Cortland County Soil and Water Conservation District
100 Grange Place, Room 202, Cortland, NY 13045
Phone: (607) 756-5991 Fax: (607) 756-0029
www.cortlandswcd.org

SWCD...established to promote the conservation and wise use of our county's natural resources

April 22, 2025

Stephanie Fitzgerald
NYSDEC - Division of Environmental Remediation
615 Erie Blvd. West
Syracuse, NY 13204-2400

Dear Ms. Fitzgerald:

Enclosed is the 2024 Quarter 3 Environmental Monitoring Report for Cortland County's Towslee Landfill, also known as the Old Cortland County Landfill. Please contact our office at (607) 756-5991 if you have any questions.

Please contact our office at (607) 756-5991 if you have any questions.

Sincerely,

Patrick Reidy
Water Quality Specialist

cc: Charles Sudbrink, Cortland County Highway Dept.
Amanda Barber, SWCD/File

Environmental Monitoring Report
Towslee Landfill, Cortland County, NY

Quarter 3 of 2024

Prepared for

Cortland County Highway Department

By

Cortland County Soil and Water Conservation District

April 22, 2025

TABLE OF CONTENTS

Section 1. Introduction

Towslee Landfill is approximately 36 acres in size, and is part of a larger solid waste disposal site of 540 acres owned by Cortland County in the Towns of Cortlandville and Solon. The Towslee Landfill has previously been called the Old County Landfill and the Town Line Landfill.
DEC requires environmental monitoring at the landfill. The monitoring follows the Post-Closure Monitoring and Site Maintenance Plan prepared by Barton & Loguidice, D.P.C (B&L) in October, 2002 and revised in June, 2006. Towslee Landfill is required to be monitored during Quarters 2, 3 and 4. Of these three quarters, one quarter is monitored for Baseline parameters and two quarters are monitored for Routine parameters. The Baseline quarter rotates among the three quarters.

This report summarizes Quarter 3 of 2024 (Routine) monitoring activities at the Towslee Landfill, including identification of contraventions of water quality standards, and an evaluation of water quality trends.

Additionally, a Corrective Measures Work Plan (CMWP) has been prepared by Barton & Loguidice, D.P.C. (B&L). The first round of monitoring under this plan was conducted in Quarter 2 of 2024.

The CMWP is intended to evaluate levels of cis-1,2-dichloroethene and vinyl chloride that have been observed in exceedance of NYSDEC groundwater quality standards at Well MW-2B. This well is located directly south, and downgradient, of Towslee Landfill.

Four additional wells are being monitored under the CMWP: two bedrock wells (D-1 and D-2), and two overburden wells (DO-2 and RE-4). All four wells are downgradient of MW-2B. The overburden wells are currently included in monitoring for the closed Pine Tree Landfill.

NOTE: The results for the CMWP are <u>not</u> specifically reported on in this document. They are being evaluated and reported on separately by B&L.

Section 2. Site History

Placement of waste at Towslee began in the 1940s by a private disposal company. In the 1960s, the site was leased to the City of Cortland for waste disposal. In 1972, Cortland County purchased the site and began landfill operations at Towslee Landfill. Towslee Landfill was open for disposal of municipal solid waste until 1987 and for construction and demolition debris until 1992.

A Remedial Investigation/Feasibility Study (RI/FS) was conducted for Cortland County by B&L in response to NYSDEC Order of Consent #B7-0486-12-95, effective May 31, 1996. The Towslee Landfill was classified by NYSDEC as a Class 2 Inactive Hazardous Waste Site. The Remedial Investigation was completed in March, 1998 and the Feasibility Study was completed in July, 1998.

DEC issued a Record of Decision (ROD) in March, 1999. Remedial activities at the landfill, which included landfill capping, were substantially completed in December 2001 and the Towslee Landfill was reclassified as a Class 4 Inactive Hazardous Waste Site, assigned site number 7-12-001.

The B&L Remedial Investigation concluded in 1997 that there was mild landfill leachate contamination of groundwater in the vicinity of Wells MW-2A/B and MW-7A. In addition, low-level leachate contamination was detected in the vicinity of Well MW-1A. Groundwater contamination occurred primarily in the overburden and extended downgradient of the site about 450 feet.

Section 3. Methods

3.1 Schedule

Quarter	Analysis	Date Sampled
1	-- Sampling not required --	
2	Routine	June 7, 10, 13, 27 of 2024
3	Routine	October 1, 2024
4	Baseline	Not yet conducted

3.2 Monitoring Locations

Groundwater: Thirteen wells are regularly monitored at Towslee Landfill:

	Bedrock	Overburden
Upgradient	CD-1RA	CD-1
Downgradient	MW-1B	MW-1A
	MW-2B	MW-2A
	MW-3A	MW-6A
	MW-3B	MW-7A
	MW-4A	
	MW-5A	
	MW-6B	

Combustible Gas: Testing for the presence of combustible gas (methane) is conducted associated with landfill monitoring. All of the wells and the scale house basement (ambient air) are monitored during Quarters 2-4.

3.3 Sampling and Analysis**:**

Water quality analyses were conducted in accordance with 1998 Part 360 regulations. Cortland County Soil and Water Conservation District staff conducted combustible gas monitoring and collected water samples and field parameter data. Eurofins TestAmerica Laboratories, Inc. (TestAmerica) performed all laboratory analyses for this quarter:

Eurofins TestAmerica Laboratories, Buffalo (NYELAP # 10026)
10 Hazelwood Drive
Amherst, NY 14228-2223

In this quarter, Routine parameters were sampled at all locations.

Field data sheets for this quarter can be found in Appendix A. The laboratory analytical reportis included in Appendix B.

Section 4. Groundwater Monitoring Results

4.1 Contraventions of Water Quality Standards

Groundwater data are compared to NYS water quality/drinking water standards to assess current conditions. Tables 1 and 2 summarize results for groundwater monitoring wells. Contraventions of NYS standards are highlighted. Table 3 lists the descriptions of Qualifiers reported in the laboratory reports.

pH - The pH water quality standard is contravened if below 6.5, or above 8.5. The pH standard was contravened for Wells MW-2A, MW-2B, MW-6A, MW-6B and MW-7A, (ranging from about 6.2 to 6.4).

Turbidity - Turbidity exceeded the NYS standard of 5 NTU at all wells, except MW-1B and MW-6B.

Total Dissolved Solids (TDS) - The TDS standard of 500 mg/L was exceeded at MW-2B (743 mg/L), MW-4A (503 mg/L) and MW-7A (524 mg/L).

Ammonia - The ammonia standard of 2 mg/L was exceeded at MW-2A (9.2 mg/L), consistent with past findings at this well.

Iron - The NYS standard for total iron is 0.3 mg/L, and is an aesthetic standard. This standard was exceeded at both upgradient wells CD-1 (3.3 mg/L) and CD-1RA (1.6 mg/L). It was also exceeded at 8 of the 11 downgradient wells (ranging from 0.33 to 51.5 mg/L). Iron frequently exceeds the standard at the Towslee Landfill. The elevated iron levels are believed to be caused at least in part by particulate in the unfiltered samples.

Manganese - The NYS standard for total manganese is 0.3 mg/L and is an aesthetic standard. The manganese standard was exceeded for total manganese at upgradient well CD-1 (1.9 mg/L) and

seven of the 11 downgradient wells, ranging from 1.5 to 11.2 mg/L. The manganese standard has frequently been exceeded in past monitoring, which may be caused in part by particulate in unfiltered samples.

Sodium - The NYS sodium guidelines for people on severely and moderately restricted sodium diets are 20 mg/L and 270 mg/L, respectively. The more restrictive diet guideline was exceeded for total sodium at four downgradient wells, MW-2B (40.6 mg/L), MW-6A (62.4 mg/L), MW-6B (41.0 mg/L) and MW-7A (62.7 mg/L).

Volatile organic compounds (VOCs) were not analyzed this quarter.

4.2 Water Quality Trends

Tabulated trend data are reported annually, during Quarter 4 reporting. However, a review of the Quarter 3 water quality data suggest that overall, groundwater quality surrounding the Towslee Landfill is fairly stable over time.

Section 5. Landfill Gas Testing

Landfill gas monitoring is conducted during Quarter 2 and Quarter 4, and was not conducted in this quarter.

Section 6. Quality Control

Independent data validation was not required during this quarter. Eurofins TestAmerica conducted standard internal QA/QC on the samples. We believe the analytical data are adequate to characterize Towslee Landfill groundwater quality for this quarter.

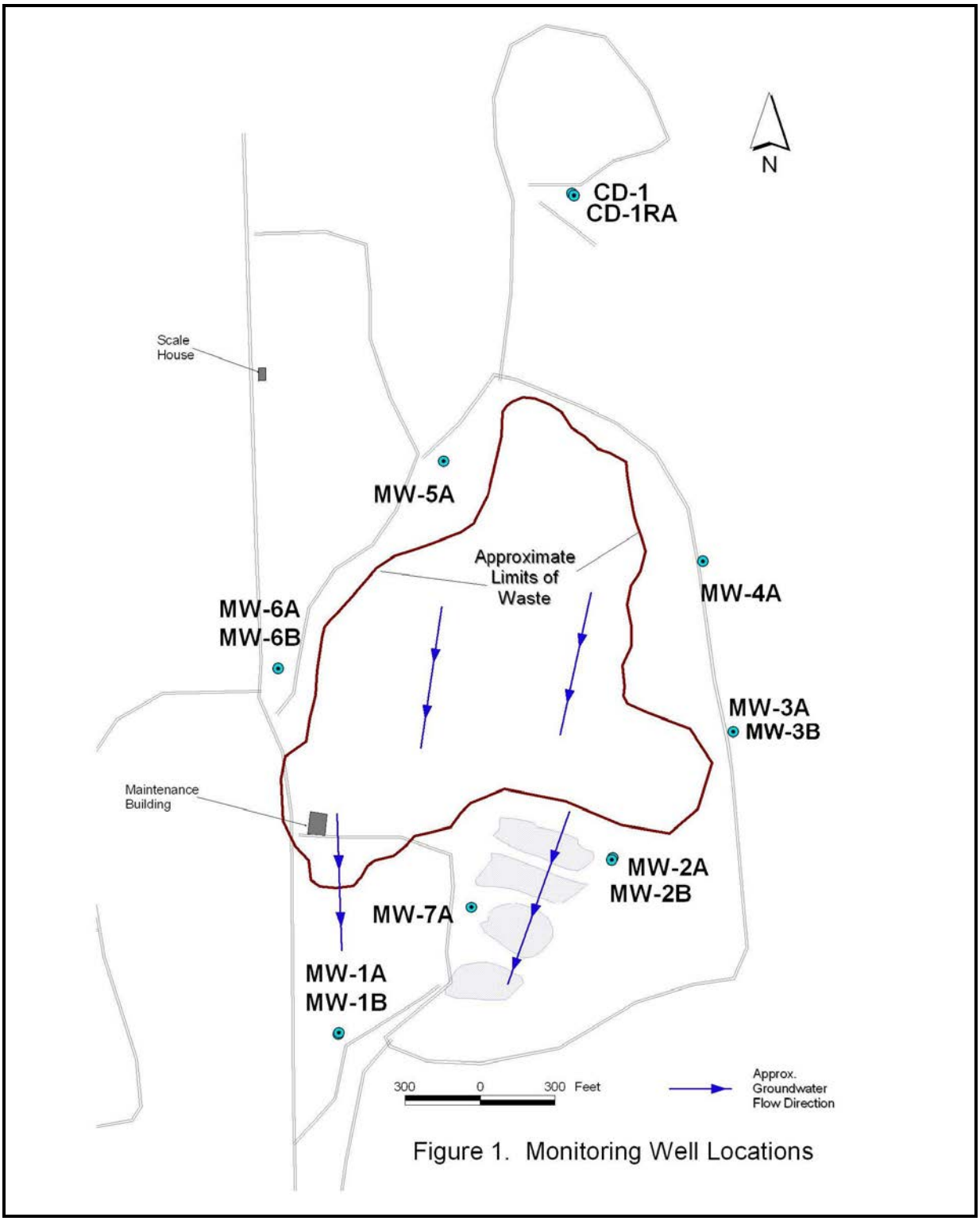

Figure 1. Monitoring Well Locations

Table1. Contraventions of NYS Water Quality Standards for Field and Inorganic Parameters

Towslee Landfill - Quarter 3 2024

Parameter	Units	NYS Water Quality Standard		Upgradient		Downgradient										
				OB	BR	OB	BR	OB	BR	BR	BR	BR	BR	OB	BR	OB
				CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Temperature	(°C)	--		12.6	13.4	15.7	14.7	14.2	13.8	12.7	11.9	12.4	14.2	12.6	11.6	15.2
Eh	(mV)	--		120	120	89.7	94.5	23.5	55.9	144	124	147	139	116.2	117.5	120.4
pH	log	6.5 - 8.5	a	6.77	6.83	6.83	6.82	6.3	6.2	6.66	6.67	6.62	6.8	6.19	6.23	6.38
Specific Conduct.	(uS/cm)	--		242	226	324.8	178.7	647	1027	271	272	700	255	584	403.6	744
Diss. Oxygen	(mg/l)	--		7.3	6	4.24	5.97	4.1	3.43	6	5.2	8	6.66	3.15	5.5	4.14
Color	(Units)	15	a, b	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	(NTU)	5	a	13.7	13.7	200	3.91	11.9	15.7	12.4	12.9	20.4	18.5	183	4.8	24.3
Alkalinity (as CaCO3)	(mg/l)	--		140	149	130	95.5	379	682	188	150	592	163	195	169	427
Hardness (as CaCO3)	(mg/l)	--		148	155	209	104	292	581	167	166	468	149	244	171	366
Total Diss. Solids	(mg/l)	500	a	161	179	225	135	388	743	195	196	503	180	404	290	524
Chloride	(mg/l)	250	a, b	4.7	< 1	34.1	6.3	23	87	2.7	19.6 F1	8.7	4.2	122	71.6	37.7
Sulfate	(mg/l)	250	a, b	11	14	13.4	6.6	< 5	< 5	8.2	8.6	< 5	11.3	11.2	12.3	15.8
Bromide	(mg/l)	2	a	< 0.2	< 0.2	< 0.2	< 0.2	< 0.4	0.9	< 0.2	0.26	< 0.4	< 0.2	< 0.2	< 0.2	0.48
NO_3	(mg/l)	10	a, b	0.071	0.11	0.14	< 0.05	2	< 0.05	< 0.05	< 0.05	< 0.05	0.071	0.34	0.15	0.076
NH_3	(mg/l)	2	a	0.084	0.066	0.1	0.13 F1	9.2	0.75	0.12	0.058	0.11	< 0.02 F1	0.18	0.13	0.15
TKN	(mg/l)	--		1.3	0.69 F1	1.1	0.59	8.8	0.99	0.56	0.35	1.5	0.31	2.1	0.23	0.69
COD	(mg/l)	--		< 10 F1	< 10	< 10	12.6	< 10	< 10	< 10	< 10	12.9	10.1	10.1	< 10	13.3
BOD	(mg/l)	--		< 2	< 2	< 2	< 2	9.4 b	2.1 b	< 2	< 2	2.7 b	< 2	2.5	< 2 b	5.1 b
TOC	(mg/l)	--		--	--	--	--	--	--	--	--	--	--	--	--	--
Phenolics, Total	(mg/l)	0.001	a	--	--	--	--	--	< 0.01*+^+	--	--	--	--	--	--	--
Cyanide	(mg/l)	0.2	a, b	--	--	--	--	--	--	--	--	--	--	--	--	--

a - Part 703 Water Quality Standard (Class GA waters)

b - Part 5 Drinking Water MCL

1.23 indicates contravention of standard.

OB = overburden well

BR = Bedrock well

See Table 3 for Qualifier description

Table 2. Contraventions of NYS Water Quality Standards for Metals (mg/l)

Towslee Landfill - Quarter 3 2024

Parameter	NYS Water Quality Standard		Total Metals												
			Upgradient		Downgradient										
			OB	BR	OB	BR	OB	BR	BR	BR	BR	BR	OB	BR	OB
			CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Aluminum	--		--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	0.003	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	0.025	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	1	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	0.004	b	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	1	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.005	a, b	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Calcium	--		44.1	45.8	57.4	30.8	86.6	175	50.2	45.6	139	41.2	70.1	50.3	108
Chromium	0.05	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrom, Hex	0.05	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--		--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	0.2	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	0.3	a, b	3.3	1.6	28.3	0.13	15.7	0.33	2.4	0.14	2.6	0.4	51.5	0.2	2.1
Lead	0.015	b	< 0.01	< 0.01	0.015	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.015	< 0.01	< 0.01
Magnesium	--		9.3	9.9	15.9	6.7	18.4	35.2	10.1	12.6	29.2	11.1	16.8	11	23.4
Manganese	0.3	a, b	1.9	0.21	1.5	0.21	11.2	4.3	0.31	0.051	8.3	0.19	4.9	0.07	2.1
Mercury	0.0007	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	0.1	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--		1.8	1.2	9.3	0.53	13.4	2.2	2.4	1.1	2.2	0.97	12.7	1.2	2
Sodium	20	a, b	4	5.4	12.6	7.6	14.8	40.6	6.1	8	19	9.1	62.4	41	62.7
Selenium	0.01	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	0.05	a	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	0.002	b	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--		--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	5	b	--	--	--	--	--	--	--	--	--	--	--	--	--

a - Part 703 Water Quality Standard (assumes Class GA)

b - Part 5 Drinking Water MCL

1.23 indicates contravention of standard.

OB = overburden well

BR = Bedrock well

Table 3. Description of Laboratory Qualifiers

Towslee Landfill - Quarter 3 2024

*+ LCS and/or LCSD is outside acceptance limits, high biased.

^+ Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.

b Result Detected in the Unseeded Control blank (USB).

F1 MS and/or MSD recovery exceeds control limits

Appendix A

Field Data Sheets

Sample Log / Field Observations

Landfill Name: Towslee - Monitoring Wells **Field Personnel:** P. Reidy **Agency Name:** Cortland SWCD

Date: 10/1/2024 **Weather:** Partly Sunny 70F **Sample Quarter:** Quarter 3 2024 **Sampling Method:** Dedicated Bailer

DTW = Depth to water, **DTB** = Well depth to bottom, **BTOC** = Below top of casing, **SW** = Surface water, **UD** = Underdrain water, **F or S** = Floaters or sinkers (LNAPL or DNAPL) present?, **GW** = Groundwater, **LC** = Leachate, **NA** = No data available

Sample ID	Well Diameter (inches)	Sample Matrix	DTW (ft) BTOC	DTB (ft) BTOC	Water Column Thickness (ft)	Purge Volume Goal (gal)	Total Volume Purged (gal)	Sample Time	Turbidity (NTU)	Temperature (°C)	DO (mg/L)	Conductivity (µmhos/cm)	pH (standard units)	ORP (mV)	F or S y/n?	Comments
CD-1	2	GW	12.5	24.3	11.8	6	6	10:25	13.7	12.6	7.3	242	6.77	120		
CD-1RA	2	GW	7.99	50.3	42.3	21	21	10:15	13.7	13.4	6	226	6.83	120		
MW-1A	2	GW	0.45	33.5	33.1	16.5	8*	11:50	200	15.7	4.24	324.8	6.83	89.7		Artesian, but below TOC
MW-1B	2	GW	0	55.5	55.5	27.8	27.8	12:00	3.91	14.7	5.97	178.7	6.82	94.5		Artesian
MW-2A	2	GW	8.52	12.5	4.0	2	2.2	11:20	11.9	14.2	4.1	647	6.3	23.5		
MW-2B	2	GW	11.46	33.0	21.5	10.8	6.5*	11:30	15.7	13.8	3.43	1027	6.2	55.9		
MW-3A	2	GW	11.15	22.0	10.9	5.5	2.6	10:40	12.4	12.7	6	271	6.66	144		
MW-3B	2	GW	16.65	44.0	27.4	11.7	5.2*	10:50	12.9	11.9	5.2	272	6.67	124		
MW-4A	2	GW	9.11	32.4	23.3	11.7	11.7	11:00	20.4	12.4	8	700	6.62	147		
MW-5A	2	GW	13.8	32.3	18.5	9.3	2.5*	10:00	18.5	14.2	6.66	255	6.8	139		
MW-6A	2	GW	15.2	18.6	3.4	1.7	1.7	9:40	183	12.6	3.15	584	6.19	116.2		
MW-6B	2	GW	14.45	40.3	25.9	12.9	8*	9:30	4.8	11.6	5.5	403.6	6.23	117.5		
MW-7A	2	GW	7.15	22.0	14.9	7.5	8	12:30	24.3	15.2	4.14	744	6.38	120.4		

Comments / Observations: *=purged dry

I certify that sampling procedures were in accordance with all applicable EPA, state and site-specific protocols.

Initials: _____ **Date:** _____

Appendix B

Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Patrick Reidy
Cortland Cty Soil & Water Cons District
100 Grange Place
Rm 202
Cortland, New York 13045

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JOB DESCRIPTION

Towslee Landfill - Routine Q3 2024
Towslee Landfill - Routine

JOB NUMBER

480-223887-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

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.

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 Environment Testing Northeast, LLC Project Manager.

Authorization

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Authorized for release by
Wyatt Watson, Project Management Assistant I
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Designee for
John Beninati, Project Manager I
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(716)504-9874

Table of Contents

Definitions/Glossary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Qualifiers

General Chemistry

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
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	Result Detected in the Unseeded Control blank (USB).
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

Job Narrative
480-223887-1

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 samples were received on 10/2/2024 11:00 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 2.5°C, 2.8°C, 3.1°C and 3.4°C.

GC/MS VOA
Method 8260C: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The sample was analyzed within the 7-day holding time specified for unpreserved samples: MW-2B (480-223887-6).

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 300.0_28D: The following samples were diluted due to the nature of the sample matrix: MW-2A (480-223887-5), MW-2B (480-223887-6), MW-4A (480-223887-9) and MW-7A (480-223887-13). Elevated reporting limits (RLs) are provided.

Method 420.4_NP: The laboratory control sample (LCS) and continuous control verification (CCV) for analytical batch 480-727121 recovered outside control limits for the following analytes Total Recoverable Phenolics. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.MW-2B (480-223887-6)

Method 420.4_NP: The method requirement for no headspace was not met. The following sample was analyzed with headspace in the sample container(s): MW-2B (480-223887-6).

Method SM4500_Cl_E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for the following sample associated with analytical batch 480-727181 were outside control limits: MW-3B (480-223887-8). The associated laboratory control sample (LCS) recovery met acceptance criteria.

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

Detection Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: CD-1 — Lab Sample ID: 480-223887-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	44.1		0.50		mg/L	1		6010C	Total/NA
Iron	3.3		0.050		mg/L	1		6010C	Total/NA
Magnesium	9.3		0.20		mg/L	1		6010C	Total/NA
Manganese	1.9		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.8		0.50		mg/L	1		6010C	Total/NA
Sodium	4.0		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	148		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	140		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.084		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	1.3		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.071		0.050		mg/L	1		353.2	Total/NA
Sulfate	11.0		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	161		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	4.7		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: CD-1RA — Lab Sample ID: 480-223887-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	45.8		0.50		mg/L	1		6010C	Total/NA
Iron	1.6		0.050		mg/L	1		6010C	Total/NA
Magnesium	9.9		0.20		mg/L	1		6010C	Total/NA
Manganese	0.21		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.2		0.50		mg/L	1		6010C	Total/NA
Sodium	5.4		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	155		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	149		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.066		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.69	F1	0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.11		0.050		mg/L	1		353.2	Total/NA
Sulfate	14.0		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	179		10.0		mg/L	1		SM 2540C	Total/NA

Client Sample ID: MW-1A — Lab Sample ID: 480-223887-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	57.4		0.50		mg/L	1		6010C	Total/NA
Iron	28.3		0.050		mg/L	1		6010C	Total/NA
Lead	0.015		0.010		mg/L	1		6010C	Total/NA
Magnesium	15.9		0.20		mg/L	1		6010C	Total/NA
Manganese	1.5		0.0030		mg/L	1		6010C	Total/NA
Potassium	9.3		0.50		mg/L	1		6010C	Total/NA
Sodium	12.6		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	209		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	130		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.10		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	1.1		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.14		0.050		mg/L	1		353.2	Total/NA
Sulfate	13.4		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	225		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	34.1		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-1B
Lab Sample ID: 480-223887-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	30.8		0.50		mg/L	1		6010C	Total/NA
Iron	0.13		0.050		mg/L	1		6010C	Total/NA
Magnesium	6.7		0.20		mg/L	1		6010C	Total/NA
Manganese	0.21		0.0030		mg/L	1		6010C	Total/NA
Potassium	0.53		0.50		mg/L	1		6010C	Total/NA
Sodium	7.6		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	104		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	95.5		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.13	F1	0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.59		0.20		mg/L	1		351.2	Total/NA
Chemical Oxygen Demand	12.6		10.0		mg/L	1		410.4	Total/NA
Sulfate	6.6		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	135		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	6.3		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-2A
Lab Sample ID: 480-223887-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	86.6		0.50		mg/L	1		6010C	Total/NA
Iron	15.7		0.050		mg/L	1		6010C	Total/NA
Magnesium	18.4		0.20		mg/L	1		6010C	Total/NA
Manganese	11.2		0.0030		mg/L	1		6010C	Total/NA
Potassium	13.4		0.50		mg/L	1		6010C	Total/NA
Sodium	14.8		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	292		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	379		50.0		mg/L	5		310.2	Total/NA
Ammonia	9.2		0.10		mg/L	5		350.1	Total/NA
Total Kjeldahl Nitrogen	8.8		1.0		mg/L	5		351.2	Total/NA
Nitrate as N	2.0		0.050		mg/L	1		353.2	Total/NA
Total Dissolved Solids	388		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	23.0		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	9.4	b	2.0		mg/L	1		SM 5210B	Total/NA

Client Sample ID: MW-2B
Lab Sample ID: 480-223887-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroethane	3.2		1.0		ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	44		1.0		ug/L	1		8260C	Total/NA
Methylene Chloride	7.8		1.0		ug/L	1		8260C	Total/NA
Vinyl chloride	10		1.0		ug/L	1		8260C	Total/NA
Calcium	175		0.50		mg/L	1		6010C	Total/NA
Iron	0.33		0.050		mg/L	1		6010C	Total/NA
Magnesium	35.2		0.20		mg/L	1		6010C	Total/NA
Manganese	4.3		0.0030		mg/L	1		6010C	Total/NA
Potassium	2.2		0.50		mg/L	1		6010C	Total/NA
Sodium	40.6		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	581		0.50		mg/L	1		SM 2340B	Total/NA
Bromide	0.90		0.40		mg/L	2		300.0	Total/NA
Alkalinity, Total	682		100		mg/L	10		310.2	Total/NA
Ammonia	0.75		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.99		0.20		mg/L	1		351.2	Total/NA
Total Dissolved Solids	743		10.0		mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: MW-2B (Continued)

Lab Sample ID: 480-223887-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	87.0		5.0		mg/L	5		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	2.1	b	2.0		mg/L	1		SM 5210B	Total/NA
TOC Result 1	5.2		1.0		mg/L	1		SM 5310C	Total/NA
TOC Result 2	3.8		1.0		mg/L	1		SM 5310C	Total/NA

Client Sample ID: MW-3A

Lab Sample ID: 480-223887-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	50.2		0.50		mg/L	1		6010C	Total/NA
Iron	2.4		0.050		mg/L	1		6010C	Total/NA
Magnesium	10.1		0.20		mg/L	1		6010C	Total/NA
Manganese	0.31		0.0030		mg/L	1		6010C	Total/NA
Potassium	2.4		0.50		mg/L	1		6010C	Total/NA
Sodium	6.1		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	167		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	188		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.12		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.56		0.20		mg/L	1		351.2	Total/NA
Sulfate	8.2		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	195		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	2.7		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-3B

Lab Sample ID: 480-223887-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	45.6		0.50		mg/L	1		6010C	Total/NA
Iron	0.14		0.050		mg/L	1		6010C	Total/NA
Magnesium	12.6		0.20		mg/L	1		6010C	Total/NA
Manganese	0.051		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.1		0.50		mg/L	1		6010C	Total/NA
Sodium	8.0		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	166		0.50		mg/L	1		SM 2340B	Total/NA
Bromide	0.26		0.20		mg/L	1		300.0	Total/NA
Alkalinity, Total	150		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.058		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.35		0.20		mg/L	1		351.2	Total/NA
Sulfate	8.6		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	196		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	19.6	F1	1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-4A

Lab Sample ID: 480-223887-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	139		0.50		mg/L	1		6010C	Total/NA
Iron	2.6		0.050		mg/L	1		6010C	Total/NA
Magnesium	29.2		0.20		mg/L	1		6010C	Total/NA
Manganese	8.3		0.0030		mg/L	1		6010C	Total/NA
Potassium	2.2		0.50		mg/L	1		6010C	Total/NA
Sodium	19.0		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	468		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	592		100		mg/L	10		310.2	Total/NA
Ammonia	0.11		0.020		mg/L	1		350.1	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-4A (Continued)
Lab Sample ID: 480-223887-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Kjeldahl Nitrogen	1.5		0.20		mg/L	1		351.2	Total/NA
Chemical Oxygen Demand	12.9		10.0		mg/L	1		410.4	Total/NA
Total Dissolved Solids	503		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	8.7		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	2.7	b	2.0		mg/L	1		SM 5210B	Total/NA

Client Sample ID: MW-5A
Lab Sample ID: 480-223887-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	41.2		0.50		mg/L	1		6010C	Total/NA
Iron	0.40		0.050		mg/L	1		6010C	Total/NA
Magnesium	11.1		0.20		mg/L	1		6010C	Total/NA
Manganese	0.19		0.0030		mg/L	1		6010C	Total/NA
Potassium	0.97		0.50		mg/L	1		6010C	Total/NA
Sodium	9.1		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	149		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	163		50.0		mg/L	5		310.2	Total/NA
Total Kjeldahl Nitrogen	0.31		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.071		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	10.1		10.0		mg/L	1		410.4	Total/NA
Sulfate	11.3		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	180		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	4.2		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-6A
Lab Sample ID: 480-223887-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	70.1		0.50		mg/L	1		6010C	Total/NA
Iron	51.5		0.050		mg/L	1		6010C	Total/NA
Lead	0.015		0.010		mg/L	1		6010C	Total/NA
Magnesium	16.8		0.20		mg/L	1		6010C	Total/NA
Manganese	4.9		0.0030		mg/L	1		6010C	Total/NA
Potassium	12.7		0.50		mg/L	1		6010C	Total/NA
Sodium	62.4		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	244		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	195		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.18		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	2.1		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.34		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	10.1		10.0		mg/L	1		410.4	Total/NA
Sulfate	11.2		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	404		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	122		5.0		mg/L	5		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	2.5	b	2.0		mg/L	1		SM 5210B	Total/NA

Client Sample ID: MW-6B
Lab Sample ID: 480-223887-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	50.3		0.50		mg/L	1		6010C	Total/NA
Iron	0.20		0.050		mg/L	1		6010C	Total/NA
Magnesium	11.0		0.20		mg/L	1		6010C	Total/NA
Manganese	0.070		0.0030		mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-6B (Continued)
Lab Sample ID: 480-223887-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1.2		0.50		mg/L	1		6010C	Total/NA
Sodium	41.0		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	171		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	169		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.13		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.23		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.15		0.050		mg/L	1		353.2	Total/NA
Sulfate	12.3		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	290		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	71.6		5.0		mg/L	5		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-7A
Lab Sample ID: 480-223887-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	108		0.50		mg/L	1		6010C	Total/NA
Iron	2.1		0.050		mg/L	1		6010C	Total/NA
Magnesium	23.4		0.20		mg/L	1		6010C	Total/NA
Manganese	2.1		0.0030		mg/L	1		6010C	Total/NA
Potassium	2.0		0.50		mg/L	1		6010C	Total/NA
Sodium	62.7		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	366		0.50		mg/L	1		SM 2340B	Total/NA
Bromide	0.48		0.40		mg/L	2		300.0	Total/NA
Alkalinity, Total	427		100		mg/L	10		310.2	Total/NA
Ammonia	0.15		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.69		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.076		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	13.3		10.0		mg/L	1		410.4	Total/NA
Sulfate	15.8		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	524		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	37.7		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	5.1	b	3.0		mg/L	1		SM 5210B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: CD-1
Lab Sample ID: 480-223887-1
Date Collected: 10/01/24 10:25
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:15	1
Calcium	**44.1**		0.50		mg/L		10/03/24 08:26	10/03/24 14:15	1
Iron	**3.3**		0.050		mg/L		10/03/24 08:26	10/03/24 14:15	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:15	1
Magnesium	**9.3**		0.20		mg/L		10/03/24 08:26	10/03/24 14:15	1
Manganese	**1.9**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:15	1
Potassium	**1.8**		0.50		mg/L		10/03/24 08:26	10/03/24 14:15	1
Sodium	**4.0**		1.0		mg/L		10/03/24 08:26	10/03/24 14:15	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	**148**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/02/24 22:02	1
Alkalinity, Total (EPA 310.2)	**140**		50.0		mg/L			10/04/24 10:23	5
Ammonia (EPA 350.1)	**0.084**		0.020		mg/L			10/03/24 14:01	1
Total Kjeldahl Nitrogen (EPA 351.2	**1.3**		0.20		mg/L		10/04/24 10:13	10/05/24 10:28	1
Nitrate as N (EPA 353.2)	**0.071**		0.050		mg/L			10/02/24 18:48	1
Chemical Oxygen Demand (EPA 410.4)	ND	F1	10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**11.0**		5.0		mg/L			10/05/24 11:42	1
Total Dissolved Solids (SM 2540C)	**161**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**4.7**		1.0		mg/L			10/04/24 15:43	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client Sample Results

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: CD-1RA
Date Collected: 10/01/24 10:15
Date Received: 10/02/24 11:00

Lab Sample ID: 480-223887-2
Matrix: Water

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:17	1
Calcium	**45.8**		0.50		mg/L		10/03/24 08:26	10/03/24 14:17	1
Iron	**1.6**		0.050		mg/L		10/03/24 08:26	10/03/24 14:17	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:17	1
Magnesium	**9.9**		0.20		mg/L		10/03/24 08:26	10/03/24 14:17	1
Manganese	**0.21**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:17	1
Potassium	**1.2**		0.50		mg/L		10/03/24 08:26	10/03/24 14:17	1
Sodium	**5.4**		1.0		mg/L		10/03/24 08:26	10/03/24 14:17	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	**155**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/02/24 22:16	1
Alkalinity, Total (EPA 310.2)	**149**		50.0		mg/L			10/04/24 10:25	5
Ammonia (EPA 350.1)	**0.066**		0.020		mg/L			10/03/24 14:01	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.69**	**F1**	0.20		mg/L		10/02/24 14:28	10/03/24 11:41	1
Nitrate as N (EPA 353.2)	**0.11**		0.050		mg/L			10/02/24 18:49	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**14.0**		5.0		mg/L			10/05/24 11:42	1
Total Dissolved Solids (SM 2540C)	**179**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	ND		1.0		mg/L			10/04/24 15:44	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client Sample Results

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-1A
Lab Sample ID: 480-223887-3
Date Collected: 10/01/24 11:50
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:27	1
Calcium	**57.4**		0.50		mg/L		10/03/24 08:26	10/03/24 14:27	1
Iron	**28.3**		0.050		mg/L		10/03/24 08:26	10/03/24 14:27	1
Lead	**0.015**		0.010		mg/L		10/03/24 08:26	10/03/24 14:27	1
Magnesium	**15.9**		0.20		mg/L		10/03/24 08:26	10/03/24 14:27	1
Manganese	**1.5**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:27	1
Potassium	**9.3**		0.50		mg/L		10/03/24 08:26	10/03/24 14:27	1
Sodium	**12.6**		1.0		mg/L		10/03/24 08:26	10/03/24 14:27	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	**209**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/02/24 22:31	1
Alkalinity, Total (EPA 310.2)	**130**		50.0		mg/L			10/04/24 10:25	5
Ammonia (EPA 350.1)	**0.10**		0.020		mg/L			10/03/24 14:03	1
Total Kjeldahl Nitrogen (EPA 351.2	**1.1**		0.20		mg/L		10/02/24 14:28	10/03/24 12:17	1
Nitrate as N (EPA 353.2)	**0.14**		0.050		mg/L			10/02/24 18:51	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**13.4**		5.0		mg/L			10/05/24 11:42	1
Total Dissolved Solids (SM 2540C)	**225**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**34.1**		1.0		mg/L			10/04/24 15:44	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client Sample Results

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-1B
Lab Sample ID: 480-223887-4
Date Collected: 10/01/24 11:30
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:34	1
Calcium	**30.8**		0.50		mg/L		10/03/24 08:26	10/03/24 14:34	1
Iron	**0.13**		0.050		mg/L		10/03/24 08:26	10/03/24 14:34	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:34	1
Magnesium	**6.7**		0.20		mg/L		10/03/24 08:26	10/03/24 14:34	1
Manganese	**0.21**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:34	1
Potassium	**0.53**		0.50		mg/L		10/03/24 08:26	10/03/24 14:34	1
Sodium	**7.6**		1.0		mg/L		10/03/24 08:26	10/03/24 14:34	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	**104**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/02/24 22:46	1
Alkalinity, Total (EPA 310.2)	**95.5**		50.0		mg/L			10/04/24 10:25	5
Ammonia (EPA 350.1)	**0.13**	**F1**	0.020		mg/L			10/03/24 14:05	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.59**		0.20		mg/L		10/02/24 14:28	10/03/24 12:18	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			10/02/24 18:52	1
Chemical Oxygen Demand (EPA 410.4)	**12.6**		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**6.6**		5.0		mg/L			10/05/24 11:44	1
Total Dissolved Solids (SM 2540C)	**135**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**6.3**		1.0		mg/L			10/04/24 15:44	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-2A
Lab Sample ID: 480-223887-5
Date Collected: 10/01/24 11:20
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:36	1
Calcium	**86.6**		0.50		mg/L		10/03/24 08:26	10/03/24 14:36	1
Iron	**15.7**		0.050		mg/L		10/03/24 08:26	10/03/24 14:36	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:36	1
Magnesium	**18.4**		0.20		mg/L		10/03/24 08:26	10/03/24 14:36	1
Manganese	**11.2**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:36	1
Potassium	**13.4**		0.50		mg/L		10/03/24 08:26	10/03/24 14:36	1
Sodium	**14.8**		1.0		mg/L		10/03/24 08:26	10/03/24 14:36	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	**292**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.40		mg/L			10/02/24 23:01	2
Alkalinity, Total (EPA 310.2)	**379**		50.0		mg/L			10/04/24 10:26	5
Ammonia (EPA 350.1)	**9.2**		0.10		mg/L			10/03/24 14:06	5
Total Kjeldahl Nitrogen (EPA 351.2	**8.8**		1.0		mg/L		10/02/24 14:28	10/03/24 12:55	5
Nitrate as N (EPA 353.2)	**2.0**		0.050		mg/L			10/02/24 18:53	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	ND		5.0		mg/L			10/05/24 11:44	1
Total Dissolved Solids (SM 2540C)	**388**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**23.0**		1.0		mg/L			10/04/24 17:05	1
Biochemical Oxygen Demand (SM 5210B)	**9.4**	**b**	2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-2B
Lab Sample ID: 480-223887-6
Date Collected: 10/01/24 12:00
Matrix: Water
Date Received: 10/02/24 11:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0		ug/L			10/04/24 13:55	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/04/24 13:55	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			10/04/24 13:55	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/04/24 13:55	1
1,1-Dichloroethane	ND		1.0		ug/L			10/04/24 13:55	1
1,1-Dichloroethene	ND		1.0		ug/L			10/04/24 13:55	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/04/24 13:55	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			10/04/24 13:55	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/04/24 13:55	1
1,2-Dichloroethane	ND		1.0		ug/L			10/04/24 13:55	1
1,2-Dichloropropane	ND		1.0		ug/L			10/04/24 13:55	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/04/24 13:55	1
2-Butanone (MEK)	ND		10		ug/L			10/04/24 13:55	1
2-Hexanone	ND		5.0		ug/L			10/04/24 13:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			10/04/24 13:55	1
Acetone	ND		10		ug/L			10/04/24 13:55	1
Acrylonitrile	ND		5.0		ug/L			10/04/24 13:55	1
Benzene	ND		1.0		ug/L			10/04/24 13:55	1
Chlorobromomethane	ND		1.0		ug/L			10/04/24 13:55	1
Bromodichloromethane	ND		1.0		ug/L			10/04/24 13:55	1
Bromoform	ND		1.0		ug/L			10/04/24 13:55	1
Bromomethane	ND		1.0		ug/L			10/04/24 13:55	1
Carbon disulfide	ND		1.0		ug/L			10/04/24 13:55	1
Carbon tetrachloride	ND		1.0		ug/L			10/04/24 13:55	1
Chlorobenzene	ND		1.0		ug/L			10/04/24 13:55	1
Dibromochloromethane	ND		1.0		ug/L			10/04/24 13:55	1
Chloroethane	**3.2**		1.0		ug/L			10/04/24 13:55	1
Chloroform	ND		1.0		ug/L			10/04/24 13:55	1
Chloromethane	ND		1.0		ug/L			10/04/24 13:55	1
cis-1,2-Dichloroethene	**44**		1.0		ug/L			10/04/24 13:55	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			10/04/24 13:55	1
Dibromomethane	ND		1.0		ug/L			10/04/24 13:55	1
Ethylbenzene	ND		1.0		ug/L			10/04/24 13:55	1
1,2-Dibromoethane	ND		1.0		ug/L			10/04/24 13:55	1
Iodomethane	ND		1.0		ug/L			10/04/24 13:55	1
Methylene Chloride	**7.8**		1.0		ug/L			10/04/24 13:55	1
Styrene	ND		1.0		ug/L			10/04/24 13:55	1
Tetrachloroethene	ND		1.0		ug/L			10/04/24 13:55	1
Trichlorofluoromethane	ND		1.0		ug/L			10/04/24 13:55	1
Trichloroethene	ND		1.0		ug/L			10/04/24 13:55	1
Toluene	ND		1.0		ug/L			10/04/24 13:55	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/04/24 13:55	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			10/04/24 13:55	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			10/04/24 13:55	1
Vinyl acetate	ND		5.0		ug/L			10/04/24 13:55	1
Vinyl chloride	**10**		1.0		ug/L			10/04/24 13:55	1
Xylenes, Total	ND		2.0		ug/L			10/04/24 13:55	1
m,p-Xylene	ND		2.0		ug/L			10/04/24 13:55	1
o-Xylene	ND		1.0		ug/L			10/04/24 13:55	1

Client: Cortland Cty Soil & Water Cons District
Project/Site: Towslee Landfill - Routine Q3 2024

Job ID: 480-223887-1

Client Sample ID: MW-2B

Date Collected: 10/01/24 12:00
Date Received: 10/02/24 11:00

Lab Sample ID: 480-223887-6

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*10/04/24 13:55*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/04/24 13:55*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*10/04/24 13:55*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:38	1
Calcium	**175**		0.50		mg/L		10/03/24 08:26	10/03/24 14:38	1
Iron	**0.33**		0.050		mg/L		10/03/24 08:26	10/03/24 14:38	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:38	1
Magnesium	**35.2**		0.20		mg/L		10/03/24 08:26	10/03/24 14:38	1
Manganese	**4.3**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:38	1
Potassium	**2.2**		0.50		mg/L		10/03/24 08:26	10/03/24 14:38	1
Sodium	**40.6**		1.0		mg/L		10/03/24 08:26	10/03/24 14:38	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	**581**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**0.90**		0.40		mg/L			10/03/24 00:14	2
Alkalinity, Total (EPA 310.2)	**682**		100		mg/L			10/04/24 12:14	10
Ammonia (EPA 350.1)	**0.75**		0.020		mg/L			10/03/24 14:08	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.99**		0.20		mg/L		10/02/24 14:28	10/03/24 12:20	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			10/02/24 18:53	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			10/03/24 11:53	1
Phenolics, Total Recoverable (EPA 420.4)	ND	*+ ^+	0.010		mg/L			10/04/24 11:28	1
Sulfate (SW846 9038)	ND		5.0		mg/L			10/05/24 11:44	1
Total Dissolved Solids (SM 2540C)	**743**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**87.0**		5.0		mg/L			10/04/24 15:46	5
Biochemical Oxygen Demand (SM 5210B)	**2.1**	**b**	2.0		mg/L			10/02/24 09:56	1
TOC Result 1 (SM 5310C)	**5.2**		1.0		mg/L			10/03/24 01:11	1
TOC Result 2 (SM 5310C)	**3.8**		1.0		mg/L			10/03/24 01:11	1

Client Sample Results

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-3A
Lab Sample ID: 480-223887-7
Date Collected: 10/01/24 10:40
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:40	1
Calcium	**50.2**		0.50		mg/L		10/03/24 08:26	10/03/24 14:40	1
Iron	**2.4**		0.050		mg/L		10/03/24 08:26	10/03/24 14:40	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:40	1
Magnesium	**10.1**		0.20		mg/L		10/03/24 08:26	10/03/24 14:40	1
Manganese	**0.31**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:40	1
Potassium	**2.4**		0.50		mg/L		10/03/24 08:26	10/03/24 14:40	1
Sodium	**6.1**		1.0		mg/L		10/03/24 08:26	10/03/24 14:40	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	**167**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/03/24 00:29	1
Alkalinity, Total (EPA 310.2)	**188**		50.0		mg/L			10/04/24 10:26	5
Ammonia (EPA 350.1)	**0.12**		0.020		mg/L			10/03/24 14:08	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.56**		0.20		mg/L		10/02/24 14:28	10/03/24 12:20	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			10/02/24 18:54	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**8.2**		5.0		mg/L			10/05/24 11:45	1
Total Dissolved Solids (SM 2540C)	**195**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**2.7**		1.0		mg/L			10/04/24 17:05	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-3B
Lab Sample ID: 480-223887-8
Date Collected: 10/01/24 10:50
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:42	1
Calcium	**45.6**		0.50		mg/L		10/03/24 08:26	10/03/24 14:42	1
Iron	**0.14**		0.050		mg/L		10/03/24 08:26	10/03/24 14:42	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:42	1
Magnesium	**12.6**		0.20		mg/L		10/03/24 08:26	10/03/24 14:42	1
Manganese	**0.051**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:42	1
Potassium	**1.1**		0.50		mg/L		10/03/24 08:26	10/03/24 14:42	1
Sodium	**8.0**		1.0		mg/L		10/03/24 08:26	10/03/24 14:42	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	**166**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**0.26**		0.20		mg/L			10/03/24 00:44	1
Alkalinity, Total (EPA 310.2)	**150**		50.0		mg/L			10/04/24 10:27	5
Ammonia (EPA 350.1)	**0.058**		0.020		mg/L			10/03/24 14:09	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.35**		0.20		mg/L		10/02/24 14:28	10/03/24 12:23	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			10/02/24 18:54	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			10/04/24 15:10	1
Sulfate (SW846 9038)	**8.6**		5.0		mg/L			10/05/24 11:50	1
Total Dissolved Solids (SM 2540C)	**196**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**19.6**	**F1**	1.0		mg/L			10/04/24 17:06	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-4A
Lab Sample ID: 480-223887-9
Date Collected: 10/01/24 11:00
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:44	1
Calcium	**139**		0.50		mg/L		10/03/24 08:26	10/03/24 14:44	1
Iron	**2.6**		0.050		mg/L		10/03/24 08:26	10/03/24 14:44	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:44	1
Magnesium	**29.2**		0.20		mg/L		10/03/24 08:26	10/03/24 14:44	1
Manganese	**8.3**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:44	1
Potassium	**2.2**		0.50		mg/L		10/03/24 08:26	10/03/24 14:44	1
Sodium	**19.0**		1.0		mg/L		10/03/24 08:26	10/03/24 14:44	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	**468**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.40		mg/L			10/03/24 00:59	2
Alkalinity, Total (EPA 310.2)	**592**		100		mg/L			10/04/24 12:14	10
Ammonia (EPA 350.1)	**0.11**		0.020		mg/L			10/03/24 14:10	1
Total Kjeldahl Nitrogen (EPA 351.2	**1.5**		0.20		mg/L		10/02/24 14:28	10/03/24 12:24	1
Nitrate as N (EPA 353.2)	ND		0.050		mg/L			10/02/24 18:55	1
Chemical Oxygen Demand (EPA 410.4)	**12.9**		10.0		mg/L			10/07/24 14:08	1
Sulfate (SW846 9038)	ND		5.0		mg/L			10/05/24 11:51	1
Total Dissolved Solids (SM 2540C)	**503**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**8.7**		1.0		mg/L			10/04/24 17:07	1
Biochemical Oxygen Demand (SM 5210B)	**2.7**	**b**	2.0		mg/L			10/02/24 09:56	1

Client Sample Results

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-5A
Lab Sample ID: 480-223887-10
Date Collected: 10/01/24 10:00
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:46	1
Calcium	**41.2**		0.50		mg/L		10/03/24 08:26	10/03/24 14:46	1
Iron	**0.40**		0.050		mg/L		10/03/24 08:26	10/03/24 14:46	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:46	1
Magnesium	**11.1**		0.20		mg/L		10/03/24 08:26	10/03/24 14:46	1
Manganese	**0.19**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:46	1
Potassium	**0.97**		0.50		mg/L		10/03/24 08:26	10/03/24 14:46	1
Sodium	**9.1**		1.0		mg/L		10/03/24 08:26	10/03/24 14:46	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	**149**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/03/24 01:13	1
Alkalinity, Total (EPA 310.2)	**163**		50.0		mg/L			10/04/24 12:47	5
Ammonia (EPA 350.1)	ND	F1	0.020		mg/L			10/03/24 14:13	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.31**		0.20		mg/L		10/02/24 14:28	10/03/24 12:24	1
Nitrate as N (EPA 353.2)	**0.071**		0.050		mg/L			10/02/24 18:56	1
Chemical Oxygen Demand (EPA 410.4)	**10.1**		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**11.3**		5.0		mg/L			10/05/24 11:52	1
Total Dissolved Solids (SM 2540C)	**180**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**4.2**		1.0		mg/L			10/04/24 17:08	1
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-6A
Lab Sample ID: 480-223887-11
Date Collected: 10/01/24 09:40
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:47	1
Calcium	**70.1**		0.50		mg/L		10/03/24 08:26	10/03/24 14:47	1
Iron	**51.5**		0.050		mg/L		10/03/24 08:26	10/03/24 14:47	1
Lead	**0.015**		0.010		mg/L		10/03/24 08:26	10/03/24 14:47	1
Magnesium	**16.8**		0.20		mg/L		10/03/24 08:26	10/03/24 14:47	1
Manganese	**4.9**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:47	1
Potassium	**12.7**		0.50		mg/L		10/03/24 08:26	10/03/24 14:47	1
Sodium	**62.4**		1.0		mg/L		10/03/24 08:26	10/03/24 14:47	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	**244**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/03/24 01:28	1
Alkalinity, Total (EPA 310.2)	**195**		50.0		mg/L			10/04/24 12:48	5
Ammonia (EPA 350.1)	**0.18**		0.020		mg/L			10/03/24 14:16	1
Total Kjeldahl Nitrogen (EPA 351.2	**2.1**		0.20		mg/L		10/02/24 14:28	10/03/24 12:25	1
Nitrate as N (EPA 353.2)	**0.34**		0.050		mg/L			10/02/24 18:56	1
Chemical Oxygen Demand (EPA 410.4)	**10.1**		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**11.2**		5.0		mg/L			10/05/24 11:52	1
Total Dissolved Solids (SM 2540C)	**404**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**122**		5.0		mg/L			10/04/24 15:54	5
Biochemical Oxygen Demand (SM 5210B)	**2.5**	**b**	2.0		mg/L			10/02/24 09:56	1

Client Sample Results

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-6B
Lab Sample ID: 480-223887-12
Date Collected: 10/01/24 09:30
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:49	1
Calcium	**50.3**		0.50		mg/L		10/03/24 08:26	10/03/24 14:49	1
Iron	**0.20**		0.050		mg/L		10/03/24 08:26	10/03/24 14:49	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:49	1
Magnesium	**11.0**		0.20		mg/L		10/03/24 08:26	10/03/24 14:49	1
Manganese	**0.070**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:49	1
Potassium	**1.2**		0.50		mg/L		10/03/24 08:26	10/03/24 14:49	1
Sodium	**41.0**		1.0		mg/L		10/03/24 08:26	10/03/24 14:49	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	**171**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	ND		0.20		mg/L			10/03/24 01:43	1
Alkalinity, Total (EPA 310.2)	**169**		50.0		mg/L			10/04/24 12:48	5
Ammonia (EPA 350.1)	**0.13**		0.020		mg/L			10/03/24 14:17	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.23**		0.20		mg/L		10/02/24 14:28	10/03/24 12:26	1
Nitrate as N (EPA 353.2)	**0.15**		0.050		mg/L			10/02/24 18:57	1
Chemical Oxygen Demand (EPA 410.4)	ND		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**12.3**		5.0		mg/L			10/05/24 11:53	1
Total Dissolved Solids (SM 2540C)	**290**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**71.6**		5.0		mg/L			10/04/24 15:54	5
Biochemical Oxygen Demand (SM 5210B)	ND		2.0		mg/L			10/02/24 09:56	1

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-7A
Lab Sample ID: 480-223887-13
Date Collected: 10/01/24 12:30
Matrix: Water
Date Received: 10/02/24 11:00

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:57	1
Calcium	**108**		0.50		mg/L		10/03/24 08:26	10/03/24 14:57	1
Iron	**2.1**		0.050		mg/L		10/03/24 08:26	10/03/24 14:57	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:57	1
Magnesium	**23.4**		0.20		mg/L		10/03/24 08:26	10/03/24 14:57	1
Manganese	**2.1**		0.0030		mg/L		10/03/24 08:26	10/03/24 14:57	1
Potassium	**2.0**		0.50		mg/L		10/03/24 08:26	10/03/24 14:57	1
Sodium	**62.7**		1.0		mg/L		10/03/24 08:26	10/03/24 14:57	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	**366**		0.50		mg/L			10/04/24 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide (EPA 300.0)	**0.48**		0.40		mg/L			10/03/24 01:58	2
Alkalinity, Total (EPA 310.2)	**427**		100		mg/L			10/04/24 12:48	10
Ammonia (EPA 350.1)	**0.15**		0.020		mg/L			10/03/24 14:18	1
Total Kjeldahl Nitrogen (EPA 351.2	**0.69**		0.20		mg/L		10/02/24 14:28	10/03/24 12:27	1
Nitrate as N (EPA 353.2)	**0.076**		0.050		mg/L			10/02/24 18:57	1
Chemical Oxygen Demand (EPA 410.4)	**13.3**		10.0		mg/L			10/03/24 11:53	1
Sulfate (SW846 9038)	**15.8**		5.0		mg/L			10/05/24 11:53	1
Total Dissolved Solids (SM 2540C)	**524**		10.0		mg/L			10/02/24 14:07	1
Chloride (SM 4500 Cl- E)	**37.7**		1.0		mg/L			10/04/24 17:08	1
Biochemical Oxygen Demand (SM 5210B)	**5.1**	**b**	3.0		mg/L			10/02/24 09:56	1

Surrogate Summary

Client: Cortland Cty Soil & Water Cons District
Project/Site: Towslee Landfill - Routine Q3 2024

Job ID: 480-223887-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	TOL	BFB
Lab Sample ID	Client Sample ID	(77-120)	(80-120)	(73-120)
480-223887-6	MW-2B	96	99	104
LCS 480-727065/6	Lab Control Sample	95	94	100
MB 480-727065/8	Method Blank	97	95	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

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

Lab Sample ID: MB 480-727065/8
Matrix: Water
Analysis Batch: 727065

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		1.0		ug/L			10/04/24 10:56	1
1,1,1-Trichloroethane	ND		1.0		ug/L			10/04/24 10:56	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			10/04/24 10:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			10/04/24 10:56	1
1,1-Dichloroethane	ND		1.0		ug/L			10/04/24 10:56	1
1,1-Dichloroethene	ND		1.0		ug/L			10/04/24 10:56	1
1,2,3-Trichloropropane	ND		1.0		ug/L			10/04/24 10:56	1
1,2-Dibromo-3-Chloropropane	ND		1.0		ug/L			10/04/24 10:56	1
1,2-Dichlorobenzene	ND		1.0		ug/L			10/04/24 10:56	1
1,2-Dichloroethane	ND		1.0		ug/L			10/04/24 10:56	1
1,2-Dichloropropane	ND		1.0		ug/L			10/04/24 10:56	1
1,4-Dichlorobenzene	ND		1.0		ug/L			10/04/24 10:56	1
2-Butanone (MEK)	ND		10		ug/L			10/04/24 10:56	1
2-Hexanone	ND		5.0		ug/L			10/04/24 10:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0		ug/L			10/04/24 10:56	1
Acetone	ND		10		ug/L			10/04/24 10:56	1
Acrylonitrile	ND		5.0		ug/L			10/04/24 10:56	1
Benzene	ND		1.0		ug/L			10/04/24 10:56	1
Chlorobromomethane	ND		1.0		ug/L			10/04/24 10:56	1
Bromodichloromethane	ND		1.0		ug/L			10/04/24 10:56	1
Bromoform	ND		1.0		ug/L			10/04/24 10:56	1
Bromomethane	ND		1.0		ug/L			10/04/24 10:56	1
Carbon disulfide	ND		1.0		ug/L			10/04/24 10:56	1
Carbon tetrachloride	ND		1.0		ug/L			10/04/24 10:56	1
Chlorobenzene	ND		1.0		ug/L			10/04/24 10:56	1
Dibromochloromethane	ND		1.0		ug/L			10/04/24 10:56	1
Chloroethane	ND		1.0		ug/L			10/04/24 10:56	1
Chloroform	ND		1.0		ug/L			10/04/24 10:56	1
Chloromethane	ND		1.0		ug/L			10/04/24 10:56	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			10/04/24 10:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			10/04/24 10:56	1
Dibromomethane	ND		1.0		ug/L			10/04/24 10:56	1
Ethylbenzene	ND		1.0		ug/L			10/04/24 10:56	1
1,2-Dibromoethane	ND		1.0		ug/L			10/04/24 10:56	1
Iodomethane	ND		1.0		ug/L			10/04/24 10:56	1
Methylene Chloride	ND		1.0		ug/L			10/04/24 10:56	1
Styrene	ND		1.0		ug/L			10/04/24 10:56	1
Tetrachloroethene	ND		1.0		ug/L			10/04/24 10:56	1
Trichlorofluoromethane	ND		1.0		ug/L			10/04/24 10:56	1
Trichloroethene	ND		1.0		ug/L			10/04/24 10:56	1
Toluene	ND		1.0		ug/L			10/04/24 10:56	1
trans-1,2-Dichloroethene	ND		1.0		ug/L			10/04/24 10:56	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			10/04/24 10:56	1
trans-1,4-Dichloro-2-butene	ND		1.0		ug/L			10/04/24 10:56	1
Vinyl acetate	ND		5.0		ug/L			10/04/24 10:56	1
Vinyl chloride	ND		1.0		ug/L			10/04/24 10:56	1
Xylenes, Total	ND		2.0		ug/L			10/04/24 10:56	1
m,p-Xylene	ND		2.0		ug/L			10/04/24 10:56	1

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

Lab Sample ID: MB 480-727065/8
Matrix: Water
Analysis Batch: 727065

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		1.0		ug/L			10/04/24 10:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*10/04/24 10:56*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/04/24 10:56*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*10/04/24 10:56*	*1*

Lab Sample ID: LCS 480-727065/6
Matrix: Water
Analysis Batch: 727065

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	25.0	28.4		ug/L		114	80 - 120
1,1,1-Trichloroethane	25.0	30.3		ug/L		121	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.6		ug/L		102	76 - 120
1,1,2-Trichloroethane	25.0	25.6		ug/L		102	76 - 122
1,1-Dichloroethane	25.0	27.4		ug/L		109	77 - 120
1,1-Dichloroethene	25.0	29.3		ug/L		117	66 - 127
1,2,3-Trichloropropane	25.0	24.7		ug/L		99	68 - 122
1,2-Dibromo-3-Chloropropane	25.0	26.1		ug/L		104	56 - 134
1,2-Dichlorobenzene	25.0	27.3		ug/L		109	80 - 124
1,2-Dichloroethane	25.0	26.0		ug/L		104	75 - 120
1,2-Dichloropropane	25.0	27.2		ug/L		109	76 - 120
1,4-Dichlorobenzene	25.0	26.7		ug/L		107	80 - 120
2-Butanone (MEK)	125	126		ug/L		101	57 - 140
2-Hexanone	125	125		ug/L		100	65 - 127
4-Methyl-2-pentanone (MIBK)	125	131		ug/L		105	71 - 125
Acetone	125	137		ug/L		109	56 - 142
Acrylonitrile	250	251		ug/L		100	63 - 125
Benzene	25.0	27.4		ug/L		109	71 - 124
Chlorobromomethane	25.0	26.8		ug/L		107	72 - 130
Bromodichloromethane	25.0	25.7		ug/L		103	80 - 122
Bromoform	25.0	24.3		ug/L		97	61 - 132
Bromomethane	25.0	25.7		ug/L		103	55 - 144
Carbon disulfide	25.0	29.7		ug/L		119	59 - 134
Carbon tetrachloride	25.0	30.6		ug/L		122	72 - 134
Chlorobenzene	25.0	26.5		ug/L		106	80 - 120
Dibromochloromethane	25.0	25.8		ug/L		103	75 - 125
Chloroethane	25.0	25.7		ug/L		103	69 - 136
Chloroform	25.0	24.7		ug/L		99	73 - 127
Chloromethane	25.0	25.0		ug/L		100	68 - 124
cis-1,2-Dichloroethene	25.0	29.3		ug/L		117	74 - 124
cis-1,3-Dichloropropene	25.0	25.4		ug/L		102	74 - 124
Dibromomethane	25.0	26.0		ug/L		104	76 - 127
Ethylbenzene	25.0	27.8		ug/L		111	77 - 123
1,2-Dibromoethane	25.0	26.7		ug/L		107	77 - 120
Iodomethane	25.0	28.9		ug/L		116	78 - 123
Methylene Chloride	25.0	27.2		ug/L		109	75 - 124

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

Lab Sample ID: LCS 480-727065/6
Matrix: Water
Analysis Batch: 727065

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Styrene	25.0	27.3		ug/L		109	80 - 120
Tetrachloroethene	25.0	28.6		ug/L		114	74 - 122
Trichlorofluoromethane	25.0	29.0		ug/L		116	62 - 150
Trichloroethene	25.0	27.1		ug/L		108	74 - 123
Toluene	25.0	26.8		ug/L		107	80 - 122
trans-1,2-Dichloroethene	25.0	29.0		ug/L		116	73 - 127
trans-1,3-Dichloropropene	25.0	26.1		ug/L		105	80 - 120
trans-1,4-Dichloro-2-butene	25.0	22.0		ug/L		88	41 - 131
Vinyl acetate	50.0	51.6		ug/L		103	50 - 144
Vinyl chloride	25.0	27.1		ug/L		108	65 - 133
m,p-Xylene	25.0	28.2		ug/L		113	76 - 122
o-Xylene	25.0	28.0		ug/L		112	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*
Toluene-d8 (Surr)	*94*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-726889/1-A
Matrix: Water
Analysis Batch: 727045

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 726889

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		10/03/24 08:26	10/03/24 14:11	1
Calcium	ND		0.50		mg/L		10/03/24 08:26	10/03/24 14:11	1
Iron	ND		0.050		mg/L		10/03/24 08:26	10/03/24 14:11	1
Lead	ND		0.010		mg/L		10/03/24 08:26	10/03/24 14:11	1
Magnesium	ND		0.20		mg/L		10/03/24 08:26	10/03/24 14:11	1
Potassium	ND		0.50		mg/L		10/03/24 08:26	10/03/24 14:11	1
Sodium	ND		1.0		mg/L		10/03/24 08:26	10/03/24 14:11	1

Lab Sample ID: MB 480-726889/1-A
Matrix: Water
Analysis Batch: 727116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 726889

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		0.0030		mg/L		10/03/24 08:26	10/04/24 10:57	1

Lab Sample ID: LCS 480-726889/2-A
Matrix: Water
Analysis Batch: 727045

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 726889

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	0.500	0.504		mg/L		101	80 - 120
Calcium	25.0	25.66		mg/L		103	80 - 120
Iron	5.10	5.81		mg/L		114	80 - 120
Lead	0.500	0.520		mg/L		104	80 - 120

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

Lab Sample ID: LCS 480-726889/2-A
Matrix: Water
Analysis Batch: 727045

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 726889

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	25.0	24.55		mg/L		98	80 - 120
Manganese	0.500	0.513		mg/L		103	80 - 120
Potassium	25.0	25.43		mg/L		102	80 - 120
Sodium	25.0	25.79		mg/L		103	80 - 120

Lab Sample ID: 480-223887-2 MS
Matrix: Water
Analysis Batch: 727045

Client Sample ID: CD-1RA
Prep Type: Total/NA
Prep Batch: 726889

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	ND		0.500	0.493		mg/L		99	75 - 125
Calcium	45.8		25.0	71.20		mg/L		102	75 - 125
Iron	1.6		5.10	7.22		mg/L		110	75 - 125
Lead	ND		0.500	0.508		mg/L		102	75 - 125
Magnesium	9.9		25.0	34.52		mg/L		98	75 - 125
Manganese	0.21		0.500	0.706		mg/L		99	75 - 125
Potassium	1.2		25.0	26.37		mg/L		101	75 - 125
Sodium	5.4		25.0	30.78		mg/L		102	75 - 125

Lab Sample ID: 480-223887-2 MSD
Matrix: Water
Analysis Batch: 727045

Client Sample ID: CD-1RA
Prep Type: Total/NA
Prep Batch: 726889

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cadmium	ND		0.500	0.486		mg/L		97	75 - 125	1	20
Calcium	45.8		25.0	70.18		mg/L		98	75 - 125	1	20
Iron	1.6		5.10	7.06		mg/L		107	75 - 125	2	20
Lead	ND		0.500	0.500		mg/L		100	75 - 125	2	20
Magnesium	9.9		25.0	33.79		mg/L		96	75 - 125	2	20
Manganese	0.21		0.500	0.696		mg/L		97	75 - 125	1	20
Potassium	1.2		25.0	25.64		mg/L		98	75 - 125	3	20
Sodium	5.4		25.0	30.01		mg/L		99	75 - 125	3	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-726882/28
Matrix: Water
Analysis Batch: 726882

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			10/02/24 21:17	1

Lab Sample ID: LCS 480-726882/29
Matrix: Water
Analysis Batch: 726882

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bromide	5.01	5.06		mg/L		101	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 480-223887-5 MS
Matrix: Water
Analysis Batch: 726882

Client Sample ID: MW-2A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Bromide	ND		10.0	10.18		mg/L		99	80 - 120		

Lab Sample ID: 480-223887-5 MSD
Matrix: Water
Analysis Batch: 726882

Client Sample ID: MW-2A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bromide	ND		10.0	9.88		mg/L		96	80 - 120	3	15

Method: 310.2 - Alkalinity

Lab Sample ID: MB 480-727180/12
Matrix: Water
Analysis Batch: 727180

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			10/04/24 10:15	1

Lab Sample ID: MB 480-727180/20
Matrix: Water
Analysis Batch: 727180

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			10/04/24 10:24	1

Lab Sample ID: MB 480-727180/70
Matrix: Water
Analysis Batch: 727180

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			10/04/24 11:39	1

Lab Sample ID: MB 480-727180/81
Matrix: Water
Analysis Batch: 727180

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			10/04/24 12:13	1

Lab Sample ID: MB 480-727180/89
Matrix: Water
Analysis Batch: 727180

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			10/04/24 12:47	1

Method: 310.2 - Alkalinity (Continued)

Lab Sample ID: LCS 480-727180/11
Matrix: Water
Analysis Batch: 727180

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	50.0	51.93		mg/L		104	90 - 110

Lab Sample ID: LCS 480-727180/19
Matrix: Water
Analysis Batch: 727180

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	50.0	50.61		mg/L		101	90 - 110

Lab Sample ID: LCS 480-727180/80
Matrix: Water
Analysis Batch: 727180

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	50.0	51.45		mg/L		103	90 - 110

Lab Sample ID: LCS 480-727180/88
Matrix: Water
Analysis Batch: 727180

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	50.0	52.35		mg/L		105	90 - 110

Lab Sample ID: 480-223887-8 MS
Matrix: Water
Analysis Batch: 727180

Client Sample ID: MW-3B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Alkalinity, Total	150		20.0	177.7	4	mg/L		141	60 - 140

Lab Sample ID: 480-223887-8 DU
Matrix: Water
Analysis Batch: 727180

Client Sample ID: MW-3B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity, Total	150		136.5		mg/L		9	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-727018/26
Matrix: Water
Analysis Batch: 727018

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020		mg/L			10/03/24 14:13	1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: MB 480-727018/5
Matrix: Water
Analysis Batch: 727018

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020		mg/L			10/03/24 13:56	1

Lab Sample ID: LCS 480-727018/27
Matrix: Water
Analysis Batch: 727018

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia			1.00	1.03		mg/L		103	90 - 110		

Lab Sample ID: LCS 480-727018/6
Matrix: Water
Analysis Batch: 727018

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia			1.00	1.02		mg/L		102	90 - 110		

Lab Sample ID: 480-223887-4 MS
Matrix: Water
Analysis Batch: 727018

Client Sample ID: MW-1B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia	0.13	F1	0.0800	0.255	F1	mg/L		154	90 - 110		

Lab Sample ID: 480-223887-10 MS
Matrix: Water
Analysis Batch: 727018

Client Sample ID: MW-5A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Ammonia	ND	F1	0.0800	0.173	F1	mg/L		216	90 - 110		

Lab Sample ID: 480-223887-10 MSD
Matrix: Water
Analysis Batch: 727018

Client Sample ID: MW-5A
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	0.0800	0.162	F1	mg/L		203	90 - 110	7	20

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 480-726903/1-A
Matrix: Water
Analysis Batch: 727013

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 726903

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		0.20		mg/L		10/02/24 14:28	10/03/24 12:16	1

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: LCS 480-726903/2-A
Matrix: Water
Analysis Batch: 727013

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 726903

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Kjeldahl Nitrogen			2.50	2.61		mg/L		104	90 - 110		

Lab Sample ID: 480-223887-2 MS
Matrix: Water
Analysis Batch: 727013

Client Sample ID: CD-1RA
Prep Type: Total/NA
Prep Batch: 726903

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Kjeldahl Nitrogen	0.69	F1	1.00	1.06	F1	mg/L		36	90 - 110		

Lab Sample ID: 480-223887-13 MS
Matrix: Water
Analysis Batch: 727013

Client Sample ID: MW-7A
Prep Type: Total/NA
Prep Batch: 726903

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Kjeldahl Nitrogen	0.69		1.00	1.75		mg/L		106	90 - 110		

Lab Sample ID: MB 480-727148/1-A
Matrix: Water
Analysis Batch: 727218

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 727148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		0.20		mg/L		10/04/24 10:13	10/05/24 10:18	1

Lab Sample ID: LCS 480-727148/2-A
Matrix: Water
Analysis Batch: 727218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 727148

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Total Kjeldahl Nitrogen			2.50	2.58		mg/L		103	90 - 110		

Method: 410.4 - COD

Lab Sample ID: MB 480-727038/27
Matrix: Water
Analysis Batch: 727038

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		10.0		mg/L			10/03/24 11:53	1

Lab Sample ID: MB 480-727038/3
Matrix: Water
Analysis Batch: 727038

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		10.0		mg/L			10/03/24 11:53	1

Method: 410.4 - COD (Continued)

Lab Sample ID: LCS 480-727038/28
Matrix: Water
Analysis Batch: 727038

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	25.0	25.41		mg/L		102	90 - 110

Lab Sample ID: LCS 480-727038/4
Matrix: Water
Analysis Batch: 727038

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	25.0	24.13		mg/L		97	90 - 110

Lab Sample ID: 480-223887-1 MS
Matrix: Water
Analysis Batch: 727038

Client Sample ID: CD-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	ND	F1	50.0	60.57	F1	mg/L		121	90 - 110

Lab Sample ID: 480-223887-3 MS
Matrix: Water
Analysis Batch: 727038

Client Sample ID: MW-1A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chemical Oxygen Demand	ND		50.0	54.18		mg/L		108	90 - 110

Lab Sample ID: 480-223887-1 DU
Matrix: Water
Analysis Batch: 727038

Client Sample ID: CD-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chemical Oxygen Demand	ND	F1	ND		mg/L		NC	20

Lab Sample ID: MB 480-727228/4
Matrix: Water
Analysis Batch: 727228

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		10.0		mg/L			10/04/24 14:46	1

Lab Sample ID: LCS 480-727228/5
Matrix: Water
Analysis Batch: 727228

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	25.0	25.78		mg/L		103	90 - 110

Lab Sample ID: MB 480-727370/3
Matrix: Water
Analysis Batch: 727370

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		10.0		mg/L			10/07/24 14:08	1

Method: 410.4 - COD

Lab Sample ID: LCS 480-727370/4
Matrix: Water
Analysis Batch: 727370

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	25.0	24.45		mg/L		98	90 - 110

Method: 420.4 - Phenolics, Total Recoverable

Lab Sample ID: MB 480-727121/46
Matrix: Water
Analysis Batch: 727121

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND	^+	0.010		mg/L			10/04/24 10:12	1

Lab Sample ID: LCS 480-727121/47
Matrix: Water
Analysis Batch: 727121

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Phenolics, Total Recoverable	0.100	0.113	*+ ^+	mg/L		113	90 - 110

Method: 9038 - Sulfate, Turbidimetric

Lab Sample ID: MB 480-727202/13
Matrix: Water
Analysis Batch: 727202

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			10/05/24 11:39	1

Lab Sample ID: MB 480-727202/18
Matrix: Water
Analysis Batch: 727202

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			10/05/24 11:41	1

Lab Sample ID: MB 480-727202/25
Matrix: Water
Analysis Batch: 727202

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			10/05/24 11:43	1

Lab Sample ID: MB 480-727202/33
Matrix: Water
Analysis Batch: 727202

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			10/05/24 11:46	1

Method: 9038 - Sulfate, Turbidimetric (Continued)

Lab Sample ID: MB 480-727202/38
Matrix: Water
Analysis Batch: 727202

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			10/05/24 11:49	1

Lab Sample ID: MB 480-727202/46
Matrix: Water
Analysis Batch: 727202

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			10/05/24 11:52	1

Lab Sample ID: LCS 480-727202/17
Matrix: Water
Analysis Batch: 727202

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30.0	31.98		mg/L		107	90 - 110

Lab Sample ID: LCS 480-727202/24
Matrix: Water
Analysis Batch: 727202

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30.0	31.06		mg/L		104	90 - 110

Lab Sample ID: LCS 480-727202/32
Matrix: Water
Analysis Batch: 727202

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30.0	30.68		mg/L		102	90 - 110

Lab Sample ID: LCS 480-727202/37
Matrix: Water
Analysis Batch: 727202

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30.0	30.56		mg/L		102	90 - 110

Lab Sample ID: LCS 480-727202/45
Matrix: Water
Analysis Batch: 727202

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	30.0	30.44		mg/L		101	90 - 110

Lab Sample ID: 480-223887-8 MS
Matrix: Water
Analysis Batch: 727202

Client Sample ID: MW-3B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Sulfate	8.6		20.0	30.01		mg/L		107	60 - 128

Method: 9038 - Sulfate, Turbidimetric

Lab Sample ID: 480-223887-8 MSD
Matrix: Water
Analysis Batch: 727202

Client Sample ID: MW-3B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sulfate	8.6		20.0	30.00		mg/L		107	60 - 128	0	20

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

Lab Sample ID: MB 480-726847/1
Matrix: Water
Analysis Batch: 726847

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		10.0		mg/L			10/02/24 10:14	1

Lab Sample ID: LCS 480-726847/2
Matrix: Water
Analysis Batch: 726847

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			500	484.0		mg/L		97	85 - 115		

Lab Sample ID: 480-223887-12 DU
Matrix: Water
Analysis Batch: 726847

Client Sample ID: MW-6B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids	290			290.0		mg/L				0	10

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 480-727181/13
Matrix: Water
Analysis Batch: 727181

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		mg/L			10/04/24 15:27	1

Lab Sample ID: MB 480-727181/25
Matrix: Water
Analysis Batch: 727181

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		mg/L			10/04/24 15:46	1

Lab Sample ID: MB 480-727181/36
Matrix: Water
Analysis Batch: 727181

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		mg/L			10/04/24 16:10	1

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: MB 480-727181/47
Matrix: Water
Analysis Batch: 727181

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		mg/L			10/04/24 17:05	1

Lab Sample ID: MB 480-727181/57
Matrix: Water
Analysis Batch: 727181

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		mg/L			10/04/24 17:08	1

Lab Sample ID: LCS 480-727181/12
Matrix: Water
Analysis Batch: 727181

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	27.29		mg/L		109	90 - 110

Lab Sample ID: LCS 480-727181/24
Matrix: Water
Analysis Batch: 727181

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	27.28		mg/L		109	90 - 110

Lab Sample ID: LCS 480-727181/35
Matrix: Water
Analysis Batch: 727181

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	27.26		mg/L		109	90 - 110

Lab Sample ID: LCS 480-727181/46
Matrix: Water
Analysis Batch: 727181

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	26.55		mg/L		106	90 - 110

Lab Sample ID: LCS 480-727181/56
Matrix: Water
Analysis Batch: 727181

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	26.70		mg/L		107	90 - 110

Lab Sample ID: 480-223887-8 MS
Matrix: Water
Analysis Batch: 727181

Client Sample ID: MW-3B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	19.6	F1	20.0	19.43	F1	mg/L		-0.9	74 - 131

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: 480-223887-8 DU
Matrix: Water
Analysis Batch: 727181

Client Sample ID: MW-3B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	19.6	F1	19.48		mg/L		0.7	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-726915/1
Matrix: Water
Analysis Batch: 726915

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0		mg/L			10/02/24 09:56	1

Lab Sample ID: LCS 480-726915/2
Matrix: Water
Analysis Batch: 726915

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Biochemical Oxygen Demand	199	201.9		mg/L		101	85 - 115

Method: SM 5310C - TOC

Lab Sample ID: MB 480-726935/4
Matrix: Water
Analysis Batch: 726935

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TOC Result 1	ND		1.0		mg/L			10/02/24 15:31	1
TOC Result 2	ND		1.0		mg/L			10/02/24 15:31	1

Lab Sample ID: LCS 480-726935/5
Matrix: Water
Analysis Batch: 726935

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
TOC Result 1	60.0	58.07		mg/L		97	90 - 110
TOC Result 2	60.0	62.22		mg/L		104	90 - 110

GC/MS VOA

Analysis Batch: 727065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-6	MW-2B	Total/NA	Water	8260C	
MB 480-727065/8	Method Blank	Total/NA	Water	8260C	
LCS 480-727065/6	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 726889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	3005A	
480-223887-2	CD-1RA	Total/NA	Water	3005A	
480-223887-3	MW-1A	Total/NA	Water	3005A	
480-223887-4	MW-1B	Total/NA	Water	3005A	
480-223887-5	MW-2A	Total/NA	Water	3005A	
480-223887-6	MW-2B	Total/NA	Water	3005A	
480-223887-7	MW-3A	Total/NA	Water	3005A	
480-223887-8	MW-3B	Total/NA	Water	3005A	
480-223887-9	MW-4A	Total/NA	Water	3005A	
480-223887-10	MW-5A	Total/NA	Water	3005A	
480-223887-11	MW-6A	Total/NA	Water	3005A	
480-223887-12	MW-6B	Total/NA	Water	3005A	
480-223887-13	MW-7A	Total/NA	Water	3005A	
MB 480-726889/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-726889/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-223887-2 MS	CD-1RA	Total/NA	Water	3005A	
480-223887-2 MSD	CD-1RA	Total/NA	Water	3005A	

Analysis Batch: 727045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	6010C	726889
480-223887-2	CD-1RA	Total/NA	Water	6010C	726889
480-223887-3	MW-1A	Total/NA	Water	6010C	726889
480-223887-4	MW-1B	Total/NA	Water	6010C	726889
480-223887-5	MW-2A	Total/NA	Water	6010C	726889
480-223887-6	MW-2B	Total/NA	Water	6010C	726889
480-223887-7	MW-3A	Total/NA	Water	6010C	726889
480-223887-8	MW-3B	Total/NA	Water	6010C	726889
480-223887-9	MW-4A	Total/NA	Water	6010C	726889
480-223887-10	MW-5A	Total/NA	Water	6010C	726889
480-223887-11	MW-6A	Total/NA	Water	6010C	726889
480-223887-12	MW-6B	Total/NA	Water	6010C	726889
480-223887-13	MW-7A	Total/NA	Water	6010C	726889
MB 480-726889/1-A	Method Blank	Total/NA	Water	6010C	726889
LCS 480-726889/2-A	Lab Control Sample	Total/NA	Water	6010C	726889
480-223887-2 MS	CD-1RA	Total/NA	Water	6010C	726889
480-223887-2 MSD	CD-1RA	Total/NA	Water	6010C	726889

Analysis Batch: 727116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-726889/1-A	Method Blank	Total/NA	Water	6010C	726889

Metals

Analysis Batch: 727150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	SM 2340B	
480-223887-2	CD-1RA	Total/NA	Water	SM 2340B	
480-223887-3	MW-1A	Total/NA	Water	SM 2340B	
480-223887-4	MW-1B	Total/NA	Water	SM 2340B	
480-223887-5	MW-2A	Total/NA	Water	SM 2340B	
480-223887-6	MW-2B	Total/NA	Water	SM 2340B	
480-223887-7	MW-3A	Total/NA	Water	SM 2340B	
480-223887-8	MW-3B	Total/NA	Water	SM 2340B	
480-223887-9	MW-4A	Total/NA	Water	SM 2340B	
480-223887-10	MW-5A	Total/NA	Water	SM 2340B	
480-223887-11	MW-6A	Total/NA	Water	SM 2340B	
480-223887-12	MW-6B	Total/NA	Water	SM 2340B	
480-223887-13	MW-7A	Total/NA	Water	SM 2340B	

General Chemistry

Analysis Batch: 726847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	SM 2540C	
480-223887-2	CD-1RA	Total/NA	Water	SM 2540C	
480-223887-3	MW-1A	Total/NA	Water	SM 2540C	
480-223887-4	MW-1B	Total/NA	Water	SM 2540C	
480-223887-5	MW-2A	Total/NA	Water	SM 2540C	
480-223887-6	MW-2B	Total/NA	Water	SM 2540C	
480-223887-7	MW-3A	Total/NA	Water	SM 2540C	
480-223887-8	MW-3B	Total/NA	Water	SM 2540C	
480-223887-9	MW-4A	Total/NA	Water	SM 2540C	
480-223887-10	MW-5A	Total/NA	Water	SM 2540C	
480-223887-11	MW-6A	Total/NA	Water	SM 2540C	
480-223887-12	MW-6B	Total/NA	Water	SM 2540C	
480-223887-13	MW-7A	Total/NA	Water	SM 2540C	
MB 480-726847/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 480-726847/2	Lab Control Sample	Total/NA	Water	SM 2540C	
480-223887-12 DU	MW-6B	Total/NA	Water	SM 2540C	

Analysis Batch: 726882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	300.0	
480-223887-2	CD-1RA	Total/NA	Water	300.0	
480-223887-3	MW-1A	Total/NA	Water	300.0	
480-223887-4	MW-1B	Total/NA	Water	300.0	
480-223887-5	MW-2A	Total/NA	Water	300.0	
480-223887-6	MW-2B	Total/NA	Water	300.0	
480-223887-7	MW-3A	Total/NA	Water	300.0	
480-223887-8	MW-3B	Total/NA	Water	300.0	
480-223887-9	MW-4A	Total/NA	Water	300.0	
480-223887-10	MW-5A	Total/NA	Water	300.0	
480-223887-11	MW-6A	Total/NA	Water	300.0	
480-223887-12	MW-6B	Total/NA	Water	300.0	
480-223887-13	MW-7A	Total/NA	Water	300.0	
MB 480-726882/28	Method Blank	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 726882 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-726882/29	Lab Control Sample	Total/NA	Water	300.0	
480-223887-5 MS	MW-2A	Total/NA	Water	300.0	
480-223887-5 MSD	MW-2A	Total/NA	Water	300.0	

Prep Batch: 726903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-2	CD-1RA	Total/NA	Water	351.2	
480-223887-3	MW-1A	Total/NA	Water	351.2	
480-223887-4	MW-1B	Total/NA	Water	351.2	
480-223887-5	MW-2A	Total/NA	Water	351.2	
480-223887-6	MW-2B	Total/NA	Water	351.2	
480-223887-7	MW-3A	Total/NA	Water	351.2	
480-223887-8	MW-3B	Total/NA	Water	351.2	
480-223887-9	MW-4A	Total/NA	Water	351.2	
480-223887-10	MW-5A	Total/NA	Water	351.2	
480-223887-11	MW-6A	Total/NA	Water	351.2	
480-223887-12	MW-6B	Total/NA	Water	351.2	
480-223887-13	MW-7A	Total/NA	Water	351.2	
MB 480-726903/1-A	Method Blank	Total/NA	Water	351.2	
LCS 480-726903/2-A	Lab Control Sample	Total/NA	Water	351.2	
480-223887-2 MS	CD-1RA	Total/NA	Water	351.2	
480-223887-13 MS	MW-7A	Total/NA	Water	351.2	

Analysis Batch: 726915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	SM 5210B	
480-223887-2	CD-1RA	Total/NA	Water	SM 5210B	
480-223887-3	MW-1A	Total/NA	Water	SM 5210B	
480-223887-4	MW-1B	Total/NA	Water	SM 5210B	
480-223887-5	MW-2A	Total/NA	Water	SM 5210B	
480-223887-6	MW-2B	Total/NA	Water	SM 5210B	
480-223887-7	MW-3A	Total/NA	Water	SM 5210B	
480-223887-8	MW-3B	Total/NA	Water	SM 5210B	
480-223887-9	MW-4A	Total/NA	Water	SM 5210B	
480-223887-10	MW-5A	Total/NA	Water	SM 5210B	
480-223887-11	MW-6A	Total/NA	Water	SM 5210B	
480-223887-12	MW-6B	Total/NA	Water	SM 5210B	
480-223887-13	MW-7A	Total/NA	Water	SM 5210B	
USB 480-726915/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 480-726915/2	Lab Control Sample	Total/NA	Water	SM 5210B	

Analysis Batch: 726935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-6	MW-2B	Total/NA	Water	SM 5310C	
MB 480-726935/4	Method Blank	Total/NA	Water	SM 5310C	
LCS 480-726935/5	Lab Control Sample	Total/NA	Water	SM 5310C	

Analysis Batch: 726998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	353.2	
480-223887-2	CD-1RA	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 726998 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-3	MW-1A	Total/NA	Water	353.2	
480-223887-4	MW-1B	Total/NA	Water	353.2	
480-223887-5	MW-2A	Total/NA	Water	353.2	
480-223887-6	MW-2B	Total/NA	Water	353.2	
480-223887-7	MW-3A	Total/NA	Water	353.2	
480-223887-8	MW-3B	Total/NA	Water	353.2	
480-223887-9	MW-4A	Total/NA	Water	353.2	
480-223887-10	MW-5A	Total/NA	Water	353.2	
480-223887-11	MW-6A	Total/NA	Water	353.2	
480-223887-12	MW-6B	Total/NA	Water	353.2	
480-223887-13	MW-7A	Total/NA	Water	353.2	

Analysis Batch: 727013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-2	CD-1RA	Total/NA	Water	351.2	726903
480-223887-3	MW-1A	Total/NA	Water	351.2	726903
480-223887-4	MW-1B	Total/NA	Water	351.2	726903
480-223887-5	MW-2A	Total/NA	Water	351.2	726903
480-223887-6	MW-2B	Total/NA	Water	351.2	726903
480-223887-7	MW-3A	Total/NA	Water	351.2	726903
480-223887-8	MW-3B	Total/NA	Water	351.2	726903
480-223887-9	MW-4A	Total/NA	Water	351.2	726903
480-223887-10	MW-5A	Total/NA	Water	351.2	726903
480-223887-11	MW-6A	Total/NA	Water	351.2	726903
480-223887-12	MW-6B	Total/NA	Water	351.2	726903
480-223887-13	MW-7A	Total/NA	Water	351.2	726903
MB 480-726903/1-A	Method Blank	Total/NA	Water	351.2	726903
LCS 480-726903/2-A	Lab Control Sample	Total/NA	Water	351.2	726903
480-223887-2 MS	CD-1RA	Total/NA	Water	351.2	726903
480-223887-13 MS	MW-7A	Total/NA	Water	351.2	726903

Analysis Batch: 727018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	350.1	
480-223887-2	CD-1RA	Total/NA	Water	350.1	
480-223887-3	MW-1A	Total/NA	Water	350.1	
480-223887-4	MW-1B	Total/NA	Water	350.1	
480-223887-5	MW-2A	Total/NA	Water	350.1	
480-223887-6	MW-2B	Total/NA	Water	350.1	
480-223887-7	MW-3A	Total/NA	Water	350.1	
480-223887-8	MW-3B	Total/NA	Water	350.1	
480-223887-9	MW-4A	Total/NA	Water	350.1	
480-223887-10	MW-5A	Total/NA	Water	350.1	
480-223887-11	MW-6A	Total/NA	Water	350.1	
480-223887-12	MW-6B	Total/NA	Water	350.1	
480-223887-13	MW-7A	Total/NA	Water	350.1	
MB 480-727018/26	Method Blank	Total/NA	Water	350.1	
MB 480-727018/5	Method Blank	Total/NA	Water	350.1	
LCS 480-727018/27	Lab Control Sample	Total/NA	Water	350.1	
LCS 480-727018/6	Lab Control Sample	Total/NA	Water	350.1	
480-223887-4 MS	MW-1B	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 727018 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-10 MS	MW-5A	Total/NA	Water	350.1	
480-223887-10 MSD	MW-5A	Total/NA	Water	350.1	

Analysis Batch: 727038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	410.4	
480-223887-2	CD-1RA	Total/NA	Water	410.4	
480-223887-3	MW-1A	Total/NA	Water	410.4	
480-223887-4	MW-1B	Total/NA	Water	410.4	
480-223887-5	MW-2A	Total/NA	Water	410.4	
480-223887-6	MW-2B	Total/NA	Water	410.4	
480-223887-7	MW-3A	Total/NA	Water	410.4	
480-223887-10	MW-5A	Total/NA	Water	410.4	
480-223887-11	MW-6A	Total/NA	Water	410.4	
480-223887-12	MW-6B	Total/NA	Water	410.4	
480-223887-13	MW-7A	Total/NA	Water	410.4	
MB 480-727038/27	Method Blank	Total/NA	Water	410.4	
MB 480-727038/3	Method Blank	Total/NA	Water	410.4	
LCS 480-727038/28	Lab Control Sample	Total/NA	Water	410.4	
LCS 480-727038/4	Lab Control Sample	Total/NA	Water	410.4	
480-223887-1 MS	CD-1	Total/NA	Water	410.4	
480-223887-3 MS	MW-1A	Total/NA	Water	410.4	
480-223887-1 DU	CD-1	Total/NA	Water	410.4	

Analysis Batch: 727121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-6	MW-2B	Total/NA	Water	420.4	
MB 480-727121/46	Method Blank	Total/NA	Water	420.4	
LCS 480-727121/47	Lab Control Sample	Total/NA	Water	420.4	

Prep Batch: 727148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	351.2	
MB 480-727148/1-A	Method Blank	Total/NA	Water	351.2	
LCS 480-727148/2-A	Lab Control Sample	Total/NA	Water	351.2	

Analysis Batch: 727180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	310.2	
480-223887-2	CD-1RA	Total/NA	Water	310.2	
480-223887-3	MW-1A	Total/NA	Water	310.2	
480-223887-4	MW-1B	Total/NA	Water	310.2	
480-223887-5	MW-2A	Total/NA	Water	310.2	
480-223887-6	MW-2B	Total/NA	Water	310.2	
480-223887-7	MW-3A	Total/NA	Water	310.2	
480-223887-8	MW-3B	Total/NA	Water	310.2	
480-223887-9	MW-4A	Total/NA	Water	310.2	
480-223887-10	MW-5A	Total/NA	Water	310.2	
480-223887-11	MW-6A	Total/NA	Water	310.2	
480-223887-12	MW-6B	Total/NA	Water	310.2	
480-223887-13	MW-7A	Total/NA	Water	310.2	

General Chemistry (Continued)

Analysis Batch: 727180 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-727180/12	Method Blank	Total/NA	Water	310.2	
MB 480-727180/20	Method Blank	Total/NA	Water	310.2	
MB 480-727180/70	Method Blank	Total/NA	Water	310.2	
MB 480-727180/81	Method Blank	Total/NA	Water	310.2	
MB 480-727180/89	Method Blank	Total/NA	Water	310.2	
LCS 480-727180/11	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-727180/19	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-727180/80	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-727180/88	Lab Control Sample	Total/NA	Water	310.2	
480-223887-8 MS	MW-3B	Total/NA	Water	310.2	
480-223887-8 DU	MW-3B	Total/NA	Water	310.2	

Analysis Batch: 727181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	SM 4500 Cl- E	
480-223887-2	CD-1RA	Total/NA	Water	SM 4500 Cl- E	
480-223887-3	MW-1A	Total/NA	Water	SM 4500 Cl- E	
480-223887-4	MW-1B	Total/NA	Water	SM 4500 Cl- E	
480-223887-5	MW-2A	Total/NA	Water	SM 4500 Cl- E	
480-223887-6	MW-2B	Total/NA	Water	SM 4500 Cl- E	
480-223887-7	MW-3A	Total/NA	Water	SM 4500 Cl- E	
480-223887-8	MW-3B	Total/NA	Water	SM 4500 Cl- E	
480-223887-9	MW-4A	Total/NA	Water	SM 4500 Cl- E	
480-223887-10	MW-5A	Total/NA	Water	SM 4500 Cl- E	
480-223887-11	MW-6A	Total/NA	Water	SM 4500 Cl- E	
480-223887-12	MW-6B	Total/NA	Water	SM 4500 Cl- E	
480-223887-13	MW-7A	Total/NA	Water	SM 4500 Cl- E	
MB 480-727181/13	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-727181/25	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-727181/36	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-727181/47	Method Blank	Total/NA	Water	SM 4500 Cl- E	
MB 480-727181/57	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 480-727181/12	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 480-727181/24	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 480-727181/35	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 480-727181/46	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCS 480-727181/56	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
480-223887-8 MS	MW-3B	Total/NA	Water	SM 4500 Cl- E	
480-223887-8 DU	MW-3B	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 727202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	9038	
480-223887-2	CD-1RA	Total/NA	Water	9038	
480-223887-3	MW-1A	Total/NA	Water	9038	
480-223887-4	MW-1B	Total/NA	Water	9038	
480-223887-5	MW-2A	Total/NA	Water	9038	
480-223887-6	MW-2B	Total/NA	Water	9038	
480-223887-7	MW-3A	Total/NA	Water	9038	
480-223887-8	MW-3B	Total/NA	Water	9038	
480-223887-9	MW-4A	Total/NA	Water	9038	

General Chemistry (Continued)

Analysis Batch: 727202 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-10	MW-5A	Total/NA	Water	9038	
480-223887-11	MW-6A	Total/NA	Water	9038	
480-223887-12	MW-6B	Total/NA	Water	9038	
480-223887-13	MW-7A	Total/NA	Water	9038	
MB 480-727202/13	Method Blank	Total/NA	Water	9038	
MB 480-727202/18	Method Blank	Total/NA	Water	9038	
MB 480-727202/25	Method Blank	Total/NA	Water	9038	
MB 480-727202/33	Method Blank	Total/NA	Water	9038	
MB 480-727202/38	Method Blank	Total/NA	Water	9038	
MB 480-727202/46	Method Blank	Total/NA	Water	9038	
LCS 480-727202/17	Lab Control Sample	Total/NA	Water	9038	
LCS 480-727202/24	Lab Control Sample	Total/NA	Water	9038	
LCS 480-727202/32	Lab Control Sample	Total/NA	Water	9038	
LCS 480-727202/37	Lab Control Sample	Total/NA	Water	9038	
LCS 480-727202/45	Lab Control Sample	Total/NA	Water	9038	
480-223887-8 MS	MW-3B	Total/NA	Water	9038	
480-223887-8 MSD	MW-3B	Total/NA	Water	9038	

Analysis Batch: 727218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-1	CD-1	Total/NA	Water	351.2	727148
MB 480-727148/1-A	Method Blank	Total/NA	Water	351.2	727148
LCS 480-727148/2-A	Lab Control Sample	Total/NA	Water	351.2	727148

Analysis Batch: 727228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-8	MW-3B	Total/NA	Water	410.4	
MB 480-727228/4	Method Blank	Total/NA	Water	410.4	
LCS 480-727228/5	Lab Control Sample	Total/NA	Water	410.4	

Analysis Batch: 727370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-223887-9	MW-4A	Total/NA	Water	410.4	
MB 480-727370/3	Method Blank	Total/NA	Water	410.4	
LCS 480-727370/4	Lab Control Sample	Total/NA	Water	410.4	

Lab Chronicle

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: CD-1
Lab Sample ID: 480-223887-1
Date Collected: 10/01/24 10:25
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:15
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/02/24 22:02
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 10:23
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:01
Total/NA	Prep	351.2			727148	RMJ	EET BUF	10/04/24 10:13
Total/NA	Analysis	351.2		1	727218	AM	EET BUF	10/05/24 10:28
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:48
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:42
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 15:43
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: CD-1RA
Lab Sample ID: 480-223887-2
Date Collected: 10/01/24 10:15
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:17
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/02/24 22:16
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 10:25
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:01
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 11:41
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:49
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:42
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 15:44
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-1A
Lab Sample ID: 480-223887-3
Date Collected: 10/01/24 11:50
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:27
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16

Client Sample ID: MW-1A

Lab Sample ID: 480-223887-3

Date Collected: 10/01/24 11:50

Matrix: Water

Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/02/24 22:31
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 10:25
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:03
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:17
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:51
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:42
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 15:44
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-1B

Lab Sample ID: 480-223887-4

Date Collected: 10/01/24 11:30

Matrix: Water

Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:34
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/02/24 22:46
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 10:25
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:05
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:18
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:52
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:44
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 15:44
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-2A

Lab Sample ID: 480-223887-5

Date Collected: 10/01/24 11:20

Matrix: Water

Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:36
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		2	726882	AF	EET BUF	10/02/24 23:01
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 10:26

Lab Chronicle

Client: Cortland Cty Soil & Water Cons District
Project/Site: Towslee Landfill - Routine Q3 2024

Job ID: 480-223887-1

Client Sample ID: MW-2A
Date Collected: 10/01/24 11:20
Date Received: 10/02/24 11:00

Lab Sample ID: 480-223887-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	350.1		5	727018	AM	EET BUF	10/03/24 14:06
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		5	727013	AM	EET BUF	10/03/24 12:55
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:53
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:44
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 17:05
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-2B
Date Collected: 10/01/24 12:00
Date Received: 10/02/24 11:00

Lab Sample ID: 480-223887-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	727065	ZN	EET BUF	10/04/24 13:55
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:38
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		2	726882	AF	EET BUF	10/03/24 00:14
Total/NA	Analysis	310.2		10	727180	CG	EET BUF	10/04/24 12:14
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:08
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:20
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:53
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	420.4		1	727121	CLT	EET BUF	10/04/24 11:28
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:44
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		5	727181	CG	EET BUF	10/04/24 15:46
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56
Total/NA	Analysis	SM 5310C		1	726935	AF	EET BUF	10/03/24 01:11

Client Sample ID: MW-3A
Date Collected: 10/01/24 10:40
Date Received: 10/02/24 11:00

Lab Sample ID: 480-223887-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:40
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/03/24 00:29

Lab Chronicle

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-3A
Lab Sample ID: 480-223887-7
Date Collected: 10/01/24 10:40
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 10:26
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:08
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:20
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:54
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:45
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 17:05
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-3B
Lab Sample ID: 480-223887-8
Date Collected: 10/01/24 10:50
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:42
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/03/24 00:44
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 10:27
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:09
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:23
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:54
Total/NA	Analysis	410.4		1	727228	RMJ	EET BUF	10/04/24 15:10
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:50
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 17:06
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-4A
Lab Sample ID: 480-223887-9
Date Collected: 10/01/24 11:00
Matrix: Water
Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:44
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		2	726882	AF	EET BUF	10/03/24 00:59
Total/NA	Analysis	310.2		10	727180	CG	EET BUF	10/04/24 12:14
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:10

Lab Chronicle

Client: Cortland Cty Soil & Water Cons District
Project/Site: Towslee Landfill - Routine Q3 2024

Job ID: 480-223887-1

Client Sample ID: MW-4A

Date Collected: 10/01/24 11:00
Date Received: 10/02/24 11:00

Lab Sample ID: 480-223887-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:24
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:55
Total/NA	Analysis	410.4		1	727370	RMJ	EET BUF	10/07/24 14:08
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:51
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 17:07
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-5A

Date Collected: 10/01/24 10:00
Date Received: 10/02/24 11:00

Lab Sample ID: 480-223887-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:46
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/03/24 01:13
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 12:47
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:13
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:24
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:56
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:52
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 17:08
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-6A

Date Collected: 10/01/24 09:40
Date Received: 10/02/24 11:00

Lab Sample ID: 480-223887-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:47
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/03/24 01:28
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 12:48
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:16
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:25
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:56

Lab Chronicle

Client: Cortland Cty Soil & Water Cons District
Project/Site: Towslee Landfill - Routine Q3 2024

Job ID: 480-223887-1

Client Sample ID: MW-6A
Date Collected: 10/01/24 09:40
Date Received: 10/02/24 11:00

Lab Sample ID: 480-223887-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:52
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		5	727181	CG	EET BUF	10/04/24 15:54
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-6B
Date Collected: 10/01/24 09:30
Date Received: 10/02/24 11:00

Lab Sample ID: 480-223887-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:49
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		1	726882	AF	EET BUF	10/03/24 01:43
Total/NA	Analysis	310.2		5	727180	CG	EET BUF	10/04/24 12:48
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:17
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:26
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:57
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:53
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		5	727181	CG	EET BUF	10/04/24 15:54
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Client Sample ID: MW-7A
Date Collected: 10/01/24 12:30
Date Received: 10/02/24 11:00

Lab Sample ID: 480-223887-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			726889	ET	EET BUF	10/03/24 08:26
Total/NA	Analysis	6010C		1	727045	BMB	EET BUF	10/03/24 14:57
Total/NA	Analysis	SM 2340B		1	727150	JJP	EET BUF	10/04/24 15:16
Total/NA	Analysis	300.0		2	726882	AF	EET BUF	10/03/24 01:58
Total/NA	Analysis	310.2		10	727180	CG	EET BUF	10/04/24 12:48
Total/NA	Analysis	350.1		1	727018	AM	EET BUF	10/03/24 14:18
Total/NA	Prep	351.2			726903	RMJ	EET BUF	10/02/24 14:28
Total/NA	Analysis	351.2		1	727013	AM	EET BUF	10/03/24 12:27
Total/NA	Analysis	353.2		1	726998	KB	EET BUF	10/02/24 18:57
Total/NA	Analysis	410.4		1	727038	RMJ	EET BUF	10/03/24 11:53
Total/NA	Analysis	9038		1	727202	CG	EET BUF	10/05/24 11:53

Lab Chronicle

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Client Sample ID: MW-7A
Lab Sample ID: 480-223887-13

Date Collected: 10/01/24 12:30
Matrix: Water

Date Received: 10/02/24 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	SM 2540C		1	726847	AB	EET BUF	10/02/24 14:07
Total/NA	Analysis	SM 4500 Cl- E		1	727181	CG	EET BUF	10/04/24 17:08
Total/NA	Analysis	SM 5210B		1	726915	KO	EET BUF	10/02/24 09:56

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Laboratory: Eurofins Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
9038		Water	Sulfate
SM 5310C		Water	TOC Result 1
SM 5310C		Water	TOC Result 2

Method Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
6010C	Metals (ICP)	SW846	EET BUF
SM 2340B	Total Hardness (as CaCO3) by calculation	SM	EET BUF
300.0	Anions, Ion Chromatography	EPA	EET BUF
310.2	Alkalinity	EPA	EET BUF
350.1	Nitrogen, Ammonia	EPA	EET BUF
351.2	Nitrogen, Total Kjeldahl	EPA	EET BUF
353.2	Nitrate	EPA	EET BUF
410.4	COD	EPA	EET BUF
420.4	Phenolics, Total Recoverable	EPA	EET BUF
9038	Sulfate, Turbidimetric	SW846	EET BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET BUF
SM 4500 Cl- E	Chloride, Total	SM	EET BUF
SM 5210B	BOD, 5-Day	SM	EET BUF
SM 5310C	TOC	SM	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
351.2	Nitrogen, Total Kjeldahl	EPA	EET BUF
5030C	Purge and Trap	SW846	EET BUF

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 BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Cortland Cty Soil & Water Cons District
Job ID: 480-223887-1
Project/Site: Towslee Landfill - Routine Q3 2024

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-223887-1	CD-1	Water	10/01/24 10:25	10/02/24 11:00
480-223887-2	CD-1RA	Water	10/01/24 10:15	10/02/24 11:00
480-223887-3	MW-1A	Water	10/01/24 11:50	10/02/24 11:00
480-223887-4	MW-1B	Water	10/01/24 11:30	10/02/24 11:00
480-223887-5	MW-2A	Water	10/01/24 11:20	10/02/24 11:00
480-223887-6	MW-2B	Water	10/01/24 12:00	10/02/24 11:00
480-223887-7	MW-3A	Water	10/01/24 10:40	10/02/24 11:00
480-223887-8	MW-3B	Water	10/01/24 10:50	10/02/24 11:00
480-223887-9	MW-4A	Water	10/01/24 11:00	10/02/24 11:00
480-223887-10	MW-5A	Water	10/01/24 10:00	10/02/24 11:00
480-223887-11	MW-6A	Water	10/01/24 09:40	10/02/24 11:00
480-223887-12	MW-6B	Water	10/01/24 09:30	10/02/24 11:00
480-223887-13	MW-7A	Water	10/01/24 12:30	10/02/24 11:00

Amherst, NY 14228-2298
Phone (716) 691-2600 Phone (716) 691-7991

Chain of Custody Record

eurofins | Environment Testing America

Syracuse

#225

Client Information	Sampler: Pat Reidy	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No:
Client Contact: Pat Reidy	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Cortland Cty Soil & Water Cons District	PWSID:			Job #:

Address: 100 Grange Place Rm 202	Due Date Requested:	
City: Cortland	TAT Requested (days): NORMAL	
State, Zip: NY, 13045	Compliance Project: Δ Yes Δ No	
Phone: 607-756-5991	PO #: Purchase Order not required	
Email: patrick.reidy@cortlandswcd.org	WO #:	
Project Name: Cortland Landfill: Towslee Landfill - Routine GW	Project #:	
Site: New York	SSOW#:	

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	300.0_28D - Bromide	350.1, 351.2, 410.4	6010C, SM2340B	5210B - Biochemical Oxygen Demand	2540C_Calcd - Total Dissolved Solids	353.2, 353.2_Nitrite, 9038, Nitrate_Calc, SM4500_Cl_E	310.2 - Alkalinity, Total	5310C - Total Organic Carbon	420.4_NP - Total Phenolics	8260C - NY Part 360 Volatiles				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	S	D	N	N	N	N	A	S	A					
CD-1	10/1/24	1025	G	Water	N	N	X	X	X	X	X	X	X	X	X						
CD-1RA	10/1/24	1015	G	Water	N	N	X	X	X	X	X	X	X	X	X						
MW-1A	10/1/24	1150	G	Water	N	N	X	X	X	X	X	X	X	X	X						
MW-1B	10/1/24	1130	G	Water	N	N	X	X	X	X	X	X	X	X	X						
MW-2A	10/1/24	1120	G	Water	N	N	X	X	X	X	X	X	X	X	X						
MW-2B	10/1/24	1200	G	Water	N	N	X	X	X	X	X	X	X	X	X	X					report cis-1,2-DCE
MW-3A	10/1/24	1040	G	Water	N	N	X	X	X	X	X	X	X	X	X						
MW-3B	10/1/24	1050	G	Water	N	N	X	X	X	X	X	X	X	X	X						
MW-4A	10/1/24	1100	G	Water	N	N	X	X	X	X	X	X	X	X	X						
MW-5A	10/1/24	1000	G	Water	N	N	X	X	X	X	X	X	X	X	X						
	RE			Water																	

Preservation Codes:

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

480-223887 Chain of Custody

Possible Hazard Identification

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

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:	
Relinquished by: Patrick Reidy	Date/Time: 10/1/2024 14:30	Company	Received by:	Date/Time: 10/1/24 1430	Company FS-SYR
Relinquished by: RE Nyhus	Date/Time: 10.1.24, 1905	Company	Received by: CWallace	Date/Time: 10/2/24 1100	Company TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.0, 2.5, 3.1, 3.4 IR#5C

Ver: 01/16/2019

10/9/2024

Chain of Custody Record

eurofins | Environment Testing America

Syracuse

#225

Amherst, NY 14228-2298
Phone (716) 691-2600 Phone (716) 691-7991

Client Information	Sampler: Pat Reidy	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No:
Client Contact: Pat Reidy	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Cortland Cty Soil & Water Cons District	PWSID:			Job #:

Address: 100 Grange Place Rm 202	Due Date Requested:
City: Cortland	TAT Requested (days): NORMAL
State, Zip: NY, 13045	Compliance Project: Δ Yes Δ No
Phone: 607-756-5991	PO #: Purchase Order not required
Email: patrick.reidy@cortlandswcd.org	WO #:
Project Name: Cortland Landfill: Towslee Landfill - Routine GW	Project #:
Site: New York	SSOW#:

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	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)	300.0_28D - Bromide	350.1, 351.2, 410.4	6010C, SM2340B	5210B - Biochemical Oxygen Demand	2540C_Calcd - Total Dissolved Solids	353.2, 353.2_Nitrite, 9038, Nitrate_Calc, SM4500_Cl_E	310.2 - Alkalinity, Total	5310C - Total Organic Carbon	420.4_NP - Total Phenolics	8260C - NY Part 360 Volatiles	Total Number of containers	Special Instructions/Note:
Preservation Code:					N	N	N	S	D	N	N	N	N	A	S	A		
MW-6A	10/1/24	940	G	Water	N	N	X	X	X	X	X	X	X	X	X			
MW-6B	10/1/24	930	G	Water	N	N	X	X	X	X	X	X	X	X	X			
MW-7A	10/1/24	1230	G	Water	N	N	X	X	X	X	X	X	X	X	X			
Trip Blank				Water												X		
				Water														
				Water														
				Water														
				Water														
				Water														
				Water														
				Water														

RL = 10.1.24

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: Patrick Reidy	Date/Time: 10/1/2024 14:30	Company	Received by:	Date/Time: 10/1/24 1430	Company ES-Syr
Relinquished by: Rec'd 10.1.24	Date/Time: 10.1.24, 1900	Company	Received by: Ewallace	Date/Time: 10/2/24 1100	Company TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019

10/9/2024

Login Sample Receipt Checklist

Client: Cortland Cty Soil & Water Cons District

Job Number: 480-223887-1

Login Number: 223887
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, 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 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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	CCS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	