		935	G	Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	S - P FAS samples
M-21	M-12		1235	G	Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	in separate cooler
M-11	M-11		1120	G	Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	S - samples on
M-11A	M-11A		1325	G	Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	Preserved
M-11B	M-11B		1405	G	Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	ICE
M-11C	M-11C		1410	G	Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
M-11D	M-11D		1415	G	Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
M-11E	M-11E		1455	G	Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	
Possible Hazard Identification		☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological		Date		Time		Method of Shipment:											
Deliverable Requested 1, II, III, IV, Other (specify)		Empty Kit Relinquished by		Date		Time		Special Instructions/QC Requirements											
Relinquished by		Landon Chase		Date		Time		Relinquished by											
Relinquished by		Landon Chase		Date		Time		Relinquished by											
Relinquished by		Landon Chase		Date		Time		Relinquished by											
Custody Seals Intact		Custody Seal No		Cooler Temperature(s) °C and Other Remarks		Cooler Temperature(s) °C and Other Remarks		Cooler Temperature(s) °C and Other Remarks											

EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F

CAD: 1030460/INET4535

HANOVER, MD 21076
UNITED STATES US

BILL RECIPIENT

SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

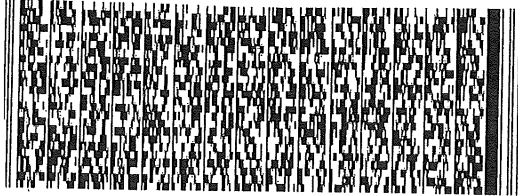
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REF: GEOSYNTEC

INV:

PO:

DEPT:



2 of 3

WED - 10 SEP 10:30A

PRIORITY OVERNIGHT

S#

63

str#

8842 3953 5660

0201

15238

PA-US

PIT

AGCA

180-195531 Waybill

Uncorrected temp

Thermometer ID

CF

Initials

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

1.9 °C

28

70.4

JS

15238

PA-US

PIT

AGCA

180-195531 Waybill

Uncorrected temp

Thermometer ID

CF

Initials

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

1.7 °C

28

70.4

JS

15238

PA-US

PIT

AGCA

180-195531 Waybill

Uncorrected temp

Thermometer ID

CF

Initials

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

1.7 °C

28

70.4

JS

15238

PA-US

PIT

AGCA

180-195531 Waybill

Uncorrected temp

Thermometer ID

CF

Initials

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

1.7 °C

28

70.4

JS

15238

PA-US

PIT

AGCA

ORIGIN ID: BWA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F

SHIP DATE 09SEP25
ACTWGT 50.00 LB
CAD: 1030460/INET4535

HANOVER, MD 21076
UNITED STATES US

BILL RECIPIENT

SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

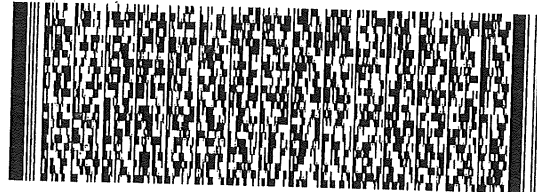
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REF: GEOSYNTEC

INV:

PO:

DEPT:



1 of 3

WED - 10 SEP 10:30A

PRIORITY OVERNIGHT

8842 3953 5660

STER #

AGCA

Uncorrected temp

Thermometer ID

CF

Initials

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

1.7 °C

28

70.4

JS

15238

PA-US

PIT

AGCA

180-195531 Waybill

Uncorrected temp

Thermometer ID

CF

Initials

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

1.7 °C

28

70.4

JS

CAD: 1030460/INET4535

HANOVER, MD. 21076
UNITED STATES US

BILL RECIPIENT

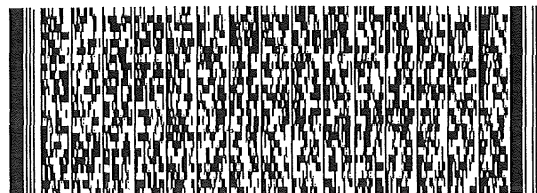
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EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058

REF: GEOSYNTEC

INV:

DEPT



FedEx
Express



3 of 3

WED - 10 SEP 10:30

MPS#

8842 3953 5682

PRIORITY OVERNIGHT

0263

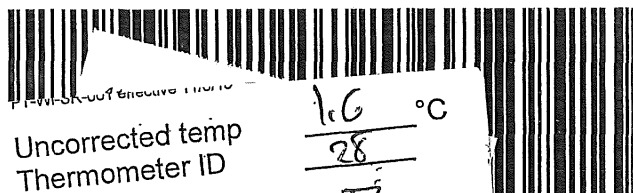
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EA AGCA

1523

PA-US PIT



Uncorrected temp
Thermometer ID

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CF FDY Initials

T3

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- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Ver: 10/10/2024
10/23/2025 (Rev. 1)

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195531-1

Login Number: 195531

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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	
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 $<6\text{mm}$ (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: 180-195531-1

Login Number: 195531

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 09/12/25 12:43 PM

Creator: Trzos, Hazel

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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, 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 $> 6\text{mm}$ in diameter (none, if from WV)?	True	



ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Girod
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 9/23/2025 4:01:17 PM

JOB DESCRIPTION

Ritchie Rubble LF Semi-Annual GW PFAS

JOB NUMBER

180-195532-1

Eurofins Pittsburgh

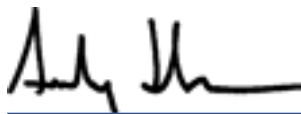
Job Notes

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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9/23/2025 4:01:17 PM

Authorized for release by
Andy Johnson, Senior Project Manager
Andy.Johnson@et.eurofinsus.com
(615)818-9567

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Job ID: 180-195532-1

Eurofins Pittsburgh

Job Narrative 180-195532-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/10/2025 9:15 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.0°C, 2.1°C and 2.3°C.

PFAS

Method PFC_IDA: The recovery for the labeled isotope(s) ¹³C3-PFBS in the following samples M-11D (180-195532-1), M-11 (180-195532-4) and DUP_09092025 (180-195532-5) is outside the QC acceptance limits due to the matrix of the sample.

Method PFC_IDA: Sample injection standard peak areas in M-11D (180-195532-1), M-11 (180-195532-4) and DUP_09092025 (180-195532-5) are below the QC limit for both the initial injections and the re-injections. The values here are from the initial injections of the samples.

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

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Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
E	Result exceeded calibration range.
I	Ion ratio outside 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)
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
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-26
Washington	State	C457	04-11-26

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

Eurofins Pittsburgh

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

Sample Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195532-1	M-11D	Water	09/09/25 09:40	09/10/25 09:15	Maryland
180-195532-2	M-10	Water	09/09/25 09:35	09/10/25 09:15	Maryland
180-195532-3	M-12	Water	09/09/25 12:35	09/10/25 09:15	Maryland
180-195532-4	M-11	Water	09/09/25 11:20	09/10/25 09:15	Maryland
180-195532-5	DUP_09092025	Water	09/09/25 00:01	09/10/25 09:15	Maryland
180-195532-6	MW-07	Water	09/09/25 14:05	09/10/25 09:15	Maryland

Method Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Method	Method Description	Protocol	Laboratory
537 IDA	EPA 537 Isotope Dilution	EPA	ELLE
SPE	PFAS by SPE	Lab SOP	ELLE

Protocol References:

EPA = US Environmental Protection Agency
Lab SOP = Laboratory Standard Operating Procedure

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Client Sample ID: M-11D

Date Collected: 09/09/25 09:40

Date Received: 09/10/25 09:15

Lab Sample ID: 180-195532-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE	RA		281 mL	1 mL	700133	09/16/25 15:22	V3FW	ELLE
Total/NA	Analysis	537 IDA	RA	1			701397	09/18/25 22:14	UUV6	ELLE
Instrument ID: 30638										
Total/NA	Prep	SPE			281 mL	1 mL	700133	09/16/25 15:22	V3FW	ELLE
Total/NA	Analysis	537 IDA		1	1 uL	1 uL	700792	09/17/25 23:22	DSU6	ELLE
Instrument ID: 30731										

Client Sample ID: M-10

Date Collected: 09/09/25 09:35

Date Received: 09/10/25 09:15

Lab Sample ID: 180-195532-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			273.6 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA		1	1 uL	1 uL	700792	09/17/25 23:35	DSU6	ELLE
Instrument ID: 30731										

Client Sample ID: M-12

Date Collected: 09/09/25 12:35

Date Received: 09/10/25 09:15

Lab Sample ID: 180-195532-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			274.2 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA		1	1 uL	1 uL	700792	09/17/25 23:49	DSU6	ELLE
Instrument ID: 30731										

Client Sample ID: M-11

Date Collected: 09/09/25 11:20

Date Received: 09/10/25 09:15

Lab Sample ID: 180-195532-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE	RA		265.4 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA	RA	1			701397	09/18/25 22:29	UUV6	ELLE
Instrument ID: 30638										
Total/NA	Prep	SPE	DL		265.4 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA	DL	10			701397	09/18/25 22:45	UUV6	ELLE
Instrument ID: 30638										
Total/NA	Prep	SPE			265.4 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA		1	1 uL	1 uL	700792	09/18/25 00:03	DSU6	ELLE
Instrument ID: 30731										

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Client Sample ID: DUP_09092025

Lab Sample ID: 180-195532-5

Date Collected: 09/09/25 00:01

Matrix: Water

Date Received: 09/10/25 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE	DL		259.5 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA	DL	10			701397	09/18/25 23:00	UUV6	ELLE
Instrument ID: 30638										
Total/NA	Prep	SPE	RA		259.5 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA	RA	1			701775	09/20/25 04:43	QD9Y	ELLE
Instrument ID: 30638										
Total/NA	Prep	SPE			259.5 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA		1	1 uL	1 uL	700792	09/18/25 00:16	DSU6	ELLE
Instrument ID: 30731										

Client Sample ID: MW-07

Lab Sample ID: 180-195532-6

Date Collected: 09/09/25 14:05

Matrix: Water

Date Received: 09/10/25 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			263.4 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA		1	1 uL	1 uL	700792	09/18/25 00:43	DSU6	ELLE
Instrument ID: 30731										

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: ELLE

Batch Type: Prep

V3FW = Amber Mauger

Batch Type: Analysis

DSU6 = John Grossi

QD9Y = Adam Fellenbaum

UUV6 = Anthony Polaski

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Client Sample ID: M-11D

Lab Sample ID: 180-195532-1

Date Collected: 09/09/25 09:40

Matrix: Water

Date Received: 09/10/25 09:15

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	1.4	ng/L		09/16/25 15:22	09/17/25 23:22	1
Perfluorobutanesulfonic acid (PFBS)	48		1.8	0.44	ng/L		09/16/25 15:22	09/17/25 23:22	1
Perfluorohexanesulfonic acid (PFHxS)	100		1.8	0.44	ng/L		09/16/25 15:22	09/17/25 23:22	1
Perfluorononanoic acid (PFNA)	5.2		1.8	0.44	ng/L		09/16/25 15:22	09/17/25 23:22	1
Perfluorooctanesulfonic acid (PFOS)	25		1.8	0.44	ng/L		09/16/25 15:22	09/17/25 23:22	1
Perfluorooctanoic acid (PFOA)	160		1.8	0.44	ng/L		09/16/25 15:22	09/17/25 23:22	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	56		26 - 161				09/16/25 15:22	09/17/25 23:22	1
13C3-PFBS	200	*5+	20 - 198				09/16/25 15:22	09/17/25 23:22	1
13C3-PFHxS	70		35 - 165				09/16/25 15:22	09/17/25 23:22	1
13C4-PFHpA	59		33 - 158				09/16/25 15:22	09/17/25 23:22	1
13C8-PFOA	70		35 - 146				09/16/25 15:22	09/17/25 23:22	1
13C8-PFOS	73		41 - 155				09/16/25 15:22	09/17/25 23:22	1
13C9-PFNA	74		37 - 157				09/16/25 15:22	09/17/25 23:22	1

Method: EPA 537 IDA - EPA 537 Isotope Dilution - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	1.4	ng/L		09/16/25 15:22	09/18/25 22:14	1
Perfluorobutanesulfonic acid (PFBS)	47		1.8	0.44	ng/L		09/16/25 15:22	09/18/25 22:14	1
Perfluorohexanesulfonic acid (PFHxS)	97		1.8	0.44	ng/L		09/16/25 15:22	09/18/25 22:14	1
Perfluorononanoic acid (PFNA)	4.8		1.8	0.44	ng/L		09/16/25 15:22	09/18/25 22:14	1
Perfluorooctanesulfonic acid (PFOS)	27 I		1.8	0.44	ng/L		09/16/25 15:22	09/18/25 22:14	1
Perfluorooctanoic acid (PFOA)	180		1.8	0.44	ng/L		09/16/25 15:22	09/18/25 22:14	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	83		26 - 161				09/16/25 15:22	09/18/25 22:14	1
13C3-PFBS	236	*5+	20 - 198				09/16/25 15:22	09/18/25 22:14	1
13C3-PFHxS	85		35 - 165				09/16/25 15:22	09/18/25 22:14	1
13C4-PFHpA	77		33 - 158				09/16/25 15:22	09/18/25 22:14	1
13C8-PFOA	75		35 - 146				09/16/25 15:22	09/18/25 22:14	1
13C8-PFOS	75		41 - 155				09/16/25 15:22	09/18/25 22:14	1
13C9-PFNA	75		37 - 157				09/16/25 15:22	09/18/25 22:14	1

Eurofins Pittsburgh

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Client Sample ID: M-10

Lab Sample ID: 180-195532-2

Date Collected: 09/09/25 09:35

Matrix: Water

Date Received: 09/10/25 09:15

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	1.5	ng/L		09/16/25 16:10	09/17/25 23:35	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.46	ng/L		09/16/25 16:10	09/17/25 23:35	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.46	ng/L		09/16/25 16:10	09/17/25 23:35	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.46	ng/L		09/16/25 16:10	09/17/25 23:35	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.46	ng/L		09/16/25 16:10	09/17/25 23:35	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.46	ng/L		09/16/25 16:10	09/17/25 23:35	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	65		26 - 161				09/16/25 16:10	09/17/25 23:35	1
13C3-PFBS	82		20 - 198				09/16/25 16:10	09/17/25 23:35	1
13C3-PFHxS	77		35 - 165				09/16/25 16:10	09/17/25 23:35	1
13C4-PFHpA	71		33 - 158				09/16/25 16:10	09/17/25 23:35	1
13C8-PFOA	76		35 - 146				09/16/25 16:10	09/17/25 23:35	1
13C8-PFOS	76		41 - 155				09/16/25 16:10	09/17/25 23:35	1
13C9-PFNA	78		37 - 157				09/16/25 16:10	09/17/25 23:35	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Client Sample ID: M-12

Lab Sample ID: 180-195532-3

Date Collected: 09/09/25 12:35

Matrix: Water

Date Received: 09/10/25 09:15

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	1.5	ng/L		09/16/25 16:10	09/17/25 23:49	1
Perfluorobutanesulfonic acid (PFBS)	1.1	J	1.8	0.46	ng/L		09/16/25 16:10	09/17/25 23:49	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.46	ng/L		09/16/25 16:10	09/17/25 23:49	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.46	ng/L		09/16/25 16:10	09/17/25 23:49	1
Perfluorooctanesulfonic acid (PFOS)	0.68	J	1.8	0.46	ng/L		09/16/25 16:10	09/17/25 23:49	1
Perfluorooctanoic acid (PFOA)	1.1	J	1.8	0.46	ng/L		09/16/25 16:10	09/17/25 23:49	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	64		26 - 161				09/16/25 16:10	09/17/25 23:49	1
13C3-PFBS	100		20 - 198				09/16/25 16:10	09/17/25 23:49	1
13C3-PFHxS	77		35 - 165				09/16/25 16:10	09/17/25 23:49	1
13C4-PFHpA	68		33 - 158				09/16/25 16:10	09/17/25 23:49	1
13C8-PFOA	73		35 - 146				09/16/25 16:10	09/17/25 23:49	1
13C8-PFOS	71		41 - 155				09/16/25 16:10	09/17/25 23:49	1
13C9-PFNA	71		37 - 157				09/16/25 16:10	09/17/25 23:49	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Client Sample ID: M-11

Lab Sample ID: 180-195532-4

Date Collected: 09/09/25 11:20

Matrix: Water

Date Received: 09/10/25 09:15

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/16/25 16:10	09/18/25 00:03	1
Perfluorobutanesulfonic acid (PFBS)	78		1.9	0.47	ng/L		09/16/25 16:10	09/18/25 00:03	1
Perfluorohexanesulfonic acid (PFHxS)	190		1.9	0.47	ng/L		09/16/25 16:10	09/18/25 00:03	1
Perfluorononanoic acid (PFNA)	26		1.9	0.47	ng/L		09/16/25 16:10	09/18/25 00:03	1
Perfluorooctanesulfonic acid (PFOS)	170		1.9	0.47	ng/L		09/16/25 16:10	09/18/25 00:03	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	47		26 - 161				09/16/25 16:10	09/18/25 00:03	1
13C3-PFBS	274	*5+	20 - 198				09/16/25 16:10	09/18/25 00:03	1
13C3-PFHxS	89		35 - 165				09/16/25 16:10	09/18/25 00:03	1
13C4-PFHpa	54		33 - 158				09/16/25 16:10	09/18/25 00:03	1
13C8-PFOA	68		35 - 146				09/16/25 16:10	09/18/25 00:03	1
13C8-PFOS	72		41 - 155				09/16/25 16:10	09/18/25 00:03	1
13C9-PFNA	65		37 - 157				09/16/25 16:10	09/18/25 00:03	1

Method: EPA 537 IDA - EPA 537 Isotope Dilution - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	420		19	4.7	ng/L		09/16/25 16:10	09/18/25 22:45	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8-PFOA	70		35 - 146				09/16/25 16:10	09/18/25 22:45	10

Method: EPA 537 IDA - EPA 537 Isotope Dilution - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/16/25 16:10	09/18/25 22:29	1
Perfluorobutanesulfonic acid (PFBS)	81		1.9	0.47	ng/L		09/16/25 16:10	09/18/25 22:29	1
Perfluorohexanesulfonic acid (PFHxS)	170		1.9	0.47	ng/L		09/16/25 16:10	09/18/25 22:29	1
Perfluorononanoic acid (PFNA)	20		1.9	0.47	ng/L		09/16/25 16:10	09/18/25 22:29	1
Perfluorooctanesulfonic acid (PFOS)	150		1.9	0.47	ng/L		09/16/25 16:10	09/18/25 22:29	1
Perfluorooctanoic acid (PFOA)	460	E	1.9	0.47	ng/L		09/16/25 16:10	09/18/25 22:29	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	81		26 - 161				09/16/25 16:10	09/18/25 22:29	1
13C3-PFBS	374	*5+	20 - 198				09/16/25 16:10	09/18/25 22:29	1
13C3-PFHxS	113		35 - 165				09/16/25 16:10	09/18/25 22:29	1
13C4-PFHpa	92		33 - 158				09/16/25 16:10	09/18/25 22:29	1
13C8-PFOA	91		35 - 146				09/16/25 16:10	09/18/25 22:29	1
13C8-PFOS	92		41 - 155				09/16/25 16:10	09/18/25 22:29	1
13C9-PFNA	95		37 - 157				09/16/25 16:10	09/18/25 22:29	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Client Sample ID: DUP_09092025

Lab Sample ID: 180-195532-5

Date Collected: 09/09/25 00:01

Matrix: Water

Date Received: 09/10/25 09:15

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/16/25 16:10	09/18/25 00:16	1
Perfluorobutanesulfonic acid (PFBS)	80		1.9	0.48	ng/L		09/16/25 16:10	09/18/25 00:16	1
Perfluorohexanesulfonic acid (PFHxS)	190		1.9	0.48	ng/L		09/16/25 16:10	09/18/25 00:16	1
Perfluorononanoic acid (PFNA)	25		1.9	0.48	ng/L		09/16/25 16:10	09/18/25 00:16	1
Perfluorooctanesulfonic acid (PFOS)	170		1.9	0.48	ng/L		09/16/25 16:10	09/18/25 00:16	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	39		26 - 161				09/16/25 16:10	09/18/25 00:16	1
13C3-PFBS	298	*5+	20 - 198				09/16/25 16:10	09/18/25 00:16	1
13C3-PFHxS	79		35 - 165				09/16/25 16:10	09/18/25 00:16	1
13C4-PFHpa	48		33 - 158				09/16/25 16:10	09/18/25 00:16	1
13C8-PFOA	62		35 - 146				09/16/25 16:10	09/18/25 00:16	1
13C8-PFOS	69		41 - 155				09/16/25 16:10	09/18/25 00:16	1
13C9-PFNA	65		37 - 157				09/16/25 16:10	09/18/25 00:16	1

Method: EPA 537 IDA - EPA 537 Isotope Dilution - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	440		19	4.8	ng/L		09/16/25 16:10	09/18/25 23:00	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8-PFOA	65		35 - 146				09/16/25 16:10	09/18/25 23:00	10

Method: EPA 537 IDA - EPA 537 Isotope Dilution - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/16/25 16:10	09/20/25 04:43	1
Perfluorobutanesulfonic acid (PFBS)	92		1.9	0.48	ng/L		09/16/25 16:10	09/20/25 04:43	1
Perfluorohexanesulfonic acid (PFHxS)	170		1.9	0.48	ng/L		09/16/25 16:10	09/20/25 04:43	1
Perfluorononanoic acid (PFNA)	21		1.9	0.48	ng/L		09/16/25 16:10	09/20/25 04:43	1
Perfluorooctanesulfonic acid (PFOS)	160		1.9	0.48	ng/L		09/16/25 16:10	09/20/25 04:43	1
Perfluorooctanoic acid (PFOA)	510	E	1.9	0.48	ng/L		09/16/25 16:10	09/20/25 04:43	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	60		26 - 161				09/16/25 16:10	09/20/25 04:43	1
13C3-PFBS	258	*5+	20 - 198				09/16/25 16:10	09/20/25 04:43	1
13C3-PFHxS	85		35 - 165				09/16/25 16:10	09/20/25 04:43	1
13C4-PFHpa	67		33 - 158				09/16/25 16:10	09/20/25 04:43	1
13C8-PFOA	66		35 - 146				09/16/25 16:10	09/20/25 04:43	1
13C8-PFOS	69		41 - 155				09/16/25 16:10	09/20/25 04:43	1
13C9-PFNA	70		37 - 157				09/16/25 16:10	09/20/25 04:43	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Client Sample ID: MW-07

Lab Sample ID: 180-195532-6

Date Collected: 09/09/25 14:05

Matrix: Water

Date Received: 09/10/25 09:15

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/16/25 16:10	09/18/25 00:43	1
Perfluorobutanesulfonic acid (PFBS)	24		1.9	0.47	ng/L		09/16/25 16:10	09/18/25 00:43	1
Perfluorohexanesulfonic acid (PFHxS)	53		1.9	0.47	ng/L		09/16/25 16:10	09/18/25 00:43	1
Perfluorononanoic acid (PFNA)	5.3		1.9	0.47	ng/L		09/16/25 16:10	09/18/25 00:43	1
Perfluorooctanesulfonic acid (PFOS)	24	I	1.9	0.47	ng/L		09/16/25 16:10	09/18/25 00:43	1
Perfluorooctanoic acid (PFOA)	74		1.9	0.47	ng/L		09/16/25 16:10	09/18/25 00:43	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	66		26 - 161				09/16/25 16:10	09/18/25 00:43	1
13C3-PFBS	116		20 - 198				09/16/25 16:10	09/18/25 00:43	1
13C3-PFHxS	76		35 - 165				09/16/25 16:10	09/18/25 00:43	1
13C4-PFHpA	71		33 - 158				09/16/25 16:10	09/18/25 00:43	1
13C8-PFOA	72		35 - 146				09/16/25 16:10	09/18/25 00:43	1
13C8-PFOS	65		41 - 155				09/16/25 16:10	09/18/25 00:43	1
13C9-PFNA	69		37 - 157				09/16/25 16:10	09/18/25 00:43	1

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 410-700133/1-A

Matrix: Water

Analysis Batch: 700792

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 700133

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/16/25 15:22	09/17/25 22:01	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		09/16/25 15:22	09/17/25 22:01	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		09/16/25 15:22	09/17/25 22:01	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		09/16/25 15:22	09/17/25 22:01	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		09/16/25 15:22	09/17/25 22:01	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.50	ng/L		09/16/25 15:22	09/17/25 22:01	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	81		26 - 161	09/16/25 15:22	09/17/25 22:01	1
13C3-PFBS	88		20 - 198	09/16/25 15:22	09/17/25 22:01	1
13C3-PFHxS	84		35 - 165	09/16/25 15:22	09/17/25 22:01	1
13C4-PFHpA	82		33 - 158	09/16/25 15:22	09/17/25 22:01	1
13C8-PFOA	85		35 - 146	09/16/25 15:22	09/17/25 22:01	1
13C8-PFOS	83		41 - 155	09/16/25 15:22	09/17/25 22:01	1
13C9-PFNA	83		37 - 157	09/16/25 15:22	09/17/25 22:01	1

Lab Sample ID: LCS 410-700133/2-A

Matrix: Water

Analysis Batch: 700792

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 700133

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	25.6	16.8		ng/L		66	50 - 132
Perfluorobutanesulfonic acid (PFBS)	22.7	18.2		ng/L		80	54 - 145
Perfluorohexanesulfonic acid (PFHxS)	23.3	16.8		ng/L		72	52 - 138
Perfluorononanoic acid (PFNA)	25.6	19.1		ng/L		75	52 - 143
Perfluorooctanesulfonic acid (PFOS)	23.8	16.8		ng/L		71	52 - 139
Perfluorooctanoic acid (PFOA)	25.6	17.3		ng/L		68	53 - 147

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C3-HFPO-DA	65		26 - 161
13C3-PFBS	70		20 - 198
13C3-PFHxS	69		35 - 165
13C4-PFHpA	67		33 - 158
13C8-PFOA	74		35 - 146
13C8-PFOS	73		41 - 155
13C9-PFNA	74		37 - 157

Lab Sample ID: 180-195532-6 MS

Matrix: Water

Analysis Batch: 700792

Client Sample ID: MW-07

Prep Type: Total/NA

Prep Batch: 700133

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		23.4	24.8		ng/L		106	50 - 132
Perfluorobutanesulfonic acid (PFBS)	24		20.7	51.5		ng/L		133	54 - 145

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: 180-195532-6 MS

Matrix: Water

Analysis Batch: 700792

Client Sample ID: MW-07

Prep Type: Total/NA

Prep Batch: 700133

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorohexanesulfonic acid (PFHxS)	53		21.3	75.8		ng/L		105	52 - 138
Perfluorononanoic acid (PFNA)	5.3		23.4	32.7		ng/L		117	52 - 143
Perfluorooctanesulfonic acid (PFOS)	24	I	21.7	44.7		ng/L		97	52 - 139
Perfluorooctanoic acid (PFOA)	74		23.4	99.8		ng/L		110	53 - 147
MS MS									
Isotope Dilution	%Recovery	Qualifier	Limits						
13C3-HFPO-DA	74		26 - 161						
13C3-PFBS	134		20 - 198						
13C3-PFHxS	82		35 - 165						
13C4-PFHpA	73		33 - 158						
13C8-PFOA	78		35 - 146						
13C8-PFOS	77		41 - 155						
13C9-PFNA	76		37 - 157						

Lab Sample ID: 180-195532-6 MSD

Matrix: Water

Analysis Batch: 700792

Client Sample ID: MW-07

Prep Type: Total/NA

Prep Batch: 700133

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		23.1	24.2		ng/L		105	50 - 132	3	30
Perfluorobutanesulfonic acid (PFBS)	24		20.5	52.0		ng/L		137	54 - 145	1	30
Perfluorohexanesulfonic acid (PFHxS)	53		21.1	76.5		ng/L		110	52 - 138	1	30
Perfluorononanoic acid (PFNA)	5.3		23.1	33.9		ng/L		124	52 - 143	4	30
Perfluorooctanesulfonic acid (PFOS)	24	I	21.5	44.8		ng/L		99	52 - 139	0	30
Perfluorooctanoic acid (PFOA)	74		23.1	102		ng/L		121	53 - 147	2	30
MSD MSD											
Isotope Dilution	%Recovery	Qualifier	Limits								
13C3-HFPO-DA	69		26 - 161								
13C3-PFBS	125		20 - 198								
13C3-PFHxS	75		35 - 165								
13C4-PFHpA	68		33 - 158								
13C8-PFOA	70		35 - 146								
13C8-PFOS	75		41 - 155								
13C9-PFNA	71		37 - 157								

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QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195532-1

LCMS

Prep Batch: 700133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195532-1 - RA	M-11D	Total/NA	Water	SPE	
180-195532-1	M-11D	Total/NA	Water	SPE	
180-195532-2	M-10	Total/NA	Water	SPE	
180-195532-3	M-12	Total/NA	Water	SPE	
180-195532-4 - RA	M-11	Total/NA	Water	SPE	
180-195532-4 - DL	M-11	Total/NA	Water	SPE	
180-195532-4	M-11	Total/NA	Water	SPE	
180-195532-5 - DL	DUP_09092025	Total/NA	Water	SPE	
180-195532-5 - RA	DUP_09092025	Total/NA	Water	SPE	
180-195532-5	DUP_09092025	Total/NA	Water	SPE	
180-195532-6	MW-07	Total/NA	Water	SPE	
MB 410-700133/1-A	Method Blank	Total/NA	Water	SPE	
LCS 410-700133/2-A	Lab Control Sample	Total/NA	Water	SPE	
180-195532-6 MS	MW-07	Total/NA	Water	SPE	
180-195532-6 MSD	MW-07	Total/NA	Water	SPE	

Analysis Batch: 700792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195532-1	M-11D	Total/NA	Water	537 IDA	700133
180-195532-2	M-10	Total/NA	Water	537 IDA	700133
180-195532-3	M-12	Total/NA	Water	537 IDA	700133
180-195532-4	M-11	Total/NA	Water	537 IDA	700133
180-195532-5	DUP_09092025	Total/NA	Water	537 IDA	700133
180-195532-6	MW-07	Total/NA	Water	537 IDA	700133
MB 410-700133/1-A	Method Blank	Total/NA	Water	537 IDA	700133
LCS 410-700133/2-A	Lab Control Sample	Total/NA	Water	537 IDA	700133
180-195532-6 MS	MW-07	Total/NA	Water	537 IDA	700133
180-195532-6 MSD	MW-07	Total/NA	Water	537 IDA	700133

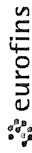
Analysis Batch: 701397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195532-1 - RA	M-11D	Total/NA	Water	537 IDA	700133
180-195532-4 - RA	M-11	Total/NA	Water	537 IDA	700133
180-195532-4 - DL	M-11	Total/NA	Water	537 IDA	700133
180-195532-5 - DL	DUP_09092025	Total/NA	Water	537 IDA	700133

Analysis Batch: 701775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195532-5 - RA	DUP_09092025	Total/NA	Water	537 IDA	700133

Chain of Custody Record



Environment Testing

Client Information		Sampler	Lab PM	Carrier Tracking No(s)	COC No					
Geosyntec Consultants Inc		Landon Chase	Johnson, Andy		180-116867-20331 2					
Address 10211 Wincopin Circle 4th Floor		Phone 202-893-1758	E-Mail Andy.Johnson@eurofins.com	State of Origin MD	Page 2 of 2					
City Columbia		Job #								
State, Zip MD, 21044		Analysis Requested								
Phone 240-381-5010(Tel)		Preservation Codes: N - None								
Email H.Girod@Geosyntec.com		Other:								
Project Name Ritchie Rubble LF Semi-Annual GW/UD PFAS		Total Number of Containers								
Site Ritchie Rubble Landfill		Special Instructions/Note:								
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, G=waste/soil, BT=Tissue, A=Air, DW=Drinking Water)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PPC, IDA - 6 PFAS by 537 Mod.	Received by	Date/Time	Company
M-11 D	9-9-25	0940	G	Water						
M-10	9-9-25	0935	G	Water						
M-11 B	9-9-25	1835	G	Water						
M-11	9-9-25	1120	G	Water						
DUP - 09092025	9-9-2025	1015	G	Water						
MS - 09092025	9-9-25	1410	G	Water						
MSD - 09092025	9-9-25	1405	G	Water						
M-7	9-9-25	1405	G	Water						
M-7	9-9-25	1405	G	Water						
GWMS				Water						
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological										
Deliverable Requested I, II, III, IV, Other (specify)										
Empty Kit Relinquished by										
Relinquished by Landon Chase										
Relinquished by										
Relinquished by										
Custody Seals Intact: ☐ Yes ☐ No										
Custody Seal No										
Cooler Temperature(s) °C and Other Remarks										

EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F

CAD: 1030460/INET4535

HANOVER, MD 21076
UNITED STATES US

BILL RECIPIENT

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TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

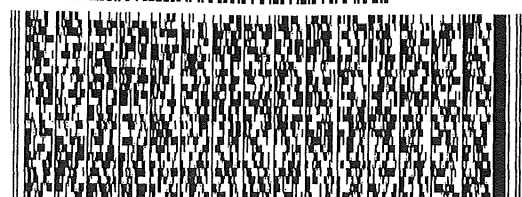
(412) 963-7058

REF. GEOSYNTEC

INV:

PO

DEPT.



2 of 3

WED - 10 SEP 10:30A

PRIORITY OVERNIGHT

TS# 8842 3953 5671

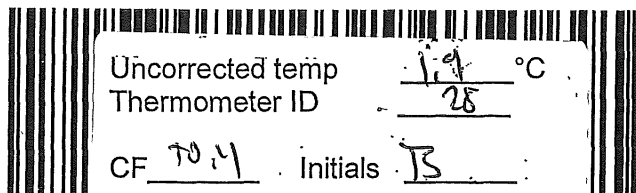
str# 8842 3953 5660

0201

15238

EA AGCA

PA-US PIT



Uncorrected temp 1.9 °C
Thermometer ID 28

CF 10.4 Initials JB

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

ORIGIN ID: BMA (240) 814-1351

CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F

HANOVER, MD 21076
UNITED STATES US

SHIP DATE: 09SEP25
ACTWGT: 50.00 LB
CAD: 1030460/INET4535

BILL RECIPIENT

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

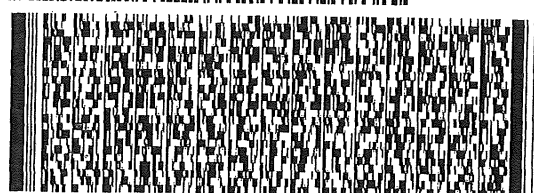
(412) 963-7058

REF. GEOSYNTEC

INV:

PO

DEPT.



1 of 3

WED - 10 SEP 10:30A

PRIORITY OVERNIGHT

TRK# 8842 3953 5660

0201

MASTER

EA AGCA

15238

PA-US PIT

Uncorrected temp 1.7 °C
Thermometer ID 28
CF 10.4 Initials JB



180-195532 Waybill

CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F

HANOVER, MD 21076
UNITED STATES US

ACTIVITY 00.00 LB
CAD: 1030460/INET4535

BILL RECIPIENT

TO **SAMPLE RECEIVING**
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

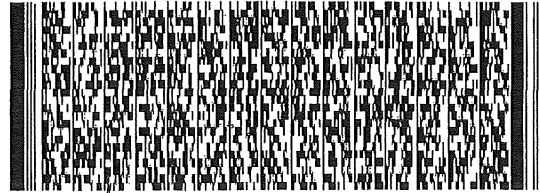
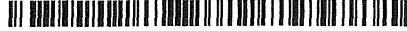
(412) 963-7058

REF: GEOSYNTEC

INV:

PO:

DEPT:



3 of 3

WED - 10 SEP 10:30

MPS#

8842 3953 5682

PRIORITY OVERNIGHT

0263

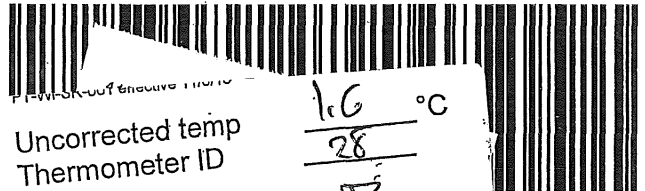
Mstr# 8842 3953 5660

0201

EA AGCA

1523

PA-US PIT



Uncorrected temp
Thermometer ID

1.6 °C
28

CF FDY Initials JS

SP:PD:10J.Y
002826081360001523800884239535682

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: N/A		Lab PM: Johnson, Andy		Carrier Tracking No(s): N/A		COC No: 180-545164.1												
Client Contact: Shipping/Receiving		Phone: N/A		E-Mail: Andy.Johnson@et.eurofinsus.com		State of Origin: Maryland		Page: Page 1 of 1												
Company: Eurofins Lancaster Laboratories Environm				Accreditations Required (See note): N/A				Job #: 180-195532-1												
Address: 2425 New Holland Pike,		Due Date Requested: 9/23/2025		Analysis Requested						Preservation Codes:										
City: Lancaster		TAT Requested (days): N/A																		
State, Zip: PA, 17601		PO #: N/A		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) PFC_IDAP/PFAS_W_Prep(MOD) UCMR3 6 PFAS		Total Number of containers		Other: N/A												
Phone: 717-856-2300(Tel)		WO #: N/A																		
Email: N/A		Project #: 18015089																		
Project Name: Ritchie Rubble LF Semi-Annual PFAS		SSOW#: N/A																		
Site: N/A																				
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	Special Instructions/Note:														
				Preservation Code:																
M-11D (180-195532-1)		9/9/25	09:40 Eastern	G	Water			X											2	
M-10 (180-195532-2)		9/9/25	09:35 Eastern	G	Water			X											2	
M-12 (180-195532-3)		9/9/25	12:35 Eastern	G	Water			X											2	
M-11 (180-195532-4)		9/9/25	11:20 Eastern	G	Water			X											2	
DUP_09092025 (180-195532-5)		9/9/25	00:01 Eastern	G	Water			X											2	
MW-7 (180-195532-6)		9/9/25	14:05 Eastern	G	Water			X											2	
MW-7 (180-195532-6MS)		9/9/25	14:15 Eastern	G	Water			X											2	
MW-7 (180-195532-6MSD)		9/9/25	14:10 Eastern	G	Water			X											2	
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										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)										
Unconfirmed										☐ 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: 9/11/25 1400 Company: EIIIE										
Relinquished by: MGA										Date/Time: 9/11/25 1855 Company: EIIIE										
Relinquished by:										Date/Time: 9/11/25 1855 Company:										
Custody Seals Intact: ☐ Yes ☐ No										Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: R-3.2 C:3.1										

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195532-1

Login Number: 195532

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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 $<6\text{mm}$ (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: 180-195532-1

Login Number: 195532

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 09/12/25 01:02 PM

Creator: Trzos, Hazel

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	



ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Girod
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 9/30/2025 6:33:54 PM

JOB DESCRIPTION

Ritchie Rubble LF Semi-Annual GW

JOB NUMBER

180-195604-1

Eurofins Pittsburgh

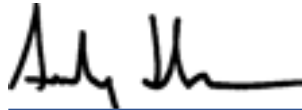
Job Notes

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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9/30/2025 6:33:54 PM

Authorized for release by
Andy Johnson, Senior Project Manager
Andy.Johnson@et.eurofinsus.com
(615)818-9567

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Job ID: 180-195604-1

Eurofins Pittsburgh

Job Narrative 180-195604-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/11/2025 8:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.5°C, 2.8°C and 4.9°C.

Receipt Exceptions

Only two sodium thiosulfate vials were returned for the trip blank. TRIP BLANK 03 (180-195604-9)

GC/MS VOA

Method 8260D_LL: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: M-08 (180-195604-7) and M-08A (180-195604-8). 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 8011: Surrogate recovery for the following samples were outside the upper control limit: M-17 (180-195604-3), M-15 (180-195604-4), M-18 (180-195604-5), M-08 (180-195604-7) and M-08A (180-195604-8). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8011: Surrogate recovery in the LCS is outside upper control limits. The recovery for the target analyte(s) is within limits, therefore the data are reported. M-13 (180-195604-1), M-09 (180-195604-2), M-17 (180-195604-3), M-15 (180-195604-4), M-18 (180-195604-5), M-19 (180-195604-6), M-08 (180-195604-7), M-08A (180-195604-8) and TRIP BLANK 03 (180-195604-9)

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

HPLC/IC

Method 300_ORGFMS: The following samples were diluted due to the nature of the sample matrix: M-17 (180-195604-3), M-18 (180-195604-5), M-08 (180-195604-7) and M-08A (180-195604-8). Elevated reporting limits (RLs) are provided.

Method 300_ORGFMS: The following samples were diluted due to the nature of the sample matrix: M-15 (180-195604-4) and M-19 (180-195604-6). 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.

Metals

Method 6020B - Total Recoverable: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample: M-18 (180-195604-5).

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

General Chemistry

Method 180.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: M-08 (180-195604-7). Elevated reporting limits (RLs) are provided.

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Job ID: 180-195604-1 (Continued)

Eurofins Pittsburgh

Method 2540C_Calcd: The analysis volume selected for the following samples produced a base result greater than 200mg before calculation of the final result: M-18 (180-195604-5). Reanalysis could be performed due to holding time exceedance. The reference method specifies that no more than 200mg of weight be recovered for a chosen sample analysis volume in order to produce the best data precision. As such, these data have been qualified.

Method 350.1: The following samples were diluted due to the nature of the sample matrix: M-17 (180-195604-3), M-18 (180-195604-5), M-08A (180-195604-8) and (180-195604-C-8 MS). Elevated reporting limits (RLs) are provided.

Method 350.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: M-08 (180-195604-7). 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.

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Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

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 Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

HPLC/IC

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

Metals

Qualifier	Qualifier Description
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.
B	Compound was found in the blank and sample.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
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
E	Result exceeded calibration range.
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)

Eurofins Pittsburgh

Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

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

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Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00690	06-28-25 *
California	State	3122	05-30-26
Connecticut	State	PH-0820	09-30-26
Florida	NELAP	E871008	06-30-25 *
Georgia	State	PA 02-00416	04-30-26
Illinois	NELAP	200005	07-31-25 *
Kansas	NELAP	E-10350	01-31-26
Kentucky (UST)	State	162013	04-30-26
Kentucky (WW)	State	KY98043	12-31-25
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-25 *
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-25
New Hampshire	NELAP	2030	04-04-26
New Jersey	NELAP	PA005	06-30-25 *
New York	NELAP	11182	03-31-26
North Carolina (WW/SW)	State	434	12-31-25
North Dakota	State	R-227	04-30-24 *
Oregon	NELAP	PA-2151	02-06-26
Pennsylvania	NELAP	02-00416	04-30-26
Rhode Island	State	LAO00375	12-30-25
South Carolina	State	89014	04-30-25 *
Texas	NELAP	T104704528	03-31-26
US Fish & Wildlife	US Federal Programs	A21930	04-30-26
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462024-14	03-31-24 *
Virginia	NELAP	460189	09-14-25 *
West Virginia DEP	State	142	01-31-26
Wisconsin	State	998027800	08-31-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26

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

Eurofins Pittsburgh

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Ohio	State	87787	01-31-26
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-26
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

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

Eurofins Pittsburgh

Sample Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195604-1	M-13	Water	09/10/25 09:05	09/11/25 08:50	Maryland
180-195604-2	M-09	Water	09/10/25 09:00	09/11/25 08:50	Maryland
180-195604-3	M-17	Water	09/10/25 10:45	09/11/25 08:50	Maryland
180-195604-4	M-15	Water	09/10/25 11:05	09/11/25 08:50	Maryland
180-195604-5	M-18	Water	09/10/25 12:10	09/11/25 08:50	Maryland
180-195604-6	M-19	Water	09/10/25 13:40	09/11/25 08:50	Maryland
180-195604-7	M-08	Water	09/10/25 13:55	09/11/25 08:50	Maryland
180-195604-8	M-08A	Water	09/10/25 12:40	09/11/25 08:50	Maryland
180-195604-9	TRIP BLANK 03	Water	09/10/25 14:15	09/11/25 08:50	Maryland

Method Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	ELLE
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	ELLE
410.4	COD	EPA	ELLE
EPA 180.1	Turbidity, Nephelometric	EPA	EET PIT
EPA 350.1	Nitrogen, Ammonia	EPA	EET PIT
EPA 9050A	Specific Conductance	SW846	EET PIT
SM 2320B	Alkalinity	SM	EET PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
8011	Microextraction	SW846	ELLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-13

Date Collected: 09/10/25 09:05

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	25 mL	25 mL	700218	09/17/25 02:38	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.5 mL	2 mL	700951	09/17/25 23:15	USL7	ELLE
Total/NA	Analysis	8011		1			701267	09/19/25 00:23	URS0	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502786	09/12/25 01:50	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	702306	09/22/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			703934	09/23/25 20:53	LHF4	ELLE
		Instrument ID: E09 - 30921								
Total/NA	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A		1			704306	09/24/25 19:49	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			698918	09/15/25 06:10	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	701063	09/18/25 06:40	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502794	09/11/25 16:30	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			502892	09/13/25 09:47	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502871	09/12/25 14:28	A1K	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	502949	09/15/25 11:20	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503022	09/16/25 09:41	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: M-09

Date Collected: 09/10/25 09:00

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	25 mL	25 mL	700218	09/17/25 02:59	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.5 mL	2 mL	700951	09/17/25 23:15	USL7	ELLE
Total/NA	Analysis	8011		1			701267	09/19/25 00:40	URS0	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502786	09/12/25 05:00	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	702306	09/22/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			703934	09/23/25 21:02	LHF4	ELLE
		Instrument ID: E09 - 30921								

Eurofins Pittsburgh

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-09

Lab Sample ID: 180-195604-2

Date Collected: 09/10/25 09:00

Matrix: Water

Date Received: 09/11/25 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A		1			704306	09/24/25 20:01	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			698918	09/15/25 06:10	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	701063	09/18/25 06:40	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502794	09/11/25 16:30	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			502892	09/13/25 09:10	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502871	09/12/25 14:29	A1K	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	502949	09/15/25 11:29	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503022	09/16/25 09:41	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: M-17

Lab Sample ID: 180-195604-3

Date Collected: 09/10/25 10:45

Matrix: Water

Date Received: 09/11/25 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	8260D		1	25 mL	25 mL	700218	09/17/25 03:20	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.6 mL	2 mL	700951	09/17/25 23:15	USL7	ELLE
Total/NA	Analysis	8011		1			701267	09/19/25 00:57	URS0	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502786	09/12/25 02:05	ERP	EET PIT
		Instrument ID: INTEGRION								
Total/NA	Analysis	EPA 300.0 R2.1		5	1 mL	1 mL	502786	09/12/25 02:48	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	702306	09/22/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			703934	09/23/25 21:04	LHF4	ELLE
		Instrument ID: E09 - 30921								
Total Recoverable	Prep	3005A			50 mL	50 mL	702306	09/22/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		10			703934	09/23/25 21:43	LHF4	ELLE
		Instrument ID: E09 - 30921								
Total/NA	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A		1			704306	09/24/25 19:59	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			698918	09/15/25 06:10	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		2.5	2 mL	2 mL	701063	09/18/25 06:40	USAE	ELLE
		Instrument ID: 11076								

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-17

Date Collected: 09/10/25 10:45

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 180.1		1			502794	09/11/25 16:30	RAO	EET PIT
Total/NA	Analysis	EPA 350.1		100			502892	09/13/25 09:37	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502871	09/12/25 14:30	A1K	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	502949	09/15/25 11:33	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503022	09/16/25 09:41	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: M-15

Date Collected: 09/10/25 11:05

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	25 mL	25 mL	700218	09/17/25 03:41	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.7 mL	2 mL	700951	09/17/25 23:15	USL7	ELLE
Total/NA	Analysis	8011		1			701267	09/19/25 01:14	URS0	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502786	09/12/25 03:03	ERP	EET PIT
		Instrument ID: INTEGRION								
Total/NA	Analysis	EPA 300.0 R2.1		2	1 mL	1 mL	503023	09/17/25 08:06	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	702306	09/22/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			703934	09/23/25 21:14	LHF4	ELLE
		Instrument ID: E09 - 30921								
Total Recoverable	Prep	3005A			50 mL	50 mL	702306	09/22/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		10			703934	09/23/25 21:45	LHF4	ELLE
		Instrument ID: E09 - 30921								
Total/NA	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A		1			704306	09/24/25 19:57	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			698918	09/15/25 06:10	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	701063	09/18/25 06:40	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502794	09/11/25 16:30	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			502892	09/13/25 10:16	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502871	09/12/25 14:32	A1K	EET PIT
		Instrument ID: NOEQUIP								

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-15

Date Collected: 09/10/25 11:05

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	502949	09/15/25 11:38	ELS	EET PIT
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503022	09/16/25 09:41	A1K	EET PIT
Instrument ID: NOEQUIP										

Client Sample ID: M-18

Date Collected: 09/10/25 12:10

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	25 mL	25 mL	700218	09/17/25 04:02	JS6E	ELLE
Instrument ID: 19094										
Total/NA	Prep	8011			36.6 mL	2 mL	700951	09/17/25 23:15	USL7	ELLE
Total/NA	Analysis	8011		1			701267	09/19/25 01:31	URS0	ELLE
Instrument ID: 19846										
Total/NA	Analysis	EPA 300.0 R2.1		2.5	1 mL	1 mL	502786	09/12/25 03:18	ERP	EET PIT
Instrument ID: INTEGRION										
Total/NA	Analysis	EPA 300.0 R2.1		25	1 mL	1 mL	502786	09/12/25 03:32	ERP	EET PIT
Instrument ID: INTEGRION										
Total Recoverable	Prep	3005A			50 mL	50 mL	702306	09/22/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			703934	09/23/25 21:16	LHF4	ELLE
Instrument ID: E09 - 30921										
Total Recoverable	Prep	3005A			50 mL	50 mL	702306	09/22/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		100			703934	09/23/25 21:47	LHF4	ELLE
Instrument ID: E09 - 30921										
Total/NA	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A		1			704306	09/24/25 19:51	IJ3I	ELLE
Instrument ID: M10 - 31820										
Total/NA	Analysis	SM 2340B		1			698918	09/15/25 06:10	USJM	ELLE
Instrument ID: NOEQUIP										
Total/NA	Analysis	410.4		2.5	2 mL	2 mL	701063	09/18/25 06:40	USAE	ELLE
Instrument ID: 11076										
Total/NA	Analysis	EPA 180.1		1			502794	09/11/25 16:30	RAO	EET PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	EPA 350.1		100			502892	09/13/25 09:49	BAB	EET PIT
Instrument ID: BLUE-ASTORIA										
Total/NA	Analysis	EPA 9050A		1			502871	09/12/25 14:33	A1K	EET PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	502949	09/15/25 11:42	ELS	EET PIT
Instrument ID: NOEQUIP										
Total/NA	Analysis	SM 2540C		1	50 mL	100 mL	503022	09/16/25 09:41	A1K	EET PIT
Instrument ID: NOEQUIP										

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-19

Date Collected: 09/10/25 13:40

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	25 mL	25 mL	700218	09/17/25 04:23	JS6E	ELLE
	Instrument ID: 19094									
Total/NA	Prep	8011			36.9 mL	2 mL	700951	09/17/25 23:15	USL7	ELLE
Total/NA	Analysis	8011		1			701267	09/19/25 01:48	URS0	ELLE
	Instrument ID: 19846									
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502786	09/12/25 03:47	ERP	EET PIT
	Instrument ID: INTEGRION									
Total/NA	Analysis	EPA 300.0 R2.1		2	1 mL	1 mL	503023	09/17/25 08:20	ERP	EET PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	702306	09/22/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			703934	09/23/25 21:18	LHF4	ELLE
	Instrument ID: E09 - 30921									
Total/NA	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A		1			704306	09/24/25 19:53	IJ3I	ELLE
	Instrument ID: M10 – 31820									
Total/NA	Analysis	SM 2340B		1			698918	09/15/25 06:10	USJM	ELLE
	Instrument ID: NOEQUIP									
Total/NA	Analysis	410.4		1	2 mL	2 mL	701063	09/18/25 06:40	USAE	ELLE
	Instrument ID: 11076									
Total/NA	Analysis	EPA 180.1		1			502794	09/11/25 16:30	RAO	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	EPA 350.1		1			502892	09/13/25 09:12	BAB	EET PIT
	Instrument ID: BLUE-ASTORIA									
Total/NA	Analysis	EPA 9050A		1			502871	09/12/25 14:34	A1K	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	502949	09/15/25 11:47	ELS	EET PIT
	Instrument ID: NOEQUIP									
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503022	09/16/25 09:41	A1K	EET PIT
	Instrument ID: NOEQUIP									

Client Sample ID: M-08

Date Collected: 09/10/25 13:55

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		10	25 mL	25 mL	700218	09/17/25 05:26	JS6E	ELLE
	Instrument ID: 19094									
Total/NA	Prep	8011			36.5 mL	2 mL	700951	09/17/25 23:15	USL7	ELLE
Total/NA	Analysis	8011		1			701267	09/19/25 02:05	URS0	ELLE
	Instrument ID: 19846									
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502786	09/12/25 04:02	ERP	EET PIT
	Instrument ID: INTEGRION									
Total Recoverable	Prep	3005A			50 mL	50 mL	702306	09/22/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			703934	09/23/25 21:21	LHF4	ELLE
	Instrument ID: E09 - 30921									

Eurofins Pittsburgh

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-08

Date Collected: 09/10/25 13:55

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A		1			704306	09/24/25 19:55	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			698918	09/15/25 06:11	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		2.5	2 mL	2 mL	701063	09/18/25 06:40	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		5			502794	09/11/25 16:30	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		10			502892	09/13/25 09:45	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502871	09/12/25 14:38	A1K	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	502949	09/15/25 11:51	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503022	09/16/25 09:41	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: M-08A

Date Collected: 09/10/25 12:40

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		10	25 mL	25 mL	700218	09/17/25 05:47	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.6 mL	2 mL	700951	09/17/25 23:15	USL7	ELLE
Total/NA	Analysis	8011		1			701267	09/19/25 02:22	URS0	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502786	09/12/25 04:31	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	702306	09/22/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			703934	09/23/25 21:23	LHF4	ELLE
		Instrument ID: E09 - 30921								
Total Recoverable	Prep	3005A			50 mL	50 mL	702306	09/22/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		10			703934	09/23/25 21:49	LHF4	ELLE
		Instrument ID: E09 - 30921								
Total/NA	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A		1			704306	09/24/25 20:04	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			698918	09/15/25 06:11	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	701063	09/18/25 06:40	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502794	09/11/25 16:30	RAO	EET PIT
		Instrument ID: NOEQUIP								

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-08A

Date Collected: 09/10/25 12:40

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 350.1		25			502892	09/13/25 11:03	BAB	EET PIT
Total/NA	Analysis	EPA 9050A		1			502871	09/12/25 14:39	A1K	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	502949	09/15/25 11:56	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503022	09/16/25 09:41	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: TRIP BLANK 03

Date Collected: 09/10/25 14:15

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	25 mL	25 mL	700218	09/16/25 22:27	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.1 mL	2 mL	700951	09/17/25 23:15	USL7	ELLE
Total/NA	Analysis	8011		1			701267	09/19/25 02:40	URS0	ELLE
		Instrument ID: 19846								

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

Analyst References:

Lab: EET PIT

Batch Type: Analysis

A1K = Agnes Komlos

BAB = Brooke Batyi

ELS = Edwin Shireman

ERP = Evan Papak

RAO = Rachel Oster

Lab: ELLE

Batch Type: Prep

RFN5 = Aniyah Oxendine

UAMX = Annamaria Kuhns

USL7 = Sherry Morrow

Batch Type: Analysis

IJ3I = Elizabeth Brittingham

JS6E = Gavin Walmer

LHF4 = Diamond Boyer

URS0 = Richard Shober

USAE = Susan Engle

USJM = Sandra Miller

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-13

Lab Sample ID: 180-195604-1

Date Collected: 09/10/25 09:05

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/17/25 02:38	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 02:38	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/17/25 02:38	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 02:38	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/17/25 02:38	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 02:38	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/17/25 02:38	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 02:38	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/17/25 02:38	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/17/25 02:38	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 02:38	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/17/25 02:38	1
2-Hexanone	ND		5.0	2.0	ug/L			09/17/25 02:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/17/25 02:38	1
Acetone	ND		5.0	1.5	ug/L			09/17/25 02:38	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/17/25 02:38	1
Benzene	ND		0.50	0.10	ug/L			09/17/25 02:38	1
Bromoform	ND		1.0	0.30	ug/L			09/17/25 02:38	1
Bromomethane	ND		0.50	0.10	ug/L			09/17/25 02:38	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/17/25 02:38	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/17/25 02:38	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/17/25 02:38	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 02:38	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/17/25 02:38	1
Chloroethane	ND		0.50	0.10	ug/L			09/17/25 02:38	1
Chloroform	ND		0.50	0.090	ug/L			09/17/25 02:38	1
Chloromethane	ND		0.50	0.10	ug/L			09/17/25 02:38	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/17/25 02:38	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/17/25 02:38	1
Dibromomethane	ND		0.50	0.080	ug/L			09/17/25 02:38	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 02:38	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/17/25 02:38	1
Iodomethane	ND		0.50	0.080	ug/L			09/17/25 02:38	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/17/25 02:38	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/17/25 02:38	1
Styrene	ND		0.50	0.070	ug/L			09/17/25 02:38	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/17/25 02:38	1
Toluene	ND		0.50	0.080	ug/L			09/17/25 02:38	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 02:38	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/17/25 02:38	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/17/25 02:38	1
Trichloroethene	ND		0.50	0.080	ug/L			09/17/25 02:38	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/17/25 02:38	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/17/25 02:38	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/17/25 02:38	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/17/25 02:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		09/17/25 02:38	1
4-Bromofluorobenzene (Surr)	94		80 - 120		09/17/25 02:38	1

Eurofins Pittsburgh

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-13

Lab Sample ID: 180-195604-1

Date Collected: 09/10/25 09:05

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	100		80 - 120		09/17/25 02:38	1
Toluene-d8 (Surr)	101		80 - 120		09/17/25 02:38	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/19/25 00:23	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/19/25 00:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	129		46 - 136				09/17/25 23:15	09/19/25 00:23	1
1,1,2,2-Tetrachloroethane	125		46 - 136				09/17/25 23:15	09/19/25 00:23	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		1.0	0.71	mg/L			09/12/25 01:50	1
Nitrate as N	0.039	J	0.10	0.023	mg/L			09/12/25 01:50	1
Sulfate	78		1.0	0.76	mg/L			09/12/25 01:50	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.22	J	1.0	0.20	ug/L		09/22/25 22:00	09/23/25 20:53	1
Arsenic	2.2		2.0	0.68	ug/L		09/22/25 22:00	09/23/25 20:53	1
Barium	110		2.0	0.75	ug/L		09/22/25 22:00	09/23/25 20:53	1
Beryllium	ND		0.50	0.12	ug/L		09/22/25 22:00	09/23/25 20:53	1
Cadmium	ND		0.50	0.15	ug/L		09/22/25 22:00	09/23/25 20:53	1
Calcium	71000	B	120	50	ug/L		09/22/25 22:00	09/23/25 20:53	1
Chromium	ND		2.0	0.55	ug/L		09/22/25 22:00	09/23/25 20:53	1
Cobalt	1.2		0.50	0.16	ug/L		09/22/25 22:00	09/23/25 20:53	1
Copper	ND		1.0	0.85	ug/L		09/22/25 22:00	09/23/25 20:53	1
Iron	11000		50	20	ug/L		09/22/25 22:00	09/23/25 20:53	1
Lead	ND		0.50	0.12	ug/L		09/22/25 22:00	09/23/25 20:53	1
Magnesium	3200		50	16	ug/L		09/22/25 22:00	09/23/25 20:53	1
Manganese	120		2.0	0.95	ug/L		09/22/25 22:00	09/23/25 20:53	1
Nickel	4.2		1.0	0.40	ug/L		09/22/25 22:00	09/23/25 20:53	1
Potassium	5000		200	65	ug/L		09/22/25 22:00	09/23/25 20:53	1
Selenium	0.42	J	1.0	0.28	ug/L		09/22/25 22:00	09/23/25 20:53	1
Silver	ND		0.50	0.10	ug/L		09/22/25 22:00	09/23/25 20:53	1
Sodium	3600		200	90	ug/L		09/22/25 22:00	09/23/25 20:53	1
Thallium	ND		0.50	0.13	ug/L		09/22/25 22:00	09/23/25 20:53	1
Tin	0.89	J B	2.0	0.60	ug/L		09/22/25 22:00	09/23/25 20:53	1
Vanadium	ND		4.0	0.79	ug/L		09/22/25 22:00	09/23/25 20:53	1
Zinc	ND		10	4.0	ug/L		09/22/25 22:00	09/23/25 20:53	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 19:49	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	190		0.51	0.19	mg/L			09/15/25 06:10	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-13

Date Collected: 09/10/25 09:05

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-1

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	ND		10	5.0	mg/L			09/18/25 06:40	1
Turbidity (EPA 180.1)	35		0.85	0.05	NTU			09/11/25 16:30	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/13/25 09:47	1
Specific Conductance (SW846 EPA 9050A)	440		1.0	1.0	umhos/cm			09/12/25 14:28	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	300		5.0	5.0	mg/L			09/15/25 11:20	1
Total Dissolved Solids (SM 2540C)	290		10	10	mg/L			09/16/25 09:41	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-09

Lab Sample ID: 180-195604-2

Date Collected: 09/10/25 09:00

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/17/25 02:59	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 02:59	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/17/25 02:59	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 02:59	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/17/25 02:59	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 02:59	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/17/25 02:59	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 02:59	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/17/25 02:59	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/17/25 02:59	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 02:59	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/17/25 02:59	1
2-Hexanone	ND		5.0	2.0	ug/L			09/17/25 02:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/17/25 02:59	1
Acetone	ND		5.0	1.5	ug/L			09/17/25 02:59	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/17/25 02:59	1
Benzene	ND		0.50	0.10	ug/L			09/17/25 02:59	1
Bromoform	ND		1.0	0.30	ug/L			09/17/25 02:59	1
Bromomethane	ND		0.50	0.10	ug/L			09/17/25 02:59	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/17/25 02:59	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/17/25 02:59	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/17/25 02:59	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 02:59	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/17/25 02:59	1
Chloroethane	ND		0.50	0.10	ug/L			09/17/25 02:59	1
Chloroform	ND		0.50	0.090	ug/L			09/17/25 02:59	1
Chloromethane	ND		0.50	0.10	ug/L			09/17/25 02:59	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/17/25 02:59	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/17/25 02:59	1
Dibromomethane	ND		0.50	0.080	ug/L			09/17/25 02:59	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 02:59	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/17/25 02:59	1
Iodomethane	ND		0.50	0.080	ug/L			09/17/25 02:59	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/17/25 02:59	1
Methylene Chloride	0.20	J	0.50	0.20	ug/L			09/17/25 02:59	1
Styrene	ND		0.50	0.070	ug/L			09/17/25 02:59	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/17/25 02:59	1
Toluene	ND		0.50	0.080	ug/L			09/17/25 02:59	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 02:59	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/17/25 02:59	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/17/25 02:59	1
Trichloroethene	ND		0.50	0.080	ug/L			09/17/25 02:59	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/17/25 02:59	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/17/25 02:59	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/17/25 02:59	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/17/25 02:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		09/17/25 02:59	1
4-Bromofluorobenzene (Surr)	94		80 - 120		09/17/25 02:59	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-09

Lab Sample ID: 180-195604-2

Date Collected: 09/10/25 09:00

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	98		80 - 120		09/17/25 02:59	1
Toluene-d8 (Surr)	99		80 - 120		09/17/25 02:59	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/19/25 00:40	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/19/25 00:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	130		46 - 136	09/17/25 23:15	09/19/25 00:40	1
1,1,2,2-Tetrachloroethane	126		46 - 136	09/17/25 23:15	09/19/25 00:40	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.4		1.0	0.71	mg/L			09/12/25 05:00	1
Nitrate as N	ND		0.10	0.023	mg/L			09/12/25 05:00	1
Sulfate	17		1.0	0.76	mg/L			09/12/25 05:00	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/22/25 22:00	09/23/25 21:02	1
Arsenic	ND		2.0	0.68	ug/L		09/22/25 22:00	09/23/25 21:02	1
Barium	60		2.0	0.75	ug/L		09/22/25 22:00	09/23/25 21:02	1
Beryllium	ND		0.50	0.12	ug/L		09/22/25 22:00	09/23/25 21:02	1
Cadmium	ND		0.50	0.15	ug/L		09/22/25 22:00	09/23/25 21:02	1
Calcium	13000	B	120	50	ug/L		09/22/25 22:00	09/23/25 21:02	1
Chromium	ND		2.0	0.55	ug/L		09/22/25 22:00	09/23/25 21:02	1
Cobalt	0.19	J	0.50	0.16	ug/L		09/22/25 22:00	09/23/25 21:02	1
Copper	ND		1.0	0.85	ug/L		09/22/25 22:00	09/23/25 21:02	1
Iron	2200		50	20	ug/L		09/22/25 22:00	09/23/25 21:02	1
Lead	ND		0.50	0.12	ug/L		09/22/25 22:00	09/23/25 21:02	1
Magnesium	2000		50	16	ug/L		09/22/25 22:00	09/23/25 21:02	1
Manganese	70		2.0	0.95	ug/L		09/22/25 22:00	09/23/25 21:02	1
Nickel	1.0		1.0	0.40	ug/L		09/22/25 22:00	09/23/25 21:02	1
Potassium	1400		200	65	ug/L		09/22/25 22:00	09/23/25 21:02	1
Selenium	0.38	J	1.0	0.28	ug/L		09/22/25 22:00	09/23/25 21:02	1
Silver	ND		0.50	0.10	ug/L		09/22/25 22:00	09/23/25 21:02	1
Sodium	3300		200	90	ug/L		09/22/25 22:00	09/23/25 21:02	1
Thallium	ND		0.50	0.13	ug/L		09/22/25 22:00	09/23/25 21:02	1
Tin	0.67	J B	2.0	0.60	ug/L		09/22/25 22:00	09/23/25 21:02	1
Vanadium	ND		4.0	0.79	ug/L		09/22/25 22:00	09/23/25 21:02	1
Zinc	ND		10	4.0	ug/L		09/22/25 22:00	09/23/25 21:02	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 20:01	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	41		0.51	0.19	mg/L			09/15/25 06:10	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-09

Lab Sample ID: 180-195604-2

Date Collected: 09/10/25 09:00

Matrix: Water

Date Received: 09/11/25 08:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	8.1	J	10	5.0	mg/L			09/18/25 06:40	1
Turbidity (EPA 180.1)	4.5		0.85	0.05	NTU			09/11/25 16:30	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/13/25 09:10	1
Specific Conductance (SW846 EPA 9050A)	110		1.0	1.0	umhos/cm			09/12/25 14:29	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	30		5.0	5.0	mg/L			09/15/25 11:29	1
Total Dissolved Solids (SM 2540C)	150		10	10	mg/L			09/16/25 09:41	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-17

Lab Sample ID: 180-195604-3

Date Collected: 09/10/25 10:45

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/17/25 03:20	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 03:20	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/17/25 03:20	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 03:20	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/17/25 03:20	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 03:20	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/17/25 03:20	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 03:20	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/17/25 03:20	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/17/25 03:20	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 03:20	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/17/25 03:20	1
2-Hexanone	ND		5.0	2.0	ug/L			09/17/25 03:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/17/25 03:20	1
Acetone	ND		5.0	1.5	ug/L			09/17/25 03:20	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/17/25 03:20	1
Benzene	ND		0.50	0.10	ug/L			09/17/25 03:20	1
Bromoform	ND		1.0	0.30	ug/L			09/17/25 03:20	1
Bromomethane	ND		0.50	0.10	ug/L			09/17/25 03:20	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/17/25 03:20	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/17/25 03:20	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/17/25 03:20	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 03:20	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/17/25 03:20	1
Chloroethane	ND		0.50	0.10	ug/L			09/17/25 03:20	1
Chloroform	ND		0.50	0.090	ug/L			09/17/25 03:20	1
Chloromethane	ND		0.50	0.10	ug/L			09/17/25 03:20	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/17/25 03:20	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/17/25 03:20	1
Dibromomethane	ND		0.50	0.080	ug/L			09/17/25 03:20	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 03:20	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/17/25 03:20	1
Iodomethane	ND		0.50	0.080	ug/L			09/17/25 03:20	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/17/25 03:20	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/17/25 03:20	1
Styrene	ND		0.50	0.070	ug/L			09/17/25 03:20	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/17/25 03:20	1
Toluene	ND		0.50	0.080	ug/L			09/17/25 03:20	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 03:20	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/17/25 03:20	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/17/25 03:20	1
Trichloroethene	ND		0.50	0.080	ug/L			09/17/25 03:20	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/17/25 03:20	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/17/25 03:20	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/17/25 03:20	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/17/25 03:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		80 - 120		09/17/25 03:20	1
4-Bromofluorobenzene (Surr)	94		80 - 120		09/17/25 03:20	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-17

Lab Sample ID: 180-195604-3

Date Collected: 09/10/25 10:45

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	97		80 - 120		09/17/25 03:20	1
Toluene-d8 (Surr)	100		80 - 120		09/17/25 03:20	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/19/25 00:57	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/19/25 00:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	150	S1+	46 - 136	09/17/25 23:15	09/19/25 00:57	1
1,1,2,2-Tetrachloroethane	150	S1+	46 - 136	09/17/25 23:15	09/19/25 00:57	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22		1.0	0.71	mg/L			09/12/25 02:05	1
Nitrate as N	ND		0.10	0.023	mg/L			09/12/25 02:05	1
Sulfate	630		5.0	3.8	mg/L			09/12/25 02:48	5

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/22/25 22:00	09/23/25 21:04	1
Arsenic	91		2.0	0.68	ug/L		09/22/25 22:00	09/23/25 21:04	1
Barium	9.9		2.0	0.75	ug/L		09/22/25 22:00	09/23/25 21:04	1
Beryllium	0.27	J	0.50	0.12	ug/L		09/22/25 22:00	09/23/25 21:04	1
Cadmium	2.1		0.50	0.15	ug/L		09/22/25 22:00	09/23/25 21:04	1
Calcium	96000	B	120	50	ug/L		09/22/25 22:00	09/23/25 21:04	1
Chromium	0.65	J	2.0	0.55	ug/L		09/22/25 22:00	09/23/25 21:04	1
Cobalt	15		0.50	0.16	ug/L		09/22/25 22:00	09/23/25 21:04	1
Copper	ND		1.0	0.85	ug/L		09/22/25 22:00	09/23/25 21:04	1
Iron	250000		500	200	ug/L		09/22/25 22:00	09/23/25 21:43	10
Lead	ND		0.50	0.12	ug/L		09/22/25 22:00	09/23/25 21:04	1
Magnesium	32000		50	16	ug/L		09/22/25 22:00	09/23/25 21:04	1
Manganese	3400		20	9.5	ug/L		09/22/25 22:00	09/23/25 21:43	10
Nickel	25		1.0	0.40	ug/L		09/22/25 22:00	09/23/25 21:04	1
Potassium	2000		200	65	ug/L		09/22/25 22:00	09/23/25 21:04	1
Selenium	0.95	J	1.0	0.28	ug/L		09/22/25 22:00	09/23/25 21:04	1
Silver	ND		0.50	0.10	ug/L		09/22/25 22:00	09/23/25 21:04	1
Sodium	21000		200	90	ug/L		09/22/25 22:00	09/23/25 21:04	1
Thallium	ND		0.50	0.13	ug/L		09/22/25 22:00	09/23/25 21:04	1
Tin	0.61	J B	2.0	0.60	ug/L		09/22/25 22:00	09/23/25 21:04	1
Vanadium	2.1	J	4.0	0.79	ug/L		09/22/25 22:00	09/23/25 21:04	1
Zinc	160		10	4.0	ug/L		09/22/25 22:00	09/23/25 21:04	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 19:59	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	370		0.51	0.19	mg/L			09/15/25 06:10	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-17

Lab Sample ID: 180-195604-3

Date Collected: 09/10/25 10:45

Matrix: Water

Date Received: 09/11/25 08:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	81		25	13	mg/L			09/18/25 06:40	2.5
Turbidity (EPA 180.1)	33		0.85	0.05	NTU			09/11/25 16:30	1
Ammonia (EPA 350.1)	ND		10	8.8	mg/L			09/13/25 09:37	100
Specific Conductance (SW846 EPA 9050A)	1400		1.0	1.0	umhos/cm			09/12/25 14:30	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	190		5.0	5.0	mg/L			09/15/25 11:33	1
Total Dissolved Solids (SM 2540C)	1200		10	10	mg/L			09/16/25 09:41	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-15

Lab Sample ID: 180-195604-4

Date Collected: 09/10/25 11:05

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/17/25 03:41	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 03:41	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/17/25 03:41	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 03:41	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/17/25 03:41	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 03:41	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/17/25 03:41	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 03:41	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/17/25 03:41	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/17/25 03:41	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 03:41	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/17/25 03:41	1
2-Hexanone	ND		5.0	2.0	ug/L			09/17/25 03:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/17/25 03:41	1
Acetone	ND		5.0	1.5	ug/L			09/17/25 03:41	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/17/25 03:41	1
Benzene	ND		0.50	0.10	ug/L			09/17/25 03:41	1
Bromoform	ND		1.0	0.30	ug/L			09/17/25 03:41	1
Bromomethane	ND		0.50	0.10	ug/L			09/17/25 03:41	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/17/25 03:41	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/17/25 03:41	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/17/25 03:41	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 03:41	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/17/25 03:41	1
Chloroethane	ND		0.50	0.10	ug/L			09/17/25 03:41	1
Chloroform	ND		0.50	0.090	ug/L			09/17/25 03:41	1
Chloromethane	ND		0.50	0.10	ug/L			09/17/25 03:41	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/17/25 03:41	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/17/25 03:41	1
Dibromomethane	ND		0.50	0.080	ug/L			09/17/25 03:41	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 03:41	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/17/25 03:41	1
Iodomethane	ND		0.50	0.080	ug/L			09/17/25 03:41	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/17/25 03:41	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/17/25 03:41	1
Styrene	ND		0.50	0.070	ug/L			09/17/25 03:41	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/17/25 03:41	1
Toluene	ND		0.50	0.080	ug/L			09/17/25 03:41	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 03:41	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/17/25 03:41	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/17/25 03:41	1
Trichloroethene	ND		0.50	0.080	ug/L			09/17/25 03:41	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/17/25 03:41	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/17/25 03:41	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/17/25 03:41	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/17/25 03:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		09/17/25 03:41	1
4-Bromofluorobenzene (Surr)	95		80 - 120		09/17/25 03:41	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-15

Lab Sample ID: 180-195604-4

Date Collected: 09/10/25 11:05

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		80 - 120		09/17/25 03:41	1
Toluene-d8 (Surr)	102		80 - 120		09/17/25 03:41	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0095	ug/L		09/17/25 23:15	09/19/25 01:14	1
1,2-Dibromoethane	ND		0.019	0.0095	ug/L		09/17/25 23:15	09/19/25 01:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	138	S1+	46 - 136				09/17/25 23:15	09/19/25 01:14	1
1,1,2,2-Tetrachloroethane	136		46 - 136				09/17/25 23:15	09/19/25 01:14	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.3		1.0	0.71	mg/L			09/12/25 03:03	1
Nitrate as N	0.22		0.10	0.023	mg/L			09/12/25 03:03	1
Sulfate	320		2.0	1.5	mg/L			09/17/25 08:06	2

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/22/25 22:00	09/23/25 21:14	1
Arsenic	1.4	J	2.0	0.68	ug/L		09/22/25 22:00	09/23/25 21:14	1
Barium	22		2.0	0.75	ug/L		09/22/25 22:00	09/23/25 21:14	1
Beryllium	1.0		0.50	0.12	ug/L		09/22/25 22:00	09/23/25 21:14	1
Cadmium	45		0.50	0.15	ug/L		09/22/25 22:00	09/23/25 21:14	1
Calcium	86000	B	120	50	ug/L		09/22/25 22:00	09/23/25 21:14	1
Chromium	0.59	J	2.0	0.55	ug/L		09/22/25 22:00	09/23/25 21:14	1
Cobalt	7.9		0.50	0.16	ug/L		09/22/25 22:00	09/23/25 21:14	1
Copper	1.6		1.0	0.85	ug/L		09/22/25 22:00	09/23/25 21:14	1
Iron	6900		50	20	ug/L		09/22/25 22:00	09/23/25 21:14	1
Lead	ND		0.50	0.12	ug/L		09/22/25 22:00	09/23/25 21:14	1
Magnesium	8900		50	16	ug/L		09/22/25 22:00	09/23/25 21:14	1
Manganese	1300		20	9.5	ug/L		09/22/25 22:00	09/23/25 21:45	10
Nickel	81		1.0	0.40	ug/L		09/22/25 22:00	09/23/25 21:14	1
Potassium	2900		200	65	ug/L		09/22/25 22:00	09/23/25 21:14	1
Selenium	ND		1.0	0.28	ug/L		09/22/25 22:00	09/23/25 21:14	1
Silver	ND		0.50	0.10	ug/L		09/22/25 22:00	09/23/25 21:14	1
Sodium	14000		200	90	ug/L		09/22/25 22:00	09/23/25 21:14	1
Thallium	0.27	J	0.50	0.13	ug/L		09/22/25 22:00	09/23/25 21:14	1
Tin	0.84	J B	2.0	0.60	ug/L		09/22/25 22:00	09/23/25 21:14	1
Vanadium	ND		4.0	0.79	ug/L		09/22/25 22:00	09/23/25 21:14	1
Zinc	250		10	4.0	ug/L		09/22/25 22:00	09/23/25 21:14	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 19:57	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	250		0.51	0.19	mg/L			09/15/25 06:10	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-15

Lab Sample ID: 180-195604-4

Date Collected: 09/10/25 11:05

Matrix: Water

Date Received: 09/11/25 08:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	8.8	J	10	5.0	mg/L			09/18/25 06:40	1
Turbidity (EPA 180.1)	2.9		0.85	0.05	NTU			09/11/25 16:30	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/13/25 10:16	1
Specific Conductance (SW846 EPA 9050A)	700		1.0	1.0	umhos/cm			09/12/25 14:32	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	ND		5.0	5.0	mg/L			09/15/25 11:38	1
Total Dissolved Solids (SM 2540C)	510		10	10	mg/L			09/16/25 09:41	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-18

Lab Sample ID: 180-195604-5

Date Collected: 09/10/25 12:10

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/17/25 04:02	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 04:02	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/17/25 04:02	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 04:02	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/17/25 04:02	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 04:02	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/17/25 04:02	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 04:02	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/17/25 04:02	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/17/25 04:02	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 04:02	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/17/25 04:02	1
2-Hexanone	ND		5.0	2.0	ug/L			09/17/25 04:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/17/25 04:02	1
Acetone	ND		5.0	1.5	ug/L			09/17/25 04:02	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/17/25 04:02	1
Benzene	0.19	J	0.50	0.10	ug/L			09/17/25 04:02	1
Bromoform	ND		1.0	0.30	ug/L			09/17/25 04:02	1
Bromomethane	ND		0.50	0.10	ug/L			09/17/25 04:02	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/17/25 04:02	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/17/25 04:02	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/17/25 04:02	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 04:02	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/17/25 04:02	1
Chloroethane	ND		0.50	0.10	ug/L			09/17/25 04:02	1
Chloroform	ND		0.50	0.090	ug/L			09/17/25 04:02	1
Chloromethane	ND		0.50	0.10	ug/L			09/17/25 04:02	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/17/25 04:02	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/17/25 04:02	1
Dibromomethane	ND		0.50	0.080	ug/L			09/17/25 04:02	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 04:02	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/17/25 04:02	1
Iodomethane	0.10	J	0.50	0.080	ug/L			09/17/25 04:02	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/17/25 04:02	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/17/25 04:02	1
Styrene	ND		0.50	0.070	ug/L			09/17/25 04:02	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/17/25 04:02	1
Toluene	ND		0.50	0.080	ug/L			09/17/25 04:02	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 04:02	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/17/25 04:02	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/17/25 04:02	1
Trichloroethene	ND		0.50	0.080	ug/L			09/17/25 04:02	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/17/25 04:02	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/17/25 04:02	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/17/25 04:02	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/17/25 04:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		09/17/25 04:02	1
4-Bromofluorobenzene (Surr)	93		80 - 120		09/17/25 04:02	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-18

Lab Sample ID: 180-195604-5

Date Collected: 09/10/25 12:10

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	98		80 - 120		09/17/25 04:02	1
Toluene-d8 (Surr)	98		80 - 120		09/17/25 04:02	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/19/25 01:31	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/19/25 01:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	137	S1+	46 - 136	09/17/25 23:15	09/19/25 01:31	1
1,1,2,2-Tetrachloroethane	137	S1+	46 - 136	09/17/25 23:15	09/19/25 01:31	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.6		2.5	1.8	mg/L			09/12/25 03:18	2.5
Nitrate as N	ND		0.25	0.058	mg/L			09/12/25 03:18	2.5
Sulfate	3500		25	19	mg/L			09/12/25 03:32	25

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.32	J	1.0	0.20	ug/L		09/22/25 22:00	09/23/25 21:16	1
Arsenic	11		2.0	0.68	ug/L		09/22/25 22:00	09/23/25 21:16	1
Barium	13		2.0	0.75	ug/L		09/22/25 22:00	09/23/25 21:16	1
Beryllium	6.6		0.50	0.12	ug/L		09/22/25 22:00	09/23/25 21:16	1
Cadmium	160		0.50	0.15	ug/L		09/22/25 22:00	09/23/25 21:16	1
Calcium	380000	B	12000	5000	ug/L		09/22/25 22:00	09/23/25 21:47	100
Chromium	15		2.0	0.55	ug/L		09/22/25 22:00	09/23/25 21:16	1
Cobalt	77		0.50	0.16	ug/L		09/22/25 22:00	09/23/25 21:16	1
Copper	46		1.0	0.85	ug/L		09/22/25 22:00	09/23/25 21:16	1
Iron	610000		5000	2000	ug/L		09/22/25 22:00	09/23/25 21:47	100
Lead	ND		50	12	ug/L		09/22/25 22:00	09/23/25 21:47	100
Magnesium	130000		50	16	ug/L		09/22/25 22:00	09/23/25 21:16	1
Manganese	5100		200	95	ug/L		09/22/25 22:00	09/23/25 21:47	100
Nickel	320		1.0	0.40	ug/L		09/22/25 22:00	09/23/25 21:16	1
Potassium	7500		200	65	ug/L		09/22/25 22:00	09/23/25 21:16	1
Selenium	0.35	J	1.0	0.28	ug/L		09/22/25 22:00	09/23/25 21:16	1
Silver	ND		0.50	0.10	ug/L		09/22/25 22:00	09/23/25 21:16	1
Sodium	13000		200	90	ug/L		09/22/25 22:00	09/23/25 21:16	1
Thallium	ND		50	13	ug/L		09/22/25 22:00	09/23/25 21:47	100
Tin	0.95	J B	2.0	0.60	ug/L		09/22/25 22:00	09/23/25 21:16	1
Vanadium	22		4.0	0.79	ug/L		09/22/25 22:00	09/23/25 21:16	1
Zinc	3600		1000	400	ug/L		09/22/25 22:00	09/23/25 21:47	100

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.54		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 19:51	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	1500		0.51	0.19	mg/L			09/15/25 06:10	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-18

Date Collected: 09/10/25 12:10

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-5

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	90		25	13	mg/L			09/18/25 06:40	2.5
Turbidity (EPA 180.1)	0.45	J	0.85	0.05	NTU			09/11/25 16:30	1
Ammonia (EPA 350.1)	ND		10	8.8	mg/L			09/13/25 09:49	100
Specific Conductance (SW846 EPA 9050A)	3900		1.0	1.0	umhos/cm			09/12/25 14:33	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	ND		5.0	5.0	mg/L			09/15/25 11:42	1
Total Dissolved Solids (SM 2540C)	5100	E	20	20	mg/L			09/16/25 09:41	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-19

Lab Sample ID: 180-195604-6

Date Collected: 09/10/25 13:40

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/17/25 04:23	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 04:23	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/17/25 04:23	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/17/25 04:23	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/17/25 04:23	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 04:23	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/17/25 04:23	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 04:23	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/17/25 04:23	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/17/25 04:23	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/17/25 04:23	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/17/25 04:23	1
2-Hexanone	ND		5.0	2.0	ug/L			09/17/25 04:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/17/25 04:23	1
Acetone	ND		5.0	1.5	ug/L			09/17/25 04:23	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/17/25 04:23	1
Benzene	ND		0.50	0.10	ug/L			09/17/25 04:23	1
Bromoform	ND		1.0	0.30	ug/L			09/17/25 04:23	1
Bromomethane	ND		0.50	0.10	ug/L			09/17/25 04:23	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/17/25 04:23	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/17/25 04:23	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/17/25 04:23	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 04:23	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/17/25 04:23	1
Chloroethane	ND		0.50	0.10	ug/L			09/17/25 04:23	1
Chloroform	ND		0.50	0.090	ug/L			09/17/25 04:23	1
Chloromethane	ND		0.50	0.10	ug/L			09/17/25 04:23	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/17/25 04:23	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/17/25 04:23	1
Dibromomethane	ND		0.50	0.080	ug/L			09/17/25 04:23	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/17/25 04:23	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/17/25 04:23	1
Iodomethane	ND		0.50	0.080	ug/L			09/17/25 04:23	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/17/25 04:23	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/17/25 04:23	1
Styrene	ND		0.50	0.070	ug/L			09/17/25 04:23	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/17/25 04:23	1
Toluene	ND		0.50	0.080	ug/L			09/17/25 04:23	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/17/25 04:23	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/17/25 04:23	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/17/25 04:23	1
Trichloroethene	ND		0.50	0.080	ug/L			09/17/25 04:23	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/17/25 04:23	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/17/25 04:23	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/17/25 04:23	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/17/25 04:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		09/17/25 04:23	1
4-Bromofluorobenzene (Surr)	94		80 - 120		09/17/25 04:23	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-19

Lab Sample ID: 180-195604-6

Date Collected: 09/10/25 13:40

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	100		80 - 120		09/17/25 04:23	1
Toluene-d8 (Surr)	99		80 - 120		09/17/25 04:23	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0095	ug/L		09/17/25 23:15	09/19/25 01:48	1
1,2-Dibromoethane	ND		0.019	0.0095	ug/L		09/17/25 23:15	09/19/25 01:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	127		46 - 136	09/17/25 23:15	09/19/25 01:48	1
1,1,2,2-Tetrachloroethane	124		46 - 136	09/17/25 23:15	09/19/25 01:48	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16		1.0	0.71	mg/L			09/12/25 03:47	1
Nitrate as N	ND		0.10	0.023	mg/L			09/12/25 03:47	1
Sulfate	270		2.0	1.5	mg/L			09/17/25 08:20	2

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/22/25 22:00	09/23/25 21:18	1
Arsenic	1.3	J	2.0	0.68	ug/L		09/22/25 22:00	09/23/25 21:18	1
Barium	60		2.0	0.75	ug/L		09/22/25 22:00	09/23/25 21:18	1
Beryllium	0.47	J	0.50	0.12	ug/L		09/22/25 22:00	09/23/25 21:18	1
Cadmium	37		0.50	0.15	ug/L		09/22/25 22:00	09/23/25 21:18	1
Calcium	95000	B	120	50	ug/L		09/22/25 22:00	09/23/25 21:18	1
Chromium	ND		2.0	0.55	ug/L		09/22/25 22:00	09/23/25 21:18	1
Cobalt	9.1		0.50	0.16	ug/L		09/22/25 22:00	09/23/25 21:18	1
Copper	ND		1.0	0.85	ug/L		09/22/25 22:00	09/23/25 21:18	1
Iron	9700		50	20	ug/L		09/22/25 22:00	09/23/25 21:18	1
Lead	ND		0.50	0.12	ug/L		09/22/25 22:00	09/23/25 21:18	1
Magnesium	19000		50	16	ug/L		09/22/25 22:00	09/23/25 21:18	1
Manganese	220		2.0	0.95	ug/L		09/22/25 22:00	09/23/25 21:18	1
Nickel	36		1.0	0.40	ug/L		09/22/25 22:00	09/23/25 21:18	1
Potassium	7100		200	65	ug/L		09/22/25 22:00	09/23/25 21:18	1
Selenium	ND		1.0	0.28	ug/L		09/22/25 22:00	09/23/25 21:18	1
Silver	ND		0.50	0.10	ug/L		09/22/25 22:00	09/23/25 21:18	1
Sodium	8100		200	90	ug/L		09/22/25 22:00	09/23/25 21:18	1
Thallium	ND		0.50	0.13	ug/L		09/22/25 22:00	09/23/25 21:18	1
Tin	0.83	J B	2.0	0.60	ug/L		09/22/25 22:00	09/23/25 21:18	1
Vanadium	ND		4.0	0.79	ug/L		09/22/25 22:00	09/23/25 21:18	1
Zinc	190		10	4.0	ug/L		09/22/25 22:00	09/23/25 21:18	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 19:53	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	320		0.51	0.19	mg/L			09/15/25 06:10	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-19

Lab Sample ID: 180-195604-6

Date Collected: 09/10/25 13:40

Matrix: Water

Date Received: 09/11/25 08:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	8.1	J	10	5.0	mg/L			09/18/25 06:40	1
Turbidity (EPA 180.1)	3.4		0.85	0.05	NTU			09/11/25 16:30	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/13/25 09:12	1
Specific Conductance (SW846 EPA 9050A)	720		1.0	1.0	umhos/cm			09/12/25 14:34	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	94		5.0	5.0	mg/L			09/15/25 11:47	1
Total Dissolved Solids (SM 2540C)	530		10	10	mg/L			09/16/25 09:41	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-08

Lab Sample ID: 180-195604-7

Date Collected: 09/10/25 13:55

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.70	ug/L			09/17/25 05:26	10
1,1,1-Trichloroethane	ND		5.0	0.80	ug/L			09/17/25 05:26	10
1,1,2,2-Tetrachloroethane	ND		5.0	1.0	ug/L			09/17/25 05:26	10
1,1,2-Trichloroethane	ND		5.0	0.80	ug/L			09/17/25 05:26	10
1,1-Dichloroethane	ND		5.0	1.0	ug/L			09/17/25 05:26	10
1,1-Dichloroethene	ND		5.0	1.0	ug/L			09/17/25 05:26	10
1,2,3-Trichloropropane	ND		10	1.0	ug/L			09/17/25 05:26	10
1,2-Dichlorobenzene	ND		5.0	0.70	ug/L			09/17/25 05:26	10
1,2-Dichloroethane	ND		5.0	0.70	ug/L			09/17/25 05:26	10
1,2-Dichloropropane	ND		5.0	1.0	ug/L			09/17/25 05:26	10
1,4-Dichlorobenzene	ND		5.0	0.70	ug/L			09/17/25 05:26	10
2-Butanone (MEK)	ND		50	10	ug/L			09/17/25 05:26	10
2-Hexanone	ND		50	20	ug/L			09/17/25 05:26	10
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/L			09/17/25 05:26	10
Acetone	ND		50	15	ug/L			09/17/25 05:26	10
Acrylonitrile	ND		50	4.0	ug/L			09/17/25 05:26	10
Benzene	ND		5.0	1.0	ug/L			09/17/25 05:26	10
Bromoform	ND		10	3.0	ug/L			09/17/25 05:26	10
Bromomethane	ND		5.0	1.0	ug/L			09/17/25 05:26	10
Carbon disulfide	ND		10	1.0	ug/L			09/17/25 05:26	10
Carbon tetrachloride	ND		5.0	1.0	ug/L			09/17/25 05:26	10
Chlorobenzene	ND		5.0	0.70	ug/L			09/17/25 05:26	10
Chlorobromomethane	ND		5.0	0.80	ug/L			09/17/25 05:26	10
Chlorodibromomethane	ND		5.0	0.80	ug/L			09/17/25 05:26	10
Chloroethane	ND		5.0	1.0	ug/L			09/17/25 05:26	10
Chloroform	ND		5.0	0.90	ug/L			09/17/25 05:26	10
Chloromethane	ND		5.0	1.0	ug/L			09/17/25 05:26	10
cis-1,2-Dichloroethene	ND		5.0	0.80	ug/L			09/17/25 05:26	10
cis-1,3-Dichloropropene	ND		5.0	1.0	ug/L			09/17/25 05:26	10
Dibromomethane	ND		5.0	0.80	ug/L			09/17/25 05:26	10
Dichlorobromomethane	ND		5.0	0.80	ug/L			09/17/25 05:26	10
Ethylbenzene	ND		5.0	0.80	ug/L			09/17/25 05:26	10
Iodomethane	ND		5.0	0.80	ug/L			09/17/25 05:26	10
Methyl tert-butyl ether	4.9 J		5.0	0.80	ug/L			09/17/25 05:26	10
Methylene Chloride	ND		5.0	2.0	ug/L			09/17/25 05:26	10
Styrene	ND		5.0	0.70	ug/L			09/17/25 05:26	10
Tetrachloroethene	ND		5.0	2.0	ug/L			09/17/25 05:26	10
Toluene	ND		5.0	0.80	ug/L			09/17/25 05:26	10
trans-1,2-Dichloroethene	ND		5.0	1.0	ug/L			09/17/25 05:26	10
trans-1,3-Dichloropropene	ND		5.0	0.80	ug/L			09/17/25 05:26	10
trans-1,4-Dichloro-2-butene	ND		50	20	ug/L			09/17/25 05:26	10
Trichloroethene	ND		5.0	0.80	ug/L			09/17/25 05:26	10
Trichlorofluoromethane	ND		5.0	1.0	ug/L			09/17/25 05:26	10
Vinyl acetate	ND		10	3.0	ug/L			09/17/25 05:26	10
Vinyl chloride	ND		5.0	1.0	ug/L			09/17/25 05:26	10
Xylenes, Total	ND		10	0.70	ug/L			09/17/25 05:26	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		09/17/25 05:26	10
4-Bromofluorobenzene (Surr)	94		80 - 120		09/17/25 05:26	10

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-08

Date Collected: 09/10/25 13:55

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-7

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	97		80 - 120		09/17/25 05:26	10
Toluene-d8 (Surr)	99		80 - 120		09/17/25 05:26	10

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/19/25 02:05	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/19/25 02:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	214	S1+	46 - 136	09/17/25 23:15	09/19/25 02:05	1
1,1,2,2-Tetrachloroethane	206	S1+	46 - 136	09/17/25 23:15	09/19/25 02:05	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		1.0	0.71	mg/L			09/12/25 04:02	1
Nitrate as N	ND		0.10	0.023	mg/L			09/12/25 04:02	1
Sulfate	130		1.0	0.76	mg/L			09/12/25 04:02	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/22/25 22:00	09/23/25 21:21	1
Arsenic	180		2.0	0.68	ug/L		09/22/25 22:00	09/23/25 21:21	1
Barium	17		2.0	0.75	ug/L		09/22/25 22:00	09/23/25 21:21	1
Beryllium	ND		0.50	0.12	ug/L		09/22/25 22:00	09/23/25 21:21	1
Cadmium	0.20	J	0.50	0.15	ug/L		09/22/25 22:00	09/23/25 21:21	1
Calcium	74000	B	120	50	ug/L		09/22/25 22:00	09/23/25 21:21	1
Chromium	0.81	J	2.0	0.55	ug/L		09/22/25 22:00	09/23/25 21:21	1
Cobalt	7.0		0.50	0.16	ug/L		09/22/25 22:00	09/23/25 21:21	1
Copper	ND		1.0	0.85	ug/L		09/22/25 22:00	09/23/25 21:21	1
Iron	130000		50	20	ug/L		09/22/25 22:00	09/23/25 21:21	1
Lead	ND		0.50	0.12	ug/L		09/22/25 22:00	09/23/25 21:21	1
Magnesium	34000		50	16	ug/L		09/22/25 22:00	09/23/25 21:21	1
Manganese	360		2.0	0.95	ug/L		09/22/25 22:00	09/23/25 21:21	1
Nickel	38		1.0	0.40	ug/L		09/22/25 22:00	09/23/25 21:21	1
Potassium	8400		200	65	ug/L		09/22/25 22:00	09/23/25 21:21	1
Selenium	1.1		1.0	0.28	ug/L		09/22/25 22:00	09/23/25 21:21	1
Silver	ND		0.50	0.10	ug/L		09/22/25 22:00	09/23/25 21:21	1
Sodium	96000		200	90	ug/L		09/22/25 22:00	09/23/25 21:21	1
Thallium	0.86		0.50	0.13	ug/L		09/22/25 22:00	09/23/25 21:21	1
Tin	0.71	J B	2.0	0.60	ug/L		09/22/25 22:00	09/23/25 21:21	1
Vanadium	ND		4.0	0.79	ug/L		09/22/25 22:00	09/23/25 21:21	1
Zinc	40		10	4.0	ug/L		09/22/25 22:00	09/23/25 21:21	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 19:55	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	320		0.51	0.19	mg/L			09/15/25 06:11	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-08

Lab Sample ID: 180-195604-7

Date Collected: 09/10/25 13:55

Matrix: Water

Date Received: 09/11/25 08:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	110		25	13	mg/L			09/18/25 06:40	2.5
Turbidity (EPA 180.1)	170		4.2	0.25	NTU			09/11/25 16:30	5
Ammonia (EPA 350.1)	4.6		1.0	0.88	mg/L			09/13/25 09:45	10
Specific Conductance (SW846 EPA 9050A)	1300		1.0	1.0	umhos/cm			09/12/25 14:38	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	390		5.0	5.0	mg/L			09/15/25 11:51	1
Total Dissolved Solids (SM 2540C)	800		10	10	mg/L			09/16/25 09:41	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-08A

Lab Sample ID: 180-195604-8

Date Collected: 09/10/25 12:40

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.70	ug/L			09/17/25 05:47	10
1,1,1-Trichloroethane	ND		5.0	0.80	ug/L			09/17/25 05:47	10
1,1,2,2-Tetrachloroethane	ND		5.0	1.0	ug/L			09/17/25 05:47	10
1,1,2-Trichloroethane	ND		5.0	0.80	ug/L			09/17/25 05:47	10
1,1-Dichloroethane	ND		5.0	1.0	ug/L			09/17/25 05:47	10
1,1-Dichloroethene	ND		5.0	1.0	ug/L			09/17/25 05:47	10
1,2,3-Trichloropropane	ND		10	1.0	ug/L			09/17/25 05:47	10
1,2-Dichlorobenzene	ND		5.0	0.70	ug/L			09/17/25 05:47	10
1,2-Dichloroethane	ND		5.0	0.70	ug/L			09/17/25 05:47	10
1,2-Dichloropropane	ND		5.0	1.0	ug/L			09/17/25 05:47	10
1,4-Dichlorobenzene	ND		5.0	0.70	ug/L			09/17/25 05:47	10
2-Butanone (MEK)	ND		50	10	ug/L			09/17/25 05:47	10
2-Hexanone	ND		50	20	ug/L			09/17/25 05:47	10
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/L			09/17/25 05:47	10
Acetone	ND		50	15	ug/L			09/17/25 05:47	10
Acrylonitrile	ND		50	4.0	ug/L			09/17/25 05:47	10
Benzene	ND		5.0	1.0	ug/L			09/17/25 05:47	10
Bromoform	ND		10	3.0	ug/L			09/17/25 05:47	10
Bromomethane	ND		5.0	1.0	ug/L			09/17/25 05:47	10
Carbon disulfide	ND		10	1.0	ug/L			09/17/25 05:47	10
Carbon tetrachloride	ND		5.0	1.0	ug/L			09/17/25 05:47	10
Chlorobenzene	ND		5.0	0.70	ug/L			09/17/25 05:47	10
Chlorobromomethane	ND		5.0	0.80	ug/L			09/17/25 05:47	10
Chlorodibromomethane	ND		5.0	0.80	ug/L			09/17/25 05:47	10
Chloroethane	ND		5.0	1.0	ug/L			09/17/25 05:47	10
Chloroform	ND		5.0	0.90	ug/L			09/17/25 05:47	10
Chloromethane	ND		5.0	1.0	ug/L			09/17/25 05:47	10
cis-1,2-Dichloroethene	ND		5.0	0.80	ug/L			09/17/25 05:47	10
cis-1,3-Dichloropropene	ND		5.0	1.0	ug/L			09/17/25 05:47	10
Dibromomethane	ND		5.0	0.80	ug/L			09/17/25 05:47	10
Dichlorobromomethane	ND		5.0	0.80	ug/L			09/17/25 05:47	10
Ethylbenzene	ND		5.0	0.80	ug/L			09/17/25 05:47	10
Iodomethane	ND		5.0	0.80	ug/L			09/17/25 05:47	10
Methyl tert-butyl ether	2.3 J		5.0	0.80	ug/L			09/17/25 05:47	10
Methylene Chloride	ND		5.0	2.0	ug/L			09/17/25 05:47	10
Styrene	ND		5.0	0.70	ug/L			09/17/25 05:47	10
Tetrachloroethene	ND		5.0	2.0	ug/L			09/17/25 05:47	10
Toluene	ND		5.0	0.80	ug/L			09/17/25 05:47	10
trans-1,2-Dichloroethene	ND		5.0	1.0	ug/L			09/17/25 05:47	10
trans-1,3-Dichloropropene	ND		5.0	0.80	ug/L			09/17/25 05:47	10
trans-1,4-Dichloro-2-butene	ND		50	20	ug/L			09/17/25 05:47	10
Trichloroethene	ND		5.0	0.80	ug/L			09/17/25 05:47	10
Trichlorofluoromethane	ND		5.0	1.0	ug/L			09/17/25 05:47	10
Vinyl acetate	ND		10	3.0	ug/L			09/17/25 05:47	10
Vinyl chloride	ND		5.0	1.0	ug/L			09/17/25 05:47	10
Xylenes, Total	ND		10	0.70	ug/L			09/17/25 05:47	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		09/17/25 05:47	10
4-Bromofluorobenzene (Surr)	93		80 - 120		09/17/25 05:47	10

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-08A

Date Collected: 09/10/25 12:40

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-8

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	95		80 - 120		09/17/25 05:47	10
Toluene-d8 (Surr)	99		80 - 120		09/17/25 05:47	10

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/19/25 02:22	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/17/25 23:15	09/19/25 02:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	145	S1+	46 - 136	09/17/25 23:15	09/19/25 02:22	1
1,1,2,2-Tetrachloroethane	140	S1+	46 - 136	09/17/25 23:15	09/19/25 02:22	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	160		1.0	0.71	mg/L			09/12/25 04:31	1
Nitrate as N	0.042	J	0.10	0.023	mg/L			09/12/25 04:31	1
Sulfate	67		1.0	0.76	mg/L			09/12/25 04:31	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.37	J	1.0	0.20	ug/L		09/22/25 22:00	09/23/25 21:23	1
Arsenic	24		2.0	0.68	ug/L		09/22/25 22:00	09/23/25 21:23	1
Barium	21		2.0	0.75	ug/L		09/22/25 22:00	09/23/25 21:23	1
Beryllium	ND		0.50	0.12	ug/L		09/22/25 22:00	09/23/25 21:23	1
Cadmium	ND		0.50	0.15	ug/L		09/22/25 22:00	09/23/25 21:23	1
Calcium	81000	B	120	50	ug/L		09/22/25 22:00	09/23/25 21:23	1
Chromium	0.99	J	2.0	0.55	ug/L		09/22/25 22:00	09/23/25 21:23	1
Cobalt	4.7		0.50	0.16	ug/L		09/22/25 22:00	09/23/25 21:23	1
Copper	ND		1.0	0.85	ug/L		09/22/25 22:00	09/23/25 21:23	1
Iron	24000		50	20	ug/L		09/22/25 22:00	09/23/25 21:23	1
Lead	ND		0.50	0.12	ug/L		09/22/25 22:00	09/23/25 21:23	1
Magnesium	33000		50	16	ug/L		09/22/25 22:00	09/23/25 21:23	1
Manganese	520		20	9.5	ug/L		09/22/25 22:00	09/23/25 21:49	10
Nickel	18		1.0	0.40	ug/L		09/22/25 22:00	09/23/25 21:23	1
Potassium	18000		200	65	ug/L		09/22/25 22:00	09/23/25 21:23	1
Selenium	0.40	J	1.0	0.28	ug/L		09/22/25 22:00	09/23/25 21:23	1
Silver	ND		0.50	0.10	ug/L		09/22/25 22:00	09/23/25 21:23	1
Sodium	130000		200	90	ug/L		09/22/25 22:00	09/23/25 21:23	1
Thallium	0.40	J	0.50	0.13	ug/L		09/22/25 22:00	09/23/25 21:23	1
Tin	ND		2.0	0.60	ug/L		09/22/25 22:00	09/23/25 21:23	1
Vanadium	ND		4.0	0.79	ug/L		09/22/25 22:00	09/23/25 21:23	1
Zinc	8.2	J	10	4.0	ug/L		09/22/25 22:00	09/23/25 21:23	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 20:04	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	340		0.51	0.19	mg/L			09/15/25 06:11	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: M-08A

Date Collected: 09/10/25 12:40

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195604-8

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	72		10	5.0	mg/L			09/18/25 06:40	1
Turbidity (EPA 180.1)	27		0.85	0.05	NTU			09/11/25 16:30	1
Ammonia (EPA 350.1)	ND		2.5	2.2	mg/L			09/13/25 11:03	25
Specific Conductance (SW846 EPA 9050A)	1300		1.0	1.0	umhos/cm			09/12/25 14:39	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	320		5.0	5.0	mg/L			09/15/25 11:56	1
Total Dissolved Solids (SM 2540C)	760		10	10	mg/L			09/16/25 09:41	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: TRIP BLANK 03

Lab Sample ID: 180-195604-9

Date Collected: 09/10/25 14:15

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/16/25 22:27	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/16/25 22:27	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/16/25 22:27	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/16/25 22:27	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/16/25 22:27	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/16/25 22:27	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/16/25 22:27	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/16/25 22:27	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/16/25 22:27	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/16/25 22:27	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/16/25 22:27	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/16/25 22:27	1
2-Hexanone	ND		5.0	2.0	ug/L			09/16/25 22:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/16/25 22:27	1
Acetone	ND		5.0	1.5	ug/L			09/16/25 22:27	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/16/25 22:27	1
Benzene	ND		0.50	0.10	ug/L			09/16/25 22:27	1
Bromoform	ND		1.0	0.30	ug/L			09/16/25 22:27	1
Bromomethane	ND		0.50	0.10	ug/L			09/16/25 22:27	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/16/25 22:27	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/16/25 22:27	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/16/25 22:27	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/16/25 22:27	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/16/25 22:27	1
Chloroethane	ND		0.50	0.10	ug/L			09/16/25 22:27	1
Chloroform	ND		0.50	0.090	ug/L			09/16/25 22:27	1
Chloromethane	ND		0.50	0.10	ug/L			09/16/25 22:27	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/16/25 22:27	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/16/25 22:27	1
Dibromomethane	ND		0.50	0.080	ug/L			09/16/25 22:27	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/16/25 22:27	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/16/25 22:27	1
Iodomethane	ND		0.50	0.080	ug/L			09/16/25 22:27	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/16/25 22:27	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/16/25 22:27	1
Styrene	ND		0.50	0.070	ug/L			09/16/25 22:27	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/16/25 22:27	1
Toluene	ND		0.50	0.080	ug/L			09/16/25 22:27	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/16/25 22:27	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/16/25 22:27	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/16/25 22:27	1
Trichloroethene	ND		0.50	0.080	ug/L			09/16/25 22:27	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/16/25 22:27	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/16/25 22:27	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/16/25 22:27	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/16/25 22:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		80 - 120		09/16/25 22:27	1
4-Bromofluorobenzene (Surr)	95		80 - 120		09/16/25 22:27	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Client Sample ID: TRIP BLANK 03

Lab Sample ID: 180-195604-9

Date Collected: 09/10/25 14:15

Matrix: Water

Date Received: 09/11/25 08:50

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	100		80 - 120		09/16/25 22:27	1
Toluene-d8 (Surr)	99		80 - 120		09/16/25 22:27	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0097	ug/L		09/17/25 23:15	09/19/25 02:40	1
1,2-Dibromoethane	ND		0.019	0.0097	ug/L		09/17/25 23:15	09/19/25 02:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	128		46 - 136	09/17/25 23:15	09/19/25 02:40	1
1,1,2,2-Tetrachloroethane	129		46 - 136	09/17/25 23:15	09/19/25 02:40	1

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-700218/9

Matrix: Water

Analysis Batch: 700218

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/16/25 21:45	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/16/25 21:45	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/16/25 21:45	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/16/25 21:45	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/16/25 21:45	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/16/25 21:45	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/16/25 21:45	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/16/25 21:45	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/16/25 21:45	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/16/25 21:45	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/16/25 21:45	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/16/25 21:45	1
2-Hexanone	ND		5.0	2.0	ug/L			09/16/25 21:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/16/25 21:45	1
Acetone	ND		5.0	1.5	ug/L			09/16/25 21:45	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/16/25 21:45	1
Benzene	ND		0.50	0.10	ug/L			09/16/25 21:45	1
Bromoform	ND		1.0	0.30	ug/L			09/16/25 21:45	1
Bromomethane	ND		0.50	0.10	ug/L			09/16/25 21:45	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/16/25 21:45	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/16/25 21:45	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/16/25 21:45	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Chloroethane	ND		0.50	0.10	ug/L			09/16/25 21:45	1
Chloroform	ND		0.50	0.090	ug/L			09/16/25 21:45	1
Chloromethane	ND		0.50	0.10	ug/L			09/16/25 21:45	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/16/25 21:45	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/16/25 21:45	1
Dibromomethane	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Iodomethane	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/16/25 21:45	1
Styrene	ND		0.50	0.070	ug/L			09/16/25 21:45	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/16/25 21:45	1
Toluene	ND		0.50	0.080	ug/L			09/16/25 21:45	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/16/25 21:45	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/16/25 21:45	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/16/25 21:45	1
Trichloroethene	ND		0.50	0.080	ug/L			09/16/25 21:45	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/16/25 21:45	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/16/25 21:45	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/16/25 21:45	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/16/25 21:45	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

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

Lab Sample ID: MB 410-700218/9

Matrix: Water

Analysis Batch: 700218

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		09/16/25 21:45	1
4-Bromofluorobenzene (Surr)	96		80 - 120		09/16/25 21:45	1
Dibromofluoromethane (Surr)	98		80 - 120		09/16/25 21:45	1
Toluene-d8 (Surr)	98		80 - 120		09/16/25 21:45	1

Lab Sample ID: LCS 410-700218/5

Matrix: Water

Analysis Batch: 700218

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	5.24		ug/L		105	80 - 122
1,1,1-Trichloroethane	5.00	5.32		ug/L		106	78 - 126
1,1,2,2-Tetrachloroethane	5.00	5.52		ug/L		110	75 - 123
1,1,2-Trichloroethane	5.00	5.19		ug/L		104	80 - 120
1,1-Dichloroethane	5.00	5.66		ug/L		113	74 - 120
1,1-Dichloroethene	5.00	5.93		ug/L		119	80 - 131
1,2,3-Trichloropropane	5.00	5.61		ug/L		112	80 - 125
1,2-Dichlorobenzene	5.00	5.40		ug/L		108	80 - 120
1,2-Dichloroethane	5.00	5.17		ug/L		103	69 - 122
1,2-Dichloropropane	5.00	5.55		ug/L		111	80 - 120
1,4-Dichlorobenzene	5.00	5.33		ug/L		107	80 - 120
2-Butanone (MEK)	62.5	58.3		ug/L		93	59 - 141
2-Hexanone	62.5	61.1		ug/L		98	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	57.3		ug/L		92	55 - 140
Acetone	62.5	57.1		ug/L		91	60 - 146
Acrylonitrile	25.0	22.6		ug/L		91	64 - 139
Benzene	5.00	5.42		ug/L		108	80 - 120
Bromoform	5.00	5.57		ug/L		111	75 - 126
Bromomethane	5.00	5.03		ug/L		101	63 - 120
Carbon disulfide	5.00	5.53		ug/L		111	67 - 130
Carbon tetrachloride	5.00	5.44		ug/L		109	64 - 141
Chlorobenzene	5.00	5.21		ug/L		104	80 - 120
Chlorobromomethane	5.00	5.53		ug/L		111	80 - 133
Chlorodibromomethane	5.00	5.25		ug/L		105	80 - 123
Chloroethane	5.00	5.07		ug/L		101	63 - 120
Chloroform	5.00	5.39		ug/L		108	80 - 120
Chloromethane	5.00	5.00		ug/L		100	56 - 124
cis-1,2-Dichloroethene	5.00	5.62		ug/L		112	80 - 122
cis-1,3-Dichloropropene	5.00	5.11		ug/L		102	67 - 121
Dibromomethane	5.00	5.72		ug/L		114	80 - 122
Dichlorobromomethane	5.00	5.50		ug/L		110	80 - 123
Ethylbenzene	5.00	5.22		ug/L		104	80 - 120
Iodomethane	5.00	5.17		ug/L		103	77 - 120
Methyl tert-butyl ether	5.00	5.16		ug/L		103	69 - 120
Methylene Chloride	5.00	5.64		ug/L		113	80 - 120
Styrene	5.00	5.24		ug/L		105	80 - 120
Tetrachloroethene	5.00	4.85		ug/L		97	80 - 120
Toluene	5.00	5.32		ug/L		106	80 - 120

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

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

Lab Sample ID: LCS 410-700218/5

Matrix: Water

Analysis Batch: 700218

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,2-Dichloroethene	5.00	5.66		ug/L		113	80 - 122
trans-1,3-Dichloropropene	5.00	5.13		ug/L		103	61 - 129
trans-1,4-Dichloro-2-butene	25.0	21.7		ug/L		87	13 - 144
Trichloroethene	5.00	5.20		ug/L		104	80 - 120
Trichlorofluoromethane	5.00	3.97		ug/L		79	53 - 136
Vinyl chloride	5.00	5.13		ug/L		103	60 - 125
Xylenes, Total	15.0	15.5		ug/L		103	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCS 410-700218/6

Matrix: Water

Analysis Batch: 700218

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	12.5	15.0		ug/L		120	64 - 145

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCSD 410-700218/7

Matrix: Water

Analysis Batch: 700218

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
Vinyl acetate	12.5	14.3		ug/L		114	64 - 145	5	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 410-700951/1-A

Matrix: Water

Analysis Batch: 701267

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 700951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.020	0.010	ug/L		09/17/25 23:15	09/18/25 20:06	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: MB 410-700951/1-A

Matrix: Water

Analysis Batch: 701267

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 700951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.010	ug/L		09/17/25 23:15	09/18/25 20:06	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	130		46 - 136				09/17/25 23:15	09/18/25 20:06	1
1,1,2,2-Tetrachloroethane	131		46 - 136				09/17/25 23:15	09/18/25 20:06	1

Lab Sample ID: LCS 410-700951/2-A

Matrix: Water

Analysis Batch: 701267

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 700951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	0.129	0.139		ug/L		107	60 - 140
1,2-Dibromoethane	0.129	0.134		ug/L		104	60 - 140
Surrogate	%Recovery	LCS Qualifier	Limits				
1,1,2,2-Tetrachloroethane	137	S1+	46 - 136				
1,1,2,2-Tetrachloroethane	131		46 - 136				

Lab Sample ID: LCSD 410-700951/3-A

Matrix: Water

Analysis Batch: 701267

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 700951

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
1,2-Dibromo-3-Chloropropane	0.129	0.144		ug/L		112	60 - 140	4	20
1,2-Dibromoethane	0.129	0.134		ug/L		104	60 - 140	0	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1,1,2,2-Tetrachloroethane	131		46 - 136						
1,1,2,2-Tetrachloroethane	127		46 - 136						

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-502786/26

Matrix: Water

Analysis Batch: 502786

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			09/11/25 23:54	1
Nitrate as N	ND		0.10	0.023	mg/L			09/11/25 23:54	1
Sulfate	ND		1.0	0.76	mg/L			09/11/25 23:54	1

Lab Sample ID: LCS 180-502786/27

Matrix: Water

Analysis Batch: 502786

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	49.6		mg/L		99	90 - 110
Nitrate as N	2.50	2.60		mg/L		104	90 - 110

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 180-502786/27

Matrix: Water

Analysis Batch: 502786

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	50.0	49.7		mg/L		99	90 - 110

Lab Sample ID: 180-195604-2 MS

Matrix: Water

Analysis Batch: 502786

Client Sample ID: M-09

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	2.4		50.0	51.3		mg/L		98	90 - 110
Nitrate as N	ND		2.50	2.62		mg/L		105	90 - 110
Sulfate	17		50.0	65.2		mg/L		97	90 - 110

Lab Sample ID: 180-195604-2 MSD

Matrix: Water

Analysis Batch: 502786

Client Sample ID: M-09

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2.4		50.0	51.0		mg/L		97	90 - 110	1	20
Nitrate as N	ND		2.50	2.61		mg/L		105	90 - 110	0	20
Sulfate	17		50.0	65.6		mg/L		97	90 - 110	1	20

Lab Sample ID: MB 180-503023/79

Matrix: Water

Analysis Batch: 503023

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			09/17/25 06:24	1
Nitrate as N	ND		0.10	0.023	mg/L			09/17/25 06:24	1
Sulfate	ND		1.0	0.76	mg/L			09/17/25 06:24	1

Lab Sample ID: LCS 180-503023/80

Matrix: Water

Analysis Batch: 503023

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.1		mg/L		100	90 - 110
Nitrate as N	2.50	2.58		mg/L		103	90 - 110
Sulfate	50.0	50.2		mg/L		100	90 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-702306/1-A

Matrix: Water

Analysis Batch: 703934

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 702306

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/22/25 22:00	09/23/25 20:47	1
Arsenic	ND		2.0	0.68	ug/L		09/22/25 22:00	09/23/25 20:47	1
Barium	ND		2.0	0.75	ug/L		09/22/25 22:00	09/23/25 20:47	1
Beryllium	ND		0.50	0.12	ug/L		09/22/25 22:00	09/23/25 20:47	1
Cadmium	ND		0.50	0.15	ug/L		09/22/25 22:00	09/23/25 20:47	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-702306/1-A
Matrix: Water
Analysis Batch: 703934

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 702306

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	58.6	J	120	50	ug/L		09/22/25 22:00	09/23/25 20:47	1
Chromium	ND		2.0	0.55	ug/L		09/22/25 22:00	09/23/25 20:47	1
Cobalt	ND		0.50	0.16	ug/L		09/22/25 22:00	09/23/25 20:47	1
Copper	ND		1.0	0.85	ug/L		09/22/25 22:00	09/23/25 20:47	1
Iron	ND		50	20	ug/L		09/22/25 22:00	09/23/25 20:47	1
Lead	ND		0.50	0.12	ug/L		09/22/25 22:00	09/23/25 20:47	1
Magnesium	ND		50	16	ug/L		09/22/25 22:00	09/23/25 20:47	1
Manganese	ND		2.0	0.95	ug/L		09/22/25 22:00	09/23/25 20:47	1
Nickel	ND		1.0	0.40	ug/L		09/22/25 22:00	09/23/25 20:47	1
Potassium	ND		200	65	ug/L		09/22/25 22:00	09/23/25 20:47	1
Selenium	ND		1.0	0.28	ug/L		09/22/25 22:00	09/23/25 20:47	1
Silver	ND		0.50	0.10	ug/L		09/22/25 22:00	09/23/25 20:47	1
Sodium	ND		200	90	ug/L		09/22/25 22:00	09/23/25 20:47	1
Thallium	ND		0.50	0.13	ug/L		09/22/25 22:00	09/23/25 20:47	1
Tin	0.646	J	2.0	0.60	ug/L		09/22/25 22:00	09/23/25 20:47	1
Vanadium	ND		4.0	0.79	ug/L		09/22/25 22:00	09/23/25 20:47	1
Zinc	ND		10	4.0	ug/L		09/22/25 22:00	09/23/25 20:47	1

Lab Sample ID: LCS 410-702306/2-A
Matrix: Water
Analysis Batch: 703934

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 702306

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	109		ug/L		109	85 - 115
Arsenic	500	533		ug/L		107	86 - 111
Barium	500	537		ug/L		107	86 - 114
Beryllium	50.0	50.4		ug/L		101	80 - 120
Cadmium	50.0	52.5		ug/L		105	86 - 114
Calcium	5000	5210		ug/L		104	84 - 113
Chromium	500	527		ug/L		105	84 - 113
Cobalt	500	524		ug/L		105	85 - 112
Copper	500	521		ug/L		104	86 - 111
Iron	5000	5350		ug/L		107	84 - 114
Lead	50.0	52.8		ug/L		106	86 - 114
Magnesium	5000	5050		ug/L		101	84 - 113
Manganese	500	530		ug/L		106	84 - 113
Nickel	500	517		ug/L		103	85 - 113
Potassium	5000	5170		ug/L		103	87 - 111
Selenium	100	102		ug/L		102	86 - 111
Silver	50.0	52.2		ug/L		104	88 - 116
Sodium	5000	5000		ug/L		100	84 - 114
Thallium	100	105		ug/L		105	86 - 113
Tin	100	104		ug/L		104	84 - 115
Vanadium	500	517		ug/L		103	84 - 112
Zinc	500	532		ug/L		106	86 - 112

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 410-702306/3-A

Matrix: Water

Analysis Batch: 703934

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 702306

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	100	105		ug/L		105	85 - 115	4	20
Arsenic	500	532		ug/L		106	86 - 111	0	20
Barium	500	523		ug/L		105	86 - 114	3	20
Beryllium	50.0	49.9		ug/L		100	80 - 120	1	20
Cadmium	50.0	51.8		ug/L		104	86 - 114	1	20
Calcium	5000	4880		ug/L		98	84 - 113	6	20
Chromium	500	523		ug/L		105	84 - 113	1	20
Cobalt	500	515		ug/L		103	85 - 112	2	20
Copper	500	521		ug/L		104	86 - 111	0	20
Iron	5000	5190		ug/L		104	84 - 114	3	20
Lead	50.0	52.5		ug/L		105	86 - 114	1	20
Magnesium	5000	5090		ug/L		102	84 - 113	1	20
Manganese	500	517		ug/L		103	84 - 113	3	20
Nickel	500	520		ug/L		104	85 - 113	0	20
Potassium	5000	5160		ug/L		103	87 - 111	0	20
Selenium	100	102		ug/L		102	86 - 111	1	20
Silver	50.0	52.4		ug/L		105	88 - 116	1	20
Sodium	5000	4970		ug/L		99	84 - 114	1	20
Thallium	100	105		ug/L		105	86 - 113	0	20
Tin	100	103		ug/L		103	84 - 115	1	20
Vanadium	500	516		ug/L		103	84 - 112	0	20
Zinc	500	532		ug/L		106	86 - 112	0	20

Lab Sample ID: 180-195604-1 MS

Matrix: Water

Analysis Batch: 703934

Client Sample ID: M-13

Prep Type: Total Recoverable

Prep Batch: 702306

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	0.22	J	100	106		ug/L		106	75 - 125
Arsenic	2.2		500	518		ug/L		103	75 - 125
Barium	110		500	636		ug/L		106	75 - 125
Beryllium	ND		50.0	50.0		ug/L		100	75 - 125
Cadmium	ND		50.0	50.0		ug/L		100	75 - 125
Calcium	71000	B	5000	74300	4	ug/L		67	75 - 125
Chromium	ND		500	505		ug/L		101	75 - 125
Cobalt	1.2		500	510		ug/L		102	80 - 125
Copper	ND		500	494		ug/L		99	75 - 125
Iron	11000		5000	15400		ug/L		85	75 - 125
Lead	ND		50.0	52.4		ug/L		105	75 - 125
Magnesium	3200		5000	7840		ug/L		94	75 - 125
Manganese	120		500	636		ug/L		104	75 - 125
Nickel	4.2		500	499		ug/L		99	75 - 125
Potassium	5000		5000	9700		ug/L		95	75 - 125
Selenium	0.42	J	100	101		ug/L		100	75 - 125
Silver	ND		50.0	50.8		ug/L		102	75 - 125
Sodium	3600		5000	8260		ug/L		93	75 - 125
Thallium	ND		100	103		ug/L		103	75 - 125
Tin	0.89	J B	100	105		ug/L		104	84 - 125
Vanadium	ND		500	499		ug/L		100	75 - 125

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-195604-1 MS

Matrix: Water

Analysis Batch: 703934

Client Sample ID: M-13

Prep Type: Total Recoverable

Prep Batch: 702306

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	ND		500	503		ug/L		101	75 - 125

Lab Sample ID: 180-195604-1 MSD

Matrix: Water

Analysis Batch: 703934

Client Sample ID: M-13

Prep Type: Total Recoverable

Prep Batch: 702306

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.22	J	100	103		ug/L		103	75 - 125	3	20
Arsenic	2.2		500	524		ug/L		104	75 - 125	1	20
Barium	110		500	616		ug/L		101	75 - 125	3	20
Beryllium	ND		50.0	49.1		ug/L		98	75 - 125	2	20
Cadmium	ND		50.0	50.8		ug/L		102	75 - 125	2	20
Calcium	71000	B	5000	75100	4	ug/L		83	75 - 125	1	20
Chromium	ND		500	522		ug/L		104	75 - 125	3	20
Cobalt	1.2		500	502		ug/L		100	80 - 125	2	20
Copper	ND		500	504		ug/L		101	75 - 125	2	20
Iron	11000		5000	16100		ug/L		99	75 - 125	4	20
Lead	ND		50.0	51.8		ug/L		104	75 - 125	1	20
Magnesium	3200		5000	8050		ug/L		98	75 - 125	3	20
Manganese	120		500	623		ug/L		101	75 - 125	2	20
Nickel	4.2		500	507		ug/L		101	75 - 125	2	20
Potassium	5000		5000	9910		ug/L		99	75 - 125	2	20
Selenium	0.42	J	100	101		ug/L		100	75 - 125	0	20
Silver	ND		50.0	51.5		ug/L		103	75 - 125	1	20
Sodium	3600		5000	8460		ug/L		97	75 - 125	2	20
Thallium	ND		100	103		ug/L		103	75 - 125	0	20
Tin	0.89	J B	100	102		ug/L		101	84 - 125	2	20
Vanadium	ND		500	509		ug/L		102	75 - 125	2	20
Zinc	ND		500	511		ug/L		102	75 - 125	2	20

Lab Sample ID: 180-195604-1 DU

Matrix: Water

Analysis Batch: 703934

Client Sample ID: M-13

Prep Type: Total Recoverable

Prep Batch: 702306

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.22	J	ND		ug/L		NC	20
Arsenic	2.2		1.71	J F5	ug/L		26	20
Barium	110		107		ug/L		1	20
Beryllium	ND		ND		ug/L		NC	20
Cadmium	ND		ND		ug/L		NC	20
Calcium	71000	B	71500		ug/L		0.7	20
Chromium	ND		ND		ug/L		NC	20
Cobalt	1.2		0.901	F5	ug/L		28	20
Copper	ND		ND		ug/L		NC	20
Iron	11000		11100		ug/L		0.5	20
Lead	ND		ND		ug/L		NC	20
Magnesium	3200		3180		ug/L		0.9	20
Manganese	120		116		ug/L		2	20
Nickel	4.2		3.96		ug/L		6	20

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-195604-1 DU

Matrix: Water

Analysis Batch: 703934

Client Sample ID: M-13

Prep Type: Total Recoverable

Prep Batch: 702306

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Potassium	5000		4930		ug/L		0.7	20
Selenium	0.42	J	ND		ug/L		NC	20
Silver	ND		ND		ug/L		NC	20
Sodium	3600		3630		ug/L		0.08	20
Thallium	ND		ND		ug/L		NC	20
Tin	0.89	J B	0.689	J F5	ug/L		25	20
Vanadium	ND		ND		ug/L		NC	20
Zinc	ND		ND		ug/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-703971/1-A

Matrix: Water

Analysis Batch: 704306

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 703971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 19:19	1

Lab Sample ID: LCS 410-703971/2-A

Matrix: Water

Analysis Batch: 704306

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 703971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.01		ug/L		101	80 - 120

Lab Sample ID: LCSD 410-703971/3-A

Matrix: Water

Analysis Batch: 704306

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 703971

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	1.00	0.989		ug/L		99	80 - 120	2	20

Method: 410.4 - COD

Lab Sample ID: MB 410-701063/4

Matrix: Water

Analysis Batch: 701063

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			09/18/25 06:40	1

Lab Sample ID: LCS 410-701063/5

Matrix: Water

Analysis Batch: 701063

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	40.0	39.7		mg/L		99	90 - 110

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Method: 410.4 - COD (Continued)

Lab Sample ID: 180-195604-4 MS

Matrix: Water

Analysis Batch: 701063

Client Sample ID: M-15

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	8.8	J	20.0	27.5		mg/L		94	90 - 110

Lab Sample ID: 180-195604-4 DU

Matrix: Water

Analysis Batch: 701063

Client Sample ID: M-15

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chemical Oxygen Demand	8.8	J	8.13	J	mg/L		8	9

Method: EPA 180.1 - Turbidity, Nephelometric

Lab Sample ID: MB 180-502794/7

Matrix: Water

Analysis Batch: 502794

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	ND		0.85	0.05	NTU			09/11/25 13:48	1

Lab Sample ID: LCS 180-502794/8

Matrix: Water

Analysis Batch: 502794

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Turbidity	0.850	0.85		NTU		102	90 - 110

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 180-502892/17

Matrix: Water

Analysis Batch: 502892

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.088	mg/L			09/13/25 08:59	1

Lab Sample ID: MB 180-502892/49

Matrix: Water

Analysis Batch: 502892

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.088	mg/L			09/13/25 10:00	1

Lab Sample ID: LCS 180-502892/18

Matrix: Water

Analysis Batch: 502892

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	0.500	0.496		mg/L		99	90 - 110

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Method: EPA 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 180-502892/53

Matrix: Water

Analysis Batch: 502892

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	0.500	0.530		mg/L		106	90 - 110

Lab Sample ID: 180-195604-8 MS

Matrix: Water

Analysis Batch: 502892

Client Sample ID: M-08A

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	ND		0.500	2.51		mg/L		NC	90 - 110

Lab Sample ID: 180-195604-8 MSD

Matrix: Water

Analysis Batch: 502892

Client Sample ID: M-08A

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	ND		0.500	2.54		mg/L		NC	90 - 110	1	20

Method: EPA 9050A - Specific Conductance

Lab Sample ID: MB 180-502871/30

Matrix: Water

Analysis Batch: 502871

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			09/12/25 14:12	1

Lab Sample ID: LCS 180-502871/29

Matrix: Water

Analysis Batch: 502871

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	84.0	84.3		umhos/cm		100	90 - 110

Lab Sample ID: 180-195604-3 DU

Matrix: Water

Analysis Batch: 502871

Client Sample ID: M-17

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	1400		1380		umhos/cm		0.2	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 180-502949/2

Matrix: Water

Analysis Batch: 502949

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	ND		5.0	5.0	mg/L			09/15/25 10:30	1

Eurofins Pittsburgh

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 180-502949/1

Matrix: Water

Analysis Batch: 502949

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	251	257		mg/L		103	90 - 110

Lab Sample ID: 180-195604-1 DU

Matrix: Water

Analysis Batch: 502949

Client Sample ID: M-13

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3 to pH 4.5	300		299		mg/L		1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-503022/1

Matrix: Water

Analysis Batch: 503022

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			09/16/25 09:41	1

Lab Sample ID: LCS 180-503022/2

Matrix: Water

Analysis Batch: 503022

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	176	156		mg/L		89	85 - 115

Lab Sample ID: 180-195604-1 DU

Matrix: Water

Analysis Batch: 503022

Client Sample ID: M-13

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	290		298		mg/L		4	10

Lab Sample ID: MB 180-503107/1

Matrix: Water

Analysis Batch: 503107

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			09/17/25 13:01	1

Lab Sample ID: LCS 180-503107/2

Matrix: Water

Analysis Batch: 503107

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	176	152		mg/L		86	85 - 115

Eurofins Pittsburgh

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 180-195604-5 DU
Matrix: Water
Analysis Batch: 503107

Client Sample ID: M-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	5000		4960		mg/L		0.2	10

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

GC/MS VOA

Analysis Batch: 700218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-1	M-13	Total/NA	Water	8260D	
180-195604-2	M-09	Total/NA	Water	8260D	
180-195604-3	M-17	Total/NA	Water	8260D	
180-195604-4	M-15	Total/NA	Water	8260D	
180-195604-5	M-18	Total/NA	Water	8260D	
180-195604-6	M-19	Total/NA	Water	8260D	
180-195604-7	M-08	Total/NA	Water	8260D	
180-195604-8	M-08A	Total/NA	Water	8260D	
180-195604-9	TRIP BLANK 03	Total/NA	Water	8260D	
MB 410-700218/9	Method Blank	Total/NA	Water	8260D	
LCS 410-700218/5	Lab Control Sample	Total/NA	Water	8260D	
LCS 410-700218/6	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-700218/7	Lab Control Sample Dup	Total/NA	Water	8260D	

GC Semi VOA

Prep Batch: 700951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-1	M-13	Total/NA	Water	8011	
180-195604-2	M-09	Total/NA	Water	8011	
180-195604-3	M-17	Total/NA	Water	8011	
180-195604-4	M-15	Total/NA	Water	8011	
180-195604-5	M-18	Total/NA	Water	8011	
180-195604-6	M-19	Total/NA	Water	8011	
180-195604-7	M-08	Total/NA	Water	8011	
180-195604-8	M-08A	Total/NA	Water	8011	
180-195604-9	TRIP BLANK 03	Total/NA	Water	8011	
MB 410-700951/1-A	Method Blank	Total/NA	Water	8011	
LCS 410-700951/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 410-700951/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 701267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-1	M-13	Total/NA	Water	8011	700951
180-195604-2	M-09	Total/NA	Water	8011	700951
180-195604-3	M-17	Total/NA	Water	8011	700951
180-195604-4	M-15	Total/NA	Water	8011	700951
180-195604-5	M-18	Total/NA	Water	8011	700951
180-195604-6	M-19	Total/NA	Water	8011	700951
180-195604-7	M-08	Total/NA	Water	8011	700951
180-195604-8	M-08A	Total/NA	Water	8011	700951
180-195604-9	TRIP BLANK 03	Total/NA	Water	8011	700951
MB 410-700951/1-A	Method Blank	Total/NA	Water	8011	700951
LCS 410-700951/2-A	Lab Control Sample	Total/NA	Water	8011	700951
LCSD 410-700951/3-A	Lab Control Sample Dup	Total/NA	Water	8011	700951

HPLC/IC

Analysis Batch: 502786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-1	M-13	Total/NA	Water	EPA 300.0 R2.1	
180-195604-2	M-09	Total/NA	Water	EPA 300.0 R2.1	

Eurofins Pittsburgh

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

HPLC/IC (Continued)

Analysis Batch: 502786 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-3	M-17	Total/NA	Water	EPA 300.0 R2.1	
180-195604-3	M-17	Total/NA	Water	EPA 300.0 R2.1	
180-195604-4	M-15	Total/NA	Water	EPA 300.0 R2.1	
180-195604-5	M-18	Total/NA	Water	EPA 300.0 R2.1	
180-195604-5	M-18	Total/NA	Water	EPA 300.0 R2.1	
180-195604-6	M-19	Total/NA	Water	EPA 300.0 R2.1	
180-195604-7	M-08	Total/NA	Water	EPA 300.0 R2.1	
180-195604-8	M-08A	Total/NA	Water	EPA 300.0 R2.1	
MB 180-502786/26	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-502786/27	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-195604-2 MS	M-09	Total/NA	Water	EPA 300.0 R2.1	
180-195604-2 MSD	M-09	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 503023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-4	M-15	Total/NA	Water	EPA 300.0 R2.1	
180-195604-6	M-19	Total/NA	Water	EPA 300.0 R2.1	
MB 180-503023/79	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-503023/80	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Metals

Analysis Batch: 698918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-1	M-13	Total/NA	Water	SM 2340B	
180-195604-2	M-09	Total/NA	Water	SM 2340B	
180-195604-3	M-17	Total/NA	Water	SM 2340B	
180-195604-4	M-15	Total/NA	Water	SM 2340B	
180-195604-5	M-18	Total/NA	Water	SM 2340B	
180-195604-6	M-19	Total/NA	Water	SM 2340B	
180-195604-7	M-08	Total/NA	Water	SM 2340B	
180-195604-8	M-08A	Total/NA	Water	SM 2340B	

Prep Batch: 702306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-1	M-13	Total Recoverable	Water	3005A	
180-195604-2	M-09	Total Recoverable	Water	3005A	
180-195604-3	M-17	Total Recoverable	Water	3005A	
180-195604-4	M-15	Total Recoverable	Water	3005A	
180-195604-5	M-18	Total Recoverable	Water	3005A	
180-195604-6	M-19	Total Recoverable	Water	3005A	
180-195604-7	M-08	Total Recoverable	Water	3005A	
180-195604-8	M-08A	Total Recoverable	Water	3005A	
MB 410-702306/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-702306/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 410-702306/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
180-195604-1 MS	M-13	Total Recoverable	Water	3005A	
180-195604-1 MSD	M-13	Total Recoverable	Water	3005A	
180-195604-1 DU	M-13	Total Recoverable	Water	3005A	

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QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

Metals

Analysis Batch: 703934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-1	M-13	Total Recoverable	Water	6020B	702306
180-195604-2	M-09	Total Recoverable	Water	6020B	702306
180-195604-3	M-17	Total Recoverable	Water	6020B	702306
180-195604-3	M-17	Total Recoverable	Water	6020B	702306
180-195604-4	M-15	Total Recoverable	Water	6020B	702306
180-195604-4	M-15	Total Recoverable	Water	6020B	702306
180-195604-5	M-18	Total Recoverable	Water	6020B	702306
180-195604-5	M-18	Total Recoverable	Water	6020B	702306
180-195604-6	M-19	Total Recoverable	Water	6020B	702306
180-195604-7	M-08	Total Recoverable	Water	6020B	702306
180-195604-8	M-08A	Total Recoverable	Water	6020B	702306
180-195604-8	M-08A	Total Recoverable	Water	6020B	702306
MB 410-702306/1-A	Method Blank	Total Recoverable	Water	6020B	702306
LCS 410-702306/2-A	Lab Control Sample	Total Recoverable	Water	6020B	702306
LCSD 410-702306/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	702306
180-195604-1 MS	M-13	Total Recoverable	Water	6020B	702306
180-195604-1 MSD	M-13	Total Recoverable	Water	6020B	702306
180-195604-1 DU	M-13	Total Recoverable	Water	6020B	702306

Prep Batch: 703971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-1	M-13	Total/NA	Water	7470A	
180-195604-2	M-09	Total/NA	Water	7470A	
180-195604-3	M-17	Total/NA	Water	7470A	
180-195604-4	M-15	Total/NA	Water	7470A	
180-195604-5	M-18	Total/NA	Water	7470A	
180-195604-6	M-19	Total/NA	Water	7470A	
180-195604-7	M-08	Total/NA	Water	7470A	
180-195604-8	M-08A	Total/NA	Water	7470A	
MB 410-703971/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-703971/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 410-703971/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	

Analysis Batch: 704306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-1	M-13	Total/NA	Water	7470A	703971
180-195604-2	M-09	Total/NA	Water	7470A	703971
180-195604-3	M-17	Total/NA	Water	7470A	703971
180-195604-4	M-15	Total/NA	Water	7470A	703971
180-195604-5	M-18	Total/NA	Water	7470A	703971
180-195604-6	M-19	Total/NA	Water	7470A	703971
180-195604-7	M-08	Total/NA	Water	7470A	703971
180-195604-8	M-08A	Total/NA	Water	7470A	703971
MB 410-703971/1-A	Method Blank	Total/NA	Water	7470A	703971
LCS 410-703971/2-A	Lab Control Sample	Total/NA	Water	7470A	703971
LCSD 410-703971/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	703971

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QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

General Chemistry

Analysis Batch: 502794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-1	M-13	Total/NA	Water	EPA 180.1	
180-195604-2	M-09	Total/NA	Water	EPA 180.1	
180-195604-3	M-17	Total/NA	Water	EPA 180.1	
180-195604-4	M-15	Total/NA	Water	EPA 180.1	
180-195604-5	M-18	Total/NA	Water	EPA 180.1	
180-195604-6	M-19	Total/NA	Water	EPA 180.1	
180-195604-7	M-08	Total/NA	Water	EPA 180.1	
180-195604-8	M-08A	Total/NA	Water	EPA 180.1	
MB 180-502794/7	Method Blank	Total/NA	Water	EPA 180.1	
LCS 180-502794/8	Lab Control Sample	Total/NA	Water	EPA 180.1	

Analysis Batch: 502871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-1	M-13	Total/NA	Water	EPA 9050A	
180-195604-2	M-09	Total/NA	Water	EPA 9050A	
180-195604-3	M-17	Total/NA	Water	EPA 9050A	
180-195604-4	M-15	Total/NA	Water	EPA 9050A	
180-195604-5	M-18	Total/NA	Water	EPA 9050A	
180-195604-6	M-19	Total/NA	Water	EPA 9050A	
180-195604-7	M-08	Total/NA	Water	EPA 9050A	
180-195604-8	M-08A	Total/NA	Water	EPA 9050A	
MB 180-502871/30	Method Blank	Total/NA	Water	EPA 9050A	
LCS 180-502871/29	Lab Control Sample	Total/NA	Water	EPA 9050A	
180-195604-3 DU	M-17	Total/NA	Water	EPA 9050A	

Analysis Batch: 502892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-1	M-13	Total/NA	Water	EPA 350.1	
180-195604-2	M-09	Total/NA	Water	EPA 350.1	
180-195604-3	M-17	Total/NA	Water	EPA 350.1	
180-195604-4	M-15	Total/NA	Water	EPA 350.1	
180-195604-5	M-18	Total/NA	Water	EPA 350.1	
180-195604-6	M-19	Total/NA	Water	EPA 350.1	
180-195604-7	M-08	Total/NA	Water	EPA 350.1	
180-195604-8	M-08A	Total/NA	Water	EPA 350.1	
MB 180-502892/17	Method Blank	Total/NA	Water	EPA 350.1	
MB 180-502892/49	Method Blank	Total/NA	Water	EPA 350.1	
LCS 180-502892/18	Lab Control Sample	Total/NA	Water	EPA 350.1	
LCS 180-502892/53	Lab Control Sample	Total/NA	Water	EPA 350.1	
180-195604-8 MS	M-08A	Total/NA	Water	EPA 350.1	
180-195604-8 MSD	M-08A	Total/NA	Water	EPA 350.1	

Analysis Batch: 502949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-1	M-13	Total/NA	Water	SM 2320B	
180-195604-2	M-09	Total/NA	Water	SM 2320B	
180-195604-3	M-17	Total/NA	Water	SM 2320B	
180-195604-4	M-15	Total/NA	Water	SM 2320B	
180-195604-5	M-18	Total/NA	Water	SM 2320B	
180-195604-6	M-19	Total/NA	Water	SM 2320B	
180-195604-7	M-08	Total/NA	Water	SM 2320B	

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QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195604-1

General Chemistry (Continued)

Analysis Batch: 502949 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-8	M-08A	Total/NA	Water	SM 2320B	
MB 180-502949/2	Method Blank	Total/NA	Water	SM 2320B	
LCS 180-502949/1	Lab Control Sample	Total/NA	Water	SM 2320B	
180-195604-1 DU	M-13	Total/NA	Water	SM 2320B	

Analysis Batch: 503022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-1	M-13	Total/NA	Water	SM 2540C	
180-195604-2	M-09	Total/NA	Water	SM 2540C	
180-195604-3	M-17	Total/NA	Water	SM 2540C	
180-195604-4	M-15	Total/NA	Water	SM 2540C	
180-195604-5	M-18	Total/NA	Water	SM 2540C	
180-195604-6	M-19	Total/NA	Water	SM 2540C	
180-195604-7	M-08	Total/NA	Water	SM 2540C	
180-195604-8	M-08A	Total/NA	Water	SM 2540C	
MB 180-503022/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-503022/2	Lab Control Sample	Total/NA	Water	SM 2540C	
180-195604-1 DU	M-13	Total/NA	Water	SM 2540C	

Analysis Batch: 503107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-503107/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-503107/2	Lab Control Sample	Total/NA	Water	SM 2540C	
180-195604-5 DU	M-18	Total/NA	Water	SM 2540C	

Analysis Batch: 701063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195604-1	M-13	Total/NA	Water	410.4	
180-195604-2	M-09	Total/NA	Water	410.4	
180-195604-3	M-17	Total/NA	Water	410.4	
180-195604-4	M-15	Total/NA	Water	410.4	
180-195604-5	M-18	Total/NA	Water	410.4	
180-195604-6	M-19	Total/NA	Water	410.4	
180-195604-7	M-08	Total/NA	Water	410.4	
180-195604-8	M-08A	Total/NA	Water	410.4	
MB 410-701063/4	Method Blank	Total/NA	Water	410.4	
LCS 410-701063/5	Lab Control Sample	Total/NA	Water	410.4	
180-195604-4 MS	M-15	Total/NA	Water	410.4	
180-195604-4 DU	M-15	Total/NA	Water	410.4	

Phone 412-963-7058 Fax 412-963-2468

[illegible]

EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

CAD: 1030460/INET4535
BILL RECIPIENT

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEO-SYNTEC CONSULTANTS INC

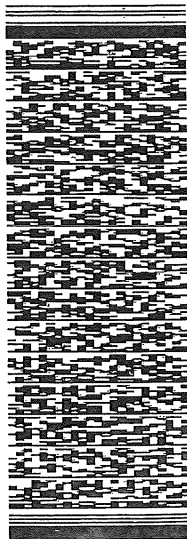
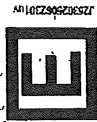
(412) 963-7058

INV:

PO:

DEPT:

FedEx
Express



THU - 11 SEP 10:30A

PRIORITY OVERNIGHT

1 of 3

MP# 8842 7490 7089

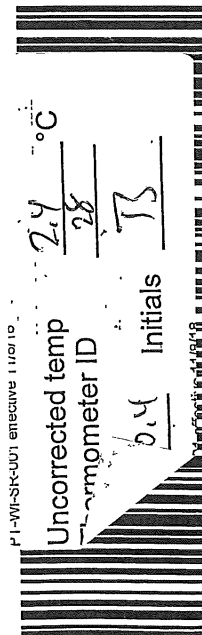
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MASTER #

NS AGCA

15238

PA-US PIT



Uncorrected temp

2.4 °C

Thermometer ID

28

Initials

BS

P1-VI-SK-UUT ENTREPRENEURS 11/01/10

Part # 159469-434 MTW EXP 01/25

9/30/2025

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEO-SYNTEC CONSULTANTS INC

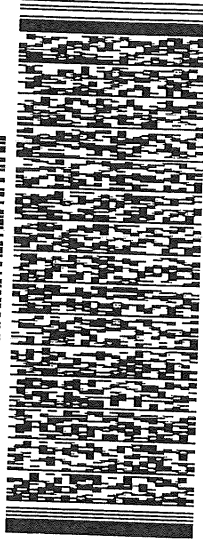
(412) 963-7058

INV:

PO:

DEPT:

FedEx
Express



THU - 11 SEP 10:30A

PRIORITY OVERNIGHT

2 of 3

MP# 8842 7490 7090

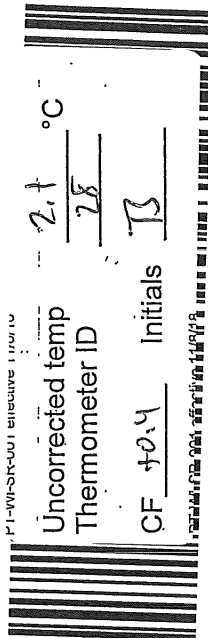
0201

MASTER #

NS AGCA

15238

PA-US PIT



Uncorrected temp

2.4 °C

Thermometer ID

28

Initials

BS

P1-VI-SK-UUT ENTREPRENEURS 11/01/10

Part # 159469-434 MTW EXP 01/25



180-195604 Waybill

1
2
3
4
5
6
7
8
9
10
11
12
13

ORIGIN ID: BWA
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
(240) 814-1351

SHIP DATE: 10SEP25
ACTWGT 50.00 LB
CAD: 1030460/INET4535

HANOVER, MD 21076
UNITED STATES US

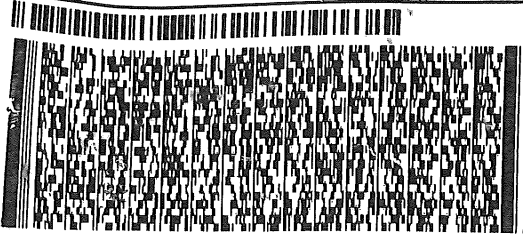
BILL RECIPIENT

TO
SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058
INV:
PO:

REF: GEO-SYNTec CONSULTANTS INC

DEPT:



FedEx
Express



58CJ3780E59F2

3 of 3

MPS# 8842 7490 7104
0263
Mstr# 8842 7490 7089

THU - 11 SEP 10:30A
PRIORITY OVERNIGHT

0201

15238

NS AGCA

PA-US PIT

Uncorrected temp 4.5 °C
Thermometer ID 28
CF +0.4 Initials JB



THU 09/11 17:45
EUROFINS PITTSBURGH
301 ALPHA DRIVE
PITTSBURGH PA
PRIORITY OVERNIGHT
15238

198-1013

ETP: 2
100382608161000152380080842450071014

Eurofins Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler: N/A		Lab PM: Johnson, Andy		Carrier Tracking No(s): N/A		COC No: 180-545214.1																	
Client Contact: Shipping/Receiving		Phone: N/A		E-Mail: Andy.Johnson@et.eurofinsus.com		State of Origin: Maryland		Page: Page 1 of 1																	
Company: Eurofins Lancaster Laboratories Environm				Accreditations Required (See note): N/A				Job #: 180-195604-1																	
Address: 2425 New Holland Pike,		Due Date Requested: 9/24/2025		Analysis Requested						Preservation Codes:															
City: Lancaster		TAT Requested (days): N/A		<table border="1"><tr><td rowspan="5">Field Filtered Sample (Yes or No)</td><td rowspan="5">Perform MS/MSD (Yes or No)</td><td rowspan="5">8260D_LU/5030C(MOD) VOCs - Appendix I+ MTBE Low Level</td><td rowspan="5">8011/8011_PrepEDB & DECP by 8011</td><td rowspan="5">6020B/3005A(MOD) Appendix I Metals by 6020B</td><td rowspan="5">7470A/7470A_PrepMercury by 7470A</td><td rowspan="5">SM2340B_JCFMSTotal Hardness as CaCO3 Calculation</td><td rowspan="5">410.4_LL COD by 410.4 LL</td><td rowspan="5">Total Number of containers</td></tr><tr></tr><tr></tr><tr></tr><tr></tr></table>						Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D_LU/5030C(MOD) VOCs - Appendix I+ MTBE Low Level	8011/8011_PrepEDB & DECP by 8011	6020B/3005A(MOD) Appendix I Metals by 6020B	7470A/7470A_PrepMercury by 7470A	SM2340B_JCFMSTotal Hardness as CaCO3 Calculation	410.4_LL COD by 410.4 LL	Total Number of containers	Other: N/A						
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D_LU/5030C(MOD) VOCs - Appendix I+ MTBE Low Level	8011/8011_PrepEDB & DECP by 8011																		6020B/3005A(MOD) Appendix I Metals by 6020B	7470A/7470A_PrepMercury by 7470A	SM2340B_JCFMSTotal Hardness as CaCO3 Calculation	410.4_LL COD by 410.4 LL	Total Number of containers
PO #: N/A																									
WO #: N/A																									
Project #: 18015089																									
SSOW#: N/A																									
Project Name: Ritchie Rubble LF Semi-Annual		Project #:																							
Site: N/A		SSOW#:																							
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=sewage/solid)		Preservation Code:		Special Instructions/Note:													
M-13 (180-195604-1)		9/10/25		09:05 Eastern		G		Water				1													
M-09 (180-195604-2)		9/10/25		09:00 Eastern		G		Water				1													
M-17 (180-195604-3)		9/10/25		10:45 Eastern		G		Water				1													
M-15 (180-195604-4)		9/10/25		11:05 Eastern		G		Water				1													
M-18 (180-195604-5)		9/10/25		12:10 Eastern		G		Water				1													
M-19 (180-195604-6)		9/10/25		13:40 Eastern		G		Water				1													
M-08 (180-195604-7)		9/10/25		13:55 Eastern		G		Water				1													
M-08A (180-195604-8)		9/10/25		12:40 Eastern		G		Water				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/test/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						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)																			
Unconfirmed						☐ 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: 9/12/25 1300		Company: EPITHE		Received by:		Date/Time: 9/25/25 1400		Company: ELL															
Relinquished by:		Date/Time: 9/25/25 1900		Company: ELL		Received by:		Date/Time: 9/25/25 1900		Company: ELL															
Relinquished by:		Date/Time: 9/25/25 1900		Company: ELL		Received by:		Date/Time: 9/25/25 1900		Company: ELL															
Custody Seals Intact: ☐ Yes ☐ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: R:4.1-5.0 C:4.0-4.9																					

Eurofins Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler: N/A		Lab PM: Johnson, Andy		Carrier Tracking No(s): N/A		COC No: 180-545210.1																											
Client Contact: Shipping/Receiving		Phone: N/A		E-Mail: Andy.Johnson@et.eurofins.com		State of Origin: Maryland		Page: Page 1 of 1																											
Company: Eurofins Lancaster Laboratories Environm				Accreditations Required (See note): N/A				Job #: 180-195604-1																											
Address: 2425 New Holland Pike,		Due Date Requested: 9/24/2025		Analysis Requested						Preservation Codes: -																									
City: Lancaster		TAT Requested (days): N/A																																	
State, Zip: PA, 17601		PO #: N/A																																	
Phone: 717-656-2300(Tel)		WO #: N/A																																	
Email: N/A		Project #: 18015089																																	
Project Name: Ritchie Rubble LF Semi-Annual		SSOW#: N/A		Field Filtered Sample (Yes or No)						Other: N/A																									
Site: N/A				Perform MS/MSD (Yes or No)						Total Number of containers																									
				9260D_LL/5039C(MOD) VOCs - Appendix I/+ MTBE Low Level																															
				8011/8011_PrepEDB & DBCP by 8011																															
				6020B/0005A(MOD) Appendix I Metals by 6020B																															
				7470A/7470A_PrepMercury by 7470A																															
				SM2340B_ICPMS/Total Hardness as CaCO3 Calculation																															
				410.4_LL/COD by 410.4 LL																															
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)		9260D_LL/5039C(MOD) VOCs - Appendix I/+ MTBE		Low Level		8011/8011_PrepEDB & DBCP by 8011		6020B/0005A(MOD) Appendix I Metals by 6020B		7470A/7470A_PrepMercury by 7470A		SM2340B_ICPMS/Total Hardness as CaCO3		Calculation		410.4_LL/COD by 410.4 LL		Total Number of containers		Special Instructions/Note:			
M-13 (180-195604-1)		9/10/25		09:05 Eastern		G		Water						X		X		X		X		X		X								6			
M-09 (180-195604-2)		9/10/25		09:00 Eastern		G		Water						X		X		X		X		X		X								6			
M-17 (180-195604-3)		9/10/25		10:45 Eastern		G		Water						X		X		X		X		X		X								7			
M-15 (180-195604-4)		9/10/25		11:05 Eastern		G		Water						X		X		X		X		X		X								7			
M-18 (180-195604-5)		9/10/25		12:10 Eastern		G		Water						X		X		X		X		X		X								7			
M-19 (180-195604-6)		9/10/25		13:40 Eastern		G		Water						X		X		X		X		X		X								6			
M-08 (180-195604-7)		9/10/25		13:55 Eastern		G		Water						X		X		X		X		X		X								7			
M-08A (180-195604-8)		9/10/25		12:40 Eastern		G		Water						X		X		X		X		X		X								7			
TRIP BLANK 03 (180-195604-9)		9/10/25		14:15 Eastern		G		Water						X		X																2			
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														Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)																					
Unconfirmed														☐ 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:																					
Relinquished by:														Time:																					
Relinquished by:														Method of Shipment:																					
Relinquished by:														Date/Time:																					
Relinquished by:														Date/Time:																					
Relinquished by:														Date/Time:																					
Custody Seals Intact:														Custody Seal No.:																					
Δ Yes Δ No														Cooler Temperature(s) °C and Other Remarks:																					

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195604-1

Login Number: 195604

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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 $<6\text{mm}$ (1/4").	False	
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: 180-195604-1

Login Number: 195604

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 09/13/25 06:08 PM

Creator: Reynolds, Benjamin

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	



ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Girod
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 9/25/2025 4:40:12 PM

JOB DESCRIPTION

Ritchie Rubble LF Semi-Annual GW PFAS

JOB NUMBER

180-195605-1

Eurofins Pittsburgh

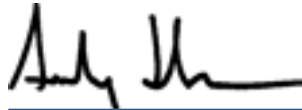
Job Notes

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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9/25/2025 4:40:12 PM

Authorized for release by
Andy Johnson, Senior Project Manager
Andy.Johnson@et.eurofinsus.com
(615)818-9567

Table of Contents

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Job ID: 180-195605-1

Eurofins Pittsburgh

Job Narrative 180-195605-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/11/2025 8:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.5°C, 2.8°C and 4.9°C.

Receipt Exceptions

The following sample was received at the laboratory without a sample collection time documented on the chain of custody: M-08 (180-195605-7). Time taken from the container labels.

PFAS

Method PFC_IDA: The recovery for the labeled isotope(s) 13C3-PFBS in the following sample: M-17 (180-195605-3) is outside the QC acceptance limits due to the matrix of the sample.

Method PFC_IDA: Sample injection standard peak areas in M-17 (180-195605-3) are below the QC limit for both the initial injections and the re-injections. The values here are from the initial injections of the samples.

Method PFC_IDA: Sample injection standard peak areas in M-08 (180-195605-7) are below the QC acceptance limit for both the initial injection and the re-injection. The values here are from the re-injection of the sample.

The recovery for 13C3-PFBS in the sample is above the QC acceptance limit due to the matrix of the sample.

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

Eurofins Pittsburgh

Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
E	Result exceeded calibration range.
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
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Ohio	State	87787	01-31-26
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-26

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

Eurofins Pittsburgh

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

Sample Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195605-1	M-13	Water	09/10/25 09:05	09/11/25 08:50	Maryland
180-195605-2	M-09	Water	09/10/25 09:00	09/11/25 08:50	Maryland
180-195605-3	M-17	Water	09/10/25 10:45	09/11/25 08:50	Maryland
180-195605-4	M-18	Water	09/10/25 12:10	09/11/25 08:50	Maryland
180-195605-5	M-19	Water	09/10/25 13:40	09/11/25 08:50	Maryland
180-195605-6	M-15	Water	09/10/25 11:05	09/11/25 08:50	Maryland
180-195605-7	M-08	Water	09/10/25 13:55	09/11/25 08:50	Maryland

Method Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Method	Method Description	Protocol	Laboratory
537 IDA	EPA 537 Isotope Dilution	EPA	ELLE
SPE	PFAS by SPE	Lab SOP	ELLE

Protocol References:

EPA = US Environmental Protection Agency
Lab SOP = Laboratory Standard Operating Procedure

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Client Sample ID: M-13

Date Collected: 09/10/25 09:05

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195605-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			274.5 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA		1	1 uL	1 uL	700792	09/18/25 01:24	DSU6	ELLE
Instrument ID: 30731										

Client Sample ID: M-09

Date Collected: 09/10/25 09:00

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195605-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			257.3 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA		1	1 uL	1 uL	700792	09/18/25 01:38	DSU6	ELLE
Instrument ID: 30731										

Client Sample ID: M-17

Date Collected: 09/10/25 10:45

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195605-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE	RA		274.2 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA	RA	1			701397	09/18/25 23:16	UUV6	ELLE
Instrument ID: 30638										
Total/NA	Prep	SPE			274.2 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA		1	1 uL	1 uL	700792	09/18/25 01:51	DSU6	ELLE
Instrument ID: 30731										

Client Sample ID: M-18

Date Collected: 09/10/25 12:10

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195605-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			270.4 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA		1			701397	09/18/25 23:31	UUV6	ELLE
Instrument ID: 30638										

Client Sample ID: M-19

Date Collected: 09/10/25 13:40

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195605-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			284.1 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA		1			701397	09/18/25 23:47	UUV6	ELLE
Instrument ID: 30638										

Eurofins Pittsburgh

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Client Sample ID: M-15

Date Collected: 09/10/25 11:05

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195605-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			261.2 mL	1 mL	700133	09/16/25 16:10	V3FW	ELLE
Total/NA	Analysis	537 IDA		1	1 uL	1 uL	700792	09/18/25 02:32	DSU6	ELLE
Instrument ID: 30731										

Client Sample ID: M-08

Date Collected: 09/10/25 13:55

Date Received: 09/11/25 08:50

Lab Sample ID: 180-195605-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			257.8 mL	1 mL	702327	09/21/25 07:15	RC3V	ELLE
Total/NA	Analysis	537 IDA		1			702707	09/22/25 22:59	R7RE	ELLE
Instrument ID: 30638										
Total/NA	Prep	SPE	DL		257.8 mL	1 mL	702327	09/21/25 07:15	RC3V	ELLE
Total/NA	Analysis	537 IDA	DL	10			703350	09/23/25 14:46	DSU6	ELLE
Instrument ID: 30638										
Total/NA	Prep	SPE	RA		257.8 mL	1 mL	702327	09/21/25 07:15	RC3V	ELLE
Total/NA	Analysis	537 IDA	RA	1			702863	09/22/25 17:15	DSU6	ELLE
Instrument ID: 30728										

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: ELLE

Batch Type: Prep

RC3V = Donovan Catchings

V3FW = Amber Mauger

Batch Type: Analysis

DSU6 = John Grossi

R7RE = McKenzi Hartenstein

UUV6 = Anthony Polaski

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Client Sample ID: M-13

Lab Sample ID: 180-195605-1

Date Collected: 09/10/25 09:05

Matrix: Water

Date Received: 09/11/25 08:50

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	1.5	ng/L		09/16/25 16:10	09/18/25 01:24	1
Perfluorobutanesulfonic acid (PFBS)	0.62	J	1.8	0.46	ng/L		09/16/25 16:10	09/18/25 01:24	1
Perfluorohexanesulfonic acid (PFHxS)	0.65	J	1.8	0.46	ng/L		09/16/25 16:10	09/18/25 01:24	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.46	ng/L		09/16/25 16:10	09/18/25 01:24	1
Perfluorooctanesulfonic acid (PFOS)	0.64	J	1.8	0.46	ng/L		09/16/25 16:10	09/18/25 01:24	1
Perfluorooctanoic acid (PFOA)	0.57	J	1.8	0.46	ng/L		09/16/25 16:10	09/18/25 01:24	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	64		26 - 161				09/16/25 16:10	09/18/25 01:24	1
13C3-PFBS	77		20 - 198				09/16/25 16:10	09/18/25 01:24	1
13C3-PFHxS	69		35 - 165				09/16/25 16:10	09/18/25 01:24	1
13C4-PFHpA	68		33 - 158				09/16/25 16:10	09/18/25 01:24	1
13C8-PFOA	74		35 - 146				09/16/25 16:10	09/18/25 01:24	1
13C8-PFOS	72		41 - 155				09/16/25 16:10	09/18/25 01:24	1
13C9-PFNA	75		37 - 157				09/16/25 16:10	09/18/25 01:24	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Client Sample ID: M-09

Lab Sample ID: 180-195605-2

Date Collected: 09/10/25 09:00

Matrix: Water

Date Received: 09/11/25 08:50

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.6	ng/L		09/16/25 16:10	09/18/25 01:38	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.49	ng/L		09/16/25 16:10	09/18/25 01:38	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.49	ng/L		09/16/25 16:10	09/18/25 01:38	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.49	ng/L		09/16/25 16:10	09/18/25 01:38	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.49	ng/L		09/16/25 16:10	09/18/25 01:38	1
Perfluorooctanoic acid (PFOA)	ND		1.9	0.49	ng/L		09/16/25 16:10	09/18/25 01:38	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	73		26 - 161				09/16/25 16:10	09/18/25 01:38	1
13C3-PFBS	88		20 - 198				09/16/25 16:10	09/18/25 01:38	1
13C3-PFHxS	76		35 - 165				09/16/25 16:10	09/18/25 01:38	1
13C4-PFHpA	76		33 - 158				09/16/25 16:10	09/18/25 01:38	1
13C8-PFOA	78		35 - 146				09/16/25 16:10	09/18/25 01:38	1
13C8-PFOS	75		41 - 155				09/16/25 16:10	09/18/25 01:38	1
13C9-PFNA	79		37 - 157				09/16/25 16:10	09/18/25 01:38	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Client Sample ID: M-17

Lab Sample ID: 180-195605-3

Date Collected: 09/10/25 10:45

Matrix: Water

Date Received: 09/11/25 08:50

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	1.5	ng/L		09/16/25 16:10	09/18/25 01:51	1
Perfluorobutanesulfonic acid (PFBS)	54		1.8	0.46	ng/L		09/16/25 16:10	09/18/25 01:51	1
Perfluorohexanesulfonic acid (PFHxS)	19		1.8	0.46	ng/L		09/16/25 16:10	09/18/25 01:51	1
Perfluorononanoic acid (PFNA)	6.8		1.8	0.46	ng/L		09/16/25 16:10	09/18/25 01:51	1
Perfluorooctanesulfonic acid (PFOS)	26		1.8	0.46	ng/L		09/16/25 16:10	09/18/25 01:51	1
Perfluorooctanoic acid (PFOA)	77		1.8	0.46	ng/L		09/16/25 16:10	09/18/25 01:51	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	50		26 - 161				09/16/25 16:10	09/18/25 01:51	1
13C3-PFBS	256	*5+	20 - 198				09/16/25 16:10	09/18/25 01:51	1
13C3-PFHxS	72		35 - 165				09/16/25 16:10	09/18/25 01:51	1
13C4-PFHpA	53		33 - 158				09/16/25 16:10	09/18/25 01:51	1
13C8-PFOA	70		35 - 146				09/16/25 16:10	09/18/25 01:51	1
13C8-PFOS	71		41 - 155				09/16/25 16:10	09/18/25 01:51	1
13C9-PFNA	72		37 - 157				09/16/25 16:10	09/18/25 01:51	1

Method: EPA 537 IDA - EPA 537 Isotope Dilution - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	1.5	ng/L		09/16/25 16:10	09/18/25 23:16	1
Perfluorobutanesulfonic acid (PFBS)	53		1.8	0.46	ng/L		09/16/25 16:10	09/18/25 23:16	1
Perfluorohexanesulfonic acid (PFHxS)	17		1.8	0.46	ng/L		09/16/25 16:10	09/18/25 23:16	1
Perfluorononanoic acid (PFNA)	6.2		1.8	0.46	ng/L		09/16/25 16:10	09/18/25 23:16	1
Perfluorooctanesulfonic acid (PFOS)	25		1.8	0.46	ng/L		09/16/25 16:10	09/18/25 23:16	1
Perfluorooctanoic acid (PFOA)	82		1.8	0.46	ng/L		09/16/25 16:10	09/18/25 23:16	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	82		26 - 161				09/16/25 16:10	09/18/25 23:16	1
13C3-PFBS	293	*5+	20 - 198				09/16/25 16:10	09/18/25 23:16	1
13C3-PFHxS	90		35 - 165				09/16/25 16:10	09/18/25 23:16	1
13C4-PFHpA	79		33 - 158				09/16/25 16:10	09/18/25 23:16	1
13C8-PFOA	86		35 - 146				09/16/25 16:10	09/18/25 23:16	1
13C8-PFOS	84		41 - 155				09/16/25 16:10	09/18/25 23:16	1
13C9-PFNA	84		37 - 157				09/16/25 16:10	09/18/25 23:16	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Client Sample ID: M-18

Lab Sample ID: 180-195605-4

Date Collected: 09/10/25 12:10

Matrix: Water

Date Received: 09/11/25 08:50

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	1.5	ng/L		09/16/25 16:10	09/18/25 23:31	1
Perfluorobutanesulfonic acid (PFBS)	1.8		1.8	0.46	ng/L		09/16/25 16:10	09/18/25 23:31	1
Perfluorohexanesulfonic acid (PFHxS)	1.4	J	1.8	0.46	ng/L		09/16/25 16:10	09/18/25 23:31	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.46	ng/L		09/16/25 16:10	09/18/25 23:31	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.46	ng/L		09/16/25 16:10	09/18/25 23:31	1
Perfluorooctanoic acid (PFOA)	5.4		1.8	0.46	ng/L		09/16/25 16:10	09/18/25 23:31	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	73		26 - 161	09/16/25 16:10	09/18/25 23:31	1
13C3-PFBS	179		20 - 198	09/16/25 16:10	09/18/25 23:31	1
13C3-PFHxS	76		35 - 165	09/16/25 16:10	09/18/25 23:31	1
13C4-PFHpA	69		33 - 158	09/16/25 16:10	09/18/25 23:31	1
13C8-PFOA	70		35 - 146	09/16/25 16:10	09/18/25 23:31	1
13C8-PFOS	71		41 - 155	09/16/25 16:10	09/18/25 23:31	1
13C9-PFNA	71		37 - 157	09/16/25 16:10	09/18/25 23:31	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Client Sample ID: M-19

Lab Sample ID: 180-195605-5

Date Collected: 09/10/25 13:40

Matrix: Water

Date Received: 09/11/25 08:50

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	1.4	ng/L		09/16/25 16:10	09/18/25 23:47	1
Perfluorobutanesulfonic acid (PFBS)	2.8		1.8	0.44	ng/L		09/16/25 16:10	09/18/25 23:47	1
Perfluorohexanesulfonic acid (PFHxS)	6.0		1.8	0.44	ng/L		09/16/25 16:10	09/18/25 23:47	1
Perfluorononanoic acid (PFNA)	1.2	J	1.8	0.44	ng/L		09/16/25 16:10	09/18/25 23:47	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.44	ng/L		09/16/25 16:10	09/18/25 23:47	1
Perfluorooctanoic acid (PFOA)	18		1.8	0.44	ng/L		09/16/25 16:10	09/18/25 23:47	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	77		26 - 161				09/16/25 16:10	09/18/25 23:47	1
13C3-PFBS	119		20 - 198				09/16/25 16:10	09/18/25 23:47	1
13C3-PFHxS	76		35 - 165				09/16/25 16:10	09/18/25 23:47	1
13C4-PFHpA	69		33 - 158				09/16/25 16:10	09/18/25 23:47	1
13C8-PFOA	74		35 - 146				09/16/25 16:10	09/18/25 23:47	1
13C8-PFOS	77		41 - 155				09/16/25 16:10	09/18/25 23:47	1
13C9-PFNA	73		37 - 157				09/16/25 16:10	09/18/25 23:47	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Client Sample ID: M-15

Lab Sample ID: 180-195605-6

Date Collected: 09/10/25 11:05

Matrix: Water

Date Received: 09/11/25 08:50

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/16/25 16:10	09/18/25 02:32	1
Perfluorobutanesulfonic acid (PFBS)	14		1.9	0.48	ng/L		09/16/25 16:10	09/18/25 02:32	1
Perfluorohexanesulfonic acid (PFHxS)	8.6		1.9	0.48	ng/L		09/16/25 16:10	09/18/25 02:32	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.48	ng/L		09/16/25 16:10	09/18/25 02:32	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.48	ng/L		09/16/25 16:10	09/18/25 02:32	1
Perfluorooctanoic acid (PFOA)	12		1.9	0.48	ng/L		09/16/25 16:10	09/18/25 02:32	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	69		26 - 161				09/16/25 16:10	09/18/25 02:32	1
13C3-PFBS	117		20 - 198				09/16/25 16:10	09/18/25 02:32	1
13C3-PFHxS	76		35 - 165				09/16/25 16:10	09/18/25 02:32	1
13C4-PFHpA	71		33 - 158				09/16/25 16:10	09/18/25 02:32	1
13C8-PFOA	71		35 - 146				09/16/25 16:10	09/18/25 02:32	1
13C8-PFOS	70		41 - 155				09/16/25 16:10	09/18/25 02:32	1
13C9-PFNA	72		37 - 157				09/16/25 16:10	09/18/25 02:32	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Client Sample ID: M-08

Lab Sample ID: 180-195605-7

Date Collected: 09/10/25 13:55

Matrix: Water

Date Received: 09/11/25 08:50

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.6	ng/L		09/21/25 07:15	09/22/25 22:59	1
Perfluorobutanesulfonic acid (PFBS)	110		1.9	0.48	ng/L		09/21/25 07:15	09/22/25 22:59	1
Perfluorononanoic acid (PFNA)	15		1.9	0.48	ng/L		09/21/25 07:15	09/22/25 22:59	1
Perfluorooctanesulfonic acid (PFOS)	63		1.9	0.48	ng/L		09/21/25 07:15	09/22/25 22:59	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	56		26 - 161				09/21/25 07:15	09/22/25 22:59	1
13C3-PFBS	258	*5+	20 - 198				09/21/25 07:15	09/22/25 22:59	1
13C3-PFHxS	72		35 - 165				09/21/25 07:15	09/22/25 22:59	1
13C4-PFHpA	59		33 - 158				09/21/25 07:15	09/22/25 22:59	1
13C8-PFOA	66		35 - 146				09/21/25 07:15	09/22/25 22:59	1
13C8-PFOS	65		41 - 155				09/21/25 07:15	09/22/25 22:59	1
13C9-PFNA	70		37 - 157				09/21/25 07:15	09/22/25 22:59	1

Method: EPA 537 IDA - EPA 537 Isotope Dilution - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	400		19	4.8	ng/L		09/21/25 07:15	09/23/25 14:46	10
Perfluorooctanoic acid (PFOA)	560		19	4.8	ng/L		09/21/25 07:15	09/23/25 14:46	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-PFHxS	84		35 - 165				09/21/25 07:15	09/23/25 14:46	10
13C8-PFOA	75		35 - 146				09/21/25 07:15	09/23/25 14:46	10

Method: EPA 537 IDA - EPA 537 Isotope Dilution - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.6	ng/L		09/21/25 07:15	09/22/25 17:15	1
Perfluorobutanesulfonic acid (PFBS)	84		1.9	0.48	ng/L		09/21/25 07:15	09/22/25 17:15	1
Perfluorohexanesulfonic acid (PFHxS)	430	E	1.9	0.48	ng/L		09/21/25 07:15	09/22/25 17:15	1
Perfluorononanoic acid (PFNA)	19		1.9	0.48	ng/L		09/21/25 07:15	09/22/25 17:15	1
Perfluorooctanesulfonic acid (PFOS)	65		1.9	0.48	ng/L		09/21/25 07:15	09/22/25 17:15	1
Perfluorooctanoic acid (PFOA)	550	E	1.9	0.48	ng/L		09/21/25 07:15	09/22/25 17:15	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	72		26 - 161				09/21/25 07:15	09/22/25 17:15	1
13C3-PFBS	531	*5+	20 - 198				09/21/25 07:15	09/22/25 17:15	1
13C3-PFHxS	130		35 - 165				09/21/25 07:15	09/22/25 17:15	1
13C4-PFHpA	74		33 - 158				09/21/25 07:15	09/22/25 17:15	1
13C8-PFOA	97		35 - 146				09/21/25 07:15	09/22/25 17:15	1
13C8-PFOS	97		41 - 155				09/21/25 07:15	09/22/25 17:15	1
13C9-PFNA	83		37 - 157				09/21/25 07:15	09/22/25 17:15	1

Eurofins Pittsburgh

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 410-700133/1-A

Matrix: Water

Analysis Batch: 700792

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 700133

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/16/25 15:22	09/17/25 22:01	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		09/16/25 15:22	09/17/25 22:01	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		09/16/25 15:22	09/17/25 22:01	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		09/16/25 15:22	09/17/25 22:01	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		09/16/25 15:22	09/17/25 22:01	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.50	ng/L		09/16/25 15:22	09/17/25 22:01	1
Isotope Dilution	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	81		26 - 161				09/16/25 15:22	09/17/25 22:01	1
13C3-PFBS	88		20 - 198				09/16/25 15:22	09/17/25 22:01	1
13C3-PFHxS	84		35 - 165				09/16/25 15:22	09/17/25 22:01	1
13C4-PFHpA	82		33 - 158				09/16/25 15:22	09/17/25 22:01	1
13C8-PFOA	85		35 - 146				09/16/25 15:22	09/17/25 22:01	1
13C8-PFOS	83		41 - 155				09/16/25 15:22	09/17/25 22:01	1
13C9-PFNA	83		37 - 157				09/16/25 15:22	09/17/25 22:01	1

Lab Sample ID: LCS 410-700133/2-A

Matrix: Water

Analysis Batch: 700792

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 700133

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	25.6	16.8		ng/L		66	50 - 132
Perfluorobutanesulfonic acid (PFBS)	22.7	18.2		ng/L		80	54 - 145
Perfluorohexanesulfonic acid (PFHxS)	23.3	16.8		ng/L		72	52 - 138
Perfluorononanoic acid (PFNA)	25.6	19.1		ng/L		75	52 - 143
Perfluorooctanesulfonic acid (PFOS)	23.8	16.8		ng/L		71	52 - 139
Perfluorooctanoic acid (PFOA)	25.6	17.3		ng/L		68	53 - 147
Isotope Dilution	%Recovery	LCS Qualifier	Limits				
13C3-HFPO-DA	65		26 - 161				
13C3-PFBS	70		20 - 198				
13C3-PFHxS	69		35 - 165				
13C4-PFHpA	67		33 - 158				
13C8-PFOA	74		35 - 146				
13C8-PFOS	73		41 - 155				
13C9-PFNA	74		37 - 157				

Lab Sample ID: MB 410-702327/1-A

Matrix: Water

Analysis Batch: 702863

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 702327

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/21/25 07:15	09/22/25 16:34	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		09/21/25 07:15	09/22/25 16:34	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 410-702327/1-A

Matrix: Water

Analysis Batch: 702863

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 702327

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		09/21/25 07:15	09/22/25 16:34	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		09/21/25 07:15	09/22/25 16:34	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		09/21/25 07:15	09/22/25 16:34	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.50	ng/L		09/21/25 07:15	09/22/25 16:34	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	97		26 - 161				09/21/25 07:15	09/22/25 16:34	1
13C3-PFBS	79		20 - 198				09/21/25 07:15	09/22/25 16:34	1
13C3-PFHxS	80		35 - 165				09/21/25 07:15	09/22/25 16:34	1
13C4-PFHpA	79		33 - 158				09/21/25 07:15	09/22/25 16:34	1
13C8-PFOA	76		35 - 146				09/21/25 07:15	09/22/25 16:34	1
13C8-PFOS	80		41 - 155				09/21/25 07:15	09/22/25 16:34	1
13C9-PFNA	78		37 - 157				09/21/25 07:15	09/22/25 16:34	1

Lab Sample ID: LCS 410-702327/2-A

Matrix: Water

Analysis Batch: 702863

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 702327

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	25.6	28.5		ng/L		111	50 - 132
Perfluorobutanesulfonic acid (PFBS)	22.7	27.6		ng/L		121	54 - 145
Perfluorohexanesulfonic acid (PFHxS)	23.3	27.0		ng/L		116	52 - 138
Perfluorononanoic acid (PFNA)	25.6	29.9		ng/L		117	52 - 143
Perfluorooctanesulfonic acid (PFOS)	23.8	26.6		ng/L		112	52 - 139
Perfluorooctanoic acid (PFOA)	25.6	28.8		ng/L		113	53 - 147
Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits				
13C3-HFPO-DA	90		26 - 161				
13C3-PFBS	73		20 - 198				
13C3-PFHxS	75		35 - 165				
13C4-PFHpA	73		33 - 158				
13C8-PFOA	72		35 - 146				
13C8-PFOS	76		41 - 155				
13C9-PFNA	73		37 - 157				

Lab Sample ID: LCSD 410-702327/3-A

Matrix: Water

Analysis Batch: 702863

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 702327

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	25.6	26.1		ng/L		102	50 - 132	9	30
Perfluorobutanesulfonic acid (PFBS)	22.7	26.8		ng/L		118	54 - 145	3	30
Perfluorohexanesulfonic acid (PFHxS)	23.3	26.2		ng/L		112	52 - 138	3	30
Perfluorononanoic acid (PFNA)	25.6	29.3		ng/L		114	52 - 143	2	30

Eurofins Pittsburgh

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 410-702327/3-A

Matrix: Water

Analysis Batch: 702863

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 702327

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS)	23.8	25.8		ng/L		108	52 - 139	3	30
Perfluorooctanoic acid (PFOA)	25.6	29.2		ng/L		114	53 - 147	1	30
Isotope Dilution									
	LCSD %Recovery	LCSD Qualifier	LCSD Limits						
13C3-HFPO-DA	96		26 - 161						
13C3-PFBS	76		20 - 198						
13C3-PFHxS	80		35 - 165						
13C4-PFHpA	76		33 - 158						
13C8-PFOA	73		35 - 146						
13C8-PFOS	78		41 - 155						
13C9-PFNA	74		37 - 157						

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195605-1

LCMS

Prep Batch: 700133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195605-1	M-13	Total/NA	Water	SPE	
180-195605-2	M-09	Total/NA	Water	SPE	
180-195605-3 - RA	M-17	Total/NA	Water	SPE	
180-195605-3	M-17	Total/NA	Water	SPE	
180-195605-4	M-18	Total/NA	Water	SPE	
180-195605-5	M-19	Total/NA	Water	SPE	
180-195605-6	M-15	Total/NA	Water	SPE	
MB 410-700133/1-A	Method Blank	Total/NA	Water	SPE	
LCS 410-700133/2-A	Lab Control Sample	Total/NA	Water	SPE	

Analysis Batch: 700792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195605-1	M-13	Total/NA	Water	537 IDA	700133
180-195605-2	M-09	Total/NA	Water	537 IDA	700133
180-195605-3	M-17	Total/NA	Water	537 IDA	700133
180-195605-6	M-15	Total/NA	Water	537 IDA	700133
MB 410-700133/1-A	Method Blank	Total/NA	Water	537 IDA	700133
LCS 410-700133/2-A	Lab Control Sample	Total/NA	Water	537 IDA	700133

Analysis Batch: 701397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195605-3 - RA	M-17	Total/NA	Water	537 IDA	700133
180-195605-4	M-18	Total/NA	Water	537 IDA	700133
180-195605-5	M-19	Total/NA	Water	537 IDA	700133

Prep Batch: 702327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195605-7 - DL	M-08	Total/NA	Water	SPE	
180-195605-7	M-08	Total/NA	Water	SPE	
180-195605-7 - RA	M-08	Total/NA	Water	SPE	
MB 410-702327/1-A	Method Blank	Total/NA	Water	SPE	
LCS 410-702327/2-A	Lab Control Sample	Total/NA	Water	SPE	
LCSD 410-702327/3-A	Lab Control Sample Dup	Total/NA	Water	SPE	

Analysis Batch: 702707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195605-7	M-08	Total/NA	Water	537 IDA	702327

Analysis Batch: 702863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195605-7 - RA	M-08	Total/NA	Water	537 IDA	702327
MB 410-702327/1-A	Method Blank	Total/NA	Water	537 IDA	702327
LCS 410-702327/2-A	Lab Control Sample	Total/NA	Water	537 IDA	702327
LCSD 410-702327/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	702327

Analysis Batch: 703350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195605-7 - DL	M-08	Total/NA	Water	537 IDA	702327

Eurofins Pittsburgh

Ver: 10/10/2024

CAD: 1030460/NET4535
BILL RECIPIENT

EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK

PITTSBURGH PA 15238

REF: GEO-SYNTEC CONSULTANTS INC

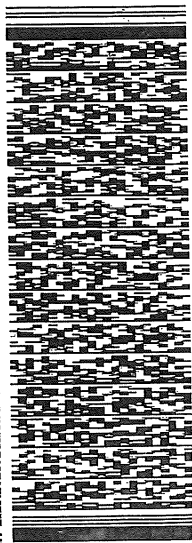
(412) 963-7058

INV:

PO:

DEPT:

FedEx
Express



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PRIORITY OVERNIGHT

1 of 3

MPS# 8842 7490 7089

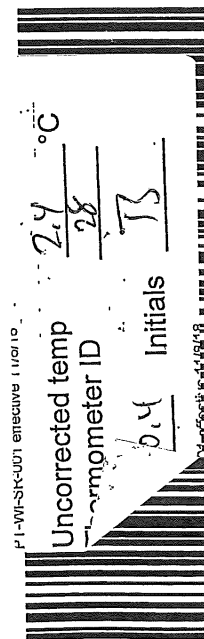
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Mstr# 8842 7490 7089

NS AGCA

15238

PA-US
PIT



Uncorrected temp 2.4 °C

Thermometer ID 28

CF 0.4

Initials JS

P1-VI-SK-UOT effective 11/01/10

Part # 159469-434 M/TW EXP 01/25

9/25/2025

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK

PITTSBURGH PA 15238

REF: GEO-SYNTEC CONSULTANTS INC

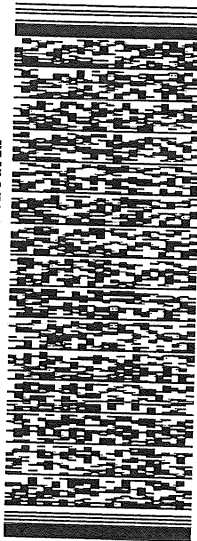
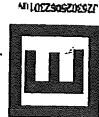
(412) 963-7058

INV:

PO:

DEPT:

FedEx
Express



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PRIORITY OVERNIGHT

2 of 3

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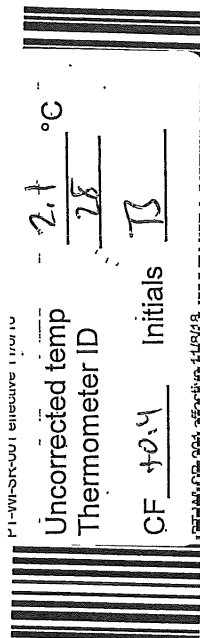
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Mstr# 8842 7490 7089

NS AGCA

15238

PA-US
PIT



Uncorrected temp 2.4 °C

Thermometer ID 28

CF 0.4

Initials JS

P1-VI-SK-UOT effective 11/01/10



180-195605 Waybill

Part # 159469-

1
2
3
4
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6
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8
9
10
11
12
13

ORIGIN ID: BWA
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F

(240) 814-1351

SHIP DATE: 10SEP25
ACTWGT: 50.00 LB
CAD: 1030460/INET4535

HANOVER, MD 21076
UNITED STATES US

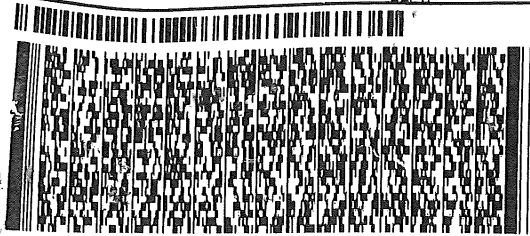
BILL RECIPIENT

TO
SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058
INV.
PO:

REF: GEO-SYNTec CONSULTANTS INC

DEPT:



FedEx
Express



39G13780E59F2

3 of 3

MPS#

0263

8842 7490 7104

Mstr# 8842 7490 7089

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PRIORITY OVERNIGHT

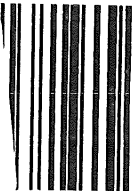
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15238

NS AGCA

PA-US PIT

Uncorrected temp 41.5 °C
Thermometer ID 28
CF +0.4 Initials JS



250052

THU 09/11 17:43

4160

EUROFINS PITTSBURGH

301 ALPHA DR

RIDC PARK

PITTSBURGH PA

PRIORITY OVERNIGHT

198-1013

SP:PD:100:Y

10058886081510001523800884274907104

ETP: 2

Eurofins Pittsburgh

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

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler: N/A		Lab PM: Johnson, Andy		Carrier Tracking No(s): N/A		COC No: 180-545210.1											
Client Contact: Shipping/Receiving		Phone: N/A		E-Mail: Andy.Johnson@et.eurofinsus.com		State of Origin: Maryland		Page: Page 1 of 1											
Company: Eurofins Lancaster Laboratories Environm				Accreditations Required (See note): N/A				Job #: 180-195605-1											
Address: 2425 New Holland Pike,		Due Date Requested: 9/24/2025		Analysis Requested						Preservation Codes:									
City: Lancaster		TAT Requested (days): N/A		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) PFAS IDAP/PFAS_W_Prep(MOD) UCMR3 6 PFAS Total Number of containers						Other: N/A									
State, Zip: PA, 17601		PO #: N/A																	
Phone: 717-656-2300(Tel)		WO #: N/A																	
Email: N/A		Project #: 18015089																	
Project Name: Ritchie Rubble LF Semi-Annual PFAS		SSOW#: N/A																	
Site: N/A																			
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=tissue, A=air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		PFAS IDAP/PFAS_W_Prep(MOD) UCMR3 6 PFAS		Total Number of containers		Special Instructions/Note:	
M-13 (180-195605-1)		9/10/25		09:05 Eastern		G		Water				X				2			
M-09 (180-195605-2)		9/10/25		09:00 Eastern		G		Water				X				2			
M-17 (180-195605-3)		9/10/25		10:45 Eastern		G		Water				X				2			
M-18 (180-195605-4)		9/10/25		12:10 Eastern		G		Water				X				2			
M-19 (180-195605-5)		9/10/25		13:40 Eastern		G		Water				X				2			
M-15 (180-195605-6)		9/10/25		11:05 Eastern		G		Water				X				2			
M-08 (180-195605-7)		9/10/25		13:55 Eastern		G		Water				X				2			
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										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)									
Unconfirmed										☐ 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:										Method of Shipment:									
Relinquished by:										Date/Time: 9/12/25 1300 Company: E.P. HME									
Relinquished by:										Date/Time: 12 Sept 25 1400 Company: ELLE									
Relinquished by:										Date/Time: 9/12/25 1900 Company: ELLE									
Custody Seals Intact: ☐ Yes ☐ No										Custody Seal No.: _____									
										Cooler Temperature(s) °C and Other Remarks: R: 5.0 C: 4.9									

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195605-1

Login Number: 195605

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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.	False	
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.	False	
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 $<6\text{mm}$ (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: 180-195605-1

Login Number: 195605

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 09/13/25 06:08 PM

Creator: Reynolds, Benjamin

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	



ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Girod
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 10/3/2025 1:35:06 PM

JOB DESCRIPTION

Ritchie Rubble LF Semi-Annual GW

JOB NUMBER

180-195677-1

Eurofins Pittsburgh

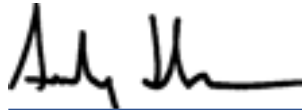
Job Notes

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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10/3/2025 1:35:06 PM

Authorized for release by
Andy Johnson, Senior Project Manager
Andy.Johnson@et.eurofinsus.com
(615)818-9567

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Job ID: 180-195677-1

Eurofins Pittsburgh

Job Narrative 180-195677-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/12/2025 9:15 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.1°C, 1.6°C and 1.7°C.

Receipt Exceptions

Only two HCl vials were received for the trip blank, no sodium thiosulfate vials.

GC/MS VOA

Method 8260D_LL: The method requirement for no headspace was not met. The following volatile sample was analyzed with headspace in the sample container(s): M-06 (180-195677-1). The sample container was received with headspace.

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFMS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 180-502863 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300_ORGFMS: The following samples were diluted due to the nature of the sample matrix: M-18A (180-195677-5) and M-20 (180-195677-7). Elevated reporting limits (RLs) are provided.

Method 300_ORGFMS: The following samples were diluted due to the nature of the sample matrix: M-19A (180-195677-3) and M-05A (180-195677-4). 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.

Metals

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

General Chemistry

Method 180.1: The following sample was diluted to bring the concentration of target analytes within the calibration range: M-14 (180-195677-6). Elevated reporting limits (RLs) are provided.

Method 350.1: The following samples were diluted due to the nature of the sample matrix: M-20 (180-195677-7) and (180-195604-C-8 MSD). 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.

Eurofins Pittsburgh

Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

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.

HPLC/IC

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.

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
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
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)

Eurofins Pittsburgh

Definitions/Glossary

Client: Geosyntec Consultants Inc

Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

1
2
3
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13

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00690	06-28-25 *
California	State	2891	04-30-26
Connecticut	State	PH-0820	09-30-26
Florida	NELAP	E871008	06-30-25 *
Georgia	State	PA 02-00416	04-30-26
Illinois	NELAP	200005	07-31-25 *
Kansas	NELAP	E-10350	01-31-26
Kentucky (UST)	State	162013	04-30-26
Kentucky (WW)	State	KY98043	12-31-25
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-25 *
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-25
New Hampshire	NELAP	2030	04-04-26
New Jersey	NELAP	PA005	06-30-25 *
New York	NELAP	11182	03-31-26
North Carolina (WW/SW)	State	434	12-31-25
North Dakota	State	R-227	04-30-24 *
Oregon	NELAP	PA-2151	02-06-26
Pennsylvania	NELAP	02-00416	04-30-26
Rhode Island	State	LAO00375	12-30-25
South Carolina	State	89014	04-30-25 *
Texas	NELAP	T104704528	03-31-26
US Fish & Wildlife	US Federal Programs	A21930	04-30-26
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462024-14	03-31-24 *
Virginia	NELAP	460189	09-14-25 *
West Virginia DEP	State	142	01-31-26
Wisconsin	State	998027800	08-31-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26

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

Eurofins Pittsburgh

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Ohio	State	87787	01-31-26
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-27-25
Virginia	NELAP	460182	06-14-26
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

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

Eurofins Pittsburgh

Sample Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195677-1	M-06	Water	09/11/25 09:05	09/12/25 09:15	Maryland
180-195677-2	M-21	Water	09/11/25 09:35	09/12/25 09:15	Maryland
180-195677-3	M-19A	Water	09/11/25 10:45	09/12/25 09:15	Maryland
180-195677-4	M-05A	Water	09/11/25 10:30	09/12/25 09:15	Maryland
180-195677-5	M-18A	Water	09/11/25 11:55	09/12/25 09:15	Maryland
180-195677-6	M-14	Water	09/11/25 12:15	09/12/25 09:15	Maryland
180-195677-7	M-20	Water	09/11/25 13:25	09/12/25 09:15	Maryland
180-195677-8	TRIP BLANK-04	Water	09/11/25 14:00	09/12/25 09:15	Maryland

Method Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	ELLE
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	ELLE
410.4	COD	EPA	ELLE
EPA 180.1	Turbidity, Nephelometric	EPA	EET PIT
EPA 350.1	Nitrogen, Ammonia	EPA	EET PIT
EPA 9050A	Specific Conductance	SW846	EET PIT
SM 2320B	Alkalinity	SM	EET PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
8011	Microextraction	SW846	ELLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-06

Date Collected: 09/11/25 09:05

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195677-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	25 mL	25 mL	703590	09/24/25 00:10	JS6E	ELLE
		Instrument ID: 16334								
Total/NA	Prep	8011			36.4 mL	2 mL	701606	09/19/25 00:11	USL7	ELLE
Total/NA	Analysis	8011		1			701697	09/19/25 19:29	WN7O	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502863	09/12/25 21:25	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	703640	09/23/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			704344	09/24/25 20:56	I9IN	ELLE
		Instrument ID: E08 - 30647								
Total Recoverable	Prep	3005A			50 mL	50 mL	703640	09/23/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			704081	09/24/25 11:47	F7JF	ELLE
		Instrument ID: E10								
Total/NA	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A		1			704306	09/24/25 19:38	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			698918	09/16/25 11:40	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	702649	09/22/25 08:20	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502853	09/12/25 13:20	SNR	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			502892	09/13/25 09:56	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502880	09/12/25 18:11	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	503034	09/16/25 10:33	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503037	09/16/25 12:05	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: M-21

Date Collected: 09/11/25 09:35

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195677-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502863	09/12/25 22:09	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	703640	09/23/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			704344	09/24/25 21:03	I9IN	ELLE
		Instrument ID: E08 - 30647								
Total Recoverable	Prep	3005A			50 mL	50 mL	703640	09/23/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			704081	09/24/25 12:00	F7JF	ELLE
		Instrument ID: E10								

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-21

Lab Sample ID: 180-195677-2

Date Collected: 09/11/25 09:35

Matrix: Water

Date Received: 09/12/25 09:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A		1			704306	09/24/25 19:36	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			698918	09/16/25 11:40	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	702649	09/22/25 08:20	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502853	09/12/25 13:21	SNR	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			502892	09/13/25 09:22	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502880	09/12/25 18:13	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	503034	09/16/25 10:41	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503037	09/16/25 12:05	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: M-19A

Lab Sample ID: 180-195677-3

Date Collected: 09/11/25 10:45

Matrix: Water

Date Received: 09/12/25 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	EPA 300.0 R2.1		1	1 mL	1 mL	502863	09/12/25 22:24	ERP	EET PIT
		Instrument ID: INTEGRION								
Total/NA	Analysis	EPA 300.0 R2.1		5	1 mL	1 mL	503109	09/17/25 16:49	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	703640	09/23/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			704344	09/24/25 21:07	I9IN	ELLE
		Instrument ID: E08 - 30647								
Total Recoverable	Prep	3005A			50 mL	50 mL	703640	09/23/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			704081	09/24/25 12:04	F7JF	ELLE
		Instrument ID: E10								
Total/NA	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A		1			704306	09/24/25 19:28	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			698918	09/16/25 11:40	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	702649	09/22/25 08:20	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502853	09/12/25 13:22	SNR	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			502892	09/13/25 09:58	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-19A

Date Collected: 09/11/25 10:45

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195677-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9050A		1			502880	09/12/25 18:14	LWM	EET PIT
Total/NA	Analysis	SM 2320B Instrument ID: NOEQUIP		1	50 mL	50 mL	503034	09/16/25 10:45	ELS	EET PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	503037	09/16/25 12:05	A1K	EET PIT

Client Sample ID: M-05A

Date Collected: 09/11/25 10:30

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195677-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D Instrument ID: 19094		1	25 mL	25 mL	702434	09/22/25 03:44	JS6E	ELLE
Total/NA	Prep	8011			36.6 mL	2 mL	701606	09/19/25 00:11	USL7	ELLE
Total/NA	Analysis	8011 Instrument ID: 19846		1			701697	09/19/25 19:46	WN7O	ELLE
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		1	1 mL	1 mL	502863	09/12/25 22:38	ERP	EET PIT
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		5	1 mL	1 mL	503109	09/17/25 17:03	ERP	EET PIT
Total Recoverable	Prep	3005A			50 mL	50 mL	703640	09/23/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B Instrument ID: E08 - 30647		1			704344	09/24/25 20:58	I9IN	ELLE
Total Recoverable	Prep	3005A			50 mL	50 mL	703640	09/23/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B Instrument ID: E10		1			704081	09/24/25 11:49	F7JF	ELLE
Total/NA	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A Instrument ID: M10 – 31820		1			704306	09/24/25 19:42	IJ3I	ELLE
Total/NA	Analysis	SM 2340B Instrument ID: NOEQUIP		1			698918	09/16/25 11:40	USJM	ELLE
Total/NA	Analysis	410.4 Instrument ID: 11076		1	2 mL	2 mL	702649	09/22/25 08:20	USAE	ELLE
Total/NA	Analysis	EPA 180.1 Instrument ID: NOEQUIP		1			502853	09/12/25 13:23	SNR	EET PIT
Total/NA	Analysis	EPA 350.1 Instrument ID: BLUE-ASTORIA		1			502892	09/13/25 09:14	BAB	EET PIT
Total/NA	Analysis	EPA 9050A Instrument ID: NOEQUIP		1			502880	09/12/25 18:15	LWM	EET PIT
Total/NA	Analysis	SM 2320B Instrument ID: NOEQUIP		1	50 mL	50 mL	503034	09/16/25 10:49	ELS	EET PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	503037	09/16/25 12:05	A1K	EET PIT

Eurofins Pittsburgh

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-18A

Date Collected: 09/11/25 11:55

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195677-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502863	09/12/25 22:53	ERP	EET PIT
		Instrument ID: INTEGRION								
Total/NA	Analysis	EPA 300.0 R2.1		5	1 mL	1 mL	502863	09/12/25 23:07	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	703640	09/23/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			704344	09/24/25 20:47	I9IN	ELLE
		Instrument ID: E08 - 30647								
Total Recoverable	Prep	3005A			50 mL	50 mL	703640	09/23/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			704081	09/24/25 11:39	F7JF	ELLE
		Instrument ID: E10								
Total/NA	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A		1			704306	09/24/25 20:12	IJ3I	ELLE
		Instrument ID: M10 - 31820								
Total/NA	Analysis	SM 2340B		1			698918	09/16/25 11:40	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	702649	09/22/25 08:20	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502853	09/12/25 13:24	SNR	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			502892	09/13/25 09:54	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502880	09/12/25 18:16	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	503034	09/16/25 10:53	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503037	09/16/25 12:05	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: M-14

Date Collected: 09/11/25 12:15

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195677-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	25 mL	25 mL	702434	09/22/25 04:05	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.3 mL	2 mL	701606	09/19/25 00:11	USL7	ELLE
Total/NA	Analysis	8011		1			701697	09/19/25 20:03	WN7O	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502863	09/12/25 23:50	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	703640	09/23/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			704344	09/24/25 21:05	I9IN	ELLE
		Instrument ID: E08 - 30647								

Eurofins Pittsburgh

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-14

Date Collected: 09/11/25 12:15

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195677-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			50 mL	50 mL	703640	09/23/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			704081	09/24/25 12:02	F7JF	ELLE
		Instrument ID: E10								
Total/NA	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A		1			704306	09/24/25 20:06	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			698918	09/16/25 11:40	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	702649	09/22/25 08:20	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		5			502853	09/12/25 13:27	SNR	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			502892	09/13/25 09:28	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502880	09/12/25 18:17	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	503034	09/16/25 10:57	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503037	09/16/25 12:05	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: M-20

Date Collected: 09/11/25 13:25

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195677-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	25 mL	25 mL	702434	09/22/25 04:25	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.4 mL	2 mL	701606	09/19/25 00:11	USL7	ELLE
Total/NA	Analysis	8011		1			701697	09/19/25 20:55	WN7O	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502863	09/13/25 00:05	ERP	EET PIT
		Instrument ID: INTEGRION								
Total/NA	Analysis	EPA 300.0 R2.1		10	1 mL	1 mL	502863	09/13/25 00:20	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	703640	09/23/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			704344	09/24/25 21:00	I9IN	ELLE
		Instrument ID: E08 - 30647								
Total Recoverable	Prep	3005A			50 mL	50 mL	703640	09/23/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			704081	09/24/25 11:58	F7JF	ELLE
		Instrument ID: E10								
Total/NA	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Total/NA	Analysis	7470A		1			704306	09/24/25 19:44	IJ3I	ELLE
		Instrument ID: M10 – 31820								

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-20

Date Collected: 09/11/25 13:25

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195677-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2340B		1			698918	09/16/25 11:40	USJM	ELLE
Total/NA	Analysis	410.4 Instrument ID: 11076		1	2 mL	2 mL	702646	09/22/25 08:20	USAE	ELLE
Total/NA	Analysis	EPA 180.1 Instrument ID: NOEQUIP		1			502853	09/12/25 13:28	SNR	EET PIT
Total/NA	Analysis	EPA 350.1 Instrument ID: BLUE-ASTORIA		25			502892	09/13/25 11:02	BAB	EET PIT
Total/NA	Analysis	EPA 9050A Instrument ID: NOEQUIP		1			502880	09/12/25 18:18	LWM	EET PIT
Total/NA	Analysis	SM 2320B Instrument ID: NOEQUIP		1	50 mL	50 mL	503034	09/16/25 11:01	ELS	EET PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	50 mL	100 mL	503037	09/16/25 12:05	A1K	EET PIT

Client Sample ID: TRIP BLANK-04

Date Collected: 09/11/25 14:00

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195677-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D Instrument ID: 19094		1	25 mL	25 mL	702434	09/21/25 23:53	JS6E	ELLE
Total/NA	Prep	8011			36.9 mL	2 mL	701606	09/19/25 00:11	USL7	ELLE
Total/NA	Analysis	8011 Instrument ID: 19846		1			701697	09/19/25 21:12	WN7O	ELLE

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

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Analyst References:

- Lab: EET PIT
- Batch Type: Analysis
 - A1K = Agnes Komlos
 - BAB = Brooke Batyi
 - ELS = Edwin Shireman
 - ERP = Evan Papak
 - LWM = Leslie McIntire
 - SNR = Sabra Richart
- Lab: ELLE
- Batch Type: Prep
 - RFN5 = Aniyah Oxendine
 - UAMX = Annamaria Kuhns
 - USL7 = Sherry Morrow
 - Batch Type: Analysis
 - F7JF = Dennis Dick
 - I9IN = Miles Yiengst
 - IJ3I = Elizabeth Brittingham
 - JS6E = Gavin Walmer
 - USAE = Susan Engle
 - USJM = Sandra Miller
 - WN7O = James Patrushev

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-06

Lab Sample ID: 180-195677-1

Date Collected: 09/11/25 09:05

Matrix: Water

Date Received: 09/12/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/24/25 00:10	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/24/25 00:10	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/24/25 00:10	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/24/25 00:10	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/24/25 00:10	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/24/25 00:10	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/24/25 00:10	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/24/25 00:10	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/24/25 00:10	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/24/25 00:10	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/24/25 00:10	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/24/25 00:10	1
2-Hexanone	ND		5.0	2.0	ug/L			09/24/25 00:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/24/25 00:10	1
Acetone	3.2	J	5.0	1.5	ug/L			09/24/25 00:10	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/24/25 00:10	1
Benzene	ND		0.50	0.10	ug/L			09/24/25 00:10	1
Bromoform	ND		1.0	0.30	ug/L			09/24/25 00:10	1
Bromomethane	ND		0.50	0.10	ug/L			09/24/25 00:10	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/24/25 00:10	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/24/25 00:10	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/24/25 00:10	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/24/25 00:10	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/24/25 00:10	1
Chloroethane	ND		0.50	0.10	ug/L			09/24/25 00:10	1
Chloroform	ND		0.50	0.090	ug/L			09/24/25 00:10	1
Chloromethane	ND		0.50	0.10	ug/L			09/24/25 00:10	1
cis-1,2-Dichloroethene	0.16	J	0.50	0.080	ug/L			09/24/25 00:10	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/24/25 00:10	1
Dibromomethane	ND		0.50	0.080	ug/L			09/24/25 00:10	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/24/25 00:10	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/24/25 00:10	1
Iodomethane	ND		0.50	0.080	ug/L			09/24/25 00:10	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/24/25 00:10	1
Methylene Chloride	0.23	J	0.50	0.20	ug/L			09/24/25 00:10	1
Styrene	ND		0.50	0.070	ug/L			09/24/25 00:10	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/24/25 00:10	1
Toluene	ND		0.50	0.080	ug/L			09/24/25 00:10	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/24/25 00:10	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/24/25 00:10	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/24/25 00:10	1
Trichloroethene	ND		0.50	0.080	ug/L			09/24/25 00:10	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/24/25 00:10	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/24/25 00:10	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/24/25 00:10	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/24/25 00:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		09/24/25 00:10	1
4-Bromofluorobenzene (Surr)	100		80 - 120		09/24/25 00:10	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-06

Lab Sample ID: 180-195677-1

Date Collected: 09/11/25 09:05

Matrix: Water

Date Received: 09/12/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	102		80 - 120		09/24/25 00:10	1
Toluene-d8 (Surr)	101		80 - 120		09/24/25 00:10	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/19/25 00:11	09/19/25 19:29	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/19/25 00:11	09/19/25 19:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	117		46 - 136	09/19/25 00:11	09/19/25 19:29	1
1,1,2,2-Tetrachloroethane	121		46 - 136	09/19/25 00:11	09/19/25 19:29	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		1.0	0.71	mg/L			09/12/25 21:25	1
Nitrate as N	0.27		0.10	0.023	mg/L			09/12/25 21:25	1
Sulfate	160	F1	1.0	0.76	mg/L			09/12/25 21:25	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/23/25 22:00	09/24/25 11:47	1
Arsenic	ND		2.0	0.68	ug/L		09/23/25 22:00	09/24/25 11:47	1
Barium	24		2.0	0.75	ug/L		09/23/25 22:00	09/24/25 11:47	1
Beryllium	ND		0.50	0.12	ug/L		09/23/25 22:00	09/24/25 11:47	1
Cadmium	3.1		0.50	0.15	ug/L		09/23/25 22:00	09/24/25 20:56	1
Calcium	55000		120	50	ug/L		09/23/25 22:00	09/24/25 11:47	1
Chromium	2.9		2.0	0.55	ug/L		09/23/25 22:00	09/24/25 11:47	1
Cobalt	1.3		0.50	0.16	ug/L		09/23/25 22:00	09/24/25 11:47	1
Copper	1.6		1.0	0.85	ug/L		09/23/25 22:00	09/24/25 11:47	1
Iron	2800		50	20	ug/L		09/23/25 22:00	09/24/25 11:47	1
Lead	ND		0.50	0.12	ug/L		09/23/25 22:00	09/24/25 11:47	1
Magnesium	28000		50	16	ug/L		09/23/25 22:00	09/24/25 11:47	1
Manganese	140		2.0	0.95	ug/L		09/23/25 22:00	09/24/25 11:47	1
Nickel	14		1.0	0.40	ug/L		09/23/25 22:00	09/24/25 11:47	1
Potassium	3700		200	65	ug/L		09/23/25 22:00	09/24/25 11:47	1
Selenium	ND		1.0	0.28	ug/L		09/23/25 22:00	09/24/25 11:47	1
Silver	ND		0.50	0.10	ug/L		09/23/25 22:00	09/24/25 11:47	1
Sodium	21000		200	90	ug/L		09/23/25 22:00	09/24/25 11:47	1
Thallium	0.51		0.50	0.13	ug/L		09/23/25 22:00	09/24/25 11:47	1
Tin	ND		2.0	0.60	ug/L		09/23/25 22:00	09/24/25 20:56	1
Vanadium	ND		4.0	0.79	ug/L		09/23/25 22:00	09/24/25 11:47	1
Zinc	58		10	4.0	ug/L		09/23/25 22:00	09/24/25 11:47	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15	J	0.20	0.087	ug/L		09/24/25 13:45	09/24/25 19:38	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	250		0.51	0.19	mg/L			09/16/25 11:40	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-06

Lab Sample ID: 180-195677-1

Date Collected: 09/11/25 09:05

Matrix: Water

Date Received: 09/12/25 09:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	13		10	5.0	mg/L			09/22/25 08:20	1
Turbidity (EPA 180.1)	21		0.85	0.05	NTU			09/12/25 13:20	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/13/25 09:56	1
Specific Conductance (SW846 EPA 9050A)	660		1.0	1.0	umhos/cm			09/12/25 18:11	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	140		5.0	5.0	mg/L			09/16/25 10:33	1
Total Dissolved Solids (SM 2540C)	420		10	10	mg/L			09/16/25 12:05	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-21

Lab Sample ID: 180-195677-2

Date Collected: 09/11/25 09:35

Matrix: Water

Date Received: 09/12/25 09:15

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	200		1.0	0.71	mg/L			09/12/25 22:09	1
Nitrate as N	0.058	J	0.10	0.023	mg/L			09/12/25 22:09	1
Sulfate	57		1.0	0.76	mg/L			09/12/25 22:09	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/23/25 22:00	09/24/25 12:00	1
Arsenic	ND		2.0	0.68	ug/L		09/23/25 22:00	09/24/25 12:00	1
Barium	82		2.0	0.75	ug/L		09/23/25 22:00	09/24/25 12:00	1
Beryllium	3.3		0.50	0.12	ug/L		09/23/25 22:00	09/24/25 12:00	1
Cadmium	11		0.50	0.15	ug/L		09/23/25 22:00	09/24/25 21:03	1
Calcium	42000		120	50	ug/L		09/23/25 22:00	09/24/25 12:00	1
Chromium	ND		2.0	0.55	ug/L		09/23/25 22:00	09/24/25 12:00	1
Cobalt	14		0.50	0.16	ug/L		09/23/25 22:00	09/24/25 12:00	1
Copper	ND		1.0	0.85	ug/L		09/23/25 22:00	09/24/25 12:00	1
Iron	12000		50	20	ug/L		09/23/25 22:00	09/24/25 12:00	1
Lead	0.76		0.50	0.12	ug/L		09/23/25 22:00	09/24/25 12:00	1
Magnesium	15000		50	16	ug/L		09/23/25 22:00	09/24/25 12:00	1
Manganese	180		2.0	0.95	ug/L		09/23/25 22:00	09/24/25 12:00	1
Nickel	88		1.0	0.40	ug/L		09/23/25 22:00	09/24/25 12:00	1
Potassium	11000		200	65	ug/L		09/23/25 22:00	09/24/25 12:00	1
Selenium	ND		1.0	0.28	ug/L		09/23/25 22:00	09/24/25 12:00	1
Silver	ND		0.50	0.10	ug/L		09/23/25 22:00	09/24/25 12:00	1
Sodium	39000		200	90	ug/L		09/23/25 22:00	09/24/25 12:00	1
Thallium	ND		0.50	0.13	ug/L		09/23/25 22:00	09/24/25 12:00	1
Tin	ND		2.0	0.60	ug/L		09/23/25 22:00	09/24/25 21:03	1
Vanadium	ND		4.0	0.79	ug/L		09/23/25 22:00	09/24/25 12:00	1
Zinc	250		10	4.0	ug/L		09/23/25 22:00	09/24/25 12:00	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 19:36	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	170		0.51	0.19	mg/L			09/16/25 11:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	9.8	J	10	5.0	mg/L			09/22/25 08:20	1
Turbidity (EPA 180.1)	1.1		0.85	0.05	NTU			09/12/25 13:21	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/13/25 09:22	1
Specific Conductance (SW846 EP/ 9050A)	800		1.0	1.0	umhos/cm			09/12/25 18:13	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	ND		5.0	5.0	mg/L			09/16/25 10:41	1
Total Dissolved Solids (SM 2540C)	410		10	10	mg/L			09/16/25 12:05	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-19A

Lab Sample ID: 180-195677-3

Date Collected: 09/11/25 10:45

Matrix: Water

Date Received: 09/12/25 09:15

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	230		5.0	3.6	mg/L			09/17/25 16:49	5
Nitrate as N	ND		0.10	0.023	mg/L			09/12/25 22:24	1
Sulfate	65		1.0	0.76	mg/L			09/12/25 22:24	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/23/25 22:00	09/24/25 12:04	1
Arsenic	ND		2.0	0.68	ug/L		09/23/25 22:00	09/24/25 12:04	1
Barium	77		2.0	0.75	ug/L		09/23/25 22:00	09/24/25 12:04	1
Beryllium	1.1		0.50	0.12	ug/L		09/23/25 22:00	09/24/25 12:04	1
Cadmium	38		0.50	0.15	ug/L		09/23/25 22:00	09/24/25 21:07	1
Calcium	32000		120	50	ug/L		09/23/25 22:00	09/24/25 12:04	1
Chromium	ND		2.0	0.55	ug/L		09/23/25 22:00	09/24/25 12:04	1
Cobalt	7.0		0.50	0.16	ug/L		09/23/25 22:00	09/24/25 12:04	1
Copper	ND		1.0	0.85	ug/L		09/23/25 22:00	09/24/25 12:04	1
Iron	6100		50	20	ug/L		09/23/25 22:00	09/24/25 12:04	1
Lead	0.23 J		0.50	0.12	ug/L		09/23/25 22:00	09/24/25 12:04	1
Magnesium	12000		50	16	ug/L		09/23/25 22:00	09/24/25 12:04	1
Manganese	120		2.0	0.95	ug/L		09/23/25 22:00	09/24/25 12:04	1
Nickel	44		1.0	0.40	ug/L		09/23/25 22:00	09/24/25 12:04	1
Potassium	8200		200	65	ug/L		09/23/25 22:00	09/24/25 12:04	1
Selenium	ND		1.0	0.28	ug/L		09/23/25 22:00	09/24/25 12:04	1
Silver	ND		0.50	0.10	ug/L		09/23/25 22:00	09/24/25 12:04	1
Sodium	85000		200	90	ug/L		09/23/25 22:00	09/24/25 12:04	1
Thallium	ND		0.50	0.13	ug/L		09/23/25 22:00	09/24/25 12:04	1
Tin	ND		2.0	0.60	ug/L		09/23/25 22:00	09/24/25 21:07	1
Vanadium	ND		4.0	0.79	ug/L		09/23/25 22:00	09/24/25 12:04	1
Zinc	200		10	4.0	ug/L		09/23/25 22:00	09/24/25 12:04	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	F1 F2	0.20	0.087	ug/L		09/24/25 13:45	09/24/25 19:28	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	130		0.51	0.19	mg/L			09/16/25 11:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	11		10	5.0	mg/L			09/22/25 08:20	1
Turbidity (EPA 180.1)	1.0		0.85	0.05	NTU			09/12/25 13:22	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/13/25 09:58	1
Specific Conductance (SW846 EP/ 9050A)	900		1.0	1.0	umhos/cm			09/12/25 18:14	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	21		5.0	5.0	mg/L			09/16/25 10:45	1
Total Dissolved Solids (SM 2540C)	470		10	10	mg/L			09/16/25 12:05	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-05A

Lab Sample ID: 180-195677-4

Date Collected: 09/11/25 10:30

Matrix: Water

Date Received: 09/12/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/22/25 03:44	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/22/25 03:44	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/22/25 03:44	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/22/25 03:44	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/22/25 03:44	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/22/25 03:44	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/22/25 03:44	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/22/25 03:44	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/22/25 03:44	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/22/25 03:44	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/22/25 03:44	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/22/25 03:44	1
2-Hexanone	ND		5.0	2.0	ug/L			09/22/25 03:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/22/25 03:44	1
Acetone	ND		5.0	1.5	ug/L			09/22/25 03:44	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/22/25 03:44	1
Benzene	ND		0.50	0.10	ug/L			09/22/25 03:44	1
Bromoform	ND		1.0	0.30	ug/L			09/22/25 03:44	1
Bromomethane	ND		0.50	0.10	ug/L			09/22/25 03:44	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/22/25 03:44	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/22/25 03:44	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/22/25 03:44	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/22/25 03:44	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/22/25 03:44	1
Chloroethane	ND		0.50	0.10	ug/L			09/22/25 03:44	1
Chloroform	ND		0.50	0.090	ug/L			09/22/25 03:44	1
Chloromethane	ND		0.50	0.10	ug/L			09/22/25 03:44	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/22/25 03:44	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/22/25 03:44	1
Dibromomethane	ND		0.50	0.080	ug/L			09/22/25 03:44	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/22/25 03:44	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/22/25 03:44	1
Iodomethane	ND		0.50	0.080	ug/L			09/22/25 03:44	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/22/25 03:44	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/22/25 03:44	1
Styrene	ND		0.50	0.070	ug/L			09/22/25 03:44	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/22/25 03:44	1
Toluene	ND		0.50	0.080	ug/L			09/22/25 03:44	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/22/25 03:44	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/22/25 03:44	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/22/25 03:44	1
Trichloroethene	ND		0.50	0.080	ug/L			09/22/25 03:44	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/22/25 03:44	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/22/25 03:44	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/22/25 03:44	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/22/25 03:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		09/22/25 03:44	1
4-Bromofluorobenzene (Surr)	95		80 - 120		09/22/25 03:44	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-05A

Date Collected: 09/11/25 10:30

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195677-4

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		80 - 120		09/22/25 03:44	1
Toluene-d8 (Surr)	97		80 - 120		09/22/25 03:44	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/19/25 00:11	09/19/25 19:46	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/19/25 00:11	09/19/25 19:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	107		46 - 136	09/19/25 00:11	09/19/25 19:46	1
1,1,2,2-Tetrachloroethane	102		46 - 136	09/19/25 00:11	09/19/25 19:46	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31		1.0	0.71	mg/L			09/12/25 22:38	1
Nitrate as N	ND		0.10	0.023	mg/L			09/12/25 22:38	1
Sulfate	430		5.0	3.8	mg/L			09/17/25 17:03	5

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/23/25 22:00	09/24/25 11:49	1
Arsenic	ND		2.0	0.68	ug/L		09/23/25 22:00	09/24/25 11:49	1
Barium	15		2.0	0.75	ug/L		09/23/25 22:00	09/24/25 11:49	1
Beryllium	ND		0.50	0.12	ug/L		09/23/25 22:00	09/24/25 11:49	1
Cadmium	2.5		0.50	0.15	ug/L		09/23/25 22:00	09/24/25 20:58	1
Calcium	100000		120	50	ug/L		09/23/25 22:00	09/24/25 11:49	1
Chromium	ND		2.0	0.55	ug/L		09/23/25 22:00	09/24/25 11:49	1
Cobalt	1.3		0.50	0.16	ug/L		09/23/25 22:00	09/24/25 11:49	1
Copper	ND		1.0	0.85	ug/L		09/23/25 22:00	09/24/25 11:49	1
Iron	40 J		50	20	ug/L		09/23/25 22:00	09/24/25 11:49	1
Lead	ND		0.50	0.12	ug/L		09/23/25 22:00	09/24/25 11:49	1
Magnesium	19000		50	16	ug/L		09/23/25 22:00	09/24/25 11:49	1
Manganese	190		2.0	0.95	ug/L		09/23/25 22:00	09/24/25 11:49	1
Nickel	5.3		1.0	0.40	ug/L		09/23/25 22:00	09/24/25 11:49	1
Potassium	8400		200	65	ug/L		09/23/25 22:00	09/24/25 11:49	1
Selenium	ND		1.0	0.28	ug/L		09/23/25 22:00	09/24/25 11:49	1
Silver	ND		0.50	0.10	ug/L		09/23/25 22:00	09/24/25 11:49	1
Sodium	32000		200	90	ug/L		09/23/25 22:00	09/24/25 11:49	1
Thallium	0.16 J		0.50	0.13	ug/L		09/23/25 22:00	09/24/25 11:49	1
Tin	ND		2.0	0.60	ug/L		09/23/25 22:00	09/24/25 20:58	1
Vanadium	ND		4.0	0.79	ug/L		09/23/25 22:00	09/24/25 11:49	1
Zinc	9.3 J		10	4.0	ug/L		09/23/25 22:00	09/24/25 11:49	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 19:42	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	330		0.51	0.19	mg/L			09/16/25 11:40	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-05A

Lab Sample ID: 180-195677-4

Date Collected: 09/11/25 10:30

Matrix: Water

Date Received: 09/12/25 09:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	12		10	5.0	mg/L			09/22/25 08:20	1
Turbidity (EPA 180.1)	0.45	J	0.85	0.05	NTU			09/12/25 13:23	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/13/25 09:14	1
Specific Conductance (SW846 EPA 9050A)	940		1.0	1.0	umhos/cm			09/12/25 18:15	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	26		5.0	5.0	mg/L			09/16/25 10:49	1
Total Dissolved Solids (SM 2540C)	680		10	10	mg/L			09/16/25 12:05	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-18A

Lab Sample ID: 180-195677-5

Date Collected: 09/11/25 11:55

Matrix: Water

Date Received: 09/12/25 09:15

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		1.0	0.71	mg/L			09/12/25 22:53	1
Nitrate as N	ND		0.10	0.023	mg/L			09/12/25 22:53	1
Sulfate	530		5.0	3.8	mg/L			09/12/25 23:07	5

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/23/25 22:00	09/24/25 11:39	1
Arsenic	1.8	J	2.0	0.68	ug/L		09/23/25 22:00	09/24/25 11:39	1
Barium	15		2.0	0.75	ug/L		09/23/25 22:00	09/24/25 11:39	1
Beryllium	2.8		0.50	0.12	ug/L		09/23/25 22:00	09/24/25 11:39	1
Cadmium	8.0		0.50	0.15	ug/L		09/23/25 22:00	09/24/25 20:47	1
Calcium	69000		120	50	ug/L		09/23/25 22:00	09/24/25 11:39	1
Chromium	ND		2.0	0.55	ug/L		09/23/25 22:00	09/24/25 11:39	1
Cobalt	13		0.50	0.16	ug/L		09/23/25 22:00	09/24/25 11:39	1
Copper	ND		1.0	0.85	ug/L		09/23/25 22:00	09/24/25 11:39	1
Iron	1900		50	20	ug/L		09/23/25 22:00	09/24/25 11:39	1
Lead	0.19	J	0.50	0.12	ug/L		09/23/25 22:00	09/24/25 11:39	1
Magnesium	30000		50	16	ug/L		09/23/25 22:00	09/24/25 11:39	1
Manganese	180		2.0	0.95	ug/L		09/23/25 22:00	09/24/25 11:39	1
Nickel	52		1.0	0.40	ug/L		09/23/25 22:00	09/24/25 11:39	1
Potassium	4200		200	65	ug/L		09/23/25 22:00	09/24/25 11:39	1
Selenium	ND		1.0	0.28	ug/L		09/23/25 22:00	09/24/25 11:39	1
Silver	ND		0.50	0.10	ug/L		09/23/25 22:00	09/24/25 11:39	1
Sodium	130000		200	90	ug/L		09/23/25 22:00	09/24/25 11:39	1
Thallium	ND		0.50	0.13	ug/L		09/23/25 22:00	09/24/25 11:39	1
Tin	ND		2.0	0.60	ug/L		09/23/25 22:00	09/24/25 20:47	1
Vanadium	ND		4.0	0.79	ug/L		09/23/25 22:00	09/24/25 11:39	1
Zinc	180		10	4.0	ug/L		09/23/25 22:00	09/24/25 11:39	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 20:12	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	300		0.51	0.19	mg/L			09/16/25 11:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	8.8	J	10	5.0	mg/L			09/22/25 08:20	1
Turbidity (EPA 180.1)	0.95		0.85	0.05	NTU			09/12/25 13:24	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/13/25 09:54	1
Specific Conductance (SW846 EP/ 9050A)	1400		1.0	1.0	umhos/cm			09/12/25 18:16	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	ND		5.0	5.0	mg/L			09/16/25 10:53	1
Total Dissolved Solids (SM 2540C)	940		10	10	mg/L			09/16/25 12:05	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-14

Lab Sample ID: 180-195677-6

Date Collected: 09/11/25 12:15

Matrix: Water

Date Received: 09/12/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/22/25 04:05	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/22/25 04:05	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/22/25 04:05	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/22/25 04:05	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/22/25 04:05	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/22/25 04:05	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/22/25 04:05	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/22/25 04:05	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/22/25 04:05	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/22/25 04:05	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/22/25 04:05	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/22/25 04:05	1
2-Hexanone	ND		5.0	2.0	ug/L			09/22/25 04:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/22/25 04:05	1
Acetone	ND		5.0	1.5	ug/L			09/22/25 04:05	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/22/25 04:05	1
Benzene	ND		0.50	0.10	ug/L			09/22/25 04:05	1
Bromoform	ND		1.0	0.30	ug/L			09/22/25 04:05	1
Bromomethane	ND		0.50	0.10	ug/L			09/22/25 04:05	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/22/25 04:05	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/22/25 04:05	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/22/25 04:05	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/22/25 04:05	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/22/25 04:05	1
Chloroethane	ND		0.50	0.10	ug/L			09/22/25 04:05	1
Chloroform	ND		0.50	0.090	ug/L			09/22/25 04:05	1
Chloromethane	ND		0.50	0.10	ug/L			09/22/25 04:05	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/22/25 04:05	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/22/25 04:05	1
Dibromomethane	ND		0.50	0.080	ug/L			09/22/25 04:05	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/22/25 04:05	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/22/25 04:05	1
Iodomethane	ND		0.50	0.080	ug/L			09/22/25 04:05	1
Methyl tert-butyl ether	0.12	J	0.50	0.080	ug/L			09/22/25 04:05	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/22/25 04:05	1
Styrene	ND		0.50	0.070	ug/L			09/22/25 04:05	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/22/25 04:05	1
Toluene	ND		0.50	0.080	ug/L			09/22/25 04:05	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/22/25 04:05	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/22/25 04:05	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/22/25 04:05	1
Trichloroethene	ND		0.50	0.080	ug/L			09/22/25 04:05	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/22/25 04:05	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/22/25 04:05	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/22/25 04:05	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/22/25 04:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		09/22/25 04:05	1
4-Bromofluorobenzene (Surr)	96		80 - 120		09/22/25 04:05	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-14

Lab Sample ID: 180-195677-6

Date Collected: 09/11/25 12:15

Matrix: Water

Date Received: 09/12/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		80 - 120		09/22/25 04:05	1
Toluene-d8 (Surr)	98		80 - 120		09/22/25 04:05	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/19/25 00:11	09/19/25 20:03	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/19/25 00:11	09/19/25 20:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	103		46 - 136	09/19/25 00:11	09/19/25 20:03	1
1,1,2,2-Tetrachloroethane	105		46 - 136	09/19/25 00:11	09/19/25 20:03	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	32		1.0	0.71	mg/L			09/12/25 23:50	1
Nitrate as N	0.043	J	0.10	0.023	mg/L			09/12/25 23:50	1
Sulfate	99		1.0	0.76	mg/L			09/12/25 23:50	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/23/25 22:00	09/24/25 12:02	1
Arsenic	ND		2.0	0.68	ug/L		09/23/25 22:00	09/24/25 12:02	1
Barium	370		2.0	0.75	ug/L		09/23/25 22:00	09/24/25 12:02	1
Beryllium	ND		0.50	0.12	ug/L		09/23/25 22:00	09/24/25 12:02	1
Cadmium	ND		0.50	0.15	ug/L		09/23/25 22:00	09/24/25 21:05	1
Calcium	100000		120	50	ug/L		09/23/25 22:00	09/24/25 12:02	1
Chromium	ND		2.0	0.55	ug/L		09/23/25 22:00	09/24/25 12:02	1
Cobalt	ND		0.50	0.16	ug/L		09/23/25 22:00	09/24/25 12:02	1
Copper	ND		1.0	0.85	ug/L		09/23/25 22:00	09/24/25 12:02	1
Iron	10000		50	20	ug/L		09/23/25 22:00	09/24/25 12:02	1
Lead	ND		0.50	0.12	ug/L		09/23/25 22:00	09/24/25 12:02	1
Magnesium	2500		50	16	ug/L		09/23/25 22:00	09/24/25 12:02	1
Manganese	87		2.0	0.95	ug/L		09/23/25 22:00	09/24/25 12:02	1
Nickel	0.54	J	1.0	0.40	ug/L		09/23/25 22:00	09/24/25 12:02	1
Potassium	4700		200	65	ug/L		09/23/25 22:00	09/24/25 12:02	1
Selenium	ND		1.0	0.28	ug/L		09/23/25 22:00	09/24/25 12:02	1
Silver	ND		0.50	0.10	ug/L		09/23/25 22:00	09/24/25 12:02	1
Sodium	5900		200	90	ug/L		09/23/25 22:00	09/24/25 12:02	1
Thallium	ND		0.50	0.13	ug/L		09/23/25 22:00	09/24/25 12:02	1
Tin	ND		2.0	0.60	ug/L		09/23/25 22:00	09/24/25 21:05	1
Vanadium	ND		4.0	0.79	ug/L		09/23/25 22:00	09/24/25 12:02	1
Zinc	ND		10	4.0	ug/L		09/23/25 22:00	09/24/25 12:02	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 20:06	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	260		0.51	0.19	mg/L			09/16/25 11:40	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-14

Lab Sample ID: 180-195677-6

Date Collected: 09/11/25 12:15

Matrix: Water

Date Received: 09/12/25 09:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	6.5	J	10	5.0	mg/L			09/22/25 08:20	1
Turbidity (EPA 180.1)	95		4.2	0.25	NTU			09/12/25 13:27	5
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/13/25 09:28	1
Specific Conductance (SW846 EPA 9050A)	650		1.0	1.0	umhos/cm			09/12/25 18:17	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	200		5.0	5.0	mg/L			09/16/25 10:57	1
Total Dissolved Solids (SM 2540C)	440		10	10	mg/L			09/16/25 12:05	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-20

Lab Sample ID: 180-195677-7

Date Collected: 09/11/25 13:25

Matrix: Water

Date Received: 09/12/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/22/25 04:25	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/22/25 04:25	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/22/25 04:25	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/22/25 04:25	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/22/25 04:25	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/22/25 04:25	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/22/25 04:25	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/22/25 04:25	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/22/25 04:25	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/22/25 04:25	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/22/25 04:25	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/22/25 04:25	1
2-Hexanone	ND		5.0	2.0	ug/L			09/22/25 04:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/22/25 04:25	1
Acetone	ND		5.0	1.5	ug/L			09/22/25 04:25	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/22/25 04:25	1
Benzene	ND		0.50	0.10	ug/L			09/22/25 04:25	1
Bromoform	ND		1.0	0.30	ug/L			09/22/25 04:25	1
Bromomethane	ND		0.50	0.10	ug/L			09/22/25 04:25	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/22/25 04:25	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/22/25 04:25	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/22/25 04:25	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/22/25 04:25	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/22/25 04:25	1
Chloroethane	ND		0.50	0.10	ug/L			09/22/25 04:25	1
Chloroform	ND		0.50	0.090	ug/L			09/22/25 04:25	1
Chloromethane	ND		0.50	0.10	ug/L			09/22/25 04:25	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/22/25 04:25	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/22/25 04:25	1
Dibromomethane	ND		0.50	0.080	ug/L			09/22/25 04:25	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/22/25 04:25	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/22/25 04:25	1
Iodomethane	ND		0.50	0.080	ug/L			09/22/25 04:25	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/22/25 04:25	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/22/25 04:25	1
Styrene	ND		0.50	0.070	ug/L			09/22/25 04:25	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/22/25 04:25	1
Toluene	ND		0.50	0.080	ug/L			09/22/25 04:25	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/22/25 04:25	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/22/25 04:25	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/22/25 04:25	1
Trichloroethene	ND		0.50	0.080	ug/L			09/22/25 04:25	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/22/25 04:25	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/22/25 04:25	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/22/25 04:25	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/22/25 04:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		09/22/25 04:25	1
4-Bromofluorobenzene (Surr)	96		80 - 120		09/22/25 04:25	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-20

Date Collected: 09/11/25 13:25

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195677-7

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	100		80 - 120		09/22/25 04:25	1
Toluene-d8 (Surr)	99		80 - 120		09/22/25 04:25	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/19/25 00:11	09/19/25 20:55	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/19/25 00:11	09/19/25 20:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	105		46 - 136	09/19/25 00:11	09/19/25 20:55	1
1,1,2,2-Tetrachloroethane	112		46 - 136	09/19/25 00:11	09/19/25 20:55	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20		1.0	0.71	mg/L			09/13/25 00:05	1
Nitrate as N	ND		0.10	0.023	mg/L			09/13/25 00:05	1
Sulfate	1600		10	7.6	mg/L			09/13/25 00:20	10

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/23/25 22:00	09/24/25 11:58	1
Arsenic	2.6		2.0	0.68	ug/L		09/23/25 22:00	09/24/25 11:58	1
Barium	17		2.0	0.75	ug/L		09/23/25 22:00	09/24/25 11:58	1
Beryllium	1.1		0.50	0.12	ug/L		09/23/25 22:00	09/24/25 11:58	1
Cadmium	0.57		0.50	0.15	ug/L		09/23/25 22:00	09/24/25 21:00	1
Calcium	390000		120	50	ug/L		09/23/25 22:00	09/24/25 11:58	1
Chromium	ND		2.0	0.55	ug/L		09/23/25 22:00	09/24/25 11:58	1
Cobalt	16		0.50	0.16	ug/L		09/23/25 22:00	09/24/25 11:58	1
Copper	ND		1.0	0.85	ug/L		09/23/25 22:00	09/24/25 11:58	1
Iron	150000		50	20	ug/L		09/23/25 22:00	09/24/25 11:58	1
Lead	0.19 J		0.50	0.12	ug/L		09/23/25 22:00	09/24/25 11:58	1
Magnesium	48000		50	16	ug/L		09/23/25 22:00	09/24/25 11:58	1
Manganese	5000		2.0	0.95	ug/L		09/23/25 22:00	09/24/25 11:58	1
Nickel	26		1.0	0.40	ug/L		09/23/25 22:00	09/24/25 11:58	1
Potassium	11000		200	65	ug/L		09/23/25 22:00	09/24/25 11:58	1
Selenium	0.37 J		1.0	0.28	ug/L		09/23/25 22:00	09/24/25 11:58	1
Silver	ND		0.50	0.10	ug/L		09/23/25 22:00	09/24/25 11:58	1
Sodium	12000		200	90	ug/L		09/23/25 22:00	09/24/25 11:58	1
Thallium	ND		0.50	0.13	ug/L		09/23/25 22:00	09/24/25 11:58	1
Tin	ND		2.0	0.60	ug/L		09/23/25 22:00	09/24/25 21:00	1
Vanadium	ND		4.0	0.79	ug/L		09/23/25 22:00	09/24/25 11:58	1
Zinc	330		10	4.0	ug/L		09/23/25 22:00	09/24/25 11:58	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 19:44	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	1200		0.51	0.19	mg/L			09/16/25 11:40	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: M-20

Lab Sample ID: 180-195677-7

Date Collected: 09/11/25 13:25

Matrix: Water

Date Received: 09/12/25 09:15

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	37		10	5.0	mg/L			09/22/25 08:20	1
Turbidity (EPA 180.1)	11		0.85	0.05	NTU			09/12/25 13:28	1
Ammonia (EPA 350.1)	ND		2.5	2.2	mg/L			09/13/25 11:02	25
Specific Conductance (SW846 EPA 9050A)	2500		1.0	1.0	umhos/cm			09/12/25 18:18	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	160		5.0	5.0	mg/L			09/16/25 11:01	1
Total Dissolved Solids (SM 2540C)	2500		20	20	mg/L			09/16/25 12:05	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: TRIP BLANK-04

Lab Sample ID: 180-195677-8

Date Collected: 09/11/25 14:00

Matrix: Water

Date Received: 09/12/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/21/25 23:53	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/21/25 23:53	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/21/25 23:53	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/21/25 23:53	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/21/25 23:53	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/21/25 23:53	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/21/25 23:53	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/21/25 23:53	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/21/25 23:53	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/21/25 23:53	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/21/25 23:53	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/21/25 23:53	1
2-Hexanone	ND		5.0	2.0	ug/L			09/21/25 23:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/21/25 23:53	1
Acetone	ND		5.0	1.5	ug/L			09/21/25 23:53	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/21/25 23:53	1
Benzene	ND		0.50	0.10	ug/L			09/21/25 23:53	1
Bromoform	ND		1.0	0.30	ug/L			09/21/25 23:53	1
Bromomethane	ND		0.50	0.10	ug/L			09/21/25 23:53	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/21/25 23:53	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/21/25 23:53	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/21/25 23:53	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/21/25 23:53	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/21/25 23:53	1
Chloroethane	ND		0.50	0.10	ug/L			09/21/25 23:53	1
Chloroform	ND		0.50	0.090	ug/L			09/21/25 23:53	1
Chloromethane	ND		0.50	0.10	ug/L			09/21/25 23:53	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/21/25 23:53	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/21/25 23:53	1
Dibromomethane	ND		0.50	0.080	ug/L			09/21/25 23:53	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/21/25 23:53	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/21/25 23:53	1
Iodomethane	ND		0.50	0.080	ug/L			09/21/25 23:53	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/21/25 23:53	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/21/25 23:53	1
Styrene	ND		0.50	0.070	ug/L			09/21/25 23:53	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/21/25 23:53	1
Toluene	ND		0.50	0.080	ug/L			09/21/25 23:53	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/21/25 23:53	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/21/25 23:53	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/21/25 23:53	1
Trichloroethene	ND		0.50	0.080	ug/L			09/21/25 23:53	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/21/25 23:53	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/21/25 23:53	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/21/25 23:53	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/21/25 23:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		09/21/25 23:53	1
4-Bromofluorobenzene (Surr)	94		80 - 120		09/21/25 23:53	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Client Sample ID: TRIP BLANK-04

Lab Sample ID: 180-195677-8

Date Collected: 09/11/25 14:00

Matrix: Water

Date Received: 09/12/25 09:15

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		80 - 120		09/21/25 23:53	1
Toluene-d8 (Surr)	98		80 - 120		09/21/25 23:53	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0095	ug/L		09/19/25 00:11	09/19/25 21:12	1
1,2-Dibromoethane	ND		0.019	0.0095	ug/L		09/19/25 00:11	09/19/25 21:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	107		46 - 136	09/19/25 00:11	09/19/25 21:12	1
1,1,2,2-Tetrachloroethane	105		46 - 136	09/19/25 00:11	09/19/25 21:12	1

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-702434/10

Matrix: Water

Analysis Batch: 702434

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/21/25 22:03	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/21/25 22:03	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/21/25 22:03	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/21/25 22:03	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/21/25 22:03	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/21/25 22:03	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/21/25 22:03	1
2-Hexanone	ND		5.0	2.0	ug/L			09/21/25 22:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/21/25 22:03	1
Acetone	ND		5.0	1.5	ug/L			09/21/25 22:03	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/21/25 22:03	1
Benzene	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Bromoform	ND		1.0	0.30	ug/L			09/21/25 22:03	1
Bromomethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/21/25 22:03	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/21/25 22:03	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Chloroethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Chloroform	ND		0.50	0.090	ug/L			09/21/25 22:03	1
Chloromethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/21/25 22:03	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Dibromomethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Iodomethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/21/25 22:03	1
Styrene	ND		0.50	0.070	ug/L			09/21/25 22:03	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/21/25 22:03	1
Toluene	ND		0.50	0.080	ug/L			09/21/25 22:03	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/21/25 22:03	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/21/25 22:03	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/21/25 22:03	1
Trichloroethene	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/21/25 22:03	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/21/25 22:03	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

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

Lab Sample ID: MB 410-702434/10

Matrix: Water

Analysis Batch: 702434

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		09/21/25 22:03	1
4-Bromofluorobenzene (Surr)	97		80 - 120		09/21/25 22:03	1
Dibromofluoromethane (Surr)	100		80 - 120		09/21/25 22:03	1
Toluene-d8 (Surr)	97		80 - 120		09/21/25 22:03	1

Lab Sample ID: LCS 410-702434/5

Matrix: Water

Analysis Batch: 702434

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	5.34		ug/L		107	80 - 122
1,1,1-Trichloroethane	5.00	5.32		ug/L		106	78 - 126
1,1,2,2-Tetrachloroethane	5.00	5.24		ug/L		105	75 - 123
1,1,2-Trichloroethane	5.00	5.15		ug/L		103	80 - 120
1,1-Dichloroethane	5.00	5.67		ug/L		113	74 - 120
1,1-Dichloroethene	5.00	5.84		ug/L		117	80 - 131
1,2,3-Trichloropropane	5.00	5.38		ug/L		108	80 - 125
1,2-Dichlorobenzene	5.00	5.29		ug/L		106	80 - 120
1,2-Dichloroethane	5.00	5.14		ug/L		103	69 - 122
1,2-Dichloropropane	5.00	5.50		ug/L		110	80 - 120
1,4-Dichlorobenzene	5.00	5.15		ug/L		103	80 - 120
2-Butanone (MEK)	62.5	63.7		ug/L		102	59 - 141
2-Hexanone	62.5	67.7		ug/L		108	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	64.2		ug/L		103	55 - 140
Acetone	62.5	56.8		ug/L		91	60 - 146
Acrylonitrile	25.0	26.0		ug/L		104	64 - 139
Benzene	5.00	5.37		ug/L		107	80 - 120
Bromoform	5.00	5.42		ug/L		108	75 - 126
Bromomethane	5.00	4.25		ug/L		85	63 - 120
Carbon disulfide	5.00	5.41		ug/L		108	67 - 130
Carbon tetrachloride	5.00	5.40		ug/L		108	64 - 141
Chlorobenzene	5.00	5.24		ug/L		105	80 - 120
Chlorobromomethane	5.00	5.60		ug/L		112	80 - 133
Chlorodibromomethane	5.00	5.19		ug/L		104	80 - 123
Chloroethane	5.00	4.55		ug/L		91	63 - 120
Chloroform	5.00	5.42		ug/L		108	80 - 120
Chloromethane	5.00	4.01		ug/L		80	56 - 124
cis-1,2-Dichloroethene	5.00	5.70		ug/L		114	80 - 122
cis-1,3-Dichloropropene	5.00	5.12		ug/L		102	67 - 121
Dibromomethane	5.00	5.72		ug/L		114	80 - 122
Dichlorobromomethane	5.00	5.38		ug/L		108	80 - 123
Ethylbenzene	5.00	5.21		ug/L		104	80 - 120
Iodomethane	5.00	5.10		ug/L		102	77 - 120
Methyl tert-butyl ether	5.00	5.17		ug/L		103	69 - 120
Methylene Chloride	5.00	5.63		ug/L		113	80 - 120
Styrene	5.00	5.30		ug/L		106	80 - 120
Tetrachloroethene	5.00	4.93		ug/L		99	80 - 120
Toluene	5.00	5.26		ug/L		105	80 - 120

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

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

Lab Sample ID: LCS 410-702434/5

Matrix: Water

Analysis Batch: 702434

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,2-Dichloroethene	5.00	5.77		ug/L		115	80 - 122
trans-1,3-Dichloropropene	5.00	5.27		ug/L		105	61 - 129
trans-1,4-Dichloro-2-butene	25.0	23.1		ug/L		93	13 - 144
Trichloroethene	5.00	5.19		ug/L		104	80 - 120
Trichlorofluoromethane	5.00	3.67		ug/L		73	53 - 136
Vinyl chloride	5.00	4.47		ug/L		89	60 - 125
Xylenes, Total	15.0	15.8		ug/L		105	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCS 410-702434/7

Matrix: Water

Analysis Batch: 702434

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	12.5	15.1		ug/L		121	64 - 145

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: MB 410-703590/10

Matrix: Water

Analysis Batch: 703590

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/23/25 22:42	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/23/25 22:42	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/23/25 22:42	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/23/25 22:42	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/23/25 22:42	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/23/25 22:42	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/23/25 22:42	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/23/25 22:42	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/23/25 22:42	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/23/25 22:42	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/23/25 22:42	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/23/25 22:42	1
2-Hexanone	ND		5.0	2.0	ug/L			09/23/25 22:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/23/25 22:42	1
Acetone	ND		5.0	1.5	ug/L			09/23/25 22:42	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/23/25 22:42	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

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

Lab Sample ID: MB 410-703590/10

Matrix: Water

Analysis Batch: 703590

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.10	ug/L			09/23/25 22:42	1
Bromoform	ND		1.0	0.30	ug/L			09/23/25 22:42	1
Bromomethane	ND		0.50	0.10	ug/L			09/23/25 22:42	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/23/25 22:42	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/23/25 22:42	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/23/25 22:42	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/23/25 22:42	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/23/25 22:42	1
Chloroethane	ND		0.50	0.10	ug/L			09/23/25 22:42	1
Chloroform	ND		0.50	0.090	ug/L			09/23/25 22:42	1
Chloromethane	ND		0.50	0.10	ug/L			09/23/25 22:42	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/23/25 22:42	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/23/25 22:42	1
Dibromomethane	ND		0.50	0.080	ug/L			09/23/25 22:42	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/23/25 22:42	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/23/25 22:42	1
Iodomethane	ND		0.50	0.080	ug/L			09/23/25 22:42	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/23/25 22:42	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/23/25 22:42	1
Styrene	ND		0.50	0.070	ug/L			09/23/25 22:42	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/23/25 22:42	1
Toluene	ND		0.50	0.080	ug/L			09/23/25 22:42	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/23/25 22:42	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/23/25 22:42	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/23/25 22:42	1
Trichloroethene	ND		0.50	0.080	ug/L			09/23/25 22:42	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/23/25 22:42	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/23/25 22:42	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/23/25 22:42	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/23/25 22:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		09/23/25 22:42	1
4-Bromofluorobenzene (Surr)	99		80 - 120		09/23/25 22:42	1
Dibromofluoromethane (Surr)	102		80 - 120		09/23/25 22:42	1
Toluene-d8 (Surr)	100		80 - 120		09/23/25 22:42	1

Lab Sample ID: LCS 410-703590/5

Matrix: Water

Analysis Batch: 703590

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	4.73		ug/L		95	80 - 122
1,1,1-Trichloroethane	5.00	4.84		ug/L		97	78 - 126
1,1,2,2-Tetrachloroethane	5.00	4.63		ug/L		93	75 - 123
1,1,2-Trichloroethane	5.00	4.77		ug/L		95	80 - 120
1,1-Dichloroethane	5.00	4.83		ug/L		97	74 - 120
1,1-Dichloroethene	5.00	5.21		ug/L		104	80 - 131

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

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

Lab Sample ID: LCS 410-703590/5

Matrix: Water

Analysis Batch: 703590

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	5.00	4.51		ug/L		90	80 - 125
1,2-Dichlorobenzene	5.00	4.35		ug/L		87	80 - 120
1,2-Dichloroethane	5.00	4.58		ug/L		92	69 - 122
1,2-Dichloropropane	5.00	4.68		ug/L		94	80 - 120
1,4-Dichlorobenzene	5.00	4.34		ug/L		87	80 - 120
2-Butanone (MEK)	62.5	56.2		ug/L		90	59 - 141
2-Hexanone	62.5	60.9		ug/L		97	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	59.4		ug/L		95	55 - 140
Acetone	62.5	53.8		ug/L		86	60 - 146
Acrylonitrile	25.0	23.5		ug/L		94	64 - 139
Benzene	5.00	4.57		ug/L		91	80 - 120
Bromoform	5.00	4.97		ug/L		99	75 - 126
Bromomethane	5.00	4.70		ug/L		94	63 - 120
Carbon disulfide	5.00	4.93		ug/L		99	67 - 130
Carbon tetrachloride	5.00	4.95		ug/L		99	64 - 141
Chlorobenzene	5.00	4.55		ug/L		91	80 - 120
Chlorobromomethane	5.00	4.82		ug/L		96	80 - 133
Chlorodibromomethane	5.00	4.80		ug/L		96	80 - 123
Chloroethane	5.00	4.87		ug/L		97	63 - 120
Chloroform	5.00	4.91		ug/L		98	80 - 120
Chloromethane	5.00	4.23		ug/L		85	56 - 124
cis-1,2-Dichloroethene	5.00	4.59		ug/L		92	80 - 122
cis-1,3-Dichloropropene	5.00	4.68		ug/L		94	67 - 121
Dibromomethane	5.00	4.70		ug/L		94	80 - 122
Dichlorobromomethane	5.00	4.63		ug/L		93	80 - 123
Ethylbenzene	5.00	4.51		ug/L		90	80 - 120
Iodomethane	5.00	4.52		ug/L		90	77 - 120
Methyl tert-butyl ether	5.00	4.56		ug/L		91	69 - 120
Methylene Chloride	5.00	4.70		ug/L		94	80 - 120
Styrene	5.00	4.73		ug/L		95	80 - 120
Tetrachloroethene	5.00	4.34		ug/L		87	80 - 120
Toluene	5.00	4.40		ug/L		88	80 - 120
trans-1,2-Dichloroethene	5.00	4.51		ug/L		90	80 - 122
trans-1,3-Dichloropropene	5.00	4.64		ug/L		93	61 - 129
trans-1,4-Dichloro-2-butene	25.0	25.0		ug/L		100	13 - 144
Trichloroethene	5.00	4.69		ug/L		94	80 - 120
Trichlorofluoromethane	5.00	4.98		ug/L		100	53 - 136
Vinyl chloride	5.00	4.57		ug/L		91	60 - 125
Xylenes, Total	15.0	13.8		ug/L		92	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	102		80 - 120

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

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

Lab Sample ID: LCS 410-703590/7

Matrix: Water

Analysis Batch: 703590

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	12.5	15.7		ug/L		126	64 - 145
LCS LCS							
Surrogate	%Recovery	Qualifier	Limits				
1,2-Dichloroethane-d4 (Surr)	99		80 - 120				
4-Bromofluorobenzene (Surr)	98		80 - 120				
Dibromofluoromethane (Surr)	102		80 - 120				
Toluene-d8 (Surr)	101		80 - 120				

Lab Sample ID: LCSD 410-703590/6

Matrix: Water

Analysis Batch: 703590

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	4.80		ug/L		96	80 - 122	1	30
1,1,1-Trichloroethane	5.00	4.72		ug/L		94	78 - 126	2	30
1,1,2,2-Tetrachloroethane	5.00	4.66		ug/L		93	75 - 123	1	30
1,1,2-Trichloroethane	5.00	4.79		ug/L		96	80 - 120	0	30
1,1-Dichloroethane	5.00	4.82		ug/L		96	74 - 120	0	30
1,1-Dichloroethene	5.00	5.17		ug/L		103	80 - 131	1	30
1,2,3-Trichloropropane	5.00	4.68		ug/L		94	80 - 125	4	30
1,2-Dichlorobenzene	5.00	4.40		ug/L		88	80 - 120	1	30
1,2-Dichloroethane	5.00	4.70		ug/L		94	69 - 122	2	30
1,2-Dichloropropane	5.00	4.62		ug/L		92	80 - 120	1	30
1,4-Dichlorobenzene	5.00	4.44		ug/L		89	80 - 120	2	30
2-Butanone (MEK)	62.5	59.9		ug/L		96	59 - 141	6	30
2-Hexanone	62.5	65.7		ug/L		105	52 - 140	8	30
4-Methyl-2-pentanone (MIBK)	62.5	63.4		ug/L		101	55 - 140	7	30
Acetone	62.5	55.4		ug/L		89	60 - 146	3	30
Acrylonitrile	25.0	24.2		ug/L		97	64 - 139	3	30
Benzene	5.00	4.52		ug/L		90	80 - 120	1	30
Bromoform	5.00	4.90		ug/L		98	75 - 126	1	30
Bromomethane	5.00	4.59		ug/L		92	63 - 120	2	30
Carbon disulfide	5.00	4.95		ug/L		99	67 - 130	0	30
Carbon tetrachloride	5.00	4.94		ug/L		99	64 - 141	0	30
Chlorobenzene	5.00	4.52		ug/L		90	80 - 120	1	30
Chlorobromomethane	5.00	4.76		ug/L		95	80 - 133	1	30
Chlorodibromomethane	5.00	4.77		ug/L		95	80 - 123	1	30
Chloroethane	5.00	4.74		ug/L		95	63 - 120	3	30
Chloroform	5.00	4.89		ug/L		98	80 - 120	0	30
Chloromethane	5.00	4.21		ug/L		84	56 - 124	1	30
cis-1,2-Dichloroethene	5.00	4.56		ug/L		91	80 - 122	1	30
cis-1,3-Dichloropropene	5.00	4.67		ug/L		93	67 - 121	0	30
Dibromomethane	5.00	4.69		ug/L		94	80 - 122	0	30
Dichlorobromomethane	5.00	4.59		ug/L		92	80 - 123	1	30
Ethylbenzene	5.00	4.52		ug/L		90	80 - 120	0	30
Iodomethane	5.00	4.52		ug/L		90	77 - 120	0	30
Methyl tert-butyl ether	5.00	4.65		ug/L		93	69 - 120	2	30
Methylene Chloride	5.00	4.59		ug/L		92	80 - 120	2	30

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

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

Lab Sample ID: LCSD 410-703590/6

Matrix: Water

Analysis Batch: 703590

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
Styrene	5.00	4.63		ug/L		93	80 - 120	2	30
Tetrachloroethene	5.00	4.31		ug/L		86	80 - 120	1	30
Toluene	5.00	4.38		ug/L		88	80 - 120	0	30
trans-1,2-Dichloroethene	5.00	4.58		ug/L		92	80 - 122	2	30
trans-1,3-Dichloropropene	5.00	4.65		ug/L		93	61 - 129	0	30
trans-1,4-Dichloro-2-butene	25.0	26.9		ug/L		108	13 - 144	7	30
Trichloroethene	5.00	4.69		ug/L		94	80 - 120	0	30
Trichlorofluoromethane	5.00	4.92		ug/L		98	53 - 136	1	30
Vinyl chloride	5.00	4.48		ug/L		90	60 - 125	2	30
Xylenes, Total	15.0	13.8		ug/L		92	80 - 120	0	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		80 - 120
4-Bromofluorobenzene (Surr)	100		80 - 120
Dibromofluoromethane (Surr)	102		80 - 120
Toluene-d8 (Surr)	102		80 - 120

Lab Sample ID: LCSD 410-703590/8

Matrix: Water

Analysis Batch: 703590

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
Vinyl acetate	12.5	16.0		ug/L		128	64 - 145	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	102		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 410-701606/1-A

Matrix: Water

Analysis Batch: 701697

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 701606

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.020	0.010	ug/L		09/19/25 00:11	09/19/25 17:27	1
1,2-Dibromoethane	ND		0.020	0.010	ug/L		09/19/25 00:11	09/19/25 17:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	101		46 - 136	09/19/25 00:11	09/19/25 17:27	1
1,1,2,2-Tetrachloroethane	105		46 - 136	09/19/25 00:11	09/19/25 17:27	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCS 410-701606/2-A

Matrix: Water

Analysis Batch: 701697

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 701606

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	0.129	0.149		ug/L		115	60 - 140
1,2-Dibromoethane	0.129	0.125		ug/L		97	60 - 140
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1,1,2,2-Tetrachloroethane	101		46 - 136				
1,1,2,2-Tetrachloroethane	111		46 - 136				

Lab Sample ID: LCSD 410-701606/3-A

Matrix: Water

Analysis Batch: 701697

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 701606

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.129	0.161		ug/L		125	60 - 140	8	20
1,2-Dibromoethane	0.129	0.115		ug/L		89	60 - 140	9	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1,1,2,2-Tetrachloroethane	119		46 - 136						
1,1,2,2-Tetrachloroethane	120		46 - 136						

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-502863/26

Matrix: Water

Analysis Batch: 502863

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			09/12/25 20:56	1
Nitrate as N	ND		0.10	0.023	mg/L			09/12/25 20:56	1
Sulfate	ND		1.0	0.76	mg/L			09/12/25 20:56	1

Lab Sample ID: LCS 180-502863/27

Matrix: Water

Analysis Batch: 502863

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.5		mg/L		103	90 - 110
Nitrate as N	2.50	2.62		mg/L		105	90 - 110
Sulfate	50.0	51.4		mg/L		103	90 - 110

Lab Sample ID: 180-195677-1 MS

Matrix: Water

Analysis Batch: 502863

Client Sample ID: M-06

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	17		50.0	65.0		mg/L		95	90 - 110
Nitrate as N	0.27		2.50	2.92		mg/L		106	90 - 110
Sulfate	160	F1	50.0	195	F1	mg/L		76	90 - 110

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 180-195677-1 MSD

Matrix: Water

Analysis Batch: 502863

Client Sample ID: M-06

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	17		50.0	66.2		mg/L		97	90 - 110	2	20
Nitrate as N	0.27		2.50	3.01		mg/L		110	90 - 110	3	20
Sulfate	160	F1	50.0	197	F1	mg/L		80	90 - 110	1	20

Lab Sample ID: MB 180-503109/6

Matrix: Water

Analysis Batch: 503109

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			09/17/25 13:20	1
Nitrate as N	ND		0.10	0.023	mg/L			09/17/25 13:20	1
Sulfate	ND		1.0	0.76	mg/L			09/17/25 13:20	1

Lab Sample ID: LCS 180-503109/7

Matrix: Water

Analysis Batch: 503109

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.0		mg/L		100	90 - 110
Nitrate as N	2.50	2.59		mg/L		104	90 - 110
Sulfate	50.0	50.3		mg/L		101	90 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-703640/1-A

Matrix: Water

Analysis Batch: 704081

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 703640

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/23/25 22:00	09/24/25 11:35	1
Arsenic	ND		2.0	0.68	ug/L		09/23/25 22:00	09/24/25 11:35	1
Barium	ND		2.0	0.75	ug/L		09/23/25 22:00	09/24/25 11:35	1
Beryllium	ND		0.50	0.12	ug/L		09/23/25 22:00	09/24/25 11:35	1
Calcium	ND		120	50	ug/L		09/23/25 22:00	09/24/25 11:35	1
Chromium	ND		2.0	0.55	ug/L		09/23/25 22:00	09/24/25 11:35	1
Cobalt	ND		0.50	0.16	ug/L		09/23/25 22:00	09/24/25 11:35	1
Copper	ND		1.0	0.85	ug/L		09/23/25 22:00	09/24/25 11:35	1
Iron	ND		50	20	ug/L		09/23/25 22:00	09/24/25 11:35	1
Lead	ND		0.50	0.12	ug/L		09/23/25 22:00	09/24/25 11:35	1
Magnesium	ND		50	16	ug/L		09/23/25 22:00	09/24/25 11:35	1
Manganese	ND		2.0	0.95	ug/L		09/23/25 22:00	09/24/25 11:35	1
Nickel	ND		1.0	0.40	ug/L		09/23/25 22:00	09/24/25 11:35	1
Potassium	ND		200	65	ug/L		09/23/25 22:00	09/24/25 11:35	1
Selenium	ND		1.0	0.28	ug/L		09/23/25 22:00	09/24/25 11:35	1
Silver	ND		0.50	0.10	ug/L		09/23/25 22:00	09/24/25 11:35	1
Sodium	ND		200	90	ug/L		09/23/25 22:00	09/24/25 11:35	1
Thallium	ND		0.50	0.13	ug/L		09/23/25 22:00	09/24/25 11:35	1
Vanadium	ND		4.0	0.79	ug/L		09/23/25 22:00	09/24/25 11:35	1
Zinc	ND		10	4.0	ug/L		09/23/25 22:00	09/24/25 11:35	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-703640/1-A

Matrix: Water

Analysis Batch: 704344

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 703640

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.50	0.15	ug/L		09/23/25 22:00	09/24/25 16:48	1
Tin	ND		2.0	0.60	ug/L		09/23/25 22:00	09/24/25 16:48	1

Lab Sample ID: LCS 410-703640/2-A

Matrix: Water

Analysis Batch: 704081

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 703640

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	88.4		ug/L		88	85 - 115
Arsenic	500	453		ug/L		91	86 - 111
Barium	500	452		ug/L		90	86 - 114
Beryllium	50.0	45.1		ug/L		90	80 - 120
Calcium	5000	4770		ug/L		95	84 - 113
Chromium	500	447		ug/L		89	84 - 113
Cobalt	500	437		ug/L		87	85 - 112
Copper	500	448		ug/L		90	86 - 111
Iron	5000	4430		ug/L		89	84 - 114
Lead	50.0	45.2		ug/L		90	86 - 114
Magnesium	5000	4560		ug/L		91	84 - 113
Manganese	500	450		ug/L		90	84 - 113
Nickel	500	452		ug/L		90	85 - 113
Potassium	5000	4870		ug/L		97	87 - 111
Selenium	100	88.4		ug/L		88	86 - 111
Silver	50.0	45.6		ug/L		91	88 - 116
Sodium	5000	4660		ug/L		93	84 - 114
Thallium	100	89.8		ug/L		90	86 - 113
Vanadium	500	448		ug/L		90	84 - 112
Zinc	500	454		ug/L		91	86 - 112

Lab Sample ID: LCS 410-703640/2-A

Matrix: Water

Analysis Batch: 704344

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 703640

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	50.0	50.6		ug/L		101	86 - 114
Tin	100	98.0		ug/L		98	84 - 115

Lab Sample ID: 180-195677-5 MS

Matrix: Water

Analysis Batch: 704081

Client Sample ID: M-18A

Prep Type: Total Recoverable

Prep Batch: 703640

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		100	84.3		ug/L		84	75 - 125
Arsenic	1.8	J	500	438		ug/L		87	75 - 125
Barium	15		500	430		ug/L		83	75 - 125
Beryllium	2.8		50.0	46.2		ug/L		87	75 - 125
Calcium	69000		5000	68500	4	ug/L		-15	75 - 125
Chromium	ND		500	416		ug/L		83	75 - 125
Cobalt	13		500	422		ug/L		82	80 - 125

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-195677-5 MS

Matrix: Water

Analysis Batch: 704081

Client Sample ID: M-18A

Prep Type: Total Recoverable

Prep Batch: 703640

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	ND		500	406		ug/L		81	75 - 125
Iron	1900		5000	5970		ug/L		81	75 - 125
Lead	0.19	J	50.0	41.7		ug/L		83	75 - 125
Magnesium	30000		5000	31500	4	ug/L		36	75 - 125
Manganese	180		500	594		ug/L		82	75 - 125
Nickel	52		500	462		ug/L		82	75 - 125
Potassium	4200		5000	8680		ug/L		90	75 - 125
Selenium	ND		100	89.3		ug/L		89	75 - 125
Silver	ND		50.0	41.8		ug/L		84	75 - 125
Sodium	130000		5000	126000	4	ug/L		-68	75 - 125
Thallium	ND		100	82.4		ug/L		82	75 - 125
Vanadium	ND		500	428		ug/L		86	75 - 125
Zinc	180		500	592		ug/L		82	75 - 125

Lab Sample ID: 180-195677-5 MS

Matrix: Water

Analysis Batch: 704344

Client Sample ID: M-18A

Prep Type: Total Recoverable

Prep Batch: 703640

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	8.0		50.0	57.0		ug/L		98	75 - 125
Tin	ND		100	96.1		ug/L		96	84 - 125

Lab Sample ID: 180-195677-5 MSD

Matrix: Water

Analysis Batch: 704081

Client Sample ID: M-18A

Prep Type: Total Recoverable

Prep Batch: 703640

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Antimony	ND		100	87.3		ug/L		87	75 - 125	3	20
Arsenic	1.8	J	500	451		ug/L		90	75 - 125	3	20
Barium	15		500	453		ug/L		88	75 - 125	5	20
Beryllium	2.8		50.0	47.2		ug/L		89	75 - 125	2	20
Calcium	69000		5000	70000	4	ug/L		16	75 - 125	2	20
Chromium	ND		500	425		ug/L		85	75 - 125	2	20
Cobalt	13		500	431		ug/L		84	80 - 125	2	20
Copper	ND		500	419		ug/L		84	75 - 125	3	20
Iron	1900		5000	6130		ug/L		84	75 - 125	3	20
Lead	0.19	J	50.0	43.4		ug/L		86	75 - 125	4	20
Magnesium	30000		5000	32400	4	ug/L		54	75 - 125	3	20
Manganese	180		500	606		ug/L		85	75 - 125	2	20
Nickel	52		500	477		ug/L		85	75 - 125	3	20
Potassium	4200		5000	8760		ug/L		91	75 - 125	1	20
Selenium	ND		100	89.9		ug/L		90	75 - 125	1	20
Silver	ND		50.0	42.8		ug/L		86	75 - 125	2	20
Sodium	130000		5000	129000	4	ug/L		-20	75 - 125	2	20
Thallium	ND		100	85.7		ug/L		86	75 - 125	4	20
Vanadium	ND		500	440		ug/L		88	75 - 125	3	20
Zinc	180		500	615		ug/L		86	75 - 125	4	20

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-195677-5 MSD

Matrix: Water

Analysis Batch: 704344

Client Sample ID: M-18A

Prep Type: Total Recoverable

Prep Batch: 703640

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	8.0		50.0	57.1		ug/L		98	75 - 125	0	20
Tin	ND		100	98.6		ug/L		99	84 - 125	3	20

Lab Sample ID: 180-195677-5 DU

Matrix: Water

Analysis Batch: 704081

Client Sample ID: M-18A

Prep Type: Total Recoverable

Prep Batch: 703640

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	ND		ND		ug/L		NC	20
Arsenic	1.8	J	1.28	J F5	ug/L		33	20
Barium	15		13.6		ug/L		7	20
Beryllium	2.8		2.87		ug/L		2	20
Calcium	69000		69000		ug/L		0.3	20
Chromium	ND		ND		ug/L		NC	20
Cobalt	13		13.4		ug/L		0.9	20
Copper	ND		ND		ug/L		NC	20
Iron	1900		1930		ug/L		0.4	20
Lead	0.19	J	0.187	J	ug/L		2	20
Magnesium	30000		29700		ug/L		0.3	20
Manganese	180		182		ug/L		0.2	20
Nickel	52		51.1		ug/L		1	20
Potassium	4200		4300		ug/L		3	20
Selenium	ND		ND		ug/L		NC	20
Silver	ND		ND		ug/L		NC	20
Sodium	130000		131000		ug/L		0.9	20
Thallium	ND		ND		ug/L		NC	20
Vanadium	ND		ND		ug/L		NC	20
Zinc	180		178		ug/L		3	20

Lab Sample ID: 180-195677-5 DU

Matrix: Water

Analysis Batch: 704344

Client Sample ID: M-18A

Prep Type: Total Recoverable

Prep Batch: 703640

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cadmium	8.0		8.16		ug/L		2	20
Tin	ND		ND		ug/L		NC	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-703971/1-A

Matrix: Water

Analysis Batch: 704306

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 703971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 19:19	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 410-703971/2-A
Matrix: Water
Analysis Batch: 704306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 703971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.01		ug/L		101	80 - 120

Lab Sample ID: LCSD 410-703971/3-A
Matrix: Water
Analysis Batch: 704306

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 703971

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	1.00	0.989		ug/L		99	80 - 120	2	20

Lab Sample ID: 180-195677-3 MS
Matrix: Water
Analysis Batch: 704306

Client Sample ID: M-19A
Prep Type: Total/NA
Prep Batch: 703971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND	F1 F2	1.00	0.667	F1	ug/L		67	80 - 120

Lab Sample ID: 180-195677-3 MSD
Matrix: Water
Analysis Batch: 704306

Client Sample ID: M-19A
Prep Type: Total/NA
Prep Batch: 703971

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND	F1 F2	1.00	0.939	F2	ug/L		94	80 - 120	34	20

Lab Sample ID: 180-195677-3 DU
Matrix: Water
Analysis Batch: 704306

Client Sample ID: M-19A
Prep Type: Total/NA
Prep Batch: 703971

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND	F1 F2	ND		ug/L		NC	20

Method: 410.4 - COD

Lab Sample ID: MB 410-702646/4
Matrix: Water
Analysis Batch: 702646

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			09/22/25 08:20	1

Lab Sample ID: LCS 410-702646/5
Matrix: Water
Analysis Batch: 702646

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	40.0	37.8		mg/L		94	90 - 110

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Method: 410.4 - COD (Continued)

Lab Sample ID: MB 410-702649/4

Matrix: Water

Analysis Batch: 702649

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			09/22/25 08:20	1

Lab Sample ID: LCS 410-702649/5

Matrix: Water

Analysis Batch: 702649

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	40.0	42.7		mg/L		107	90 - 110

Lab Sample ID: 180-195677-6 MS

Matrix: Water

Analysis Batch: 702649

Client Sample ID: M-14

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	6.5	J	20.0	27.9		mg/L		107	90 - 110

Lab Sample ID: 180-195677-6 DU

Matrix: Water

Analysis Batch: 702649

Client Sample ID: M-14

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chemical Oxygen Demand	6.5	J	6.15	J	mg/L		5	9

Method: EPA 180.1 - Turbidity, Nephelometric

Lab Sample ID: MB 180-502853/7

Matrix: Water

Analysis Batch: 502853

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	ND		0.85	0.05	NTU			09/12/25 12:08	1

Lab Sample ID: LCS 180-502853/8

Matrix: Water

Analysis Batch: 502853

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Turbidity	0.850	0.85		NTU		100	90 - 110

Lab Sample ID: 180-195677-5 DU

Matrix: Water

Analysis Batch: 502853

Client Sample ID: M-18A

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Turbidity	0.95		1.0		NTU		4	20

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 180-502892/17

Matrix: Water

Analysis Batch: 502892

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.088	mg/L			09/13/25 08:59	1

Lab Sample ID: MB 180-502892/49

Matrix: Water

Analysis Batch: 502892

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.088	mg/L			09/13/25 10:00	1

Lab Sample ID: LCS 180-502892/18

Matrix: Water

Analysis Batch: 502892

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	0.500	0.496		mg/L		99	90 - 110

Lab Sample ID: LCS 180-502892/53

Matrix: Water

Analysis Batch: 502892

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	0.500	0.530		mg/L		106	90 - 110

Method: EPA 9050A - Specific Conductance

Lab Sample ID: MB 180-502880/2

Matrix: Water

Analysis Batch: 502880

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			09/12/25 18:10	1

Lab Sample ID: LCS 180-502880/1

Matrix: Water

Analysis Batch: 502880

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	84.0	84.7		umhos/cm		101	90 - 110

Lab Sample ID: 180-195677-1 DU

Matrix: Water

Analysis Batch: 502880

Client Sample ID: M-06

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	660		658		umhos/cm		0.2	20

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 180-503034/2

Matrix: Water

Analysis Batch: 503034

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	ND		5.0	5.0	mg/L			09/16/25 10:29	1

Lab Sample ID: LCS 180-503034/1

Matrix: Water

Analysis Batch: 503034

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	251	239		mg/L		95	90 - 110

Lab Sample ID: 180-195677-1 DU

Matrix: Water

Analysis Batch: 503034

Client Sample ID: M-06

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3 to pH 4.5	140		144		mg/L		2	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-503037/1

Matrix: Water

Analysis Batch: 503037

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			09/16/25 12:05	1

Lab Sample ID: LCS 180-503037/2

Matrix: Water

Analysis Batch: 503037

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	176	160		mg/L		91	85 - 115

Lab Sample ID: 180-195677-1 DU

Matrix: Water

Analysis Batch: 503037

Client Sample ID: M-06

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	420		412		mg/L		1	10

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

GC/MS VOA

Analysis Batch: 702434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-4	M-05A	Total/NA	Water	8260D	
180-195677-6	M-14	Total/NA	Water	8260D	
180-195677-7	M-20	Total/NA	Water	8260D	
180-195677-8	TRIP BLANK-04	Total/NA	Water	8260D	
MB 410-702434/10	Method Blank	Total/NA	Water	8260D	
LCS 410-702434/5	Lab Control Sample	Total/NA	Water	8260D	
LCS 410-702434/7	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 703590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total/NA	Water	8260D	
MB 410-703590/10	Method Blank	Total/NA	Water	8260D	
LCS 410-703590/5	Lab Control Sample	Total/NA	Water	8260D	
LCS 410-703590/7	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-703590/6	Lab Control Sample Dup	Total/NA	Water	8260D	
LCSD 410-703590/8	Lab Control Sample Dup	Total/NA	Water	8260D	

GC Semi VOA

Prep Batch: 701606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total/NA	Water	8011	
180-195677-4	M-05A	Total/NA	Water	8011	
180-195677-6	M-14	Total/NA	Water	8011	
180-195677-7	M-20	Total/NA	Water	8011	
180-195677-8	TRIP BLANK-04	Total/NA	Water	8011	
MB 410-701606/1-A	Method Blank	Total/NA	Water	8011	
LCS 410-701606/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 410-701606/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 701697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total/NA	Water	8011	701606
180-195677-4	M-05A	Total/NA	Water	8011	701606
180-195677-6	M-14	Total/NA	Water	8011	701606
180-195677-7	M-20	Total/NA	Water	8011	701606
180-195677-8	TRIP BLANK-04	Total/NA	Water	8011	701606
MB 410-701606/1-A	Method Blank	Total/NA	Water	8011	701606
LCS 410-701606/2-A	Lab Control Sample	Total/NA	Water	8011	701606
LCSD 410-701606/3-A	Lab Control Sample Dup	Total/NA	Water	8011	701606

HPLC/IC

Analysis Batch: 502863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total/NA	Water	EPA 300.0 R2.1	
180-195677-2	M-21	Total/NA	Water	EPA 300.0 R2.1	
180-195677-3	M-19A	Total/NA	Water	EPA 300.0 R2.1	
180-195677-4	M-05A	Total/NA	Water	EPA 300.0 R2.1	
180-195677-5	M-18A	Total/NA	Water	EPA 300.0 R2.1	
180-195677-5	M-18A	Total/NA	Water	EPA 300.0 R2.1	
180-195677-6	M-14	Total/NA	Water	EPA 300.0 R2.1	

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QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

HPLC/IC (Continued)

Analysis Batch: 502863 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-7	M-20	Total/NA	Water	EPA 300.0 R2.1	
180-195677-7	M-20	Total/NA	Water	EPA 300.0 R2.1	
MB 180-502863/26	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-502863/27	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-195677-1 MS	M-06	Total/NA	Water	EPA 300.0 R2.1	
180-195677-1 MSD	M-06	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 503109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-3	M-19A	Total/NA	Water	EPA 300.0 R2.1	
180-195677-4	M-05A	Total/NA	Water	EPA 300.0 R2.1	
MB 180-503109/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-503109/7	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Metals

Analysis Batch: 698918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total/NA	Water	SM 2340B	
180-195677-2	M-21	Total/NA	Water	SM 2340B	
180-195677-3	M-19A	Total/NA	Water	SM 2340B	
180-195677-4	M-05A	Total/NA	Water	SM 2340B	
180-195677-5	M-18A	Total/NA	Water	SM 2340B	
180-195677-6	M-14	Total/NA	Water	SM 2340B	
180-195677-7	M-20	Total/NA	Water	SM 2340B	

Prep Batch: 703640

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total Recoverable	Water	3005A	
180-195677-2	M-21	Total Recoverable	Water	3005A	
180-195677-3	M-19A	Total Recoverable	Water	3005A	
180-195677-4	M-05A	Total Recoverable	Water	3005A	
180-195677-5	M-18A	Total Recoverable	Water	3005A	
180-195677-6	M-14	Total Recoverable	Water	3005A	
180-195677-7	M-20	Total Recoverable	Water	3005A	
MB 410-703640/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-703640/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
180-195677-5 MS	M-18A	Total Recoverable	Water	3005A	
180-195677-5 MSD	M-18A	Total Recoverable	Water	3005A	
180-195677-5 DU	M-18A	Total Recoverable	Water	3005A	

Prep Batch: 703971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total/NA	Water	7470A	
180-195677-2	M-21	Total/NA	Water	7470A	
180-195677-3	M-19A	Total/NA	Water	7470A	
180-195677-4	M-05A	Total/NA	Water	7470A	
180-195677-5	M-18A	Total/NA	Water	7470A	
180-195677-6	M-14	Total/NA	Water	7470A	
180-195677-7	M-20	Total/NA	Water	7470A	
MB 410-703971/1-A	Method Blank	Total/NA	Water	7470A	

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QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

Metals (Continued)

Prep Batch: 703971 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 410-703971/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 410-703971/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
180-195677-3 MS	M-19A	Total/NA	Water	7470A	
180-195677-3 MSD	M-19A	Total/NA	Water	7470A	
180-195677-3 DU	M-19A	Total/NA	Water	7470A	

Analysis Batch: 704081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total Recoverable	Water	6020B	703640
180-195677-2	M-21	Total Recoverable	Water	6020B	703640
180-195677-3	M-19A	Total Recoverable	Water	6020B	703640
180-195677-4	M-05A	Total Recoverable	Water	6020B	703640
180-195677-5	M-18A	Total Recoverable	Water	6020B	703640
180-195677-6	M-14	Total Recoverable	Water	6020B	703640
180-195677-7	M-20	Total Recoverable	Water	6020B	703640
MB 410-703640/1-A	Method Blank	Total Recoverable	Water	6020B	703640
LCS 410-703640/2-A	Lab Control Sample	Total Recoverable	Water	6020B	703640
180-195677-5 MS	M-18A	Total Recoverable	Water	6020B	703640
180-195677-5 MSD	M-18A	Total Recoverable	Water	6020B	703640
180-195677-5 DU	M-18A	Total Recoverable	Water	6020B	703640

Analysis Batch: 704306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total/NA	Water	7470A	703971
180-195677-2	M-21	Total/NA	Water	7470A	703971
180-195677-3	M-19A	Total/NA	Water	7470A	703971
180-195677-4	M-05A	Total/NA	Water	7470A	703971
180-195677-5	M-18A	Total/NA	Water	7470A	703971
180-195677-6	M-14	Total/NA	Water	7470A	703971
180-195677-7	M-20	Total/NA	Water	7470A	703971
MB 410-703971/1-A	Method Blank	Total/NA	Water	7470A	703971
LCS 410-703971/2-A	Lab Control Sample	Total/NA	Water	7470A	703971
LCSD 410-703971/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	703971
180-195677-3 MS	M-19A	Total/NA	Water	7470A	703971
180-195677-3 MSD	M-19A	Total/NA	Water	7470A	703971
180-195677-3 DU	M-19A	Total/NA	Water	7470A	703971

Analysis Batch: 704344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total Recoverable	Water	6020B	703640
180-195677-2	M-21	Total Recoverable	Water	6020B	703640
180-195677-3	M-19A	Total Recoverable	Water	6020B	703640
180-195677-4	M-05A	Total Recoverable	Water	6020B	703640
180-195677-5	M-18A	Total Recoverable	Water	6020B	703640
180-195677-6	M-14	Total Recoverable	Water	6020B	703640
180-195677-7	M-20	Total Recoverable	Water	6020B	703640
MB 410-703640/1-A	Method Blank	Total Recoverable	Water	6020B	703640
LCS 410-703640/2-A	Lab Control Sample	Total Recoverable	Water	6020B	703640
180-195677-5 MS	M-18A	Total Recoverable	Water	6020B	703640
180-195677-5 MSD	M-18A	Total Recoverable	Water	6020B	703640
180-195677-5 DU	M-18A	Total Recoverable	Water	6020B	703640

Eurofins Pittsburgh

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

General Chemistry

Analysis Batch: 502853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total/NA	Water	EPA 180.1	
180-195677-2	M-21	Total/NA	Water	EPA 180.1	
180-195677-3	M-19A	Total/NA	Water	EPA 180.1	
180-195677-4	M-05A	Total/NA	Water	EPA 180.1	
180-195677-5	M-18A	Total/NA	Water	EPA 180.1	
180-195677-6	M-14	Total/NA	Water	EPA 180.1	
180-195677-7	M-20	Total/NA	Water	EPA 180.1	
MB 180-502853/7	Method Blank	Total/NA	Water	EPA 180.1	
LCS 180-502853/8	Lab Control Sample	Total/NA	Water	EPA 180.1	
180-195677-5 DU	M-18A	Total/NA	Water	EPA 180.1	

Analysis Batch: 502880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total/NA	Water	EPA 9050A	
180-195677-2	M-21	Total/NA	Water	EPA 9050A	
180-195677-3	M-19A	Total/NA	Water	EPA 9050A	
180-195677-4	M-05A	Total/NA	Water	EPA 9050A	
180-195677-5	M-18A	Total/NA	Water	EPA 9050A	
180-195677-6	M-14	Total/NA	Water	EPA 9050A	
180-195677-7	M-20	Total/NA	Water	EPA 9050A	
MB 180-502880/2	Method Blank	Total/NA	Water	EPA 9050A	
LCS 180-502880/1	Lab Control Sample	Total/NA	Water	EPA 9050A	
180-195677-1 DU	M-06	Total/NA	Water	EPA 9050A	

Analysis Batch: 502892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total/NA	Water	EPA 350.1	
180-195677-2	M-21	Total/NA	Water	EPA 350.1	
180-195677-3	M-19A	Total/NA	Water	EPA 350.1	
180-195677-4	M-05A	Total/NA	Water	EPA 350.1	
180-195677-5	M-18A	Total/NA	Water	EPA 350.1	
180-195677-6	M-14	Total/NA	Water	EPA 350.1	
180-195677-7	M-20	Total/NA	Water	EPA 350.1	
MB 180-502892/17	Method Blank	Total/NA	Water	EPA 350.1	
MB 180-502892/49	Method Blank	Total/NA	Water	EPA 350.1	
LCS 180-502892/18	Lab Control Sample	Total/NA	Water	EPA 350.1	
LCS 180-502892/53	Lab Control Sample	Total/NA	Water	EPA 350.1	

Analysis Batch: 503034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total/NA	Water	SM 2320B	
180-195677-2	M-21	Total/NA	Water	SM 2320B	
180-195677-3	M-19A	Total/NA	Water	SM 2320B	
180-195677-4	M-05A	Total/NA	Water	SM 2320B	
180-195677-5	M-18A	Total/NA	Water	SM 2320B	
180-195677-6	M-14	Total/NA	Water	SM 2320B	
180-195677-7	M-20	Total/NA	Water	SM 2320B	
MB 180-503034/2	Method Blank	Total/NA	Water	SM 2320B	
LCS 180-503034/1	Lab Control Sample	Total/NA	Water	SM 2320B	
180-195677-1 DU	M-06	Total/NA	Water	SM 2320B	

Eurofins Pittsburgh

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW

Job ID: 180-195677-1

General Chemistry

Analysis Batch: 503037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total/NA	Water	SM 2540C	
180-195677-2	M-21	Total/NA	Water	SM 2540C	
180-195677-3	M-19A	Total/NA	Water	SM 2540C	
180-195677-4	M-05A	Total/NA	Water	SM 2540C	
180-195677-5	M-18A	Total/NA	Water	SM 2540C	
180-195677-6	M-14	Total/NA	Water	SM 2540C	
180-195677-7	M-20	Total/NA	Water	SM 2540C	
MB 180-503037/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-503037/2	Lab Control Sample	Total/NA	Water	SM 2540C	
180-195677-1 DU	M-06	Total/NA	Water	SM 2540C	

Analysis Batch: 702646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-7	M-20	Total/NA	Water	410.4	
MB 410-702646/4	Method Blank	Total/NA	Water	410.4	
LCS 410-702646/5	Lab Control Sample	Total/NA	Water	410.4	

Analysis Batch: 702649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195677-1	M-06	Total/NA	Water	410.4	
180-195677-2	M-21	Total/NA	Water	410.4	
180-195677-3	M-19A	Total/NA	Water	410.4	
180-195677-4	M-05A	Total/NA	Water	410.4	
180-195677-5	M-18A	Total/NA	Water	410.4	
180-195677-6	M-14	Total/NA	Water	410.4	
MB 410-702649/4	Method Blank	Total/NA	Water	410.4	
LCS 410-702649/5	Lab Control Sample	Total/NA	Water	410.4	
180-195677-6 MS	M-14	Total/NA	Water	410.4	
180-195677-6 DU	M-14	Total/NA	Water	410.4	

Chain of Custody Record

Client Information		Sampler		Lab PM		Carrier Tracking No(s)		COC No	
Client Contact: Helen Girod		Phone 202-893-1758		Johnson, Andy		State of Origin MD		180-116865-18132 1	
Company Geosyntec Consultants Inc		FWSID		E-Mail Andy.Johnson@et.eurofins.com		Analysis Requested		Page Page 1 of 1	
Address 10211 Wincopin Circle 4th Floor		Due Date Requested:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Job #	
City Columbia		TAT Requested (days): Standard		Sample Date		Sample Time		Preservation Codes: S - H2SO4 N - None D - HNO3 R - NaThioSO4 A - HCL	
State, Zip MD, 21044		Compliance Project: ☒ Yes ☐ No		Sample Type (C=Comp, G=grab)		Preservation Code:		Total Number of containers	
Phone 240-381-5010(Tel)		PO # WO-ME1166K-5773		Matrix (W=solid, S=liquid, O=wastewater, B=soil, K=air, DW=drinking water)		Special Instructions/Note:		Other:	
Email HGirod@Geosyntec.com		WO #		Sample Date		Sample Time		Special Instructions/Note:	
Project Name Ritchie Rubble LF Semi-Annual GW/UD		Project # 18015089		Sample Date		Sample Time		Special Instructions/Note:	
Site Ritchie Rubble		SSOW#		Sample Date		Sample Time		Special Instructions/Note:	
Sample Identification		Sample Date		Sample Time		Sample Type		Matrix	
M-06		9-11-25 0905		G		G		Water	
M-21		9-11-25 0935		G		G		Water	
M-19A		9-11-25 1045		G		G		Water	
M-05A		9-11-25 1030		G		G		Water	
M-18A		9-11-25 1155		G		G		Water	
M-14		9-11-25 1215		G		G		Water	
M-20		9-11-25 1325		G		G		Water	
Trip Blank-04		9-11-25 1400		G		G		Water	
M-11								Water	
M-12								Water	
M-13								Water	
Possible Hazard Identification		Sample Disposal (A fee may be assessed)		Sample Disposal (A fee may be assessed)		Sample Disposal (A fee may be assessed)		Sample Disposal (A fee may be assessed)	
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological		☐ Return To Client ☒ Disposal		☐ Return To Client ☒ Disposal		☐ Return To Client ☒ Disposal		☐ Return To Client ☒ Disposal	
Deliverable Requested I, II, III, IV, Other (specify)		Special Instructions/QC Requirements		Special Instructions/QC Requirements		Special Instructions/QC Requirements		Special Instructions/QC Requirements	
Empty Kit Relinquished by		Date		Time		Method of Shipment:		180-195677 Chain of Custody	
Relinquished by Landon Chase		Date/Time 9-11-25 1430		Company Geosyntec		Received by Newman		Date/Time 9/11/25 2:30P	
Relinquished by Helen Girod		Date/Time 9-11-25 3:53PM		Company BSC		Received by JL		Date/Time 9/12/25 0915	
Relinquished by		Date/Time		Company		Received by		Date/Time	
Custody Seals Intact: ☒ Yes ☐ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks		Cooler Temperature(s) °C and Other Remarks		Cooler Temperature(s) °C and Other Remarks	

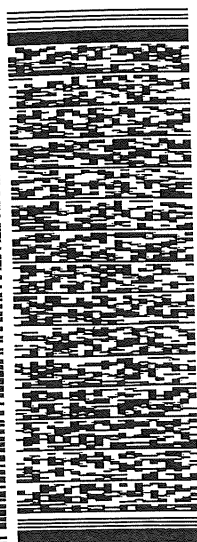
ORIGIN: BWA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK

PITTSBURGH PA 15238

REF: GEO-SYNTEC
(412) 963-7058
INV: PO. DEPT:

FedEx
Express



FRI - 12 SEP 10:30
PRIORITY OVERNIGHT

1 of 3
TRK# 8843 0556 3757
MASTER #

NS AGCA

PA-US
PIT

Uncorrected temp 1.3 °C
Thermometer ID 28
CF +0.4 Initials JRC

159469-434 MTV

SHIP DATE: 11SEP2
ACTWGT: 50.00 LB
CAD: 1030460/INET4
BILL RECIPIENT

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK

PITTSBURGH PA 15238

REF: GEO-SYNTEC
(412) 963-7058
INV: PO. DEPT:



FRI - 12 SEP
PRIORITY OVI

2 of 3
MPS# 8843 0556 3768
Mstr# 8843 0556 3757

NS AGCA

PA-US

Uncorrected temp 1.2 °C
Thermometer ID 28
CF +0.4 Initials JRC

159469-434 MTV



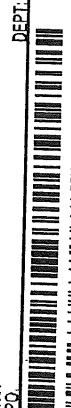
180-195677 Waybill

SHIP DATE: 11SEP25
ACTWGT: 50.00 LB
CAD: 1030460/INET4535
BILL RECIPIENT

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK

PITTSBURGH PA 15238

REF: GEO-SYNTEC
(412) 963-7058
INV: PO. DEPT:



FRI - 12 SEP 10
PRIORITY OVERNIGHT

3 of 3
MPS# 8843 0556 3779
Mstr# 8843 0556 3757

NS AGCA

PA-US
PIT

Uncorrected temp 0.7 °C
Thermometer ID 28
CF +0.4 Initials JRC

159469-434 MTV

10/3/2025

Eurofins Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler: N/A		Lab PM: Johnson, Andy		Carrier Tracking No(s): N/A		COC No: 180-545340.1																	
Client Contact: Shipping/Receiving		Phone: N/A		E-Mail: Andy.Johnson@et.eurofinsus.com		State of Origin: Maryland		Page: Page 1 of 1																	
Company: Eurofins Lancaster Laboratories Environm				Accreditations Required (See note): N/A				Job #: 180-195677-1																	
Address: 2425 New Holland Pike,		Due Date Requested: 9/25/2025		Analysis Requested						Preservation Codes:															
City: Lancaster		TAT Requested (days): N/A		<table border="1"><tr><td rowspan="5">Field Filtered Sample (Yes or No)</td><td rowspan="5">Perform MS/MSD (Yes or No)</td><td rowspan="5">82600_LL/8030C(MOD) VOCs - Appendix 9+ MTBE Low Level</td><td rowspan="5">8011/8011_PrepEDB & DBCP by 8011</td><td rowspan="5">6020B/3005A(MOD) Appendix I Metals by 6020B</td><td rowspan="5">7470A/7470A_PrepMercury by 7470A</td><td rowspan="5">SM2340B_ICPMS Total Hardness as CaCO3 Calculation</td><td rowspan="5">410.4_ILCOD by 410.4 LL</td><td rowspan="5">Total Number of Containers</td><td rowspan="5">Other: N/A</td></tr><tr></tr><tr></tr><tr></tr><tr></tr></table>						Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	82600_LL/8030C(MOD) VOCs - Appendix 9+ MTBE Low Level	8011/8011_PrepEDB & DBCP by 8011	6020B/3005A(MOD) Appendix I Metals by 6020B	7470A/7470A_PrepMercury by 7470A	SM2340B_ICPMS Total Hardness as CaCO3 Calculation	410.4_ILCOD by 410.4 LL	Total Number of Containers	Other: N/A	Job #:					
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	82600_LL/8030C(MOD) VOCs - Appendix 9+ MTBE Low Level	8011/8011_PrepEDB & DBCP by 8011																	6020B/3005A(MOD) Appendix I Metals by 6020B	7470A/7470A_PrepMercury by 7470A	SM2340B_ICPMS Total Hardness as CaCO3 Calculation	410.4_ILCOD by 410.4 LL	Total Number of Containers	Other: N/A
State, Zip: PA, 17601		PO #: N/A		Job #:																					
Phone: 717-656-2300(Tel)		WO #: N/A		Job #:																					
Email: N/A		Project #: 18015089		Job #:																					
Project Name: Ritchie Rubble LF Semi-Annual GW		SSOW#: N/A		Job #:																					
Site: N/A				Job #:																					
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=soils/sediment, A=air)		Special Instructions/Note:															
M-06 (180-195677-1)		9/11/25		09:05 Eastern		G		Water																	
M-21 (180-195677-2)		9/11/25		09:35 Eastern		G		Water																	
M-19A (180-195677-3)		9/11/25		10:45 Eastern		G		Water																	
M-05A (180-195677-4)		9/11/25		10:30 Eastern		G		Water																	
M-18A (180-195677-5)		9/11/25		11:55 Eastern		G		Water																	
M-14 (180-195677-6)		9/11/25		12:15 Eastern		G		Water																	
M-20 (180-195677-7)		9/11/25		13:25 Eastern		G		Water																	
TRIP BLANK-04 (180-195677-8)		9/11/25		14:00 Eastern		G		Water																	
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						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)																			
Unconfirmed						☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months																			
Deliverable Requested: I, II, III, IV, Other (specify)						Special Instructions/QC Requirements:																			
Primary Deliverable Rank: 2																									
Empty Kit Relinquished by:						Date: 9/15/25 1300																			
Relinquished by:						Date/Time: 9/15/25 1451																			
Relinquished by: MGA						Date/Time: 9/15/25 1930																			
Relinquished by:						Date/Time: 9/15/25 1930																			
Custody Seals Intact: ☒ Yes ☐ No						Custody Seal No.: 3.5-3.6																			
Cooler Temperature(s) °C and Other Remarks: c: 3.4-3.5																									

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195677-1

Login Number: 195677

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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	
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 $<6\text{mm}$ (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: 180-195677-1

Login Number: 195677

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 09/16/25 10:22 AM

Creator: Fuehrer, Stephanie

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.	False	Limited volume received.
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	



ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Girod
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 9/25/2025 4:44:26 PM

JOB DESCRIPTION

Ritchie Rubble LF Semi-Annual GW PFAS

JOB NUMBER

180-195678-1

Eurofins Pittsburgh

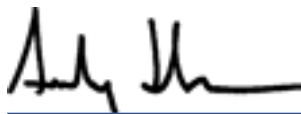
Job Notes

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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9/25/2025 4:44:26 PM

Authorized for release by
Andy Johnson, Senior Project Manager
Andy.Johnson@et.eurofinsus.com
(615)818-9567

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195678-1

Job ID: 180-195678-1

Eurofins Pittsburgh

Job Narrative 180-195678-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/12/2025 9:15 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.1°C, 1.6°C and 1.7°C.

PFAS

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

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Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195678-1

Qualifiers

LCMS

Qualifier	Qualifier Description
I	Ion ratio outside 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)
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
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195678-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Ohio	State	87787	01-31-26
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-26

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

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Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195678-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

Sample Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195678-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195678-1	M-06	Water	09/11/25 09:05	09/12/25 09:15	Maryland
180-195678-2	M-05A	Water	09/11/25 10:30	09/12/25 09:15	Maryland
180-195678-3	M-14	Water	09/11/25 12:15	09/12/25 09:15	Maryland
180-195678-4	M-20	Water	09/11/25 13:25	09/12/25 09:15	Maryland

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Method Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195678-1

Method	Method Description	Protocol	Laboratory
537 IDA	EPA 537 Isotope Dilution	EPA	ELLE
SPE	PFAS by SPE	Lab SOP	ELLE

Protocol References:

EPA = US Environmental Protection Agency
Lab SOP = Laboratory Standard Operating Procedure

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195678-1

Client Sample ID: M-06

Date Collected: 09/11/25 09:05

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195678-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			266.4 mL	1 mL	702327	09/21/25 07:15	RC3V	ELLE
Total/NA	Analysis	537 IDA		1			702707	09/22/25 23:30	R7RE	ELLE
Instrument ID: 30638										

Client Sample ID: M-05A

Date Collected: 09/11/25 10:30

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195678-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			275 mL	1 mL	702327	09/21/25 07:15	RC3V	ELLE
Total/NA	Analysis	537 IDA		1			702707	09/22/25 23:46	R7RE	ELLE
Instrument ID: 30638										

Client Sample ID: M-14

Date Collected: 09/11/25 12:15

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195678-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			268.9 mL	1 mL	702327	09/21/25 07:15	RC3V	ELLE
Total/NA	Analysis	537 IDA		1			702863	09/22/25 17:56	DSU6	ELLE
Instrument ID: 30728										

Client Sample ID: M-20

Date Collected: 09/11/25 13:25

Date Received: 09/12/25 09:15

Lab Sample ID: 180-195678-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			272.8 mL	1 mL	702327	09/21/25 07:15	RC3V	ELLE
Total/NA	Analysis	537 IDA		1			702707	09/23/25 00:01	R7RE	ELLE
Instrument ID: 30638										

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: ELLE

Batch Type: Prep

RC3V = Donovan Catchings

Batch Type: Analysis

DSU6 = John Grossi

R7RE = McKenzi Hartenstein

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195678-1

Client Sample ID: M-06

Lab Sample ID: 180-195678-1

Date Collected: 09/11/25 09:05

Matrix: Water

Date Received: 09/12/25 09:15

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/21/25 07:15	09/22/25 23:30	1
Perfluorobutanesulfonic acid (PFBS)	23		1.9	0.47	ng/L		09/21/25 07:15	09/22/25 23:30	1
Perfluorohexanesulfonic acid (PFHxS)	58		1.9	0.47	ng/L		09/21/25 07:15	09/22/25 23:30	1
Perfluorononanoic acid (PFNA)	4.4		1.9	0.47	ng/L		09/21/25 07:15	09/22/25 23:30	1
Perfluorooctanesulfonic acid (PFOS)	25	I	1.9	0.47	ng/L		09/21/25 07:15	09/22/25 23:30	1
Perfluorooctanoic acid (PFOA)	110		1.9	0.47	ng/L		09/21/25 07:15	09/22/25 23:30	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	83		26 - 161				09/21/25 07:15	09/22/25 23:30	1
13C3-PFBS	177		20 - 198				09/21/25 07:15	09/22/25 23:30	1
13C3-PFHxS	80		35 - 165				09/21/25 07:15	09/22/25 23:30	1
13C4-PFHpA	78		33 - 158				09/21/25 07:15	09/22/25 23:30	1
13C8-PFOA	73		35 - 146				09/21/25 07:15	09/22/25 23:30	1
13C8-PFOS	79		41 - 155				09/21/25 07:15	09/22/25 23:30	1
13C9-PFNA	77		37 - 157				09/21/25 07:15	09/22/25 23:30	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195678-1

Client Sample ID: M-05A

Lab Sample ID: 180-195678-2

Date Collected: 09/11/25 10:30

Matrix: Water

Date Received: 09/12/25 09:15

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	1.5	ng/L		09/21/25 07:15	09/22/25 23:46	1
Perfluorobutanesulfonic acid (PFBS)	27		1.8	0.45	ng/L		09/21/25 07:15	09/22/25 23:46	1
Perfluorohexanesulfonic acid (PFHxS)	28		1.8	0.45	ng/L		09/21/25 07:15	09/22/25 23:46	1
Perfluorononanoic acid (PFNA)	3.3		1.8	0.45	ng/L		09/21/25 07:15	09/22/25 23:46	1
Perfluorooctanesulfonic acid (PFOS)	29		1.8	0.45	ng/L		09/21/25 07:15	09/22/25 23:46	1
Perfluorooctanoic acid (PFOA)	61		1.8	0.45	ng/L		09/21/25 07:15	09/22/25 23:46	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	88		26 - 161				09/21/25 07:15	09/22/25 23:46	1
13C3-PFBS	193		20 - 198				09/21/25 07:15	09/22/25 23:46	1
13C3-PFHxS	93		35 - 165				09/21/25 07:15	09/22/25 23:46	1
13C4-PFHpA	85		33 - 158				09/21/25 07:15	09/22/25 23:46	1
13C8-PFOA	82		35 - 146				09/21/25 07:15	09/22/25 23:46	1
13C8-PFOS	81		41 - 155				09/21/25 07:15	09/22/25 23:46	1
13C9-PFNA	79		37 - 157				09/21/25 07:15	09/22/25 23:46	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195678-1

Client Sample ID: M-14

Lab Sample ID: 180-195678-3

Date Collected: 09/11/25 12:15

Matrix: Water

Date Received: 09/12/25 09:15

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/21/25 07:15	09/22/25 17:56	1
Perfluorobutanesulfonic acid (PFBS)	1.6	J	1.9	0.46	ng/L		09/21/25 07:15	09/22/25 17:56	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.46	ng/L		09/21/25 07:15	09/22/25 17:56	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.46	ng/L		09/21/25 07:15	09/22/25 17:56	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.46	ng/L		09/21/25 07:15	09/22/25 17:56	1
Perfluorooctanoic acid (PFOA)	ND		1.9	0.46	ng/L		09/21/25 07:15	09/22/25 17:56	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	124		26 - 161				09/21/25 07:15	09/22/25 17:56	1
13C3-PFBS	126		20 - 198				09/21/25 07:15	09/22/25 17:56	1
13C3-PFHxS	94		35 - 165				09/21/25 07:15	09/22/25 17:56	1
13C4-PFHpA	99		33 - 158				09/21/25 07:15	09/22/25 17:56	1
13C8-PFOA	91		35 - 146				09/21/25 07:15	09/22/25 17:56	1
13C8-PFOS	93		41 - 155				09/21/25 07:15	09/22/25 17:56	1
13C9-PFNA	94		37 - 157				09/21/25 07:15	09/22/25 17:56	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195678-1

Client Sample ID: M-20

Lab Sample ID: 180-195678-4

Date Collected: 09/11/25 13:25

Matrix: Water

Date Received: 09/12/25 09:15

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	1.5	ng/L		09/21/25 07:15	09/23/25 00:01	1
Perfluorobutanesulfonic acid (PFBS)	4.8		1.8	0.46	ng/L		09/21/25 07:15	09/23/25 00:01	1
Perfluorohexanesulfonic acid (PFHxS)	3.5		1.8	0.46	ng/L		09/21/25 07:15	09/23/25 00:01	1
Perfluorononanoic acid (PFNA)	1.7	J	1.8	0.46	ng/L		09/21/25 07:15	09/23/25 00:01	1
Perfluorooctanesulfonic acid (PFOS)	5.7		1.8	0.46	ng/L		09/21/25 07:15	09/23/25 00:01	1
Perfluorooctanoic acid (PFOA)	14		1.8	0.46	ng/L		09/21/25 07:15	09/23/25 00:01	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	95		26 - 161				09/21/25 07:15	09/23/25 00:01	1
13C3-PFBS	192		20 - 198				09/21/25 07:15	09/23/25 00:01	1
13C3-PFHxS	93		35 - 165				09/21/25 07:15	09/23/25 00:01	1
13C4-PFHpA	87		33 - 158				09/21/25 07:15	09/23/25 00:01	1
13C8-PFOA	88		35 - 146				09/21/25 07:15	09/23/25 00:01	1
13C8-PFOS	94		41 - 155				09/21/25 07:15	09/23/25 00:01	1
13C9-PFNA	93		37 - 157				09/21/25 07:15	09/23/25 00:01	1

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195678-1

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 410-702327/1-A

Matrix: Water

Analysis Batch: 702863

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 702327

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/21/25 07:15	09/22/25 16:34	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		09/21/25 07:15	09/22/25 16:34	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		09/21/25 07:15	09/22/25 16:34	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		09/21/25 07:15	09/22/25 16:34	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		09/21/25 07:15	09/22/25 16:34	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.50	ng/L		09/21/25 07:15	09/22/25 16:34	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	97		26 - 161				09/21/25 07:15	09/22/25 16:34	1
13C3-PFBS	79		20 - 198				09/21/25 07:15	09/22/25 16:34	1
13C3-PFHxS	80		35 - 165				09/21/25 07:15	09/22/25 16:34	1
13C4-PFHpa	79		33 - 158				09/21/25 07:15	09/22/25 16:34	1
13C8-PFOA	76		35 - 146				09/21/25 07:15	09/22/25 16:34	1
13C8-PFOS	80		41 - 155				09/21/25 07:15	09/22/25 16:34	1
13C9-PFNA	78		37 - 157				09/21/25 07:15	09/22/25 16:34	1

Lab Sample ID: LCS 410-702327/2-A

Matrix: Water

Analysis Batch: 702863

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 702327

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	25.6	28.5		ng/L		111	50 - 132
Perfluorobutanesulfonic acid (PFBS)	22.7	27.6		ng/L		121	54 - 145
Perfluorohexanesulfonic acid (PFHxS)	23.3	27.0		ng/L		116	52 - 138
Perfluorononanoic acid (PFNA)	25.6	29.9		ng/L		117	52 - 143
Perfluorooctanesulfonic acid (PFOS)	23.8	26.6		ng/L		112	52 - 139
Perfluorooctanoic acid (PFOA)	25.6	28.8		ng/L		113	53 - 147
Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits				
13C3-HFPO-DA	90		26 - 161				
13C3-PFBS	73		20 - 198				
13C3-PFHxS	75		35 - 165				
13C4-PFHpa	73		33 - 158				
13C8-PFOA	72		35 - 146				
13C8-PFOS	76		41 - 155				
13C9-PFNA	73		37 - 157				

Lab Sample ID: LCSD 410-702327/3-A

Matrix: Water

Analysis Batch: 702863

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 702327

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	25.6	26.1		ng/L		102	50 - 132	9	30
Perfluorobutanesulfonic acid (PFBS)	22.7	26.8		ng/L		118	54 - 145	3	30

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195678-1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 410-702327/3-A

Matrix: Water

Analysis Batch: 702863

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 702327

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorohexanesulfonic acid (PFHxS)	23.3	26.2		ng/L		112	52 - 138	3	30
Perfluorononanoic acid (PFNA)	25.6	29.3		ng/L		114	52 - 143	2	30
Perfluorooctanesulfonic acid (PFOS)	23.8	25.8		ng/L		108	52 - 139	3	30
Perfluorooctanoic acid (PFOA)	25.6	29.2		ng/L		114	53 - 147	1	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	LCSD Limits
13C3-HFPO-DA	96		26 - 161
13C3-PFBS	76		20 - 198
13C3-PFHxS	80		35 - 165
13C4-PFHpA	76		33 - 158
13C8-PFOA	73		35 - 146
13C8-PFOS	78		41 - 155
13C9-PFNA	74		37 - 157

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual GW PFAS

Job ID: 180-195678-1

LCMS

Prep Batch: 702327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195678-1	M-06	Total/NA	Water	SPE	
180-195678-2	M-05A	Total/NA	Water	SPE	
180-195678-3	M-14	Total/NA	Water	SPE	
180-195678-4	M-20	Total/NA	Water	SPE	
MB 410-702327/1-A	Method Blank	Total/NA	Water	SPE	
LCS 410-702327/2-A	Lab Control Sample	Total/NA	Water	SPE	
LCSD 410-702327/3-A	Lab Control Sample Dup	Total/NA	Water	SPE	

Analysis Batch: 702707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195678-1	M-06	Total/NA	Water	537 IDA	702327
180-195678-2	M-05A	Total/NA	Water	537 IDA	702327
180-195678-4	M-20	Total/NA	Water	537 IDA	702327

Analysis Batch: 702863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195678-3	M-14	Total/NA	Water	537 IDA	702327
MB 410-702327/1-A	Method Blank	Total/NA	Water	537 IDA	702327
LCS 410-702327/2-A	Lab Control Sample	Total/NA	Water	537 IDA	702327
LCSD 410-702327/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	702327

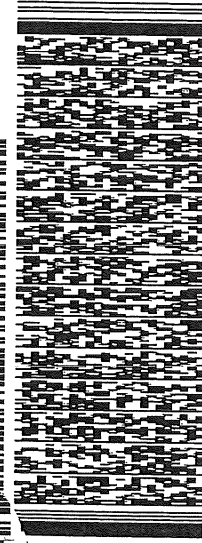
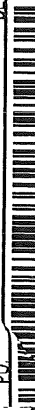
Chain of Custody Record

Client Information		Sampler <i>Landon Chase</i>		Lab PM Johnson, Andy		Carrier Tracking No(s)		COC No 180-116867-20331 1	
Client Contact: Helen Girod		Phone <i>202-843-1758</i>		E-Mail Andy Johnson@et.eurofins.com		State of Origin <i>MD</i>		Page Page 1 of 1	
Company Geosyntec Consultants Inc		PWSID		Analysis Requested		Job #		Preservation Codes: N - None	
Address 10211 Vincopin Circle 4th Floor		Due Date Requested:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		PFC IDA - 6 PFAS by 537 Mod.	
City Columbia		TAT Requested (days): <i>Standard</i>		Sample Date		Sample Time		Sample Preservation Code:	
State Zip MD, 21044		Compliance Project: ☒ Yes ☒ No		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=other, B=BF=Breathable Air, DW=Drinking Water)		Total Number of containers	
Phone 240-381-5010(Tel)		WO # WO-ME1166K-5773		Sample Date		Sample Time		Sample Preservation Code:	
Email HGirod@Geosyntec.com		Project # 18015089		Sample Date		Sample Time		Sample Preservation Code:	
Site Ritchie Rubble LF Semi-Annual GW/UD PFAS		SSOW#		Sample Date		Sample Time		Sample Preservation Code:	
Sample Identification		Sample Date		Sample Time		Sample Preservation Code:		Special Instructions/Note:	
<i>M-06</i>		<i>9-11-25</i>		<i>905</i>		<i>Water</i>		<i>2-2 CCLs</i>	
<i>M-05A</i>		<i>9-11-25</i>		<i>1030</i>		<i>Water</i>		<i>2-Samples</i>	
<i>M-14</i>		<i>9-11-25</i>		<i>1215</i>		<i>Water</i>		<i>2 Preservation on Ice</i>	
<i>M-20</i>		<i>9-11-25</i>		<i>1325</i>		<i>Water</i>		<i>2 PFAS samples in separate cooler - 3 Coolers</i>	
<i>M-08</i>						<i>Water</i>			
<i>M-09</i>						<i>Water</i>			
<i>M-10</i>						<i>Water</i>			
<i>M-11</i>						<i>Water</i>			
<i>M-12</i>						<i>Water</i>			
<i>M-13</i>						<i>Water</i>			
<i>M-14</i>						<i>Water</i>			
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 1, II, III, IV, Other (specify)		Special Instructions/QC Requirements		Method of Shipment:		Date/Time		Company	
Empty Kit Relinquished by		Date		Time		Date/Time		Company	
Relinquished by <i>Landon Chase</i>		<i>9/11/25</i>		<i>1430</i>		<i>9/11/25</i>		<i>2:30P</i>	
Relinquished by <i>Helen Girod</i>		<i>9/11/25</i>		<i>3:53PM</i>		<i>9/12/25</i>		<i>0915</i>	
Relinquished by		Date/Time		Time		Date/Time		Company	
Custody Seals Intact ☒ Yes ☐ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks					

ORIGIN ID: BWA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US
SHIP DATE: 11SEP2
ACTWGT 50.00 LB
CAD: 1030460/INET4
BILL RECIPIENT

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RDC PARK
PITTSBURGH PA 15238

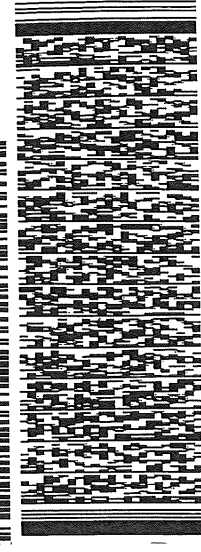
INV: (412) 963-7058
REF: GEO-SYNTEC
DEPT: PO



ORIGIN ID: BWA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US
BILL RECIPIENT

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RDC PARK
PITTSBURGH PA 15238

INV: (412) 963-7058
REF: GEO-SYNTEC
DEPT: PO



FRI - 12 SEP
PRIORITY OVI
MPS# 8843 0556 3768
Mstr# 8843 0556 3757
0201

NS AGCA

PA-US

1.2 °C
28
JLR
Uncorrected temp
Thermometer ID
CF +0.4 Initials

PTM ON 004 Affinity 11/14/18



180-195678 Waybill

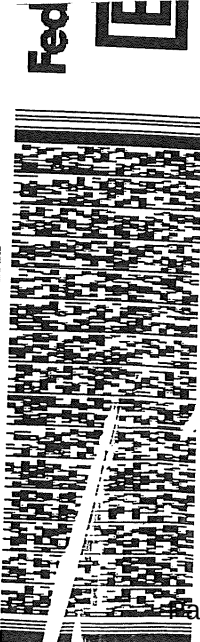
1 # 159459-434 M/TW EXP 01/25

13

ORIGIN ID: BWA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US
SHIP DATE: 11SEP25
ACTWGT 50.00 LB
CAD: 1030460/INET4535
BILL RECIPIENT

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RDC PARK
PITTSBURGH PA 15238

INV: (412) 963-7058
REF: GEO-SYNTEC
DEPT: PO



FRI - 12 SEP
PRIORITY OVI
MPS# 8843 0556 3779
Mstr# 8843 0556 3757
0201

NS AGCA

PA-US

0.7 °C
28
JLR
Uncorrected temp
Thermometer ID
CF +0.4 Initials

PTM ON 004 Affinity 11/14/18

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Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195678-1

Login Number: 195678

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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 $<6\text{mm}$ (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: 180-195678-1

Login Number: 195678

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 09/16/25 09:29 AM

Creator: Ballard, Megan

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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, 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 $> 6\text{mm}$ in diameter (none, if from WV)?	N/A	



ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Girod
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 9/29/2025 2:59:16 PM

JOB DESCRIPTION

Ritchie Rubble LF Semi-Annual SW

JOB NUMBER

180-195744-1

Eurofins Pittsburgh

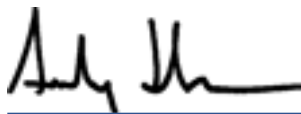
Job Notes

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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9/29/2025 2:59:16 PM

Authorized for release by
Andy Johnson, Senior Project Manager
Andy.Johnson@et.eurofinsus.com
(615)818-9567

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Job ID: 180-195744-1

Eurofins Pittsburgh

Job Narrative 180-195744-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/13/2025 10:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.9°C, 0.9°C, 1.9°C and 4.7°C.

HPLC/IC

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

Metals

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

General Chemistry

Method 350.1: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 180-503104 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Eurofins Pittsburgh

Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Qualifiers

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
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
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
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00690	06-28-25 *
California	State	3122	05-30-26
Connecticut	State	PH-0820	09-30-26
Florida	NELAP	E871008	06-30-25 *
Georgia	State	PA 02-00416	04-30-26
Illinois	NELAP	200005	07-31-25 *
Kansas	NELAP	E-10350	01-31-26
Kentucky (UST)	State	162013	04-30-26
Kentucky (WW)	State	KY98043	12-31-25
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-25 *
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-25
New Hampshire	NELAP	2030	04-04-26
New Jersey	NELAP	PA005	06-30-25 *
New York	NELAP	11182	03-31-26
North Carolina (WW/SW)	State	434	12-31-25
North Dakota	State	R-227	04-30-24 *
Oregon	NELAP	PA-2151	02-06-26
Pennsylvania	NELAP	02-00416	04-30-26
Rhode Island	State	LAO00375	12-30-25
South Carolina	State	89014	04-30-25 *
Texas	NELAP	T104704528	03-31-26
US Fish & Wildlife	US Federal Programs	A21930	04-30-26
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462024-14	03-31-24 *
Virginia	NELAP	460189	09-14-25 *
West Virginia DEP	State	142	01-31-26
Wisconsin	State	998027800	08-31-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26

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

Eurofins Pittsburgh

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Ohio	State	87787	01-31-26
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-26
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

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

Eurofins Pittsburgh

Sample Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195744-1	STR-01	Water	09/12/25 11:50	09/13/25 10:05	Maryland
180-195744-2	STR-02	Water	09/12/25 12:15	09/13/25 10:05	Maryland
180-195744-3	STR-03	Water	09/12/25 12:35	09/13/25 10:05	Maryland

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Method Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Method	Method Description	Protocol	Laboratory
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	ELLE
410.4	COD	EPA	ELLE
EPA 180.1	Turbidity, Nephelometric	EPA	EET PIT
EPA 350.1	Nitrogen, Ammonia	EPA	EET PIT
EPA 9050A	Specific Conductance	SW846	EET PIT
SM 2320B	Alkalinity	SM	EET PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Client Sample ID: STR-01

Date Collected: 09/12/25 11:50

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195744-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		1	1 mL	1 mL	502895	09/13/25 19:37	ERP	EET PIT
Dissolved	Prep	3005A			50 mL	50 mL	703353	09/26/25 22:00	UAMX	ELLE
Dissolved	Analysis	6020B Instrument ID: E08 - 30647		1			705649	09/27/25 12:33	F7JF	ELLE
Dissolved	Prep	7470A			20 mL	20 mL	703962	09/24/25 13:45	RFN5	ELLE
Dissolved	Analysis	7470A Instrument ID: M10 – 31820		1			704306	09/24/25 18:47	IJ3I	ELLE
Dissolved	Analysis	SM 2340B Instrument ID: NOEQUIP		1			698918	09/16/25 11:40	USJM	ELLE
Total/NA	Analysis	410.4 Instrument ID: 11076		1	2 mL	2 mL	701063	09/18/25 06:40	USAE	ELLE
Total/NA	Analysis	EPA 180.1 Instrument ID: NOEQUIP		1			502894	09/13/25 13:54	RAO	EET PIT
Total/NA	Analysis	EPA 350.1 Instrument ID: BLUE-ASTORIA		1			503104	09/17/25 10:26	BAB	EET PIT
Total/NA	Analysis	EPA 9050A Instrument ID: NOEQUIP		1			502977	09/15/25 18:59	LWM	EET PIT
Total/NA	Analysis	SM 2320B Instrument ID: NOEQUIP		1	50 mL	50 mL	503099	09/17/25 11:22	ELS	EET PIT
Total/NA	Analysis	SM 2540C Instrument ID: NOEQUIP		1	100 mL	100 mL	503040	09/16/25 13:33	A1K	EET PIT

Client Sample ID: STR-02

Date Collected: 09/12/25 12:15

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195744-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1 Instrument ID: INTEGRION		1	1 mL	1 mL	502895	09/13/25 19:51	ERP	EET PIT
Dissolved	Prep	3005A			50 mL	50 mL	703353	09/26/25 22:00	UAMX	ELLE
Dissolved	Analysis	6020B Instrument ID: E08 - 30647		1			705649	09/27/25 12:31	F7JF	ELLE
Dissolved	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Dissolved	Analysis	7470A Instrument ID: M10 – 31820		1			704306	09/24/25 20:16	IJ3I	ELLE
Dissolved	Analysis	SM 2340B Instrument ID: NOEQUIP		1			698918	09/16/25 11:40	USJM	ELLE
Total/NA	Analysis	410.4 Instrument ID: 11076		1	2 mL	2 mL	701063	09/18/25 06:40	USAE	ELLE
Total/NA	Analysis	EPA 180.1 Instrument ID: NOEQUIP		1			502894	09/13/25 13:55	RAO	EET PIT
Total/NA	Analysis	EPA 350.1 Instrument ID: BLUE-ASTORIA		1			503104	09/17/25 10:28	BAB	EET PIT

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Client Sample ID: STR-02

Date Collected: 09/12/25 12:15

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195744-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9050A		1			502977	09/15/25 19:00	LWM	EET PIT
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	503099	09/17/25 11:32	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503040	09/16/25 13:33	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: STR-03

Date Collected: 09/12/25 12:35

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195744-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502895	09/13/25 20:06	ERP	EET PIT
		Instrument ID: INTEGRION								
Dissolved	Prep	3005A			50 mL	50 mL	703353	09/26/25 22:00	UAMX	ELLE
Dissolved	Analysis	6020B		1			705649	09/27/25 12:36	F7JF	ELLE
		Instrument ID: E08 - 30647								
Dissolved	Prep	7470A			20 mL	20 mL	703971	09/24/25 13:45	RFN5	ELLE
Dissolved	Analysis	7470A		1			704306	09/24/25 20:14	IJ3I	ELLE
		Instrument ID: M10 - 31820								
Dissolved	Analysis	SM 2340B		1			698918	09/16/25 11:40	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	701063	09/18/25 06:40	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502894	09/13/25 13:57	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			503104	09/17/25 10:30	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502977	09/15/25 19:01	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	503099	09/17/25 11:37	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503040	09/16/25 13:33	A1K	EET PIT
		Instrument ID: NOEQUIP								

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

Eurofins Pittsburgh

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Analyst References:

- Lab: EET PIT
- Batch Type: Analysis
 - A1K = Agnes Komlos
 - BAB = Brooke Batyi
 - ELS = Edwin Shireman
 - ERP = Evan Papak
 - LWM = Leslie McIntire
 - RAO = Rachel Oster
- Lab: ELLE
- Batch Type: Prep
 - RFN5 = Aniyah Oxendine
 - UAMX = Annamaria Kuhns
 - Batch Type: Analysis
 - F7JF = Dennis Dick
 - IJ3I = Elizabeth Brittingham
 - USAE = Susan Engle
 - USJM = Sandra Miller

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Client Sample ID: STR-01

Lab Sample ID: 180-195744-1

Date Collected: 09/12/25 11:50

Matrix: Water

Date Received: 09/13/25 10:05

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		1.0	0.71	mg/L			09/13/25 19:37	1
Nitrate as N	0.71		0.10	0.023	mg/L			09/13/25 19:37	1
Sulfate	43		1.0	0.76	mg/L			09/13/25 19:37	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/26/25 22:00	09/27/25 12:33	1
Arsenic	ND		2.0	0.68	ug/L		09/26/25 22:00	09/27/25 12:33	1
Barium	73		2.0	0.75	ug/L		09/26/25 22:00	09/27/25 12:33	1
Beryllium	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:33	1
Cadmium	ND		0.50	0.15	ug/L		09/26/25 22:00	09/27/25 12:33	1
Calcium	50000		120	50	ug/L		09/26/25 22:00	09/27/25 12:33	1
Chromium	ND		2.0	0.55	ug/L		09/26/25 22:00	09/27/25 12:33	1
Cobalt	0.81		0.50	0.16	ug/L		09/26/25 22:00	09/27/25 12:33	1
Copper	ND		1.0	0.85	ug/L		09/26/25 22:00	09/27/25 12:33	1
Iron	42 J		50	20	ug/L		09/26/25 22:00	09/27/25 12:33	1
Lead	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:33	1
Magnesium	12000		50	16	ug/L		09/26/25 22:00	09/27/25 12:33	1
Manganese	33		2.0	0.95	ug/L		09/26/25 22:00	09/27/25 12:33	1
Nickel	1.2		1.0	0.40	ug/L		09/26/25 22:00	09/27/25 12:33	1
Potassium	4200		200	65	ug/L		09/26/25 22:00	09/27/25 12:33	1
Selenium	ND		1.0	0.28	ug/L		09/26/25 22:00	09/27/25 12:33	1
Silver	ND		0.50	0.10	ug/L		09/26/25 22:00	09/27/25 12:33	1
Sodium	69000		200	90	ug/L		09/26/25 22:00	09/27/25 12:33	1
Thallium	ND		0.50	0.13	ug/L		09/26/25 22:00	09/27/25 12:33	1
Tin	ND		2.0	0.60	ug/L		09/26/25 22:00	09/27/25 12:33	1
Vanadium	ND		4.0	0.79	ug/L		09/26/25 22:00	09/27/25 12:33	1
Zinc	ND		10	4.0	ug/L		09/26/25 22:00	09/27/25 12:33	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 18:47	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	170		0.51	0.19	mg/L			09/16/25 11:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	15		10	5.0	mg/L			09/18/25 06:40	1
Turbidity (EPA 180.1)	4.6		0.85	0.05	NTU			09/13/25 13:54	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/17/25 10:26	1
Specific Conductance (SW846 EPA 9050A)	720		1.0	1.0	umhos/cm			09/15/25 18:59	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	110		5.0	5.0	mg/L			09/17/25 11:22	1
Total Dissolved Solids (SM 2540C)	410		10	10	mg/L			09/16/25 13:33	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Client Sample ID: STR-02

Lab Sample ID: 180-195744-2

Date Collected: 09/12/25 12:15

Matrix: Water

Date Received: 09/13/25 10:05

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25		1.0	0.71	mg/L			09/13/25 19:51	1
Nitrate as N	0.17		0.10	0.023	mg/L			09/13/25 19:51	1
Sulfate	160		1.0	0.76	mg/L			09/13/25 19:51	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/26/25 22:00	09/27/25 12:31	1
Arsenic	0.94	J	2.0	0.68	ug/L		09/26/25 22:00	09/27/25 12:31	1
Barium	28		2.0	0.75	ug/L		09/26/25 22:00	09/27/25 12:31	1
Beryllium	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:31	1
Cadmium	0.29	J	0.50	0.15	ug/L		09/26/25 22:00	09/27/25 12:31	1
Calcium	51000		120	50	ug/L		09/26/25 22:00	09/27/25 12:31	1
Chromium	ND		2.0	0.55	ug/L		09/26/25 22:00	09/27/25 12:31	1
Cobalt	0.81		0.50	0.16	ug/L		09/26/25 22:00	09/27/25 12:31	1
Copper	ND		1.0	0.85	ug/L		09/26/25 22:00	09/27/25 12:31	1
Iron	740		50	20	ug/L		09/26/25 22:00	09/27/25 12:31	1
Lead	0.20	J	0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:31	1
Magnesium	20000		50	16	ug/L		09/26/25 22:00	09/27/25 12:31	1
Manganese	53		2.0	0.95	ug/L		09/26/25 22:00	09/27/25 12:31	1
Nickel	3.7		1.0	0.40	ug/L		09/26/25 22:00	09/27/25 12:31	1
Potassium	12000		200	65	ug/L		09/26/25 22:00	09/27/25 12:31	1
Selenium	ND		1.0	0.28	ug/L		09/26/25 22:00	09/27/25 12:31	1
Silver	ND		0.50	0.10	ug/L		09/26/25 22:00	09/27/25 12:31	1
Sodium	30000		200	90	ug/L		09/26/25 22:00	09/27/25 12:31	1
Thallium	0.19	J	0.50	0.13	ug/L		09/26/25 22:00	09/27/25 12:31	1
Tin	ND		2.0	0.60	ug/L		09/26/25 22:00	09/27/25 12:31	1
Vanadium	ND		4.0	0.79	ug/L		09/26/25 22:00	09/27/25 12:31	1
Zinc	5.6	J	10	4.0	ug/L		09/26/25 22:00	09/27/25 12:31	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 20:16	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	210		0.51	0.19	mg/L			09/16/25 11:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	21		10	5.0	mg/L			09/18/25 06:40	1
Turbidity (EPA 180.1)	8.9		0.85	0.05	NTU			09/13/25 13:55	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/17/25 10:28	1
Specific Conductance (SW846 EP/ 9050A)	590		1.0	1.0	umhos/cm			09/15/25 19:00	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	92		5.0	5.0	mg/L			09/17/25 11:32	1
Total Dissolved Solids (SM 2540C)	390		10	10	mg/L			09/16/25 13:33	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Client Sample ID: STR-03

Lab Sample ID: 180-195744-3

Date Collected: 09/12/25 12:35

Matrix: Water

Date Received: 09/13/25 10:05

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21		1.0	0.71	mg/L			09/13/25 20:06	1
Nitrate as N	0.55		0.10	0.023	mg/L			09/13/25 20:06	1
Sulfate	98		1.0	0.76	mg/L			09/13/25 20:06	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/26/25 22:00	09/27/25 12:36	1
Arsenic	ND		2.0	0.68	ug/L		09/26/25 22:00	09/27/25 12:36	1
Barium	39		2.0	0.75	ug/L		09/26/25 22:00	09/27/25 12:36	1
Beryllium	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:36	1
Cadmium	ND		0.50	0.15	ug/L		09/26/25 22:00	09/27/25 12:36	1
Calcium	56000		120	50	ug/L		09/26/25 22:00	09/27/25 12:36	1
Chromium	ND		2.0	0.55	ug/L		09/26/25 22:00	09/27/25 12:36	1
Cobalt	0.55		0.50	0.16	ug/L		09/26/25 22:00	09/27/25 12:36	1
Copper	ND		1.0	0.85	ug/L		09/26/25 22:00	09/27/25 12:36	1
Iron	ND		50	20	ug/L		09/26/25 22:00	09/27/25 12:36	1
Lead	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:36	1
Magnesium	13000		50	16	ug/L		09/26/25 22:00	09/27/25 12:36	1
Manganese	150		2.0	0.95	ug/L		09/26/25 22:00	09/27/25 12:36	1
Nickel	1.2		1.0	0.40	ug/L		09/26/25 22:00	09/27/25 12:36	1
Potassium	7800		200	65	ug/L		09/26/25 22:00	09/27/25 12:36	1
Selenium	ND		1.0	0.28	ug/L		09/26/25 22:00	09/27/25 12:36	1
Silver	ND		0.50	0.10	ug/L		09/26/25 22:00	09/27/25 12:36	1
Sodium	19000		200	90	ug/L		09/26/25 22:00	09/27/25 12:36	1
Thallium	ND		0.50	0.13	ug/L		09/26/25 22:00	09/27/25 12:36	1
Tin	ND		2.0	0.60	ug/L		09/26/25 22:00	09/27/25 12:36	1
Vanadium	ND		4.0	0.79	ug/L		09/26/25 22:00	09/27/25 12:36	1
Zinc	5.2 J		10	4.0	ug/L		09/26/25 22:00	09/27/25 12:36	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 20:14	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	200		0.51	0.19	mg/L			09/16/25 11:40	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	19		10	5.0	mg/L			09/18/25 06:40	1
Turbidity (EPA 180.1)	8.4		0.85	0.05	NTU			09/13/25 13:57	1
Ammonia (EPA 350.1)	ND	F1	0.10	0.088	mg/L			09/17/25 10:30	1
Specific Conductance (SW846 EP/ 9050A)	510		1.0	1.0	umhos/cm			09/15/25 19:01	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	120		5.0	5.0	mg/L			09/17/25 11:37	1
Total Dissolved Solids (SM 2540C)	340		10	10	mg/L			09/16/25 13:33	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-502895/6

Matrix: Water

Analysis Batch: 502895

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			09/13/25 12:55	1
Nitrate as N	ND		0.10	0.023	mg/L			09/13/25 12:55	1
Sulfate	ND		1.0	0.76	mg/L			09/13/25 12:55	1

Lab Sample ID: LCS 180-502895/7

Matrix: Water

Analysis Batch: 502895

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.7		mg/L		103	90 - 110
Nitrate as N	2.50	2.60		mg/L		104	90 - 110
Sulfate	50.0	51.8		mg/L		104	90 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-703353/1-A

Matrix: Water

Analysis Batch: 705649

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 703353

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/26/25 22:00	09/27/25 11:56	1
Arsenic	ND		2.0	0.68	ug/L		09/26/25 22:00	09/27/25 11:56	1
Barium	ND		2.0	0.75	ug/L		09/26/25 22:00	09/27/25 11:56	1
Beryllium	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 11:56	1
Cadmium	ND		0.50	0.15	ug/L		09/26/25 22:00	09/27/25 11:56	1
Calcium	ND		120	50	ug/L		09/26/25 22:00	09/27/25 11:56	1
Chromium	ND		2.0	0.55	ug/L		09/26/25 22:00	09/27/25 11:56	1
Cobalt	ND		0.50	0.16	ug/L		09/26/25 22:00	09/27/25 11:56	1
Copper	ND		1.0	0.85	ug/L		09/26/25 22:00	09/27/25 11:56	1
Iron	ND		50	20	ug/L		09/26/25 22:00	09/27/25 11:56	1
Lead	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 11:56	1
Magnesium	ND		50	16	ug/L		09/26/25 22:00	09/27/25 11:56	1
Manganese	ND		2.0	0.95	ug/L		09/26/25 22:00	09/27/25 11:56	1
Nickel	ND		1.0	0.40	ug/L		09/26/25 22:00	09/27/25 11:56	1
Potassium	ND		200	65	ug/L		09/26/25 22:00	09/27/25 11:56	1
Selenium	ND		1.0	0.28	ug/L		09/26/25 22:00	09/27/25 11:56	1
Silver	ND		0.50	0.10	ug/L		09/26/25 22:00	09/27/25 11:56	1
Sodium	ND		200	90	ug/L		09/26/25 22:00	09/27/25 11:56	1
Thallium	ND		0.50	0.13	ug/L		09/26/25 22:00	09/27/25 11:56	1
Tin	ND		2.0	0.60	ug/L		09/26/25 22:00	09/27/25 11:56	1
Vanadium	ND		4.0	0.79	ug/L		09/26/25 22:00	09/27/25 11:56	1
Zinc	ND		10	4.0	ug/L		09/26/25 22:00	09/27/25 11:56	1

Lab Sample ID: LCS 410-703353/2-A

Matrix: Water

Analysis Batch: 705649

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 703353

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	98.0		ug/L		98	85 - 115

Eurofins Pittsburgh

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 410-703353/2-A

Matrix: Water

Analysis Batch: 705649

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 703353

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	500	486		ug/L		97	86 - 111
Barium	500	489		ug/L		98	86 - 114
Beryllium	50.0	50.7		ug/L		101	80 - 120
Cadmium	50.0	48.3		ug/L		97	86 - 114
Calcium	5000	4790		ug/L		96	84 - 113
Chromium	500	502		ug/L		100	84 - 113
Cobalt	500	497		ug/L		99	85 - 112
Copper	500	490		ug/L		98	86 - 111
Iron	5000	4810		ug/L		96	84 - 114
Lead	50.0	50.4		ug/L		101	86 - 114
Magnesium	5000	4880		ug/L		98	84 - 113
Manganese	500	494		ug/L		99	84 - 113
Nickel	500	494		ug/L		99	85 - 113
Potassium	5000	4950		ug/L		99	87 - 111
Selenium	100	97.1		ug/L		97	86 - 111
Silver	50.0	48.8		ug/L		98	88 - 116
Sodium	5000	4950		ug/L		99	84 - 114
Thallium	100	97.3		ug/L		97	86 - 113
Tin	100	98.1		ug/L		98	84 - 115
Vanadium	500	497		ug/L		99	84 - 112
Zinc	500	489		ug/L		98	86 - 112

Lab Sample ID: LCSD 410-703353/3-A

Matrix: Water

Analysis Batch: 705649

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 703353

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Antimony	100	99.6		ug/L		100	85 - 115	2	20
Arsenic	500	483		ug/L		97	86 - 111	1	20
Barium	500	495		ug/L		99	86 - 114	1	20
Beryllium	50.0	51.4		ug/L		103	80 - 120	1	20
Cadmium	50.0	49.5		ug/L		99	86 - 114	2	20
Calcium	5000	4810		ug/L		96	84 - 113	0	20
Chromium	500	500		ug/L		100	84 - 113	0	20
Cobalt	500	493		ug/L		99	85 - 112	1	20
Copper	500	486		ug/L		97	86 - 111	1	20
Iron	5000	4810		ug/L		96	84 - 114	0	20
Lead	50.0	50.0		ug/L		100	86 - 114	1	20
Magnesium	5000	4820		ug/L		96	84 - 113	1	20
Manganese	500	493		ug/L		99	84 - 113	0	20
Nickel	500	488		ug/L		98	85 - 113	1	20
Potassium	5000	4980		ug/L		100	87 - 111	1	20
Selenium	100	97.2		ug/L		97	86 - 111	0	20
Silver	50.0	49.3		ug/L		99	88 - 116	1	20
Sodium	5000	4900		ug/L		98	84 - 114	1	20
Thallium	100	97.4		ug/L		97	86 - 113	0	20
Tin	100	99.1		ug/L		99	84 - 115	1	20
Vanadium	500	496		ug/L		99	84 - 112	0	20
Zinc	500	490		ug/L		98	86 - 112	0	20

Eurofins Pittsburgh

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-703962/1-A
Matrix: Water
Analysis Batch: 704306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 703962

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 18:24	1

Lab Sample ID: LCS 410-703962/2-A
Matrix: Water
Analysis Batch: 704306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 703962

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	0.933		ug/L		93	80 - 120

Lab Sample ID: MB 410-703971/1-A
Matrix: Water
Analysis Batch: 704306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 703971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/24/25 13:45	09/24/25 19:19	1

Lab Sample ID: LCS 410-703971/2-A
Matrix: Water
Analysis Batch: 704306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 703971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.01		ug/L		101	80 - 120

Lab Sample ID: LCSD 410-703971/3-A
Matrix: Water
Analysis Batch: 704306

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 703971

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	1.00	0.989		ug/L		99	80 - 120	2	20

Method: 410.4 - COD

Lab Sample ID: MB 410-701063/4
Matrix: Water
Analysis Batch: 701063

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			09/18/25 06:40	1

Lab Sample ID: LCS 410-701063/5
Matrix: Water
Analysis Batch: 701063

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	40.0	39.7		mg/L		99	90 - 110

Eurofins Pittsburgh

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Method: EPA 180.1 - Turbidity, Nephelometric

Lab Sample ID: MB 180-502894/35

Matrix: Water

Analysis Batch: 502894

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	ND		0.85	0.05	NTU			09/13/25 13:56	1

Lab Sample ID: MB 180-502894/7

Matrix: Water

Analysis Batch: 502894

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	ND		0.85	0.05	NTU			09/13/25 13:32	1

Lab Sample ID: LCS 180-502894/36

Matrix: Water

Analysis Batch: 502894

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Turbidity	0.850	0.90		NTU		107	90 - 110

Lab Sample ID: LCS 180-502894/8

Matrix: Water

Analysis Batch: 502894

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Turbidity	0.850	0.90		NTU		107	90 - 110

Lab Sample ID: 180-195744-3 DU

Matrix: Water

Analysis Batch: 502894

Client Sample ID: STR-03

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Turbidity	8.4		8.4		NTU		0.5	20

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 180-503104/17

Matrix: Water

Analysis Batch: 503104

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.088	mg/L			09/17/25 09:57	1

Lab Sample ID: LCS 180-503104/18

Matrix: Water

Analysis Batch: 503104

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	0.500	0.507		mg/L		101	90 - 110

Eurofins Pittsburgh

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Method: EPA 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 180-195744-3 MS

Matrix: Water

Analysis Batch: 503104

Client Sample ID: STR-03

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	ND	F1	0.500	ND	F1	mg/L		0	90 - 110

Lab Sample ID: 180-195744-3 MSD

Matrix: Water

Analysis Batch: 503104

Client Sample ID: STR-03

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	ND	F1	0.500	ND	F1	mg/L		0	90 - 110	NC	20

Method: EPA 9050A - Specific Conductance

Lab Sample ID: MB 180-502977/30

Matrix: Water

Analysis Batch: 502977

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			09/15/25 18:53	1

Lab Sample ID: LCS 180-502977/29

Matrix: Water

Analysis Batch: 502977

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	84.0	84.0		umhos/cm		100	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 180-503099/2

Matrix: Water

Analysis Batch: 503099

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	ND		5.0	5.0	mg/L			09/17/25 11:17	1

Lab Sample ID: LCS 180-503099/1

Matrix: Water

Analysis Batch: 503099

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	251	245		mg/L		98	90 - 110

Lab Sample ID: 180-195744-1 DU

Matrix: Water

Analysis Batch: 503099

Client Sample ID: STR-01

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3 to pH 4.5	110		117		mg/L		9	20

Eurofins Pittsburgh

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-503040/1
Matrix: Water
Analysis Batch: 503040

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			09/16/25 13:33	1

Lab Sample ID: LCS 180-503040/2
Matrix: Water
Analysis Batch: 503040

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	176	154		mg/L		88	85 - 115

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

HPLC/IC

Analysis Batch: 502895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195744-1	STR-01	Total/NA	Water	EPA 300.0 R2.1	
180-195744-2	STR-02	Total/NA	Water	EPA 300.0 R2.1	
180-195744-3	STR-03	Total/NA	Water	EPA 300.0 R2.1	
MB 180-502895/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-502895/7	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Metals

Analysis Batch: 698918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195744-1	STR-01	Dissolved	Water	SM 2340B	
180-195744-2	STR-02	Dissolved	Water	SM 2340B	
180-195744-3	STR-03	Dissolved	Water	SM 2340B	

Prep Batch: 703353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195744-1	STR-01	Dissolved	Water	3005A	
180-195744-2	STR-02	Dissolved	Water	3005A	
180-195744-3	STR-03	Dissolved	Water	3005A	
MB 410-703353/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-703353/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 410-703353/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

Prep Batch: 703962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195744-1	STR-01	Dissolved	Water	7470A	
MB 410-703962/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-703962/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 703971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195744-2	STR-02	Dissolved	Water	7470A	
180-195744-3	STR-03	Dissolved	Water	7470A	
MB 410-703971/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-703971/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 410-703971/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	

Analysis Batch: 704306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195744-1	STR-01	Dissolved	Water	7470A	703962
180-195744-2	STR-02	Dissolved	Water	7470A	703971
180-195744-3	STR-03	Dissolved	Water	7470A	703971
MB 410-703962/1-A	Method Blank	Total/NA	Water	7470A	703962
MB 410-703971/1-A	Method Blank	Total/NA	Water	7470A	703971
LCS 410-703962/2-A	Lab Control Sample	Total/NA	Water	7470A	703962
LCS 410-703971/2-A	Lab Control Sample	Total/NA	Water	7470A	703971
LCSD 410-703971/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	703971

Analysis Batch: 705649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195744-1	STR-01	Dissolved	Water	6020B	703353

Eurofins Pittsburgh

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

Metals (Continued)

Analysis Batch: 705649 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195744-2	STR-02	Dissolved	Water	6020B	703353
180-195744-3	STR-03	Dissolved	Water	6020B	703353
MB 410-703353/1-A	Method Blank	Total Recoverable	Water	6020B	703353
LCS 410-703353/2-A	Lab Control Sample	Total Recoverable	Water	6020B	703353
LCSD 410-703353/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	703353

General Chemistry

Analysis Batch: 502894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195744-1	STR-01	Total/NA	Water	EPA 180.1	
180-195744-2	STR-02	Total/NA	Water	EPA 180.1	
180-195744-3	STR-03	Total/NA	Water	EPA 180.1	
MB 180-502894/35	Method Blank	Total/NA	Water	EPA 180.1	
MB 180-502894/7	Method Blank	Total/NA	Water	EPA 180.1	
LCS 180-502894/36	Lab Control Sample	Total/NA	Water	EPA 180.1	
LCS 180-502894/8	Lab Control Sample	Total/NA	Water	EPA 180.1	
180-195744-3 DU	STR-03	Total/NA	Water	EPA 180.1	

Analysis Batch: 502977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195744-1	STR-01	Total/NA	Water	EPA 9050A	
180-195744-2	STR-02	Total/NA	Water	EPA 9050A	
180-195744-3	STR-03	Total/NA	Water	EPA 9050A	
MB 180-502977/30	Method Blank	Total/NA	Water	EPA 9050A	
LCS 180-502977/29	Lab Control Sample	Total/NA	Water	EPA 9050A	

Analysis Batch: 503040

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195744-1	STR-01	Total/NA	Water	SM 2540C	
180-195744-2	STR-02	Total/NA	Water	SM 2540C	
180-195744-3	STR-03	Total/NA	Water	SM 2540C	
MB 180-503040/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-503040/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 503099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195744-1	STR-01	Total/NA	Water	SM 2320B	
180-195744-2	STR-02	Total/NA	Water	SM 2320B	
180-195744-3	STR-03	Total/NA	Water	SM 2320B	
MB 180-503099/2	Method Blank	Total/NA	Water	SM 2320B	
LCS 180-503099/1	Lab Control Sample	Total/NA	Water	SM 2320B	
180-195744-1 DU	STR-01	Total/NA	Water	SM 2320B	

Analysis Batch: 503104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195744-1	STR-01	Total/NA	Water	EPA 350.1	
180-195744-2	STR-02	Total/NA	Water	EPA 350.1	
180-195744-3	STR-03	Total/NA	Water	EPA 350.1	
MB 180-503104/17	Method Blank	Total/NA	Water	EPA 350.1	
LCS 180-503104/18	Lab Control Sample	Total/NA	Water	EPA 350.1	

Eurofins Pittsburgh

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195744-1

General Chemistry (Continued)

Analysis Batch: 503104 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195744-3 MS	STR-03	Total/NA	Water	EPA 350.1	
180-195744-3 MSD	STR-03	Total/NA	Water	EPA 350.1	

Analysis Batch: 701063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195744-1	STR-01	Total/NA	Water	410.4	
180-195744-2	STR-02	Total/NA	Water	410.4	
180-195744-3	STR-03	Total/NA	Water	410.4	
MB 410-701063/4	Method Blank	Total/NA	Water	410.4	
LCS 410-701063/5	Lab Control Sample	Total/NA	Water	410.4	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Part # 159469-434 MTW EXP 01/25

ORIGIN ID: BWA (240) 814-1351
 CLINT WEAVER
 EUROFINS TESTAMERICA
 7526 CONNELLY DRIVE SUITE F
 HANOVER, MD 21076
 UNITED STATES US

SHIP DATE: 12SEP25
 ACTWGT: 50.00 LB
 CAD: 1030460/INET4535

BILL RECIPIENT

TO SAMPLE RECEIVING
 EUROFINS PITTSBURGH
 301 ALPHA DRIVE
 RIDC PARK
 PITTSBURGH PA 15238

REF: GEOSYNTEC
 (412) 963-7058
 INV: PO:

DEPT:

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

Uncorrected temp 1.19 °C
 Thermometer ID 20

CF-0.7 Initials Rd

FedEx Express



SATURDAY 12:00
 PRIORITY OVERNIGHT

4 of 4

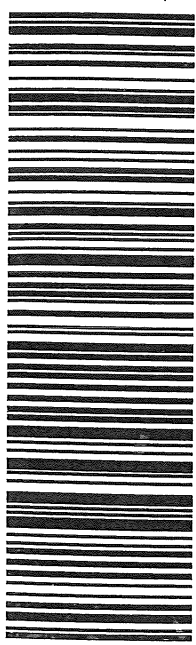
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 Mstr# 8843 3509 6129

0201

1523

PA-US PIT

X0 AGCA



180-195744 Waybill

Part # 159469-434 MTW EXP 01/25

ORIGIN ID: BWA (240) 814-1351
 CLINT WEAVER
 EUROFINS TESTAMERICA
 7526 CONNELLY DRIVE SUITE F
 HANOVER, MD 21076
 UNITED STATES US

SHIP DATE: 12SEP25
 ACTWGT: 50.00 LB
 CAD: 1030460/INET4535

BILL RECIPIENT

TO SAMPLE RECEIVING
 EUROFINS PITTSBURGH
 301 ALPHA DRIVE
 RIDC PARK
 PITTSBURGH PA 15238

REF: GEOSYNTEC
 (412) 963-7058
 INV: PO:

DEPT:

Uncorrected temp 1.19 °C
 Thermometer ID 20

CF-0.7 Initials Rd

FedEx Express



SATURDAY 12:00
 PRIORITY OVERNIGHT

2 of 4

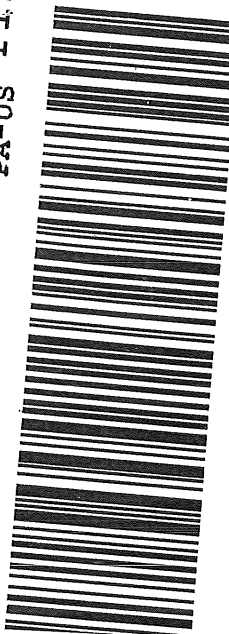
Mstr# 8843 3509 6130
 Mstr# 8843 3509 6129

0201

1523E

PA-US PIT

0 AGCA



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Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195744-1

Login Number: 195744

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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	
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 $<6\text{mm}$ (1/4").	False	
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: 180-195744-1

Login Number: 195744

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 09/15/25 10:28 AM

Creator: Cyms, Carolyn M

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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, 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	Not present.
VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)?	N/A	



ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Girod
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 10/5/2025 10:13:40 PM

JOB DESCRIPTION

Ritchie Rubble LF Semi-Annual UD

JOB NUMBER

180-195745-1

Eurofins Pittsburgh

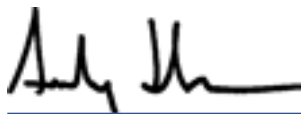
Job Notes

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
Andy Johnson, Senior Project Manager
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(615)818-9567

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Job ID: 180-195745-1

Eurofins Pittsburgh

Job Narrative 180-195745-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The sample was received on 9/13/2025 10:05 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.9°C, 0.9°C, 1.9°C and 4.4°C.

GC/MS VOA

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

GC Semi VOA

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

HPLC/IC

Method 300_ORGFMS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 180-502895 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Metals

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

General Chemistry

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

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Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Metals

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

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
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00690	06-28-25 *
California	State	2891	04-30-26
Connecticut	State	PH-0820	09-30-26
Florida	NELAP	E871008	06-30-25 *
Georgia	State	PA 02-00416	04-30-26
Illinois	NELAP	200005	07-31-25 *
Kansas	NELAP	E-10350	01-31-26
Kentucky (UST)	State	162013	04-30-26
Kentucky (WW)	State	KY98043	12-31-25
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-25 *
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-25
New Hampshire	NELAP	2030	04-04-26
New Jersey	NELAP	PA005	06-30-25 *
New York	NELAP	11182	03-31-26
North Carolina (WW/SW)	State	434	12-31-25
North Dakota	State	R-227	04-30-24 *
Oregon	NELAP	PA-2151	02-06-26
Pennsylvania	NELAP	02-00416	04-30-26
Rhode Island	State	LAO00375	12-30-25
South Carolina	State	89014	04-30-25 *
Texas	NELAP	T104704528	03-31-26
US Fish & Wildlife	US Federal Programs	A21930	04-30-26
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462024-14	03-31-24 *
Virginia	NELAP	460189	09-14-25 *
West Virginia DEP	State	142	01-31-26
Wisconsin	State	998027800	08-31-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26

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

Eurofins Pittsburgh

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Ohio	State	87787	01-31-26
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-27-25
Virginia	NELAP	460182	06-14-26
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

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

Eurofins Pittsburgh

Sample Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195745-1	D2-UD	Water	09/12/25 13:15	09/13/25 10:05	Maryland

- 1
- 2
- 3
- 4
- 5
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Method Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	ELLE
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	ELLE
410.4	COD	EPA	ELLE
EPA 180.1	Turbidity, Nephelometric	EPA	EET PIT
EPA 350.1	Nitrogen, Ammonia	EPA	EET PIT
EPA 9050A	Specific Conductance	SW846	EET PIT
SM 2320B	Alkalinity	SM	EET PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
8011	Microextraction	SW846	ELLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Client Sample ID: D2-UD

Lab Sample ID: 180-195745-1

Date Collected: 09/12/25 13:15

Matrix: Water

Date Received: 09/13/25 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	25 mL	25 mL	702434	09/22/25 04:46	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.2 mL	2 mL	701606	09/19/25 00:11	USL7	ELLE
Total/NA	Analysis	8011		1			701697	09/19/25 21:29	WN7O	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502895	09/13/25 18:24	ERP	EET PIT
		Instrument ID: INTEGRION								
Total Recoverable	Prep	3005A			50 mL	50 mL	705149	09/26/25 22:00	UAMX	ELLE
Total Recoverable	Analysis	6020B		1			705644	09/27/25 11:24	F7JF	ELLE
		Instrument ID: E10								
Total/NA	Prep	7470A			20 mL	20 mL	708873	10/03/25 15:06	RFN5	ELLE
Total/NA	Analysis	7470A		1			709309	10/05/25 13:16	HNC4	ELLE
		Instrument ID: M10 – 31820								
Total/NA	Analysis	SM 2340B		1			698918	09/16/25 11:40	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	701615	09/19/25 02:14	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502894	09/13/25 13:59	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			503104	09/17/25 10:35	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502977	09/15/25 19:02	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	503099	09/17/25 11:42	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503107	09/17/25 13:01	A1K	EET PIT
		Instrument ID: NOEQUIP								

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

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Analyst References:

- Lab: EET PIT
- Batch Type: Analysis
 - A1K = Agnes Komlos
 - BAB = Brooke Batyi
 - ELS = Edwin Shireman
 - ERP = Evan Papak
 - LWM = Leslie McIntire
 - RAO = Rachel Oster
- Lab: ELLE
- Batch Type: Prep
 - RFN5 = Aniyah Oxendine
 - UAMX = Annamaria Kuhns
 - USL7 = Sherry Morrow
 - Batch Type: Analysis
 - F7JF = Dennis Dick
 - HNC4 = Mindy Schantzenbach
 - JS6E = Gavin Walmer
 - USAE = Susan Engle
 - USJM = Sandra Miller
 - WN7O = James Patrushev

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Client Sample ID: D2-UD

Lab Sample ID: 180-195745-1

Date Collected: 09/12/25 13:15

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/22/25 04:46	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/22/25 04:46	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/22/25 04:46	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/22/25 04:46	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/22/25 04:46	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/22/25 04:46	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/22/25 04:46	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/22/25 04:46	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/22/25 04:46	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/22/25 04:46	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/22/25 04:46	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/22/25 04:46	1
2-Hexanone	ND		5.0	2.0	ug/L			09/22/25 04:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/22/25 04:46	1
Acetone	ND		5.0	1.5	ug/L			09/22/25 04:46	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/22/25 04:46	1
Benzene	ND		0.50	0.10	ug/L			09/22/25 04:46	1
Bromoform	ND		1.0	0.30	ug/L			09/22/25 04:46	1
Bromomethane	ND		0.50	0.10	ug/L			09/22/25 04:46	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/22/25 04:46	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/22/25 04:46	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/22/25 04:46	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/22/25 04:46	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/22/25 04:46	1
Chloroethane	ND		0.50	0.10	ug/L			09/22/25 04:46	1
Chloroform	ND		0.50	0.090	ug/L			09/22/25 04:46	1
Chloromethane	ND		0.50	0.10	ug/L			09/22/25 04:46	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/22/25 04:46	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/22/25 04:46	1
Dibromomethane	ND		0.50	0.080	ug/L			09/22/25 04:46	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/22/25 04:46	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/22/25 04:46	1
Iodomethane	ND		0.50	0.080	ug/L			09/22/25 04:46	1
Methyl tert-butyl ether	2.0		0.50	0.080	ug/L			09/22/25 04:46	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/22/25 04:46	1
Styrene	ND		0.50	0.070	ug/L			09/22/25 04:46	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/22/25 04:46	1
Toluene	ND		0.50	0.080	ug/L			09/22/25 04:46	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/22/25 04:46	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/22/25 04:46	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/22/25 04:46	1
Trichloroethene	ND		0.50	0.080	ug/L			09/22/25 04:46	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/22/25 04:46	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/22/25 04:46	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/22/25 04:46	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/22/25 04:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		09/22/25 04:46	1
4-Bromofluorobenzene (Surr)	95		80 - 120		09/22/25 04:46	1

Eurofins Pittsburgh

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Client Sample ID: D2-UD

Lab Sample ID: 180-195745-1

Date Collected: 09/12/25 13:15

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		80 - 120		09/22/25 04:46	1
Toluene-d8 (Surr)	96		80 - 120		09/22/25 04:46	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0097	ug/L		09/19/25 00:11	09/19/25 21:29	1
1,2-Dibromoethane	ND		0.019	0.0097	ug/L		09/19/25 00:11	09/19/25 21:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	105		46 - 136	09/19/25 00:11	09/19/25 21:29	1
1,1,2,2-Tetrachloroethane	128		46 - 136	09/19/25 00:11	09/19/25 21:29	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73		1.0	0.71	mg/L			09/13/25 18:24	1
Nitrate as N	ND	F1	0.10	0.023	mg/L			09/13/25 18:24	1
Sulfate	150	F1	1.0	0.76	mg/L			09/13/25 18:24	1

Method: SW846 6020B - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/26/25 22:00	09/27/25 11:24	1
Arsenic	ND		2.0	0.68	ug/L		09/26/25 22:00	09/27/25 11:24	1
Barium	35		2.0	0.75	ug/L		09/26/25 22:00	09/27/25 11:24	1
Beryllium	2.3		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 11:24	1
Cadmium	11		0.50	0.15	ug/L		09/26/25 22:00	09/27/25 11:24	1
Calcium	33000		120	50	ug/L		09/26/25 22:00	09/27/25 11:24	1
Chromium	0.75	J	2.0	0.55	ug/L		09/26/25 22:00	09/27/25 11:24	1
Cobalt	11		0.50	0.16	ug/L		09/26/25 22:00	09/27/25 11:24	1
Copper	4.9		1.0	0.85	ug/L		09/26/25 22:00	09/27/25 11:24	1
Iron	2600		50	20	ug/L		09/26/25 22:00	09/27/25 11:24	1
Lead	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 11:24	1
Magnesium	11000		50	16	ug/L		09/26/25 22:00	09/27/25 11:24	1
Manganese	720		2.0	0.95	ug/L		09/26/25 22:00	09/27/25 11:24	1
Nickel	38		1.0	0.40	ug/L		09/26/25 22:00	09/27/25 11:24	1
Potassium	3000		200	65	ug/L		09/26/25 22:00	09/27/25 11:24	1
Selenium	ND		1.0	0.28	ug/L		09/26/25 22:00	09/27/25 11:24	1
Silver	ND		0.50	0.10	ug/L		09/26/25 22:00	09/27/25 11:24	1
Sodium	50000		200	90	ug/L		09/26/25 22:00	09/27/25 11:24	1
Thallium	0.38	J	0.50	0.13	ug/L		09/26/25 22:00	09/27/25 11:24	1
Tin	ND		2.0	0.60	ug/L		09/26/25 22:00	09/27/25 11:24	1
Vanadium	ND		4.0	0.79	ug/L		09/26/25 22:00	09/27/25 11:24	1
Zinc	200		10	4.0	ug/L		09/26/25 22:00	09/27/25 11:24	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		10/03/25 15:06	10/05/25 13:16	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	130		0.51	0.19	mg/L			09/16/25 11:40	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Client Sample ID: D2-UD

Lab Sample ID: 180-195745-1

Date Collected: 09/12/25 13:15

Matrix: Water

Date Received: 09/13/25 10:05

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	18		10	5.0	mg/L			09/19/25 02:14	1
Turbidity (EPA 180.1)	0.95		0.85	0.05	NTU			09/13/25 13:59	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/17/25 10:35	1
Specific Conductance (SW846 EPA 9050A)	600		1.0	1.0	umhos/cm			09/15/25 19:02	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	ND		5.0	5.0	mg/L			09/17/25 11:42	1
Total Dissolved Solids (SM 2540C)	380		10	10	mg/L			09/17/25 13:01	1

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-702434/10

Matrix: Water

Analysis Batch: 702434

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/21/25 22:03	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/21/25 22:03	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/21/25 22:03	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/21/25 22:03	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/21/25 22:03	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/21/25 22:03	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/21/25 22:03	1
2-Hexanone	ND		5.0	2.0	ug/L			09/21/25 22:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/21/25 22:03	1
Acetone	ND		5.0	1.5	ug/L			09/21/25 22:03	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/21/25 22:03	1
Benzene	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Bromoform	ND		1.0	0.30	ug/L			09/21/25 22:03	1
Bromomethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/21/25 22:03	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/21/25 22:03	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Chloroethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Chloroform	ND		0.50	0.090	ug/L			09/21/25 22:03	1
Chloromethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/21/25 22:03	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Dibromomethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Iodomethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/21/25 22:03	1
Styrene	ND		0.50	0.070	ug/L			09/21/25 22:03	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/21/25 22:03	1
Toluene	ND		0.50	0.080	ug/L			09/21/25 22:03	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/21/25 22:03	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/21/25 22:03	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/21/25 22:03	1
Trichloroethene	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/21/25 22:03	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/21/25 22:03	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

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

Lab Sample ID: MB 410-702434/10

Matrix: Water

Analysis Batch: 702434

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		09/21/25 22:03	1
4-Bromofluorobenzene (Surr)	97		80 - 120		09/21/25 22:03	1
Dibromofluoromethane (Surr)	100		80 - 120		09/21/25 22:03	1
Toluene-d8 (Surr)	97		80 - 120		09/21/25 22:03	1

Lab Sample ID: LCS 410-702434/5

Matrix: Water

Analysis Batch: 702434

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	5.34		ug/L		107	80 - 122
1,1,1-Trichloroethane	5.00	5.32		ug/L		106	78 - 126
1,1,2,2-Tetrachloroethane	5.00	5.24		ug/L		105	75 - 123
1,1,2-Trichloroethane	5.00	5.15		ug/L		103	80 - 120
1,1-Dichloroethane	5.00	5.67		ug/L		113	74 - 120
1,1-Dichloroethene	5.00	5.84		ug/L		117	80 - 131
1,2,3-Trichloropropane	5.00	5.38		ug/L		108	80 - 125
1,2-Dichlorobenzene	5.00	5.29		ug/L		106	80 - 120
1,2-Dichloroethane	5.00	5.14		ug/L		103	69 - 122
1,2-Dichloropropane	5.00	5.50		ug/L		110	80 - 120
1,4-Dichlorobenzene	5.00	5.15		ug/L		103	80 - 120
2-Butanone (MEK)	62.5	63.7		ug/L		102	59 - 141
2-Hexanone	62.5	67.7		ug/L		108	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	64.2		ug/L		103	55 - 140
Acetone	62.5	56.8		ug/L		91	60 - 146
Acrylonitrile	25.0	26.0		ug/L		104	64 - 139
Benzene	5.00	5.37		ug/L		107	80 - 120
Bromoform	5.00	5.42		ug/L		108	75 - 126
Bromomethane	5.00	4.25		ug/L		85	63 - 120
Carbon disulfide	5.00	5.41		ug/L		108	67 - 130
Carbon tetrachloride	5.00	5.40		ug/L		108	64 - 141
Chlorobenzene	5.00	5.24		ug/L		105	80 - 120
Chlorobromomethane	5.00	5.60		ug/L		112	80 - 133
Chlorodibromomethane	5.00	5.19		ug/L		104	80 - 123
Chloroethane	5.00	4.55		ug/L		91	63 - 120
Chloroform	5.00	5.42		ug/L		108	80 - 120
Chloromethane	5.00	4.01		ug/L		80	56 - 124
cis-1,2-Dichloroethene	5.00	5.70		ug/L		114	80 - 122
cis-1,3-Dichloropropene	5.00	5.12		ug/L		102	67 - 121
Dibromomethane	5.00	5.72		ug/L		114	80 - 122
Dichlorobromomethane	5.00	5.38		ug/L		108	80 - 123
Ethylbenzene	5.00	5.21		ug/L		104	80 - 120
Iodomethane	5.00	5.10		ug/L		102	77 - 120
Methyl tert-butyl ether	5.00	5.17		ug/L		103	69 - 120
Methylene Chloride	5.00	5.63		ug/L		113	80 - 120
Styrene	5.00	5.30		ug/L		106	80 - 120
Tetrachloroethene	5.00	4.93		ug/L		99	80 - 120
Toluene	5.00	5.26		ug/L		105	80 - 120

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

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

Lab Sample ID: LCS 410-702434/5

Matrix: Water

Analysis Batch: 702434

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,2-Dichloroethene	5.00	5.77		ug/L		115	80 - 122
trans-1,3-Dichloropropene	5.00	5.27		ug/L		105	61 - 129
trans-1,4-Dichloro-2-butene	25.0	23.1		ug/L		93	13 - 144
Trichloroethene	5.00	5.19		ug/L		104	80 - 120
Trichlorofluoromethane	5.00	3.67		ug/L		73	53 - 136
Vinyl chloride	5.00	4.47		ug/L		89	60 - 125
Xylenes, Total	15.0	15.8		ug/L		105	80 - 120

Surrogate	%Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCS 410-702434/7

Matrix: Water

Analysis Batch: 702434

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	12.5	15.1		ug/L		121	64 - 145

Surrogate	%Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 410-701606/1-A

Matrix: Water

Analysis Batch: 701697

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 701606

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.020	0.010	ug/L		09/19/25 00:11	09/19/25 17:27	1
1,2-Dibromoethane	ND		0.020	0.010	ug/L		09/19/25 00:11	09/19/25 17:27	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	101		46 - 136				09/19/25 00:11	09/19/25 17:27	1
1,1,2,2-Tetrachloroethane	105		46 - 136				09/19/25 00:11	09/19/25 17:27	1

Lab Sample ID: LCS 410-701606/2-A

Matrix: Water

Analysis Batch: 701697

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 701606

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	0.129	0.149		ug/L		115	60 - 140
1,2-Dibromoethane	0.129	0.125		ug/L		97	60 - 140

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCS 410-701606/2-A

Matrix: Water

Analysis Batch: 701697

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 701606

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,1,2,2-Tetrachloroethane	101		46 - 136
1,1,2,2-Tetrachloroethane	111		46 - 136

Lab Sample ID: LCSD 410-701606/3-A

Matrix: Water

Analysis Batch: 701697

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 701606

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.129	0.161		ug/L		125	60 - 140	8	20
1,2-Dibromoethane	0.129	0.115		ug/L		89	60 - 140	9	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1,1,2,2-Tetrachloroethane	119		46 - 136
1,1,2,2-Tetrachloroethane	120		46 - 136

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-502895/6

Matrix: Water

Analysis Batch: 502895

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			09/13/25 12:55	1
Nitrate as N	ND		0.10	0.023	mg/L			09/13/25 12:55	1
Sulfate	ND		1.0	0.76	mg/L			09/13/25 12:55	1

Lab Sample ID: LCS 180-502895/7

Matrix: Water

Analysis Batch: 502895

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.7		mg/L		103	90 - 110
Nitrate as N	2.50	2.60		mg/L		104	90 - 110
Sulfate	50.0	51.8		mg/L		104	90 - 110

Lab Sample ID: 180-195745-1 MS

Matrix: Water

Analysis Batch: 502895

Client Sample ID: D2-UD

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	73		50.0	119		mg/L		92	90 - 110
Nitrate as N	ND	F1	2.50	2.82	F1	mg/L		113	90 - 110
Sulfate	150	F1	50.0	193	F1	mg/L		84	90 - 110

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 180-195745-1 MSD

Matrix: Water

Analysis Batch: 502895

Client Sample ID: D2-UD

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	73		50.0	119		mg/L		93	90 - 110	1	20
Nitrate as N	ND	F1	2.50	2.85	F1	mg/L		114	90 - 110	1	20
Sulfate	150	F1	50.0	194	F1	mg/L		86	90 - 110	0	20

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-705149/1-A

Matrix: Water

Analysis Batch: 705644

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 705149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/26/25 22:00	09/27/25 10:54	1
Arsenic	ND		2.0	0.68	ug/L		09/26/25 22:00	09/27/25 10:54	1
Barium	ND		2.0	0.75	ug/L		09/26/25 22:00	09/27/25 10:54	1
Beryllium	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 10:54	1
Cadmium	ND		0.50	0.15	ug/L		09/26/25 22:00	09/27/25 10:54	1
Calcium	ND		120	50	ug/L		09/26/25 22:00	09/27/25 10:54	1
Chromium	ND		2.0	0.55	ug/L		09/26/25 22:00	09/27/25 10:54	1
Cobalt	ND		0.50	0.16	ug/L		09/26/25 22:00	09/27/25 10:54	1
Copper	ND		1.0	0.85	ug/L		09/26/25 22:00	09/27/25 10:54	1
Iron	ND		50	20	ug/L		09/26/25 22:00	09/27/25 10:54	1
Lead	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 10:54	1
Magnesium	ND		50	16	ug/L		09/26/25 22:00	09/27/25 10:54	1
Manganese	ND		2.0	0.95	ug/L		09/26/25 22:00	09/27/25 10:54	1
Nickel	ND		1.0	0.40	ug/L		09/26/25 22:00	09/27/25 10:54	1
Potassium	ND		200	65	ug/L		09/26/25 22:00	09/27/25 10:54	1
Selenium	ND		1.0	0.28	ug/L		09/26/25 22:00	09/27/25 10:54	1
Silver	ND		0.50	0.10	ug/L		09/26/25 22:00	09/27/25 10:54	1
Sodium	ND		200	90	ug/L		09/26/25 22:00	09/27/25 10:54	1
Thallium	ND		0.50	0.13	ug/L		09/26/25 22:00	09/27/25 10:54	1
Tin	ND		2.0	0.60	ug/L		09/26/25 22:00	09/27/25 10:54	1
Vanadium	ND		4.0	0.79	ug/L		09/26/25 22:00	09/27/25 10:54	1
Zinc	ND		10	4.0	ug/L		09/26/25 22:00	09/27/25 10:54	1

Lab Sample ID: LCS 410-705149/2-A

Matrix: Water

Analysis Batch: 705644

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 705149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	106		ug/L		106	85 - 115
Arsenic	500	527		ug/L		105	86 - 111
Barium	500	520		ug/L		104	86 - 114
Beryllium	50.0	52.9		ug/L		106	80 - 120
Cadmium	50.0	52.3		ug/L		105	86 - 114
Calcium	5000	5480		ug/L		110	84 - 113
Chromium	500	538		ug/L		108	84 - 113
Cobalt	500	522		ug/L		104	85 - 112
Copper	500	530		ug/L		106	86 - 111
Iron	5000	5350		ug/L		107	84 - 114

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 410-705149/2-A
Matrix: Water
Analysis Batch: 705644

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 705149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	50.0	52.6		ug/L		105	86 - 114
Magnesium	5000	5360		ug/L		107	84 - 113
Manganese	500	535		ug/L		107	84 - 113
Nickel	500	527		ug/L		105	85 - 113
Potassium	5000	5240		ug/L		105	87 - 111
Selenium	100	102		ug/L		102	86 - 111
Silver	50.0	52.3		ug/L		105	88 - 116
Sodium	5000	5320		ug/L		106	84 - 114
Thallium	100	103		ug/L		103	86 - 113
Tin	100	108		ug/L		108	84 - 115
Vanadium	500	531		ug/L		106	84 - 112
Zinc	500	531		ug/L		106	86 - 112

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-708873/1-A
Matrix: Water
Analysis Batch: 709309

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 708873

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		10/03/25 15:06	10/05/25 13:01	1

Lab Sample ID: LCS 410-708873/2-A
Matrix: Water
Analysis Batch: 709309

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 708873

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.05		ug/L		105	80 - 120

Method: 410.4 - COD

Lab Sample ID: MB 410-701615/4
Matrix: Water
Analysis Batch: 701615

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			09/19/25 02:14	1

Lab Sample ID: LCS 410-701615/5
Matrix: Water
Analysis Batch: 701615

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	40.0	42.0		mg/L		105	90 - 110

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Method: EPA 180.1 - Turbidity, Nephelometric

Lab Sample ID: MB 180-502894/35

Matrix: Water

Analysis Batch: 502894

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	ND		0.85	0.05	NTU			09/13/25 13:56	1

Lab Sample ID: LCS 180-502894/36

Matrix: Water

Analysis Batch: 502894

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Turbidity	0.850	0.90		NTU		107	90 - 110

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 180-503104/17

Matrix: Water

Analysis Batch: 503104

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.088	mg/L			09/17/25 09:57	1

Lab Sample ID: LCS 180-503104/18

Matrix: Water

Analysis Batch: 503104

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	0.500	0.507		mg/L		101	90 - 110

Method: EPA 9050A - Specific Conductance

Lab Sample ID: MB 180-502977/30

Matrix: Water

Analysis Batch: 502977

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			09/15/25 18:53	1

Lab Sample ID: LCS 180-502977/29

Matrix: Water

Analysis Batch: 502977

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	84.0	84.0		umhos/cm		100	90 - 110

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 180-503099/2

Matrix: Water

Analysis Batch: 503099

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	ND		5.0	5.0	mg/L			09/17/25 11:17	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Method: SM 2320B - Alkalinity (Continued)

Lab Sample ID: LCS 180-503099/1

Matrix: Water

Analysis Batch: 503099

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	251	245		mg/L		98	90 - 110

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-503107/1

Matrix: Water

Analysis Batch: 503107

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			09/17/25 13:01	1

Lab Sample ID: LCS 180-503107/2

Matrix: Water

Analysis Batch: 503107

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	176	152		mg/L		86	85 - 115

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

GC/MS VOA

Analysis Batch: 702434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195745-1	D2-UD	Total/NA	Water	8260D	
MB 410-702434/10	Method Blank	Total/NA	Water	8260D	
LCS 410-702434/5	Lab Control Sample	Total/NA	Water	8260D	
LCS 410-702434/7	Lab Control Sample	Total/NA	Water	8260D	

GC Semi VOA

Prep Batch: 701606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195745-1	D2-UD	Total/NA	Water	8011	
MB 410-701606/1-A	Method Blank	Total/NA	Water	8011	
LCS 410-701606/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 410-701606/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 701697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195745-1	D2-UD	Total/NA	Water	8011	701606
MB 410-701606/1-A	Method Blank	Total/NA	Water	8011	701606
LCS 410-701606/2-A	Lab Control Sample	Total/NA	Water	8011	701606
LCSD 410-701606/3-A	Lab Control Sample Dup	Total/NA	Water	8011	701606

HPLC/IC

Analysis Batch: 502895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195745-1	D2-UD	Total/NA	Water	EPA 300.0 R2.1	
MB 180-502895/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-502895/7	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-195745-1 MS	D2-UD	Total/NA	Water	EPA 300.0 R2.1	
180-195745-1 MSD	D2-UD	Total/NA	Water	EPA 300.0 R2.1	

Metals

Analysis Batch: 698918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195745-1	D2-UD	Total/NA	Water	SM 2340B	

Prep Batch: 705149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195745-1	D2-UD	Total Recoverable	Water	3005A	
MB 410-705149/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-705149/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 705644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195745-1	D2-UD	Total Recoverable	Water	6020B	705149
MB 410-705149/1-A	Method Blank	Total Recoverable	Water	6020B	705149
LCS 410-705149/2-A	Lab Control Sample	Total Recoverable	Water	6020B	705149

Prep Batch: 708873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195745-1	D2-UD	Total/NA	Water	7470A	

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QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD

Job ID: 180-195745-1

Metals (Continued)

Prep Batch: 708873 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-708873/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-708873/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 709309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195745-1	D2-UD	Total/NA	Water	7470A	708873
MB 410-708873/1-A	Method Blank	Total/NA	Water	7470A	708873
LCS 410-708873/2-A	Lab Control Sample	Total/NA	Water	7470A	708873

General Chemistry

Analysis Batch: 502894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195745-1	D2-UD	Total/NA	Water	EPA 180.1	
MB 180-502894/35	Method Blank	Total/NA	Water	EPA 180.1	
LCS 180-502894/36	Lab Control Sample	Total/NA	Water	EPA 180.1	

Analysis Batch: 502977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195745-1	D2-UD	Total/NA	Water	EPA 9050A	
MB 180-502977/30	Method Blank	Total/NA	Water	EPA 9050A	
LCS 180-502977/29	Lab Control Sample	Total/NA	Water	EPA 9050A	

Analysis Batch: 503099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195745-1	D2-UD	Total/NA	Water	SM 2320B	
MB 180-503099/2	Method Blank	Total/NA	Water	SM 2320B	
LCS 180-503099/1	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 503104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195745-1	D2-UD	Total/NA	Water	EPA 350.1	
MB 180-503104/17	Method Blank	Total/NA	Water	EPA 350.1	
LCS 180-503104/18	Lab Control Sample	Total/NA	Water	EPA 350.1	

Analysis Batch: 503107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195745-1	D2-UD	Total/NA	Water	SM 2540C	
MB 180-503107/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-503107/2	Lab Control Sample	Total/NA	Water	SM 2540C	

Analysis Batch: 701615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195745-1	D2-UD	Total/NA	Water	410.4	
MB 410-701615/4	Method Blank	Total/NA	Water	410.4	
LCS 410-701615/5	Lab Control Sample	Total/NA	Water	410.4	

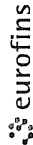
Eurofins Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

Phone 412-963-7058 Fax 412-963-2468

Chain of Custody Record



Environment Testing

Client Information		Sampler		Lab PM		Carrier Tracking No(s)		COC No											
Client Contact: Helen Girod		Phone 262-893-1758		E-Mail Andy Johnson@et.eurofins.com		Johnston, Andy		180-116865-18132 2											
Company Geosyntec Consultants Inc		PWSID						Page 2 of 4											
Address 10211 Wincopin Circle 4th Floor		Due Date Requested:		Analysis Requested		State of Origin MD		Job #											
City Columbia		TAT Requested (days):						Preservation Codes: S - H2SO4 N - None D - HNO3 R - NaThioSO4 A - HCL											
State, Zip MD, 21044		Compliance Project: ☒ Yes ☐ No						Other:											
Phone 240-381-5010(Tel)		PO # WO-ME1168K-5773																	
Email HGirod@Geosyntec.com		WO #																	
Project Name Ritchie Rubble LF Semi-Annual GW/UD		Project # 18015089																	
Site Ritchie Rubble		SSOW#																	
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastefoil, BT=Tissue, A=Air, DW=Drinking Water)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	180-1, 2320B, 300_ORGMS, 9050A	2340C, 6020A, 7470A	2540C, Calcd - TDS by 2540C	8011 - EDB & DBCP by 8011	8270C - Anthracene by 8270C	8260D - Appendix I VOCs & MTBE by 8260D	350.1 - Ammonia by 350.1	300_ORGMS - Cl, SO4, NO3 by 300.0	6020A, 7470A	Total Number of containers	Special Instructions/Note:	
M-14	D2-UD	9/12/25	1315	G	Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	D-COCs - 4 codes - PFAS in separate cooler - Samples on ice
M-15					Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒		
M-16					Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒		
M-17					Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒		
M-18					Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒		
M-19					Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒		
M-20					Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒		
GW-DUP						☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒		
M-11A					water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒		
M-11B					Water	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒		
Possible Hazard Identification		Poison B ☒ Unknown ☐ Radiological ☐																	
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐		☐ Deliverable Requested I, II, III, IV, Other (specify)																	
Empty Kit Relinquished by		Date		Time		Method of Shipment													
Relinquished by London Chase		9/12/25		1805		Company Geosyntec		Received by Helen Girod		Date/Time 9/12/25		Company RSC		Received by Helen Girod		Date/Time 9/12/25		Company RSC	
Relinquished by Helen Girod		9/12/25		400 P		Company RSC		Received by Helen Girod		Date/Time 9/12/25		Company RSC		Received by Helen Girod		Date/Time 9/12/25		Company RSC	
Relinquished by		Date/Time				Company		Received by		Date/Time		Company		Received by		Date/Time		Company	
Custody Seals Intact ☒ Yes ☐ No		Custody Seal No																	

ORIGIN ID: BMA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

Part # 159469-434 MTW EXP 01/25

SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 1030460INET4535

BILL RECIPIENT

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058
REF: GEOSYNTEC
INVT: PO: DEPT:

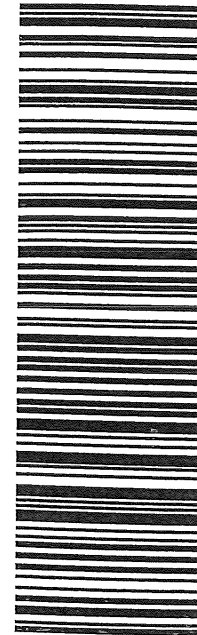
Uncorrected temp 1.0 °C
Thermometer ID 20
CF-0.7 Initials 20
PT-WI-SR-001 effective 11/8/18



SATURDAY 12:00
PRIORITY OVERNIGHT

4 of 4
MS# 8843 3509 6151
Mstr# 8843 3509 6129

XO AGCA
PA-US PIT 152



ORIGIN ID: BMA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

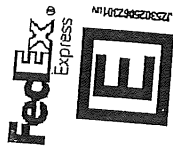
SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 1030460INET4535

BILL RECIPIENT

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058
REF: GEOSYNTEC
INVT: PO: DEPT:

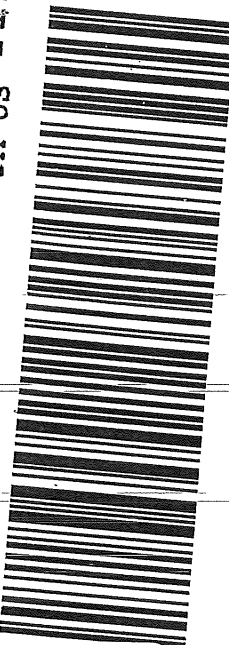
Uncorrected temp 1.0 °C
Thermometer ID 20
CF-0.7 Initials 20
PT-WI-SR-001 effective 11/8/18



SATURDAY 12:00
PRIORITY OVERNIGHT

2 of 4
S# 8843 3509 6130
tr# 8843 3509 6129

XO AGCA
PA-US PIT 15238



180-195745 Waybill



Part # 159469-434 MTW EXP 01/25

ORIGIN: BMA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEOSYNTEC

(412) 963-7058

INV: PO: DEPT:

FedEx
Express



Uncorrected temp: 20.0 °C
Thermometer ID: 20

CF - 0.7 Initials: RD

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

Page 1 of 4
SATURDAY 12:00E
PRIORITY OVERNIGHT

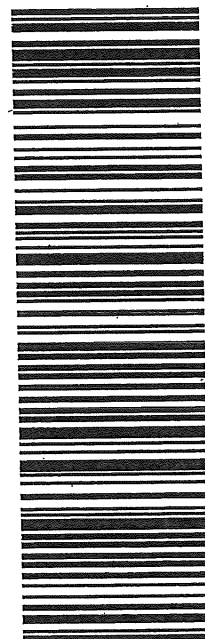
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MASTER #

X0 AGCA

PA-US

15238



SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 1030460/NET4535

BILL RECIPIENT

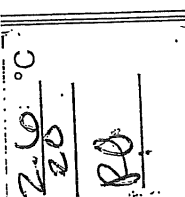
TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEOSYNTEC

(412) 963-7058

INV: PO: DEPT:

FedEx
Express



Uncorrected temp: 20.0 °C
Thermometer ID: 20

CF - 0.7 Initials: RD

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

SATURDAY 12:00I
PRIORITY OVERNIGHT

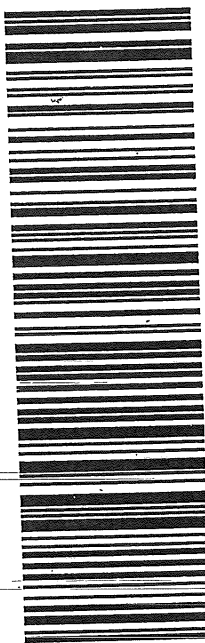
MPK# 8843 3509 6140

MASTER #

X0 AGCA

PA-US

15238



15238-2907-01
PITTSBURGH PA

4150 SAT 09/13 08 13
301 ALPHA DR
(639) 09/13-09/14

CLOSED - 600
ETP 1 CLPD 100 Y

10/5/2025

Chain of Custody Record

[illegible]

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195745-1

Login Number: 195745

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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 $<6\text{mm}$ (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: 180-195745-1

Login Number: 195745

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 09/15/25 11:07 AM

Creator: Cyms, Carolyn M

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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, 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	Not present.
VOA sample vials do not have headspace $> 6\text{mm}$ in diameter (none, if from WV)?	True	



ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Girod
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 10/7/2025 10:09:14 AM

JOB DESCRIPTION

Ritchie Rubble LF Semi-Annual SW

JOB NUMBER

180-195746-1

Eurofins Pittsburgh

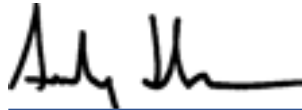
Job Notes

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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10/7/2025 10:09:14 AM

Authorized for release by
Andy Johnson, Senior Project Manager
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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Job ID: 180-195746-1

Eurofins Pittsburgh

Job Narrative 180-195746-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/13/2025 10:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.9°C, 0.9°C, 1.9°C and 4.4°C.

GC/MS VOA

Method 8260D_LL: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: SB-03 (180-195746-1), STR-05 (180-195746-3), STR-06 (180-195746-4), STR-07 (180-195746-5), STR-07 (180-195746-5[MS]), STR-07 (180-195746-5[MSD]), STR-08 (180-195746-6) and SW DUPLICATE (180-195746-8). 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 8011: Surrogate recovery for the following sample was outside the upper control limit: SW DUPLICATE (180-195746-8). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8011: Surrogate recovery was outside acceptance limits for the following matrix spike (MS) sample: STR-07 (180-195746-5[MS]). The parent sample's surrogate recovery was within limits. The MS sample has been qualified and reported.

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

HPLC/IC

Method 300_ORGFMS: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 180-503109 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300_ORGFMS: The following sample(s) was analyzed outside of analytical holding time due to spike and spike dupe being added to the method after the hold time had elapsed. STR-07 (180-195746-5[MS]) and STR-07 (180-195746-5[MSD]).

Method 300_ORGFMS: The following sample was diluted due to the nature of the sample matrix: SB-13 (180-195746-7). 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.

Metals

Method 6020B - Dissolved: The reference method requires samples to be preserved to a pH of <2. The following sample was received with insufficient preservation at a pH of 6: SB-03 (180-195746-1). The sample(s) were preserved to the appropriate pH in the laboratory.

This does not meet regulatory requirements.

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

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Job ID: 180-195746-1 (Continued)

Eurofins Pittsburgh

General Chemistry

Method 180.1: The following sample was diluted due to the nature of the sample matrix: SB-03 (180-195746-1) at 2.0. Elevated reporting limits (RLs) are provided.

Method 350.1: The following samples were diluted due to the nature of the sample matrix: STR-07 (180-195746-5), STR-07 (180-195746-5[MS]) and STR-07 (180-195746-5[MSD]). 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.

Eurofins Pittsburgh

Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

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 Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
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.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
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

Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Laboratory: Eurofins Pittsburgh

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

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00690	06-28-25 *
California	State	2891	04-30-26
Connecticut	State	PH-0820	09-30-26
Florida	NELAP	E871008	06-30-25 *
Georgia	State	PA 02-00416	04-30-26
Illinois	NELAP	200005	07-31-25 *
Kansas	NELAP	E-10350	01-31-26
Kentucky (UST)	State	162013	04-30-26
Kentucky (WW)	State	KY98043	12-31-25
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-25 *
Maine	State	PA00164	03-06-26
Minnesota	NELAP	042-999-482	12-31-25
New Hampshire	NELAP	2030	04-04-26
New Jersey	NELAP	PA005	06-30-25 *
New York	NELAP	11182	03-31-26
North Carolina (WW/SW)	State	434	12-31-25
North Dakota	State	R-227	04-30-24 *
Oregon	NELAP	PA-2151	02-06-26
Pennsylvania	NELAP	02-00416	04-30-26
Rhode Island	State	LAO00375	12-30-25
South Carolina	State	89014	04-30-25 *
Texas	NELAP	T104704528	03-31-26
US Fish & Wildlife	US Federal Programs	A21930	04-30-26
USDA	US Federal Programs	P330-16-00211	04-11-26
Utah	NELAP	PA001462024-14	03-31-24 *
Virginia	NELAP	460189	09-14-25 *
West Virginia DEP	State	142	01-31-26
Wisconsin	State	998027800	08-31-26

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26

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

Eurofins Pittsburgh

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Ohio	State	87787	01-31-26
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-27-25
Virginia	NELAP	460182	06-14-26
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

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

Eurofins Pittsburgh

Sample Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195746-1	SB-03	Water	09/12/25 09:55	09/13/25 10:05	Maryland
180-195746-3	STR-05	Water	09/12/25 09:30	09/13/25 10:05	Maryland
180-195746-4	STR-06	Water	09/12/25 08:35	09/13/25 10:05	Maryland
180-195746-5	STR-07	Water	09/12/25 07:50	09/13/25 10:05	Maryland
180-195746-6	STR-08	Water	09/12/25 11:00	09/13/25 10:05	Maryland
180-195746-7	SB-13	Water	09/12/25 10:35	09/13/25 10:05	Maryland
180-195746-8	SW DUPLICATE	Water	09/12/25 00:00	09/13/25 10:05	Maryland
180-195746-17	TRIP BLANK-05	Water	09/12/25 14:20	09/13/25 10:05	Maryland

Method Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	ELLE
EPA 300.0 R2.1	Anions, Ion Chromatography	EPA	EET PIT
6020B	Metals (ICP/MS)	SW846	ELLE
7470A	Mercury (CVAA)	SW846	ELLE
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	ELLE
410.4	COD	EPA	ELLE
EPA 180.1	Turbidity, Nephelometric	EPA	EET PIT
EPA 350.1	Nitrogen, Ammonia	EPA	EET PIT
EPA 9050A	Specific Conductance	SW846	EET PIT
SM 2320B	Alkalinity	SM	EET PIT
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET PIT
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE
7470A	Preparation, Mercury	SW846	ELLE
8011	Microextraction	SW846	ELLE

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: SB-03

Date Collected: 09/12/25 09:55

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5	25 mL	25 mL	702434	09/22/25 05:29	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.9 mL	2 mL	701606	09/19/25 00:11	USL7	ELLE
Total/NA	Analysis	8011		1			701697	09/19/25 21:47	WN7O	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502895	09/13/25 22:45	ERP	EET PIT
		Instrument ID: INTEGRION								
Dissolved	Prep	3005A			50 mL	50 mL	703353	09/26/25 22:00	UAMX	ELLE
Dissolved	Analysis	6020B		1			705649	09/27/25 12:22	F7JF	ELLE
		Instrument ID: E08 - 30647								
Dissolved	Prep	7470A			20 mL	20 mL	708749	10/06/25 07:35	UJL8	ELLE
Dissolved	Analysis	7470A		1			709926	10/06/25 17:18	IJ3I	ELLE
		Instrument ID: M17								
Dissolved	Analysis	SM 2340B		1			698918	09/17/25 05:20	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		10	2 mL	2 mL	701615	09/19/25 02:14	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		2			502894	09/13/25 13:47	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			503104	09/17/25 10:43	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502977	09/15/25 19:03	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	503099	09/17/25 11:47	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	40 mL	100 mL	503107	09/17/25 13:01	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: STR-05

Date Collected: 09/12/25 09:30

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5	25 mL	25 mL	702434	09/22/25 05:50	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.4 mL	2 mL	701606	09/19/25 00:11	USL7	ELLE
Total/NA	Analysis	8011		1			701697	09/19/25 22:04	WN7O	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502895	09/13/25 20:20	ERP	EET PIT
		Instrument ID: INTEGRION								
Dissolved	Prep	3005A			50 mL	50 mL	703353	09/26/25 22:00	UAMX	ELLE
Dissolved	Analysis	6020B		1			705649	09/27/25 12:29	F7JF	ELLE
		Instrument ID: E08 - 30647								

Eurofins Pittsburgh

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: STR-05

Date Collected: 09/12/25 09:30

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	7470A			20 mL	20.0 mL	704571	09/29/25 13:27	RFN5	ELLE
Dissolved	Analysis	7470A		1			706567	09/29/25 23:27	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Dissolved	Analysis	SM 2340B		1			698918	09/17/25 05:20	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	701615	09/19/25 02:14	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502894	09/13/25 13:47	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			503104	09/17/25 10:45	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502977	09/15/25 19:04	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	503099	09/17/25 11:52	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503107	09/17/25 13:01	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: STR-06

Date Collected: 09/12/25 08:35

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5	25 mL	25 mL	702434	09/22/25 06:11	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.4 mL	2 mL	701606	09/19/25 00:11	USL7	ELLE
Total/NA	Analysis	8011		1			701697	09/19/25 22:21	WN7O	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502895	09/13/25 20:35	ERP	EET PIT
		Instrument ID: INTEGRION								
Dissolved	Prep	3005A			50 mL	50 mL	703353	09/26/25 22:00	UAMX	ELLE
Dissolved	Analysis	6020B		1			705649	09/27/25 12:27	F7JF	ELLE
		Instrument ID: E08 - 30647								
Dissolved	Prep	7470A			20 mL	20.0 mL	704571	09/29/25 13:27	RFN5	ELLE
Dissolved	Analysis	7470A		1			706567	09/29/25 23:29	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Dissolved	Analysis	SM 2340B		1			698918	09/17/25 05:20	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	701615	09/19/25 02:14	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502894	09/13/25 13:48	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			503104	09/17/25 10:47	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								

Eurofins Pittsburgh

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: STR-06

Date Collected: 09/12/25 08:35

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9050A		1			502977	09/15/25 19:05	LWM	EET PIT
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	503099	09/17/25 11:57	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503107	09/17/25 13:01	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: STR-07

Date Collected: 09/12/25 07:50

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5	25 mL	25 mL	702434	09/22/25 01:37	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.3 mL	2 mL	701606	09/19/25 00:11	USL7	ELLE
Total/NA	Analysis	8011		1			701697	09/19/25 22:38	WN7O	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502895	09/13/25 20:49	ERP	EET PIT
		Instrument ID: INTEGRION								
Dissolved	Prep	3005A			50 mL	50 mL	706355	09/29/25 21:00	UAMX	ELLE
Dissolved	Analysis	6020B		1			706980	09/30/25 09:41	SAM2	ELLE
		Instrument ID: E08 - 30647								
Dissolved	Prep	7470A			20 mL	20.0 mL	704571	09/29/25 13:27	RFN5	ELLE
Dissolved	Analysis	7470A		1			706567	09/29/25 22:58	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Dissolved	Analysis	SM 2340B		1			698918	09/17/25 05:20	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	701615	09/19/25 02:14	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502894	09/13/25 13:49	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		50			503104	09/17/25 11:10	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502977	09/15/25 19:07	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	503099	09/17/25 12:12	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503107	09/17/25 13:01	A1K	EET PIT
		Instrument ID: NOEQUIP								

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: STR-08

Date Collected: 09/12/25 11:00

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5	25 mL	25 mL	702434	09/22/25 06:32	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			37.1 mL	2 mL	701606	09/19/25 00:11	USL7	ELLE
Total/NA	Analysis	8011		1			701697	09/19/25 23:30	WN7O	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502895	09/13/25 21:04	ERP	EET PIT
		Instrument ID: INTEGRION								
Dissolved	Prep	3005A			50 mL	50 mL	703353	09/26/25 22:00	UAMX	ELLE
Dissolved	Analysis	6020B		1			705649	09/27/25 12:11	F7JF	ELLE
		Instrument ID: E08 - 30647								
Dissolved	Prep	7470A			20 mL	20.0 mL	704571	09/29/25 13:27	RFN5	ELLE
Dissolved	Analysis	7470A		1			706567	09/29/25 23:23	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Dissolved	Analysis	SM 2340B		1			698918	09/17/25 05:20	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	701615	09/19/25 02:14	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502894	09/13/25 13:50	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			503104	09/17/25 10:49	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502977	09/15/25 19:11	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	503099	09/17/25 12:22	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503107	09/17/25 13:01	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: SB-13

Date Collected: 09/12/25 10:35

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	25 mL	25 mL	702434	09/22/25 05:08	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.7 mL	2 mL	701606	09/19/25 00:11	USL7	ELLE
Total/NA	Analysis	8011		1			701697	09/19/25 23:47	WN7O	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502895	09/13/25 21:18	ERP	EET PIT
		Instrument ID: INTEGRION								
Total/NA	Analysis	EPA 300.0 R2.1		5	1 mL	1 mL	503169	09/18/25 16:18	ERP	EET PIT
		Instrument ID: INTEGRION								
Dissolved	Prep	3005A			50 mL	50 mL	703353	09/26/25 22:00	UAMX	ELLE
Dissolved	Analysis	6020B		1			705649	09/27/25 12:20	F7JF	ELLE
		Instrument ID: E08 - 30647								

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: SB-13

Lab Sample ID: 180-195746-7

Date Collected: 09/12/25 10:35

Matrix: Water

Date Received: 09/13/25 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	7470A			20 mL	20.0 mL	704571	09/29/25 13:27	RFN5	ELLE
Dissolved	Analysis	7470A		1			706567	09/29/25 23:25	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Dissolved	Analysis	SM 2340B		1			698918	09/17/25 05:20	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	702646	09/22/25 08:20	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502894	09/13/25 13:52	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			503104	09/17/25 10:51	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								
Total/NA	Analysis	EPA 9050A		1			502977	09/15/25 19:12	LWM	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	503099	09/17/25 12:27	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503107	09/17/25 13:01	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: SW DUPLICATE

Lab Sample ID: 180-195746-8

Date Collected: 09/12/25 00:00

Matrix: Water

Date Received: 09/13/25 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5	25 mL	25 mL	702434	09/22/25 06:53	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.2 mL	2 mL	701606	09/19/25 00:11	USL7	ELLE
Total/NA	Analysis	8011		1			701697	09/20/25 00:04	WN7O	ELLE
		Instrument ID: 19846								
Total/NA	Analysis	EPA 300.0 R2.1		1	1 mL	1 mL	502895	09/13/25 21:33	ERP	EET PIT
		Instrument ID: INTEGRION								
Dissolved	Prep	3005A			50 mL	50 mL	703353	09/26/25 22:00	UAMX	ELLE
Dissolved	Analysis	6020B		1			705649	09/27/25 12:25	F7JF	ELLE
		Instrument ID: E08 - 30647								
Dissolved	Prep	7470A			20 mL	20.0 mL	704571	09/29/25 13:27	RFN5	ELLE
Dissolved	Analysis	7470A		1			706567	09/29/25 23:31	IJ3I	ELLE
		Instrument ID: M10 – 31820								
Dissolved	Analysis	SM 2340B		1			698918	09/17/25 05:20	USJM	ELLE
		Instrument ID: NOEQUIP								
Total/NA	Analysis	410.4		1	2 mL	2 mL	702646	09/22/25 08:20	USAE	ELLE
		Instrument ID: 11076								
Total/NA	Analysis	EPA 180.1		1			502894	09/13/25 13:53	RAO	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	EPA 350.1		1			503104	09/17/25 10:53	BAB	EET PIT
		Instrument ID: BLUE-ASTORIA								

Eurofins Pittsburgh

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: SW DUPLICATE

Lab Sample ID: 180-195746-8

Date Collected: 09/12/25 00:00

Matrix: Water

Date Received: 09/13/25 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 9050A		1			502977	09/15/25 19:13	LWM	EET PIT
Total/NA	Analysis	SM 2320B		1	50 mL	50 mL	503099	09/17/25 12:31	ELS	EET PIT
		Instrument ID: NOEQUIP								
Total/NA	Analysis	SM 2540C		1	100 mL	100 mL	503107	09/17/25 13:01	A1K	EET PIT
		Instrument ID: NOEQUIP								

Client Sample ID: TRIP BLANK-05

Lab Sample ID: 180-195746-17

Date Collected: 09/12/25 14:20

Matrix: Water

Date Received: 09/13/25 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	25 mL	25 mL	702434	09/22/25 00:14	JS6E	ELLE
		Instrument ID: 19094								
Total/NA	Prep	8011			36.6 mL	2 mL	701606	09/19/25 00:11	USL7	ELLE
Total/NA	Analysis	8011		1			701697	09/20/25 00:22	WN7O	ELLE
		Instrument ID: 19846								

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

Analyst References:

Lab: EET PIT

Batch Type: Analysis

A1K = Agnes Komlos

BAB = Brooke Batyi

ELS = Edwin Shireman

ERP = Evan Papak

LWM = Leslie McIntire

RAO = Rachel Oster

Lab: ELLE

Batch Type: Prep

RFN5 = Aniyah Oxendine

UAMX = Annamaria Kuhns

UJL8 = James Mertz

USL7 = Sherry Morrow

Batch Type: Analysis

F7JF = Dennis Dick

IJ3I = Elizabeth Brittingham

JS6E = Gavin Walmer

SAM2 = Matthew Olley

USAE = Susan Engle

USJM = Sandra Miller

WN7O = James Patrushev

Eurofins Pittsburgh

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: SB-03

Lab Sample ID: 180-195746-1

Date Collected: 09/12/25 09:55

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.5	0.35	ug/L			09/22/25 05:29	5
1,1,1-Trichloroethane	ND		2.5	0.40	ug/L			09/22/25 05:29	5
1,1,2,2-Tetrachloroethane	ND		2.5	0.50	ug/L			09/22/25 05:29	5
1,1,2-Trichloroethane	ND		2.5	0.40	ug/L			09/22/25 05:29	5
1,1-Dichloroethane	ND		2.5	0.50	ug/L			09/22/25 05:29	5
1,1-Dichloroethene	ND		2.5	0.50	ug/L			09/22/25 05:29	5
1,2,3-Trichloropropane	ND		5.0	0.50	ug/L			09/22/25 05:29	5
1,2-Dichlorobenzene	ND		2.5	0.35	ug/L			09/22/25 05:29	5
1,2-Dichloroethane	ND		2.5	0.35	ug/L			09/22/25 05:29	5
1,2-Dichloropropane	ND		2.5	0.50	ug/L			09/22/25 05:29	5
1,4-Dichlorobenzene	ND		2.5	0.35	ug/L			09/22/25 05:29	5
2-Butanone (MEK)	ND		25	5.0	ug/L			09/22/25 05:29	5
2-Hexanone	ND		25	10	ug/L			09/22/25 05:29	5
4-Methyl-2-pentanone (MIBK)	ND		25	5.0	ug/L			09/22/25 05:29	5
Acetone	ND		25	7.5	ug/L			09/22/25 05:29	5
Acrylonitrile	ND		25	2.0	ug/L			09/22/25 05:29	5
Benzene	ND		2.5	0.50	ug/L			09/22/25 05:29	5
Bromoform	ND		5.0	1.5	ug/L			09/22/25 05:29	5
Bromomethane	ND		2.5	0.50	ug/L			09/22/25 05:29	5
Carbon disulfide	ND		5.0	0.50	ug/L			09/22/25 05:29	5
Carbon tetrachloride	ND		2.5	0.50	ug/L			09/22/25 05:29	5
Chlorobenzene	ND		2.5	0.35	ug/L			09/22/25 05:29	5
Chlorobromomethane	ND		2.5	0.40	ug/L			09/22/25 05:29	5
Chlorodibromomethane	ND		2.5	0.40	ug/L			09/22/25 05:29	5
Chloroethane	ND		2.5	0.50	ug/L			09/22/25 05:29	5
Chloroform	ND		2.5	0.45	ug/L			09/22/25 05:29	5
Chloromethane	ND		2.5	0.50	ug/L			09/22/25 05:29	5
cis-1,2-Dichloroethene	ND		2.5	0.40	ug/L			09/22/25 05:29	5
cis-1,3-Dichloropropene	ND		2.5	0.50	ug/L			09/22/25 05:29	5
Dibromomethane	ND		2.5	0.40	ug/L			09/22/25 05:29	5
Dichlorobromomethane	ND		2.5	0.40	ug/L			09/22/25 05:29	5
Ethylbenzene	ND		2.5	0.40	ug/L			09/22/25 05:29	5
Iodomethane	ND		2.5	0.40	ug/L			09/22/25 05:29	5
Methyl tert-butyl ether	ND		2.5	0.40	ug/L			09/22/25 05:29	5
Methylene Chloride	ND		2.5	1.0	ug/L			09/22/25 05:29	5
Styrene	ND		2.5	0.35	ug/L			09/22/25 05:29	5
Tetrachloroethene	ND		2.5	1.0	ug/L			09/22/25 05:29	5
Toluene	ND		2.5	0.40	ug/L			09/22/25 05:29	5
trans-1,2-Dichloroethene	ND		2.5	0.50	ug/L			09/22/25 05:29	5
trans-1,3-Dichloropropene	ND		2.5	0.40	ug/L			09/22/25 05:29	5
trans-1,4-Dichloro-2-butene	ND		25	10	ug/L			09/22/25 05:29	5
Trichloroethene	ND		2.5	0.40	ug/L			09/22/25 05:29	5
Trichlorofluoromethane	ND		2.5	0.50	ug/L			09/22/25 05:29	5
Vinyl acetate	ND		5.0	1.5	ug/L			09/22/25 05:29	5
Vinyl chloride	ND		2.5	0.50	ug/L			09/22/25 05:29	5
Xylenes, Total	ND		5.0	0.35	ug/L			09/22/25 05:29	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		09/22/25 05:29	5
4-Bromofluorobenzene (Surr)	96		80 - 120		09/22/25 05:29	5

Eurofins Pittsburgh

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: SB-03

Date Collected: 09/12/25 09:55

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-1

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		80 - 120		09/22/25 05:29	5
Toluene-d8 (Surr)	98		80 - 120		09/22/25 05:29	5

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0095	ug/L		09/19/25 00:11	09/19/25 21:47	1
1,2-Dibromoethane	ND		0.019	0.0095	ug/L		09/19/25 00:11	09/19/25 21:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	105		46 - 136				09/19/25 00:11	09/19/25 21:47	1
1,1,2,2-Tetrachloroethane	105		46 - 136				09/19/25 00:11	09/19/25 21:47	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.0		1.0	0.71	mg/L			09/13/25 22:45	1
Nitrate as N	0.052	J	0.10	0.023	mg/L			09/13/25 22:45	1
Sulfate	46		1.0	0.76	mg/L			09/13/25 22:45	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.42	J	1.0	0.20	ug/L		09/26/25 22:00	09/27/25 12:22	1
Arsenic	1.0	J	2.0	0.68	ug/L		09/26/25 22:00	09/27/25 12:22	1
Barium	23		2.0	0.75	ug/L		09/26/25 22:00	09/27/25 12:22	1
Beryllium	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:22	1
Cadmium	ND		0.50	0.15	ug/L		09/26/25 22:00	09/27/25 12:22	1
Calcium	66000		120	50	ug/L		09/26/25 22:00	09/27/25 12:22	1
Chromium	ND		2.0	0.55	ug/L		09/26/25 22:00	09/27/25 12:22	1
Cobalt	0.34	J	0.50	0.16	ug/L		09/26/25 22:00	09/27/25 12:22	1
Copper	ND		1.0	0.85	ug/L		09/26/25 22:00	09/27/25 12:22	1
Iron	200		50	20	ug/L		09/26/25 22:00	09/27/25 12:22	1
Lead	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:22	1
Magnesium	13000		50	16	ug/L		09/26/25 22:00	09/27/25 12:22	1
Manganese	250		2.0	0.95	ug/L		09/26/25 22:00	09/27/25 12:22	1
Nickel	1.1		1.0	0.40	ug/L		09/26/25 22:00	09/27/25 12:22	1
Potassium	5700		200	65	ug/L		09/26/25 22:00	09/27/25 12:22	1
Selenium	ND		1.0	0.28	ug/L		09/26/25 22:00	09/27/25 12:22	1
Silver	ND		0.50	0.10	ug/L		09/26/25 22:00	09/27/25 12:22	1
Sodium	10000		200	90	ug/L		09/26/25 22:00	09/27/25 12:22	1
Thallium	ND		0.50	0.13	ug/L		09/26/25 22:00	09/27/25 12:22	1
Tin	ND		2.0	0.60	ug/L		09/26/25 22:00	09/27/25 12:22	1
Vanadium	ND		4.0	0.79	ug/L		09/26/25 22:00	09/27/25 12:22	1
Zinc	ND		10	4.0	ug/L		09/26/25 22:00	09/27/25 12:22	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		10/06/25 07:35	10/06/25 17:18	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	220		0.51	0.19	mg/L			09/17/25 05:20	1

Eurofins Pittsburgh

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: SB-03

Date Collected: 09/12/25 09:55

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-1

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	310		100	50	mg/L			09/19/25 02:14	10
Turbidity (EPA 180.1)	70		1.7	0.10	NTU			09/13/25 13:47	2
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/17/25 10:43	1
Specific Conductance (SW846 EPA 9050A)	470		1.0	1.0	umhos/cm			09/15/25 19:03	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	230		5.0	5.0	mg/L			09/17/25 11:47	1
Total Dissolved Solids (SM 2540C)	230		25	25	mg/L			09/17/25 13:01	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: STR-05

Lab Sample ID: 180-195746-3

Date Collected: 09/12/25 09:30

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.5	0.35	ug/L			09/22/25 05:50	5
1,1,1-Trichloroethane	ND		2.5	0.40	ug/L			09/22/25 05:50	5
1,1,2,2-Tetrachloroethane	ND		2.5	0.50	ug/L			09/22/25 05:50	5
1,1,2-Trichloroethane	ND		2.5	0.40	ug/L			09/22/25 05:50	5
1,1-Dichloroethane	ND		2.5	0.50	ug/L			09/22/25 05:50	5
1,1-Dichloroethene	ND		2.5	0.50	ug/L			09/22/25 05:50	5
1,2,3-Trichloropropane	ND		5.0	0.50	ug/L			09/22/25 05:50	5
1,2-Dichlorobenzene	ND		2.5	0.35	ug/L			09/22/25 05:50	5
1,2-Dichloroethane	ND		2.5	0.35	ug/L			09/22/25 05:50	5
1,2-Dichloropropane	ND		2.5	0.50	ug/L			09/22/25 05:50	5
1,4-Dichlorobenzene	ND		2.5	0.35	ug/L			09/22/25 05:50	5
2-Butanone (MEK)	ND		25	5.0	ug/L			09/22/25 05:50	5
2-Hexanone	ND		25	10	ug/L			09/22/25 05:50	5
4-Methyl-2-pentanone (MIBK)	ND		25	5.0	ug/L			09/22/25 05:50	5
Acetone	ND		25	7.5	ug/L			09/22/25 05:50	5
Acrylonitrile	ND		25	2.0	ug/L			09/22/25 05:50	5
Benzene	ND		2.5	0.50	ug/L			09/22/25 05:50	5
Bromoform	ND		5.0	1.5	ug/L			09/22/25 05:50	5
Bromomethane	ND		2.5	0.50	ug/L			09/22/25 05:50	5
Carbon disulfide	ND		5.0	0.50	ug/L			09/22/25 05:50	5
Carbon tetrachloride	ND		2.5	0.50	ug/L			09/22/25 05:50	5
Chlorobenzene	ND		2.5	0.35	ug/L			09/22/25 05:50	5
Chlorobromomethane	ND		2.5	0.40	ug/L			09/22/25 05:50	5
Chlorodibromomethane	ND		2.5	0.40	ug/L			09/22/25 05:50	5
Chloroethane	ND		2.5	0.50	ug/L			09/22/25 05:50	5
Chloroform	ND		2.5	0.45	ug/L			09/22/25 05:50	5
Chloromethane	ND		2.5	0.50	ug/L			09/22/25 05:50	5
cis-1,2-Dichloroethene	ND		2.5	0.40	ug/L			09/22/25 05:50	5
cis-1,3-Dichloropropene	ND		2.5	0.50	ug/L			09/22/25 05:50	5
Dibromomethane	ND		2.5	0.40	ug/L			09/22/25 05:50	5
Dichlorobromomethane	ND		2.5	0.40	ug/L			09/22/25 05:50	5
Ethylbenzene	ND		2.5	0.40	ug/L			09/22/25 05:50	5
Iodomethane	ND		2.5	0.40	ug/L			09/22/25 05:50	5
Methyl tert-butyl ether	ND		2.5	0.40	ug/L			09/22/25 05:50	5
Methylene Chloride	ND		2.5	1.0	ug/L			09/22/25 05:50	5
Styrene	ND		2.5	0.35	ug/L			09/22/25 05:50	5
Tetrachloroethene	ND		2.5	1.0	ug/L			09/22/25 05:50	5
Toluene	ND		2.5	0.40	ug/L			09/22/25 05:50	5
trans-1,2-Dichloroethene	ND		2.5	0.50	ug/L			09/22/25 05:50	5
trans-1,3-Dichloropropene	ND		2.5	0.40	ug/L			09/22/25 05:50	5
trans-1,4-Dichloro-2-butene	ND		25	10	ug/L			09/22/25 05:50	5
Trichloroethene	ND		2.5	0.40	ug/L			09/22/25 05:50	5
Trichlorofluoromethane	ND		2.5	0.50	ug/L			09/22/25 05:50	5
Vinyl acetate	ND		5.0	1.5	ug/L			09/22/25 05:50	5
Vinyl chloride	ND		2.5	0.50	ug/L			09/22/25 05:50	5
Xylenes, Total	ND		5.0	0.35	ug/L			09/22/25 05:50	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		80 - 120		09/22/25 05:50	5
4-Bromofluorobenzene (Surr)	97		80 - 120		09/22/25 05:50	5

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: STR-05

Lab Sample ID: 180-195746-3

Date Collected: 09/12/25 09:30

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		80 - 120		09/22/25 05:50	5
Toluene-d8 (Surr)	96		80 - 120		09/22/25 05:50	5

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/19/25 00:11	09/19/25 22:04	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/19/25 00:11	09/19/25 22:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	116		46 - 136	09/19/25 00:11	09/19/25 22:04	1
1,1,2,2-Tetrachloroethane	115		46 - 136	09/19/25 00:11	09/19/25 22:04	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87		1.0	0.71	mg/L			09/13/25 20:20	1
Nitrate as N	0.89		0.10	0.023	mg/L			09/13/25 20:20	1
Sulfate	45		1.0	0.76	mg/L			09/13/25 20:20	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/26/25 22:00	09/27/25 12:29	1
Arsenic	1.3	J	2.0	0.68	ug/L		09/26/25 22:00	09/27/25 12:29	1
Barium	27		2.0	0.75	ug/L		09/26/25 22:00	09/27/25 12:29	1
Beryllium	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:29	1
Cadmium	ND		0.50	0.15	ug/L		09/26/25 22:00	09/27/25 12:29	1
Calcium	56000		120	50	ug/L		09/26/25 22:00	09/27/25 12:29	1
Chromium	ND		2.0	0.55	ug/L		09/26/25 22:00	09/27/25 12:29	1
Cobalt	0.39	J	0.50	0.16	ug/L		09/26/25 22:00	09/27/25 12:29	1
Copper	ND		1.0	0.85	ug/L		09/26/25 22:00	09/27/25 12:29	1
Iron	ND		50	20	ug/L		09/26/25 22:00	09/27/25 12:29	1
Lead	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:29	1
Magnesium	19000		50	16	ug/L		09/26/25 22:00	09/27/25 12:29	1
Manganese	44		2.0	0.95	ug/L		09/26/25 22:00	09/27/25 12:29	1
Nickel	3.5		1.0	0.40	ug/L		09/26/25 22:00	09/27/25 12:29	1
Potassium	6900		200	65	ug/L		09/26/25 22:00	09/27/25 12:29	1
Selenium	0.28	J	1.0	0.28	ug/L		09/26/25 22:00	09/27/25 12:29	1
Silver	ND		0.50	0.10	ug/L		09/26/25 22:00	09/27/25 12:29	1
Sodium	58000		200	90	ug/L		09/26/25 22:00	09/27/25 12:29	1
Thallium	ND		0.50	0.13	ug/L		09/26/25 22:00	09/27/25 12:29	1
Tin	ND		2.0	0.60	ug/L		09/26/25 22:00	09/27/25 12:29	1
Vanadium	ND		4.0	0.79	ug/L		09/26/25 22:00	09/27/25 12:29	1
Zinc	ND		10	4.0	ug/L		09/26/25 22:00	09/27/25 12:29	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/29/25 13:27	09/29/25 23:27	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	220		0.51	0.19	mg/L			09/17/25 05:20	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: STR-05

Lab Sample ID: 180-195746-3

Date Collected: 09/12/25 09:30

Matrix: Water

Date Received: 09/13/25 10:05

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	35		10	5.0	mg/L			09/19/25 02:14	1
Turbidity (EPA 180.1)	6.4		0.85	0.05	NTU			09/13/25 13:47	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/17/25 10:45	1
Specific Conductance (SW846 EPA 9050A)	720		1.0	1.0	umhos/cm			09/15/25 19:04	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	210		5.0	5.0	mg/L			09/17/25 11:52	1
Total Dissolved Solids (SM 2540C)	570		10	10	mg/L			09/17/25 13:01	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: STR-06

Lab Sample ID: 180-195746-4

Date Collected: 09/12/25 08:35

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.5	0.35	ug/L			09/22/25 06:11	5
1,1,1-Trichloroethane	ND		2.5	0.40	ug/L			09/22/25 06:11	5
1,1,2,2-Tetrachloroethane	ND		2.5	0.50	ug/L			09/22/25 06:11	5
1,1,2-Trichloroethane	ND		2.5	0.40	ug/L			09/22/25 06:11	5
1,1-Dichloroethane	ND		2.5	0.50	ug/L			09/22/25 06:11	5
1,1-Dichloroethene	ND		2.5	0.50	ug/L			09/22/25 06:11	5
1,2,3-Trichloropropane	ND		5.0	0.50	ug/L			09/22/25 06:11	5
1,2-Dichlorobenzene	ND		2.5	0.35	ug/L			09/22/25 06:11	5
1,2-Dichloroethane	ND		2.5	0.35	ug/L			09/22/25 06:11	5
1,2-Dichloropropane	ND		2.5	0.50	ug/L			09/22/25 06:11	5
1,4-Dichlorobenzene	ND		2.5	0.35	ug/L			09/22/25 06:11	5
2-Butanone (MEK)	ND		25	5.0	ug/L			09/22/25 06:11	5
2-Hexanone	ND		25	10	ug/L			09/22/25 06:11	5
4-Methyl-2-pentanone (MIBK)	ND		25	5.0	ug/L			09/22/25 06:11	5
Acetone	ND		25	7.5	ug/L			09/22/25 06:11	5
Acrylonitrile	ND		25	2.0	ug/L			09/22/25 06:11	5
Benzene	ND		2.5	0.50	ug/L			09/22/25 06:11	5
Bromoform	ND		5.0	1.5	ug/L			09/22/25 06:11	5
Bromomethane	ND		2.5	0.50	ug/L			09/22/25 06:11	5
Carbon disulfide	ND		5.0	0.50	ug/L			09/22/25 06:11	5
Carbon tetrachloride	ND		2.5	0.50	ug/L			09/22/25 06:11	5
Chlorobenzene	ND		2.5	0.35	ug/L			09/22/25 06:11	5
Chlorobromomethane	ND		2.5	0.40	ug/L			09/22/25 06:11	5
Chlorodibromomethane	ND		2.5	0.40	ug/L			09/22/25 06:11	5
Chloroethane	ND		2.5	0.50	ug/L			09/22/25 06:11	5
Chloroform	ND		2.5	0.45	ug/L			09/22/25 06:11	5
Chloromethane	ND		2.5	0.50	ug/L			09/22/25 06:11	5
cis-1,2-Dichloroethene	ND		2.5	0.40	ug/L			09/22/25 06:11	5
cis-1,3-Dichloropropene	ND		2.5	0.50	ug/L			09/22/25 06:11	5
Dibromomethane	ND		2.5	0.40	ug/L			09/22/25 06:11	5
Dichlorobromomethane	ND		2.5	0.40	ug/L			09/22/25 06:11	5
Ethylbenzene	ND		2.5	0.40	ug/L			09/22/25 06:11	5
Iodomethane	ND		2.5	0.40	ug/L			09/22/25 06:11	5
Methyl tert-butyl ether	ND		2.5	0.40	ug/L			09/22/25 06:11	5
Methylene Chloride	ND		2.5	1.0	ug/L			09/22/25 06:11	5
Styrene	ND		2.5	0.35	ug/L			09/22/25 06:11	5
Tetrachloroethene	ND		2.5	1.0	ug/L			09/22/25 06:11	5
Toluene	ND		2.5	0.40	ug/L			09/22/25 06:11	5
trans-1,2-Dichloroethene	ND		2.5	0.50	ug/L			09/22/25 06:11	5
trans-1,3-Dichloropropene	ND		2.5	0.40	ug/L			09/22/25 06:11	5
trans-1,4-Dichloro-2-butene	ND		25	10	ug/L			09/22/25 06:11	5
Trichloroethene	ND		2.5	0.40	ug/L			09/22/25 06:11	5
Trichlorofluoromethane	ND		2.5	0.50	ug/L			09/22/25 06:11	5
Vinyl acetate	ND		5.0	1.5	ug/L			09/22/25 06:11	5
Vinyl chloride	ND		2.5	0.50	ug/L			09/22/25 06:11	5
Xylenes, Total	ND		5.0	0.35	ug/L			09/22/25 06:11	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		09/22/25 06:11	5
4-Bromofluorobenzene (Surr)	95		80 - 120		09/22/25 06:11	5

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: STR-06

Lab Sample ID: 180-195746-4

Date Collected: 09/12/25 08:35

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		80 - 120		09/22/25 06:11	5
Toluene-d8 (Surr)	98		80 - 120		09/22/25 06:11	5

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/19/25 00:11	09/19/25 22:21	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/19/25 00:11	09/19/25 22:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	132		46 - 136	09/19/25 00:11	09/19/25 22:21	1
1,1,2,2-Tetrachloroethane	114		46 - 136	09/19/25 00:11	09/19/25 22:21	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	85		1.0	0.71	mg/L			09/13/25 20:35	1
Nitrate as N	0.71		0.10	0.023	mg/L			09/13/25 20:35	1
Sulfate	45		1.0	0.76	mg/L			09/13/25 20:35	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/26/25 22:00	09/27/25 12:27	1
Arsenic	1.5	J	2.0	0.68	ug/L		09/26/25 22:00	09/27/25 12:27	1
Barium	33		2.0	0.75	ug/L		09/26/25 22:00	09/27/25 12:27	1
Beryllium	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:27	1
Cadmium	ND		0.50	0.15	ug/L		09/26/25 22:00	09/27/25 12:27	1
Calcium	56000		120	50	ug/L		09/26/25 22:00	09/27/25 12:27	1
Chromium	ND		2.0	0.55	ug/L		09/26/25 22:00	09/27/25 12:27	1
Cobalt	0.29	J	0.50	0.16	ug/L		09/26/25 22:00	09/27/25 12:27	1
Copper	1.0		1.0	0.85	ug/L		09/26/25 22:00	09/27/25 12:27	1
Iron	270		50	20	ug/L		09/26/25 22:00	09/27/25 12:27	1
Lead	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:27	1
Magnesium	19000		50	16	ug/L		09/26/25 22:00	09/27/25 12:27	1
Manganese	16		2.0	0.95	ug/L		09/26/25 22:00	09/27/25 12:27	1
Nickel	2.8		1.0	0.40	ug/L		09/26/25 22:00	09/27/25 12:27	1
Potassium	7600		200	65	ug/L		09/26/25 22:00	09/27/25 12:27	1
Selenium	0.34	J	1.0	0.28	ug/L		09/26/25 22:00	09/27/25 12:27	1
Silver	ND		0.50	0.10	ug/L		09/26/25 22:00	09/27/25 12:27	1
Sodium	58000		200	90	ug/L		09/26/25 22:00	09/27/25 12:27	1
Thallium	ND		0.50	0.13	ug/L		09/26/25 22:00	09/27/25 12:27	1
Tin	ND		2.0	0.60	ug/L		09/26/25 22:00	09/27/25 12:27	1
Vanadium	ND		4.0	0.79	ug/L		09/26/25 22:00	09/27/25 12:27	1
Zinc	ND		10	4.0	ug/L		09/26/25 22:00	09/27/25 12:27	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/29/25 13:27	09/29/25 23:29	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	220		0.51	0.19	mg/L			09/17/25 05:20	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: STR-06

Lab Sample ID: 180-195746-4

Date Collected: 09/12/25 08:35

Matrix: Water

Date Received: 09/13/25 10:05

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	36		10	5.0	mg/L			09/19/25 02:14	1
Turbidity (EPA 180.1)	2.2		0.85	0.05	NTU			09/13/25 13:48	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/17/25 10:47	1
Specific Conductance (SW846 EPA 9050A)	720		1.0	1.0	umhos/cm			09/15/25 19:05	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	170		5.0	5.0	mg/L			09/17/25 11:57	1
Total Dissolved Solids (SM 2540C)	420		10	10	mg/L			09/17/25 13:01	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: STR-07

Lab Sample ID: 180-195746-5

Date Collected: 09/12/25 07:50

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.5	0.35	ug/L			09/22/25 01:37	5
1,1,1-Trichloroethane	ND		2.5	0.40	ug/L			09/22/25 01:37	5
1,1,2,2-Tetrachloroethane	ND		2.5	0.50	ug/L			09/22/25 01:37	5
1,1,2-Trichloroethane	ND		2.5	0.40	ug/L			09/22/25 01:37	5
1,1-Dichloroethane	ND		2.5	0.50	ug/L			09/22/25 01:37	5
1,1-Dichloroethene	ND		2.5	0.50	ug/L			09/22/25 01:37	5
1,2,3-Trichloropropane	ND		5.0	0.50	ug/L			09/22/25 01:37	5
1,2-Dichlorobenzene	ND		2.5	0.35	ug/L			09/22/25 01:37	5
1,2-Dichloroethane	ND		2.5	0.35	ug/L			09/22/25 01:37	5
1,2-Dichloropropane	ND		2.5	0.50	ug/L			09/22/25 01:37	5
1,4-Dichlorobenzene	ND		2.5	0.35	ug/L			09/22/25 01:37	5
2-Butanone (MEK)	ND		25	5.0	ug/L			09/22/25 01:37	5
2-Hexanone	ND		25	10	ug/L			09/22/25 01:37	5
4-Methyl-2-pentanone (MIBK)	ND		25	5.0	ug/L			09/22/25 01:37	5
Acetone	ND		25	7.5	ug/L			09/22/25 01:37	5
Acrylonitrile	ND		25	2.0	ug/L			09/22/25 01:37	5
Benzene	ND		2.5	0.50	ug/L			09/22/25 01:37	5
Bromoform	ND		5.0	1.5	ug/L			09/22/25 01:37	5
Bromomethane	ND		2.5	0.50	ug/L			09/22/25 01:37	5
Carbon disulfide	ND		5.0	0.50	ug/L			09/22/25 01:37	5
Carbon tetrachloride	ND		2.5	0.50	ug/L			09/22/25 01:37	5
Chlorobenzene	ND		2.5	0.35	ug/L			09/22/25 01:37	5
Chlorobromomethane	ND		2.5	0.40	ug/L			09/22/25 01:37	5
Chlorodibromomethane	ND		2.5	0.40	ug/L			09/22/25 01:37	5
Chloroethane	ND		2.5	0.50	ug/L			09/22/25 01:37	5
Chloroform	ND		2.5	0.45	ug/L			09/22/25 01:37	5
Chloromethane	ND		2.5	0.50	ug/L			09/22/25 01:37	5
cis-1,2-Dichloroethene	ND		2.5	0.40	ug/L			09/22/25 01:37	5
cis-1,3-Dichloropropene	ND		2.5	0.50	ug/L			09/22/25 01:37	5
Dibromomethane	ND		2.5	0.40	ug/L			09/22/25 01:37	5
Dichlorobromomethane	ND		2.5	0.40	ug/L			09/22/25 01:37	5
Ethylbenzene	ND		2.5	0.40	ug/L			09/22/25 01:37	5
Iodomethane	ND		2.5	0.40	ug/L			09/22/25 01:37	5
Methyl tert-butyl ether	ND		2.5	0.40	ug/L			09/22/25 01:37	5
Methylene Chloride	ND		2.5	1.0	ug/L			09/22/25 01:37	5
Styrene	ND		2.5	0.35	ug/L			09/22/25 01:37	5
Tetrachloroethene	ND		2.5	1.0	ug/L			09/22/25 01:37	5
Toluene	ND		2.5	0.40	ug/L			09/22/25 01:37	5
trans-1,2-Dichloroethene	ND		2.5	0.50	ug/L			09/22/25 01:37	5
trans-1,3-Dichloropropene	ND		2.5	0.40	ug/L			09/22/25 01:37	5
trans-1,4-Dichloro-2-butene	ND		25	10	ug/L			09/22/25 01:37	5
Trichloroethene	ND		2.5	0.40	ug/L			09/22/25 01:37	5
Trichlorofluoromethane	ND		2.5	0.50	ug/L			09/22/25 01:37	5
Vinyl acetate	ND		5.0	1.5	ug/L			09/22/25 01:37	5
Vinyl chloride	ND		2.5	0.50	ug/L			09/22/25 01:37	5
Xylenes, Total	ND		5.0	0.35	ug/L			09/22/25 01:37	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		09/22/25 01:37	5
4-Bromofluorobenzene (Surr)	96		80 - 120		09/22/25 01:37	5

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: STR-07

Lab Sample ID: 180-195746-5

Date Collected: 09/12/25 07:50

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		80 - 120		09/22/25 01:37	5
Toluene-d8 (Surr)	99		80 - 120		09/22/25 01:37	5

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	F1 F2	0.019	0.0096	ug/L		09/19/25 00:11	09/19/25 22:38	1
1,2-Dibromoethane	ND	F1 F2	0.019	0.0096	ug/L		09/19/25 00:11	09/19/25 22:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	135		46 - 136	09/19/25 00:11	09/19/25 22:38	1
1,1,2,2-Tetrachloroethane	131		46 - 136	09/19/25 00:11	09/19/25 22:38	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86		1.0	0.71	mg/L			09/13/25 20:49	1
Nitrate as N	0.70		0.10	0.023	mg/L			09/13/25 20:49	1
Sulfate	49		1.0	0.76	mg/L			09/13/25 20:49	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.23	J	1.0	0.20	ug/L		09/29/25 21:00	09/30/25 09:41	1
Arsenic	1.4	J	2.0	0.68	ug/L		09/29/25 21:00	09/30/25 09:41	1
Barium	38		2.0	0.75	ug/L		09/29/25 21:00	09/30/25 09:41	1
Beryllium	ND		0.50	0.12	ug/L		09/29/25 21:00	09/30/25 09:41	1
Cadmium	0.15	J	0.50	0.15	ug/L		09/29/25 21:00	09/30/25 09:41	1
Calcium	63000		120	50	ug/L		09/29/25 21:00	09/30/25 09:41	1
Chromium	ND		2.0	0.55	ug/L		09/29/25 21:00	09/30/25 09:41	1
Cobalt	0.38	J	0.50	0.16	ug/L		09/29/25 21:00	09/30/25 09:41	1
Copper	1.0		1.0	0.85	ug/L		09/29/25 21:00	09/30/25 09:41	1
Iron	ND		50	20	ug/L		09/29/25 21:00	09/30/25 09:41	1
Lead	ND		0.50	0.12	ug/L		09/29/25 21:00	09/30/25 09:41	1
Magnesium	21000		50	16	ug/L		09/29/25 21:00	09/30/25 09:41	1
Manganese	17		2.0	0.95	ug/L		09/29/25 21:00	09/30/25 09:41	1
Nickel	3.2		1.0	0.40	ug/L		09/29/25 21:00	09/30/25 09:41	1
Potassium	8500		200	65	ug/L		09/29/25 21:00	09/30/25 09:41	1
Selenium	0.51	J	1.0	0.28	ug/L		09/29/25 21:00	09/30/25 09:41	1
Silver	ND		0.50	0.10	ug/L		09/29/25 21:00	09/30/25 09:41	1
Sodium	62000		200	90	ug/L		09/29/25 21:00	09/30/25 09:41	1
Thallium	0.23	J	0.50	0.13	ug/L		09/29/25 21:00	09/30/25 09:41	1
Tin	ND		2.0	0.60	ug/L		09/29/25 21:00	09/30/25 09:41	1
Vanadium	ND		4.0	0.79	ug/L		09/29/25 21:00	09/30/25 09:41	1
Zinc	ND		10	4.0	ug/L		09/29/25 21:00	09/30/25 09:41	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/29/25 13:27	09/29/25 22:58	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	240		0.51	0.19	mg/L			09/17/25 05:20	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: STR-07

Lab Sample ID: 180-195746-5

Date Collected: 09/12/25 07:50

Matrix: Water

Date Received: 09/13/25 10:05

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	37		10	5.0	mg/L			09/19/25 02:14	1
Turbidity (EPA 180.1)	2.2		0.85	0.05	NTU			09/13/25 13:49	1
Ammonia (EPA 350.1)	ND		5.0	4.4	mg/L			09/17/25 11:10	50
Specific Conductance (SW846 EPA 9050A)	750		1.0	1.0	umhos/cm			09/15/25 19:07	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	250		5.0	5.0	mg/L			09/17/25 12:12	1
Total Dissolved Solids (SM 2540C)	420		10	10	mg/L			09/17/25 13:01	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: STR-08

Lab Sample ID: 180-195746-6

Date Collected: 09/12/25 11:00

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.5	0.35	ug/L			09/22/25 06:32	5
1,1,1-Trichloroethane	ND		2.5	0.40	ug/L			09/22/25 06:32	5
1,1,2,2-Tetrachloroethane	ND		2.5	0.50	ug/L			09/22/25 06:32	5
1,1,2-Trichloroethane	ND		2.5	0.40	ug/L			09/22/25 06:32	5
1,1-Dichloroethane	ND		2.5	0.50	ug/L			09/22/25 06:32	5
1,1-Dichloroethene	ND		2.5	0.50	ug/L			09/22/25 06:32	5
1,2,3-Trichloropropane	ND		5.0	0.50	ug/L			09/22/25 06:32	5
1,2-Dichlorobenzene	ND		2.5	0.35	ug/L			09/22/25 06:32	5
1,2-Dichloroethane	ND		2.5	0.35	ug/L			09/22/25 06:32	5
1,2-Dichloropropane	ND		2.5	0.50	ug/L			09/22/25 06:32	5
1,4-Dichlorobenzene	ND		2.5	0.35	ug/L			09/22/25 06:32	5
2-Butanone (MEK)	ND		25	5.0	ug/L			09/22/25 06:32	5
2-Hexanone	ND		25	10	ug/L			09/22/25 06:32	5
4-Methyl-2-pentanone (MIBK)	ND		25	5.0	ug/L			09/22/25 06:32	5
Acetone	ND		25	7.5	ug/L			09/22/25 06:32	5
Acrylonitrile	ND		25	2.0	ug/L			09/22/25 06:32	5
Benzene	ND		2.5	0.50	ug/L			09/22/25 06:32	5
Bromoform	ND		5.0	1.5	ug/L			09/22/25 06:32	5
Bromomethane	ND		2.5	0.50	ug/L			09/22/25 06:32	5
Carbon disulfide	ND		5.0	0.50	ug/L			09/22/25 06:32	5
Carbon tetrachloride	ND		2.5	0.50	ug/L			09/22/25 06:32	5
Chlorobenzene	ND		2.5	0.35	ug/L			09/22/25 06:32	5
Chlorobromomethane	ND		2.5	0.40	ug/L			09/22/25 06:32	5
Chlorodibromomethane	ND		2.5	0.40	ug/L			09/22/25 06:32	5
Chloroethane	ND		2.5	0.50	ug/L			09/22/25 06:32	5
Chloroform	ND		2.5	0.45	ug/L			09/22/25 06:32	5
Chloromethane	ND		2.5	0.50	ug/L			09/22/25 06:32	5
cis-1,2-Dichloroethene	ND		2.5	0.40	ug/L			09/22/25 06:32	5
cis-1,3-Dichloropropene	ND		2.5	0.50	ug/L			09/22/25 06:32	5
Dibromomethane	ND		2.5	0.40	ug/L			09/22/25 06:32	5
Dichlorobromomethane	ND		2.5	0.40	ug/L			09/22/25 06:32	5
Ethylbenzene	ND		2.5	0.40	ug/L			09/22/25 06:32	5
Iodomethane	ND		2.5	0.40	ug/L			09/22/25 06:32	5
Methyl tert-butyl ether	ND		2.5	0.40	ug/L			09/22/25 06:32	5
Methylene Chloride	ND		2.5	1.0	ug/L			09/22/25 06:32	5
Styrene	ND		2.5	0.35	ug/L			09/22/25 06:32	5
Tetrachloroethene	ND		2.5	1.0	ug/L			09/22/25 06:32	5
Toluene	ND		2.5	0.40	ug/L			09/22/25 06:32	5
trans-1,2-Dichloroethene	ND		2.5	0.50	ug/L			09/22/25 06:32	5
trans-1,3-Dichloropropene	ND		2.5	0.40	ug/L			09/22/25 06:32	5
trans-1,4-Dichloro-2-butene	ND		25	10	ug/L			09/22/25 06:32	5
Trichloroethene	ND		2.5	0.40	ug/L			09/22/25 06:32	5
Trichlorofluoromethane	ND		2.5	0.50	ug/L			09/22/25 06:32	5
Vinyl acetate	ND		5.0	1.5	ug/L			09/22/25 06:32	5
Vinyl chloride	ND		2.5	0.50	ug/L			09/22/25 06:32	5
Xylenes, Total	ND		5.0	0.35	ug/L			09/22/25 06:32	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		09/22/25 06:32	5
4-Bromofluorobenzene (Surr)	96		80 - 120		09/22/25 06:32	5

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: STR-08

Lab Sample ID: 180-195746-6

Date Collected: 09/12/25 11:00

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		80 - 120		09/22/25 06:32	5
Toluene-d8 (Surr)	97		80 - 120		09/22/25 06:32	5

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0094	ug/L		09/19/25 00:11	09/19/25 23:30	1
1,2-Dibromoethane	ND		0.019	0.0094	ug/L		09/19/25 00:11	09/19/25 23:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	127		46 - 136	09/19/25 00:11	09/19/25 23:30	1
1,1,2,2-Tetrachloroethane	132		46 - 136	09/19/25 00:11	09/19/25 23:30	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	79		1.0	0.71	mg/L			09/13/25 21:04	1
Nitrate as N	0.57		0.10	0.023	mg/L			09/13/25 21:04	1
Sulfate	60		1.0	0.76	mg/L			09/13/25 21:04	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/26/25 22:00	09/27/25 12:11	1
Arsenic	1.3	J	2.0	0.68	ug/L		09/26/25 22:00	09/27/25 12:11	1
Barium	39		2.0	0.75	ug/L		09/26/25 22:00	09/27/25 12:11	1
Beryllium	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:11	1
Cadmium	ND		0.50	0.15	ug/L		09/26/25 22:00	09/27/25 12:11	1
Calcium	58000		120	50	ug/L		09/26/25 22:00	09/27/25 12:11	1
Chromium	ND		2.0	0.55	ug/L		09/26/25 22:00	09/27/25 12:11	1
Cobalt	0.66		0.50	0.16	ug/L		09/26/25 22:00	09/27/25 12:11	1
Copper	ND		1.0	0.85	ug/L		09/26/25 22:00	09/27/25 12:11	1
Iron	25	J	50	20	ug/L		09/26/25 22:00	09/27/25 12:11	1
Lead	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:11	1
Magnesium	19000		50	16	ug/L		09/26/25 22:00	09/27/25 12:11	1
Manganese	85		2.0	0.95	ug/L		09/26/25 22:00	09/27/25 12:11	1
Nickel	2.9		1.0	0.40	ug/L		09/26/25 22:00	09/27/25 12:11	1
Potassium	8100		200	65	ug/L		09/26/25 22:00	09/27/25 12:11	1
Selenium	0.44	J	1.0	0.28	ug/L		09/26/25 22:00	09/27/25 12:11	1
Silver	ND		0.50	0.10	ug/L		09/26/25 22:00	09/27/25 12:11	1
Sodium	56000		200	90	ug/L		09/26/25 22:00	09/27/25 12:11	1
Thallium	0.26	J	0.50	0.13	ug/L		09/26/25 22:00	09/27/25 12:11	1
Tin	ND		2.0	0.60	ug/L		09/26/25 22:00	09/27/25 12:11	1
Vanadium	ND		4.0	0.79	ug/L		09/26/25 22:00	09/27/25 12:11	1
Zinc	ND		10	4.0	ug/L		09/26/25 22:00	09/27/25 12:11	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/29/25 13:27	09/29/25 23:23	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	220		0.51	0.19	mg/L			09/17/25 05:20	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: STR-08

Lab Sample ID: 180-195746-6

Date Collected: 09/12/25 11:00

Matrix: Water

Date Received: 09/13/25 10:05

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	34		10	5.0	mg/L			09/19/25 02:14	1
Turbidity (EPA 180.1)	11		0.85	0.05	NTU			09/13/25 13:50	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/17/25 10:49	1
Specific Conductance (SW846 EPA 9050A)	720		1.0	1.0	umhos/cm			09/15/25 19:11	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	220		5.0	5.0	mg/L			09/17/25 12:22	1
Total Dissolved Solids (SM 2540C)	430		10	10	mg/L			09/17/25 13:01	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: SB-13

Lab Sample ID: 180-195746-7

Date Collected: 09/12/25 10:35

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/22/25 05:08	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/22/25 05:08	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/22/25 05:08	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/22/25 05:08	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/22/25 05:08	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/22/25 05:08	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/22/25 05:08	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/22/25 05:08	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/22/25 05:08	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/22/25 05:08	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/22/25 05:08	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/22/25 05:08	1
2-Hexanone	ND		5.0	2.0	ug/L			09/22/25 05:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/22/25 05:08	1
Acetone	2.2	J	5.0	1.5	ug/L			09/22/25 05:08	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/22/25 05:08	1
Benzene	ND		0.50	0.10	ug/L			09/22/25 05:08	1
Bromoform	ND		1.0	0.30	ug/L			09/22/25 05:08	1
Bromomethane	ND		0.50	0.10	ug/L			09/22/25 05:08	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/22/25 05:08	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/22/25 05:08	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/22/25 05:08	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/22/25 05:08	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/22/25 05:08	1
Chloroethane	ND		0.50	0.10	ug/L			09/22/25 05:08	1
Chloroform	0.63		0.50	0.090	ug/L			09/22/25 05:08	1
Chloromethane	ND		0.50	0.10	ug/L			09/22/25 05:08	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/22/25 05:08	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/22/25 05:08	1
Dibromomethane	ND		0.50	0.080	ug/L			09/22/25 05:08	1
Dichlorobromomethane	0.096	J	0.50	0.080	ug/L			09/22/25 05:08	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/22/25 05:08	1
Iodomethane	ND		0.50	0.080	ug/L			09/22/25 05:08	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/22/25 05:08	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/22/25 05:08	1
Styrene	ND		0.50	0.070	ug/L			09/22/25 05:08	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/22/25 05:08	1
Toluene	ND		0.50	0.080	ug/L			09/22/25 05:08	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/22/25 05:08	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/22/25 05:08	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/22/25 05:08	1
Trichloroethene	ND		0.50	0.080	ug/L			09/22/25 05:08	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/22/25 05:08	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/22/25 05:08	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/22/25 05:08	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/22/25 05:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		09/22/25 05:08	1
4-Bromofluorobenzene (Surr)	94		80 - 120		09/22/25 05:08	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: SB-13

Date Collected: 09/12/25 10:35

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-7

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		80 - 120		09/22/25 05:08	1
Toluene-d8 (Surr)	97		80 - 120		09/22/25 05:08	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0095	ug/L		09/19/25 00:11	09/19/25 23:47	1
1,2-Dibromoethane	ND		0.019	0.0095	ug/L		09/19/25 00:11	09/19/25 23:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	102		46 - 136	09/19/25 00:11	09/19/25 23:47	1
1,1,2,2-Tetrachloroethane	113		46 - 136	09/19/25 00:11	09/19/25 23:47	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		1.0	0.71	mg/L			09/13/25 21:18	1
Nitrate as N	ND		0.10	0.023	mg/L			09/13/25 21:18	1
Sulfate	240		5.0	3.8	mg/L			09/18/25 16:18	5

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.20	J	1.0	0.20	ug/L		09/26/25 22:00	09/27/25 12:20	1
Arsenic	1.0	J	2.0	0.68	ug/L		09/26/25 22:00	09/27/25 12:20	1
Barium	15		2.0	0.75	ug/L		09/26/25 22:00	09/27/25 12:20	1
Beryllium	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:20	1
Cadmium	ND		0.50	0.15	ug/L		09/26/25 22:00	09/27/25 12:20	1
Calcium	110000		120	50	ug/L		09/26/25 22:00	09/27/25 12:20	1
Chromium	ND		2.0	0.55	ug/L		09/26/25 22:00	09/27/25 12:20	1
Cobalt	0.31	J	0.50	0.16	ug/L		09/26/25 22:00	09/27/25 12:20	1
Copper	ND		1.0	0.85	ug/L		09/26/25 22:00	09/27/25 12:20	1
Iron	ND		50	20	ug/L		09/26/25 22:00	09/27/25 12:20	1
Lead	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:20	1
Magnesium	12000		50	16	ug/L		09/26/25 22:00	09/27/25 12:20	1
Manganese	14		2.0	0.95	ug/L		09/26/25 22:00	09/27/25 12:20	1
Nickel	2.9		1.0	0.40	ug/L		09/26/25 22:00	09/27/25 12:20	1
Potassium	15000		200	65	ug/L		09/26/25 22:00	09/27/25 12:20	1
Selenium	ND		1.0	0.28	ug/L		09/26/25 22:00	09/27/25 12:20	1
Silver	ND		0.50	0.10	ug/L		09/26/25 22:00	09/27/25 12:20	1
Sodium	22000		200	90	ug/L		09/26/25 22:00	09/27/25 12:20	1
Thallium	ND		0.50	0.13	ug/L		09/26/25 22:00	09/27/25 12:20	1
Tin	ND		2.0	0.60	ug/L		09/26/25 22:00	09/27/25 12:20	1
Vanadium	ND		4.0	0.79	ug/L		09/26/25 22:00	09/27/25 12:20	1
Zinc	ND		10	4.0	ug/L		09/26/25 22:00	09/27/25 12:20	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/29/25 13:27	09/29/25 23:25	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	320		0.51	0.19	mg/L			09/17/25 05:20	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: SB-13

Lab Sample ID: 180-195746-7

Date Collected: 09/12/25 10:35

Matrix: Water

Date Received: 09/13/25 10:05

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	8.8	J	10	5.0	mg/L			09/22/25 08:20	1
Turbidity (EPA 180.1)	2.2		0.85	0.05	NTU			09/13/25 13:52	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/17/25 10:51	1
Specific Conductance (SW846 EPA 9050A)	740		1.0	1.0	umhos/cm			09/15/25 19:12	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	100		5.0	5.0	mg/L			09/17/25 12:27	1
Total Dissolved Solids (SM 2540C)	490		10	10	mg/L			09/17/25 13:01	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: SW DUPLICATE

Lab Sample ID: 180-195746-8

Date Collected: 09/12/25 00:00

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.5	0.35	ug/L			09/22/25 06:53	5
1,1,1-Trichloroethane	ND		2.5	0.40	ug/L			09/22/25 06:53	5
1,1,2,2-Tetrachloroethane	ND		2.5	0.50	ug/L			09/22/25 06:53	5
1,1,2-Trichloroethane	ND		2.5	0.40	ug/L			09/22/25 06:53	5
1,1-Dichloroethane	ND		2.5	0.50	ug/L			09/22/25 06:53	5
1,1-Dichloroethene	ND		2.5	0.50	ug/L			09/22/25 06:53	5
1,2,3-Trichloropropane	ND		5.0	0.50	ug/L			09/22/25 06:53	5
1,2-Dichlorobenzene	ND		2.5	0.35	ug/L			09/22/25 06:53	5
1,2-Dichloroethane	ND		2.5	0.35	ug/L			09/22/25 06:53	5
1,2-Dichloropropane	ND		2.5	0.50	ug/L			09/22/25 06:53	5
1,4-Dichlorobenzene	ND		2.5	0.35	ug/L			09/22/25 06:53	5
2-Butanone (MEK)	ND		25	5.0	ug/L			09/22/25 06:53	5
2-Hexanone	ND		25	10	ug/L			09/22/25 06:53	5
4-Methyl-2-pentanone (MIBK)	ND		25	5.0	ug/L			09/22/25 06:53	5
Acetone	ND		25	7.5	ug/L			09/22/25 06:53	5
Acrylonitrile	ND		25	2.0	ug/L			09/22/25 06:53	5
Benzene	ND		2.5	0.50	ug/L			09/22/25 06:53	5
Bromoform	ND		5.0	1.5	ug/L			09/22/25 06:53	5
Bromomethane	ND		2.5	0.50	ug/L			09/22/25 06:53	5
Carbon disulfide	ND		5.0	0.50	ug/L			09/22/25 06:53	5
Carbon tetrachloride	ND		2.5	0.50	ug/L			09/22/25 06:53	5
Chlorobenzene	ND		2.5	0.35	ug/L			09/22/25 06:53	5
Chlorobromomethane	ND		2.5	0.40	ug/L			09/22/25 06:53	5
Chlorodibromomethane	ND		2.5	0.40	ug/L			09/22/25 06:53	5
Chloroethane	ND		2.5	0.50	ug/L			09/22/25 06:53	5
Chloroform	ND		2.5	0.45	ug/L			09/22/25 06:53	5
Chloromethane	ND		2.5	0.50	ug/L			09/22/25 06:53	5
cis-1,2-Dichloroethene	ND		2.5	0.40	ug/L			09/22/25 06:53	5
cis-1,3-Dichloropropene	ND		2.5	0.50	ug/L			09/22/25 06:53	5
Dibromomethane	ND		2.5	0.40	ug/L			09/22/25 06:53	5
Dichlorobromomethane	ND		2.5	0.40	ug/L			09/22/25 06:53	5
Ethylbenzene	ND		2.5	0.40	ug/L			09/22/25 06:53	5
Iodomethane	ND		2.5	0.40	ug/L			09/22/25 06:53	5
Methyl tert-butyl ether	ND		2.5	0.40	ug/L			09/22/25 06:53	5
Methylene Chloride	ND		2.5	1.0	ug/L			09/22/25 06:53	5
Styrene	ND		2.5	0.35	ug/L			09/22/25 06:53	5
Tetrachloroethene	ND		2.5	1.0	ug/L			09/22/25 06:53	5
Toluene	ND		2.5	0.40	ug/L			09/22/25 06:53	5
trans-1,2-Dichloroethene	ND		2.5	0.50	ug/L			09/22/25 06:53	5
trans-1,3-Dichloropropene	ND		2.5	0.40	ug/L			09/22/25 06:53	5
trans-1,4-Dichloro-2-butene	ND		25	10	ug/L			09/22/25 06:53	5
Trichloroethene	ND		2.5	0.40	ug/L			09/22/25 06:53	5
Trichlorofluoromethane	ND		2.5	0.50	ug/L			09/22/25 06:53	5
Vinyl acetate	ND		5.0	1.5	ug/L			09/22/25 06:53	5
Vinyl chloride	ND		2.5	0.50	ug/L			09/22/25 06:53	5
Xylenes, Total	ND		5.0	0.35	ug/L			09/22/25 06:53	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		09/22/25 06:53	5
4-Bromofluorobenzene (Surr)	96		80 - 120		09/22/25 06:53	5

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: SW DUPLICATE

Lab Sample ID: 180-195746-8

Date Collected: 09/12/25 00:00

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	101		80 - 120		09/22/25 06:53	5
Toluene-d8 (Surr)	98		80 - 120		09/22/25 06:53	5

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0097	ug/L		09/19/25 00:11	09/20/25 00:04	1
1,2-Dibromoethane	ND		0.019	0.0097	ug/L		09/19/25 00:11	09/20/25 00:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	166	S1+	46 - 136	09/19/25 00:11	09/20/25 00:04	1
1,1,2,2-Tetrachloroethane	159	S1+	46 - 136	09/19/25 00:11	09/20/25 00:04	1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86		1.0	0.71	mg/L			09/13/25 21:33	1
Nitrate as N	0.82		0.10	0.023	mg/L			09/13/25 21:33	1
Sulfate	48		1.0	0.76	mg/L			09/13/25 21:33	1

Method: SW846 6020B - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/26/25 22:00	09/27/25 12:25	1
Arsenic	1.4	J	2.0	0.68	ug/L		09/26/25 22:00	09/27/25 12:25	1
Barium	34		2.0	0.75	ug/L		09/26/25 22:00	09/27/25 12:25	1
Beryllium	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:25	1
Cadmium	0.15	J	0.50	0.15	ug/L		09/26/25 22:00	09/27/25 12:25	1
Calcium	58000		120	50	ug/L		09/26/25 22:00	09/27/25 12:25	1
Chromium	ND		2.0	0.55	ug/L		09/26/25 22:00	09/27/25 12:25	1
Cobalt	0.30	J	0.50	0.16	ug/L		09/26/25 22:00	09/27/25 12:25	1
Copper	1.0		1.0	0.85	ug/L		09/26/25 22:00	09/27/25 12:25	1
Iron	ND		50	20	ug/L		09/26/25 22:00	09/27/25 12:25	1
Lead	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 12:25	1
Magnesium	20000		50	16	ug/L		09/26/25 22:00	09/27/25 12:25	1
Manganese	14		2.0	0.95	ug/L		09/26/25 22:00	09/27/25 12:25	1
Nickel	3.0		1.0	0.40	ug/L		09/26/25 22:00	09/27/25 12:25	1
Potassium	7800		200	65	ug/L		09/26/25 22:00	09/27/25 12:25	1
Selenium	0.30	J	1.0	0.28	ug/L		09/26/25 22:00	09/27/25 12:25	1
Silver	ND		0.50	0.10	ug/L		09/26/25 22:00	09/27/25 12:25	1
Sodium	60000		200	90	ug/L		09/26/25 22:00	09/27/25 12:25	1
Thallium	ND		0.50	0.13	ug/L		09/26/25 22:00	09/27/25 12:25	1
Tin	ND		2.0	0.60	ug/L		09/26/25 22:00	09/27/25 12:25	1
Vanadium	ND		4.0	0.79	ug/L		09/26/25 22:00	09/27/25 12:25	1
Zinc	ND		10	4.0	ug/L		09/26/25 22:00	09/27/25 12:25	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/29/25 13:27	09/29/25 23:31	1

Method: SM 2340B - Total Hardness (as CaCO3) by calculation - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	220		0.51	0.19	mg/L			09/17/25 05:20	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: SW DUPLICATE

Lab Sample ID: 180-195746-8

Date Collected: 09/12/25 00:00

Matrix: Water

Date Received: 09/13/25 10:05

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand (EPA 410.4)	34		10	5.0	mg/L			09/22/25 08:20	1
Turbidity (EPA 180.1)	2.7		0.85	0.05	NTU			09/13/25 13:53	1
Ammonia (EPA 350.1)	ND		0.10	0.088	mg/L			09/17/25 10:53	1
Specific Conductance (SW846 EPA 9050A)	750		1.0	1.0	umhos/cm			09/15/25 19:13	1
Total Alkalinity as CaCO3 to pH 4.5 (SM 2320B)	180		5.0	5.0	mg/L			09/17/25 12:31	1
Total Dissolved Solids (SM 2540C)	420		10	10	mg/L			09/17/25 13:01	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: TRIP BLANK-05

Lab Sample ID: 180-195746-17

Date Collected: 09/12/25 14:20

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/22/25 00:14	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/22/25 00:14	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/22/25 00:14	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/22/25 00:14	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/22/25 00:14	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/22/25 00:14	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/22/25 00:14	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/22/25 00:14	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/22/25 00:14	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/22/25 00:14	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/22/25 00:14	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/22/25 00:14	1
2-Hexanone	ND		5.0	2.0	ug/L			09/22/25 00:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/22/25 00:14	1
Acetone	ND		5.0	1.5	ug/L			09/22/25 00:14	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/22/25 00:14	1
Benzene	ND		0.50	0.10	ug/L			09/22/25 00:14	1
Bromoform	ND		1.0	0.30	ug/L			09/22/25 00:14	1
Bromomethane	ND		0.50	0.10	ug/L			09/22/25 00:14	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/22/25 00:14	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/22/25 00:14	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/22/25 00:14	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/22/25 00:14	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/22/25 00:14	1
Chloroethane	ND		0.50	0.10	ug/L			09/22/25 00:14	1
Chloroform	ND		0.50	0.090	ug/L			09/22/25 00:14	1
Chloromethane	ND		0.50	0.10	ug/L			09/22/25 00:14	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/22/25 00:14	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/22/25 00:14	1
Dibromomethane	ND		0.50	0.080	ug/L			09/22/25 00:14	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/22/25 00:14	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/22/25 00:14	1
Iodomethane	ND		0.50	0.080	ug/L			09/22/25 00:14	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/22/25 00:14	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/22/25 00:14	1
Styrene	ND		0.50	0.070	ug/L			09/22/25 00:14	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/22/25 00:14	1
Toluene	ND		0.50	0.080	ug/L			09/22/25 00:14	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/22/25 00:14	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/22/25 00:14	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/22/25 00:14	1
Trichloroethene	ND		0.50	0.080	ug/L			09/22/25 00:14	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/22/25 00:14	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/22/25 00:14	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/22/25 00:14	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/22/25 00:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		09/22/25 00:14	1
4-Bromofluorobenzene (Surr)	97		80 - 120		09/22/25 00:14	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Client Sample ID: TRIP BLANK-05

Lab Sample ID: 180-195746-17

Date Collected: 09/12/25 14:20

Matrix: Water

Date Received: 09/13/25 10:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	99		80 - 120		09/22/25 00:14	1
Toluene-d8 (Surr)	99		80 - 120		09/22/25 00:14	1

Method: SW846 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.019	0.0096	ug/L		09/19/25 00:11	09/20/25 00:22	1
1,2-Dibromoethane	ND		0.019	0.0096	ug/L		09/19/25 00:11	09/20/25 00:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	108		46 - 136	09/19/25 00:11	09/20/25 00:22	1
1,1,2,2-Tetrachloroethane	105		46 - 136	09/19/25 00:11	09/20/25 00:22	1

QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-702434/10

Matrix: Water

Analysis Batch: 702434

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.50	0.070	ug/L			09/21/25 22:03	1
1,1,1-Trichloroethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
1,1,2-Trichloroethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
1,1-Dichloroethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
1,1-Dichloroethene	ND		0.50	0.10	ug/L			09/21/25 22:03	1
1,2,3-Trichloropropane	ND		1.0	0.10	ug/L			09/21/25 22:03	1
1,2-Dichlorobenzene	ND		0.50	0.070	ug/L			09/21/25 22:03	1
1,2-Dichloroethane	ND		0.50	0.070	ug/L			09/21/25 22:03	1
1,2-Dichloropropane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
1,4-Dichlorobenzene	ND		0.50	0.070	ug/L			09/21/25 22:03	1
2-Butanone (MEK)	ND		5.0	1.0	ug/L			09/21/25 22:03	1
2-Hexanone	ND		5.0	2.0	ug/L			09/21/25 22:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.0	ug/L			09/21/25 22:03	1
Acetone	ND		5.0	1.5	ug/L			09/21/25 22:03	1
Acrylonitrile	ND		5.0	0.40	ug/L			09/21/25 22:03	1
Benzene	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Bromoform	ND		1.0	0.30	ug/L			09/21/25 22:03	1
Bromomethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Carbon disulfide	ND		1.0	0.10	ug/L			09/21/25 22:03	1
Carbon tetrachloride	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Chlorobenzene	ND		0.50	0.070	ug/L			09/21/25 22:03	1
Chlorobromomethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Chlorodibromomethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Chloroethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Chloroform	ND		0.50	0.090	ug/L			09/21/25 22:03	1
Chloromethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
cis-1,2-Dichloroethene	ND		0.50	0.080	ug/L			09/21/25 22:03	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Dibromomethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Dichlorobromomethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Ethylbenzene	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Iodomethane	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Methyl tert-butyl ether	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Methylene Chloride	ND		0.50	0.20	ug/L			09/21/25 22:03	1
Styrene	ND		0.50	0.070	ug/L			09/21/25 22:03	1
Tetrachloroethene	ND		0.50	0.20	ug/L			09/21/25 22:03	1
Toluene	ND		0.50	0.080	ug/L			09/21/25 22:03	1
trans-1,2-Dichloroethene	ND		0.50	0.10	ug/L			09/21/25 22:03	1
trans-1,3-Dichloropropene	ND		0.50	0.080	ug/L			09/21/25 22:03	1
trans-1,4-Dichloro-2-butene	ND		5.0	2.0	ug/L			09/21/25 22:03	1
Trichloroethene	ND		0.50	0.080	ug/L			09/21/25 22:03	1
Trichlorofluoromethane	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Vinyl acetate	ND		1.0	0.30	ug/L			09/21/25 22:03	1
Vinyl chloride	ND		0.50	0.10	ug/L			09/21/25 22:03	1
Xylenes, Total	ND		1.0	0.070	ug/L			09/21/25 22:03	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

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

Lab Sample ID: MB 410-702434/10

Matrix: Water

Analysis Batch: 702434

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		09/21/25 22:03	1
4-Bromofluorobenzene (Surr)	97		80 - 120		09/21/25 22:03	1
Dibromofluoromethane (Surr)	100		80 - 120		09/21/25 22:03	1
Toluene-d8 (Surr)	97		80 - 120		09/21/25 22:03	1

Lab Sample ID: LCS 410-702434/5

Matrix: Water

Analysis Batch: 702434

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	5.00	5.34		ug/L		107	80 - 122
1,1,1-Trichloroethane	5.00	5.32		ug/L		106	78 - 126
1,1,2,2-Tetrachloroethane	5.00	5.24		ug/L		105	75 - 123
1,1,2-Trichloroethane	5.00	5.15		ug/L		103	80 - 120
1,1-Dichloroethane	5.00	5.67		ug/L		113	74 - 120
1,1-Dichloroethene	5.00	5.84		ug/L		117	80 - 131
1,2,3-Trichloropropane	5.00	5.38		ug/L		108	80 - 125
1,2-Dichlorobenzene	5.00	5.29		ug/L		106	80 - 120
1,2-Dichloroethane	5.00	5.14		ug/L		103	69 - 122
1,2-Dichloropropane	5.00	5.50		ug/L		110	80 - 120
1,4-Dichlorobenzene	5.00	5.15		ug/L		103	80 - 120
2-Butanone (MEK)	62.5	63.7		ug/L		102	59 - 141
2-Hexanone	62.5	67.7		ug/L		108	52 - 140
4-Methyl-2-pentanone (MIBK)	62.5	64.2		ug/L		103	55 - 140
Acetone	62.5	56.8		ug/L		91	60 - 146
Acrylonitrile	25.0	26.0		ug/L		104	64 - 139
Benzene	5.00	5.37		ug/L		107	80 - 120
Bromoform	5.00	5.42		ug/L		108	75 - 126
Bromomethane	5.00	4.25		ug/L		85	63 - 120
Carbon disulfide	5.00	5.41		ug/L		108	67 - 130
Carbon tetrachloride	5.00	5.40		ug/L		108	64 - 141
Chlorobenzene	5.00	5.24		ug/L		105	80 - 120
Chlorobromomethane	5.00	5.60		ug/L		112	80 - 133
Chlorodibromomethane	5.00	5.19		ug/L		104	80 - 123
Chloroethane	5.00	4.55		ug/L		91	63 - 120
Chloroform	5.00	5.42		ug/L		108	80 - 120
Chloromethane	5.00	4.01		ug/L		80	56 - 124
cis-1,2-Dichloroethene	5.00	5.70		ug/L		114	80 - 122
cis-1,3-Dichloropropene	5.00	5.12		ug/L		102	67 - 121
Dibromomethane	5.00	5.72		ug/L		114	80 - 122
Dichlorobromomethane	5.00	5.38		ug/L		108	80 - 123
Ethylbenzene	5.00	5.21		ug/L		104	80 - 120
Iodomethane	5.00	5.10		ug/L		102	77 - 120
Methyl tert-butyl ether	5.00	5.17		ug/L		103	69 - 120
Methylene Chloride	5.00	5.63		ug/L		113	80 - 120
Styrene	5.00	5.30		ug/L		106	80 - 120
Tetrachloroethene	5.00	4.93		ug/L		99	80 - 120
Toluene	5.00	5.26		ug/L		105	80 - 120

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

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

Lab Sample ID: LCS 410-702434/5

Matrix: Water

Analysis Batch: 702434

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,2-Dichloroethene	5.00	5.77		ug/L		115	80 - 122
trans-1,3-Dichloropropene	5.00	5.27		ug/L		105	61 - 129
trans-1,4-Dichloro-2-butene	25.0	23.1		ug/L		93	13 - 144
Trichloroethene	5.00	5.19		ug/L		104	80 - 120
Trichlorofluoromethane	5.00	3.67		ug/L		73	53 - 136
Vinyl chloride	5.00	4.47		ug/L		89	60 - 125
Xylenes, Total	15.0	15.8		ug/L		105	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		80 - 120
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	100		80 - 120
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LCS 410-702434/7

Matrix: Water

Analysis Batch: 702434

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	12.5	15.1		ug/L		121	64 - 145

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99		80 - 120
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: 180-195746-5 MS

Matrix: Water

Analysis Batch: 702434

Client Sample ID: STR-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND		25.0	25.7		ug/L		103	80 - 122
1,1,1-Trichloroethane	ND		25.0	28.0		ug/L		112	78 - 126
1,1,2,2-Tetrachloroethane	ND		25.0	25.4		ug/L		102	75 - 123
1,1,2-Trichloroethane	ND		25.0	25.2		ug/L		101	80 - 120
1,1-Dichloroethane	ND		25.0	28.5		ug/L		114	74 - 120
1,1-Dichloroethene	ND		25.0	31.1		ug/L		124	80 - 131
1,2,3-Trichloropropane	ND		25.0	24.8		ug/L		99	80 - 125
1,2-Dichlorobenzene	ND		25.0	26.2		ug/L		105	80 - 120
1,2-Dichloroethane	ND		25.0	24.0		ug/L		96	69 - 122
1,2-Dichloropropane	ND		25.0	27.4		ug/L		109	80 - 120
1,4-Dichlorobenzene	ND		25.0	25.9		ug/L		104	80 - 120
2-Butanone (MEK)	ND		313	348		ug/L		111	59 - 141
2-Hexanone	ND		313	374		ug/L		120	52 - 140
4-Methyl-2-pentanone (MIBK)	ND		313	363		ug/L		116	55 - 140
Acetone	ND		313	301		ug/L		96	60 - 146
Acrylonitrile	ND		125	129		ug/L		103	64 - 139

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

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

Lab Sample ID: 180-195746-5 MS

Matrix: Water

Analysis Batch: 702434

Client Sample ID: STR-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		25.0	27.4		ug/L		110	80 - 120
Bromoform	ND		25.0	26.3		ug/L		105	75 - 126
Bromomethane	ND		25.0	23.3		ug/L		93	63 - 120
Carbon disulfide	ND		25.0	28.3		ug/L		113	67 - 130
Carbon tetrachloride	ND		25.0	28.3		ug/L		113	64 - 141
Chlorobenzene	ND		25.0	26.0		ug/L		104	80 - 120
Chlorobromomethane	ND		25.0	27.0		ug/L		108	80 - 133
Chlorodibromomethane	ND		25.0	25.4		ug/L		102	80 - 123
Chloroethane	ND		25.0	24.3		ug/L		97	63 - 120
Chloroform	ND		25.0	27.2		ug/L		109	80 - 120
Chloromethane	ND		25.0	21.0		ug/L		84	80 - 120
cis-1,2-Dichloroethene	ND		25.0	28.1		ug/L		112	80 - 122
cis-1,3-Dichloropropene	ND		25.0	25.1		ug/L		100	67 - 121
Dibromomethane	ND		25.0	27.2		ug/L		109	80 - 122
Dichlorobromomethane	ND		25.0	26.6		ug/L		106	80 - 123
Ethylbenzene	ND		25.0	26.2		ug/L		105	80 - 120
Iodomethane	ND		25.0	25.6		ug/L		102	77 - 120
Methyl tert-butyl ether	ND		25.0	25.1		ug/L		100	69 - 120
Methylene Chloride	ND		25.0	28.1		ug/L		112	80 - 120
Styrene	ND		25.0	26.1		ug/L		104	80 - 120
Tetrachloroethene	ND		25.0	26.0		ug/L		104	80 - 120
Toluene	ND		25.0	26.8		ug/L		107	80 - 120
trans-1,2-Dichloroethene	ND		25.0	29.4		ug/L		118	80 - 122
trans-1,3-Dichloropropene	ND		25.0	24.4		ug/L		98	61 - 129
trans-1,4-Dichloro-2-butene	ND		125	126		ug/L		101	13 - 144
Trichloroethene	ND		25.0	26.8		ug/L		107	80 - 120
Trichlorofluoromethane	ND		25.0	20.2		ug/L		81	53 - 136
Vinyl chloride	ND		25.0	24.1		ug/L		96	60 - 125
Xylenes, Total	ND		75.1	79.6		ug/L		106	80 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: 180-195746-5 MS

Matrix: Water

Analysis Batch: 702434

Client Sample ID: STR-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl acetate	ND		62.6	79.9		ug/L		128	64 - 145

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	101		80 - 120
Toluene-d8 (Surr)	98		80 - 120

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: 180-195746-5 MSD

Matrix: Water

Analysis Batch: 702434

Client Sample ID: STR-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	26.1		ug/L		104	80 - 122	1	30
1,1,1-Trichloroethane	ND		25.0	28.5		ug/L		114	78 - 126	2	30
1,1,2,2-Tetrachloroethane	ND		25.0	25.9		ug/L		104	75 - 123	2	30
1,1,2-Trichloroethane	ND		25.0	25.6		ug/L		102	80 - 120	2	30
1,1-Dichloroethane	ND		25.0	28.8		ug/L		115	74 - 120	1	30
1,1-Dichloroethene	ND		25.0	31.7		ug/L		127	80 - 131	2	30
1,2,3-Trichloropropane	ND		25.0	27.1		ug/L		108	80 - 125	9	30
1,2-Dichlorobenzene	ND		25.0	27.0		ug/L		108	80 - 120	3	30
1,2-Dichloroethane	ND		25.0	25.1		ug/L		100	69 - 122	4	30
1,2-Dichloropropane	ND		25.0	28.3		ug/L		113	80 - 120	3	30
1,4-Dichlorobenzene	ND		25.0	25.9		ug/L		103	80 - 120	0	30
2-Butanone (MEK)	ND		313	320		ug/L		102	59 - 141	8	30
2-Hexanone	ND		313	342		ug/L		109	52 - 140	9	30
4-Methyl-2-pentanone (MIBK)	ND		313	329		ug/L		105	55 - 140	10	30
Acetone	ND		313	280		ug/L		89	60 - 146	8	30
Acrylonitrile	ND		125	121		ug/L		97	64 - 139	6	30
Benzene	ND		25.0	28.0		ug/L		112	80 - 120	2	30
Bromoform	ND		25.0	26.2		ug/L		105	75 - 126	0	30
Bromomethane	ND		25.0	22.5		ug/L		90	63 - 120	4	30
Carbon disulfide	ND		25.0	28.7		ug/L		115	67 - 130	1	30
Carbon tetrachloride	ND		25.0	29.2		ug/L		117	64 - 141	3	30
Chlorobenzene	ND		25.0	26.4		ug/L		105	80 - 120	1	30
Chlorobromomethane	ND		25.0	28.1		ug/L		112	80 - 133	4	30
Chlorodibromomethane	ND		25.0	25.0		ug/L		100	80 - 123	2	30
Chloroethane	ND		25.0	23.8		ug/L		95	63 - 120	2	30
Chloroform	ND		25.0	28.1		ug/L		112	80 - 120	3	30
Chloromethane	ND		25.0	20.3		ug/L		81	80 - 120	3	30
cis-1,2-Dichloroethene	ND		25.0	29.4		ug/L		118	80 - 122	5	30
cis-1,3-Dichloropropene	ND		25.0	26.5		ug/L		106	67 - 121	5	30
Dibromomethane	ND		25.0	27.5		ug/L		110	80 - 122	1	30
Dichlorobromomethane	ND		25.0	27.2		ug/L		109	80 - 123	2	30
Ethylbenzene	ND		25.0	27.0		ug/L		108	80 - 120	3	30
Iodomethane	ND		25.0	26.3		ug/L		105	77 - 120	3	30
Methyl tert-butyl ether	ND		25.0	25.6		ug/L		102	69 - 120	2	30
Methylene Chloride	ND		25.0	28.7		ug/L		115	80 - 120	2	30
Styrene	ND		25.0	26.4		ug/L		106	80 - 120	1	30
Tetrachloroethene	ND		25.0	26.6		ug/L		106	80 - 120	2	30
Toluene	ND		25.0	27.0		ug/L		108	80 - 120	1	30
trans-1,2-Dichloroethene	ND		25.0	29.8		ug/L		119	80 - 122	1	30
trans-1,3-Dichloropropene	ND		25.0	25.5		ug/L		102	61 - 129	4	30
trans-1,4-Dichloro-2-butene	ND		125	114		ug/L		91	13 - 144	10	30
Trichloroethene	ND		25.0	27.3		ug/L		109	80 - 120	2	30
Trichlorofluoromethane	ND		25.0	19.6		ug/L		78	53 - 136	3	30
Vinyl chloride	ND		25.0	22.1		ug/L		88	60 - 125	9	30
Xylenes, Total	ND		75.1	81.2		ug/L		108	80 - 120	2	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	104		80 - 120

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

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

Lab Sample ID: 180-195746-5 MSD

Matrix: Water

Analysis Batch: 702434

Client Sample ID: STR-07

Prep Type: Total/NA

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: 180-195746-5 MSD

Matrix: Water

Analysis Batch: 702434

Client Sample ID: STR-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl acetate	ND		62.6	83.6		ug/L		134	64 - 145	5	30

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	102		80 - 120
4-Bromofluorobenzene (Surr)	95		80 - 120
Dibromofluoromethane (Surr)	99		80 - 120
Toluene-d8 (Surr)	98		80 - 120

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 410-701606/1-A

Matrix: Water

Analysis Batch: 701697

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 701606

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
1,2-Dibromo-3-Chloropropane	ND		0.020	0.010	ug/L		09/19/25 00:11	09/19/25 17:27	1	
1,2-Dibromoethane	ND		0.020	0.010	ug/L		09/19/25 00:11	09/19/25 17:27	1	

	MB	MB								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
1,1,2,2-Tetrachloroethane	101		46 - 136	09/19/25 00:11	09/19/25 17:27	1				
1,1,2,2-Tetrachloroethane	105		46 - 136	09/19/25 00:11	09/19/25 17:27	1				

Lab Sample ID: LCS 410-701606/2-A

Matrix: Water

Analysis Batch: 701697

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 701606

			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,2-Dibromo-3-Chloropropane			0.129	0.149		ug/L		115	60 - 140	
1,2-Dibromoethane			0.129	0.125		ug/L		97	60 - 140	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1,1,2,2-Tetrachloroethane	101		46 - 136
1,1,2,2-Tetrachloroethane	111		46 - 136

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 410-701606/3-A

Matrix: Water

Analysis Batch: 701697

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 701606

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.129	0.161		ug/L		125	60 - 140	8	20
1,2-Dibromoethane	0.129	0.115		ug/L		89	60 - 140	9	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1,1,2,2-Tetrachloroethane	119		46 - 136						
1,1,2,2-Tetrachloroethane	120		46 - 136						

Lab Sample ID: 180-195746-5 MS

Matrix: Water

Analysis Batch: 701697

Client Sample ID: STR-07

Prep Type: Total/NA

Prep Batch: 701606

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	ND	F1 F2	0.123	0.255	F1	ug/L		208	60 - 140		
1,2-Dibromoethane	ND	F1 F2	0.123	0.186	F1	ug/L		151	60 - 140		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1,1,2,2-Tetrachloroethane	221	S1+	46 - 136								
1,1,2,2-Tetrachloroethane	207	S1+	46 - 136								

Lab Sample ID: 180-195746-5 MSD

Matrix: Water

Analysis Batch: 701697

Client Sample ID: STR-07

Prep Type: Total/NA

Prep Batch: 701606

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	ND	F1 F2	0.124	0.148	F2	ug/L		119	60 - 140	53	20
1,2-Dibromoethane	ND	F1 F2	0.124	0.145	F2	ug/L		117	60 - 140	24	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,1,2,2-Tetrachloroethane	122		46 - 136								
1,1,2,2-Tetrachloroethane	112		46 - 136								

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography

Lab Sample ID: MB 180-502895/42

Matrix: Water

Analysis Batch: 502895

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			09/13/25 22:16	1
Nitrate as N	ND		0.10	0.023	mg/L			09/13/25 22:16	1
Sulfate	ND		1.0	0.76	mg/L			09/13/25 22:16	1

Lab Sample ID: MB 180-502895/6

Matrix: Water

Analysis Batch: 502895

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			09/13/25 12:55	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 180-502895/6

Matrix: Water

Analysis Batch: 502895

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.10	0.023	mg/L			09/13/25 12:55	1
Nitrate as N	ND		0.10	0.023	mg/L			09/13/25 12:55	1
Sulfate	ND		1.0	0.76	mg/L			09/13/25 12:55	1

Lab Sample ID: LCS 180-502895/43

Matrix: Water

Analysis Batch: 502895

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.7		mg/L		103	90 - 110
Nitrate as N	2.50	2.66		mg/L		106	90 - 110
Sulfate	50.0	51.4		mg/L		103	90 - 110

Lab Sample ID: LCS 180-502895/7

Matrix: Water

Analysis Batch: 502895

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	51.7		mg/L		103	90 - 110
Nitrate as N	2.50	2.60		mg/L		104	90 - 110
Sulfate	50.0	51.8		mg/L		104	90 - 110

Lab Sample ID: 180-195746-1 MS

Matrix: Water

Analysis Batch: 502895

Client Sample ID: SB-03

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	9.0		50.0	60.2		mg/L		102	90 - 110
Nitrate as N	0.052	J	2.50	2.72		mg/L		107	90 - 110
Sulfate	46		50.0	95.9		mg/L		99	90 - 110

Lab Sample ID: 180-195746-1 MSD

Matrix: Water

Analysis Batch: 502895

Client Sample ID: SB-03

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	9.0		50.0	60.1		mg/L		102	90 - 110	0	20
Nitrate as N	0.052	J	2.50	2.72		mg/L		107	90 - 110	0	20
Sulfate	46		50.0	95.5		mg/L		98	90 - 110	0	20

Lab Sample ID: MB 180-503109/36

Matrix: Water

Analysis Batch: 503109

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			09/17/25 22:40	1
Nitrate as N	ND		0.10	0.023	mg/L			09/17/25 22:40	1
Sulfate	ND		1.0	0.76	mg/L			09/17/25 22:40	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 180-503109/37

Matrix: Water

Analysis Batch: 503109

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.5		mg/L		101	90 - 110
Nitrate as N	2.50	2.56		mg/L		103	90 - 110
Sulfate	50.0	50.7		mg/L		101	90 - 110

Lab Sample ID: 180-195746-5 MS

Matrix: Water

Analysis Batch: 503109

Client Sample ID: STR-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	86		50.0	125	F1	mg/L		77	90 - 110
Nitrate as N	0.70		2.50	3.05	H	mg/L		94	90 - 110
Sulfate	49		50.0	89.9	F1	mg/L		82	90 - 110

Lab Sample ID: 180-195746-5 MSD

Matrix: Water

Analysis Batch: 503109

Client Sample ID: STR-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	86		50.0	128	F1	mg/L		85	90 - 110	3	20
Nitrate as N	0.70		2.50	3.13	H	mg/L		97	90 - 110	3	20
Sulfate	49		50.0	93.1	F1	mg/L		89	90 - 110	3	20

Lab Sample ID: MB 180-503169/6

Matrix: Water

Analysis Batch: 503169

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.71	mg/L			09/18/25 09:04	1
Nitrate as N	ND		0.10	0.023	mg/L			09/18/25 09:04	1
Sulfate	ND		1.0	0.76	mg/L			09/18/25 09:04	1

Lab Sample ID: LCS 180-503169/7

Matrix: Water

Analysis Batch: 503169

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	50.0	50.4		mg/L		101	90 - 110
Nitrate as N	2.50	2.50		mg/L		100	90 - 110
Sulfate	50.0	50.4		mg/L		101	90 - 110

Method: 6020B - Metals (ICP/MS)

Lab Sample ID: MB 410-703353/1-A

Matrix: Water

Analysis Batch: 705649

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 703353

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/26/25 22:00	09/27/25 11:56	1
Arsenic	ND		2.0	0.68	ug/L		09/26/25 22:00	09/27/25 11:56	1
Barium	ND		2.0	0.75	ug/L		09/26/25 22:00	09/27/25 11:56	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-703353/1-A

Matrix: Water

Analysis Batch: 705649

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 703353

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 11:56	1
Beryllium	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 11:56	1
Cadmium	ND		0.50	0.15	ug/L		09/26/25 22:00	09/27/25 11:56	1
Calcium	ND		120	50	ug/L		09/26/25 22:00	09/27/25 11:56	1
Chromium	ND		2.0	0.55	ug/L		09/26/25 22:00	09/27/25 11:56	1
Cobalt	ND		0.50	0.16	ug/L		09/26/25 22:00	09/27/25 11:56	1
Copper	ND		1.0	0.85	ug/L		09/26/25 22:00	09/27/25 11:56	1
Iron	ND		50	20	ug/L		09/26/25 22:00	09/27/25 11:56	1
Lead	ND		0.50	0.12	ug/L		09/26/25 22:00	09/27/25 11:56	1
Magnesium	ND		50	16	ug/L		09/26/25 22:00	09/27/25 11:56	1
Manganese	ND		2.0	0.95	ug/L		09/26/25 22:00	09/27/25 11:56	1
Nickel	ND		1.0	0.40	ug/L		09/26/25 22:00	09/27/25 11:56	1
Potassium	ND		200	65	ug/L		09/26/25 22:00	09/27/25 11:56	1
Selenium	ND		1.0	0.28	ug/L		09/26/25 22:00	09/27/25 11:56	1
Silver	ND		0.50	0.10	ug/L		09/26/25 22:00	09/27/25 11:56	1
Sodium	ND		200	90	ug/L		09/26/25 22:00	09/27/25 11:56	1
Thallium	ND		0.50	0.13	ug/L		09/26/25 22:00	09/27/25 11:56	1
Tin	ND		2.0	0.60	ug/L		09/26/25 22:00	09/27/25 11:56	1
Vanadium	ND		4.0	0.79	ug/L		09/26/25 22:00	09/27/25 11:56	1
Zinc	ND		10	4.0	ug/L		09/26/25 22:00	09/27/25 11:56	1

Lab Sample ID: LCS 410-703353/2-A

Matrix: Water

Analysis Batch: 705649

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 703353

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	98.0		ug/L		98	85 - 115
Arsenic	500	486		ug/L		97	86 - 111
Barium	500	489		ug/L		98	86 - 114
Beryllium	50.0	50.7		ug/L		101	80 - 120
Cadmium	50.0	48.3		ug/L		97	86 - 114
Calcium	5000	4790		ug/L		96	84 - 113
Chromium	500	502		ug/L		100	84 - 113
Cobalt	500	497		ug/L		99	85 - 112
Copper	500	490		ug/L		98	86 - 111
Iron	5000	4810		ug/L		96	84 - 114
Lead	50.0	50.4		ug/L		101	86 - 114
Magnesium	5000	4880		ug/L		98	84 - 113
Manganese	500	494		ug/L		99	84 - 113
Nickel	500	494		ug/L		99	85 - 113
Potassium	5000	4950		ug/L		99	87 - 111
Selenium	100	97.1		ug/L		97	86 - 111
Silver	50.0	48.8		ug/L		98	88 - 116
Sodium	5000	4950		ug/L		99	84 - 114
Thallium	100	97.3		ug/L		97	86 - 113
Tin	100	98.1		ug/L		98	84 - 115
Vanadium	500	497		ug/L		99	84 - 112
Zinc	500	489		ug/L		98	86 - 112

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 410-703353/3-A

Matrix: Water

Analysis Batch: 705649

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 703353

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	100	99.6		ug/L		100	85 - 115	2	20
Arsenic	500	483		ug/L		97	86 - 111	1	20
Barium	500	495		ug/L		99	86 - 114	1	20
Beryllium	50.0	51.4		ug/L		103	80 - 120	1	20
Cadmium	50.0	49.5		ug/L		99	86 - 114	2	20
Calcium	5000	4810		ug/L		96	84 - 113	0	20
Chromium	500	500		ug/L		100	84 - 113	0	20
Cobalt	500	493		ug/L		99	85 - 112	1	20
Copper	500	486		ug/L		97	86 - 111	1	20
Iron	5000	4810		ug/L		96	84 - 114	0	20
Lead	50.0	50.0		ug/L		100	86 - 114	1	20
Magnesium	5000	4820		ug/L		96	84 - 113	1	20
Manganese	500	493		ug/L		99	84 - 113	0	20
Nickel	500	488		ug/L		98	85 - 113	1	20
Potassium	5000	4980		ug/L		100	87 - 111	1	20
Selenium	100	97.2		ug/L		97	86 - 111	0	20
Silver	50.0	49.3		ug/L		99	88 - 116	1	20
Sodium	5000	4900		ug/L		98	84 - 114	1	20
Thallium	100	97.4		ug/L		97	86 - 113	0	20
Tin	100	99.1		ug/L		99	84 - 115	1	20
Vanadium	500	496		ug/L		99	84 - 112	0	20
Zinc	500	490		ug/L		98	86 - 112	0	20

Lab Sample ID: MB 410-706355/1-A

Matrix: Water

Analysis Batch: 706980

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 706355

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.20	ug/L		09/29/25 21:00	09/30/25 09:35	1
Arsenic	ND		2.0	0.68	ug/L		09/29/25 21:00	09/30/25 09:35	1
Barium	ND		2.0	0.75	ug/L		09/29/25 21:00	09/30/25 09:35	1
Beryllium	ND		0.50	0.12	ug/L		09/29/25 21:00	09/30/25 09:35	1
Cadmium	ND		0.50	0.15	ug/L		09/29/25 21:00	09/30/25 09:35	1
Calcium	ND		120	50	ug/L		09/29/25 21:00	09/30/25 09:35	1
Chromium	ND		2.0	0.55	ug/L		09/29/25 21:00	09/30/25 09:35	1
Cobalt	ND		0.50	0.16	ug/L		09/29/25 21:00	09/30/25 09:35	1
Copper	ND		1.0	0.85	ug/L		09/29/25 21:00	09/30/25 09:35	1
Iron	ND		50	20	ug/L		09/29/25 21:00	09/30/25 09:35	1
Lead	ND		0.50	0.12	ug/L		09/29/25 21:00	09/30/25 09:35	1
Magnesium	ND		50	16	ug/L		09/29/25 21:00	09/30/25 09:35	1
Manganese	ND		2.0	0.95	ug/L		09/29/25 21:00	09/30/25 09:35	1
Nickel	ND		1.0	0.40	ug/L		09/29/25 21:00	09/30/25 09:35	1
Potassium	ND		200	65	ug/L		09/29/25 21:00	09/30/25 09:35	1
Selenium	ND		1.0	0.28	ug/L		09/29/25 21:00	09/30/25 09:35	1
Silver	ND		0.50	0.10	ug/L		09/29/25 21:00	09/30/25 09:35	1
Sodium	ND		200	90	ug/L		09/29/25 21:00	09/30/25 09:35	1
Thallium	ND		0.50	0.13	ug/L		09/29/25 21:00	09/30/25 09:35	1
Tin	ND		2.0	0.60	ug/L		09/29/25 21:00	09/30/25 09:35	1
Vanadium	ND		4.0	0.79	ug/L		09/29/25 21:00	09/30/25 09:35	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 410-706355/1-A

Matrix: Water

Analysis Batch: 706980

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 706355

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		10	4.0	ug/L		09/29/25 21:00	09/30/25 09:35	1
Zinc	ND		10	4.0	ug/L		09/29/25 21:00	09/30/25 09:35	1

Lab Sample ID: LCS 410-706355/2-A

Matrix: Water

Analysis Batch: 706980

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 706355

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	100	102		ug/L		102	85 - 115
Arsenic	500	485		ug/L		97	86 - 111
Barium	500	510		ug/L		102	86 - 114
Beryllium	50.0	49.2		ug/L		98	80 - 120
Cadmium	50.0	50.5		ug/L		101	86 - 114
Calcium	5000	5070		ug/L		101	84 - 113
Chromium	500	489		ug/L		98	84 - 113
Cobalt	500	497		ug/L		99	85 - 112
Copper	500	488		ug/L		98	86 - 111
Iron	5000	4950		ug/L		99	84 - 114
Lead	50.0	49.4		ug/L		99	86 - 114
Magnesium	5000	4880		ug/L		98	84 - 113
Manganese	500	493		ug/L		99	84 - 113
Nickel	500	496		ug/L		99	85 - 113
Potassium	5000	4970		ug/L		99	87 - 111
Selenium	100	95.4		ug/L		95	86 - 111
Silver	50.0	50.8		ug/L		102	88 - 116
Sodium	5000	4840		ug/L		97	84 - 114
Thallium	100	96.5		ug/L		96	86 - 113
Tin	100	102		ug/L		102	84 - 115
Vanadium	500	492		ug/L		98	84 - 112
Zinc	500	493		ug/L		99	86 - 112

Lab Sample ID: LCSD 410-706355/3-A

Matrix: Water

Analysis Batch: 706980

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 706355

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	100	106		ug/L		106	85 - 115	4	20
Arsenic	500	503		ug/L		101	86 - 111	4	20
Barium	500	526		ug/L		105	86 - 114	3	20
Beryllium	50.0	50.6		ug/L		101	80 - 120	3	20
Cadmium	50.0	52.3		ug/L		105	86 - 114	3	20
Calcium	5000	5130		ug/L		103	84 - 113	1	20
Chromium	500	518		ug/L		104	84 - 113	6	20
Cobalt	500	518		ug/L		104	85 - 112	4	20
Copper	500	504		ug/L		101	86 - 111	3	20
Iron	5000	5170		ug/L		103	84 - 114	4	20
Lead	50.0	51.9		ug/L		104	86 - 114	5	20
Magnesium	5000	5040		ug/L		101	84 - 113	3	20
Manganese	500	517		ug/L		103	84 - 113	5	20

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: LCSD 410-706355/3-A

Matrix: Water

Analysis Batch: 706980

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 706355

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nickel	500	520		ug/L		104	85 - 113	5	20
Potassium	5000	5070		ug/L		101	87 - 111	2	20
Selenium	100	99.5		ug/L		99	86 - 111	4	20
Silver	50.0	53.0		ug/L		106	88 - 116	4	20
Sodium	5000	4990		ug/L		100	84 - 114	3	20
Thallium	100	102		ug/L		102	86 - 113	5	20
Tin	100	104		ug/L		104	84 - 115	2	20
Vanadium	500	515		ug/L		103	84 - 112	4	20
Zinc	500	508		ug/L		102	86 - 112	3	20

Lab Sample ID: 180-195746-5 MS

Matrix: Water

Analysis Batch: 706980

Client Sample ID: STR-07

Prep Type: Dissolved

Prep Batch: 706355

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.23	J	100	104		ug/L		104	75 - 125		
Arsenic	1.4	J	500	505		ug/L		101	75 - 125		
Barium	38		500	548		ug/L		102	75 - 125		
Beryllium	ND		50.0	51.0		ug/L		102	75 - 125		
Cadmium	0.15	J	50.0	51.3		ug/L		102	75 - 125		
Calcium	63000		5000	66500	4	ug/L		72	75 - 125		
Chromium	ND		500	506		ug/L		101	75 - 125		
Cobalt	0.38	J	500	500		ug/L		100	80 - 125		
Copper	1.0		500	499		ug/L		100	75 - 125		
Iron	ND		5000	5020		ug/L		100	75 - 125		
Lead	ND		50.0	50.8		ug/L		102	75 - 125		
Magnesium	21000		5000	25600	4	ug/L		92	75 - 125		
Manganese	17		500	520		ug/L		101	75 - 125		
Nickel	3.2		500	503		ug/L		100	75 - 125		
Potassium	8500		5000	13400		ug/L		99	75 - 125		
Selenium	0.51	J	100	99.4		ug/L		99	75 - 125		
Silver	ND		50.0	50.9		ug/L		102	75 - 125		
Sodium	62000		5000	65600	4	ug/L		67	75 - 125		
Thallium	0.23	J	100	99.0		ug/L		99	75 - 125		
Tin	ND		100	103		ug/L		103	84 - 125		
Vanadium	ND		500	507		ug/L		101	75 - 125		
Zinc	ND		500	505		ug/L		101	75 - 125		

Lab Sample ID: 180-195746-5 MSD

Matrix: Water

Analysis Batch: 706980

Client Sample ID: STR-07

Prep Type: Dissolved

Prep Batch: 706355

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	0.23	J	100	103		ug/L		103	75 - 125	1	20
Arsenic	1.4	J	500	496		ug/L		99	75 - 125	2	20
Barium	38		500	547		ug/L		102	75 - 125	0	20
Beryllium	ND		50.0	48.7		ug/L		97	75 - 125	5	20
Cadmium	0.15	J	50.0	51.5		ug/L		103	75 - 125	0	20
Calcium	63000		5000	64200	4	ug/L		26	75 - 125	4	20

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Method: 6020B - Metals (ICP/MS) (Continued)

Lab Sample ID: 180-195746-5 MSD

Matrix: Water

Analysis Batch: 706980

Client Sample ID: STR-07

Prep Type: Dissolved

Prep Batch: 706355

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	ND		500	494		ug/L		99	75 - 125	3	20
Cobalt	0.38	J	500	489		ug/L		98	80 - 125	2	20
Copper	1.0		500	492		ug/L		98	75 - 125	1	20
Iron	ND		5000	4990		ug/L		100	75 - 125	1	20
Lead	ND		50.0	50.0		ug/L		100	75 - 125	2	20
Magnesium	21000		5000	24700	4	ug/L		74	75 - 125	4	20
Manganese	17		500	507		ug/L		98	75 - 125	3	20
Nickel	3.2		500	492		ug/L		98	75 - 125	2	20
Potassium	8500		5000	13000		ug/L		90	75 - 125	3	20
Selenium	0.51	J	100	96.8		ug/L		96	75 - 125	3	20
Silver	ND		50.0	50.6		ug/L		101	75 - 125	1	20
Sodium	62000		5000	62900	4	ug/L		12	75 - 125	4	20
Thallium	0.23	J	100	98.8		ug/L		99	75 - 125	0	20
Tin	ND		100	101		ug/L		101	84 - 125	1	20
Vanadium	ND		500	496		ug/L		99	75 - 125	2	20
Zinc	ND		500	493		ug/L		99	75 - 125	3	20

Lab Sample ID: 180-195746-5 DU

Matrix: Water

Analysis Batch: 706980

Client Sample ID: STR-07

Prep Type: Dissolved

Prep Batch: 706355

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.23	J	ND		ug/L		NC	20
Arsenic	1.4	J	1.12	J F5	ug/L		22	20
Barium	38		37.6		ug/L		1	20
Beryllium	ND		ND		ug/L		NC	20
Cadmium	0.15	J	0.150	J	ug/L		1	20
Calcium	63000		62700		ug/L		0.2	20
Chromium	ND		ND		ug/L		NC	20
Cobalt	0.38	J	0.330	J	ug/L		14	20
Copper	1.0		1.00		ug/L		2	20
Iron	ND		ND		ug/L		NC	20
Lead	ND		ND		ug/L		NC	20
Magnesium	21000		20800		ug/L		0.7	20
Manganese	17		17.3		ug/L		0.3	20
Nickel	3.2		3.34		ug/L		5	20
Potassium	8500		8490		ug/L		0.2	20
Selenium	0.51	J	0.363	J F5	ug/L		33	20
Silver	ND		ND		ug/L		NC	20
Sodium	62000		62200		ug/L		0.1	20
Thallium	0.23	J	ND		ug/L		NC	20
Tin	ND		ND		ug/L		NC	20
Vanadium	ND		ND		ug/L		NC	20
Zinc	ND		ND		ug/L		NC	20

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 410-704571/1-A

Matrix: Water

Analysis Batch: 706567

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 704571

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.087	ug/L		09/29/25 13:27	09/29/25 22:53	1

Lab Sample ID: LCS 410-704571/2-A

Matrix: Water

Analysis Batch: 706567

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 704571

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	1.00	1.12		ug/L		112	80 - 120

Lab Sample ID: LCSD 410-704571/3-A

Matrix: Water

Analysis Batch: 706567

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 704571

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	1.00	1.09		ug/L		109	80 - 120	2	20

Lab Sample ID: 180-195746-5 MS

Matrix: Water

Analysis Batch: 706567

Client Sample ID: STR-07

Prep Type: Dissolved

Prep Batch: 704571

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		1.00	0.963		ug/L		96	80 - 120

Lab Sample ID: 180-195746-5 MSD

Matrix: Water

Analysis Batch: 706567

Client Sample ID: STR-07

Prep Type: Dissolved

Prep Batch: 704571

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		1.00	1.03		ug/L		103	80 - 120	6	20

Lab Sample ID: 180-195746-5 DU

Matrix: Water

Analysis Batch: 706567

Client Sample ID: STR-07

Prep Type: Dissolved

Prep Batch: 704571

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Mercury	ND		ND		ug/L		NC	20

Method: 410.4 - COD

Lab Sample ID: MB 410-701615/4

Matrix: Water

Analysis Batch: 701615

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			09/19/25 02:14	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Method: 410.4 - COD (Continued)

Lab Sample ID: LCS 410-701615/5

Matrix: Water

Analysis Batch: 701615

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	40.0	42.0		mg/L		105	90 - 110

Lab Sample ID: MB 410-702646/4

Matrix: Water

Analysis Batch: 702646

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10	5.0	mg/L			09/22/25 08:20	1

Lab Sample ID: LCS 410-702646/5

Matrix: Water

Analysis Batch: 702646

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	40.0	37.8		mg/L		94	90 - 110

Method: EPA 180.1 - Turbidity, Nephelometric

Lab Sample ID: MB 180-502894/7

Matrix: Water

Analysis Batch: 502894

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	ND		0.85	0.05	NTU			09/13/25 13:32	1

Lab Sample ID: LCS 180-502894/8

Matrix: Water

Analysis Batch: 502894

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Turbidity	0.850	0.90		NTU		107	90 - 110

Method: EPA 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 180-503104/17

Matrix: Water

Analysis Batch: 503104

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.088	mg/L			09/17/25 09:57	1

Lab Sample ID: MB 180-503104/53

Matrix: Water

Analysis Batch: 503104

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.10	0.088	mg/L			09/17/25 11:06	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Method: EPA 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 180-503104/18

Matrix: Water

Analysis Batch: 503104

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	0.500	0.507		mg/L		101	90 - 110

Lab Sample ID: LCS 180-503104/54

Matrix: Water

Analysis Batch: 503104

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	0.500	0.502		mg/L		100	90 - 110

Lab Sample ID: 180-195746-5 MS

Matrix: Water

Analysis Batch: 503104

Client Sample ID: STR-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ammonia	ND		0.500	ND		mg/L		NC	90 - 110

Lab Sample ID: 180-195746-5 MSD

Matrix: Water

Analysis Batch: 503104

Client Sample ID: STR-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ammonia	ND		0.500	ND		mg/L		NC	90 - 110	NC	20

Method: EPA 9050A - Specific Conductance

Lab Sample ID: MB 180-502977/30

Matrix: Water

Analysis Batch: 502977

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Specific Conductance	ND		1.0	1.0	umhos/cm			09/15/25 18:53	1

Lab Sample ID: LCS 180-502977/29

Matrix: Water

Analysis Batch: 502977

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Specific Conductance	84.0	84.0		umhos/cm		100	90 - 110

Lab Sample ID: 180-195746-5 DU

Matrix: Water

Analysis Batch: 502977

Client Sample ID: STR-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Specific Conductance	750		752		umhos/cm		0.3	20

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 180-503099/2

Matrix: Water

Analysis Batch: 503099

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Alkalinity as CaCO3 to pH 4.5	ND		5.0	5.0	mg/L			09/17/25 11:17	1

Lab Sample ID: LCS 180-503099/1

Matrix: Water

Analysis Batch: 503099

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Alkalinity as CaCO3 to pH 4.5	251	245		mg/L		98	90 - 110

Lab Sample ID: 180-195746-5 DU

Matrix: Water

Analysis Batch: 503099

Client Sample ID: STR-07

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Alkalinity as CaCO3 to pH 4.5	250		257		mg/L		2	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 180-503107/1

Matrix: Water

Analysis Batch: 503107

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10	10	mg/L			09/17/25 13:01	1

Lab Sample ID: LCS 180-503107/2

Matrix: Water

Analysis Batch: 503107

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	176	152		mg/L		86	85 - 115

Lab Sample ID: 180-195746-8 DU

Matrix: Water

Analysis Batch: 503107

Client Sample ID: SW DUPLICATE

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	420		424		mg/L		0.5	10

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

GC/MS VOA

Analysis Batch: 702434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-1	SB-03	Total/NA	Water	8260D	
180-195746-3	STR-05	Total/NA	Water	8260D	
180-195746-4	STR-06	Total/NA	Water	8260D	
180-195746-5	STR-07	Total/NA	Water	8260D	
180-195746-6	STR-08	Total/NA	Water	8260D	
180-195746-7	SB-13	Total/NA	Water	8260D	
180-195746-8	SW DUPLICATE	Total/NA	Water	8260D	
180-195746-17	TRIP BLANK-05	Total/NA	Water	8260D	
MB 410-702434/10	Method Blank	Total/NA	Water	8260D	
LCS 410-702434/5	Lab Control Sample	Total/NA	Water	8260D	
LCS 410-702434/7	Lab Control Sample	Total/NA	Water	8260D	
180-195746-5 MS	STR-07	Total/NA	Water	8260D	
180-195746-5 MS	STR-07	Total/NA	Water	8260D	
180-195746-5 MSD	STR-07	Total/NA	Water	8260D	
180-195746-5 MSD	STR-07	Total/NA	Water	8260D	

GC Semi VOA

Prep Batch: 701606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-1	SB-03	Total/NA	Water	8011	
180-195746-3	STR-05	Total/NA	Water	8011	
180-195746-4	STR-06	Total/NA	Water	8011	
180-195746-5	STR-07	Total/NA	Water	8011	
180-195746-6	STR-08	Total/NA	Water	8011	
180-195746-7	SB-13	Total/NA	Water	8011	
180-195746-8	SW DUPLICATE	Total/NA	Water	8011	
180-195746-17	TRIP BLANK-05	Total/NA	Water	8011	
MB 410-701606/1-A	Method Blank	Total/NA	Water	8011	
LCS 410-701606/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 410-701606/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
180-195746-5 MS	STR-07	Total/NA	Water	8011	
180-195746-5 MSD	STR-07	Total/NA	Water	8011	

Analysis Batch: 701697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-1	SB-03	Total/NA	Water	8011	701606
180-195746-3	STR-05	Total/NA	Water	8011	701606
180-195746-4	STR-06	Total/NA	Water	8011	701606
180-195746-5	STR-07	Total/NA	Water	8011	701606
180-195746-6	STR-08	Total/NA	Water	8011	701606
180-195746-7	SB-13	Total/NA	Water	8011	701606
180-195746-8	SW DUPLICATE	Total/NA	Water	8011	701606
180-195746-17	TRIP BLANK-05	Total/NA	Water	8011	701606
MB 410-701606/1-A	Method Blank	Total/NA	Water	8011	701606
LCS 410-701606/2-A	Lab Control Sample	Total/NA	Water	8011	701606
LCSD 410-701606/3-A	Lab Control Sample Dup	Total/NA	Water	8011	701606
180-195746-5 MS	STR-07	Total/NA	Water	8011	701606
180-195746-5 MSD	STR-07	Total/NA	Water	8011	701606

Eurofins Pittsburgh

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

HPLC/IC

Analysis Batch: 502895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-1	SB-03	Total/NA	Water	EPA 300.0 R2.1	
180-195746-3	STR-05	Total/NA	Water	EPA 300.0 R2.1	
180-195746-4	STR-06	Total/NA	Water	EPA 300.0 R2.1	
180-195746-5	STR-07	Total/NA	Water	EPA 300.0 R2.1	
180-195746-6	STR-08	Total/NA	Water	EPA 300.0 R2.1	
180-195746-7	SB-13	Total/NA	Water	EPA 300.0 R2.1	
180-195746-8	SW DUPLICATE	Total/NA	Water	EPA 300.0 R2.1	
MB 180-502895/42	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
MB 180-502895/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-502895/43	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-502895/7	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-195746-1 MS	SB-03	Total/NA	Water	EPA 300.0 R2.1	
180-195746-1 MSD	SB-03	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 503109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 180-503109/36	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-503109/37	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	
180-195746-5 MS	STR-07	Total/NA	Water	EPA 300.0 R2.1	
180-195746-5 MSD	STR-07	Total/NA	Water	EPA 300.0 R2.1	

Analysis Batch: 503169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-7	SB-13	Total/NA	Water	EPA 300.0 R2.1	
MB 180-503169/6	Method Blank	Total/NA	Water	EPA 300.0 R2.1	
LCS 180-503169/7	Lab Control Sample	Total/NA	Water	EPA 300.0 R2.1	

Metals

Analysis Batch: 698918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-1	SB-03	Dissolved	Water	SM 2340B	
180-195746-3	STR-05	Dissolved	Water	SM 2340B	
180-195746-4	STR-06	Dissolved	Water	SM 2340B	
180-195746-5	STR-07	Dissolved	Water	SM 2340B	
180-195746-6	STR-08	Dissolved	Water	SM 2340B	
180-195746-7	SB-13	Dissolved	Water	SM 2340B	
180-195746-8	SW DUPLICATE	Dissolved	Water	SM 2340B	

Prep Batch: 703353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-1	SB-03	Dissolved	Water	3005A	
180-195746-3	STR-05	Dissolved	Water	3005A	
180-195746-4	STR-06	Dissolved	Water	3005A	
180-195746-6	STR-08	Dissolved	Water	3005A	
180-195746-7	SB-13	Dissolved	Water	3005A	
180-195746-8	SW DUPLICATE	Dissolved	Water	3005A	
MB 410-703353/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-703353/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 410-703353/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	

Eurofins Pittsburgh

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Metals

Prep Batch: 704571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-3	STR-05	Dissolved	Water	7470A	
180-195746-4	STR-06	Dissolved	Water	7470A	
180-195746-5	STR-07	Dissolved	Water	7470A	
180-195746-6	STR-08	Dissolved	Water	7470A	
180-195746-7	SB-13	Dissolved	Water	7470A	
180-195746-8	SW DUPLICATE	Dissolved	Water	7470A	
MB 410-704571/1-A	Method Blank	Total/NA	Water	7470A	
LCS 410-704571/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 410-704571/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	
180-195746-5 MS	STR-07	Dissolved	Water	7470A	
180-195746-5 MSD	STR-07	Dissolved	Water	7470A	
180-195746-5 DU	STR-07	Dissolved	Water	7470A	

Analysis Batch: 705649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-1	SB-03	Dissolved	Water	6020B	703353
180-195746-3	STR-05	Dissolved	Water	6020B	703353
180-195746-4	STR-06	Dissolved	Water	6020B	703353
180-195746-6	STR-08	Dissolved	Water	6020B	703353
180-195746-7	SB-13	Dissolved	Water	6020B	703353
180-195746-8	SW DUPLICATE	Dissolved	Water	6020B	703353
MB 410-703353/1-A	Method Blank	Total Recoverable	Water	6020B	703353
LCS 410-703353/2-A	Lab Control Sample	Total Recoverable	Water	6020B	703353
LCSD 410-703353/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	703353

Prep Batch: 706355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-5	STR-07	Dissolved	Water	3005A	
MB 410-706355/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 410-706355/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCSD 410-706355/3-A	Lab Control Sample Dup	Total Recoverable	Water	3005A	
180-195746-5 MS	STR-07	Dissolved	Water	3005A	
180-195746-5 MSD	STR-07	Dissolved	Water	3005A	
180-195746-5 DU	STR-07	Dissolved	Water	3005A	

Analysis Batch: 706567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-3	STR-05	Dissolved	Water	7470A	704571
180-195746-4	STR-06	Dissolved	Water	7470A	704571
180-195746-5	STR-07	Dissolved	Water	7470A	704571
180-195746-6	STR-08	Dissolved	Water	7470A	704571
180-195746-7	SB-13	Dissolved	Water	7470A	704571
180-195746-8	SW DUPLICATE	Dissolved	Water	7470A	704571
MB 410-704571/1-A	Method Blank	Total/NA	Water	7470A	704571
LCS 410-704571/2-A	Lab Control Sample	Total/NA	Water	7470A	704571
LCSD 410-704571/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	704571
180-195746-5 MS	STR-07	Dissolved	Water	7470A	704571
180-195746-5 MSD	STR-07	Dissolved	Water	7470A	704571
180-195746-5 DU	STR-07	Dissolved	Water	7470A	704571

Eurofins Pittsburgh

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

Metals

Analysis Batch: 706980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-5	STR-07	Dissolved	Water	6020B	706355
MB 410-706355/1-A	Method Blank	Total Recoverable	Water	6020B	706355
LCS 410-706355/2-A	Lab Control Sample	Total Recoverable	Water	6020B	706355
LCSD 410-706355/3-A	Lab Control Sample Dup	Total Recoverable	Water	6020B	706355
180-195746-5 MS	STR-07	Dissolved	Water	6020B	706355
180-195746-5 MSD	STR-07	Dissolved	Water	6020B	706355
180-195746-5 DU	STR-07	Dissolved	Water	6020B	706355

Prep Batch: 708749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-1	SB-03	Dissolved	Water	7470A	

Analysis Batch: 709926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-1	SB-03	Dissolved	Water	7470A	708749

General Chemistry

Analysis Batch: 502894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-1	SB-03	Total/NA	Water	EPA 180.1	
180-195746-3	STR-05	Total/NA	Water	EPA 180.1	
180-195746-4	STR-06	Total/NA	Water	EPA 180.1	
180-195746-5	STR-07	Total/NA	Water	EPA 180.1	
180-195746-6	STR-08	Total/NA	Water	EPA 180.1	
180-195746-7	SB-13	Total/NA	Water	EPA 180.1	
180-195746-8	SW DUPLICATE	Total/NA	Water	EPA 180.1	
MB 180-502894/7	Method Blank	Total/NA	Water	EPA 180.1	
LCS 180-502894/8	Lab Control Sample	Total/NA	Water	EPA 180.1	

Analysis Batch: 502977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-1	SB-03	Total/NA	Water	EPA 9050A	
180-195746-3	STR-05	Total/NA	Water	EPA 9050A	
180-195746-4	STR-06	Total/NA	Water	EPA 9050A	
180-195746-5	STR-07	Total/NA	Water	EPA 9050A	
180-195746-6	STR-08	Total/NA	Water	EPA 9050A	
180-195746-7	SB-13	Total/NA	Water	EPA 9050A	
180-195746-8	SW DUPLICATE	Total/NA	Water	EPA 9050A	
MB 180-502977/30	Method Blank	Total/NA	Water	EPA 9050A	
LCS 180-502977/29	Lab Control Sample	Total/NA	Water	EPA 9050A	
180-195746-5 DU	STR-07	Total/NA	Water	EPA 9050A	

Analysis Batch: 503099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-1	SB-03	Total/NA	Water	SM 2320B	
180-195746-3	STR-05	Total/NA	Water	SM 2320B	
180-195746-4	STR-06	Total/NA	Water	SM 2320B	
180-195746-5	STR-07	Total/NA	Water	SM 2320B	
180-195746-6	STR-08	Total/NA	Water	SM 2320B	
180-195746-7	SB-13	Total/NA	Water	SM 2320B	

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QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW

Job ID: 180-195746-1

General Chemistry (Continued)

Analysis Batch: 503099 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-8	SW DUPLICATE	Total/NA	Water	SM 2320B	
MB 180-503099/2	Method Blank	Total/NA	Water	SM 2320B	
LCS 180-503099/1	Lab Control Sample	Total/NA	Water	SM 2320B	
180-195746-5 DU	STR-07	Total/NA	Water	SM 2320B	

Analysis Batch: 503104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-1	SB-03	Total/NA	Water	EPA 350.1	
180-195746-3	STR-05	Total/NA	Water	EPA 350.1	
180-195746-4	STR-06	Total/NA	Water	EPA 350.1	
180-195746-5	STR-07	Total/NA	Water	EPA 350.1	
180-195746-6	STR-08	Total/NA	Water	EPA 350.1	
180-195746-7	SB-13	Total/NA	Water	EPA 350.1	
180-195746-8	SW DUPLICATE	Total/NA	Water	EPA 350.1	
MB 180-503104/17	Method Blank	Total/NA	Water	EPA 350.1	
MB 180-503104/53	Method Blank	Total/NA	Water	EPA 350.1	
LCS 180-503104/18	Lab Control Sample	Total/NA	Water	EPA 350.1	
LCS 180-503104/54	Lab Control Sample	Total/NA	Water	EPA 350.1	
180-195746-5 MS	STR-07	Total/NA	Water	EPA 350.1	
180-195746-5 MSD	STR-07	Total/NA	Water	EPA 350.1	

Analysis Batch: 503107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-1	SB-03	Total/NA	Water	SM 2540C	
180-195746-3	STR-05	Total/NA	Water	SM 2540C	
180-195746-4	STR-06	Total/NA	Water	SM 2540C	
180-195746-5	STR-07	Total/NA	Water	SM 2540C	
180-195746-6	STR-08	Total/NA	Water	SM 2540C	
180-195746-7	SB-13	Total/NA	Water	SM 2540C	
180-195746-8	SW DUPLICATE	Total/NA	Water	SM 2540C	
MB 180-503107/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 180-503107/2	Lab Control Sample	Total/NA	Water	SM 2540C	
180-195746-8 DU	SW DUPLICATE	Total/NA	Water	SM 2540C	

Analysis Batch: 701615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-1	SB-03	Total/NA	Water	410.4	
180-195746-3	STR-05	Total/NA	Water	410.4	
180-195746-4	STR-06	Total/NA	Water	410.4	
180-195746-5	STR-07	Total/NA	Water	410.4	
180-195746-6	STR-08	Total/NA	Water	410.4	
MB 410-701615/4	Method Blank	Total/NA	Water	410.4	
LCS 410-701615/5	Lab Control Sample	Total/NA	Water	410.4	

Analysis Batch: 702646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-7	SB-13	Total/NA	Water	410.4	
180-195746-8	SW DUPLICATE	Total/NA	Water	410.4	
MB 410-702646/4	Method Blank	Total/NA	Water	410.4	
LCS 410-702646/5	Lab Control Sample	Total/NA	Water	410.4	

Eurofins Pittsburgh

Chain of Custody Record

Client Information		Sampler: <u>Landon Chase</u>		Lab P/N: Johnson, Andy		Carrier Tracking No(s):		COC No: 180-116828-15056 1					
Client Contact: Helen Girod		Phone: <u>202-843-1758</u>		E-Mail: Andy.Johnson@et.eurofinsus.com		State of Origin: <u>MD</u>		Page 1 of <u>2</u>					
Company: Geosyntec Consultants Inc		PWSID:		Analysis Requested									
Address: 10211 Wincopin Circle 4th Floor		Due Date Requested:		(60)						Preservation Codes: S - H2SO4 N - None D - HNO3 R - NaThio904 A - HCL			
City: Columbia		TAT Requested (days): <u>Standard</u>								Total Number of containers:		Other:	
State, Zip: MD, 21044		Compliance Project: ☒ Yes ☒ No											
Phone: 240-381-5010(Tel)		PO #: WO-ME1168K-5773											
Email: HGirod@Geosyntec.com		WO #:											
Project Name: Ritchie Rubble Surface Water		Project #: 18015089		Field Filtered Sample (Yes or No) ☒ Perform MS/MSD (Yes or No) ☒ 350.1, 410.4 180.1, 320.9, 393, ORGFMS, 9050A 2340C - Hardness by 2340C 6020A, 7470A 2449C - Colod - TD5 by 2449C 8011 - EOB & OCBP by 8011 8290D - Appendix I VOCs + MTBE by 8290D 393.1 - Ammonia by 393.1 393, ORGFMS - CL 504, H03 by 393.9									
Site: <u>Ritchie Rubble</u>		SSON#:											
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (Stewater, Distilled, Deionized, BTH/Tissue, AMM, De-Clustering Water)		Preservation Code:		Special Instructions/Note:	
SB-03		9/12/25		955		G		Water		Y N X X X X X X X		10 -4 Coolers	
SB-05		9/12/25		835		G		Water		Y N X X X X X X X		10 -1 PEAS only	
ST-06		9/12/25		835		G		Water		Y N X X X X X X X		10 Cooler	
STR-04								Water				10 - Samples on ICE	
STR-05				430		G		Water		Y N X X X X X X X		10 - 6 COLS	
STR-06				835		G		Water		Y N X X X X X X X			
STR-07				070		G		Water		Y Y X X X X X X X			
STR-08				1105		G		Water		Y Y X X X X X X X			
SB-13				1035		G		Water		Y Y X X X X X X X			
SW DUPLICATE								Water		Y N X X X X X X X			
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: <u>Landon Chase</u>		Date/Time: <u>9/12/25 1505</u>		Company: <u>Geosyntec</u>		Received by: <u>Geosyntec</u>		Date/Time: <u>9/12/25 3:27P</u>		Company: <u>BSC</u>			
Relinquished by: <u>John</u>		Date/Time: <u>9/14/25 4:55P</u>		Company: <u>BSC</u>		Received by: <u>John</u>		Date/Time: <u>9/13/25 1005</u>		Company: <u>BSC</u>			
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							

ORIGIN ID: BWIA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

Part # 159469-434 MTW EXP 01/25 •

SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 1030460/INET4535

BILL RECIPIENT

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEOSYNTEC

(412) 963-7058

INV: PO:

DEPT:

FedEx
Express



Uncorrected temp 1.8 °C
Thermometer ID 20

CF-0.7 Initials 20

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

SATURDAY 12:01
PRIORITY OVERNIGHT

4 of 4

MPS# 8843 3509 6151

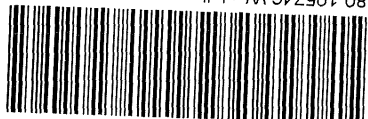
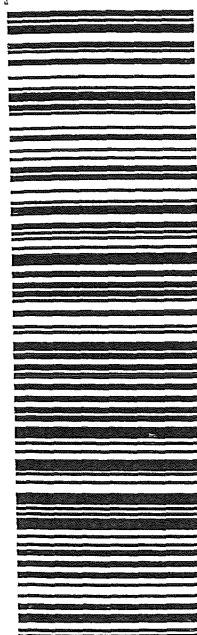
Mstr# 8843 3509 6129

0201

152

PA-US PIT

XO AGCA



180-195746 Waybill

ORIGIN ID: BWIA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

Part # 159469-434 MTW EXP 01/25 •

SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 1030460/INET4535

BILL RECIPIENT

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEOSYNTEC

(412) 963-7058

INV: PO:

DEPT:

FedEx
Express



Uncorrected temp 1.8 °C
Thermometer ID 20

CF-0.7 Initials 20

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

SATURDAY 12:01
PRIORITY OVERNIGHT

2 of 4

MPS# 8843 3509 6130

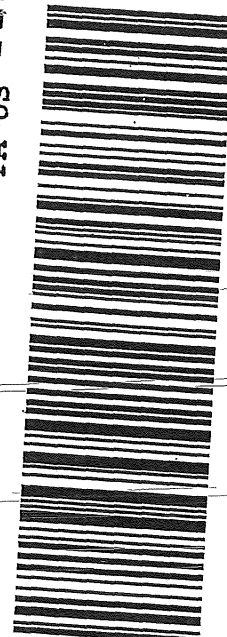
Mstr# 8843 3509 6129

0201

15238

PA-US PIT

XO AGCA



10/7/2025

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11
12
13

Part # 159469-434 MTW EXP 01/25

ORIGIN: BWA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEOSYNTEC

INV: (412) 963-7058

PO: DEPT:



Uncorrected temp: 20.0 °C
Thermometer ID: 20

CF -0.7 Initials: R

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

FedEx Express



SATURDAY 12:00E
PRIORITY OVERNIGHT

1 of 4

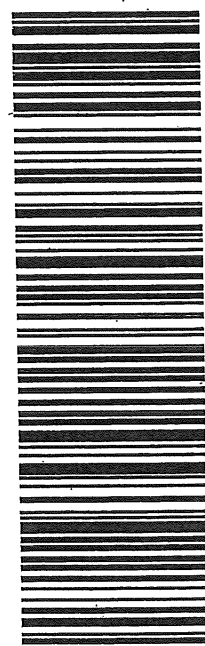
8843 3509 6129

MASTER #

X0 AGCA

PA-US

15238



Part # 159469-434 MTW EXP 01/25

SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 10304601NET4535
BILL RECIPIENT
ORI: A (240) 814-1351
CLIN: WER
EUR: S TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEOSYNTEC

INV: (412) 963-7058

PO: DEPT:



Uncorrected temp: 20.0 °C
Thermometer ID: 20

CF -0.7 Initials: R

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

FedEx Express



SATURDAY 12:00E
PRIORITY OVERNIGHT

3 of 4

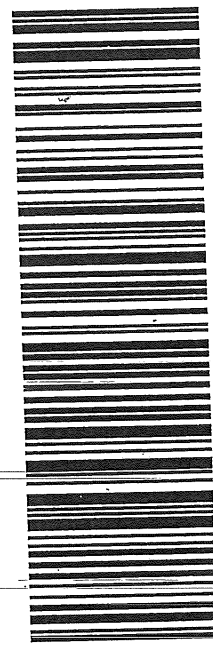
8843 3509 6140

Master # 8843 3509 6129

X0 AGCA

PA-US

15238



15238-2907-01
PITTSBURGH, PA

4150 SAT 09/13 08:13
301 ALPHA DR

(639) 09/13-09/14

CLOSED - 600

ETP 1 CLPD 100Y

10/7/2025

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: N/A		Lab PM: Johnson, Andy		Carrier Tracking No(s): N/A		COC No: 180-545337.1																	
Client Contact: Shipping/Receiving		Phone: N/A		E-Mail: Andy.Johnson@et.eurofinsus.com		State of Origin: Maryland		Page: Page 1 of 2																	
Company: Eurofins Lancaster Laboratories Environm				Accreditations Required (See note): N/A				Job #: 180-195746-1																	
Address: 2425 New Holland Pike,		Due Date Requested: 9/29/2025		Analysis Requested						Preservation Codes:															
City: Lancaster		TAT Requested (days): N/A																							
State, Zip: PA, 17601		PO #: N/A		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8260C_LL5630C(MOD) VOCs - Appendix J- MTBE Low Level		8011/8011_PrepEDS & DBCP by 8011		6020B/3005A(MOD) Appendix I Metals by 6020B		7470A/7470A_PrepMercury by 7470A		SM2340B_ICPMS Total Hardness as CaCO3 Calculation		410.4_LLCOB by 410.4 LL		PFC_IDAP/FAS_W_Prep(MOD) UCMR3 & PFAS		Total Number of containers		Other: N/A	
Phone: 717-656-2300(Tel)		WO #: N/A																							
Email: N/A		Project #: 18015089		Preservation Code:		Special Instructions/Note:																			
Project Name: Ritchie Rubble LF Semi-Annual SW		SSOW#: N/A																							
Site: N/A																									
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)		Preservation Code:															
SB-03 (180-195746-1)		9/12/25		09:55 Eastern		G		Water																	
STR-05 (180-195746-3)		9/12/25		09:30 Eastern		G		Water																	
STR-06 (180-195746-4)		9/12/25		08:35 Eastern		G		Water																	
STR-07 (180-195746-5)		9/12/25		07:50 Eastern		G		Water																	
STR-07 (180-195746-5MS)		9/12/25		07:50 Eastern		G		Water																	
STR-07 (180-195746-5MSD)		9/12/25		07:50 Eastern		G		Water																	
STR-08 (180-195746-6)		9/12/25		11:00 Eastern		G		Water																	
SB-13 (180-195746-7)		9/12/25		10:35 Eastern		G		Water																	
SW DUPLICATE (180-195746-8)		9/12/25		Eastern		G		Water																	
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										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)															
Unconfirmed										☐ 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: [Signature]										Date: [Signature]															
Relinquished by: [Signature]										Date/Time: 9/15/25 1300															
Relinquished by: [Signature]										Date/Time: 9/15/25 1451															
Relinquished by: [Signature]										Date/Time: 9/15/25 1930															
Custody Seals Intact: Yes Δ No										Custody Seal No.: [Signature]															
Cooler Temp (s) °C and Other Remarks: 22.7-9.9 (264.8)										[Signature]															

eurolins Environment Testing

Page 68 of 71

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195746-1

Login Number: 195746

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Pittsburgh

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195746-1

Login Number: 195746

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 09/15/25 11:02 AM

Creator: Cyms, Carolyn M

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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, 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 $> 6\text{mm}$ in diameter (none, if from WV)?	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Pittsburgh

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195746-1

Login Number: 195746

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 3

List Creation: 09/15/25 11:41 AM

Creator: Cyms, Carolyn M

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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, 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 $> 6\text{mm}$ in diameter (none, if from WV)?	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Pittsburgh



ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Girod
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 9/30/2025 3:58:12 PM

JOB DESCRIPTION

Ritchie Rubble LF Semi-Annual SW PFAS

JOB NUMBER

180-195746-2

Eurofins Pittsburgh

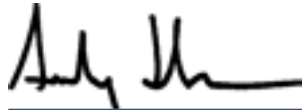
Job Notes

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



Generated
9/30/2025 3:58:12 PM

Authorized for release by
Andy Johnson, Senior Project Manager
Andy.Johnson@et.eurofinsus.com
(615)818-9567

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Job ID: 180-195746-2

Eurofins Pittsburgh

Job Narrative 180-195746-2

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/13/2025 10:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.9°C, 0.9°C, 1.9°C and 4.4°C.

Receipt Exceptions

The following sample was listed on the Chain of Custody (COC); however, no sample was received: ST-06 (180-195746-10).

PFAS

Method PFC_IDA: The sample injection standard peak areas in the following samples: STR-05 (180-195746-11), STR-06 (180-195746-12), STR-07 (180-195746-13) and STR-08 (180-195746-14) are outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

The recovery for the labeled isotope(s) 13C3-PFBS in the following samples: STR-05 (180-195746-11), STR-06 (180-195746-12), STR-07 (180-195746-13) and STR-08 (180-195746-14) is outside the QC acceptance limits due to the matrix of the sample.

Method PFC_IDA: The recovery for Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) is above the QC acceptance limit in the closing continuing calibration verification standard. Since the result is high and the target analyte is not detected in SB-03 (180-195746-9), STR-05 (180-195746-11), STR-06 (180-195746-12), STR-07 (180-195746-13) and STR-08 (180-195746-14), the data are reported.

Method PFC_IDA: The sample injection standard peak areas in the following samples: STR-05 (180-195746-11), STR-06 (180-195746-12), STR-07 (180-195746-13) and STR-08 (180-195746-14) are outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

The recovery for the labeled isotope(s) 13C3-PFBS in the following samples: STR-05 (180-195746-11), STR-06 (180-195746-12), STR-07 (180-195746-13) and STR-08 (180-195746-14) is outside the QC acceptance limits due to the matrix of the sample.

Method PFC_IDA: The sample injection standard peak areas in the following sample: SW DUPLICATE_09122025 (180-195746-16) are outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

Method PFC_IDA: The recovery for the labeled isotope(s) 13C3-PFBS in the following sample: SW DUPLICATE_09122025 (180-195746-16) is outside the QC acceptance limits due to the matrix of the sample.

Method PFC_IDA: The sample injection standard peak areas in the following sample: SB-03 (180-195746-9) are outside of the QC limits for both the initial injection and the re-injection. The values here are from the re-injection of the sample.

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

Eurofins Pittsburgh

Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Job ID: 180-195746-2 (Continued)

Eurofins Pittsburgh

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Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Qualifiers

LCMS

Qualifier	Qualifier Description
*5+	Isotope dilution analyte is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
I	Ion ratio outside 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
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
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Ohio	State	87787	01-31-26
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-26

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

Eurofins Pittsburgh

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

Sample Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195746-9	SB-03	Water	09/12/25 09:55	09/13/25 10:05	Maryland
180-195746-11	STR-05	Water	09/12/25 09:30	09/13/25 10:05	Maryland
180-195746-12	STR-06	Water	09/12/25 08:35	09/13/25 10:05	Maryland
180-195746-13	STR-07	Water	09/12/25 07:50	09/13/25 10:05	Maryland
180-195746-14	STR-08	Water	09/12/25 11:00	09/13/25 10:05	Maryland
180-195746-15	SB-13	Water	09/12/25 10:35	09/13/25 10:05	Maryland
180-195746-16	SW DUPLICATE_09122025	Water	09/12/25 00:00	09/13/25 10:05	Maryland

Method Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Method	Method Description	Protocol	Laboratory
537 IDA	EPA 537 Isotope Dilution	EPA	ELLE
SPE	PFAS by SPE	Lab SOP	ELLE

Protocol References:

EPA = US Environmental Protection Agency

Lab SOP = Laboratory Standard Operating Procedure

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Client Sample ID: SB-03

Date Collected: 09/12/25 09:55

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE	RA		251.9 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA	RA	1			706074	09/29/25 16:03	DSU6	ELLE
Instrument ID: 30638										
Total/NA	Prep	SPE			251.9 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA		1	1 uL	1 uL	704623	09/25/25 17:51	DSU6	ELLE
Instrument ID: 30731										

Client Sample ID: STR-05

Date Collected: 09/12/25 09:30

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			267.7 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA		1			704001	09/24/25 22:49	DSU6	ELLE
Instrument ID: 30728										
Total/NA	Prep	SPE	RA		267.7 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA	RA	1	1 uL	1 uL	704623	09/25/25 18:05	DSU6	ELLE
Instrument ID: 30731										

Client Sample ID: STR-06

Date Collected: 09/12/25 08:35

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			265.1 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA		1			704001	09/24/25 23:03	DSU6	ELLE
Instrument ID: 30728										
Total/NA	Prep	SPE	RA		265.1 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA	RA	1	1 uL	1 uL	704623	09/25/25 18:18	DSU6	ELLE
Instrument ID: 30731										

Client Sample ID: STR-07

Date Collected: 09/12/25 07:50

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			266.3 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA		1			704001	09/24/25 23:16	DSU6	ELLE
Instrument ID: 30728										
Total/NA	Prep	SPE	RA		266.3 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA	RA	1	1 uL	1 uL	704623	09/25/25 18:32	DSU6	ELLE
Instrument ID: 30731										

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Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Client Sample ID: STR-08

Date Collected: 09/12/25 11:00

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			255.4 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA		1			704001	09/24/25 23:57	DSU6	ELLE
Instrument ID: 30728										
Total/NA	Prep	SPE	RA		255.4 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA	RA	1	1 uL	1 uL	704623	09/25/25 19:12	DSU6	ELLE
Instrument ID: 30731										

Client Sample ID: SB-13

Date Collected: 09/12/25 10:35

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			262.2 mL	1 mL	703142	09/23/25 07:47	RC3V	ELLE
Total/NA	Analysis	537 IDA		1			704112	09/24/25 16:37	DSU6	ELLE
Instrument ID: 30638										

Client Sample ID: SW DUPLICATE_09122025

Date Collected: 09/12/25 00:00

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195746-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			251.1 mL	1 mL	703142	09/23/25 07:47	RC3V	ELLE
Total/NA	Analysis	537 IDA		1			704112	09/24/25 16:52	DSU6	ELLE
Instrument ID: 30638										
Total/NA	Prep	SPE	RA		251.1 mL	1 mL	703142	09/23/25 07:47	RC3V	ELLE
Total/NA	Analysis	537 IDA	RA	1			706074	09/29/25 10:51	DSU6	ELLE
Instrument ID: 30638										

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: ELLE

Batch Type: Prep

RC3V = Donovan Catchings

V3FW = Amber Mauger

Batch Type: Analysis

DSU6 = John Grossi

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Client Sample ID: SB-03

Lab Sample ID: 180-195746-9

Date Collected: 09/12/25 09:55

Matrix: Water

Date Received: 09/13/25 10:05

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/23/25 15:37	09/25/25 17:51	1
Perfluorobutanesulfonic acid (PFBS)	16		2.0	0.50	ng/L		09/23/25 15:37	09/25/25 17:51	1
Perfluorohexanesulfonic acid (PFHxS)	47		2.0	0.50	ng/L		09/23/25 15:37	09/25/25 17:51	1
Perfluorononanoic acid (PFNA)	5.0		2.0	0.50	ng/L		09/23/25 15:37	09/25/25 17:51	1
Perfluorooctanesulfonic acid (PFOS)	32 I		2.0	0.50	ng/L		09/23/25 15:37	09/25/25 17:51	1
Perfluorooctanoic acid (PFOA)	93		2.0	0.50	ng/L		09/23/25 15:37	09/25/25 17:51	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	44		26 - 161				09/23/25 15:37	09/25/25 17:51	1
13C3-PFBS	143		20 - 198				09/23/25 15:37	09/25/25 17:51	1
13C3-PFHxS	70		35 - 165				09/23/25 15:37	09/25/25 17:51	1
13C4-PFHpA	61		33 - 158				09/23/25 15:37	09/25/25 17:51	1
13C8-PFOA	60		35 - 146				09/23/25 15:37	09/25/25 17:51	1
13C8-PFOS	61		41 - 155				09/23/25 15:37	09/25/25 17:51	1
13C9-PFNA	62		37 - 157				09/23/25 15:37	09/25/25 17:51	1

Method: EPA 537 IDA - EPA 537 Isotope Dilution - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/23/25 15:37	09/29/25 16:03	1
Perfluorobutanesulfonic acid (PFBS)	15		2.0	0.50	ng/L		09/23/25 15:37	09/29/25 16:03	1
Perfluorohexanesulfonic acid (PFHxS)	47		2.0	0.50	ng/L		09/23/25 15:37	09/29/25 16:03	1
Perfluorononanoic acid (PFNA)	4.3		2.0	0.50	ng/L		09/23/25 15:37	09/29/25 16:03	1
Perfluorooctanesulfonic acid (PFOS)	33 I		2.0	0.50	ng/L		09/23/25 15:37	09/29/25 16:03	1
Perfluorooctanoic acid (PFOA)	98		2.0	0.50	ng/L		09/23/25 15:37	09/29/25 16:03	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	86		26 - 161				09/23/25 15:37	09/29/25 16:03	1
13C3-PFBS	169		20 - 198				09/23/25 15:37	09/29/25 16:03	1
13C3-PFHxS	95		35 - 165				09/23/25 15:37	09/29/25 16:03	1
13C4-PFHpA	82		33 - 158				09/23/25 15:37	09/29/25 16:03	1
13C8-PFOA	75		35 - 146				09/23/25 15:37	09/29/25 16:03	1
13C8-PFOS	73		41 - 155				09/23/25 15:37	09/29/25 16:03	1
13C9-PFNA	71		37 - 157				09/23/25 15:37	09/29/25 16:03	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Client Sample ID: STR-05

Lab Sample ID: 180-195746-11

Date Collected: 09/12/25 09:30

Matrix: Water

Date Received: 09/13/25 10:05

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/23/25 15:37	09/24/25 22:49	1
Perfluorobutanesulfonic acid (PFBS)	14		1.9	0.47	ng/L		09/23/25 15:37	09/24/25 22:49	1
Perfluorohexanesulfonic acid (PFHxS)	58		1.9	0.47	ng/L		09/23/25 15:37	09/24/25 22:49	1
Perfluorononanoic acid (PFNA)	4.9		1.9	0.47	ng/L		09/23/25 15:37	09/24/25 22:49	1
Perfluorooctanesulfonic acid (PFOS)	52		1.9	0.47	ng/L		09/23/25 15:37	09/24/25 22:49	1
Perfluorooctanoic acid (PFOA)	62		1.9	0.47	ng/L		09/23/25 15:37	09/24/25 22:49	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	84		26 - 161				09/23/25 15:37	09/24/25 22:49	1
13C3-PFBS	344	*5+	20 - 198				09/23/25 15:37	09/24/25 22:49	1
13C3-PFHxS	117		35 - 165				09/23/25 15:37	09/24/25 22:49	1
13C4-PFHpA	81		33 - 158				09/23/25 15:37	09/24/25 22:49	1
13C8-PFOA	97		35 - 146				09/23/25 15:37	09/24/25 22:49	1
13C8-PFOS	99		41 - 155				09/23/25 15:37	09/24/25 22:49	1
13C9-PFNA	88		37 - 157				09/23/25 15:37	09/24/25 22:49	1

Method: EPA 537 IDA - EPA 537 Isotope Dilution - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/23/25 15:37	09/25/25 18:05	1
Perfluorobutanesulfonic acid (PFBS)	22	I	1.9	0.47	ng/L		09/23/25 15:37	09/25/25 18:05	1
Perfluorohexanesulfonic acid (PFHxS)	56		1.9	0.47	ng/L		09/23/25 15:37	09/25/25 18:05	1
Perfluorononanoic acid (PFNA)	5.4	I	1.9	0.47	ng/L		09/23/25 15:37	09/25/25 18:05	1
Perfluorooctanesulfonic acid (PFOS)	52		1.9	0.47	ng/L		09/23/25 15:37	09/25/25 18:05	1
Perfluorooctanoic acid (PFOA)	71		1.9	0.47	ng/L		09/23/25 15:37	09/25/25 18:05	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	50		26 - 161				09/23/25 15:37	09/25/25 18:05	1
13C3-PFBS	317	*5+	20 - 198				09/23/25 15:37	09/25/25 18:05	1
13C3-PFHxS	98		35 - 165				09/23/25 15:37	09/25/25 18:05	1
13C4-PFHpA	69		33 - 158				09/23/25 15:37	09/25/25 18:05	1
13C8-PFOA	82		35 - 146				09/23/25 15:37	09/25/25 18:05	1
13C8-PFOS	93		41 - 155				09/23/25 15:37	09/25/25 18:05	1
13C9-PFNA	92		37 - 157				09/23/25 15:37	09/25/25 18:05	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Client Sample ID: STR-06

Lab Sample ID: 180-195746-12

Date Collected: 09/12/25 08:35

Matrix: Water

Date Received: 09/13/25 10:05

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/23/25 15:37	09/24/25 23:03	1
Perfluorobutanesulfonic acid (PFBS)	28		1.9	0.47	ng/L		09/23/25 15:37	09/24/25 23:03	1
Perfluorohexanesulfonic acid (PFHxS)	70		1.9	0.47	ng/L		09/23/25 15:37	09/24/25 23:03	1
Perfluorononanoic acid (PFNA)	5.1		1.9	0.47	ng/L		09/23/25 15:37	09/24/25 23:03	1
Perfluorooctanesulfonic acid (PFOS)	51		1.9	0.47	ng/L		09/23/25 15:37	09/24/25 23:03	1
Perfluorooctanoic acid (PFOA)	74		1.9	0.47	ng/L		09/23/25 15:37	09/24/25 23:03	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	79		26 - 161				09/23/25 15:37	09/24/25 23:03	1
13C3-PFBS	362	*5+	20 - 198				09/23/25 15:37	09/24/25 23:03	1
13C3-PFHxS	109		35 - 165				09/23/25 15:37	09/24/25 23:03	1
13C4-PFHpA	78		33 - 158				09/23/25 15:37	09/24/25 23:03	1
13C8-PFOA	93		35 - 146				09/23/25 15:37	09/24/25 23:03	1
13C8-PFOS	96		41 - 155				09/23/25 15:37	09/24/25 23:03	1
13C9-PFNA	87		37 - 157				09/23/25 15:37	09/24/25 23:03	1

Method: EPA 537 IDA - EPA 537 Isotope Dilution - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/23/25 15:37	09/25/25 18:18	1
Perfluorobutanesulfonic acid (PFBS)	23		1.9	0.47	ng/L		09/23/25 15:37	09/25/25 18:18	1
Perfluorohexanesulfonic acid (PFHxS)	70		1.9	0.47	ng/L		09/23/25 15:37	09/25/25 18:18	1
Perfluorononanoic acid (PFNA)	4.6		1.9	0.47	ng/L		09/23/25 15:37	09/25/25 18:18	1
Perfluorooctanesulfonic acid (PFOS)	48		1.9	0.47	ng/L		09/23/25 15:37	09/25/25 18:18	1
Perfluorooctanoic acid (PFOA)	82		1.9	0.47	ng/L		09/23/25 15:37	09/25/25 18:18	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	47		26 - 161				09/23/25 15:37	09/25/25 18:18	1
13C3-PFBS	293	*5+	20 - 198				09/23/25 15:37	09/25/25 18:18	1
13C3-PFHxS	94		35 - 165				09/23/25 15:37	09/25/25 18:18	1
13C4-PFHpA	69		33 - 158				09/23/25 15:37	09/25/25 18:18	1
13C8-PFOA	83		35 - 146				09/23/25 15:37	09/25/25 18:18	1
13C8-PFOS	94		41 - 155				09/23/25 15:37	09/25/25 18:18	1
13C9-PFNA	94		37 - 157				09/23/25 15:37	09/25/25 18:18	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Client Sample ID: STR-07

Lab Sample ID: 180-195746-13

Date Collected: 09/12/25 07:50

Matrix: Water

Date Received: 09/13/25 10:05

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/23/25 15:37	09/24/25 23:16	1
Perfluorobutanesulfonic acid (PFBS)	26		1.9	0.47	ng/L		09/23/25 15:37	09/24/25 23:16	1
Perfluorohexanesulfonic acid (PFHxS)	77		1.9	0.47	ng/L		09/23/25 15:37	09/24/25 23:16	1
Perfluorononanoic acid (PFNA)	5.3		1.9	0.47	ng/L		09/23/25 15:37	09/24/25 23:16	1
Perfluorooctanesulfonic acid (PFOS)	56		1.9	0.47	ng/L		09/23/25 15:37	09/24/25 23:16	1
Perfluorooctanoic acid (PFOA)	80		1.9	0.47	ng/L		09/23/25 15:37	09/24/25 23:16	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	84		26 - 161				09/23/25 15:37	09/24/25 23:16	1
13C3-PFBS	360	*5+	20 - 198				09/23/25 15:37	09/24/25 23:16	1
13C3-PFHxS	116		35 - 165				09/23/25 15:37	09/24/25 23:16	1
13C4-PFHpA	84		33 - 158				09/23/25 15:37	09/24/25 23:16	1
13C8-PFOA	99		35 - 146				09/23/25 15:37	09/24/25 23:16	1
13C8-PFOS	98		41 - 155				09/23/25 15:37	09/24/25 23:16	1
13C9-PFNA	90		37 - 157				09/23/25 15:37	09/24/25 23:16	1

Method: EPA 537 IDA - EPA 537 Isotope Dilution - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND	F1	1.9	1.5	ng/L		09/23/25 15:37	09/25/25 18:32	1
Perfluorobutanesulfonic acid (PFBS)	23	F1	1.9	0.47	ng/L		09/23/25 15:37	09/25/25 18:32	1
Perfluorohexanesulfonic acid (PFHxS)	72		1.9	0.47	ng/L		09/23/25 15:37	09/25/25 18:32	1
Perfluorononanoic acid (PFNA)	5.1		1.9	0.47	ng/L		09/23/25 15:37	09/25/25 18:32	1
Perfluorooctanesulfonic acid (PFOS)	54		1.9	0.47	ng/L		09/23/25 15:37	09/25/25 18:32	1
Perfluorooctanoic acid (PFOA)	84		1.9	0.47	ng/L		09/23/25 15:37	09/25/25 18:32	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	41		26 - 161				09/23/25 15:37	09/25/25 18:32	1
13C3-PFBS	242	*5+	20 - 198				09/23/25 15:37	09/25/25 18:32	1
13C3-PFHxS	79		35 - 165				09/23/25 15:37	09/25/25 18:32	1
13C4-PFHpA	58		33 - 158				09/23/25 15:37	09/25/25 18:32	1
13C8-PFOA	70		35 - 146				09/23/25 15:37	09/25/25 18:32	1
13C8-PFOS	73		41 - 155				09/23/25 15:37	09/25/25 18:32	1
13C9-PFNA	73		37 - 157				09/23/25 15:37	09/25/25 18:32	1

Eurofins Pittsburgh

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Client Sample ID: STR-08

Lab Sample ID: 180-195746-14

Date Collected: 09/12/25 11:00

Matrix: Water

Date Received: 09/13/25 10:05

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/23/25 15:37	09/24/25 23:57	1
Perfluorobutanesulfonic acid (PFBS)	32		2.0	0.49	ng/L		09/23/25 15:37	09/24/25 23:57	1
Perfluorohexanesulfonic acid (PFHxS)	71		2.0	0.49	ng/L		09/23/25 15:37	09/24/25 23:57	1
Perfluorononanoic acid (PFNA)	5.3		2.0	0.49	ng/L		09/23/25 15:37	09/24/25 23:57	1
Perfluorooctanesulfonic acid (PFOS)	52		2.0	0.49	ng/L		09/23/25 15:37	09/24/25 23:57	1
Perfluorooctanoic acid (PFOA)	77		2.0	0.49	ng/L		09/23/25 15:37	09/24/25 23:57	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	87		26 - 161				09/23/25 15:37	09/24/25 23:57	1
13C3-PFBS	370	*5+	20 - 198				09/23/25 15:37	09/24/25 23:57	1
13C3-PFHxS	118		35 - 165				09/23/25 15:37	09/24/25 23:57	1
13C4-PFHpA	84		33 - 158				09/23/25 15:37	09/24/25 23:57	1
13C8-PFOA	100		35 - 146				09/23/25 15:37	09/24/25 23:57	1
13C8-PFOS	99		41 - 155				09/23/25 15:37	09/24/25 23:57	1
13C9-PFNA	88		37 - 157				09/23/25 15:37	09/24/25 23:57	1

Method: EPA 537 IDA - EPA 537 Isotope Dilution - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/23/25 15:37	09/25/25 19:12	1
Perfluorobutanesulfonic acid (PFBS)	31		2.0	0.49	ng/L		09/23/25 15:37	09/25/25 19:12	1
Perfluorohexanesulfonic acid (PFHxS)	72		2.0	0.49	ng/L		09/23/25 15:37	09/25/25 19:12	1
Perfluorononanoic acid (PFNA)	5.1		2.0	0.49	ng/L		09/23/25 15:37	09/25/25 19:12	1
Perfluorooctanesulfonic acid (PFOS)	51		2.0	0.49	ng/L		09/23/25 15:37	09/25/25 19:12	1
Perfluorooctanoic acid (PFOA)	88		2.0	0.49	ng/L		09/23/25 15:37	09/25/25 19:12	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	42		26 - 161				09/23/25 15:37	09/25/25 19:12	1
13C3-PFBS	335	*5+	20 - 198				09/23/25 15:37	09/25/25 19:12	1
13C3-PFHxS	101		35 - 165				09/23/25 15:37	09/25/25 19:12	1
13C4-PFHpA	72		33 - 158				09/23/25 15:37	09/25/25 19:12	1
13C8-PFOA	87		35 - 146				09/23/25 15:37	09/25/25 19:12	1
13C8-PFOS	99		41 - 155				09/23/25 15:37	09/25/25 19:12	1
13C9-PFNA	100		37 - 157				09/23/25 15:37	09/25/25 19:12	1

Eurofins Pittsburgh

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Client Sample ID: SB-13

Lab Sample ID: 180-195746-15

Date Collected: 09/12/25 10:35

Matrix: Water

Date Received: 09/13/25 10:05

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/23/25 07:47	09/24/25 16:37	1
Perfluorobutanesulfonic acid (PFBS)	29		1.9	0.48	ng/L		09/23/25 07:47	09/24/25 16:37	1
Perfluorohexanesulfonic acid (PFHxS)	21		1.9	0.48	ng/L		09/23/25 07:47	09/24/25 16:37	1
Perfluorononanoic acid (PFNA)	4.6		1.9	0.48	ng/L		09/23/25 07:47	09/24/25 16:37	1
Perfluorooctanesulfonic acid (PFOS)	29		1.9	0.48	ng/L		09/23/25 07:47	09/24/25 16:37	1
Perfluorooctanoic acid (PFOA)	60		1.9	0.48	ng/L		09/23/25 07:47	09/24/25 16:37	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	73		26 - 161				09/23/25 07:47	09/24/25 16:37	1
13C3-PFBS	159		20 - 198				09/23/25 07:47	09/24/25 16:37	1
13C3-PFHxS	82		35 - 165				09/23/25 07:47	09/24/25 16:37	1
13C4-PFHpA	73		33 - 158				09/23/25 07:47	09/24/25 16:37	1
13C8-PFOA	70		35 - 146				09/23/25 07:47	09/24/25 16:37	1
13C8-PFOS	79		41 - 155				09/23/25 07:47	09/24/25 16:37	1
13C9-PFNA	76		37 - 157				09/23/25 07:47	09/24/25 16:37	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Client Sample ID: SW DUPLICATE_09122025

Lab Sample ID: 180-195746-16

Date Collected: 09/12/25 00:00

Matrix: Water

Date Received: 09/13/25 10:05

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/23/25 07:47	09/24/25 16:52	1
Perfluorobutanesulfonic acid (PFBS)	25		2.0	0.50	ng/L		09/23/25 07:47	09/24/25 16:52	1
Perfluorohexanesulfonic acid (PFHxS)	70		2.0	0.50	ng/L		09/23/25 07:47	09/24/25 16:52	1
Perfluorononanoic acid (PFNA)	5.2		2.0	0.50	ng/L		09/23/25 07:47	09/24/25 16:52	1
Perfluorooctanesulfonic acid (PFOS)	73		2.0	0.50	ng/L		09/23/25 07:47	09/24/25 16:52	1
Perfluorooctanoic acid (PFOA)	87		2.0	0.50	ng/L		09/23/25 07:47	09/24/25 16:52	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	68		26 - 161				09/23/25 07:47	09/24/25 16:52	1
13C3-PFBS	222	*5+	20 - 198				09/23/25 07:47	09/24/25 16:52	1
13C3-PFHxS	83		35 - 165				09/23/25 07:47	09/24/25 16:52	1
13C4-PFHpA	67		33 - 158				09/23/25 07:47	09/24/25 16:52	1
13C8-PFOA	72		35 - 146				09/23/25 07:47	09/24/25 16:52	1
13C8-PFOS	77		41 - 155				09/23/25 07:47	09/24/25 16:52	1
13C9-PFNA	77		37 - 157				09/23/25 07:47	09/24/25 16:52	1

Method: EPA 537 IDA - EPA 537 Isotope Dilution - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/23/25 07:47	09/29/25 10:51	1
Perfluorobutanesulfonic acid (PFBS)	21		2.0	0.50	ng/L		09/23/25 07:47	09/29/25 10:51	1
Perfluorohexanesulfonic acid (PFHxS)	72		2.0	0.50	ng/L		09/23/25 07:47	09/29/25 10:51	1
Perfluorononanoic acid (PFNA)	5.0		2.0	0.50	ng/L		09/23/25 07:47	09/29/25 10:51	1
Perfluorooctanesulfonic acid (PFOS)	72		2.0	0.50	ng/L		09/23/25 07:47	09/29/25 10:51	1
Perfluorooctanoic acid (PFOA)	83		2.0	0.50	ng/L		09/23/25 07:47	09/29/25 10:51	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	75		26 - 161				09/23/25 07:47	09/29/25 10:51	1
13C3-PFBS	258	*5+	20 - 198				09/23/25 07:47	09/29/25 10:51	1
13C3-PFHxS	89		35 - 165				09/23/25 07:47	09/29/25 10:51	1
13C4-PFHpA	76		33 - 158				09/23/25 07:47	09/29/25 10:51	1
13C8-PFOA	78		35 - 146				09/23/25 07:47	09/29/25 10:51	1
13C8-PFOS	79		41 - 155				09/23/25 07:47	09/29/25 10:51	1
13C9-PFNA	76		37 - 157				09/23/25 07:47	09/29/25 10:51	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 410-703142/1-A

Matrix: Water

Analysis Batch: 704112

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 703142

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/23/25 07:47	09/24/25 15:50	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		09/23/25 07:47	09/24/25 15:50	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		09/23/25 07:47	09/24/25 15:50	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		09/23/25 07:47	09/24/25 15:50	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		09/23/25 07:47	09/24/25 15:50	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.50	ng/L		09/23/25 07:47	09/24/25 15:50	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	77		26 - 161				09/23/25 07:47	09/24/25 15:50	1
13C3-PFBS	83		20 - 198				09/23/25 07:47	09/24/25 15:50	1
13C3-PFHxS	80		35 - 165				09/23/25 07:47	09/24/25 15:50	1
13C4-PFHpA	77		33 - 158				09/23/25 07:47	09/24/25 15:50	1
13C8-PFOA	74		35 - 146				09/23/25 07:47	09/24/25 15:50	1
13C8-PFOS	79		41 - 155				09/23/25 07:47	09/24/25 15:50	1
13C9-PFNA	78		37 - 157				09/23/25 07:47	09/24/25 15:50	1

Lab Sample ID: LCS 410-703142/2-A

Matrix: Water

Analysis Batch: 704112

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 703142

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	25.6	29.5		ng/L		115	50 - 132
Perfluorobutanesulfonic acid (PFBS)	22.7	26.5		ng/L		117	54 - 145
Perfluorohexanesulfonic acid (PFHxS)	23.3	25.3		ng/L		109	52 - 138
Perfluorononanoic acid (PFNA)	25.6	30.3		ng/L		118	52 - 143
Perfluorooctanesulfonic acid (PFOS)	23.8	26.5		ng/L		111	52 - 139
Perfluorooctanoic acid (PFOA)	25.6	31.1		ng/L		121	53 - 147
Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits				
13C3-HFPO-DA	74		26 - 161				
13C3-PFBS	88		20 - 198				
13C3-PFHxS	82		35 - 165				
13C4-PFHpA	77		33 - 158				
13C8-PFOA	76		35 - 146				
13C8-PFOS	82		41 - 155				
13C9-PFNA	80		37 - 157				

Lab Sample ID: LCSD 410-703142/3-A

Matrix: Water

Analysis Batch: 704112

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 703142

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	25.6	30.2		ng/L		118	50 - 132	2	30
Perfluorobutanesulfonic acid (PFBS)	22.7	27.3		ng/L		120	54 - 145	3	30

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 410-703142/3-A

Matrix: Water

Analysis Batch: 704112

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 703142

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorohexanesulfonic acid (PFHxS)	23.3	25.8		ng/L		111	52 - 138	2	30
Perfluorononanoic acid (PFNA)	25.6	30.1		ng/L		118	52 - 143	1	30
Perfluorooctanesulfonic acid (PFOS)	23.8	26.8		ng/L		112	52 - 139	1	30
Perfluorooctanoic acid (PFOA)	25.6	32.0		ng/L		125	53 - 147	3	30

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C3-HFPO-DA	79		26 - 161
13C3-PFBS	84		20 - 198
13C3-PFHxS	85		35 - 165
13C4-PFHpA	81		33 - 158
13C8-PFOA	78		35 - 146
13C8-PFOS	84		41 - 155
13C9-PFNA	80		37 - 157

Lab Sample ID: MB 410-703485/1-A

Matrix: Water

Analysis Batch: 704001

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 703485

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/23/25 15:37	09/24/25 22:08	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		09/23/25 15:37	09/24/25 22:08	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		09/23/25 15:37	09/24/25 22:08	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		09/23/25 15:37	09/24/25 22:08	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		09/23/25 15:37	09/24/25 22:08	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.50	ng/L		09/23/25 15:37	09/24/25 22:08	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	99		26 - 161	09/23/25 15:37	09/24/25 22:08	1
13C3-PFBS	85		20 - 198	09/23/25 15:37	09/24/25 22:08	1
13C3-PFHxS	85		35 - 165	09/23/25 15:37	09/24/25 22:08	1
13C4-PFHpA	79		33 - 158	09/23/25 15:37	09/24/25 22:08	1
13C8-PFOA	82		35 - 146	09/23/25 15:37	09/24/25 22:08	1
13C8-PFOS	84		41 - 155	09/23/25 15:37	09/24/25 22:08	1
13C9-PFNA	81		37 - 157	09/23/25 15:37	09/24/25 22:08	1

Lab Sample ID: LCS 410-703485/2-A

Matrix: Water

Analysis Batch: 704001

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 703485

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	25.6	27.9		ng/L		109	50 - 132
Perfluorobutanesulfonic acid (PFBS)	22.7	26.9		ng/L		118	54 - 145
Perfluorohexanesulfonic acid (PFHxS)	23.3	25.6		ng/L		109	52 - 138
Perfluorononanoic acid (PFNA)	25.6	30.4		ng/L		119	52 - 143

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 410-703485/2-A

Matrix: Water

Analysis Batch: 704001

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 703485

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonic acid (PFOS)	23.8	25.6		ng/L		107	52 - 139
Perfluorooctanoic acid (PFOA)	25.6	29.6		ng/L		116	53 - 147
Isotope Dilution							
	LCS %Recovery	LCS Qualifier	Limits				
13C3-HFPO-DA	121		26 - 161				
13C3-PFBS	97		20 - 198				
13C3-PFHxS	102		35 - 165				
13C4-PFHpA	92		33 - 158				
13C8-PFOA	91		35 - 146				
13C8-PFOS	100		41 - 155				
13C9-PFNA	90		37 - 157				

Lab Sample ID: 180-195746-13 MS

Matrix: Water

Analysis Batch: 704001

Client Sample ID: STR-07

Prep Type: Total/NA

Prep Batch: 703485

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		24.3	34.8	F1	ng/L		143	50 - 132
Perfluorobutanesulfonic acid (PFBS)	26		21.6	58.5	F1	ng/L		149	54 - 145
Perfluorohexanesulfonic acid (PFHxS)	77		22.2	97.8		ng/L		96	52 - 138
Perfluorononanoic acid (PFNA)	5.3		24.3	34.5		ng/L		120	52 - 143
Perfluorooctanesulfonic acid (PFOS)	56		22.6	78.2		ng/L		97	52 - 139
Perfluorooctanoic acid (PFOA)	80		24.3	106		ng/L		107	53 - 147
Isotope Dilution									
	MS %Recovery	MS Qualifier	Limits						
13C3-HFPO-DA	85		26 - 161						
13C3-PFBS	360	*5+	20 - 198						
13C3-PFHxS	120		35 - 165						
13C4-PFHpA	83		33 - 158						
13C8-PFOA	96		35 - 146						
13C8-PFOS	100		41 - 155						
13C9-PFNA	90		37 - 157						

Lab Sample ID: 180-195746-13 MSD

Matrix: Water

Analysis Batch: 704001

Client Sample ID: STR-07

Prep Type: Total/NA

Prep Batch: 703485

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		25.3	38.4	F1	ng/L		152	50 - 132	10	30
Perfluorobutanesulfonic acid (PFBS)	26		22.5	55.3		ng/L		128	54 - 145	6	30
Perfluorohexanesulfonic acid (PFHxS)	77		23.1	101		ng/L		105	52 - 138	3	30
Perfluorononanoic acid (PFNA)	5.3		25.3	34.6		ng/L		116	52 - 143	0	30

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: 180-195746-13 MSD

Matrix: Water

Analysis Batch: 704001

Client Sample ID: STR-07

Prep Type: Total/NA

Prep Batch: 703485

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS)	56		23.6	80.6		ng/L		103	52 - 139	3	30
Perfluorooctanoic acid (PFOA)	80		25.3	113		ng/L		128	53 - 147	6	30
Isotope Dilution	MSD %Recovery	MSD Qualifier	MSD Limits								
13C3-HFPO-DA	90		26 - 161								
13C3-PFBS	364	*5+	20 - 198								
13C3-PFHxS	123		35 - 165								
13C4-PFHpA	84		33 - 158								
13C8-PFOA	100		35 - 146								
13C8-PFOS	105		41 - 155								
13C9-PFNA	93		37 - 157								

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

LCMS

Prep Batch: 703142

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-15	SB-13	Total/NA	Water	SPE	
180-195746-16	SW DUPLICATE_09122025	Total/NA	Water	SPE	
180-195746-16 - RA	SW DUPLICATE_09122025	Total/NA	Water	SPE	
MB 410-703142/1-A	Method Blank	Total/NA	Water	SPE	
LCS 410-703142/2-A	Lab Control Sample	Total/NA	Water	SPE	
LCSD 410-703142/3-A	Lab Control Sample Dup	Total/NA	Water	SPE	

Prep Batch: 703485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-9 - RA	SB-03	Total/NA	Water	SPE	
180-195746-9	SB-03	Total/NA	Water	SPE	
180-195746-11	STR-05	Total/NA	Water	SPE	
180-195746-11 - RA	STR-05	Total/NA	Water	SPE	
180-195746-12	STR-06	Total/NA	Water	SPE	
180-195746-12 - RA	STR-06	Total/NA	Water	SPE	
180-195746-13	STR-07	Total/NA	Water	SPE	
180-195746-13 - RA	STR-07	Total/NA	Water	SPE	
180-195746-14	STR-08	Total/NA	Water	SPE	
180-195746-14 - RA	STR-08	Total/NA	Water	SPE	
MB 410-703485/1-A	Method Blank	Total/NA	Water	SPE	
LCS 410-703485/2-A	Lab Control Sample	Total/NA	Water	SPE	
180-195746-13 MS	STR-07	Total/NA	Water	SPE	
180-195746-13 MSD	STR-07	Total/NA	Water	SPE	

Analysis Batch: 704001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-11	STR-05	Total/NA	Water	537 IDA	703485
180-195746-12	STR-06	Total/NA	Water	537 IDA	703485
180-195746-13	STR-07	Total/NA	Water	537 IDA	703485
180-195746-14	STR-08	Total/NA	Water	537 IDA	703485
MB 410-703485/1-A	Method Blank	Total/NA	Water	537 IDA	703485
LCS 410-703485/2-A	Lab Control Sample	Total/NA	Water	537 IDA	703485
180-195746-13 MS	STR-07	Total/NA	Water	537 IDA	703485
180-195746-13 MSD	STR-07	Total/NA	Water	537 IDA	703485

Analysis Batch: 704112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-15	SB-13	Total/NA	Water	537 IDA	703142
180-195746-16	SW DUPLICATE_09122025	Total/NA	Water	537 IDA	703142
MB 410-703142/1-A	Method Blank	Total/NA	Water	537 IDA	703142
LCS 410-703142/2-A	Lab Control Sample	Total/NA	Water	537 IDA	703142
LCSD 410-703142/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	703142

Analysis Batch: 704623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-9	SB-03	Total/NA	Water	537 IDA	703485
180-195746-11 - RA	STR-05	Total/NA	Water	537 IDA	703485
180-195746-12 - RA	STR-06	Total/NA	Water	537 IDA	703485
180-195746-13 - RA	STR-07	Total/NA	Water	537 IDA	703485
180-195746-14 - RA	STR-08	Total/NA	Water	537 IDA	703485

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QC Association Summary

Client: Geosyntec Consultants Inc

Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195746-2

LCMS

Analysis Batch: 706074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195746-9 - RA	SB-03	Total/NA	Water	537 IDA	703485
180-195746-16 - RA	SW DUPLICATE_09122025	Total/NA	Water	537 IDA	703142

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Eurofins Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

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Chain of Custody Record



Environment Testing

Client Information		Sampler <u>London Chase</u>		Lab PM Johnson, Andy		Carrier Tracking No(s)		COC No 180-116832-20329 1	
Client Contact Helen Girod		Phone <u>202-893-1758</u>		E-Mail Andy.Johnson@et.eurofins.com		State of Origin <u>MD</u>		Page <u>2</u> of <u>2</u>	
Company Geosyntec Consultants Inc		Address 10211 Winocoin Circle 4th Floor		City Columbia		State, Zip MD, 21044		Phone 240-381-5010(Tel)	
Email HGirod@Geosyntec.com		Project Name Ritchie Rubble Surface Water - PFAS		Site Ritchie Rubble		Due Date Requested:		TAT Requested (days): <u>Standard</u>	
Compliance Project: ☒ Yes ☐ No		PO # WO-ME1168K-5773		WO #		Project # 18015089		SSOW#	
Analysis Requested		Preservation Codes: N - None		Other:		Total Number of containers		Special Instructions/Note:	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=Grab)		Matrix (H=Water, S=Soil, G=Geotextile, B=Bottom Sediment, D=Drinking Water)	
SB-03		9/12/25		0455		G		Water	
SB-06		9/12/25		0600		G		Water	
ST-08		9/12/25		0835		G		Water	
STR-04		9/12/25		0930		G		Water	
STR-05		9/12/25		0835		G		Water	
STR-06		9/12/25		0750		G		Water	
STR-07		9/12/25		1100		G		Water	
STR-08		9/12/25		1035		G		Water	
SB-13		9/12/25		1035		G		Water	
SW DUPLICATE		9/12/2025				G		Water	
Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		Return To Client		Disposal By Lab		Archive For Months	
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological		Deliverable Requested I, II, III, IV, Other (specify)		Special Instructions/QC Requirements		Empty Kit Relinquished by		Date	
Relinquished by <u>London Chase</u>		Date/Time 9/12/25 1905		Company <u>Geosyntec</u>		Received by <u>Tracy White</u>		Date/Time 9/12/25 2020	
Relinquished by <u>Tracy White</u>		Date/Time 9/12/25 405P		Company <u>BSL</u>		Received by <u>Tracy White</u>		Date/Time 9/12/25 1005	
Relinquished by		Date/Time		Company		Received by		Date/Time	
Custody Seals Intact: ☒ Yes ☐ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks					

ORIGIN ID: BWIA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

Part # 159469-434 MTW EXP 01/25

SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 1030460/INET4535

BILL RECIPIENT

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEOSYNTEC

(412) 963-7058

INV: PO:

DEPT:

FedEx
Express



Uncorrected temp 1.8 °C
Thermometer ID 20

CF-0.7 Initials 20

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

SATURDAY 12:01
PRIORITY OVERNIGHT

4 of 4

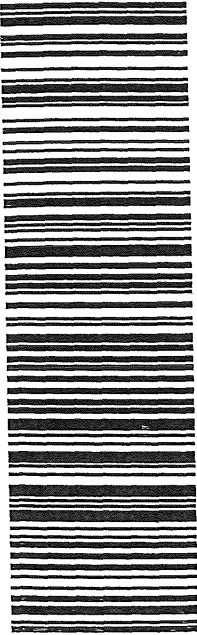
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Mstr# 8843 3509 6129

152

PA-US PIT

XO AGCA



180-195746 Waybill

ORIGIN ID: BWIA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

Part # 159469-434 MTW EXP 01/25

SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 1030460/INET4535

BILL RECIPIENT

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEOSYNTEC

(412) 963-7058

INV: PO:

DEPT:

FedEx
Express



Uncorrected temp 1.8 °C
Thermometer ID 20

CF-0.7 Initials 20

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

SATURDAY 12:01
PRIORITY OVERNIGHT

2 of 4

MPS# 8843 3509 6130

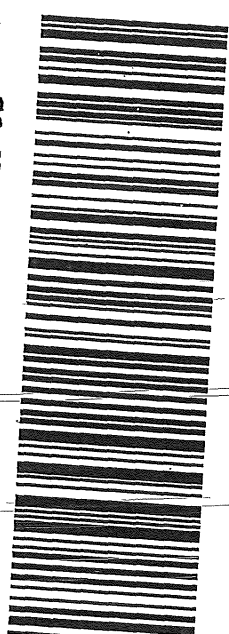
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0201

15238

PA-US PIT

XO AGCA



1
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7
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9
10
11
12
13

9/30/2025

ORIGIN: D-BWIA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

BILL RECIPIENT

TO **SAMPLE RECEIVING**
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: GEOSYNTEC

PO. INV: (412) 963-7058



Uncorrected temp: 20.0 °C
Thermometer ID: 20

CF -0.7 Initials RE

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

FedEx
Express



Page 1 of 4
SATURDAY 12:00E
PRIORITY OVERNIGHT

MPK# 8843 3509 6129

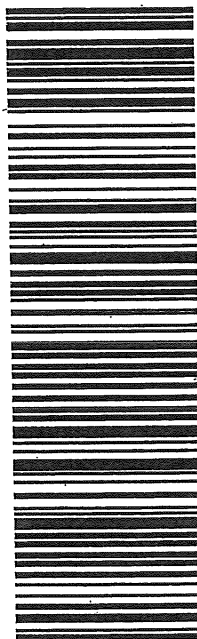
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15238

MASTER #

X0 AGCA

PA-US



SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 10304601NET4535

ORI: A (240) 814-1351
CLIN: VER.
EUR: INS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

BILL RECIPIENT

TO **SAMPLE RECEIVING**
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238
(412) 963-7058
REF: GEOSYNTEC

PO. INV: (412) 963-7058



Uncorrected temp: 20.0 °C
Thermometer ID: 20

CF -0.7 Initials RE

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

FedEx
Express



SATURDAY 12:00E
PRIORITY OVERNIGHT

MPK# 8843 3509 6140

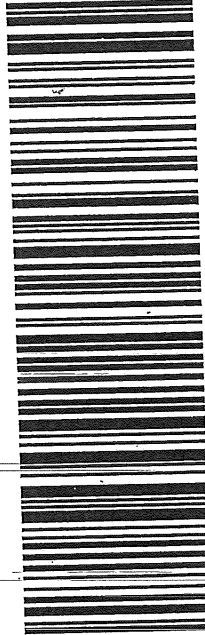
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15238

MASTER #

X0 AGCA

PA-US



15238-2907-01
PITTSBURGH, PA

4150 SAT 09/13 08:13
301 ALPHA DR

(639) 09/13-09/14

CLOSED - 600

ETP 1 CLPD 100Y

9/30/2025

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195746-2

Login Number: 195746

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Pittsburgh

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195746-2

Login Number: 195746

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 09/15/25 11:02 AM

Creator: Cyms, Carolyn M

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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, 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 $> 6\text{mm}$ in diameter (none, if from WV)?	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Pittsburgh

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195746-2

Login Number: 195746

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 3

List Creation: 09/15/25 11:41 AM

Creator: Cyms, Carolyn M

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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, 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 $> 6\text{mm}$ in diameter (none, if from WV)?	True	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Pittsburgh



ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Girod
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 9/29/2025 10:28:03 PM

JOB DESCRIPTION

Ritchie Rubble LF Semi-Annual UD PFAS

JOB NUMBER

180-195747-1

Eurofins Pittsburgh

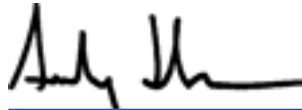
Job Notes

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



Generated
9/29/2025 10:28:03 PM

Authorized for release by
Andy Johnson, Senior Project Manager
Andy.Johnson@et.eurofinsus.com
(615)818-9567

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual UD PFAS

Job ID: 180-195747-1

Job ID: 180-195747-1

Eurofins Pittsburgh

Job Narrative 180-195747-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The sample was received on 9/13/2025 10:05 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.9°C, 0.9°C, 1.9°C and 4.4°C.

PFAS

Method PFC_IDA: The sample injection standard peak areas in the following sample: D2-UD (180-195747-1) are outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

The recovery for the labeled isotope(s) 13C3-PFBS in the following sample:
D2-UD (180-195747-1) is outside the QC acceptance limits due to the matrix of the sample.

Method PFC_IDA: The sample injection standard peak areas in the following sample: D2-UD (180-195747-1) are outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

The recovery for the labeled isotope(s) 13C3-PFBS in the following sample:
D2-UD (180-195747-1) is outside the QC acceptance limits due to the matrix of the sample.

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

Eurofins Pittsburgh

Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD PFAS

Job ID: 180-195747-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*5+	Isotope dilution analyte is outside acceptance limits, high biased.

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
Project/Site: Ritchie Rubble LF Semi-Annual UD PFAS

Job ID: 180-195747-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Ohio	State	87787	01-31-26
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-26

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

Eurofins Pittsburgh

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD PFAS

Job ID: 180-195747-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

Sample Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD PFAS

Job ID: 180-195747-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195747-1	D2-UD	Water	09/12/25 13:15	09/13/25 10:05	Maryland

- 1
- 2
- 3
- 4
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- 12
- 13

Method Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD PFAS

Job ID: 180-195747-1

Method	Method Description	Protocol	Laboratory
537 IDA	EPA 537 Isotope Dilution	EPA	ELLE
SPE	PFAS by SPE	Lab SOP	ELLE

Protocol References:

EPA = US Environmental Protection Agency

Lab SOP = Laboratory Standard Operating Procedure

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD PFAS

Job ID: 180-195747-1

Client Sample ID: D2-UD

Lab Sample ID: 180-195747-1

Date Collected: 09/12/25 13:15

Matrix: Water

Date Received: 09/13/25 10:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			273.2 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA		1			704001	09/25/25 00:11	DSU6	ELLE
		Instrument ID: 30728								
Total/NA	Prep	SPE	RA		273.2 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA	RA	1	1 uL	1 uL	704623	09/25/25 19:26	DSU6	ELLE
		Instrument ID: 30731								
Total/NA	Prep	SPE	DL		273.2 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA	DL	10	1 uL	1 uL	704623	09/25/25 19:40	DSU6	ELLE
		Instrument ID: 30731								

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: ELLE

Batch Type: Prep

V3FW = Amber Mauger

Batch Type: Analysis

DSU6 = John Grossi

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD PFAS

Job ID: 180-195747-1

Client Sample ID: D2-UD

Lab Sample ID: 180-195747-1

Date Collected: 09/12/25 13:15

Matrix: Water

Date Received: 09/13/25 10:05

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	1.5	ng/L		09/23/25 15:37	09/25/25 00:11	1
Perfluorobutanesulfonic acid (PFBS)	73		1.8	0.46	ng/L		09/23/25 15:37	09/25/25 00:11	1
Perfluorononanoic acid (PFNA)	11		1.8	0.46	ng/L		09/23/25 15:37	09/25/25 00:11	1
Perfluorooctanesulfonic acid (PFOS)	40		1.8	0.46	ng/L		09/23/25 15:37	09/25/25 00:11	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	109		26 - 161				09/23/25 15:37	09/25/25 00:11	1
13C3-PFBS	377	*5+	20 - 198				09/23/25 15:37	09/25/25 00:11	1
13C3-PFHxS	108		35 - 165				09/23/25 15:37	09/25/25 00:11	1
13C4-PFHpA	90		33 - 158				09/23/25 15:37	09/25/25 00:11	1
13C8-PFOA	100		35 - 146				09/23/25 15:37	09/25/25 00:11	1
13C8-PFOS	101		41 - 155				09/23/25 15:37	09/25/25 00:11	1
13C9-PFNA	96		37 - 157				09/23/25 15:37	09/25/25 00:11	1

Method: EPA 537 IDA - EPA 537 Isotope Dilution - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	170		18	4.6	ng/L		09/23/25 15:37	09/25/25 19:40	10
Perfluorooctanoic acid (PFOA)	340		18	4.6	ng/L		09/23/25 15:37	09/25/25 19:40	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-PFHxS	74		35 - 165				09/23/25 15:37	09/25/25 19:40	10
13C8-PFOA	72		35 - 146				09/23/25 15:37	09/25/25 19:40	10

Method: EPA 537 IDA - EPA 537 Isotope Dilution - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.8	1.5	ng/L		09/23/25 15:37	09/25/25 19:26	1
Perfluorobutanesulfonic acid (PFBS)	70		1.8	0.46	ng/L		09/23/25 15:37	09/25/25 19:26	1
Perfluorohexanesulfonic acid (PFHxS)	170		1.8	0.46	ng/L		09/23/25 15:37	09/25/25 19:26	1
Perfluorononanoic acid (PFNA)	12		1.8	0.46	ng/L		09/23/25 15:37	09/25/25 19:26	1
Perfluorooctanesulfonic acid (PFOS)	38		1.8	0.46	ng/L		09/23/25 15:37	09/25/25 19:26	1
Perfluorooctanoic acid (PFOA)	330		1.8	0.46	ng/L		09/23/25 15:37	09/25/25 19:26	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	51		26 - 161				09/23/25 15:37	09/25/25 19:26	1
13C3-PFBS	235	*5+	20 - 198				09/23/25 15:37	09/25/25 19:26	1
13C3-PFHxS	85		35 - 165				09/23/25 15:37	09/25/25 19:26	1
13C4-PFHpA	68		33 - 158				09/23/25 15:37	09/25/25 19:26	1
13C8-PFOA	75		35 - 146				09/23/25 15:37	09/25/25 19:26	1
13C8-PFOS	82		41 - 155				09/23/25 15:37	09/25/25 19:26	1
13C9-PFNA	82		37 - 157				09/23/25 15:37	09/25/25 19:26	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD PFAS

Job ID: 180-195747-1

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 410-703485/1-A

Matrix: Water

Analysis Batch: 704001

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 703485

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/23/25 15:37	09/24/25 22:08	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		09/23/25 15:37	09/24/25 22:08	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		09/23/25 15:37	09/24/25 22:08	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		09/23/25 15:37	09/24/25 22:08	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		09/23/25 15:37	09/24/25 22:08	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.50	ng/L		09/23/25 15:37	09/24/25 22:08	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	99		26 - 161				09/23/25 15:37	09/24/25 22:08	1
13C3-PFBS	85		20 - 198				09/23/25 15:37	09/24/25 22:08	1
13C3-PFHxS	85		35 - 165				09/23/25 15:37	09/24/25 22:08	1
13C4-PFHpA	79		33 - 158				09/23/25 15:37	09/24/25 22:08	1
13C8-PFOA	82		35 - 146				09/23/25 15:37	09/24/25 22:08	1
13C8-PFOS	84		41 - 155				09/23/25 15:37	09/24/25 22:08	1
13C9-PFNA	81		37 - 157				09/23/25 15:37	09/24/25 22:08	1

Lab Sample ID: LCS 410-703485/2-A

Matrix: Water

Analysis Batch: 704001

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 703485

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	25.6	27.9		ng/L		109	50 - 132
Perfluorobutanesulfonic acid (PFBS)	22.7	26.9		ng/L		118	54 - 145
Perfluorohexanesulfonic acid (PFHxS)	23.3	25.6		ng/L		109	52 - 138
Perfluorononanoic acid (PFNA)	25.6	30.4		ng/L		119	52 - 143
Perfluorooctanesulfonic acid (PFOS)	23.8	25.6		ng/L		107	52 - 139
Perfluorooctanoic acid (PFOA)	25.6	29.6		ng/L		116	53 - 147
Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits				
13C3-HFPO-DA	121		26 - 161				
13C3-PFBS	97		20 - 198				
13C3-PFHxS	102		35 - 165				
13C4-PFHpA	92		33 - 158				
13C8-PFOA	91		35 - 146				
13C8-PFOS	100		41 - 155				
13C9-PFNA	90		37 - 157				

Eurofins Pittsburgh

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual UD PFAS

Job ID: 180-195747-1

LCMS

Prep Batch: 703485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195747-1	D2-UD	Total/NA	Water	SPE	
180-195747-1 - RA	D2-UD	Total/NA	Water	SPE	
180-195747-1 - DL	D2-UD	Total/NA	Water	SPE	
MB 410-703485/1-A	Method Blank	Total/NA	Water	SPE	
LCS 410-703485/2-A	Lab Control Sample	Total/NA	Water	SPE	

Analysis Batch: 704001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195747-1	D2-UD	Total/NA	Water	537 IDA	703485
MB 410-703485/1-A	Method Blank	Total/NA	Water	537 IDA	703485
LCS 410-703485/2-A	Lab Control Sample	Total/NA	Water	537 IDA	703485

Analysis Batch: 704623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195747-1 - RA	D2-UD	Total/NA	Water	537 IDA	703485
180-195747-1 - DL	D2-UD	Total/NA	Water	537 IDA	703485

Phone 412-963-7058 Fax: 412-963-2468

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238

Phone 412-963-7058

[illegible]

Part # 159469-434 MTW EXP 01/25

SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 1030460/NET4535

BILL RECIPIENT

ORIGIN: BMA
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

TO **SAMPLE RECEIVING**
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEOSYNTEC

(412) 963-7088

INV:

PO:

DEPT:

DEPT:

Uncorrected temp: 1.8 °C
Thermometer ID: 20

CF-0.7 Initials: 20

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

FedEx Express



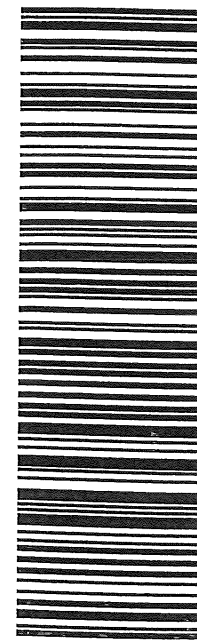
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PRIORITY OVERNIGHT

4 of 4

MS# 8843 3509 6151
Mstr# 8843 3509 6129

152
PA-US

X0 AGCA



180-196747 Waybill

Part # 159469-434 MTW EXP 01/25

SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 1030460/NET4535

BILL RECIPIENT

ORIGIN: BMA
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

TO **SAMPLE RECEIVING**
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEOSYNTEC

(412) 963-7088

INV:

PO:

DEPT:

DEPT:

Uncorrected temp: 1.8 °C
Thermometer ID: 20

CF-0.7 Initials: 20

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

FedEx Express



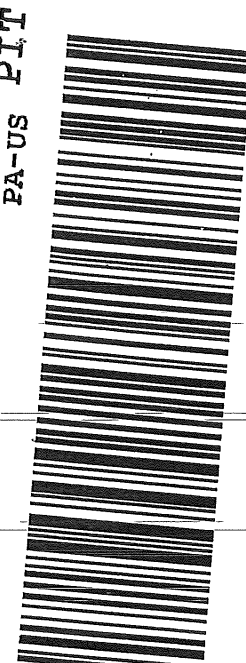
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PRIORITY OVERNIGHT

2 of 4

PS# 8843 3509 6130
str# 8843 3509 6129

X0 AGCA

15238
PA-US



Part # 159469-434 MTW EXP 01/25

ORIGINATOR (240) 814-1351
SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 1030460INET4635
BILL RECIPIENT

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEOSYNTEC
(412) 963-7058
NW: PO: DEPT:

FedEx
Express



Uncorrected temp: 20.0 °C
Thermometer ID

CF-0.7 Initials

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

SATURDAY 12:00E
PRIORITY OVERNIGHT

1 of 4

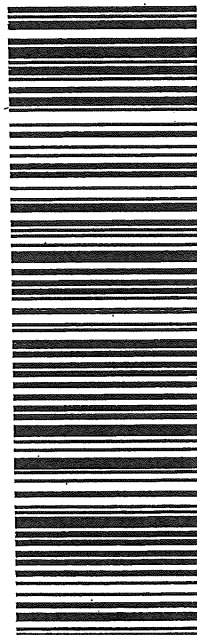
8843 3509 6129

MASTER #

X0 AGCA

PA-US

15238



9/29/2025

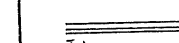
Part # 159469-434 MTW EXP 01/25

ORIGINATOR (240) 814-1351
SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 1030460INET4635
BILL RECIPIENT

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEOSYNTEC
(412) 963-7058
NW: PO: DEPT:

FedEx
Express



Uncorrected temp: 20.0 °C
Thermometer ID

CF-0.7 Initials

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

SATURDAY 12:00E
PRIORITY OVERNIGHT

3 of 4

8843 3509 6140

Mstr# 8843 3509 6129

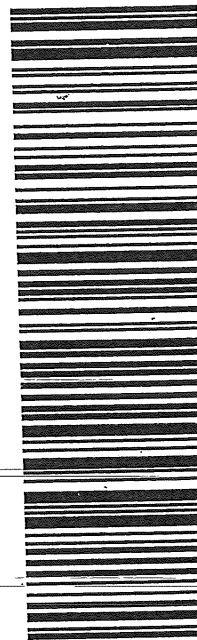
X0 AGCA

0201

15238

PA-US

PIT



15238-2907-01
PITTSBURGH, PA

4150 SAT 09/13 08:13
301 ALPHA DR

(639) 09/13-09/14

CLOSED - 600

ETP.1

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5

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195747-1

Login Number: 195747

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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.	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 $<6\text{mm}$ (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: 180-195747-1

Login Number: 195747

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

List Number: 2

List Creation: 09/16/25 04:21 PM

Creator: Trzos, Hazel

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 ($\leq 6^{\circ}\text{C}$, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temp acceptable, where thermal pres is required ($\leq 6^{\circ}\text{C}$, 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 $> 6\text{mm}$ in diameter (none, if from WV)?	N/A	



ANALYTICAL REPORT

PREPARED FOR

Attn: Helen Girod
Geosyntec Consultants Inc
10211 Wincopin Circle
4th Floor
Columbia, Maryland 21044

Generated 9/30/2025 3:53:19 PM

JOB DESCRIPTION

Ritchie Rubble LF Semi-Annual SW PFAS

JOB NUMBER

180-195748-1

Eurofins Pittsburgh

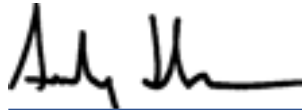
Job Notes

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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9/30/2025 3:53:19 PM

Authorized for release by
Andy Johnson, Senior Project Manager
Andy.Johnson@et.eurofinsus.com
(615)818-9567

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Case Narrative

Client: Geosyntec Consultants Inc
Project: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195748-1

Job ID: 180-195748-1

Eurofins Pittsburgh

Job Narrative 180-195748-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/13/2025 10:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.9°C, 0.9°C, 1.9°C and 4.4°C.

PFAS

Method PFC_IDA: The sample injection standard peak areas in the following samples: STR-02 (180-195748-2) and STR-03 (180-195748-3) are outside of the QC limits for both the initial injection and the re-injection. The values here are from the initial injection of the sample.

The recovery for the labeled isotope(s) 13C3-PFBS in the following samples:
STR-02 (180-195748-2) and STR-03 (180-195748-3) is outside the QC acceptance limits due to the matrix of the sample.

Method PFC_IDA: The recovery for the labeled isotope(s) 13C3-PFBS in the following sample: STR-01 (180-195748-1) is outside the QC acceptance limits due to the matrix of the sample.

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

Eurofins Pittsburgh

Definitions/Glossary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195748-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*5+	Isotope dilution analyte 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
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195748-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-26
A2LA	Dept. of Energy	0001.01	11-30-26
A2LA	ISO/IEC 17025	0001.01	11-30-26
Alabama	State	43200	01-31-26
Alaska	State	PA00009	06-30-26
Alaska (UST)	State	17-027	12-30-26
Arizona	State	AZ0780	03-12-26
Arkansas DEQ	State	88-00660	08-09-26
California	State	2792	01-31-26
Colorado	State	PA00009	06-30-26
Connecticut	State	PH-0746	06-30-27
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-26
Delaware (DW)	State	N/A	01-31-26
Florida	NELAP	E87997	07-01-26
Georgia (DW)	State	C048	01-31-26
Illinois	NELAP	200027	01-31-26
Iowa	State	361	03-01-26
Kansas	NELAP	E-10151	10-31-25
Kentucky (DW)	State	KY90088	12-31-25
Kentucky (UST)	State	0001.01	11-30-26
Kentucky (WW)	State	KY90088	12-31-25
Louisiana (All)	NELAP	02055	06-30-26
Maine	State	2019012	03-12-27
Maryland	State	100	06-30-26
Massachusetts	State	M-PA009	06-30-26
Michigan	State	9930	01-31-26
Minnesota	NELAP	042-999-487	12-31-25
Mississippi	State	023	01-31-26
Missouri	State	450	01-31-28
Montana (DW)	State	0098	01-01-26
Nebraska	State	NE-OS-32-17	01-31-26
New Hampshire	NELAP	2730	01-10-26
New Jersey	NELAP	PA011	06-30-26
New York	NELAP	10670	04-01-26
North Carolina (DW)	State	42705	07-31-26
North Carolina (WW/SW)	State	521	12-31-25
North Dakota	State	R-205	01-31-24 *
Ohio	State	87787	01-31-26
Oklahoma	NELAP	9804	12-31-25
Oregon	NELAP	PA200001	09-12-26
Pennsylvania	NELAP	36-00037	01-31-26
Quebec Ministry of Environment and Fight against Climate Change	PALA	507	09-16-29
Rhode Island	State	LAO00338	12-30-25
South Carolina	State	89002	01-31-26
Tennessee	State	02838	01-31-26
Texas	NELAP	T104704194-23-46	08-31-26
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-25
Virginia	NELAP	460182	06-14-26

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

Eurofins Pittsburgh

Accreditation/Certification Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195748-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

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

Authority	Program	Identification Number	Expiration Date
Washington	State	C457	04-11-26
West Virginia (DW)	State	9906 C	03-31-26
West Virginia DEP	State	055	07-31-26
Wyoming	State	8TMS-L	01-31-26
Wyoming (UST)	A2LA	0001.01	11-30-26

Sample Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195748-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
180-195748-1	STR-01	Water	09/12/25 11:50	09/13/25 10:05	Maryland
180-195748-2	STR-02	Water	09/12/25 12:15	09/13/25 10:05	Maryland
180-195748-3	STR-03	Water	09/12/25 12:35	09/13/25 10:05	Maryland

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Method Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195748-1

Method	Method Description	Protocol	Laboratory
537 IDA	EPA 537 Isotope Dilution	EPA	ELLE
SPE	PFAS by SPE	Lab SOP	ELLE

Protocol References:

EPA = US Environmental Protection Agency
Lab SOP = Laboratory Standard Operating Procedure

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Lab Chronicle

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195748-1

Client Sample ID: STR-01

Date Collected: 09/12/25 11:50

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195748-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			267.6 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA		1			706074	09/29/25 16:18	DSU6	ELLE
Instrument ID: 30638										

Client Sample ID: STR-02

Date Collected: 09/12/25 12:15

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195748-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			258.4 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA		1			704001	09/25/25 00:38	DSU6	ELLE
Instrument ID: 30728										
Total/NA	Prep	SPE	RA		258.4 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA	RA	1	1 uL	1 uL	704623	09/25/25 20:07	DSU6	ELLE
Instrument ID: 30731										
Total/NA	Prep	SPE	DL		258.4 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA	DL	10	1 uL	1 uL	704623	09/25/25 20:20	DSU6	ELLE
Instrument ID: 30731										

Client Sample ID: STR-03

Date Collected: 09/12/25 12:35

Date Received: 09/13/25 10:05

Lab Sample ID: 180-195748-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SPE			252.8 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA		1			704001	09/25/25 01:05	DSU6	ELLE
Instrument ID: 30728										
Total/NA	Prep	SPE	RA		252.8 mL	1 mL	703485	09/23/25 15:37	V3FW	ELLE
Total/NA	Analysis	537 IDA	RA	1	1 uL	1 uL	704623	09/25/25 20:47	DSU6	ELLE
Instrument ID: 30731										

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Analyst References:

Lab: ELLE

Batch Type: Prep

V3FW = Amber Mauger

Batch Type: Analysis

DSU6 = John Grossi

Eurofins Pittsburgh

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195748-1

Client Sample ID: STR-01

Lab Sample ID: 180-195748-1

Date Collected: 09/12/25 11:50

Matrix: Water

Date Received: 09/13/25 10:05

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/23/25 15:37	09/29/25 16:18	1
Perfluorobutanesulfonic acid (PFBS)	4.8		1.9	0.47	ng/L		09/23/25 15:37	09/29/25 16:18	1
Perfluorohexanesulfonic acid (PFHxS)	7.9		1.9	0.47	ng/L		09/23/25 15:37	09/29/25 16:18	1
Perfluorononanoic acid (PFNA)	0.59	J	1.9	0.47	ng/L		09/23/25 15:37	09/29/25 16:18	1
Perfluorooctanesulfonic acid (PFOS)	14		1.9	0.47	ng/L		09/23/25 15:37	09/29/25 16:18	1
Perfluorooctanoic acid (PFOA)	10		1.9	0.47	ng/L		09/23/25 15:37	09/29/25 16:18	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	120		26 - 161				09/23/25 15:37	09/29/25 16:18	1
13C3-PFBS	220	*5+	20 - 198				09/23/25 15:37	09/29/25 16:18	1
13C3-PFHxS	129		35 - 165				09/23/25 15:37	09/29/25 16:18	1
13C4-PFHpA	111		33 - 158				09/23/25 15:37	09/29/25 16:18	1
13C8-PFOA	109		35 - 146				09/23/25 15:37	09/29/25 16:18	1
13C8-PFOS	116		41 - 155				09/23/25 15:37	09/29/25 16:18	1
13C9-PFNA	111		37 - 157				09/23/25 15:37	09/29/25 16:18	1

Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195748-1

Client Sample ID: STR-02

Lab Sample ID: 180-195748-2

Date Collected: 09/12/25 12:15

Matrix: Water

Date Received: 09/13/25 10:05

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/23/25 15:37	09/25/25 00:38	1
Perfluorobutanesulfonic acid (PFBS)	38		1.9	0.48	ng/L		09/23/25 15:37	09/25/25 00:38	1
Perfluorohexanesulfonic acid (PFHxS)	150		1.9	0.48	ng/L		09/23/25 15:37	09/25/25 00:38	1
Perfluorononanoic acid (PFNA)	18		1.9	0.48	ng/L		09/23/25 15:37	09/25/25 00:38	1
Perfluorooctanesulfonic acid (PFOS)	160		1.9	0.48	ng/L		09/23/25 15:37	09/25/25 00:38	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	108		26 - 161				09/23/25 15:37	09/25/25 00:38	1
13C3-PFBS	293	*5+	20 - 198				09/23/25 15:37	09/25/25 00:38	1
13C3-PFHxS	110		35 - 165				09/23/25 15:37	09/25/25 00:38	1
13C4-PFHpa	93		33 - 158				09/23/25 15:37	09/25/25 00:38	1
13C8-PFOA	101		35 - 146				09/23/25 15:37	09/25/25 00:38	1
13C8-PFOS	105		41 - 155				09/23/25 15:37	09/25/25 00:38	1
13C9-PFNA	100		37 - 157				09/23/25 15:37	09/25/25 00:38	1

Method: EPA 537 IDA - EPA 537 Isotope Dilution - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	280		19	4.8	ng/L		09/23/25 15:37	09/25/25 20:20	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C8-PFOA	91		35 - 146				09/23/25 15:37	09/25/25 20:20	10

Method: EPA 537 IDA - EPA 537 Isotope Dilution - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		1.9	1.5	ng/L		09/23/25 15:37	09/25/25 20:07	1
Perfluorobutanesulfonic acid (PFBS)	38		1.9	0.48	ng/L		09/23/25 15:37	09/25/25 20:07	1
Perfluorohexanesulfonic acid (PFHxS)	140		1.9	0.48	ng/L		09/23/25 15:37	09/25/25 20:07	1
Perfluorononanoic acid (PFNA)	18		1.9	0.48	ng/L		09/23/25 15:37	09/25/25 20:07	1
Perfluorooctanesulfonic acid (PFOS)	150		1.9	0.48	ng/L		09/23/25 15:37	09/25/25 20:07	1
Perfluorooctanoic acid (PFOA)	290		1.9	0.48	ng/L		09/23/25 15:37	09/25/25 20:07	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	51		26 - 161				09/23/25 15:37	09/25/25 20:07	1
13C3-PFBS	258	*5+	20 - 198				09/23/25 15:37	09/25/25 20:07	1
13C3-PFHxS	93		35 - 165				09/23/25 15:37	09/25/25 20:07	1
13C4-PFHpa	76		33 - 158				09/23/25 15:37	09/25/25 20:07	1
13C8-PFOA	84		35 - 146				09/23/25 15:37	09/25/25 20:07	1
13C8-PFOS	93		41 - 155				09/23/25 15:37	09/25/25 20:07	1
13C9-PFNA	98		37 - 157				09/23/25 15:37	09/25/25 20:07	1

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Client Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195748-1

Client Sample ID: STR-03

Lab Sample ID: 180-195748-3

Date Collected: 09/12/25 12:35

Matrix: Water

Date Received: 09/13/25 10:05

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/23/25 15:37	09/25/25 01:05	1
Perfluorobutanesulfonic acid (PFBS)	22		2.0	0.49	ng/L		09/23/25 15:37	09/25/25 01:05	1
Perfluorohexanesulfonic acid (PFHxS)	68		2.0	0.49	ng/L		09/23/25 15:37	09/25/25 01:05	1
Perfluorononanoic acid (PFNA)	6.8		2.0	0.49	ng/L		09/23/25 15:37	09/25/25 01:05	1
Perfluorooctanesulfonic acid (PFOS)	62		2.0	0.49	ng/L		09/23/25 15:37	09/25/25 01:05	1
Perfluorooctanoic acid (PFOA)	120		2.0	0.49	ng/L		09/23/25 15:37	09/25/25 01:05	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	98		26 - 161				09/23/25 15:37	09/25/25 01:05	1
13C3-PFBS	234	*5+	20 - 198				09/23/25 15:37	09/25/25 01:05	1
13C3-PFHxS	98		35 - 165				09/23/25 15:37	09/25/25 01:05	1
13C4-PFHpA	90		33 - 158				09/23/25 15:37	09/25/25 01:05	1
13C8-PFOA	97		35 - 146				09/23/25 15:37	09/25/25 01:05	1
13C8-PFOS	98		41 - 155				09/23/25 15:37	09/25/25 01:05	1
13C9-PFNA	98		37 - 157				09/23/25 15:37	09/25/25 01:05	1

Method: EPA 537 IDA - EPA 537 Isotope Dilution - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/23/25 15:37	09/25/25 20:47	1
Perfluorobutanesulfonic acid (PFBS)	20		2.0	0.49	ng/L		09/23/25 15:37	09/25/25 20:47	1
Perfluorohexanesulfonic acid (PFHxS)	63		2.0	0.49	ng/L		09/23/25 15:37	09/25/25 20:47	1
Perfluorononanoic acid (PFNA)	7.1		2.0	0.49	ng/L		09/23/25 15:37	09/25/25 20:47	1
Perfluorooctanesulfonic acid (PFOS)	61		2.0	0.49	ng/L		09/23/25 15:37	09/25/25 20:47	1
Perfluorooctanoic acid (PFOA)	120		2.0	0.49	ng/L		09/23/25 15:37	09/25/25 20:47	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	53		26 - 161				09/23/25 15:37	09/25/25 20:47	1
13C3-PFBS	205	*5+	20 - 198				09/23/25 15:37	09/25/25 20:47	1
13C3-PFHxS	91		35 - 165				09/23/25 15:37	09/25/25 20:47	1
13C4-PFHpA	79		33 - 158				09/23/25 15:37	09/25/25 20:47	1
13C8-PFOA	85		35 - 146				09/23/25 15:37	09/25/25 20:47	1
13C8-PFOS	89		41 - 155				09/23/25 15:37	09/25/25 20:47	1
13C9-PFNA	95		37 - 157				09/23/25 15:37	09/25/25 20:47	1

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QC Sample Results

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195748-1

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 410-703485/1-A

Matrix: Water

Analysis Batch: 704001

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 703485

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		2.0	1.6	ng/L		09/23/25 15:37	09/24/25 22:08	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.50	ng/L		09/23/25 15:37	09/24/25 22:08	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.50	ng/L		09/23/25 15:37	09/24/25 22:08	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.50	ng/L		09/23/25 15:37	09/24/25 22:08	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.50	ng/L		09/23/25 15:37	09/24/25 22:08	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.50	ng/L		09/23/25 15:37	09/24/25 22:08	1
Isotope Dilution	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C3-HFPO-DA	99		26 - 161				09/23/25 15:37	09/24/25 22:08	1
13C3-PFBS	85		20 - 198				09/23/25 15:37	09/24/25 22:08	1
13C3-PFHxS	85		35 - 165				09/23/25 15:37	09/24/25 22:08	1
13C4-PFHpA	79		33 - 158				09/23/25 15:37	09/24/25 22:08	1
13C8-PFOA	82		35 - 146				09/23/25 15:37	09/24/25 22:08	1
13C8-PFOS	84		41 - 155				09/23/25 15:37	09/24/25 22:08	1
13C9-PFNA	81		37 - 157				09/23/25 15:37	09/24/25 22:08	1

Lab Sample ID: LCS 410-703485/2-A

Matrix: Water

Analysis Batch: 704001

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 703485

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	25.6	27.9		ng/L		109	50 - 132
Perfluorobutanesulfonic acid (PFBS)	22.7	26.9		ng/L		118	54 - 145
Perfluorohexanesulfonic acid (PFHxS)	23.3	25.6		ng/L		109	52 - 138
Perfluorononanoic acid (PFNA)	25.6	30.4		ng/L		119	52 - 143
Perfluorooctanesulfonic acid (PFOS)	23.8	25.6		ng/L		107	52 - 139
Perfluorooctanoic acid (PFOA)	25.6	29.6		ng/L		116	53 - 147
Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits				
13C3-HFPO-DA	121		26 - 161				
13C3-PFBS	97		20 - 198				
13C3-PFHxS	102		35 - 165				
13C4-PFHpA	92		33 - 158				
13C8-PFOA	91		35 - 146				
13C8-PFOS	100		41 - 155				
13C9-PFNA	90		37 - 157				

Eurofins Pittsburgh

QC Association Summary

Client: Geosyntec Consultants Inc
Project/Site: Ritchie Rubble LF Semi-Annual SW PFAS

Job ID: 180-195748-1

LCMS

Prep Batch: 703485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195748-1	STR-01	Total/NA	Water	SPE	
180-195748-2	STR-02	Total/NA	Water	SPE	
180-195748-2 - RA	STR-02	Total/NA	Water	SPE	
180-195748-2 - DL	STR-02	Total/NA	Water	SPE	
180-195748-3	STR-03	Total/NA	Water	SPE	
180-195748-3 - RA	STR-03	Total/NA	Water	SPE	
MB 410-703485/1-A	Method Blank	Total/NA	Water	SPE	
LCS 410-703485/2-A	Lab Control Sample	Total/NA	Water	SPE	

Analysis Batch: 704001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195748-2	STR-02	Total/NA	Water	537 IDA	703485
180-195748-3	STR-03	Total/NA	Water	537 IDA	703485
MB 410-703485/1-A	Method Blank	Total/NA	Water	537 IDA	703485
LCS 410-703485/2-A	Lab Control Sample	Total/NA	Water	537 IDA	703485

Analysis Batch: 704623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195748-2 - RA	STR-02	Total/NA	Water	537 IDA	703485
180-195748-2 - DL	STR-02	Total/NA	Water	537 IDA	703485
180-195748-3 - RA	STR-03	Total/NA	Water	537 IDA	703485

Analysis Batch: 706074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-195748-1	STR-01	Total/NA	Water	537 IDA	703485

Phone 412-963-7058 Fax 412-963-2468

Client Information					
Client Contact: Helen Girod					
Company Geosyntec Consultants Inc					
Address 10211 Wincopin Circle 4th Floor					
City Columbia					
State, Zip MD, 21044					
Phone 240-381-5010(Tel)					
Email HGirod@Geosyntec.com					
Project Name Ritchie Rubble Surface Water - PFAS					
Site Ritchie Rubble					
Due Date Requested:					
TAT Requested (days): Standard					
Compliance Project: Δ Yes X No					
PO # WO-ME1166K-5773					
WO #					
Project # 18015089					
SSOW#					
Sample Identification					
STR-01	Sample Date 9/12/25	Sample Time 1506	Sample Type (C=comp, G=grab) G	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air, DW=Drinking Water) Water	Preservation Code:
STR-02		1215	G	Water	
STR-03		1235	G	Water	
SW MS		820	G	Water	
SW MSD		805	G	Water	
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological					
Deliverable Requested I, II, III, IV, Other (specify)					
Empty Kit Relinquished by					
Relinquished by Landon Chase					
Date/Time 9/12/25 1505					
Relinquished by					
Date/Time					
Relinquished by					
Date/Time					
Custody Seals Intact. A Yes A No					
Custody Seal No					

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12
13

ORIGIN/D:BWIA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058
INV: REF: GEOSYNTEC
PO: DEPT:

SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 1030460/INET4535

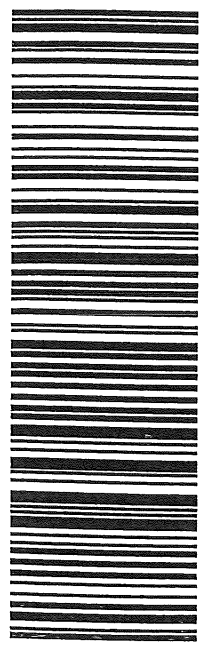
BILL RECIPIENT



Uncorrected temp: 1.00 °C
Thermometer ID: 20
CF-0.7 Initials: Red
PT-WI-SR-001 effective 11/8/18

4 of 4
SATURDAY 12:00
PRIORITY OVERNIGHT
0201
MPS# 8843 3509 6151
Mstr# 8843 3509 6129
PA-US PI

X0 AGCA



Part # 159469-434 MTW EXP 01/25

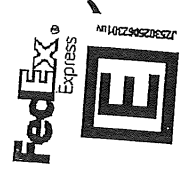
ORIGIN/D:BWIA (240) 814-1351
CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

(412) 963-7058
INV: REF: GEOSYNTEC
PO: DEPT:

SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 1030460/INET4535

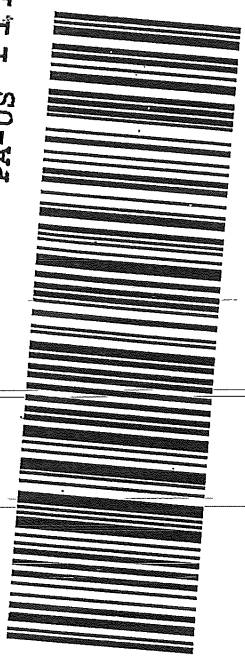
BILL RECIPIENT



Uncorrected temp: 1.00 °C
Thermometer ID: 20
CF-0.7 Initials: Red
PT-WI-SR-001 effective 11/8/18

2 of 4
SATURDAY 12:00
PRIORITY OVERNIGHT
0201
PS# 8843 3509 6130
str# 8843 3509 6129
PA-US PI

X0 AGCA



Part # 159469-434 MTW EXP 01/25

180-195748 Waybill

Part # 159469-434 MTW EXP 01/25

SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 1030460/INET4635

ORIGIN: BWA (240) 814-1351
CLIENT: CLINT WEAVER
EUROFINS TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEOSYNTEC
(412) 963-7058
INV: PO

DEPT:

FedEx
Express



Uncorrected temp: 20.0 °C
Thermometer ID: 20

CF: 0.7 Initials: RD

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

SATURDAY 12:00
PRIORITY OVERNIGHT

1 of 4

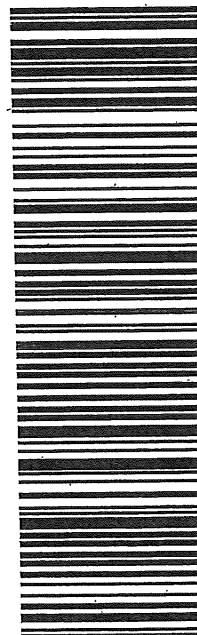
TRK# 8843 3509 6129

0263
MASTER #

15238

PA-US

X0 AGCA



SHIP DATE: 12SEP25
ACTWGT: 50.00 LB
CAD: 1030460/INET4635

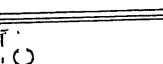
ORI: A (240) 814-1351
VER: EUR
CLIN: US TESTAMERICA
7526 CONNELLY DRIVE SUITE F
HANOVER, MD 21076
UNITED STATES US

TO SAMPLE RECEIVING
EUROFINS PITTSBURGH
301 ALPHA DRIVE
RIDC PARK
PITTSBURGH PA 15238

REF: GEOSYNTEC
(412) 963-7058
INV: PO

DEPT:

FedEx
Express



Uncorrected temp: 20.0 °C
Thermometer ID: 20

CF: 0.7 Initials: RD

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

SATURDAY 12:00
PRIORITY OVERNIGHT

3 of 4

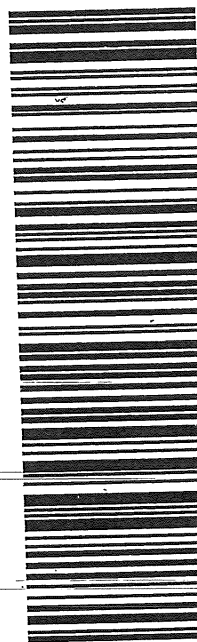
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15238

PA-US

X0 AGCA



15238-2907-01
PITTSBURGH, PA

4150 SAT 09/13 08:13

301 ALPHA DR

(639) 09/13-09/14

CLOSED - 600

ETP 1 CLPD 100 Y

9/30/2025

SF

Login Sample Receipt Checklist

Client: Geosyntec Consultants Inc

Job Number: 180-195748-1

Login Number: 195748

List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ 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	
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 $<6\text{mm}$ (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: 180-195748-1

Login Number: 195748

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

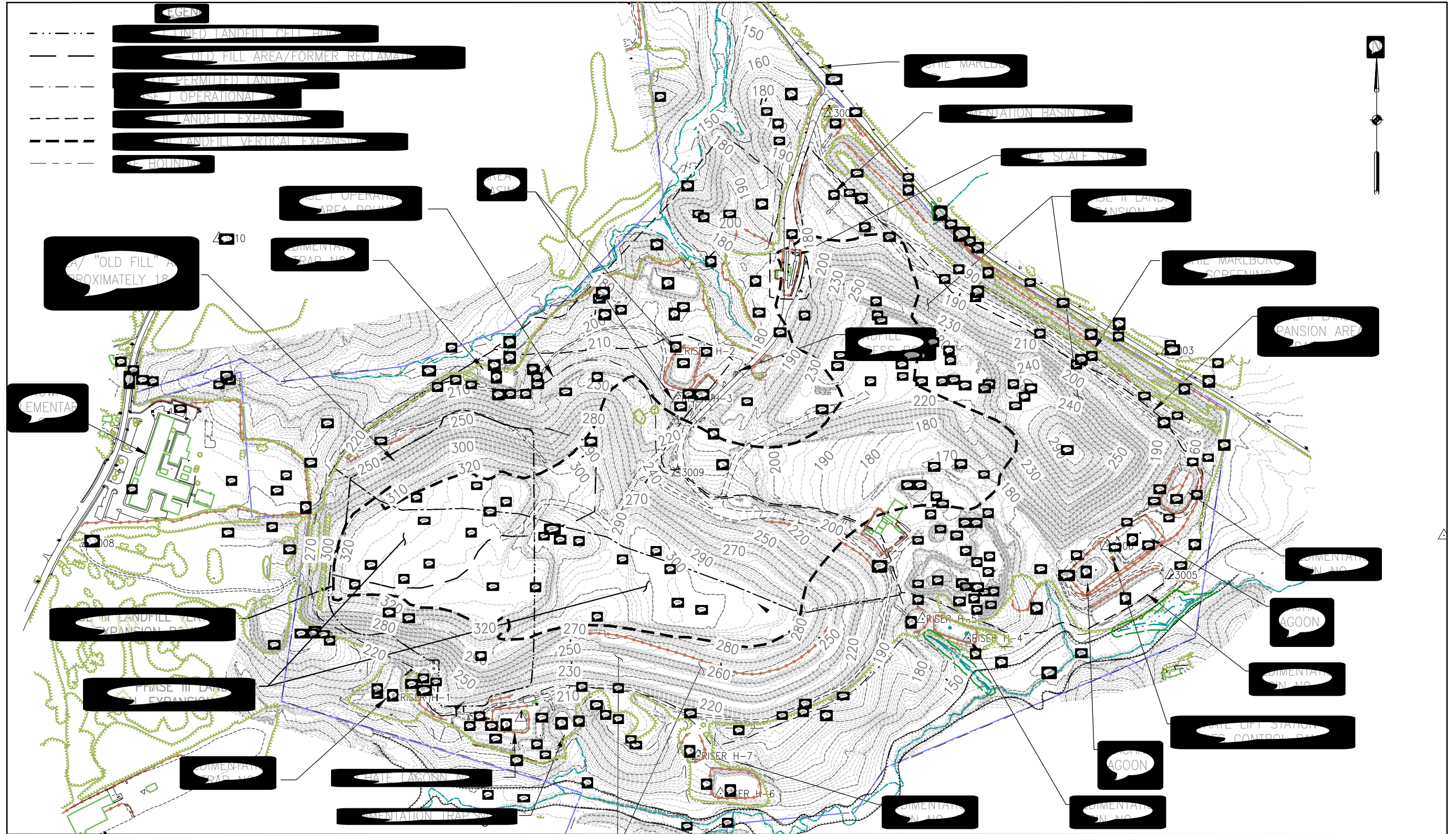
List Number: 2

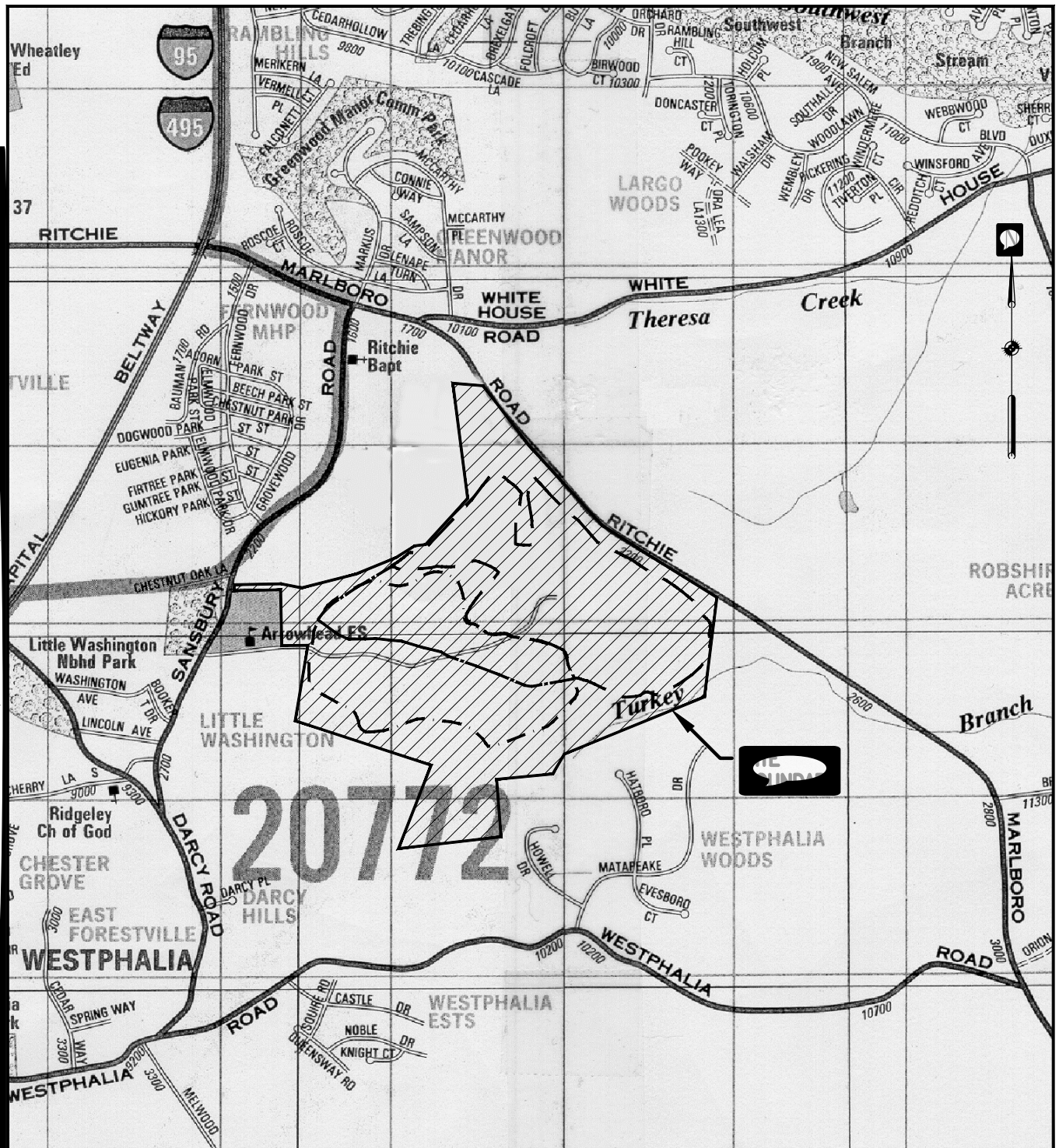
List Creation: 09/16/25 04:21 PM

Creator: Trzos, Hazel

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	

SITE MAP





SCALE: PRINCES GEORGES COUNTY									
 EA Engineering, Science, and Technology, Inc., PBC			 LAND RECLAMATION PART THE RUBBLE LAND IN VERTICAL EXPANSION CASE III REPT IN MARLBORO, MARY				 ONLY IN		
PROJECT NO.	SIGNED	DRAWN	CHECKED	DATE	PROJECT	DATE	PROJECT	DATE	SCALE
9A	S	JAL	MD/	10/5/	JULY/20	1/79	—		