Cortland County Soil and Water Conservation District
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Phone: (607) 756-5991 Fax: (607) 756-0029
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SWCD...established to promote the conservation and wise use of our county's natural resources

February 25, 2022

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

Dear Ms. Fitzgerald:

Enclosed is the 2021 Quarter 4 and Annual 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.

Sincerely,

Kathleen McGrath
Water Quality Specialist

cc: Toby Bonham, Cortland Co. Highway Dept.
Gary Priscott, R7 NYSDEC
Amanda Barber, SWCD/file

Environmental Monitoring Report
Towslee Landfill, Cortland County, NY

Quarter 4 and Annual Trends
2021

Prepared for

Cortland County Highway Department

By

Cortland County Soil and Water Conservation District

February 25, 2022

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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 2-4. 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 2021 Quarter 4 (Baseline) monitoring activities at the Towslee Landfill.

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 Barton and Loguidice (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	Analyses	Date Sampled
Q1	-- Sampling not required --	
Q2	Routine	June 14-16, 2021
Q3	Routine	September 13-14, 2021
Q4	Baseline	December 9-10, 14, 2021

3.2 Monitoring Locations

Groundwater: Thirteen wells are monitored at Towslee Landfill (Figure 1) including one each bedrock and overburden upgradient wells, and seven bedrock wells and four overburden downgradient wells:

	Bedrock	Overburden
Upgradient	CD-1RA	CD-1
Downgradient	Bedrock	Overburden
	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 methane 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, Baseline parameters were sampled for at all locations. When turbidity exceeded 50 NTU, a sample was collected for dissolved metals analysis in addition to total metals. In addition, combustible gas was sampled at each well.

The UDS Level 2 and Category B laboratory analytical reports, gas data and field data sheets for this quarter can be found in Appendix A. The full Towslee data record is available from the Cortland County SWCD upon request.

Groundwater data are compared to NYS water quality/drinking water standards to assess current conditions. Tables 1 - 3 summarize results for groundwater monitoring wells. Contraventions of NYS standards are highlighted. Quarterly data are also compared annually to historic data to evaluate trends; these data are summarized in Appendix C.

Section 4 Groundwater Monitoring Results

4.1 Contraventions of Groundwater Quality Standards

Conventional and Field Parameters

Turbidity - Turbidity exceeded the NYS standard of 5 NTU at both upgradient wells CD-1 (237 NTU) and CD-1RA (164 NTU) and 5 of the 11 downgradient wells (exceeded range 6.01 to 348 NTU).

No other conventional or field parameters exceeded water quality standards at the upgradient wells.

Color - The color standard of 15 Color Units was exceeded at MW-3A (40 CU) and MW-6A (20 CU).

Ammonia - The ammonia standard of 2 mg/L was exceeded at MW-2A (7.1 mg/L), consistent with past findings at this well.

Total Dissolved Solids (TDS) - The TDS standard of 500 mg/L was exceeded at MW-2B (696 mg/L).

No other conventional or field parameters exceeded water quality standards at downgradient wells.

Metals

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 (10.6 mg/L) and CD-1RA (20.3 mg/L) and 8 of the 11 downgradient wells (exceeded range 0.32 – 29.8 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 particulates 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 both upgradient wells CD-1 (1.3 mg/L) and CD-1RA (0.78 mg/L) and 6 of the 11 downgradient wells (exceeded range 0.83 – 11.4

mg/L). The manganese standard has frequently been exceeded in past monitoring, which may be caused in part by particulates in unfiltered samples.

Lead - The lead standard of 0.015 mg/L was contravened for total lead at the upgradient well CD-1RA (0.026 mg/L).

No other metals contravened water quality standards at upgradient wells.

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 2 downgradient wells, MW-2B (40.5 mg/L) and MW-7A (20.8 mg/L) during this quarter. The less restrictive diet guideline was not exceeded at any wells during this quarter.

No other metals contravened water quality standards at downgradient wells.

Volatile Organic Compounds (VOCs)

Benzene - The NYS standard for vinyl chloride of 1 μg/L was exceeded at one downgradient well, MW-2A (1.3 μg/L).

1,4-dichlorobenzene - The NYS standard for 1,2-dichlorobenzene of 5 μg/L was exceeded at one downgradient well, MW-2A (1.1 μg/L).

cis-1,2-dichloroethene - The NYS standard for cis-1,2-dichloroethene of 5 μg/L was exceeded at one downgradient well, MW-2B (47 μg/L).

Vinyl chloride - The NYS standard for vinyl chloride of 2 μg/L was exceeded at one downgradient well, MW-2B (20 μg/L).

No other volatile organic compounds contravened water quality standards at any wells.

4.2 Groundwater Quality Trends

Upgradient Wells

Monitoring of wells CD-1 and CD-1RA for field/conventional and organics parameters continues to show that these aspects of water quality upgradient of the Towslee Landfill have not changed significantly over time.

During 2021, metals exceedances at the upgradient wells occurred for lead, iron and manganese. These exceedances are not unusual for these wells.

Downgradient Wells

Groundwater quality downgradient of the Towslee Landfill has generally improved over time. This is especially true for parameters with elevated levels in 1997. For inorganic parameters, groundwater quality has generally either been slowly improving in recent years, or has remained stable.

Section 5 Landfill Gas Testing

Landfill gas measurements were taken at all monitoring wells. Methane was either not detected or was detected at 00.2% (DL=00.1%) at all of the wells and other ambient locations off the landfill property. Because the 00.2% values are near the detection limit and within the error range of the equipment they may not represent actual methane detections. Maintenance building vent sites were not monitored because a venting system was installed on this building at some point in the past.

Section 6 Quality Control

Independent data validation for Baseline monitoring of Quarter 4 was conducted by Dataval, Inc. With respect to Quarter 4 data, Dataval concludes that "data from this group of samples is felt to be technically correct and completely usable in its present form." The data validation report is included in Appendix B.

The analytical laboratory, Eurofins TestAmerica, conducted standard internal QA/QC on the samples. Of 1400 data records, 58 records (4.1%) were flagged because they did not meet laboratory QA/QC requirements.

The analytical data appear to be an adequate characterization of Towslee Landfill groundwater quality for this quarter.

Table 1. Contraventions of NYS Water Quality Standards for Field and Conventional Parameters, Towslee Landfill, Quarter 4, 2021.

		NYS Water Quality		Upgradient		Downgradient										
				OB	BR	OB	BR	OB	BR	BR	BR	BR	BR	OB	BR	OB
Parameter	Units	Standard		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	--		7.5	8.4	7.5	8.2	4.5	7.9	9.1	10.4	10.8	10.2	9.4	10.8	8.4
Eh/ORP	mV	--		137.9	134.9	23.6	140.4	9.9	109.7	120.1	102.1	125.2	119.5	143.7	139.3	133.5
pH	--	6.5 - 8.5	a	7.37	7.55	7.51	7.4	6.89	8.19	8.02	7.72	7.16	7.48	6.96	6.97	6.57
Conductivity	µS/cm	--		195.3	206.6	257.2	136.6	423.6	836	115.4	266.9	561	224	313.6	236.6	372.2
Color	Units	15	a, b	5J	<5J	5J	--	10J	10J	**40**	10	15	15	**20**	5	15
Turbidity	NTU	5	a	**237**	**164**	**12.1**	2.26	**18**	**7.2**	**6.01**	0.69	3	3.66	**348**	**9.08**	3.89
Alkalinity as $CaCO_3$	mg/L	--		138	144	130	95.9	339	560	85.4	158	429	156	221	142	279
Hardness as $CaCO_3$	mg/L	--		165	199	169	91.6	282	588	75.6	174	420	151	263	137	251
Total Dissolved Solids	mg/L	500	a	206	212	242	143J	350	**696**	124	264	468	183	259	180	295
Chloride	mg/L	250	a, b	2	2	35.3	4.3	20	80.7	<1	21.3	9.9J	4.8	2.1	18.3	9.8
Sulfate	mg/L	250	a, b	17.3	17.8	17.9	7.2	<5	<5	<5	10.9	<5	16.5	<5	23.5	<5
Bromide	mg/L	2	a	<0.2	<0.2	<0.2	<0.2	<0.4	0.63	<0.2	<0.2	<0.4	<0.2	<0.2	<0.2	<0.4
NO_3	mg/L	10	a, b	<0.05J	<0.05J	--	--	--	--	<0.05	<0.05	<0.05	<0.05	0.43	0.063	0.12
NH_3	mg/L	2	a	0.022J	<0.02J	<0.02J	<0.02	**7.1**	0.44	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
TKN	mg/L	--		0.45	0.65	0.2	<0.2	7.4	1	0.53J	<0.2J	0.23J	0.25J	2.4J	<0.2J	0.49J
COD	mg/L	--		<10	<10	<10	<10	11.5	<10	14.1	10.3	<10	11.2	26.1	<10	20.1
BOD	mg/L	--		<2J	<2J	<2J	--	2.2J	<2J	<2J	<2	<2J	<2	<2	<2	<2
TOC	mg/L	--		<1	<1	<1	<1	7.5	4.6	4.3	<1	2.1	<1	4.2	<1	6.4
Total Phenolics	mg/L	0.001	a	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide	mg/L	0.2	a, b	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.013	<0.01	<0.01	0.011

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

b - Part 5 Drinking Water MCL

X.XX indicates contravention of standard.

J - value is estimated because sample did not meet laboratory QAQC protocols

OB - overburden well

BR - bedrock well

Table 2. Contraventions of NYS Water Quality Standards for Metals (mg/L), Towslee Landfill, Quarter 4, 2021.

Parameter	NYS Water Quality Standard		Total Metals													Dissolved Metals		
			Upgradient		Downgradient											Upgradient		Down-gradient
			OB CD-1	BR CD-1RA	OB MW-1A	BR MW-1B	OB MW-2A	BR MW-2B	BR MW-3A	BR MW-3B	BR MW-4A	BR MW-5A	OB MW-6A	BR MW-6B	OB MW-7A	OB CD-1	BR CD-1RA	OB MW-6A
Aluminum	--		8.8	13.2	1.1	0.2	1.1	0.32	0.48	<0.2	0.29	0.23	21.7	1.2	0.22	<0.2	<0.2	--
Antimony	0.003	a	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--
Arsenic	0.025	a	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	--
Barium	1	a	0.17	0.29	0.08	0.74J	0.44	1	0.44	0.2	1	0.57	0.42	0.33	0.19	0.064	0.16	--
Beryllium	0.004	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	<0.002	<0.002	--
Boron	1	a	<0.02	<0.02	0.023	<0.02	0.2	0.2	<0.02	0.03	0.078	<0.02	0.02	0.02	0.12	<0.02	<0.02	--
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	<0.002	<0.002	<0.002
Calcium	--		47.7	55.3	49.6	26.8	84.1	175	24.3	47.2	124	41.1	82.5	38.5	75.8	41.3	41.5	77.2
Chromium	0.05	a	0.012	0.016	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.03	<0.004	<0.004	<0.004	<0.004	--
Chromium (VI)	0.05	a	<0.01J	<0.01J	<0.01J	--	<0.01J	<0.01J	<0.01J	<0.01J	<0.01J	<0.01J	<0.01J	<0.01J	<0.01J	--	--	--
Cobalt	--		0.004	0.0087	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.018	<0.004	<0.004	<0.004	<0.004	--
Copper	0.2	a	0.012	0.017	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.023	<0.01	<0.01	<0.01	<0.01	--
Iron	0.3	a, b	**10.6**	**20.3**	**1**	**0.63J**	**9.5**	**0.34**	**0.42**	0.13	0.13	0.12	**29.8**	**0.58**	**0.32**	<0.05	<0.05	<0.05
Lead	0.015	b	0.011	**0.026**	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium	--		11.1	14.7	11.1	6	17.6	36.7	3.6	13.7	26.9	11.8	13.8	9.9	15	8.7	8.7	8
Manganese	0.3	a, b	**1.3**	**0.78**	0.13	**5.6J**	**11.4**	**4.5**	**0.78**	0.022	0.11	0.024	**0.83**	0.24	**2.3**	<0.003	0.14	<0.003
Mercury	7E-04	a	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	--	--
Nickel	0.1	a	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.032	<0.01	<0.01	<0.01	<0.01	--
Potassium	--		3.3	3.5	1.2	<0.5	9	2	1	1.1	1.5	0.82	6.9	1	2.2	0.86	0.71	1.7
Sodium	20	a, b	4.4	4.9	12.3	6	13.5	**40.5**	1.6	8	15.4	8.5	3.2	14.2	**20.8**	4	4.5	2.9
Selenium	0.01	a	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	--
Silver	0.05	a	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	--
Thallium	0.002	b	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--
Vanadium	--		0.013	0.018	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.031	<0.005	<0.005	<0.005	<0.005	--
Zinc	5	b	0.025	0.05	<0.01	0.046	<0.01	0.034	<0.01	<0.01	<0.01	<0.01	0.06	0.013	<0.01	<0.01	<0.01	--

a - Part 703 Water Quality Standard (Class GA waters)
b - Part 5 Drinking Water MCL
X.XX indicates contravention of standard.
J - value is estimated because sample did not meet laboratory QAQC protocols

OB = overburden well
BR = Bedrock well

Table 3. Contraventions of NYS Water Quality Standards for Organics, Towslee Landfill, Quarter 4, 2021.

Parameter*	NYS Water Quality Standard		Total Organics (µg/L)												
			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
Vinyl chloride	2	b	<1	<1	<1	<1	<1	**20**	<1	<1	<1	<1	<1	<1	<1
Chloroethane	5	b	<1	<1	<1	<1	<1	4.7	<1	<1	<1	<1	<1	<1	<1
Acetone	50	b	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Methylene chloride	5	b	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	5	b	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	5	b	<1	<1	<1	<1	<1	**47**	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	5	b	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzene	1	a	<1	<1	<1	<1	**1.3**	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	5	b	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	5	b	<1	<1	<1	<1	2.1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	5	b	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, Total	5	b	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
1,4-Dichlorobenzene	5	b	<1	<1	<1	<1	**1.1**	<1	<1	<1	<1	<1	<1	<1	<1

* List contains only compounds detected in current or past monitoring events

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

b - Part 5 Drinking Water MCL

X.XX indicates contravention of standard.

J - value is estimated because sample did not meet laboratory QAQC protocols

OB = overburden well

BR = Bedrock well

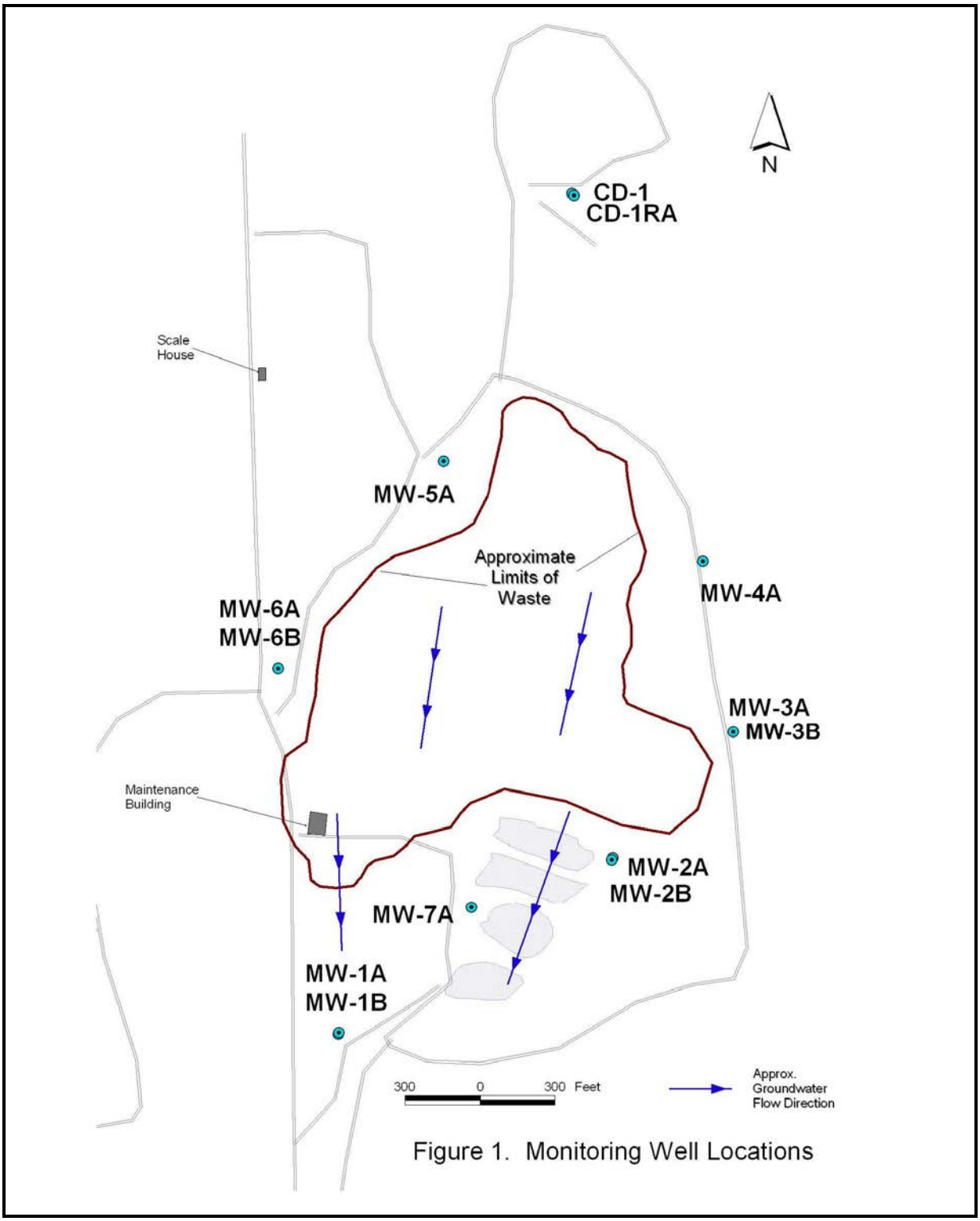

Figure 1. Monitoring Well Locations

Appendix B

Data Validation Report

Towslee Landfill, Cortland County

DATA VALIDATION
BASELINE PARAMETERS MONITORING
TOWSLEE LANDFILL

Collected December 2021
Volatile Organics
Metals
Leachate Indicators

Prepared for:
CORTLAND COUNTY SOIL and WATER CONSERVATION DISTRICT
100 Grange Place, Room 202
Cortland, NY 13045

Prepared by:

DATAVAL, Inc.
201 West Genesee Street, PMB 273
Fayetteville, NY 13066

DATA ASSESSMENT

Three data packages (480-193369, 480-193436, 480-193512) containing analytical results for 16 aqueous samples were received from TestAmerica-Buffalo on 10Jan22. The samples were collected from the Cortland County Towslee Landfill site between 09Dec21 and 15Dec21, as required by 6 NYCRR Part 360 (10/94). The ASP deliverables packages included formal reports, raw data, the necessary QC, and supporting information for Baseline Parameters Monitoring. MW-6A was also analyzed for dissolved metals. The samples were identified by Chain of Custody documents and trackable through the work of TestAmerica-Buffalo, the laboratory contracted for analysis. Laboratory data was evaluated according to the Quality Assurance / Quality Control Requirements of the New York State Department of Environmental Conservation's Analytical Services Protocol, September 1989, Rev. 07/2005. When the required protocol was not followed, the current EPA Region II Functional Guidelines (SOP HW-33, Rev. #3, March 2013, Low/Medium Volatile Data Validation, and SOP HW-2a, Rev. 15, December 2012, ICP-AES Data Validation) were used as a technical reference.

To satisfy the requirement for 5% data validation, data calculations relating to MW-1A were examined in detail. All of the available QA/QC information was then applied to an evaluation of each program sample.

Two samples were collected on 09Dec21. Three were collected on 10Dec21. Seven were collected on 14Dec21 and the final four samples were collected on 15Dec21. Each group of samples was transferred to the Syracuse office of Eurofins on the day of collection. From the office, they were shipped, via FedEx, to the laboratory in Buffalo. Samples collected on 10Dec221, 14Dec21 and 15Dec21 were delivered to the laboratory the next day. The 09Dec21 samples were delivered on 11Dec21.

At the time of receipt, the sample coolers were found to be intact and properly chilled, with custody seals in place. Twelve cooler temperatures ranging between 0.4°C and 3.0°C were recorded at that time.

Proper sample preservation was documented in the field custody records and verified in the laboratory at the time of receipt. A pH<2 was obtained from each VOC sample at the time of analysis to verify that each sample was properly stabilized.

Laboratory analyses were well organized and supported by the raw data. Each analysis incorporated the QA/QC requirements of ASP protocol. Areas where ASP requirements were not completely satisfied are addressed below. A detailed discussion of the review process follows.

LEACHATE INDICATORS

Test methods for the determination of Leachate Indicators utilize classical wet chemistry techniques. These methods were performed

well and demonstrated an acceptable level of quality control. Areas of concern are addressed below.

It is noted that the laboratory instruments used for the analysis of alkalinity, TKN, phenols, sulfate, TDS and chloride were programmed to produce results in units of concentration, directly. Instrument response was not provided. This made it impossible to verify the calculations used to obtain the reported concentrations of these analytes.

Holding Time

The 1-day ASP holding time limitations for the BOD, hexavalent chromium, color and nitrate samples from SDG 480-193369 was exceeded by between three days and five days. Based on this observation, the hexavalent chromium (CRVI), color and BOD results from MW-1A, MW-2A and MW-2B have been qualified as estimations. The hexavalent chromium (CRVI), color and BOD results from MW-1B and DUP-MW-1B and the nitrate results from SDG 480-193369 have been rejected. The nitrate sample from WS-1 was held for five days and has been similarly rejected.

The 1-day ASP holding time limitation for the BOD, hexavalent chromium, and nitrate samples were frequently exceeded by one day. This issue warrants no concern because at least one extra day is normally allowed for the shipment of samples to the laboratory.

Phenolics

A calibration blank associated with SDG 480-193369 contained 0.0155 mg/l of phenolics. The presence of this artifact, however, warrants no concern because the associated samples produced negative phenolics results.

The phenolics spike to CW-16 produced a low recovery of 77%. The phenolics results from SDG 480-193512 have been qualified as estimations based on this indication of negative bias.

Total Kjeldahl Nitrogen (TKN)

The TKN spike to MW-3A produce a high recovery of 123%. The positive TKN results from SDG 480-193436 have been qualified as estimations based on this indication of positive bias.

INORGANICS

The analysis of each metal was associated with the appropriate quality control checks, as defined by ASP protocol. The QC associated with this group of samples satisfied these requirements. The metals data from this group of samples should be considered completely usable and without qualifications as reported.

VOLATILE ORGANIC ANALYTES

Each VOA analysis incorporates several quality assurance checks to

demonstrate the precision and accuracy of laboratory measurements. These include the addition of surrogates and internal standards to every calibration standard, blank and program sample. A matrix spiked sample, a matrix spiked duplicate, and a spiked blank are also analyzed with each group of samples. ASP protocol defines acceptance criteria for each of these evaluations. Most of these requirements were satisfied. The exceptions are addressed below.

Matrix Spikes

Matrix spiking refers to the addition of known analyte concentrations to a sample, prior to analysis. Analyte recoveries provide an indication of laboratory accuracy. The analysis of a duplicate spiked aliquot provides a measurement of precision.

Although a sample from this project was not selected for matrix spiking, a spiked blank was analyzed with the samples from SDG 480-193436 and SDG 480-193512. Although this spiked blank produced a high recovery of tetrachloroethene (127%), this indication of positive bias warrants no concern because tetrachloroethene was not found in the associated samples.

DUPLICATE SAMPLES

Field split duplicate samples of MW-1B were included in this project. This pair of samples demonstrated poor measurement precision, reported as Relative Percent difference (RPD) in measurements of TDS (29%), barium (79%), iron (107%) and manganese (130%). The TDS, barium, iron and manganese results from MW-1B and DUP-MW-1B have been qualified as estimations based on this performance.

CORRECTNESS AND USABILITY

It is noted that MW-6A was analyzed for dissolved metals. However, the report forms do not identify which samples represent total metals and which are dissolved. Although the identities may be assumed based on the results, this area of documentation should be improved.

Data from this group of samples is felt to be technically correct and completely usable in its present form. Data presenting a usable estimation of the conditions at the time of sampling has been flagged "J" or "UJ". Data felt to be unreliable has been identified with a single red line and flagged "R". Rejected data should not be included in data tables. Estimated data should be used with caution.

Two facts should be considered by all data users. No compound concentration, even if it has passed all QC testing, can be guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error. Secondly. DATAVAL, Inc. guarantees the quality of this data

assessment. However, DATAVAL, Inc. does not warrant any interpretation or utilization of this data by a third party.

Reviewer's signature: James S Baldwin Date: 16 Jan 22

James Baldwin
DATAVAL, Inc.

CORTLAND COUNTY SOIL & WATER CONS DISTRICT
TOWSLEE LANDFILL
QUALIFIED DATA
SAMPLED DECEMBER 2021

	HOLD TIME HOLD*	HOLD TIME NITRATE	SPIKE PHENOLICS	SPIKES TKN	BLIND DUPE DUPE*
SDG 480-3369					
MW-1A	ALL J/UJ	REJECT			
MW-2A	ALL J/UJ	REJECT			
MW-2B	ALL J/UJ	REJECT			
MW-1B	ALL REJECT	REJECT			ALL J
DUP-MW-1B	ALL REJECT	REJECT			ALL J
SDG 480-193436-1					
MW-3A				0.53J	
MW-3B					
MW-4A				0.23J	
MW-5A				0.25J	
MW-6A				2.4J	
MW-6B					
MW-7A				0.49J	
SDG 480-193512-1					
WS-1		REJECT	0.010UJ		
CW-2			0.010UJ		
CW-15			0.010UJ		
CW-16			0.010UJ		

HOLD* = CRVI, color, BOD

DUPE* = TDS, barium, iron, manganese

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-1A
Lab Sample ID: 480-193369-1
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193369-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/10/2021 08:45
Reporting Basis: WET
Date Received: 12/13/2021 10:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	130	20.0		mg/L			2	310.2
57-12-5	Cyanide, Total	ND	0.010		mg/L			1	335.4
7664-41-7	Ammonia	ND	0.020		mg/L		F1	1	350.1
	Total Kjeldahl Nitrogen	0.20	0.20		mg/L			1	351.2
	Chemical Oxygen Demand	ND	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	ND	0.010		mg/L			1	420.4
18540-29-9	Chromium, hexavalent	~~ND~~	UJ 0.010		mg/L		H H3	1	7196A
24959-67-9	Bromide	ND	0.20		mg/L			1	300.0
14797-55-8	Nitrate as N	~~ND~~	R 0.050		mg/L		H H3	1	353.2
14808-79-8	Sulfate	17.9	5.0		mg/L			1	9038
	Total Dissolved Solids	242	10.0		mg/L			1	SM 2540C
16887-00-6	Chloride	35.3	1.0		mg/L			1	SM 4500 Cl- E
	Biochemical Oxygen Demand	~~ND~~	UJ 2.0		mg/L		H H3	1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	ND	1.0		mg/L			1	SM 5310C
	TOC Result 1	ND	1.0		mg/L			1	SM 5310C
	TOC Result 2	ND	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-1A
Lab Sample ID: 480-193369-1
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193369-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/10/2021 08:45
Reporting Basis: WET
Date Received: 12/13/2021 10:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	5.00	J 5.00		Color Units		H H3	1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-2A
Lab Sample ID: 480-193369-2
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193369-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/10/2021 07:45
Reporting Basis: WET
Date Received: 12/13/2021 10:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	339	40.0		mg/L			4	310.2
57-12-5	Cyanide, Total	ND	0.010		mg/L			1	335.4
7664-41-7	Ammonia	7.1	0.10		mg/L			5	350.1
	Total Kjeldahl Nitrogen	7.4	0.40		mg/L			2	351.2
	Chemical Oxygen Demand	11.5	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	ND	0.010		mg/L			1	420.4
18540-29-9	Chromium, hexavalent	~~ND~~	UJ 0.010		mg/L		H H3	1	7196A
24959-67-9	Bromide	ND	0.40		mg/L			2	300.0
14797-55-8	Nitrate as N	~~0.11~~	R 0.050		mg/L		H H3	1	353.2
14808-79-8	Sulfate	ND	5.0		mg/L			1	9038
	Total Dissolved Solids	350	10.0		mg/L			1	SM 2540C
16887-00-6	Chloride	20.0	1.0		mg/L			1	SM 4500 Cl- E
	Biochemical Oxygen Demand	2.2	J 2.0		mg/L		H H3 b	1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	7.5	1.0		mg/L			1	SM 5310C
	TOC Result 1	7.4	1.0		mg/L			1	SM 5310C
	TOC Result 2	7.5	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-2A
Lab Sample ID: 480-193369-2
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193369-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/10/2021 07:45
Reporting Basis: WET
Date Received: 12/13/2021 10:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	10.0	J 5.00		Color Units		H H3	1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-2B
Lab Sample ID: 480-193369-3
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193369-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/10/2021 08:05
Reporting Basis: WET
Date Received: 12/13/2021 10:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	560	80.0		mg/L			8	310.2
57-12-5	Cyanide, Total	ND	0.010		mg/L			1	335.4
7664-41-7	Ammonia	0.44	0.020		mg/L			1	350.1
	Total Kjeldahl Nitrogen	1.0	0.20		mg/L			1	351.2
	Chemical Oxygen Demand	ND	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	ND	0.010		mg/L			1	420.4
18540-29-9	Chromium, hexavalent	~~ND~~	UJ 0.010		mg/L		H H3	1	7196A
24959-67-9	Bromide	0.63	0.40		mg/L			2	300.0
14797-55-8	Nitrate as N	~~ND~~	R 0.050		mg/L		H H3	1	353.2
14808-79-8	Sulfate	ND	5.0		mg/L			1	9038
	Total Dissolved Solids	696	10.0		mg/L			1	SM 2540C
16887-00-6	Chloride	80.7	2.0		mg/L			2	SM 4500 Cl- E
	Biochemical Oxygen Demand	~~ND~~	UJ 2.0		mg/L		H H3	1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	4.6	1.0		mg/L			1	SM 5310C
	TOC Result 1	4.5	1.0		mg/L			1	SM 5310C
	TOC Result 2	4.8	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-2B
Lab Sample ID: 480-193369-3
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193369-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/10/2021 08:05
Reporting Basis: WET
Date Received: 12/13/2021 10:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	10.0	5.00		Color Units		H H3	1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-1B
Lab Sample ID: 480-193369-4
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193369-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/09/2021 12:20
Reporting Basis: WET
Date Received: 12/13/2021 10:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	95.9	20.0		mg/L			2	310.2
57-12-5	Cyanide, Total	ND	0.010		mg/L			1	335.4
7664-41-7	Ammonia	ND	0.020		mg/L			1	350.1
	Total Kjeldahl Nitrogen	ND	0.20		mg/L			1	351.2
	Chemical Oxygen Demand	ND	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	ND	0.010		mg/L			1	420.4
18540-29-9	Chromium, hexavalent	ND	0.010	R	mg/L		H H3	1	7196A
24959-67-9	Bromide	ND	0.20		mg/L			1	300.0
14797-55-8	Nitrate as N	ND	0.050	R	mg/L		H H3	1	353.2
14808-79-8	Sulfate	7.2	5.0		mg/L			1	9038
	Total Dissolved Solids	143	10.0	J	mg/L			1	SM 2540C
16887-00-6	Chloride	4.3	1.0		mg/L			1	SM 4500 Cl- E
	Biochemical Oxygen Demand	ND	2.0	R	mg/L		H H3	1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	ND	1.0		mg/L			1	SM 5310C
	TOC Result 1	ND	1.0		mg/L			1	SM 5310C
	TOC Result 2	ND	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-1B
Lab Sample ID: 480-193369-4
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193369-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/09/2021 12:20
Reporting Basis: WET
Date Received: 12/13/2021 10:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	~~5.00~~ R	5.00		Color Units		H H3	1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: DUP MW-1B
Lab Sample ID: 480-193369-5
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193369-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/09/2021 13:45
Reporting Basis: WET
Date Received: 12/13/2021 10:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	90.7	20.0		mg/L			2	310.2
57-12-5	Cyanide, Total	ND	0.010		mg/L			1	335.4
7664-41-7	Ammonia	ND	0.020		mg/L			1	350.1
	Total Kjeldahl Nitrogen	ND	0.20		mg/L			1	351.2
	Chemical Oxygen Demand	ND	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	ND	0.010		mg/L			1	420.4
18540-29-9	Chromium, hexavalent	~~ND~~	0.010	R	mg/L		H H3	1	7196A
24959-67-9	Bromide	ND	0.20		mg/L			1	300.0
14797-55-8	Nitrate as N	~~ND~~	0.050	R	mg/L		H H3	1	353.2
14808-79-8	Sulfate	7.1	5.0		mg/L			1	9038
	Total Dissolved Solids	192	10.0	J	mg/L			1	SM 2540C
16887-00-6	Chloride	4.5	1.0		mg/L			1	SM 4500 Cl- E
	Biochemical Oxygen Demand	~~ND~~	2.0	R	mg/L		H H3	1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	ND	1.0		mg/L			1	SM 5310C
	TOC Result 1	ND	1.0		mg/L			1	SM 5310C
	TOC Result 2	ND	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: DUP MW-1B
Lab Sample ID: 480-193369-5
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193369-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/09/2021 13:45
Reporting Basis: WET
Date Received: 12/13/2021 10:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	~~5.00~~ R	5.00		Color Units		H H3	1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-3A
Lab Sample ID: 480-193436-2
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 08:45
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	85.4	20.0		mg/L			2	310.2
57-12-5	Cyanide, Total	ND	0.010		mg/L			1	335.4
7664-41-7	Ammonia	ND	0.020		mg/L			1	350.1
	Total Kjeldahl Nitrogen	0.53	J 0.20		mg/L		F1	1	351.2
	Chemical Oxygen Demand	14.1	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	ND	0.010		mg/L			1	420.4
18540-29-9	Chromium, hexavalent	ND	0.010		mg/L		H H3	1	7196A
24959-67-9	Bromide	ND	0.20		mg/L			1	300.0
14797-55-8	Nitrate as N	ND	0.050		mg/L			1	353.2
14808-79-8	Sulfate	ND	5.0		mg/L			1	9038
	Total Dissolved Solids	124	10.0		mg/L			1	SM 2540C
16887-00-6	Chloride	ND	1.0		mg/L			1	SM 4500 Cl- E
	Biochemical Oxygen Demand	ND	2.0		mg/L		H	1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	4.3	1.0		mg/L			1	SM 5310C
	TOC Result 1	4.4	1.0		mg/L			1	SM 5310C
	TOC Result 2	4.2	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-3A
Lab Sample ID: 480-193436-2
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 08:45
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	40.0	5.00		Color Units			1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-3B
Lab Sample ID: 480-193436-3
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 09:00
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	158	30.0		mg/L			3	310.2
57-12-5	Cyanide, Total	0.010	0.010		mg/L			1	335.4
7664-41-7	Ammonia	ND	0.020		mg/L			1	350.1
	Total Kjeldahl Nitrogen	ND	0.20		mg/L			1	351.2
	Chemical Oxygen Demand	10.3	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	ND	0.010		mg/L			1	420.4
18540-29-9	Chromium, hexavalent	ND	0.010		mg/L		H H3	1	7196A
24959-67-9	Bromide	ND	0.20		mg/L			1	300.0
14797-55-8	Nitrate as N	ND	0.050		mg/L			1	353.2
14808-79-8	Sulfate	10.9	5.0		mg/L			1	9038
	Total Dissolved Solids	264	10.0		mg/L			1	SM 2540C
16887-00-6	Chloride	21.3	1.0		mg/L			1	SM 4500 Cl- E
	Biochemical Oxygen Demand	ND	2.0		mg/L			1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	ND	1.0		mg/L			1	SM 5310C
	TOC Result 1	ND	1.0		mg/L			1	SM 5310C
	TOC Result 2	ND	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-3B
Lab Sample ID: 480-193436-3
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 09:00
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	10.0	5.00		Color Units			1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-4A
Lab Sample ID: 480-193436-4
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 09:30
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	429	50.0		mg/L			5	310.2
57-12-5	Cyanide, Total	ND	0.010		mg/L			1	335.4
7664-41-7	Ammonia	ND	0.020		mg/L			1	350.1
	Total Kjeldahl Nitrogen	0.23	J 0.20		mg/L			1	351.2
	Chemical Oxygen Demand	ND	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	ND	0.010		mg/L			1	420.4
18540-29-9	Chromium, hexavalent	ND	0.010		mg/L		H H3	1	7196A
24959-67-9	Bromide	ND	0.40		mg/L			2	300.0
14797-55-8	Nitrate as N	ND	0.050		mg/L			1	353.2
14808-79-8	Sulfate	ND	5.0		mg/L			1	9038
	Total Dissolved Solids	468	10.0		mg/L			1	SM 2540C
16887-00-6	Chloride	9.9	1.0		mg/L		F1	1	SM 4500 Cl- E
	Biochemical Oxygen Demand	ND	2.0		mg/L			1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	2.1	1.0		mg/L			1	SM 5310C
	TOC Result 1	2.2	1.0		mg/L			1	SM 5310C
	TOC Result 2	1.9	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-4A
Lab Sample ID: 480-193436-4
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 09:30
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	15.0	5.00		Color Units			1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-5A
Lab Sample ID: 480-193436-5
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 09:50
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	156	30.0		mg/L			3	310.2
57-12-5	Cyanide, Total	0.013	0.010		mg/L			1	335.4
7664-41-7	Ammonia	ND	0.020		mg/L			1	350.1
	Total Kjeldahl Nitrogen	0.25	J 0.20		mg/L			1	351.2
	Chemical Oxygen Demand	11.2	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	ND	0.010		mg/L			1	420.4
18540-29-9	Chromium, hexavalent	ND	0.010		mg/L		H H3	1	7196A
24959-67-9	Bromide	ND	0.20		mg/L			1	300.0
14797-55-8	Nitrate as N	ND	0.050		mg/L			1	353.2
14808-79-8	Sulfate	16.5	5.0		mg/L			1	9038
	Total Dissolved Solids	183	10.0		mg/L			1	SM 2540C
16887-00-6	Chloride	4.8	1.0		mg/L			1	SM 4500 Cl- E
	Biochemical Oxygen Demand	ND	2.0		mg/L			1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	ND	1.0		mg/L			1	SM 5310C
	TOC Result 1	ND	1.0		mg/L			1	SM 5310C
	TOC Result 2	ND	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-5A
Lab Sample ID: 480-193436-5
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 09:50
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	15.0	5.00		Color Units			1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-6A
Lab Sample ID: 480-193436-6
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 10:20
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	221	30.0		mg/L			3	310.2
57-12-5	Cyanide, Total	ND	0.010		mg/L			1	335.4
7664-41-7	Ammonia	ND	0.020		mg/L			1	350.1
	Total Kjeldahl Nitrogen	2.4	0.20	J	mg/L			1	351.2
	Chemical Oxygen Demand	26.1	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	ND	0.010		mg/L			1	420.4
18540-29-9	Chromium, hexavalent	ND	0.010		mg/L		H H3	1	7196A
24959-67-9	Bromide	ND	0.20		mg/L			1	300.0
14797-55-8	Nitrate as N	0.43	0.050		mg/L			1	353.2
14808-79-8	Sulfate	ND	5.0		mg/L			1	9038
	Total Dissolved Solids	259	10.0		mg/L			1	SM 2540C
16887-00-6	Chloride	2.1	1.0		mg/L			1	SM 4500 Cl- E
	Biochemical Oxygen Demand	ND	2.0		mg/L			1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	4.2	1.0		mg/L			1	SM 5310C
	TOC Result 1	4.3	1.0		mg/L			1	SM 5310C
	TOC Result 2	4.2	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-6A
Lab Sample ID: 480-193436-6
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 10:20
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	20.0	5.00		Color Units			1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-6B
Lab Sample ID: 480-193436-7
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 10:45
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	142	30.0		mg/L			3	310.2
57-12-5	Cyanide, Total	ND	0.010		mg/L			1	335.4
7664-41-7	Ammonia	ND	0.020		mg/L			1	350.1
	Total Kjeldahl Nitrogen	ND	0.20		mg/L			1	351.2
	Chemical Oxygen Demand	ND	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	ND	0.010		mg/L			1	420.4
18540-29-9	Chromium, hexavalent	ND	0.010		mg/L		H	1	7196A
24959-67-9	Bromide	ND	0.20		mg/L			1	300.0
14797-55-8	Nitrate as N	0.063	0.050		mg/L			1	353.2
14808-79-8	Sulfate	23.5	5.0		mg/L			1	9038
	Total Dissolved Solids	180	10.0		mg/L			1	SM 2540C
16887-00-6	Chloride	18.3	1.0		mg/L			1	SM 4500 Cl- E
	Biochemical Oxygen Demand	ND	2.0		mg/L			1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	ND	1.0		mg/L			1	SM 5310C
	TOC Result 1	ND	1.0		mg/L			1	SM 5310C
	TOC Result 2	ND	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-6B
Lab Sample ID: 480-193436-7
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 10:45
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	5.00	5.00		Color Units			1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-7A
Lab Sample ID: 480-193436-8
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 11:15
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	279	50.0		mg/L			5	310.2
57-12-5	Cyanide, Total	0.011	0.010		mg/L			1	335.4
7664-41-7	Ammonia	ND	0.020		mg/L			1	350.1
	Total Kjeldahl Nitrogen	0.49	0.20	J	mg/L			1	351.2
	Chemical Oxygen Demand	20.1	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	ND	0.010		mg/L			1	420.4
18540-29-9	Chromium, hexavalent	ND	0.010		mg/L		H	1	7196A
24959-67-9	Bromide	ND	0.40		mg/L			2	300.0
14797-55-8	Nitrate as N	0.12	0.050		mg/L			1	353.2
14808-79-8	Sulfate	ND	5.0		mg/L			1	9038
	Total Dissolved Solids	295	10.0		mg/L			1	SM 2540C
16887-00-6	Chloride	9.8	1.0		mg/L			1	SM 4500 Cl- E
	Biochemical Oxygen Demand	ND	2.0		mg/L			1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	6.4	1.0		mg/L			1	SM 5310C
	TOC Result 1	6.5	1.0		mg/L			1	SM 5310C
	TOC Result 2	6.3	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-7A
Lab Sample ID: 480-193436-8
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 11:15
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	15.0	5.00		Color Units			1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WS-1 | Lab Sample ID: 480-193512-1

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-193512-1

SDG ID.:

Matrix: Water | Date Sampled: 12/15/2021 09:30

Reporting Basis: WET | Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	133	30.0		mg/L			3	310.2
7664-41-7	Ammonia	ND	0.020		mg/L			1	350.1
	Total Kjeldahl Nitrogen	ND	0.20		mg/L			1	351.2
	Chemical Oxygen Demand	ND	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	~~ND~~	0.010	UJ	mg/L			1	420.4
18540-29-9	Chromium, hexavalent	ND	0.010		mg/L		H H3	1	7196A
24959-67-9	Bromide	ND	0.20		mg/L			1	300.0
14797-55-8	Nitrate as N	~~0.056~~	0.050	R	mg/L		H	1	353.2
14808-79-8	Sulfate	33.6	5.0		mg/L			1	9038
	Total Dissolved Solids	211	10.0		mg/L			1	SM 2540C
16887-00-6	Chloride	5.9	1.0		mg/L			1	SM 4500 Cl- E
	Biochemical Oxygen Demand	ND	2.0		mg/L			1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	ND	1.0		mg/L			1	SM 5310C
	TOC Result 1	ND	1.0		mg/L			1	SM 5310C
	TOC Result 2	ND	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WS-1 | Lab Sample ID: 480-193512-1

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-193512-1

SDG ID.:

Matrix: Water | Date Sampled: 12/15/2021 09:30

Reporting Basis: WET | Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	5.00	5.00		Color Units			1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: WS-1 | Lab Sample ID: 480-193512-1

Lab Name: Eurofins TestAmerica, Savannah | Job No.: 480-193512-1

SDG ID.:

Matrix: Water | Date Sampled: 12/15/2021 09:30

Reporting Basis: WET | Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	0.015	0.010		mg/L		F1	1	335.4-1993 R1.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CW-2 | Lab Sample ID: 480-193512-2

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-193512-1

SDG ID.:

Matrix: Water | Date Sampled: 12/15/2021 11:00

Reporting Basis: WET | Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	187	20.0		mg/L			2	310.2
7664-41-7	Ammonia	0.15	0.020		mg/L			1	350.1
	Total Kjeldahl Nitrogen	0.34	0.20		mg/L			1	351.2
	Chemical Oxygen Demand	ND	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	~~ND~~ UJ	0.010		mg/L			1	420.4
18540-29-9	Chromium, hexavalent	ND	0.010		mg/L		H	1	7196A
24959-67-9	Bromide	0.40	0.20		mg/L			1	300.0
14797-55-8	Nitrate as N	ND	0.050		mg/L			1	353.2
14808-79-8	Sulfate	ND	5.0		mg/L			1	9038
	Total Dissolved Solids	247	10.0		mg/L			1	SM 2540C
16887-00-6	Chloride	43.7	1.0		mg/L			1	SM 4500 Cl- E
	Biochemical Oxygen Demand	ND	2.0		mg/L			1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	ND	1.0		mg/L			1	SM 5310C
	TOC Result 1	ND	1.0		mg/L			1	SM 5310C
	TOC Result 2	ND	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CW-2 | Lab Sample ID: 480-193512-2

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-193512-1

SDG ID.:

Matrix: Water | Date Sampled: 12/15/2021 11:00

Reporting Basis: WET | Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	10.0	5.00		Color Units			1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CW-2 | Lab Sample ID: 480-193512-2

Lab Name: Eurofins TestAmerica, Savannah | Job No.: 480-193512-1

SDG ID.:

Matrix: Water | Date Sampled: 12/15/2021 11:00

Reporting Basis: WET | Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	0.014	0.010		mg/L			1	335.4-1993 R1.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CW-15 | Lab Sample ID: 480-193512-3

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-193512-1

SDG ID.:

Matrix: Water | Date Sampled: 12/15/2021 12:50

Reporting Basis: WET | Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	184	20.0		mg/L			2	310.2
7664-41-7	Ammonia	0.12	0.020		mg/L			1	350.1
	Total Kjeldahl Nitrogen	0.33	0.20		mg/L			1	351.2
	Chemical Oxygen Demand	ND	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	~~ND~~ UJ	0.010		mg/L			1	420.4
18540-29-9	Chromium, hexavalent	ND	0.010		mg/L			1	7196A
24959-67-9	Bromide	ND	0.20		mg/L			1	300.0
14797-55-8	Nitrate as N	ND	0.050		mg/L			1	353.2
14808-79-8	Sulfate	ND	5.0		mg/L			1	9038
	Total Dissolved Solids	186	10.0		mg/L			1	SM 2540C
16887-00-6	Chloride	1.5	1.0		mg/L			1	SM 4500 Cl- E
	Biochemical Oxygen Demand	ND	2.0		mg/L			1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	ND	1.0		mg/L			1	SM 5310C
	TOC Result 1	ND	1.0		mg/L			1	SM 5310C
	TOC Result 2	ND	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CW-15 | Lab Sample ID: 480-193512-3

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-193512-1

SDG ID.:

Matrix: Water | Date Sampled: 12/15/2021 12:50

Reporting Basis: WET | Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	5.00	5.00		Color Units			1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CW-15
Lab Sample ID: 480-193512-3
Lab Name: Eurofins TestAmerica, Savannah
Job No.: 480-193512-1
SDG ID.:
Matrix: Water
Date Sampled: 12/15/2021 12:50
Reporting Basis: WET
Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	0.015	0.010		mg/L			1	335.4-1993 R1.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CW-16 | Lab Sample ID: 480-193512-4

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-193512-1

SDG ID.:

Matrix: Water | Date Sampled: 12/15/2021 12:30

Reporting Basis: WET | Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Alkalinity, Total	69.4	30.0		mg/L			3	310.2
7664-41-7	Ammonia	ND	0.020		mg/L			1	350.1
	Total Kjeldahl Nitrogen	0.39	0.20		mg/L			1	351.2
	Chemical Oxygen Demand	ND	10.0		mg/L			1	410.4
	Phenolics, Total Recoverable	~~ND~~ UJ	0.010		mg/L		F1	1	420.4
18540-29-9	Chromium, hexavalent	ND	0.010		mg/L			1	7196A
24959-67-9	Bromide	ND	0.20		mg/L			1	300.0
14797-55-8	Nitrate as N	1.3	0.050		mg/L			1	353.2
14808-79-8	Sulfate	ND	5.0		mg/L			1	9038
	Total Dissolved Solids	94.0	10.0		mg/L			1	SM 2540C
16887-00-6	Chloride	ND	1.0		mg/L			1	SM 4500 Cl- E
	Biochemical Oxygen Demand	ND	2.0		mg/L			1	SM 5210B
7440-44-0	Total Organic Carbon - Duplicates	2.3	1.0		mg/L			1	SM 5310C
	TOC Result 1	2.3	1.0		mg/L			1	SM 5310C
	TOC Result 2	2.3	1.0		mg/L			1	SM 5310C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CW-16 | Lab Sample ID: 480-193512-4

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-193512-1

SDG ID.:

Matrix: Water | Date Sampled: 12/15/2021 12:30

Reporting Basis: WET | Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
	Color	10.0	5.00		Color Units			1	SM 2120B

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: CW-16 | Lab Sample ID: 480-193512-4

Lab Name: Eurofins TestAmerica, Savannah | Job No.: 480-193512-1

SDG ID.:

Matrix: Water | Date Sampled: 12/15/2021 12:30

Reporting Basis: WET | Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	ND	0.010		mg/L		F1	1	335.4-1993 R1.0

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-1A
Lab Sample ID: 480-193369-1
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193369-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/10/2021 08:45
Reporting Basis: WET
Date Received: 12/13/2021 10:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	1.1	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	0.080	0.0020		mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-42-8	Boron	0.023	0.020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	49.6	0.50		mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040		mg/L			1	6010C
7440-50-8	Copper	ND	0.010		mg/L			1	6010C
7439-89-6	Iron	1.0	0.050		mg/L			1	6010C
7439-92-1	Lead	ND	0.010		mg/L			1	6010C
7439-95-4	Magnesium	11.1	0.20		mg/L			1	6010C
7439-96-5	Manganese	0.13	0.0030		mg/L			1	6010C
7440-02-0	Nickel	ND	0.010		mg/L			1	6010C
7440-09-7	Potassium	1.2	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	12.3	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050		mg/L			1	6010C
7440-66-6	Zinc	ND	0.010		mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A
	Hardness as calcium carbonate	169	0.50		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-2A
Lab Sample ID: 480-193369-2
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193369-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/10/2021 07:45
Reporting Basis: WET
Date Received: 12/13/2021 10:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	1.1	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	0.44	0.0020		mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-42-8	Boron	0.20	0.020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	84.1	0.50		mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040		mg/L			1	6010C
7440-50-8	Copper	ND	0.010		mg/L			1	6010C
7439-89-6	Iron	9.5	0.050		mg/L			1	6010C
7439-92-1	Lead	ND	0.010		mg/L			1	6010C
7439-95-4	Magnesium	17.6	0.20		mg/L			1	6010C
7439-96-5	Manganese	11.4	0.0030		mg/L			1	6010C
7440-02-0	Nickel	ND	0.010		mg/L			1	6010C
7440-09-7	Potassium	9.0	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	13.5	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050		mg/L			1	6010C
7440-66-6	Zinc	ND	0.010		mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A
	Hardness as calcium carbonate	282	0.50		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-2B
Lab Sample ID: 480-193369-3
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193369-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/10/2021 08:05
Reporting Basis: WET
Date Received: 12/13/2021 10:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	0.32	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	1.0	0.0020		mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-42-8	Boron	0.20	0.020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	175	0.50		mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040		mg/L			1	6010C
7440-50-8	Copper	ND	0.010		mg/L			1	6010C
7439-89-6	Iron	0.34	0.050		mg/L			1	6010C
7439-92-1	Lead	ND	0.010		mg/L			1	6010C
7439-95-4	Magnesium	36.7	0.20		mg/L			1	6010C
7439-96-5	Manganese	4.5	0.0030		mg/L			1	6010C
7440-02-0	Nickel	ND	0.010		mg/L			1	6010C
7440-09-7	Potassium	2.0	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	40.5	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050		mg/L			1	6010C
7440-66-6	Zinc	0.034	0.010		mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A
	Hardness as calcium carbonate	588	0.50		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-1B
Lab Sample ID: 480-193369-4
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193369-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/09/2021 12:20
Reporting Basis: WET
Date Received: 12/13/2021 10:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	0.20	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	0.74	0.0020	J	mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-42-8	Boron	ND	0.020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	26.8	0.50		mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040		mg/L			1	6010C
7440-50-8	Copper	ND	0.010		mg/L			1	6010C
7439-89-6	Iron	0.63	0.050	J	mg/L			1	6010C
7439-92-1	Lead	ND	0.010		mg/L			1	6010C
7439-95-4	Magnesium	6.0	0.20		mg/L			1	6010C
7439-96-5	Manganese	5.6	0.0030	J	mg/L			1	6010C
7440-02-0	Nickel	ND	0.010		mg/L			1	6010C
7440-09-7	Potassium	ND	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	6.0	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050		mg/L			1	6010C
7440-66-6	Zinc	0.046	0.010		mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A
	Hardness as calcium carbonate	91.6	0.50		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DUP MW-1B
Lab Sample ID: 480-193369-5
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193369-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/09/2021 13:45
Reporting Basis: WET
Date Received: 12/13/2021 10:00

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	0.32	0.0020	J	mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-42-8	Boron	ND	0.020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	27.0	0.50		mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040		mg/L			1	6010C
7440-50-8	Copper	ND	0.010		mg/L			1	6010C
7439-89-6	Iron	0.19	0.050	J	mg/L			1	6010C
7439-92-1	Lead	ND	0.010		mg/L			1	6010C
7439-95-4	Magnesium	6.1	0.20		mg/L			1	6010C
7439-96-5	Manganese	1.2	0.0030	J	mg/L			1	6010C
7440-02-0	Nickel	ND	0.010		mg/L			1	6010C
7440-09-7	Potassium	ND	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	6.2	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050		mg/L			1	6010C
7440-66-6	Zinc	0.019	0.010		mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A
	Hardness as calcium carbonate	92.4	0.50		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-6A
Lab Sample ID: 480-193436-6
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 10:20
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	21.7	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	0.42	0.0020		mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-42-8	Boron	0.020	0.020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	82.5	0.50		mg/L			1	6010C
7440-47-3	Chromium	0.030	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	0.018	0.0040		mg/L			1	6010C
7440-50-8	Copper	0.023	0.010		mg/L			1	6010C
7439-89-6	Iron	29.8	0.050		mg/L			1	6010C
7439-92-1	Lead	0.010	0.010		mg/L			1	6010C
7439-95-4	Magnesium	13.8	0.20		mg/L			1	6010C
7439-96-5	Manganese	0.83	0.0030		mg/L			1	6010C
7440-02-0	Nickel	0.032	0.010		mg/L			1	6010C
7440-09-7	Potassium	6.9	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	3.2	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	0.031	0.0050		mg/L			1	6010C
7440-66-6	Zinc	0.060	0.010		mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A
	Hardness as calcium carbonate	263	0.50		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MW-6A
Lab Sample ID: 480-193436-6
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 10:20
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	77.2	0.50		mg/L			1	6010C
7439-89-6	Iron	ND	0.050		mg/L			1	6010C
7439-92-1	Lead	ND	0.010		mg/L			1	6010C
7439-95-4	Magnesium	8.0	0.20		mg/L			1	6010C
7439-96-5	Manganese	ND	0.0030		mg/L			1	6010C
7440-09-7	Potassium	1.7	0.50		mg/L			1	6010C
7440-23-5	Sodium	2.9	1.0		mg/L			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-6B
Lab Sample ID: 480-193436-7
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 10:45
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	1.2	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	0.33	0.0020		mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-42-8	Boron	0.020	0.020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	38.5	0.50		mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040		mg/L			1	6010C
7440-50-8	Copper	ND	0.010		mg/L			1	6010C
7439-89-6	Iron	0.58	0.050		mg/L			1	6010C
7439-92-1	Lead	ND	0.010		mg/L			1	6010C
7439-95-4	Magnesium	9.9	0.20		mg/L			1	6010C
7439-96-5	Manganese	0.24	0.0030		mg/L			1	6010C
7440-02-0	Nickel	ND	0.010		mg/L			1	6010C
7440-09-7	Potassium	1.0	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	14.2	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050		mg/L			1	6010C
7440-66-6	Zinc	0.013	0.010		mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A
	Hardness as calcium carbonate	137	0.50		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW-7A
Lab Sample ID: 480-193436-8
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-193436-1
SDG ID.: 193337
Matrix: Water
Date Sampled: 12/14/2021 11:15
Reporting Basis: WET
Date Received: 12/15/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	0.22	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	0.19	0.0020		mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-42-8	Boron	0.12	0.020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	75.8	0.50		mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040		mg/L			1	6010C
7440-50-8	Copper	ND	0.010		mg/L			1	6010C
7439-89-6	Iron	0.32	0.050		mg/L			1	6010C
7439-92-1	Lead	ND	0.010		mg/L			1	6010C
7439-95-4	Magnesium	15.0	0.20		mg/L			1	6010C
7439-96-5	Manganese	2.3	0.0030		mg/L			1	6010C
7440-02-0	Nickel	ND	0.010		mg/L			1	6010C
7440-09-7	Potassium	2.2	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	20.8	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050		mg/L			1	6010C
7440-66-6	Zinc	ND	0.010		mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A
	Hardness as calcium carbonate	251	0.50		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WS-1 | Lab Sample ID: 480-193512-1

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-193512-1

SDG ID.:

Matrix: Water | Date Sampled: 12/15/2021 09:30

Reporting Basis: WET | Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	0.26	0.0020		mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-42-8	Boron	0.040	0.020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	39.7	0.50		mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040		mg/L			1	6010C
7440-50-8	Copper	ND	0.010		mg/L			1	6010C
7439-89-6	Iron	ND	0.050		mg/L			1	6010C
7439-92-1	Lead	ND	0.010		mg/L			1	6010C
7439-95-4	Magnesium	8.7	0.20		mg/L			1	6010C
7439-96-5	Manganese	0.0084	0.0030		mg/L			1	6010C
7440-02-0	Nickel	ND	0.010		mg/L			1	6010C
7440-09-7	Potassium	0.51	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	7.0	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050		mg/L			1	6010C
7440-66-6	Zinc	0.011	0.010		mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A
	Hardness as calcium carbonate	135	0.50		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: CW-2 | Lab Sample ID: 480-193512-2

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-193512-1

SDG ID.:

Matrix: Water | Date Sampled: 12/15/2021 11:00

Reporting Basis: WET | Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	0.83	0.0020		mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-42-8	Boron	0.27	0.020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	18.3	0.50		mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040		mg/L			1	6010C
7440-50-8	Copper	ND	0.010		mg/L			1	6010C
7439-89-6	Iron	ND	0.050		mg/L			1	6010C
7439-92-1	Lead	ND	0.010		mg/L			1	6010C
7439-95-4	Magnesium	3.7	0.20		mg/L			1	6010C
7439-96-5	Manganese	0.034	0.0030		mg/L			1	6010C
7440-02-0	Nickel	ND	0.010		mg/L			1	6010C
7440-09-7	Potassium	0.52	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	79.7	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050		mg/L			1	6010C
7440-66-6	Zinc	ND	0.010		mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A
	Hardness as calcium carbonate	61.2	0.50		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: CW-15 | Lab Sample ID: 480-193512-3

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-193512-1

SDG ID.:

Matrix: Water | Date Sampled: 12/15/2021 12:50

Reporting Basis: WET | Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	0.42	0.0020		mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-42-8	Boron	0.26	0.020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	28.7	0.50		mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040		mg/L			1	6010C
7440-50-8	Copper	0.031	0.010		mg/L			1	6010C
7439-89-6	Iron	0.16	0.050		mg/L			1	6010C
7439-92-1	Lead	ND	0.010		mg/L			1	6010C
7439-95-4	Magnesium	6.2	0.20		mg/L			1	6010C
7439-96-5	Manganese	0.071	0.0030		mg/L			1	6010C
7440-02-0	Nickel	ND	0.010		mg/L			1	6010C
7440-09-7	Potassium	ND	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	33.6	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050		mg/L			1	6010C
7440-66-6	Zinc	0.14	0.010		mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A
	Hardness as calcium carbonate	97.1	0.50		mg/L			1	SM 2340B

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: CW-16 | Lab Sample ID: 480-193512-4

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-193512-1

SDG ID.:

Matrix: Water | Date Sampled: 12/15/2021 12:30

Reporting Basis: WET | Date Received: 12/16/2021 10:30

CAS No.	Analyte	Result	RL		Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.20		mg/L			1	6010C
7440-36-0	Antimony	ND	0.020		mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015		mg/L			1	6010C
7440-39-3	Barium	0.057	0.0020		mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020		mg/L			1	6010C
7440-42-8	Boron	ND	0.020		mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020		mg/L			1	6010C
7440-70-2	Calcium	18.5	0.50		mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040		mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040		mg/L			1	6010C
7440-50-8	Copper	ND	0.010		mg/L			1	6010C
7439-89-6	Iron	0.079	0.050		mg/L			1	6010C
7439-92-1	Lead	ND	0.010		mg/L			1	6010C
7439-95-4	Magnesium	3.3	0.20		mg/L			1	6010C
7439-96-5	Manganese	0.0036	0.0030		mg/L			1	6010C
7440-02-0	Nickel	ND	0.010		mg/L			1	6010C
7440-09-7	Potassium	2.9	0.50		mg/L			1	6010C
7782-49-2	Selenium	ND	0.025		mg/L			1	6010C
7440-22-4	Silver	ND	0.0060		mg/L			1	6010C
7440-23-5	Sodium	1.7	1.0		mg/L			1	6010C
7440-28-0	Thallium	ND	0.020		mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050		mg/L			1	6010C
7440-66-6	Zinc	ND	0.010		mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020		mg/L			1	7470A
	Hardness as calcium carbonate	59.8	0.50		mg/L			1	SM 2340B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-193369-1

SDG No.: 193337

Client Sample ID: MW-1A | Lab Sample ID: 480-193369-1

Matrix: Water | Lab File ID: L16223.D

Analysis Method: 8260C | Date Collected: 12/10/2021 08:45

Sample wt/vol: 5(mL) | Date Analyzed: 12/14/2021 05:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 608629 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	ND		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193369-1

SDG No.: 193337

Client Sample ID: MW-1A Lab Sample ID: 480-193369-1

Matrix: Water Lab File ID: L16223.D

Analysis Method: 8260C Date Collected: 12/10/2021 08:45

Sample wt/vol: 5(mL) Date Analyzed: 12/14/2021 05:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 608629 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		77-120
2037-26-5	Toluene-d8 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	97		73-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193369-1

SDG No.: 193337

Client Sample ID: MW-2A Lab Sample ID: 480-193369-2

Matrix: Water Lab File ID: L16224.D

Analysis Method: 8260C Date Collected: 12/10/2021 07:45

Sample wt/vol: 5(mL) Date Analyzed: 12/14/2021 05:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 608629 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	1.1		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	1.3		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	2.1		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193369-1

SDG No.: 193337

Client Sample ID: MW-2A Lab Sample ID: 480-193369-2

Matrix: Water Lab File ID: L16224.D

Analysis Method: 8260C Date Collected: 12/10/2021 07:45

Sample wt/vol: 5(mL) Date Analyzed: 12/14/2021 05:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 608629 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		77-120
2037-26-5	Toluene-d8 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193369-1

SDG No.: 193337

Client Sample ID: MW-2B Lab Sample ID: 480-193369-3

Matrix: Water Lab File ID: L16225.D

Analysis Method: 8260C Date Collected: 12/10/2021 08:05

Sample wt/vol: 5(mL) Date Analyzed: 12/14/2021 06:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 608629 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	ND		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	4.7		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	47		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193369-1

SDG No.: 193337

Client Sample ID: MW-2B Lab Sample ID: 480-193369-3

Matrix: Water Lab File ID: L16225.D

Analysis Method: 8260C Date Collected: 12/10/2021 08:05

Sample wt/vol: 5(mL) Date Analyzed: 12/14/2021 06:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 608629 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	20		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		77-120
2037-26-5	Toluene-d8 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	96		73-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193369-1

SDG No.: 193337

Client Sample ID: MW-1B Lab Sample ID: 480-193369-4

Matrix: Water Lab File ID: L16226.D

Analysis Method: 8260C Date Collected: 12/09/2021 12:20

Sample wt/vol: 5(mL) Date Analyzed: 12/14/2021 06:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 608629 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	ND		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193369-1

SDG No.: 193337

Client Sample ID: MW-1B Lab Sample ID: 480-193369-4

Matrix: Water Lab File ID: L16226.D

Analysis Method: 8260C Date Collected: 12/09/2021 12:20

Sample wt/vol: 5(mL) Date Analyzed: 12/14/2021 06:25

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 608629 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		77-120
2037-26-5	Toluene-d8 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193369-1

SDG No.: 193337

Client Sample ID: DUP MW-1B Lab Sample ID: 480-193369-5

Matrix: Water Lab File ID: L16227.D

Analysis Method: 8260C Date Collected: 12/09/2021 13:45

Sample wt/vol: 5(mL) Date Analyzed: 12/14/2021 06:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 608629 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	ND		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193369-1

SDG No.: 193337

Client Sample ID: DUP MW-1B Lab Sample ID: 480-193369-5

Matrix: Water Lab File ID: L16227.D

Analysis Method: 8260C Date Collected: 12/09/2021 13:45

Sample wt/vol: 5(mL) Date Analyzed: 12/14/2021 06:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (30) VOA ID: 0.25(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 608629 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND		1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		77-120
2037-26-5	Toluene-d8 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193436-1

SDG No.: 193337

Client Sample ID: MW-3A Lab Sample ID: 480-193436-2

Matrix: Water Lab File ID: C1450.D

Analysis Method: 8260C Date Collected: 12/14/2021 08:45

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 15:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	ND		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193436-1

SDG No.: 193337

Client Sample ID: MW-3A Lab Sample ID: 480-193436-2

Matrix: Water Lab File ID: C1450.D

Analysis Method: 8260C Date Collected: 12/14/2021 08:45

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 15:24

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND	*+	1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		77-120
2037-26-5	Toluene-d8 (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	102		73-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193436-1

SDG No.: 193337

Client Sample ID: MW-3B Lab Sample ID: 480-193436-3

Matrix: Water Lab File ID: C1451.D

Analysis Method: 8260C Date Collected: 12/14/2021 09:00

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 15:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	ND		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193436-1

SDG No.: 193337

Client Sample ID: MW-3B Lab Sample ID: 480-193436-3

Matrix: Water Lab File ID: C1451.D

Analysis Method: 8260C Date Collected: 12/14/2021 09:00

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 15:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND	*+	1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		77-120
2037-26-5	Toluene-d8 (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	102		73-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193436-1

SDG No.: 193337

Client Sample ID: MW-4A Lab Sample ID: 480-193436-4

Matrix: Water Lab File ID: C1452.D

Analysis Method: 8260C Date Collected: 12/14/2021 09:30

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 16:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	ND		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193436-1

SDG No.: 193337

Client Sample ID: MW-4A Lab Sample ID: 480-193436-4

Matrix: Water Lab File ID: C1452.D

Analysis Method: 8260C Date Collected: 12/14/2021 09:30

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 16:10

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND	*+	1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
2037-26-5	Toluene-d8 (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		73-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193436-1

SDG No.: 193337

Client Sample ID: MW-5A Lab Sample ID: 480-193436-5

Matrix: Water Lab File ID: C1453.D

Analysis Method: 8260C Date Collected: 12/14/2021 09:50

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 16:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	ND		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193436-1

SDG No.: 193337

Client Sample ID: MW-5A Lab Sample ID: 480-193436-5

Matrix: Water Lab File ID: C1453.D

Analysis Method: 8260C Date Collected: 12/14/2021 09:50

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 16:33

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND	*+	1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	118		77-120
2037-26-5	Toluene-d8 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193436-1

SDG No.: 193337

Client Sample ID: MW-6A Lab Sample ID: 480-193436-6

Matrix: Water Lab File ID: C1454.D

Analysis Method: 8260C Date Collected: 12/14/2021 10:20

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 16:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	ND		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193436-1

SDG No.: 193337

Client Sample ID: MW-6A Lab Sample ID: 480-193436-6

Matrix: Water Lab File ID: C1454.D

Analysis Method: 8260C Date Collected: 12/14/2021 10:20

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 16:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND	*+	1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		77-120
2037-26-5	Toluene-d8 (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		73-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193436-1

SDG No.: 193337

Client Sample ID: MW-6B Lab Sample ID: 480-193436-7

Matrix: Water Lab File ID: C1455.D

Analysis Method: 8260C Date Collected: 12/14/2021 10:45

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 17:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	ND		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193436-1

SDG No.: 193337

Client Sample ID: MW-6B Lab Sample ID: 480-193436-7

Matrix: Water Lab File ID: C1455.D

Analysis Method: 8260C Date Collected: 12/14/2021 10:45

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 17:19

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND	*+	1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		77-120
2037-26-5	Toluene-d8 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	102		73-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193436-1

SDG No.: 193337

Client Sample ID: MW-7A Lab Sample ID: 480-193436-8

Matrix: Water Lab File ID: C1456.D

Analysis Method: 8260C Date Collected: 12/14/2021 11:15

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 17:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	ND		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193436-1

SDG No.: 193337

Client Sample ID: MW-7A Lab Sample ID: 480-193436-8

Matrix: Water Lab File ID: C1456.D

Analysis Method: 8260C Date Collected: 12/14/2021 11:15

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 17:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND	*+	1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		77-120
2037-26-5	Toluene-d8 (Surr)	105		80-120
460-00-4	4-Bromofluorobenzene (Surr)	104		73-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193512-1

SDG No.:

Client Sample ID: WS-1 Lab Sample ID: 480-193512-1

Matrix: Water Lab File ID: C1458.D

Analysis Method: 8260C Date Collected: 12/15/2021 09:30

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 18:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	ND		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193512-1

SDG No.:

Client Sample ID: WS-1 Lab Sample ID: 480-193512-1

Matrix: Water Lab File ID: C1458.D

Analysis Method: 8260C Date Collected: 12/15/2021 09:30

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 18:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND	*+	1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		77-120
2037-26-5	Toluene-d8 (Surr)	104		80-120
460-00-4	4-Bromofluorobenzene (Surr)	105		73-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193512-1

SDG No.:

Client Sample ID: CW-2 Lab Sample ID: 480-193512-2

Matrix: Water Lab File ID: C1459.D

Analysis Method: 8260C Date Collected: 12/15/2021 11:00

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 18:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	ND		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193512-1

SDG No.:

Client Sample ID: CW-2 Lab Sample ID: 480-193512-2

Matrix: Water Lab File ID: C1459.D

Analysis Method: 8260C Date Collected: 12/15/2021 11:00

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 18:50

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND	*+	1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		77-120
2037-26-5	Toluene-d8 (Surr)	96		80-120
460-00-4	4-Bromofluorobenzene (Surr)	93		73-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193512-1

SDG No.:

Client Sample ID: CW-15 Lab Sample ID: 480-193512-3

Matrix: Water Lab File ID: C1460.D

Analysis Method: 8260C Date Collected: 12/15/2021 12:50

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 19:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	ND		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193512-1

SDG No.:

Client Sample ID: CW-15 Lab Sample ID: 480-193512-3

Matrix: Water Lab File ID: C1460.D

Analysis Method: 8260C Date Collected: 12/15/2021 12:50

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 19:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND	*+	1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		77-120
2037-26-5	Toluene-d8 (Surr)	102		80-120
460-00-4	4-Bromofluorobenzene (Surr)	98		73-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193512-1

SDG No.:

Client Sample ID: CW-16 Lab Sample ID: 480-193512-4

Matrix: Water Lab File ID: C1461.D

Analysis Method: 8260C Date Collected: 12/15/2021 12:30

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 19:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	
71-55-6	1,1,1-Trichloroethane	ND		1.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	
79-00-5	1,1,2-Trichloroethane	ND		1.0	
75-34-3	1,1-Dichloroethane	ND		1.0	
75-35-4	1,1-Dichloroethene	ND		1.0	
96-18-4	1,2,3-Trichloropropane	ND		1.0	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	
95-50-1	1,2-Dichlorobenzene	ND		1.0	
107-06-2	1,2-Dichloroethane	ND		1.0	
78-87-5	1,2-Dichloropropane	ND		1.0	
106-46-7	1,4-Dichlorobenzene	ND		1.0	
78-93-3	2-Butanone (MEK)	ND		10	
591-78-6	2-Hexanone	ND		5.0	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	
67-64-1	Acetone	ND		10	
107-13-1	Acrylonitrile	ND		5.0	
71-43-2	Benzene	ND		1.0	
74-97-5	Chlorobromomethane	ND		1.0	
75-27-4	Bromodichloromethane	ND		1.0	
75-25-2	Bromoform	ND		1.0	
74-83-9	Bromomethane	ND		1.0	
75-15-0	Carbon disulfide	ND		1.0	
56-23-5	Carbon tetrachloride	ND		1.0	
108-90-7	Chlorobenzene	ND		1.0	
124-48-1	Dibromochloromethane	ND		1.0	
75-00-3	Chloroethane	ND		1.0	
67-66-3	Chloroform	ND		1.0	
74-87-3	Chloromethane	ND		1.0	
156-59-2	cis-1,2-Dichloroethene	ND		1.0	
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	
74-95-3	Dibromomethane	ND		1.0	
100-41-4	Ethylbenzene	ND		1.0	
106-93-4	1,2-Dibromoethane	ND		1.0	
74-88-4	Iodomethane	ND		1.0	
75-09-2	Methylene Chloride	ND		1.0	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-193512-1

SDG No.:

Client Sample ID: CW-16 Lab Sample ID: 480-193512-4

Matrix: Water Lab File ID: C1461.D

Analysis Method: 8260C Date Collected: 12/15/2021 12:30

Sample wt/vol: 5(mL) Date Analyzed: 12/17/2021 19:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 609322 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
100-42-5	Styrene	ND		1.0	
127-18-4	Tetrachloroethene	ND	*+	1.0	
75-69-4	Trichlorofluoromethane	ND		1.0	
79-01-6	Trichloroethene	ND		1.0	
108-88-3	Toluene	ND		1.0	
156-60-5	trans-1,2-Dichloroethene	ND		1.0	
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	
110-57-6	trans-1,4-Dichloro-2-butene	ND		1.0	
108-05-4	Vinyl acetate	ND		5.0	
75-01-4	Vinyl chloride	ND		1.0	
1330-20-7	Xylenes, Total	ND		2.0	
179601-23-1	m,p-Xylene	ND		2.0	
95-47-6	o-Xylene	ND		1.0	

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		77-120
2037-26-5	Toluene-d8 (Surr)	101		80-120
460-00-4	4-Bromofluorobenzene (Surr)	104		73-120

Appendix C

Trend Tables

Sample Site	Page		
	Conventionals	Metals	Organics
CD-1	1	2	3
CD-1RA	4	5	6
MW-1A	7	8	9
MW-1B	10	11	12
MW-2A	13	14	15
MW-2B	16	17	18
MW-3A	19	20	21
MW-3B	22	23	24
MW-4A	25	26	27
MW-5A	28	29	30
MW-6A	31	32	33
MW-6B	34	35	36
MW-7A	37	38	39

CD-1

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Temperature (°C)	EH/ORP (mV)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Color (Color Units)	Turbidity (NTU)	Alkalinity, Total (mg/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Bromide (mg/L)	Nitrate as N (mg/L)	Ammonia (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Biochemical Oxygen Demand (mg/L)	Total Organic Carbon (mg/L)	Phenolics, Total Recoverable (mg/L)	Cyanide, Total (mg/L)
Min	0.4	-48.9	6.99	144	2.78	<5	2.4	79.7	88.6	56	<1	10.8	<0.1	<0.05	<0.2	<0.2	<10	<2	<0.5	<0.005	<0.01
Min Year	2018	2017	2015	2019	2020	mult	2013	2014	2013	2015	mult	2011	mult	mult	mult	mult	mult	mult	2013	mult	mult
Max	19.8	419	9.84	353	9.51	15	3157	158	373	380	6.88	26.1	<8	0.166	0.042	1.5	22.1	7	7.34	0.059	0.027
Max Year	2012	2013	2020	2013	2019	2017	2019	2014	2021	2012	2011	2019	nd	2013	2014	2021	2018	2013	2013	2013	2020
2012Q1	18.2	179	7.89	274		6	46.2	130	144	180	<1	15.6	<0.8	0.055		<0.5	<20	<6	<3	<0.005	<0.01
2012Q2	19	137	7.53	257			40.9	120	146	380	1.2	12.2	<8	0.068		<0.5	<20	<4	<3	<0.005	
2012Q3	19.8	129	7.75	263			12.6	130	119	200	1.45	10.9	<8	0.072		<0.5	<20	<4	<3	<0.005	
2012Q4	12.3	169	7.3	275			24.1	130	158	200	1.34	15.7	<0.5	<0.05		<0.5	<20	<4	<3	<0.05	
2013Q1	5.5	419	8.24	257			11	121	149	149	<2	15.4	<0.1	0.081		<0.5	<10	<2	2.31	<0.02	
2013Q2	15.6	358	8.21	353		<5	9.9	82	88.6	209	1.56	13.5	<0.1	0.166		<0.5	<10	7	7.34	<0.02	<0.02
2013Q3	15.7	138	8.18	290			3.3	127	125	170	1.47	13.6	<0.1	0.081		<0.5	<10	<2	1.49	<0.005	
2013Q4	12.1	210	7.99	294			2.4	117	129	189	1.41	13.1	<0.1	0.084		<1	<10	<2	<0.5	0.059	
2014Q1	8.11	257.9	6.99	249	5.66		75.4	158	194	153	<1	21.7	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2014Q2	10.31	179.2	7.77	255	3.97		666	79.7	193	156	2.2	18.5	<0.2	0.12	0.042	0.56	<10	<2	<1	<0.01	
2014Q3	12.73	95.8	8.1	292	4.22	<5	82.9	129	136.5	172	1.4	20.7	<0.2	0.063	0.022	0.56	<10	<2	<1	<0.01	<0.01
2014Q4	9.75	58.4	7.95	287	3.88		47.2	139	144	190	1.4	21	<0.2	<0.05	0.029	<0.2	<10	<2	<1	<0.01	
2015Q2	13.41	109.1	8.04	273	4.44		9.88	127	109.9	56	1.7	17.9	<0.4	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2015Q3	13.56	109.3	7.87	256	4.59		8.91	144	119	158	1.2	18.3	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2015Q4	7.59	305.4	7.8	264	4.15	10	11.5	148	142	146	2.9	18.6	<0.2	<0.05	<0.02	0.32	<10	<2	<1	0.02	<0.01
2016Q2	6.15	119.4	8.24	233	6.66	10	26.7	106	129	141	1.2	20.1	<0.2	0.078	<0.02	<0.2	<10	<2	<1	<0.01	<0.01
2016Q3	8.7	271.1	7.86	308	5.07		15.8	118	130	155	<1	14.2	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2016Q4	3.15	147.8	8.07	259	7.01		24.9	132	136	169	1	14.5	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2017Q2	5.9	154.3	7.56	280	4.88		7.24	125	132	149	1.9	15.6	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	0.013	
2017Q3	10.11	58.1	7.36	292		15	31.2	137	129	137	2.3	15.2	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	<0.01
2017Q4	7.81	-48.9	7.47	275	4.94		6.44	140	143	165	1.7	17.1	<0.2	0.056	<0.02	<0.2	<10	<2	<1	<0.01	
2018Q2	4.07	55.1	7.8	286	4.99		5.11	120	134	141	2	20.2	<0.2	0.06	<0.02	<0.2	22.1	2.5		<0.01	
2018Q3	9.04	69.7	8.15	298	5.72		14.8	132	128	149	<1	15.4	<0.2	<0.05	<0.02	0.48	<10	<2	<1	<0.01	
2018Q4	0.4	150.2	7.7	212	4.28	<5	11.32	127	157	221	1.4	18.5	<0.2	<0.05	<0.02	0.4	<10	<2	<1	<0.01	<0.01
2019Q2	5.12	131.8	7.98	174	4.88	5	3157	104	235	204	2.3	26.1	<0.2	<0.05	0.038	0.74	<10	<2	<1	<0.01	<0.01
2019Q3	4.98	152.4	8.16	270	5.62		24.8	132	142	151	<1	17.1	<0.2	0.064	<0.02	0.21	<10	<2	<1	<0.01	
2019Q4	0.45	136.9	8.23	144	9.51		17.8	126	140	287	<1	15.8	<0.2	0.058	<0.02	0.33	<10	<2	<1	<0.01	
2020Q2	12	117.5	8.07	208	3.4		13.4	140	150	185	2.2	22.1	<0.2	<0.05	<0.02	<0.2	<10	<2	1.1	<0.01	
2020Q3	12.7	265.3	7.66	223.1	2.78	5	20.3	147	156	152	<1	19.6	<0.2	0.056	<0.02	0.29	<10	<2	<1	<0.01	0.027
2020Q4	6.8	202.2	9.84	197.6	3.33		40.6	138	150	201	<1	18.8	<0.2	<0.05	<0.02	0.28	<10	<2	<1	<0.01	
2021Q2	11.8	124.5	7.59	206.2	2.94		OR	113	158	187	<1	19.3	<0.2	<0.05	<0.2	0.27	<50	<2	<1	<0.01	
2021Q3	13.3	166.2	7.55	212	3.29		343	128	373	189	<1	17.6	<0.2	<0.05	0.048	1.5	<10	<2	<1	<0.01	
2021Q4	7.5	137.9	7.37	195.3	3.36	5	237	138	165	206	2	17.3	<0.2	<0.05	0.022	0.45	<10	<2	<1	<0.01	<0.01

CD-1

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, hexavalent	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Min	0.36	<0.005	<0.005	<0.1	<0.002	<0.02	<0.001	26.6	<0.004	<0.005	<0.004	<0.01	<0.2	<0.003	5.38	0.0614	<0.0002	<0.01	<5	<5	<0.003	<0.01	<0.02	<0.005	<0.01
Min Year	2018	mult	mult	2013	mult	mult	2013	2013	mult	2013	mult	mult	mult	mult	2013	2012	mult	mult	mult	mult	mult	2013	mult	mult	mult
Max	25	<0.02	<0.015	0.55	<0.003	0.031	<0.05	109	0.045	<0.01	0.018	0.046	66.6	0.04	24.8	23.5	<0.0002	0.04	9.2	7.8	<0.025	<0.01	<0.02	0.036	0.098
Max Year	2019	nd	nd	2019	nd	2020	nd	2021	2019	nd	2019	2019	2021	2021	2021	2019	nd	2019	2021	2014	nd	nd	nd	2019	2019
2012Q1	1.32	<0.005	<0.005	0.106	<0.003	<0.5	<0.005	40.7	<0.01	<0.01	<0.02	<0.01	2.04	<0.003	10.3	1.62	<0.0002	<0.03	<5	<5	<0.003	<0.01	<0.003	<0.03	0.0119
2012Q2							<0.005	41.2					2.34	<0.003	10.5	1.3			<5	<5					
2012Q3							<0.005	34.7					0.15	<0.003	7.92	0.0614			<5	<5					
2012Q4							<0.005	45.2					0.366	<0.015	11	0.439			<5	<5					
2013Q1							<0.05	44.9					<0.2	<0.05	9.06	0.27			0.99	4.4					
2013Q2	0.73	<0.005	<0.005	<0.1	<0.003	<0.5	<0.05	26.6	<0.005	<0.005	<0.05	<0.05	1.3	<0.005	5.38	1.4	<0.0002	<0.05	3	4.3	<0.005	<0.005	<0.005	<0.05	<0.1
2013Q3							<0.001	37.2					<0.2	0.019	7.81	0.063			1.4	3.8					
2013Q4							<0.005	37.4					<0.2	<0.005	8.53	0.22			1.3	3.9					
2014Q1							<0.002	56.8					10.8	<0.01	12.8	7			2.7	4.1					
2014Q2							<0.002	65.6					20	0.011	14.2	5.5			4.3	4					
2014Q3	8.7	<0.02	<0.015	0.17	<0.002	<0.02	<0.002	44.6	0.012	<0.01	0.0043	0.019	9.4	0.011	12.3	1.8	<0.0002	0.01	3.4	7.8	<0.025	<0.006	<0.02	0.013	0.033
2014Q4							<0.002	40.2					3.2	<0.01	10.7	1.5			1.8	4.7					
2015Q2							<0.002	36.8					0.11	<0.01	8.9	0.14			1.4	3.8					
2015Q3							<0.002	35.5					0.13	<0.01	7.4	0.32			2.2	4.5					
2015Q4	0.37	<0.02	<0.015	0.11	<0.002	<0.02	<0.002	41.3	<0.004	<0.01	<0.004	0.023	0.4	<0.01	9.4	3.2	<0.0002	<0.01	1.1	4.2	<0.025	<0.006	<0.02	<0.005	0.017
2016Q2	0.93	<0.02	<0.015	0.084	<0.002	<0.02	<0.002	37.9	<0.004	<0.01	<0.004	<0.01	0.94	<0.01	8.3	0.59	<0.0002	<0.01	1.7	4.3	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q3							<0.002	38.7					0.76	<0.01	8.1	1.6			2.2	4.4					
2016Q4							<0.002	39.9					0.32	<0.01	8.9	0.79			0.95	3.6					
2017Q2							<0.002	38.3					0.56	<0.01	8.9	1.8			1.1	3.5					
2017Q3	0.47	<0.02	<0.015	0.093	<0.002	<0.02	<0.002	37.7	<0.004	<0.01	<0.004	<0.01	0.6	<0.01	8.5	1.4	<0.0002	<0.01	1.5	3.8	<0.025	<0.006	<0.02	<0.005	<0.01
2017Q4							<0.002	41.4					0.28	<0.01	9.5	0.43			1.1	4.4					
2018Q2							<0.002	39					0.086	<0.01	8.8	0.66			1.5	3.6					
2018Q3							<0.002	37.6					0.17	<0.01	8.3	0.24			1.4	3.9					
2018Q4	0.36	<0.02	<0.015	0.088	<0.002	<0.02	<0.002	45.4	<0.004	<0.01	<0.004	<0.01	0.34	<0.01	10.6	1	<0.0002	<0.01	1.1	4	<0.025	<0.006	<0.02	<0.005	<0.01
2019Q2	25	<0.02	<0.015	0.55	<0.002	0.023	<0.002	64.6	0.045	<0.01	0.018	0.046	37.6	0.026	18	23.5	<0.0002	0.04	6	3.9	<0.025	<0.006	<0.02	0.036	0.098
2019Q3							<0.002	41.9					2.3	<0.01	9.2	3.9			1.7	3.6					
2019Q4							<0.002	40.4					0.42	<0.01	9.6	1.1			1	4					
2020Q2							<0.002	41.7					0.25	<0.01	11.2	0.14			1.7	6.3					
2020Q3	2.6	<0.02	<0.015	0.16	<0.002	0.031	<0.002	45.6	0.004	<0.01	<0.004	<0.01	2.5	<0.01	10.3	4.9	<0.0002	<0.01	1.5	5.1	<0.025	<0.006	<0.02	<0.005	0.017
2020Q4							<0.002	43.2					4.3	<0.01	10.3	1.4			2.1	4					
2021Q2							<0.002	44.2					9.9	<0.01	11.5	1			4.2	4.2					
2021Q3							<0.002	109					66.6	0.04	24.8	12.5			9.2	4.8					
2021Q4	8.8	<0.02	<0.015	0.17	<0.002	<0.02	<0.002	47.7	0.012	<0.01	0.004	0.012	10.6	0.011	11.1	1.3	<0.0002	<0.01	3.3	4.4	<0.025	<0.006	<0.02	0.013	0.025

CD-1

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Chloroethane	Acetone	Methylene chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes, Total	Vinyl chloride	1,4-Dichlorobenzene
Min	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
Min Year	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult
Max	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<2	<5	<5
Max Year	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2012Q1	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5		<5	<5
2012Q2													
2012Q3													
2012Q4													
2013Q1													
2013Q2	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5		<5	<5
2013Q3													
2013Q4													
2014Q1													
2014Q2													
2014Q3	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
2014Q4													
2015Q2													
2015Q3													
2015Q4	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
2016Q2	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
2016Q3													
2016Q4													
2017Q2													
2017Q3	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
2017Q4													
2018Q2													
2018Q3													
2018Q4	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
2019Q2	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
2019Q3													
2019Q4													
2020Q2													
2020Q3	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1
2020Q4													
2021Q2													
2021Q3													
2021Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

CD-1RA

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Temperature (°C)	EH/ORP (mV)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Color (Color Units)	Turbidity (NTU)	Alkalinity, Total (mg/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Bromide (mg/L)	Nitrate as N (mg/L)	Ammonia (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Biochemical Oxygen Demand (mg/L)	Total Organic Carbon (mg/L)	Phenolics, Total Recoverable (mg/L)	Cyanide, Total (mg/L)
Min	0.17	-57.9	7.1	157	1.72	<5	3.3	<10	110	<10	<1	13.6	<0.1	<0.01	<0.02	<0.2	<10	<2	<0.5	<0.005	<0.01
Min Year	2019	2017	2014	2019	2020	mult	2013	2019	2015	2018	2020	2013	mult	mult	mult	mult	mult	mult	2013	mult	mult
Max	205	416	9.31	519	8.38	25	3600	169	1100	321	5	38.3	<8	0.079	0.095	3.1	28	5	1.8	<0.023	<0.02
Max Year	2012	2013	2020	2013	2019	2015	2014	2014	2019	2019	2019	2017	nd	2012	2014	2014	2018	2011	2013	2015	nd
2012Q1	17.7	180	7.98	299		<5	20.3	140	164	150	1.43	15.8	<0.8	0.079		<0.5	<20	<4	<3	<0.005	<0.01
2012Q2	185	142	7.45	295			8.26	140	155	310	1.46	15.9	<0.8	<0.05		<0.5	<20	<4	<3	<0.005	
2012Q3	20.5	131	7.66	353			6.25	130	135	220	1.77	13.7	<0.8	<0.05		<0.5	<20	<4	<3	<0.005	
2012Q4	13.5	168	7.28	290			11.6	130	156	170	1.78	15.7	<0.5	0.053		<0.5	<20	<4	<3	<0.05	
2013Q1	5.8	416	8.43	224			3.3	92	118	146	<2	25.2	<0.1	0.062		<0.5	<10	<2	1.6	<0.02	
2013Q2	17.1	343	7.89	519		7.4	38	120	138	185	1.85	16.1	<0.1	<0.01		0.517	<10	3	1.01	<0.02	<0.02
2013Q3	15.5	137	8.03	331			19	138	145	194	1.95	13.9	<0.1	<0.01		<0.5	<10	<2	1.8	0.006	
2013Q4	12.6	209	7.66	332			36	107	149	232	2.01	13.6	<0.1	<0.01		<1	<10	<2	<0.5	<0.005	
2014Q1	7.04	38.9	7.1	285	3.45		3600	169	624	175	1.4	22.5	<0.2	<0.05	<0.02	3.1	<10	<2	<1	<0.01	
2014Q2	10.51	152	8	299	3.17			151	408	177	1.4	22.7	<0.2	<0.05	0.095	2.4	<10	<2	<1	<0.01	
2014Q3	10.99	110.4	8.19	313	4.51	<5	104	144	151	173	2.8	18.7	<0.2	<0.05	0.026	0.31	<10	<2	<1	<0.01	<0.01
2014Q4	9.52	63.9	7.85	305	3.29		105.5	140	169	191	2	20.5	<0.2	<0.05	<0.02	0.3	<10	<2	<1	<0.01	
2015Q2	13.65	77.7	7.95	308	2.49		32.9	145	134	109	1.8	20.4	<0.2	<0.05	<0.02	0.24	<10	<2	<1	<0.01	
2015Q3	12.66	93.1	7.77	276	3.76		33.7	152	167	195	1.9	20.3	<0.2	<0.05	0.02	0.36	<10	<2	<1	0.023	
2015Q4	7.61	331.1	7.76	270	4.77	25	64.3	141	162	169	1.7	20.9	<0.2	<0.05	0.026	0.41	<10	<2	<1	<0.01	<0.01
2016Q2	5.98	102.9	7.83	276	3.51	10	27.4	138	150	162	1.5	22.8	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	<0.01
2016Q3	8.24	272.3	7.81	330	4.25		18.4	140	160	179	1.8	16	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2016Q4	3.07	124.8	7.91	276	3.87		102.2	132	144	166	1.8	29.5	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2017Q2	5.94	170.8	7.22	317	6.24		31.7	128	154	176	3.1	18.2	<0.2	<0.05	<0.02	0.35	<10	<2	<1	<0.01	
2017Q3	9.62	50.7	7.26	326		<5	36.5	156	151	160	1.9	18	<0.2	<0.05	<0.02	0.26	<10	<2	<1	<0.01	<0.01
2017Q4	8.2	-57.9	7.62	301	3.93		29.7	137	166	196	2.2	38.3	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2018Q2	3.87	71.9	7.86	319	5.53		56.3	150	154	72	2.8	20.8	<0.2	0.069	0.022	0.24	28	2.1		<0.01	
2018Q3	8.48	63.4	8.06	320	3.97		35.4	140	147	181	1.3	17.8	<0.2	<0.05	<0.02	1.2	<10	<2	<1	<0.01	
2018Q4	0.56	159.9	7.78	228	2.58	10	21.4	143	171	190	2.2	20.5	<0.2	<0.05	0.02	<0.2	<10	<2	1	<0.01	<0.01
2019Q2	5.49	188.9	8.01	192	4.29	<5	OR	<10	1100	207	5	19.9	<0.2	<0.05	0.083	1.2	25.2	<2	<1	<0.01	<0.01
2019Q3	4.57	176.2	8.05	304	5.58		41.1	145	156	163	2.1	18.3	<0.2	<0.05	<0.02	0.25	<10	<2	<1	<0.01	
2019Q4	0.17	144.4	8.15	157	8.38		40	125	158	321	1.3	18.4	<0.2	0.056	0.032	0.43	<10	<2	<1	<0.01	
2020Q2	10.5	138.6	7.61	229	2.58		10.3	124	117	202	<1	16.4	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2020Q3	11.8	89.5	7.59	204.5	1.72	<5	7.97	142	131	194	1.5	16.6	<0.2	<0.05	<0.02	0.65	13	<2	<1	<0.01	<0.01
2020Q4	7.9	239.9	9.31	215.4	2.47		63.4	131	161	229	1.4	18.4	<0.2	<0.05	<0.02	0.31	<10	<2	1	<0.01	
2021Q2	10.3	138.1	7.43	219.8	2.54		29.9	140	165	235	1.5	21.4	<0.2	<0.05	<0.2	<0.2	<10	<2	<1	<0.01	
2021Q3	12.2	162.4	7.42	228.1	1.9		14.5	152	156	198	1.2	19.4	<0.2	<0.05	0.029	0.31	<10	<2	<1	<0.01	
2021Q4	8.4	134.9	7.55	206.6	2.76	<5	164	144	199	212	2	17.8	<0.2	<0.05	<0.02	0.65	<10	<2	<1	<0.01	<0.01

CD-1RA

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, hexavalent	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Min	0.145	<0.005	<0.005	0.15	<0.002	<0.02	<0.001	34.2	<0.004	<0.005	<0.004	<0.01	<0.2	<0.003	6.14	<0.05	<0.0002	<0.01	<5	<5	<0.003	<0.005	<0.003	<0.005	<0.01
Min Year	2012	mult	mult	2013	mult	mult	2013	2020	mult	2013	mult	mult	mult	mult	2013	mult	mult	mult	mult	mult	mult	2013	mult	mult	mult
Max	92	<0.02	0.046	1.6	0.004	0.051	0.0031	322	0.12	<0.01	0.076	0.11	158	0.39	71	7	0.00025	0.19	12.7	6.69	<0.025	<0.01	<0.02	<0.11	0.38
Max Year	2019	nd	2019	2019	2019	2019	2019	2019	2019	nd	2019	2019	2019	2014	2019	2019	2019	2019	2019	2011	nd	nd	nd	2019	2019
2012Q1	0.145	<0.005	<0.005	0.243	<0.003	<0.5	<0.005	47.1	<0.01	<0.01	<0.02	<0.01	0.248	<0.003	11.4	0.188	<0.0002	<0.03	<5	6.24	<0.003	<0.01	<0.003	<0.03	<0.01
2012Q2							<0.005	43.1					0.509	<0.003	11.5	0.23			<5	5.26					
2012Q3							<0.005	38.5					0.15	<0.003	9.47	0.139			<5	<5					
2012Q4							<0.005	44.3					0.136	<0.015	11	0.18			<5	5.25					
2013Q1							<0.05	37.2					<0.2	<0.05	6.14	<0.05			0.98	5					
2013Q2	1.5	<0.005	<0.005	0.15	<0.003	<0.5	<0.05	39.9	0.0084	<0.005	<0.05	<0.05	2.9	<0.005	9.25	0.13	<0.0002	<0.05	1.5	5.2	<0.005	<0.005	<0.005	<0.05	<0.1
2013Q3							<0.001	42.6					1.1	0.013	9.39	0.12			0.99	5.2					
2013Q4							<0.005	42.2					4.5	0.0099	10.6	0.2			1.6	5					
2014Q1							0.0025	169					97.7	0.39	49.1	4.2			9.3	5.7					
2014Q2							<0.002	127					96.9	0.24	44.7	3.1			9.7	5.1					
2014Q3	7.8	<0.02	<0.015	0.23	<0.002	<0.02	<0.002	48.3	0.0091	<0.01	0.0047	0.01	10.3	0.025	14.7	0.47	<0.0002	0.012	2.6	5.4	<0.025	<0.006	<0.02	0.011	0.035
2014Q4							<0.002	44.1					10	0.014	14.2	0.44			2.4	4.9					
2015Q2							<0.002	43.9					6.4	0.015	11.8	0.27			2.6	5.1					
2015Q3							<0.002	47.5					4.6	<0.01	11.9	0.37			1.9	5.5					
2015Q4	5.6	<0.02	<0.015	0.2	<0.002	<0.02	<0.002	45.4	0.0063	<0.01	<0.004	<0.01	6.8	<0.01	11.8	0.57	<0.0002	<0.01	2.2	5.2	<0.025	<0.006	<0.02	0.008	0.019
2016Q2	0.98	<0.02	<0.015	0.16	<0.002	<0.02	<0.002	43.1	<0.004	<0.01	<0.004	<0.01	1.1	<0.01	10.3	0.11	<0.0002	<0.01	1	5	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q3							<0.002	46.1					1.2	<0.01	10.9	0.27			1.1	5.8					
2016Q4							<0.002	40.7					4.2	<0.01	10.4	0.2			1.7	4.8					
2017Q2							<0.002	43.2					3	<0.01	11.1	0.13			1.6	5.1					
2017Q3	2.2	<0.02	<0.015	0.2	<0.002	<0.02	<0.002	42.9	<0.004	<0.01	<0.004	<0.01	2.8	<0.01	10.8	0.35	<0.0002	<0.01	1.5	5.4	<0.025	<0.006	<0.02	<0.005	0.018
2017Q4							<0.002	47.2					3.3	<0.01	11.8	0.26			1.6	5.8					
2018Q2							<0.002	43					4	<0.01	11.3	0.19			2.1	4.8					
2018Q3							<0.002	41.4					3.2	<0.01	10.5	0.2			1.6	4.9					
2018Q4	2	<0.02	<0.015	0.18	<0.002	<0.02	<0.002	48.7	<0.004	<0.01	<0.004	<0.01	2	<0.01	12.1	0.12	<0.0002	<0.01	1.4	5.8	<0.025	<0.006	<0.02	<0.005	<0.01
2019Q2	92	<0.02	0.046	1.6	0.004	0.051	0.0031	322	0.12	<0.01	0.076	0.11	158	0.22	71	7	0.00025	0.19	12.7	6	<0.025	<0.006	<0.02	0.11	0.38
2019Q3							<0.002	44.3					3.4	<0.01	11.1	0.27			1.6	5.4					
2019Q4							<0.002	44.4					3.3	<0.01	11.5	0.25			1.7	5.3					
2020Q2							<0.002	34.2					0.75	<0.01	7.8	0.88			1.5	3.5					
2020Q3	0.22	<0.02	<0.015	0.15	<0.002	<0.02	<0.002	35.5	<0.004	<0.01	<0.004	<0.01	0.19	<0.01	10.2	0.35	<0.0002	<0.01	1.9	6.5	<0.025	<0.006	<0.02	<0.005	<0.01
2020Q4							<0.002	45.2					7.1	<0.01	11.6	0.33			2.5	5.1					
2021Q2							<0.002	47.4					3.7	<0.01	11.4	0.54			1.6	5.5					
2021Q3							<0.002	45.6					2.2	<0.01	10.2	0.34			1.1	5.8					
2021Q4	13.2	<0.02	<0.015	0.29	<0.002	<0.02	<0.002	55.3	0.016	<0.01	0.0087	0.017	20.3	0.026	14.7	0.78	<0.0002	0.02	3.5	4.9	<0.025	<0.006	<0.02	0.018	0.05

CD-1RA

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Vinyl chloride	Chloroethane	Acetone	Methylene chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes, Total	1,4-Dichlorobenzene
Min	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
Min Year	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult
Max	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<2	<5
Max Year	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2012Q1	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5		<5
2012Q2													
2012Q3													
2012Q4													
2013Q1													
2013Q2	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5		<5
2013Q3													
2013Q4													
2014Q1													
2014Q2													
2014Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2014Q4													
2015Q2													
2015Q3													
2015Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q3													
2016Q4													
2017Q2													
2017Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2017Q4													
2018Q2													
2018Q3													
2018Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q3													
2019Q4													
2020Q2													
2020Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2020Q4													
2021Q2													
2021Q3													
2021Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

MW-1A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Temperature (°C)	EH/ORP (mV)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Color (Color Units)	Turbidity (NTU)	Alkalinity, Total (mg/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Bromide (mg/L)	Nitrate as N (mg/L)	Ammonia (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Biochemical Oxygen Demand (mg/L)	Total Organic Carbon (mg/L)	Phenolics, Total Recoverable (mg/L)	Cyanide, Total (mg/L)
Min	0.42	-111	6.67	199	2.53	<5	8.7	94	112	102	3.1	<5	<0.1	<0.01	<0.02	<0.2	<10	<2	<0.5	<0.005	<0.01
Min Year	2018	2007	2020	2009	2021	mult	2018	2013	2019	2013	2019	mult	mult	2013	mult	mult	mult	mult	2013	mult	mult
Max	21.7	700	8.69	1580	11.37	80	660	159	303	460	38.5	48.6	0.21	1.09	0.096	23.3	32.1	9	4.76	0.009	0.013
Max Year	2008	2006	2020	2010	2019	2011	2006	2014	2014	2011	2014	2007	2020	2012	2019	2006	2018	2008	2006	2013	2020
2012Q1	19.8	116	7.91	401		6	572	130	225	190	33.9	11.4	<8	<0.05		0.994	<20	<4	<3	<0.005	<0.01
2012Q2	20.3	163	6.94	376			26.5	140	175	450	33.1	12.2	<8	<0.05		<0.5	<20	<4	<3	<0.005	
2012Q3	19.9	147	7.97	368			17.2	120	148	270	33.5	13.2	<8	1.09		<0.5	<20	<4	<3	<0.005	
2012Q4	14.1	164	7.63	379			23.8	130	169	230	33.5	12.1	<0.5	<0.05		<0.5	<20	<4	<3	<0.05	
2013Q1	5.6	430	8.2	400			12	128	187	208	33.9	15.1	<0.1	0.044		<0.5	<10	<2	0.947	<0.02	
2013Q2	19.1	339	7.805	681		<5	59	94	168	295	31.6	13.4	<0.1	0.106		<0.5	<10	6	1.04	<0.02	<0.02
2013Q3	14.8	200	7.82	369			9.6	143	157	231	31.8	13.3	<0.1	0.082		<0.5	<10	<2	1.58	0.009	
2013Q4	10.7	199	7.94	418			54	128	155	102	30.3	13.8	<0.1	<0.01		<1	<10	<2	<0.5	<0.005	
2014Q2	11.18	144.6	8.03	379	4.84			149	237	239	33.7	21.4	<0.2	<0.05	0.06	1.2	<10	<2	<1	<0.01	
2014Q3	13.29	4.5	7.96	374	3.28	<5	OR	159	170.5	237	38.5	19.1	<0.2	<0.05	0.035	0.51	<10	<2	<1	<0.01	<0.01
2015Q2	16.85	-71.7	7.72	441	3.85		14.7	104	139	136	33.8	38	<1	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2015Q3	14.89	26.7	7.39	327	3.35		25.5	147	157	229	33.4	18.9	<0.2	<0.05	0.022	<0.2	<10	<2	<1	<0.01	
2015Q4	5.83	19	7.49	347	3.49	<5	28.5	126	154	208	36.7	20.7	<0.2	<0.05	0.038	0.5	<10	<2	<1	<0.01	<0.01
2016Q2	8.52	26	7.61	353	5.33	15	29.6	119	163	217	34.3	21.4	<0.2	<0.05	0.028	0.31	<10	<2	<1	<0.01	<0.01
2016Q3	10.31	17.7	7.03	432	5.31		29.9	130	166	216	34	14	<0.2	<0.05	0.046	<0.2	<10	<2	<1	<0.01	
2016Q4	3.59	22.1	7.58	355	4.17		35.5	123	157	222	36	15.9	<0.2	<0.05	<0.02	0.34	<10	<2	<1	<0.01	
2017Q2	7.13	38.3	7.84	442	5.25		58.2	112	166	223	35.2	17.6	<0.2	<0.05	<0.02	0.36	<10	<2	<1	<0.01	
2017Q3	12.17	-16.1	7.07	420		<5	30.8	130	161	203	36.1	17.3	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	<0.01
2017Q4	7.56	-44.6	7.42	380	4.67		31.8	128	170	220	37.7	18.7	<0.2	0.097	<0.02	<0.2	<10	<2	<1	<0.01	
2018Q2	8.31	-11.1	7.83	410	5.37		8.7	138	173	237	35.9	19.9	<0.2	<0.05	<0.02	0.51	32.1	2.4		<0.01	
2018Q3	14.44	-12.4	8.14	460	5.34		19.4	126	160	216	35	18.5	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2018Q4	0.42	-5.9	7.64	289	4.01	10	19.6	136	199	217	34.1	21.8	<0.2	0.07	0.029	<0.2	<10	<2	1.1	<0.01	<0.01
2019Q2	5.26	208.9	7.26	210	3.72	<5	18.1	96.8	112	117	3.1	<5	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	<0.01
2019Q3	9.01	43.6	8.26	414	11.37		15.1	127	162	261	36.1	20.8	<0.2	0.059	0.096	0.22	11	<2	<1	<0.01	
2020Q2	12.9	141.2	8.13	299.1	2.82		OR	130	171	236	37.4	19.3	0.21	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2020Q3	17.6	119.1	6.67	340.8	3.87	<5	15.6	149	168	253	33.9	21.1	<0.2	0.062	<0.02	0.51	21.8	<2	<1	<0.01	0.013
2020Q4	6.5	118.5	8.69	267	3.32		18.4	98.8	160	245	37.7	20.6	<0.2	<0.05	0.049	0.23	<10	<2	<1	<0.01	
2021Q2	12	118.3	7.76	294.5	2.53		OR	123	216	219	34.9	22.7	<0.2	<0.05	<0.2	0.41	<10	<2	<1	<0.01	
2021Q3	17.1	56.6	7.08	321.7	2.33		9.12	125	162	203	35.8	19.7	<0.2	<0.05	1	0.37	<10	<2	<1	<0.01	
2021Q4	7.5	23.6	7.51	257.2	3.08	5	12.1	130	169	242	35.3	17.9	<0.2	<0.05	<0.02	0.2	<10	<2	<1	<0.01	<0.01

MW-1A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, hexavalent	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Min	<0.1	<0.005	<0.005	0.0662	<0.002	<0.07	<0.001	30.8	<0.004	<0.005	<0.004	<0.01	<0.06	<0.003	8.12	<0.01	<0.0002	<0.01	<1	6.9	<0.003	<0.005	<0.003	<0.005	<0.01
Min Year	2012	mult	mult	2006	mult	2006	2013	2019	mult	2013	mult	mult	2007	mult	2006	2007	mult	mult	2009	2019	mult	2013	mult	mult	mult
Max	24.5	<0.05	0.015	0.3	<0.005	0.0732	0.0027	68.4	0.03	<0.02	0.015	0.0221	103	0.044	32.1	2.5	<0.0004	0.0409	12.1	17.1	<0.025	<0.015	<0.03	0.034	0.106
Max Year	2014	nd	2014	2014	nd	2006	2015	2014	2014	nd	2014	2006	2014	2014	2014	2014	nd	2012	2014	2006	nd	nd	nd	2014	2006
2012Q1	9.5	<0.005	0.0033	0.1736	<0.003	<0.5	<0.005	53	0.0084	<0.01	<0.02	0.0059	16.901	0.0039	15.3	0.3619	<0.0002	0.0055	<5	14.95	<0.003	<0.01	<0.003	<0.03	0.045
2012Q2							<0.005	49.4					1.65	<0.003	12.6	0.121			<5	12.6					
2012Q3							<0.005	42.8					0.702	<0.003	9.95	0.0453			<5	10.4					
2012Q4							<0.005	47.9					0.844	<0.015	11.8	0.121			<5	12.3					
2013Q1							<0.05	56.1					4	<0.05	11.4	0.61			1.3	13					
2013Q2	6.4	<0.005	<0.005	0.16	<0.003	<0.5	<0.05	47	0.0093	<0.005	<0.05	<0.05	13	0.005	12.3	2.4	<0.0002	<0.05	2.4	11	<0.005	<0.005	<0.005	<0.05	<0.1
2013Q3							<0.001	46.7					0.56	0.0021	9.79	<0.05			1.3	12					
2013Q4							<0.005	45.1					1.1	<0.005	10.3	0.064			1.4	12					
2014Q2							<0.002	68.4					103	0.044	32.1	2.5			12.1	11.6					
2014Q3	24.5	<0.02	0.015	0.3	<0.002	0.034	<0.002	53.1	0.03	<0.01	0.015	0.022	35.2	0.012	18.2	1.2	<0.0002	0.037	6.7	12.4	<0.025	<0.006	<0.02	0.034	0.076
2015Q2							0.0027	46.7					0.94	<0.01	10.8	0.34			1.3	11.8					
2015Q3							<0.002	45.6					1.9	<0.01	10.5	0.15			1.8	12.2					
2015Q4	2.4	<0.02	<0.015	0.078	<0.002	0.027	<0.002	44.6	<0.004	<0.01	<0.004	<0.01	2.2	<0.01	10.3	0.25	<0.0002	<0.01	1.7	11.7	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q2	1.7	<0.02	<0.015	0.08	<0.002	0.025	<0.002	47.5	<0.004	<0.01	<0.004	<0.01	1.8	<0.01	10.8	0.11	<0.0002	<0.01	1.5	12.5	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q3							<0.002	48.2					1.6	<0.01	11	0.2			1.5	12.8					
2016Q4							<0.002	45.1					3.3	<0.01	10.7	0.29			1.7	11.4					
2017Q2							<0.002	47.5					3.4	<0.01	11.5	0.31			2	11.8					
2017Q3	2.3	<0.02	<0.015	0.093	<0.002	0.026	<0.002	46.2	<0.004	<0.01	<0.004	<0.01	2.8	<0.01	11	0.82	<0.0002	<0.01	1.7	11.7	<0.025	<0.006	<0.02	<0.005	<0.01
2017Q4							<0.002	48.9					2.8	<0.01	11.6	0.26			1.7	13.1					
2018Q2							<0.002	49.8					1.4	<0.01	11.8	0.15			1.4	11.9					
2018Q3							<0.002	46.4					1.3	<0.01	10.7	0.3			1.6	12.5					
2018Q4	1.9	<0.02	<0.015	0.095	<0.002	0.031	<0.002	57.8	<0.004	<0.01	<0.004	<0.01	1.9	<0.01	13.3	0.41	<0.0002	<0.01	2	12.9	<0.025	<0.006	<0.02	<0.005	<0.01
2019Q2	6.9	<0.02	<0.015	0.25	<0.002	0.021	<0.002	30.8	0.0089	<0.01	<0.004	<0.01	8.8	<0.01	8.6	0.48	<0.0002	<0.01	2.1	6.9	<0.025	<0.006	<0.02	0.013	0.026
2019Q3							<0.002	47.2					0.37	<0.01	10.8	0.17			1.2	11.5					
2020Q2							<0.002	48.8					5.6	<0.01	12	0.62			2.5	12.3					
2020Q3	1.2	<0.02	<0.015	0.087	<0.002	0.025	<0.002	48.8	<0.004	<0.01	<0.004	<0.01	1.4	<0.01	11.3	0.16	<0.0002	<0.01	1.4	12.4	<0.025	<0.006	<0.02	<0.005	<0.01
2020Q4							<0.002	46.6					1.5	<0.01	10.5	0.2			1.3	11.6					
2021Q2							<0.002	56.9					32.8	0.014	18	1.1			7.2	13.9					
2021Q3							<0.002	47.8					0.53	<0.01	10.2	0.12			1.2	13.1					
2021Q4	1.1	<0.02	<0.015	0.08	<0.002	0.023	<0.002	49.6	<0.004	<0.01	<0.004	<0.01	1	<0.01	11.1	0.13	<0.0002	<0.01	1.2	12.3	<0.025	<0.006	<0.02	<0.005	<0.01

MW-1A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Vinyl chloride	Chloroethane	Acetone	Methylene chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes, Total	1,4-Dichlorobenzene
Min	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
Min Year	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult
Max	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<2	<5
Max Year	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2012Q1	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5		<5
2012Q2													
2012Q3													
2012Q4													
2013Q1													
2013Q2	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5		<5
2013Q3													
2013Q4													
2014Q2													
2014Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2015Q2													
2015Q3													
2015Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q3													
2016Q4													
2017Q2													
2017Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2017Q4													
2018Q2													
2018Q3													
2018Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q3													
2020Q2													
2020Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2020Q4													
2021Q2													
2021Q3													
2021Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

MW-1B

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Temperature (°C)	EH/ORP (mV)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Color (Color Units)	Turbidity (NTU)	Alkalinity, Total (mg/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Bromide (mg/L)	Nitrate as N (mg/L)	Ammonia (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Biochemical Oxygen Demand (mg/L)	Total Organic Carbon (mg/L)	Phenolics, Total Recoverable (mg/L)	Cyanide, Total (mg/L)
Min	1.14	-143	7.19	124	2.21	<5	<1	86	56.5	23	0.611	<5	<0.1	<0.01	<0.02	<0.2	<10	<2	<0.5	<0.005	<0.01
Min Year	2018	2007	2012	2009	2020	mult	2013	mult	2014	2015	2006	mult	mult	mult	mult	mult	mult	mult	2013	mult	mult
Max	22.8	418	8.66	1241	17.8	30	187	120	206	340	34	28.8	<8	0.12	0.21	2.6	91.4	5	5.41	0.019	<0.02
Max Year	2012	2013	2008	2007	2020	2007	2006	2011	2009	2012	2019	2007	nd	2016	2019	2019	2019	2013	2006	2018	nd
2012Q1	22.8	115	7.93	279		<5	9.46	110	124	170	6.68	5.8	<0.8	<0.05		<0.5	<20	<4	<3	<0.005	<0.01
2012Q2	21.2	155	7.19	243			16.1	100	111	340	2.47	<5	<0.8	0.075		<0.5	<20	<4	<3	<0.005	
2012Q3	20.3	138	8.51	249			12	100	107	180	6.77	5.74	<8	<0.05		<0.5	<20	<4	<3	<0.005	
2012Q4	11.8	162	7.76	214			10.6	95	94.4	110	2.23	<5	<0.5	<0.05		0.594	<20	<4	<3	<0.05	
2013Q1	4.1	418	8.5	199			1.2	101	97.8	117	2.18	6.92	<0.1	<0.01		<0.5	<10	<2	<1	<0.02	
2013Q2	13	336	8.015	380		8.3	<1	96	92.1	147	2.14	7.25	<0.1	<0.01		<0.5	<10	5	0.643	<0.02	<0.02
2013Q3	15.1	194	7.94	192			<1	86	84.5	123	2.18	6.96	<0.1	<0.01		<0.5	<10	<2	1.26	<0.005	
2013Q4	12.3	199	8.13	212			1.4	96	81.3	271	2.13	6.76	<0.1	0.069		<1	<10	<2	<0.5	<0.005	
2014Q2	11.69	151.3	8.09	227	2.65		3.47	110	67.8	121	1.8	8.8	<0.2	0.068	<0.02	<0.2	<10	<2	<1	<0.01	
2014Q3	15.04	108.1	8.21	206	4.2	<5	38.3	99.3	69.7	90	2.1	8.3	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	<0.01
2014Q4	7.64	57.1	8.01	235	3.89		62.7	99.6	85	104	2.3	9	<0.2	<0.05	<0.02	0.31	<10	<2	<1	<0.01	
2015Q2	13.67	-49.7	8.03	216	3.58		3.16	95.9	75.95	23	2.4	9.1	<0.4	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2015Q3	13.92	-33.9	7.25	208	5.65		7.12	92.6	89.3	124	3.6	9.8	<0.2	0.051	<0.02	<0.2	<10	<2	<1	<0.01	
2015Q4	6.55	61.3	7.94	185	4.56	<5	6.69	89.2	84.5	102	2.8	10.3	<0.2	<0.05	<0.02	0.46	<10	<2	<1	<0.01	<0.01
2016Q2	10.07	-47.4	7.86	194	5.49	10	7.98	95	86.6	94	2.4	11.7	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	<0.01
2016Q3	11.02	84.1	7.72	228	6.46		16.9	94.6	88.4	116	2.9	6.3	<0.2	0.12	<0.02	<0.2	13.7	<2	<1	<0.01	
2016Q4	4.18	73	7.92	198	5.65		7.55	97.2	84.2	108	2.5	5.3	<0.2	<0.05	<0.02	0.21	<10	<2	<1	<0.01	
2017Q2	7.42	66.5	7.66	225	6.8		10.84	93.9	93.1	120	3.3	<5	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2017Q3	12.77	20.1	7.32	224		<5	5.38	100	86.2	90	3.5	<5	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	<0.01
2018Q2	6.31	12	7.92	225	3.84		5.12	104	95.8	114	2.8	8.5	<0.2	<0.05	<0.02	0.58	30.9	<2		0.019	
2018Q3	9.35	21.4	8.01	226	3.73		8	87.8	85.5	95	3.1	<5	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2018Q4	1.14	-28.8	7.82	209	3.78	<5	8.6	93.1	101	126	4.4	10	<0.2	<0.05	<0.02	0.2	<10	<2	1.5	<0.01	<0.01
2019Q2	5.02	200.2	7.92	228	4.82	<5	OR	88.1	175	213	34	21.2	<0.2	<0.05	0.21	2.6	91.4	<2	<1	0.011	<0.01
2019Q3	9.24	100.7	8.26	208	5.62		12	93.3	89.6	119	3.1	6	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2020Q2	14.7	135.2	8.26	165.7	2.21		6.76	89.7	93.4	104	3.5	7.9	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2020Q3	15.5	250.5	7.61	183.1	17.8	5	21.2	115	103	204	8.3	7.7	<0.2	<0.05	0.036	0.82	15	3	<1	<0.01	<0.01
2020Q4	9.1	201.4	8.12	149.4	2.68		1.49	99.8	88.3	153	4.1	11.3	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2021Q2	12.8	102.4	8.43	160.1	2.44		4.89	102	94.1	145	4.6	9.2	<0.2	<0.05	<0.2	<0.2	<10	<2	<1	<0.01	
2021Q3	12.4	163.2	7.31	181.9	2.58		4.63	102	106	135	11.5	10.3	<0.2	<0.05	<0.02	0.22	<10	<2	<1	<0.01	
2021Q4	8.2	140.4	7.4	136.6	3.22	5	2.26	95.9	91.6	143	4.3	7.2	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	<0.01

MW-1B

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, hexavalent	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Min	<0.1	<0.005	<0.005	0.162	<0.002	<0.02	<0.001	22.6	<0.004	<0.005	<0.004	<0.01	<0.06	<0.001	5.15	<0.01	<0.0002	<0.01	<0.5	4.75	<0.003	<0.005	<0.003	<0.005	<0.01
Min Year	2010	mult	mult	2006	mult	mult	2013	2014	mult	2013	mult	mult	mult	2013	2006	2007	mult	mult	mult	2006	mult	2013	mult	mult	mult
Max	11.5	<0.05	<0.025	0.74	<0.005	0.032	0.0076	58.7	0.014	<0.02	0.006	0.0174	14.7	0.0043	14.4	9.34	<0.0002	0.014	8.56	27	<0.025	<0.015	<0.03	0.017	0.052
Max Year	2019	nd	nd	2021	nd	2019	2017	2009	2019	nd	2019	2006	2019	2007	2009	2009	nd	2019	2009	2011	nd	nd	nd	2019	2006
2012Q1	0.141	<0.005	<0.005	0.222	<0.003	<0.5	<0.005	35	<0.01	<0.01	<0.02	<0.01	0.238	<0.003	8.85	0.223	<0.0002	<0.03	<5	9.91	<0.003	<0.01	<0.003	<0.03	<0.01
2012Q2							<0.005	30.4					3.2	0.0042	8.66	0.232			<5	7.92					
2012Q3							<0.005	30.4					0.39	<0.003	7.48	0.148			<5	7.34					
2012Q4							<0.005	26.5					1.3	<0.015	6.9	0.195			<5	6.54					
2013Q1							<0.05	29.3					0.61	<0.05	6	5.1			0.5	6.8					
2013Q2	<0.2	<0.005	<0.005	0.17	<0.003	<0.5	<0.05	26.7	<0.005	<0.005	<0.05	<0.05	<0.2	<0.005	6.18	0.23	<0.0002	<0.05	0.57	6.5	<0.005	<0.005	<0.005	<0.05	<0.1
2013Q3							<0.001	24.7					<0.2	<0.001	5.53	0.053			0.53	6					
2013Q4							<0.005	23.4					<0.2	<0.005	5.55	1.4			0.5	5.6					
2014Q2							<0.002	22.6					0.26	<0.01	5.5	0.41			<0.5	5.4					
2014Q3	0.32	<0.02	<0.015	0.19	<0.002	<0.02	<0.002	22.9	<0.004	<0.01	<0.004	<0.01	0.54	<0.01	6.1	1.2	<0.0002	<0.01	0.56	5.4	<0.025	<0.006	<0.02	<0.005	<0.01
2014Q4							<0.002	23.8					0.42	<0.01	6.2	4.9			0.5	5.6					
2015Q2							<0.002	25					0.1	<0.01	6.6	0.6			0.56	6.1					
2015Q3							<0.002	25.9					0.37	<0.01	6	1.5			0.61	6.4					
2015Q4	<0.2	<0.02	<0.015	0.18	<0.002	<0.02	<0.002	24.5	<0.004	<0.01	<0.004	<0.01	0.18	<0.01	5.6	0.48	<0.0002	<0.01	<0.5	6	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q2	<0.2	<0.02	<0.015	0.37	<0.002	<0.02	<0.002	25.2	<0.004	<0.01	<0.004	<0.01	0.57	<0.01	5.7	8.7	<0.0002	<0.01	0.55	6.2	<0.025	<0.006	<0.02	<0.005	0.016
2016Q3							<0.002	25.6					1.6	<0.01	6	5.7			0.77	6.2					
2016Q4							<0.002	24.4					0.45	<0.01	5.7	3.3			<0.5	5.5					
2017Q2							<0.002	26.8					0.21	<0.01	6.3	2.5			0.51	6.3					
2017Q3	<0.2	<0.02	<0.015	0.2	<0.002	<0.02	0.0076	24.9	<0.004	<0.01	<0.004	<0.01	0.19	<0.01	5.8	0.93	<0.0002	<0.01	<0.5	5.9	<0.025	<0.006	<0.02	<0.005	0.021
2018Q2							<0.002	27.6					0.24	<0.01	6.5	2.4			0.68	6.4					
2018Q3							<0.002	24.7					0.054	<0.01	5.8	0.33			<0.5	6.1					
2018Q4	<0.2	<0.02	<0.015	0.29	<0.002	<0.02	<0.002	29.3	<0.004	<0.01	<0.004	<0.01	0.34	<0.01	6.8	4.3	<0.0002	<0.01	0.59	6.5	<0.025	<0.006	<0.02	<0.005	0.02
2019Q2	11.5	<0.02	<0.015	0.2	<0.002	0.032	<0.002	48.3	0.014	<0.01	0.006	<0.01	14.7	<0.01	13.2	0.49	<0.0002	0.014	4.1	11.6	<0.025	<0.006	<0.02	0.017	0.031
2019Q3							<0.002	25.9					0.79	<0.01	6.1	0.59			0.78	5.8					
2020Q2							<0.002	27					0.16	<0.01	6.3	2.6			0.5	6.5					
2020Q3	1.4	<0.02	<0.015	0.34	<0.002	0.029	<0.002	29.6	<0.004	<0.01	<0.004	<0.01	1.7	<0.01	7	2.3	<0.0002	<0.01	0.78	7.5	<0.025	<0.006	<0.02	<0.005	0.029
2020Q4							<0.002	25.3					0.081	<0.01	6.1	0.27			0.51	6.3					
2021Q2							<0.002	27.4					0.22	<0.01	6.2	1.5			0.71	7.1					
2021Q3							<0.002	31					0.64	<0.01	6.9	1.3			0.52	8.4					
2021Q4	0.2	<0.02	<0.015	0.74	<0.002	<0.02	<0.002	26.8	<0.004	<0.01	<0.004	<0.01	0.63	<0.01	6	5.6	<0.0002	<0.01	<0.5	6	<0.025	<0.006	<0.02	<0.005	0.046

MW-1B

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Vinyl chloride	Chloroethane	Acetone	Methylene chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes, Total	1,4-Dichlorobenzene
Min	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
Min Year	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult
Max	<5	<5	<25	13	<5	<5	<5	<5	<5	<5	<5	<2	<5
Max Year	nd	nd	nd	2008	nd	nd	nd	nd	nd	nd	nd	nd	nd
2012Q1	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5		<5
2012Q2													
2012Q3													
2012Q4													
2013Q1													
2013Q2	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5		<5
2013Q3													
2013Q4													
2014Q2													
2014Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2014Q4													
2015Q2													
2015Q3													
2015Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q3													
2016Q4													
2017Q2													
2017Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2018Q2													
2018Q3													
2018Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q3													
2020Q2													
2020Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2020Q4													
2021Q2													
2021Q3													
2021Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

MW-2A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Temperature (°C)	EH/ORP (mV)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Color (Color Units)	Turbidity (NTU)	Alkalinity, Total (mg/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Bromide (mg/L)	Nitrate as N (mg/L)	Ammonia (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Biochemical Oxygen Demand (mg/L)	Total Organic Carbon (mg/L)	Phenolics, Total Recoverable (mg/L)	Cyanide, Total (mg/L)
Min	-2.81	-154	5.68	9.29	2.67	<5	1.5	198	95	172	8.33	<5	<0.1	<0.01	2.6	1.09	<10	<2	<3	<0.005	<0.01
Min Year	2019	2013	2020	2013	2015	mult	2013	2013	2009	2015	2011	mult	2013	2013	2020	2013	mult	mult	2011	mult	mult
Max	21.3	810	7.95	1474	9.53	210	1674	440	691	916	116	10.2	1.36	0.38	14.1	132	54.8	17.8	21.8	0.14	<0.02
Max Year	2012	2014	2016	2010	2019	2007	2014	2013	2013	2013	2013	2009	2013	2020	2007	2007	2014	2017	2008	2015	nd
2012Q1	21.3	72	6.84	448		<5	25.9	260	170	250	8.96	<5	<8	<0.05		4.95	<20	<6	7.4	<0.005	<0.01
2012Q2	18.9	133	6.72	515			27.5	250	207	290	11.6	8.79	<80	0.076		6.56	36	<4	5.5	<0.005	
2012Q3	20.2	147	7.14	674			40.2	340	268	420	17.6	<5	<80	0.109		8.58	24	<4	6.9	<0.005	
2012Q4	11.8	186	6.93	488			17.3	250	212	270	10.7	<5	<0.5	0.081		6.56	<20	<4	7	<0.05	
2013Q1	4.4	176	7.07	463			31	198	188	218	10.8	4.55	<0.2	0.119		4.83	<10	<2	5.98	<0.02	
2013Q2	15	-154	6.725	9.29		14	11	232	124	306	8.57	4.73	<0.1	<0.01		6.92	<10	5	6.46	<0.02	<0.02
2013Q3	13.6	164	6.62	603			1.5	440	691	916	116	4.78	1.36	<0.01		1.09	13	<2	8.86	0.008	
2013Q4	11.5	383	6.58	624			10	207	226	294	10.7	5.93	<0.1	0.072		6.13	14	<2	4.56	<0.005	
2014Q1	3.44	810	6.59	599	6.21		1285	321	273	295	17.1	<5	<0.2	0.086	7.1	7	54.8	4.5	5.6	<0.01	
2014Q2	10.44	30.4	6.77	600	4.84		1674	250	195	273	10.8	<5	<0.2	0.15	5.2	8.2	17.6	8.9	4.6	<0.01	
2014Q3	12.81	-38.5	6.96	777	3.85	<5	OR	351	265	379	18.5	<5	0.31	0.081	7.2	9.1	20.3	3.3	5.2	<0.01	<0.01
2014Q4	5.66	-12.8	6.73	713	5.49		OR	329	279	282	15.5	<5	<0.2	<0.05	6.8	8.7	28	6.8	4.7	<0.01	
2015Q2	16.93	-66.4	6.62	522	2.67		5.23	213	158	172	10	<5	<1	<0.05	5.3	12.3	11.8	<2	4	<0.01	
2015Q3	12.02	48.7	6.32	665	4.07		134	350	281	354	18	<5	<0.2	0.16	5.2	6.5	18.2	2.7	5.3	<0.01	
2015Q4	5.99	47.5	6.69	493	6.42	15	113	236	197	230	10.5	<5	<0.2	0.11	4.6	5.8	12.9	7.4	5.2	0.14	<0.01
2016Q2	7.46	39	6.96	493	5.52	20	140	230	214	246	13.1	<5	<0.2	0.078	4.7	6.1	17.3	5	3.7	<0.01	<0.01
2016Q3	9.63	43.4	6.57	787	4.49		140	309	286	354	20	10	<0.2	0.22	8.3	8.3	20.7	2	5.7	<0.01	
2016Q4	1.73	107.7	7.95	673	6.66		105	264	212	272	13.6	7.4	<0.2	0.064	5	6.1	10.6	6.3	5	0.016	
2017Q2	6.89	47.6	6.83	1402	5.01		45.5	222	197	251	12.8	<5	<0.2	0.05	5.5	5.6	<10	<2	3.6	<0.01	
2017Q3	12.36	4	6.05	755		<5	830	363	294	344	25	<5	<0.4	0.19	6.2	7.5	<10	17.8	7.8	<0.01	<0.01
2017Q4	6.52	-23.6	6.66	617	6.31		33.87	268	236	316	15	<5	<0.4	0.058	5.3	4.9	<10	3.4	4.2	<0.01	
2018Q2	7.14	-13.8	6.67	647	3.89		876	288	254	315	16	<5	<0.2	0.15	5.7	6.5	28.6	5.4		0.086	
2018Q3	10.53	-34.6	6.82	628	6.21		67	275	241	294	16.9	<5	<0.2	0.15	5.6	6	13.4	3.6	4.3	0.011	
2018Q4	0.41	-24	6.53	420	2.84	25	82.2	287	284	316	15.1	<5	<0.2	<0.05	4.5	4.4	13.5	3.4	4.1	<0.01	<0.01
2019Q2	6.74	12.4	6.59	454	6.3	10	1142	237	272	315	18.9	<5	<0.4	<0.05	5.1	6.1	14	5.9	4.5	0.011	<0.01
2019Q3	7.39	-26.3	6.82	683	5.54		853	370	296	354	18.6	<5	<0.4	0.2	4.9	4.9	22	10.8	5.5	<0.01	
2019Q4	-2.81	66.8	7.44	253	9.53		606	247	215	350	11.2	<5	<0.4	0.13	3.6	3.9	<10	2.3	4.1	0.029	
2020Q2	14.7	47.4	6.6	474.4	3.57		17.1	253	197	240	11.7	<5	<0.4	0.11	4.5	3.7	<10	<2	4.8	<0.01	
2020Q3	16.5	95.4	5.68	612	3.69	<5	10.34	347	234	206	15.3	<5	<0.2	0.38	2.6	5.7	<10	<6	4.3	<0.01	<0.01
2020Q4	5.4	54.8	7.13	468.2	4.05		52.5	329	279	385	22.4	<5	0.41	0.13	9.4	7.7	11.3	6.8	5.9	<0.01	
2021Q2	13.3	50.6	6.13	528	3.9		15.1	351	277	373	19.7	<5	0.4	0.17	7.5	7.2	20.2	<2	5.4	<0.01	
2021Q3	16.2	22.9	6.16	535	4.32		65.6	303	240	459	16.5	<5	<0.4	0.081	7.6	7	13.5	2.4	7.1	<0.01	
2021Q4	4.5	9.9	6.89	423.6	3.58	10	18	339	282	350	20	<5	<0.4	0.11	7.1	7.4	11.5	2.2	7.5	<0.01	<0.01

MW-2A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, hexavalent	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Min	<0.1	<0.005	<0.005	0.259	<0.002	<0.5	<0.001	26.5	<0.004	<0.005	<0.004	<0.01	0.204	<0.001	7.01	0.144	<0.0002	<0.01	<5	6.59	<0.003	<0.005	<0.003	<0.005	<0.01
Min Year	2009	mult	mult	2012	mult	mult	2013	2009	2020	2013	2020	mult	2006	2013	2009	2009	mult	mult	2009	2009	mult	mult	mult	2020	mult
Max	19.9	<0.05	0.023	0.65	<0.005	0.584	0.0025	213	0.029	<0.05	0.016	0.027	64.2	0.022	38.9	15.1	<0.0004	0.036	15.1	50	<0.025	<0.015	<0.03	0.029	0.098
Max Year	mult	nd	2014	mult	nd	2006	2015	2013	2014	nd	2017	2017	2010	2014	2013	2008	nd	2017	2008	2013	nd	nd	nd	2017	2017
2012Q1	0.323	<0.005	0.0068	0.259	<0.003	<0.5	<0.005	49.6	<0.01	<0.01	<0.02	<0.01	2.9	<0.003	11.2	6.81	<0.0002	<0.03	6.33	11	<0.003	<0.01	<0.003	<0.03	<0.01
2012Q2							<0.005	59.2					3.15	<0.003	14.4	8.49			8.15	11.9					
2012Q3							<0.005	78.8					7.39	<0.003	17.4	10.3			10.9	14.7					
2012Q4							<0.005	61.5					5.21	<0.015	14.2	8.5			8.64	12.8					
2013Q1							<0.05	57.6					2.3	<0.05	10.6	6.9			5.9	9.9					
2013Q2	0.53	<0.005	0.0054	0.26	<0.003	<0.5	<0.05	30.7	<0.005	<0.005	<0.05	<0.05	2.3	<0.005	11.5	3.9	<0.0002	<0.05	4.3	11	<0.005	<0.005	<0.005	<0.05	<0.1
2013Q3							<0.001	213					0.3	<0.001	38.9	6.4			2.9	50					
2013Q4							<0.005	68.7					5.2	<0.005	13.2	9.7			8.4	12					
2014Q1							<0.002	74.4					33.8	0.012	21.1	10			10.3	13					
2014Q2							<0.002	61.6					43.3	0.022	19.9	9			11.2	11.1					
2014Q3	19.9	<0.02	0.023	0.65	<0.002	0.3	<0.002	86.9	0.029	<0.01	0.015	0.022	32.5	0.011	23.3	11.2	<0.0002	0.034	14.4	16.3	<0.025	<0.006	<0.02	0.028	0.07
2014Q4							<0.002	78.5					28.5	<0.01	20.1	10.8			10.9	13.6					
2015Q2							0.0025	53.6					3.3	<0.01	11.6	6.8			8.3	10.2					
2015Q3							<0.002	81.9					16.8	<0.01	18.5	9.6			12.1	14.2					
2015Q4	9.2	<0.02	0.018	0.33	<0.002	0.18	<0.002	56.1	0.011	<0.01	0.0071	<0.01	18.2	<0.01	13.8	7.5	<0.0002	0.015	8.8	9.7	<0.025	<0.006	<0.02	0.013	0.035
2016Q2	13.2	<0.02	0.018	0.4	<0.002	0.19	<0.002	60.5	0.019	<0.025	0.0096	0.015	25.1	0.012	15.4	7.6	<0.0002	0.022	9.2	10.1	<0.025	<0.006	<0.02	0.016	0.051
2016Q3							<0.002	82					22.3	<0.01	19.8	11.1			12.9	15.7					
2016Q4							<0.002	60.2					18.3	<0.01	14.9	8.5			8	10.2					
2017Q2							<0.002	57.1					9.9	<0.01	13.2	7.6			8.4	9.6					
2017Q3	19.9	<0.02	0.019	0.65	<0.002	0.24	<0.002	81	0.027	<0.01	0.016	0.027	34	0.021	22.2	9.6	<0.0002	0.036	12.1	15	<0.025	<0.006	<0.02	0.029	0.098
2017Q4							<0.002	69					11	<0.01	15.4	8.8			8.1	11.4					
2018Q2							<0.002	70.1					29.7	0.017	19.1	9			10.7	10.8					
2018Q3							<0.002	70					15.5	<0.01	16	8.6			10.5	11.7					
2018Q4	11	<0.02	<0.015	0.43	<0.002	0.18	<0.002	81.2	0.015	<0.01	0.0088	0.011	22.5	<0.01	19.8	9.7	<0.0002	0.018	9.6	10.2	<0.025	<0.006	<0.02	0.017	0.043
2019Q2	17	<0.02	0.022	0.54	<0.002	0.2	<0.002	77.3	0.023	<0.01	0.013	0.021	32.4	0.017	19.2	9.3	<0.0002	0.029	10.3	10.9	<0.025	<0.006	<0.02	0.024	0.076
2019Q3							<0.002	84.9					29.6	0.013	20.5	9.9			11.4	11.7					
2019Q4							<0.002	62.3					16.3	0.01	14.5	8			7.7	9.3					
2020Q2							<0.002	59.1					6.5	<0.01	12	6.9			7.7	8.5					
2020Q3	<0.2	<0.02	<0.015	0.4	<0.002	0.22	<0.002	70.4	<0.004	<0.01	<0.004	<0.01	2.2	<0.01	14	8.9	<0.0002	<0.01	9	11.3	<0.025	<0.006	<0.02	<0.005	<0.01
2020Q4							<0.002	82					6	<0.01	18.1	12.2			9.7	14.4					
2021Q2							<0.002	82.5					5.3	<0.01	17.2	11.5			10.9	15.4					
2021Q3							<0.002	71.4					12	<0.01	14.9	10			11.2	14					
2021Q4	1.1	<0.02	<0.015	0.44	<0.002	0.2	<0.002	84.1	<0.004	<0.01	<0.004	<0.01	9.5	<0.01	17.6	11.4	<0.0002	<0.01	9	13.5	<0.025	<0.006	<0.02	<0.005	<0.01

MW-2A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Vinyl chloride	Chloroethane	Acetone	Methylene chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes, Total	1,4-Dichlorobenzene
Min	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
Min Year	mult	mult	mult	mult	mult	mult	mult	mult	mult	2018	mult	mult	mult
Max	<5	<5	<25	12	<5	<5	<5	1.1	3.3	4	<5	<2	1.2
Max Year	nd	nd	nd	2008	nd	nd	nd	mult	2019	2007	nd	nd	2020
2012Q1	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5		<5
2012Q2													
2012Q3													
2012Q4													
2013Q1													
2013Q2	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5		<5
2013Q3													
2013Q4													
2014Q1													
2014Q2													
2014Q3	<1	<1	<10	<1	<1	<1	<1	**1.1**	<1	2	<1	<2	<1
2014Q4													
2015Q2													
2015Q3													
2015Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	**1.2**	<1	<2	<1
2016Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	**1.2**	<1	<2	<1
2016Q3													
2016Q4													
2017Q2													
2017Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	**1.1**	<1	<2	<1
2017Q4													
2018Q2													
2018Q3													
2018Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q2	<1	<1	<10	<1	<1	<1	<1	1.1	**3.3**	**1.5**	<1	<2	<1
2019Q3													
2019Q4													
2020Q2													
2020Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	**2.2**	<1	<2	**1.2**
2020Q4													
2021Q2													
2021Q3													
2021Q4	<1	<1	<10	<1	<1	<1	<1	**1.3**	<1	**2.1**	<1	<2	**1.1**

X.X Baseline organic detections

MW-2B

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Temperature (°C)	EH/ORP (mV)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Color (Color Units)	Turbidity (NTU)	Alkalinity, Total (mg/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Bromide (mg/L)	Nitrate as N (mg/L)	Ammonia (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Biochemical Oxygen Demand (mg/L)	Total Organic Carbon (mg/L)	Phenolics, Total Recoverable (mg/L)	Cyanide, Total (mg/L)
Min	-1.9	-77	5.85	<5	4.26	<5	1.8	288	241	141	11.6	<1	<0.2	<0.01	0.42	<0.5	<10	<2	<2	<0.005	<0.01
Min Year	2019	2007	2020	2013	2021	mult	2013	2013	2013	2020	2013	2006	mult	mult	2017	2012	mult	mult	2013	mult	mult
Max	19.5	547.3	8.34	1978	9.32	15	855	790	788	1040	167	7.9	1.32	0.216	1.31	7.19	53.1	13	82.6	0.1	0.0237
Max Year	2012	2014	2008	2009	2019	2007	2014	2012	2008	2006	2007	2010	2013	2006	2007	2013	2018	2006	2008	2006	2006
2012Q1	18	88	6.6	1377		<5	17.6	490	712	830	123	<5	<0.8	0.053		<0.5	<20	<4	20.7	<0.005	<0.01
2012Q2	18.2	161	6.12	1378			5.44	790	643	890	124	<5	<8	<0.05		0.811	<20	<4	14.4	<0.005	
2012Q3	19.5	110	6.54	1390			5.13	670	664	940	118	<5	<8	<0.05		1.38	21	<4	6.6	<0.005	
2012Q4	11.7	201	6.36	1376			15	650	730	770	120	<5	0.82	<0.05		1.66	<20	<4	<3	<0.05	
2013Q1	5.8	301	6.94	1418			6.6	626	737	821	118	3.99	<0.2	<0.01		0.883	<10	<2	8.99	<0.02	
2013Q2	14.1	332	6.69	<5		7.4	1.8	552	411	954	93.2	4.44	1.32	0.157		1.44	<10	<2	10.1	<0.02	<0.02
2013Q3	13.5	259	6.95	1391			6.4	288	241	345	11.6	5.42	0.303	0.109		7.19	12	<2	8.07	0.006	
2013Q4	11.9	305	6.76	1556			4.4	701	654	816	88.6	4.62	0.355	<0.01		1.17	<10	<2	2.34	0.072	
2014Q1	7.14	547.3	6.36	1330	6.12		855	684	677	812	114	<5	<0.2	<0.05	0.7	1.3	<10	<2	4.3	<0.01	
2014Q2	10.24	55.2	6.83	1358	4.94		19.1	657	537.5	812	98.8	<5	<0.2	0.054	0.77	1.4	13.2	<2	4.6	<0.01	
2014Q3	9.9	33	7.17	1388	6.36	<5	39.3	339	565	817	117	<5	0.84	<0.05	0.57	1.3	16.4	<2	4.2	<0.01	<0.01
2014Q4	8.38	191.1	6.71	1375	5.72		98.5	696	676	752	99.2	<5	<0.2	<0.05	0.78	1.4	18.1	2	4	<0.01	
2015Q2	14.56	-49.4	6.69	1391	4.39		5.94	650	527.5	709	107	<5	<4	<0.05	0.75	1.1	<10	<2	4.2	<0.01	
2015Q3	11.13	171.3	6.29	1139	5.08		5.01	655	624	759	96	<5	0.79	<0.05	0.66	1.3	<10	2.2	4.7	<0.01	
2015Q4	7.21	179.7	6.66	1212	4.53	10	34.1	693	650	761	121	<5	0.77	<0.05	0.64	1.8	10.4	<2	5.3	<0.01	<0.01
2016Q2	5.75	128	6.76	1231	6.61	10	7.42	666	651	763	95.4	<5	0.77	0.085	0.56	1.3	13.4	<2	4.5	<0.01	<0.01
2016Q3	8.96	294.1	6.61	1418	6.25		40.8	641	633	807	84.3	<5	0.71	<0.05	1	1.6	25.6	<3	5	<0.01	
2016Q4	2.05	240.9	7.86	1546	4.74		21.8	652	636	806	99.2	<5	0.74	<0.05	0.44	1.4	11.6	4.9	4.8	<0.01	
2017Q2	6.75	68.1	7.24	1404	7.88		7.49	602	650	757	98.5	<5	0.69	<0.05	0.55	1.1	<10	<2	3.75	<0.01	
2017Q3	11.85	29.7	5.88	1412		<5	9.75	637	618	749	99.8	<5	<1	0.13	0.42	1.6	<10	<2	5.2	<0.01	<0.01
2017Q4	6.83	-26.5	6.6	1329	4.42		7.75	644	647	798	98.5	<5	<1	<0.05	0.69	0.99	<10	<2	4.1	<0.01	
2018Q2	5.55	74.9	6.85	1393	6.63		8.43	619	655	798	95.2	<5	0.73	<0.05	0.58	1.3	53.1	2		<0.01	
2018Q3	11.71	0.6	6.99	1365	6.16		8.29	615	605	775	94.9	<5	1	<0.05	0.74	0.9	<10	2.1	4	<0.01	
2018Q4	0.58	7.2	6.53	899	4.78	10	14	561	682	733	88.3	<5	<1	<0.05	0.62	1	18.4	<2	3.5	0.018	<0.01
2019Q2	5.56	181.3	6.86	828	4.53	<5	21.1	598	640	720	89.3	<5	1.1	<0.05	0.53	1.1	26.5	<2	5.4	0.01	<0.01
2019Q3	7.1	-12.5	6.93	1248	4.58		16	574	622	783	90.5	<5	<1	<0.05	0.76	1.1	28.8	3.2	4.9	<0.01	
2019Q4	-1.9	3.7	7.43	638	9.32		8.96	572	607	798	96.6	<5	<1	0.05	0.63	1.2	26.7	<2	4.1	<0.01	
2020Q2	14.9	67.5	6.53	1220	4.33		4.79	646	601	721	89	<5	1.2	<0.05	0.58	0.99	26.3	<2	4.4	<0.01	
2020Q3	16	166.6	5.85	1050	4.28	10	2.29	696	572	141	73.6	<5	0.66	<0.05	0.46	1.7	<10	<2	3.7	<0.01	<0.01
2020Q4	6.7	119.3	7.56	892	4.33		19.8	567	600	758	85.7	<5	0.67	<0.05	0.73	1.3	25.6	<2	4.9	<0.01	
2021Q2	11.8	91.2	6.69	980	4.26		4.03	615	645	705	86.6	<5	0.84	<0.05	0.93	1.2	26.1	<2	4	<0.01	
2021Q3	14.6	72.3	6.14	1015	3.85		1.3	605	595	871	88	<5	0.87	<0.05	0.45	1.3	11.3	<2	5.2	<0.01	
2021Q4	7.9	109.7	8.19	836	4.6	10	7.2	560	588	696	80.7	<5	0.63	<0.05	0.44	1	<10	<2	4.6	<0.01	<0.01

MW-2B

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, hexavalent	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Min	<0.1	<0.005	<0.005	1	<0.002	<0.5	<0.001	73.7	<0.004	<0.005	<0.004	<0.01	0.149	<0.001	13.8	3.2	<0.0002	<0.01	<1	13	<0.003	<0.005	<0.003	<0.005	<0.01
Min Year	2018	mult	mult	2013	mult	mult	2013	2013	mult	2013	mult	mult	2010	2013	2013	2013	mult	mult	2013	mult	2013	mult	mult	mult	mult
Max	4.3	<0.05	<0.025	1.43	<0.005	0.256	<0.05	237	0.0082	<0.02	0.0051	0.0172	9.8	0.013	49.1	9	<0.0004	0.011	9.3	59.4	0.004	<0.015	<0.03	<0.05	0.0469
Max Year	2014	nd	nd	2009	nd	2006	nd	mult	2008	nd	2014	2006	2014	2014	2008	2013	nd	2014	2013	2012	2010	nd	nd	nd	2007
2012Q1	0.536	<0.005	<0.005	1.4	<0.003	<0.5	<0.005	208	<0.01	<0.01	<0.02	<0.01	1.11	<0.003	46.6	6.23	<0.0002	<0.03	<5	58.5	<0.003	<0.01	<0.003	<0.03	0.0177
2012Q2							<0.005	184					0.337	<0.003	44.9	6.4			<5	47.4					
2012Q3							<0.005	196					0.319	<0.003	42.2	6.38			<5	50.8					
2012Q4							<0.005	216					0.416	<0.015	46.6	6.49			<5	59.4					
2013Q1							<0.05	225					0.31	<0.05	42.3	6.7			2.3	51					
2013Q2	<0.2	<0.005	<0.005	1	<0.003	<0.5	<0.05	105	<0.005	<0.005	<0.05	<0.05	0.32	<0.005	36.4	3.2	<0.0002	<0.05	2.9	45	<0.005	<0.005	<0.005	<0.05	<0.1
2013Q3							<0.001	73.7					1.5	<0.001	13.8	9			9.3	13					
2013Q4							<0.005	199					0.4	<0.005	38	6.1			2.9	46					
2014Q1							<0.002	198					6.8	<0.01	44.4	5.9			3.4	48.1					
2014Q2							<0.002	182					9.8	0.013	41	5.5			4	42.9					
2014Q3	4.3	<0.02	<0.015	1.3	<0.002	0.22	<0.002	191	0.0058	<0.01	0.0051	<0.01	3.5	<0.01	43	5.7	<0.0002	0.011	3.1	46.3	<0.025	<0.006	<0.02	<0.005	0.025
2014Q4							<0.002	199					6.2	<0.01	43.7	5.8			3.6	47.7					
2015Q2							<0.002	177					0.33	<0.01	42	5.5			2.3	41.8					
2015Q3							<0.002	184					0.6	<0.01	39.8	5.2			2.4	45.5					
2015Q4	0.36	<0.02	<0.015	1.2	<0.002	0.25	<0.002	193	<0.004	<0.01	<0.004	<0.01	0.63	<0.01	40.9	5.5	<0.0002	<0.01	2.4	47.2	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q2	0.99	<0.02	<0.015	1.2	<0.002	0.21	<0.002	192	<0.004	<0.01	0.0041	<0.01	1.7	<0.01	41.3	5.3	<0.0002	<0.01	2.2	44.8	<0.025	<0.006	<0.02	<0.005	0.01
2016Q3							<0.002	188					4	<0.01	39.8	6.1			3.1	45.4					
2016Q4							<0.002	187					1.2	<0.01	40.8	5.6			2.4	44.9					
2017Q2							<0.002	191					0.5	<0.01	42	5.5			2.1	43.3					
2017Q3	0.47	<0.02	<0.015	1.1	<0.002	0.2	<0.002	182	<0.004	<0.01	<0.004	<0.01	0.63	<0.01	39.8	5	<0.0002	<0.01	2.4	44.3	<0.025	<0.006	<0.02	<0.005	0.015
2017Q4							<0.002	192					0.29	<0.01	40.7	5.4			2.2	47.6					
2018Q2							<0.002	192					0.55	<0.01	42.7	5.3			2.2	43.5					
2018Q3							<0.002	178					0.31	<0.01	39	5.1			2.2	44.5					
2018Q4	0.7	<0.02	<0.015	1.2	<0.002	0.24	<0.002	200	<0.004	<0.01	<0.004	<0.01	0.66	<0.01	44.2	5.3	<0.0002	<0.01	2.5	44.9	<0.025	<0.006	<0.02	<0.005	<0.01
2019Q2	1.1	<0.02	<0.015	1.1	<0.002	0.19	<0.002	189	<0.004	<0.01	<0.004	<0.01	1.1	<0.01	40.9	5.1	<0.0002	<0.01	2.3	42.2	<0.025	<0.006	<0.02	<0.005	<0.01
2019Q3							<0.002	185					0.37	<0.01	39	5.2			2.3	42					
2019Q4							<0.002	179					0.84	<0.01	38.7	5.2			2.2	43.1					
2020Q2							<0.002	179					0.54	<0.01	37.5	5			2.1	40.6					
2020Q3	<0.2	<0.02	<0.015	1.1	<0.002	0.21	<0.002	170	<0.004	<0.01	<0.004	<0.01	0.42	<0.01	35.9	5.2	<0.0002	<0.01	2.1	39.1	<0.025	<0.006	<0.02	<0.005	<0.01
2020Q4							<0.002	179					1.8	<0.01	37.4	5.3			2.7	44					
2021Q2							<0.002	191					0.37	<0.01	40.6	5.5			2.3	43.8					
2021Q3							<0.002	179					0.26	<0.01	36.2	4.9			2.1	45.2					
2021Q4	0.32	<0.02	<0.015	1	<0.002	0.2	<0.002	175	<0.004	<0.01	<0.004	<0.01	0.34	<0.01	36.7	4.5	<0.0002	<0.01	2	40.5	<0.025	<0.006	<0.02	<0.005	0.034

MW-2B

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Vinyl chloride	Chloroethane	Acetone	Methylene chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes, Total	1,4-Dichlorobenzene
Min	<5	<5	<10	<1	<1	6.2	<1	<1	<1	<1	<1	<2	<1
Min Year	mult	mult	mult	mult	mult	2006	mult	mult	mult	mult	mult	mult	mult
Max	17	7	<25	11	<5	42	<5	1.1	<5	1.2	<5	<2	<5
Max Year	2020	2010	nd	2008	nd	2020	nd	2020	nd	2020	nd	nd	nd
2012Q1	**8**	**4**	<10	<5	<5	**15**	<5	<5	<5	<5	<5		<5
2012Q2													
2012Q3													
2012Q4													
2013Q1													
2013Q2	<5	**5.02**	<25	<5	<5	**28.3**	<5	<5	<5	<5	<5		<5
2013Q3													
2013Q4													
2014Q1													
2014Q2													
2014Q3	**6.9**	**3.5**	<10	<1	<1	**15**	<1	<1	<1	<1	<1	<2	<1
2014Q4													
2015Q2													
2015Q3													
2015Q4	**16**	**6.3**	<10	<1	<1	**20**	<1	<1	<1	<1	<1	<2	<1
2016Q2	**14**	**5**	<10	<1	<1	**19**	<1	<1	<1	<1	<1	<2	<1
2016Q3													
2016Q4													
2017Q2													
2017Q3	**11**	**4.4**	<10	<1	<1	**25**	<1	<1	<1	<1	<1	<2	<1
2017Q4													
2018Q2													
2018Q3													
2018Q4	**12**	**3.6**	<10	<1	<1	**33**	<1	<1	<1	<1	<1	<2	<1
2019Q2	**16**	**3.2**	<10	<1	<1	**33**	<1	<1	<1	<1	<1	<2	<1
2019Q3													
2019Q4													
2020Q2													
2020Q3	**17**	**5.2**	<10	<1	<1	**42**	<1	**1.1**	<1	**1.2**	<1	<2	<1
2020Q4													
2021Q2													
2021Q3													
2021Q4	**20**	**4.7**	<10	<1	<1	**47**	<1	<1	<1	<1	<1	<2	<1

X.X Baseline organic detections

MW-3A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Temperature (°C)	EH/ORP (mV)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Color (Color Units)	Turbidity (NTU)	Alkalinity, Total (mg/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Bromide (mg/L)	Nitrate as N (mg/L)	Ammonia (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Biochemical Oxygen Demand (mg/L)	Total Organic Carbon (mg/L)	Phenolics, Total Recoverable (mg/L)	Cyanide, Total (mg/L)
Min	0.2	-115	5.83	115.1	3.64	<5	2	18	37.8	38	<1	<5	<0.1	<0.01	<0.02	<0.2	<10	<2	<1	<0.005	<0.01
Min Year	2019	2007	2010	2020	2020	2006	2013	2009	2009	2007	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult
Max	20.6	386.8	8.41	1759	7.91	115	1123	207	196	10200	24.8	20.5	1.2	1.14	1.45	4.26	47.8	10	10.9	0.012	0.036
Max Year	2008	2014	2010	2008	2019	2007	2014	2020	2009	2013	2016	2007	2007	2008	2007	2007	2018	2010	2013	2013	2020
2012Q1	17.7	194	7.27	284		11	29.9	130	147	140	1.88	<5	<0.8	<0.05		<0.5	<20	5	4.4	<0.005	<0.01
2012Q2	20	153	7.07	340			41.7	160	146	240	1.59	<5	<8	<0.05		<0.5	<20	<4	<3	<0.005	
2012Q3	18.8	133	7.63	368			13.4	160	159	240	7.33	9.49	<8	<0.05		<0.5	<20	<4	<3	<0.005	
2012Q4	12.4	186	6.73	254			13.7	110	118	210	1.44	<5	<0.5	<0.05		<0.5	<20	<4	<3	<0.05	
2013Q1	6.4	342	6.88	231			7.1	102	88.3	102	2.8	4.42	<0.1	<0.01		<0.5	<10	<2	3.78	<0.02	
2013Q2	17.3	339	6.215	482		16	3	120	135	195	1.28	2.79	<0.1	<0.01		0.896	<10	7	9.41	<0.02	<0.02
2013Q3	15.7	211	6.56	274			2.9	151	137	187	1.37	3.61	<0.1	<0.01		0.54	24	2	10.9	0.012	
2013Q4	12.6	179	6.35	292			2	91	125	10200	1.35	3.79	<0.1	<0.01		<1	<10	5	5.35	<0.005	
2014Q1	7.87	386.8	7.23	319	5.57		82.1	143	179	172	4	<5	<0.2	<0.05	<0.02	0.41	12.6	<2	2.2	<0.01	
2014Q2	9.73	-9.4	6.67	334	5.94		1123	139	110.1	172	3	<5	<0.2	<0.05	<0.02	0.52	10.7	3.6	2.6	<0.01	
2014Q3	13.07	56.7	6.68	309	5.27	50	24.9	162	121	202	2.6	<5	<0.2	<0.05	0.13	1.3	36.1	2.6	9.1	<0.01	<0.01
2014Q4	9.17	27.3	6.66	312	6.36		48.1	160	144	182	3.2	<5	<0.2	<0.05	0.18	0.74	18.7	2.3	3	<0.01	
2015Q2	12.24	-17.4	6.38	319	5.27		3.92	154	116	96	1.4	<5	<0.4	<0.05	0.073	0.6	13.7	5.3	5.4	<0.01	
2015Q3	11.96	196	5.93	187	5.41		3.25	96.6	90.3	118	2.3	<5	<0.2	<0.05	0.46	1.1	28.4	<2	6.6	0.011	
2015Q4	7.59	174	6.09	241	6.51	40	20.4	146	120	131	1.2	<5	<0.2	<0.05	0.14	1.1	18.3	<2	5.5	<0.01	<0.01
2016Q2	7.87	202.1	6.7	374	5.1	10	9.03	181	174	216	24.8	16.7	0.21	<0.05	<0.02	0.34	<10	<2	<1	<0.01	<0.01
2016Q3	9.15	285.4	7.49	361	6.77		9.6	169	160	188	5.2	9.8	<0.2	<0.05	0.03	0.32	15.5	<2	2.1	<0.01	
2016Q4	2.78	219.8	6.79	385	6.84		12.4	57.3	58.8	88	2.5	<5	<0.2	0.086	<0.02	0.51	11.2	3	3.15	<0.01	
2017Q2	6.24	38.1	6.81	178	7.04		15.8	64.9	68.5	101	1.3	<5	0.54	<0.05	<0.02	1	11.2	3.9	9.25	<0.01	
2017Q3	10.22	44.4	6.76	436		15	5.01	184	161	173	4.8	<5	<0.2	<0.05	0.074	0.45	<10	<2	2.9	<0.01	<0.01
2017Q4	8.41	-30.4	6.77	293	4.41		13	128	133	158	1.1	<5	<0.2	0.058	<0.02	0.21	<10	<2	2.6	<0.01	
2018Q2	5.25	127.2	7.31	383	7.29		16.8	175	172	206	5.8	<5	<0.2	<0.05	<0.02	0.42	47.8	<2		<0.01	
2018Q3	8.68	55.7	7.67	383	5.27		7.76	159	155	188	5.5	<5	<0.2	<0.05	<0.02	<0.2	<10	<2	1.5	<0.01	
2018Q4	1.76	131.1	6.47	144	5.48	40	17.7	69.1	80.3	97	<1	<5	<0.2	<0.05	<0.02	0.41	12.5	<2	3	<0.01	<0.01
2019Q2	7.2	236.8	6.39	169	6.46	30	21.5	111	127	123	1.4	<5	<0.2	<0.05	0.088	0.73	22.6	<2	4.9	0.01	<0.01
2019Q3	5.62	155.3	7.75	407	6.37		17.2	197	184	219	5.9	<5	<0.2	<0.05	<0.02	0.29	<10	<2	1.8	<0.01	
2019Q4	0.2	163.2	7.14	170	7.91		19.2	64.2	65.2	161	<1	<5	<0.2	<0.05	0.033	0.61	15.7	<2	2.8	<0.01	
2020Q2	14.4	122.9	6.86	321.2	5.43		6.43	177	159	157	4.6	<5	<0.2	<0.05	<0.02	<0.2	<10	<2	1.7	<0.01	
2020Q3	13.7	274.4	6.34	275.7	4.66	15	6.68	207	163	523	4.4	<5	<0.2	<0.05	<0.02	0.5	10.1	<3	<1	<0.01	0.036
2020Q4	9	273.2	7.83	115.1	3.64		11.23	73.3	69.2	194	<1	<5	<0.2	0.072	<0.02	0.42	15.4	<2	4.6	<0.01	
2021Q2	9.9	156.7	7.28	242.7	4.44		13.9	160	164	200	3.9	<5	<0.2	<0.05	<0.2	0.23	10.2	<2	1.4	<0.01	
2021Q3	13.9	159.6	6.13	132.4	3.1		4.96	58.4	57.2	164	<1	<5	<0.2	<0.05	<0.02	0.9	33.4	<2	12.4	<0.01	
2021Q4	9.1	120.1	8.02	115.4	2.46	40	6.01	85.4	75.6	124	<1	<5	<0.2	<0.05	<0.02	0.53	14.1	<2	4.3	<0.01	<0.01

MW-3A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, hexavalent	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Min	<0.1	<0.005	<0.005	0.2	<0.002	<0.02	<0.001	12.3	<0.004	<0.005	<0.004	<0.01	0.09	<0.001	<1	0.0373	<0.0002	<0.01	<1	<1	<0.003	<0.005	<0.003	<0.005	<0.01
Min Year	2009	mult	mult	2016	mult	mult	2013	2009	mult	mult	mult	mult	2020	2013	2009	2008	mult	mult	mult	mult	mult	2013	mult	mult	mult
Max	5.32	<0.05	0.023	0.64	<0.005	0.0626	<0.05	59.5	<0.01	<0.02	0.006	0.0234	6.97	0.0054	13.9	3.2	<0.0004	<0.05	2.9	8.92	<0.025	<0.015	<0.03	0.0051	0.0285
Max Year	2010	nd	2015	2015	nd	2006	nd	2009	nd	nd	2015	2006	2010	2006	2016	2015	nd	nd	2014	2006	nd	nd	nd	2019	2010
2012Q1	1.33	<0.005	<0.005	0.627	<0.003	<0.5	<0.005	44.9	<0.01	<0.01	<0.02	<0.01	1.77	<0.003	8.39	0.802	<0.0002	<0.03	<5	<5	<0.003	<0.01	<0.003	<0.03	0.0106
2012Q2							<0.005	43.6					0.451	<0.003	9.02	0.926			<5	<5					
2012Q3							<0.005	47.5					0.238	<0.003	9.93	0.371			<5	5.41					
2012Q4							<0.005	36.9					0.319	<0.015	6.27	0.891			<5	<5					
2013Q1							<0.05	28.8					0.37	<0.05	4	0.78			1.1	2.1					
2013Q2	<0.2	<0.005	0.0098	0.59	<0.003	<0.5	<0.05	43.6	<0.005	<0.005	<0.05	<0.05	0.42	<0.005	6.22	1.9	<0.0002	<0.05	1.6	2	<0.005	<0.005	<0.005	<0.05	<0.1
2013Q3							<0.001	44.3					0.49	<0.001	6.33	1.8			1.5	2.6					
2013Q4							<0.005	39.7					1.1	<0.005	6.3	1.8			1.1	2.9					
2014Q1							<0.002	54.2					4.1	<0.01	10.7	1.2			2.1	5.3					
2014Q2							<0.002	37.3					6.8	<0.01	8.3	1.4			2.9	3.2					
2014Q3	0.38	<0.02	0.019	0.58	<0.002	0.022	<0.002	42.5	<0.004	<0.01	<0.004	<0.01	0.6	<0.01	7.4	2	<0.0002	<0.01	1.6	3.2	<0.025	<0.006	<0.02	<0.005	<0.01
2014Q4							<0.002	42.5					3.9	<0.01	9.1	2.4			2.4	3.3					
2015Q2							<0.002	40.9					0.3	<0.01	6.8	2.8			1.8	2.1					
2015Q3							<0.002	28.9					0.51	<0.01	4.4	2.5			1.5	1.6					
2015Q4	0.87	<0.02	0.023	0.64	<0.002	<0.02	<0.002	37.9	<0.004	<0.01	0.006	<0.01	1.2	<0.01	6.3	3.2	<0.0002	<0.01	1.6	2.1	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q2	<0.2	<0.02	<0.015	0.2	<0.002	0.033	<0.002	46.6	<0.004	<0.01	<0.004	<0.01	0.21	<0.01	13.9	0.33	<0.0002	<0.01	1	7.9	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q3							<0.002	48					0.49	<0.01	9.7	0.64			1.5	5.8					
2016Q4							<0.002	17.9					1.4	<0.01	3.4	0.098			1	1.5					
2017Q2							<0.002	22.1					1.2	<0.01	3.2	0.88			1.3	<1					
2017Q3	0.39	<0.02	<0.015	0.46	<0.002	0.026	<0.002	48.6	<0.004	<0.01	<0.004	<0.01	0.4	<0.01	9.5	0.6	<0.0002	<0.01	1.4	5.6	<0.025	<0.006	<0.02	<0.005	<0.01
2017Q4							<0.002	41.4					0.46	<0.01	7.2	0.68			0.97	3.4					
2018Q2							<0.002	51.2					1.1	<0.01	10.6	0.65			1.4	5.5					
2018Q3							<0.002	46.2					0.38	<0.01	9.5	0.34			1.2	5.6					
2018Q4	1.8	<0.02	<0.015	0.4	<0.002	<0.02	<0.002	25.7	<0.004	<0.01	<0.004	<0.01	1.3	<0.01	3.9	1.5	<0.0002	<0.01	1.4	1.4	<0.025	<0.006	<0.02	<0.005	0.014
2019Q2	2.5	<0.02	0.021	0.62	<0.002	<0.02	<0.002	39.8	<0.004	<0.01	<0.004	0.01	2.6	<0.01	6.8	1.5	<0.0002	<0.01	1.9	2.6	<0.025	<0.006	<0.02	0.0051	0.018
2019Q3							<0.002	55					0.61	<0.01	11.4	0.59			1.4	6.2					
2019Q4							<0.002	20.3					2	<0.01	3.5	1.1			1.4	1.5					
2020Q2							<0.002	47.8					0.23	<0.01	9.7	0.62			1.1	5.5					
2020Q3	<0.2	<0.02	<0.015	0.37	<0.002	<0.02	<0.002	48.9	<0.004	<0.01	<0.004	<0.01	0.09	<0.01	9.9	0.35	<0.0002	<0.01	1	5.9	<0.025	<0.006	<0.02	<0.005	<0.01
2020Q4							<0.002	21.8					0.55	<0.01	3.6	0.17			0.93	1.4					
2021Q2							<0.002	49.5					0.52	<0.01	9.9	0.38			1.3	6.5					
2021Q3							<0.002	19					0.32	<0.01	2.4	0.82			1.2	1					
2021Q4	0.48	<0.02	<0.015	0.44	<0.002	<0.02	<0.002	24.3	<0.004	<0.01	<0.004	<0.01	0.42	<0.01	3.6	0.78	<0.0002	<0.01	1	1.6	<0.025	<0.006	<0.02	<0.005	<0.01

MW-3A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Vinyl chloride	Chloroethane	Acetone	Methylene chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes, Total	1,4-Dichlorobenzene
Min	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
Min Year	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult
Max	<5	<5	24	11	<5	<5	<5	<5	82	<5	<5	<2	<5
Max Year	nd	nd	2009	2008	nd	nd	nd	nd	2009	nd	nd	nd	nd
2012Q1	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5		<5
2012Q2													
2012Q3													
2012Q4													
2013Q1													
2013Q2	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5		<5
2013Q3													
2013Q4													
2014Q1													
2014Q2													
2014Q3	<1	<1	11	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2014Q4													
2015Q2													
2015Q3													
2015Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q3													
2016Q4													
2017Q2													
2017Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2017Q4													
2018Q2													
2018Q3													
2018Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q3													
2019Q4													
2020Q2													
2020Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2020Q4													
2021Q2													
2021Q3													
2021Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

MW-3B

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Temperature (°C)	EH/ORP (mV)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Color (Color Units)	Turbidity (NTU)	Alkalinity, Total (mg/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Bromide (mg/L)	Nitrate as N (mg/L)	Ammonia (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Biochemical Oxygen Demand (mg/L)	Total Organic Carbon (mg/L)	Phenolics, Total Recoverable (mg/L)	Cyanide, Total (mg/L)
Min	-0.4	-76.1	6.24	8.52	4.29	<5	1.02	97.9	97.9	115	1.4	<5	<0.1	<0.01	<0.02	<0.2	<10	<2	<1	<0.005	<0.01
Min Year	2019	2015	2016	2013	2014	mult	2020	2016	2016	2016	2016	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult
Max	18.3	373	8.18	522	9.12	50	83	260	283	355	27.7	17.9	0.28	0.087	0.076	1.1	39.8	6	5.8	0.015	0.02
Max Year	2012	2013	2020	2011	2016	2016	2014	2012	2014	2013	2011	2014	2020	2019	2016	2016	2018	2011	2016	2013	2020
2012Q1	15.8	203	7.04	482		<5	13.2	260	262	250	23.8	8.7	<0.8	<0.05		<0.5	<20	<4	4.5	<0.005	<0.01
2012Q2	18.3	170	6.61	479			2.51	210	259	300	23.4	7.7	<0.8	0.07		<0.5	<20	<4	<3	<0.005	
2012Q3	16.5	141	7.44	458			7.38	200	223	310	23.4	<5	<8	<0.05		<0.5	<20	<4	<3	<0.005	
2012Q4	12.9	189	6.63	464			10.2	200	248	300	23.2	7.18	<0.5	<0.05		<0.5	<20	<4	<3	<0.05	
2013Q1	8.1	373	7.65	470			5.2	204	249	281	24.4	10.9	<0.2	<0.01		<0.5	<10	<2	1.74	<0.02	
2013Q2	13.2	353	7.27	8.52		6.5	1.9	195	145	355	21.4	9.9	<0.1	<0.01		<0.5	<10	5	1.89	<0.02	<0.02
2013Q3	13.1	215	6.82	467			4.7	208	218	301	21.4	10	0.219	0.084		<0.5	<10	<2	2.96	0.015	
2013Q4	13.3	201	7.45	519			6.1	211	235	273	19.5	9.52	<0.1	<0.01		<1	<10	<2	0.894	<0.005	
2014Q1	9.84	94.1	7.46	437	4.29		61.7	227	283	235	25.2	16.1	<0.2	<0.05	<0.02	<0.2	<10	<2	1.2	<0.01	
2014Q2	12.03	112.2	7.55	450	5.34		83	250	177	263	24.1	15.3	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2014Q3	10.72	184.6	7.95	452	5.46	<5	30.9	185	183.5	265	25.3	15.2	<0.2	<0.05	<0.02	0.3	<10	<2	<1	<0.01	<0.01
2014Q4	9.72	156.9	7.14	465	5.31		56	205	223	284	23.7	17.9	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2015Q2	11.85	-76.1	7.26	446	5.65		21.4	181	196.5	176	24.4	13.4	<1	0.059	<0.02	0.44	<10	<2	1.2	<0.01	
2015Q3	9.44	266.2	6.82	332	5.81		2.47	169	190	225	25.2	12.8	<0.2	<0.05	0.035	0.25	<10	<2	1	<0.01	
2015Q4	8.47	158	7.09	364	6.78	25	7.9	202	190	199	25	16.4	<0.2	<0.05	<0.02	0.42	<10	<2	1	<0.01	<0.01
2016Q2	9.26	254.4	6.24	228	8.73	50	11.7	97.9	97.9	115	1.4	<5	<0.2	<0.05	0.076	1.1	25.5	2.6	5.8	<0.01	<0.01
2016Q3	7.69	294.1	7.62	474	6.92		8.81	168	190	218	22.7	10.1	<0.2	0.069	<0.02	<0.2	14.9	<2	1.1	<0.01	
2016Q4	2.96	263	6.55	217	9.12		13.8	174	182	235	24.8	8.9	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2017Q2	5.47	84	7.04	416	6.81		5.25	166	193	236	23.9	<5	<0.2	<0.05	<0.02	0.33	<10	<2	<1	<0.01	
2017Q3	10.9	61.4	6.55	397		10	12.1	183	188	197	22.4	<5	<0.2	0.064	<0.02	0.48	<10	<2	1.5	<0.01	<0.01
2017Q4	10.08	-37.5	7.16	392	5.22		8.15	175	191	230	22.8	10.8	<0.2	0.057	<0.02	<0.2	<10	<2	<1	<0.01	
2018Q2	6.77	135.9	7.44	474	6.91		21.4	170	191	224	23.5	12.3	<0.2	<0.05	<0.02	0.29	39.8	<2		<0.01	
2018Q3	7.01	44.1	7.73	409	6.2		10.28	161	175	221	23.5	7.3	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2018Q4	2.38	103.6	7.29	302	5.69	10	8.71	152	218	214	23.5	14.5	<0.2	<0.05	<0.02	<0.2	<10	<2	1.3	<0.01	<0.01
2019Q2	6.15	200.1	7.87	250	5.2	10	12.1	149	181	183	22.2	6.7	0.21	<0.05	<0.02	0.23	<10	<2	1	<0.01	<0.01
2019Q3	4.87	151.8	7.74	383	6.68		15.8	175	179	229	21.3	8.6	<0.2	0.087	<0.02	0.22	<10	<2	<1	<0.01	
2019Q4	-0.4	154	7.43	197	7.84		4.6	151	174	289	22.7	10.4	<0.2	0.081	<0.02	0.27	<10	<6	<1	<0.01	
2020Q2	14.2	114.9	7.28	355.4	5.32		1.02	158	173	176	21.1	11.9	0.28	<0.05	<0.02	<0.2	<10	<2	1.6	<0.01	
2020Q3	12.6	259.2	6.64	275	4.91	10	3.84	172	158	225	20.2	10.8	0.21	<0.05	<0.02	0.24	13	<2	<1	<0.01	0.02
2020Q4	9	254.8	8.18	271.1	6.06		2.65	156	166	226	22.7	13.2	<0.2	<0.05	0.022	<0.2	<10	<2	1.2	<0.01	
2021Q2	10.1	151.4	7.06	264.9	4.83		9.33	156	173	236	21.2	12.7	0.21	<0.05	<0.2	<0.2	<10	<2	<1	<0.01	
2021Q3	12.3	132.6	6.37	270.6	4.25		1.76	146	163	214	21.6	11.9	0.21	<0.05	<0.02	<0.2	<10	<2	1	<0.01	
2021Q4	10.4	102.1	7.72	266.9	4.64	10	0.69	158	174	264	21.3	10.9	<0.2	<0.05	<0.02	<0.2	10.3	<2	<1	<0.01	0.01

MW-3B

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, hexavalent	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Min	<0.2	<0.005	<0.005	0.19	<0.002	<0.02	<0.001	30.7	<0.004	<0.005	<0.004	<0.01	<0.2	<0.001	5.2	0.025	<0.0002	<0.01	<5	1.8	<0.003	<0.005	<0.003	<0.005	<0.01
Min Year	mult	mult	mult	2020	mult	2016	2013	2016	mult	2013	mult	mult	2013	2013	2016	2020	mult	mult	mult	2016	mult	2013	mult	mult	mult
Max	2.8	<0.02	0.028	0.59	<0.003	0.046	<0.05	75.8	<0.01	0.011	0.0043	<0.05	7.2	<0.05	22.9	2.6	<0.0002	<0.05	2.9	12.5	<0.025	<0.01	<0.02	<0.05	0.021
Max Year	2014	nd	2016	2016	nd	2015	nd	2011	nd	2016	2016	nd	2014	nd	2014	2016	nd	nd	2014	2011	nd	nd	nd	nd	2019
2012Q1	0.148	<0.005	<0.005	0.339	<0.003	<0.5	<0.005	69	<0.01	<0.01	<0.02	<0.01	0.386	<0.003	21.6	0.102	<0.0002	<0.03	<5	11.9	<0.003	<0.01	<0.003	<0.03	0.017
2012Q2							<0.005	66.6					0.0945	<0.003	22.4	0.1			<5	10.4					
2012Q3							<0.005	59.1					0.142	<0.003	18.4	0.092			<5	8.61					
2012Q4							<0.005	65.1					0.0777	<0.015	20.7	0.0979			<5	10.4					
2013Q1							<0.05	69.8					<0.2	<0.05	18.2	0.073			1.2	11					
2013Q2	<0.2	<0.005	<0.005	0.22	<0.003	<0.5	<0.05	31.3	<0.005	<0.005	<0.05	<0.05	0.37	<0.005	16.3	0.17	<0.0002	<0.05	1.3	9	<0.005	<0.005	<0.005	<0.05	<0.1
2013Q3							<0.001	60.3					0.27	<0.001	16.3	0.25			1.3	9.2					
2013Q4							<0.005	64.4					0.22	<0.005	18.1	0.11			1.4	9.6					
2014Q1							<0.002	75.6					7.2	<0.01	22.9	0.3			2.9	11.1					
2014Q2							<0.002	56.3					1.7	<0.01	17.6	0.17			1.4	8.6					
2014Q3	2.8	<0.02	<0.015	0.49	<0.002	0.045	<0.002	58.5	<0.004	<0.01	<0.004	<0.01	2.3	<0.01	18.2	0.19	<0.0002	<0.01	1.7	9.5	<0.025	<0.006	<0.02	<0.005	<0.01
2014Q4							<0.002	56.3					4.1	<0.01	19.9	0.37			2	9.6					
2015Q2							<0.002	64.2					1.5	<0.01	17.8	0.19			1.8	9					
2015Q3							<0.002	51.7					0.093	<0.01	14.7	0.16			1.1	8.2					
2015Q4	0.56	<0.02	<0.015	0.22	<0.002	0.046	<0.002	51.2	<0.004	<0.01	<0.004	<0.01	0.37	<0.01	15	0.17	<0.0002	<0.01	1.1	9.4	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q2	0.73	<0.02	0.028	0.59	<0.002	<0.02	<0.002	30.7	<0.004	0.011	0.0043	<0.01	1	<0.01	5.2	2.6	<0.0002	<0.01	1.6	1.8	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q3							<0.002	52					0.28	<0.01	14.7	0.43			1.3	8.7					
2016Q4							<0.002	48.8					0.35	<0.01	14.5	0.13			1	7.9					
2017Q2							<0.002	51.8					0.18	<0.01	15.6	0.13			1.1	8.2					
2017Q3	0.31	<0.02	<0.015	0.22	<0.002	0.041	<0.002	50.7	<0.004	<0.01	<0.004	<0.01	0.29	<0.01	15	0.19	<0.0002	<0.01	1.2	8.3	<0.025	<0.006	<0.02	<0.005	<0.01
2017Q4							<0.002	52					0.23	<0.01	15	0.15			1.1	9					
2018Q2							<0.002	51					1.5	<0.01	15.6	0.59			1.3	8					
2018Q3							<0.002	46.8					0.87	<0.01	14.1	0.13			1.1	7.9					
2018Q4	0.33	<0.02	<0.015	0.24	<0.002	0.038	<0.002	58.3	<0.004	<0.01	<0.004	<0.01	0.42	<0.01	17.5	0.38	<0.0002	<0.01	1.2	7.9	<0.025	<0.006	<0.02	<0.005	0.015
2019Q2	0.42	<0.02	<0.015	0.2	<0.002	0.035	<0.002	48.9	<0.004	<0.01	<0.004	<0.01	0.59	<0.01	14.4	0.21	<0.0002	<0.01	1.1	7.8	<0.025	<0.006	<0.02	<0.005	0.021
2019Q3							<0.002	48.6					0.44	<0.01	13.9	0.26			1.2	7.4					
2019Q4							<0.002	46.5					0.088	<0.01	14.1	0.25			1.2	8					
2020Q2							<0.002	46.7					0.054	<0.01	13.7	0.025			1	7.8					
2020Q3	<0.2	<0.02	<0.015	0.19	<0.002	0.027	<0.002	42.9	<0.004	<0.01	<0.004	<0.01	0.076	<0.01	12.4	0.11	<0.0002	<0.01	0.86	7.2	<0.025	<0.006	<0.02	<0.005	<0.01
2020Q4							<0.002	44.3					0.13	<0.01	13.4	0.055			1.1	7.9					
2021Q2							<0.002	47.1					0.15	<0.01	13.5	0.05			1	9					
2021Q3							<0.002	44.7					<0.05	<0.01	12.4	0.045			0.99	8.8					
2021Q4	<0.2	<0.02	<0.015	0.2	<0.002	0.03	<0.002	47.2	<0.004	<0.01	<0.004	<0.01	0.13	<0.01	13.7	0.022	<0.0002	<0.01	1.1	8	<0.025	<0.006	<0.02	<0.005	<0.01

MW-3B

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Vinyl chloride	Chloroethane	Acetone	Methylene chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes, Total	1,4-Dichlorobenzene
Min	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
Min Year	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult
Max	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<2	<5
Max Year	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2012Q1	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5		<5
2012Q2													
2012Q3													
2012Q4													
2013Q1													
2013Q2	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5		<5
2013Q3													
2013Q4													
2014Q1													
2014Q2													
2014Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2014Q4													
2015Q2													
2015Q3													
2015Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q3													
2016Q4													
2017Q2													
2017Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2017Q4													
2018Q2													
2018Q3													
2018Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q3													
2019Q4													
2020Q2													
2020Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2020Q4													
2021Q2													
2021Q3													
2021Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

MW-4A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Temperature (°C)	EH/ORP (mV)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Color (Color Units)	Turbidity (NTU)	Alkalinity, Total (mg/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Bromide (mg/L)	Nitrate as N (mg/L)	Ammonia (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Biochemical Oxygen Demand (mg/L)	Total Organic Carbon (mg/L)	Phenolics, Total Recoverable (mg/L)	Cyanide, Total (mg/L)
Min	0.42	-40.7	6.29	388	2.33	<5	2.6	258	237	355	9.9	<5	<0.1	<0.01	<0.02	<0.2	<10	<2	<3	<0.005	<0.01
Min Year	2019	2017	2021	2019	2020	mult	2013	2016	2013	2015	2020	mult	2013	mult	mult	mult	mult	mult	mult	mult	mult
Max	17.5	476.1	7.85	960	10.49	15	73.1	533	496	525	25.5	15.8	0.298	0.085	0.047	0.81	21.7	6	8.4	<0.012	0.011
Max Year	2011	2014	2019	2016	2019	mult	2014	2020	2011	2016	2011	2014	2013	2012	2019	2015	2014	2013	2012	2013	2020
2012Q1	14.6	193	7.1	762		<5	35	460	444	460	21.5	7	<0.8	<0.05		<0.5	<20	<4	8.4	<0.005	<0.01
2012Q2	15.8	160	6.83	714			7.45	350	384	490	22.3	6.5	<8	<0.05		<0.5	<20	<4	<3	<0.005	
2012Q3	17	153	7.05	818			15.8	450	421	520	19.4	6.99	<8	0.085		<0.5	<20	<4	<3	<0.005	
2012Q4	12.9	184	6.78	804			19.4	390	469	410	18.5	6.06	<0.5	<0.05		<0.5	<20	<4	<3	<0.05	
2013Q1	5.9	262	7.4	801			2.6	420	491	464	17.1	10.3	<0.2	<0.01		<0.5	<10	<2	4.89	<0.02	
2013Q2	13.9	338	7.46	630		5.6	6.8	315	237	496	16.9	9.11	0.298	0.048		<0.5	<10	6	3.56	<0.02	<0.02
2013Q3	14.7	207	7.19	742			3.6	379	394	470	17.7	9.67	0.182	<0.01		<0.5	<10	<2	8.21	0.012	
2013Q4	13.2	205	7.19	833			7.1	375	405	441	15.7	9.52	<0.1	<0.01		<1	<10	<2	1.96	<0.005	
2014Q1	7.68	476.1	6.97	685	5.66		46.6	470	461	420	18.6	11.2	<0.2	<0.05	<0.02	0.31	11.6	<2	2.3	<0.01	
2014Q2	9.32	241.2	6.91	787	5.74		14.8	319	292	413	16.9	15.8	<0.2	0.068	<0.02	0.22	21.7	<2	1.3	<0.01	
2014Q3	12.36	72.5	7.5	751	4.22	<5	12.7	300	340.5	453	19.7	15.5	<0.2	0.066	<0.02	0.28	<10	<2	1.7	<0.01	<0.01
2014Q4	9.02	67.1	7.24	738	4.58		73.1	398	364	440	16.5	13.5	<0.2	<0.05	<0.02	<0.2	<10	<2	1.7	<0.01	
2015Q2	12.98	88.1	7.6	740	5		17	336	326.5	355	17.2	13.3	<2	<0.05	<0.02	0.81	<10	3.1	1.2	<0.01	
2015Q3	13.91	118.4	7.32	675	4.66		5.74	418	396	458	15.8	7.7	<0.2	<0.05	<0.02	0.3	<10	<2	2	<0.01	
2015Q4	7.26	344.1	7.25	713	7.01	15	10.8	451	403	465	15.4	5.8	<0.2	<0.05	<0.02	0.59	<10	<2	2.5	<0.01	<0.01
2016Q2	7.63	335.1	7.38	725	4.94	10	5.1	258	370	422	15.3	11.4	<0.2	<0.05	<0.02	0.3	<10	<2	1.8	<0.01	<0.01
2016Q3	9.08	292.9	7.15	941	7.09		11.7	497	457	525	13.3	5	<0.2	<0.05	<0.02	<0.2	10.1	<2	2.3	<0.01	
2016Q4	2.5	239	7.64	960	5.22		5.99	427	423	479	13.6	6.7	<0.2	<0.05	<0.02	0.27	<10	<2	2.25	<0.01	
2017Q2	5.24	163.3	7.29	769	6.72		7.93	400	399	427	14.6	<5	<0.2	<0.05	<0.02	0.43	<10	<2	1.6	<0.01	
2017Q3	9.84	64.8	6.44	816		<5	9.43	426	392	441	13.2	<5	<0.4	<0.05	<0.02	0.26	<10	<2	2.1	<0.01	<0.01
2017Q4	8.81	-40.7	7.13	756	5.48		12.8	465	418	442	12.6	6.9	<0.4	<0.05	<0.02	<0.2	<10	<2	1.45	<0.01	
2018Q2	3.96	94.1	7.26	826	6.51		11.8	428	421	443	15.5	7.2	<0.2	<0.05	<0.02	<0.2	17.9	<2		<0.01	
2018Q3	9.55	71.4	7.54	806	6.37		13.1	417	383	424	13.1	<5	<0.2	<0.05	<0.02	0.2	<10	<2	1.6	<0.01	
2018Q4	2.5	153.2	7.02	619	5.29	10	13.3	428	475	468	12.8	9.4	<0.2	<0.05	<0.02	0.2	<10	<2	2.2	<0.01	<0.01
2019Q2	5.71	246.4	7.35	488	6.05	<5	34.2	411	408	436	12.4	<5	<0.4	<0.05	0.047	0.56	<10	<2	1.9	<0.01	<0.01
2019Q3	5.2	168	7.51	723	6.48		17.5	441	400	428	11.3	<5	<1	0.059	<0.02	0.24	<10	<2	2.1	<0.01	
2019Q4	0.42	137.2	7.85	388	10.49		4.8	381	399	513	11.4	<5	<0.4	0.055	<0.02	0.33	<10	<2	1.4	<0.01	
2020Q2	10.5	130.3	7	604	5.4		4.43	376	354	375	12.6	6	<0.4	<0.05	<0.02	0.29	<10	<2	2	<0.01	
2020Q3	12.3	169.6	6.45	6.77	2.33	<5	7.72	507	444	492	10.9	<5	<0.4	<0.05	<0.02	0.58	21.2	<2	1.9	<0.01	0.011
2020Q4	8.6	254.2	7.73	670	5.32		5.52	533	477	442	9.9	<5	<0.4	<0.05	<0.02	0.3	<10	<2	2.6	<0.01	
2021Q2	9.9	90.4	6.38	541	4.38		3.19	433	419	411	11	7.3	<0.4	<0.05	<0.2	<0.2	<10	<2	1.4	<0.01	
2021Q3	13.5	137.7	6.29	611	3.15		3.5	438	412	443	10.1	<5	<0.4	<0.05	<0.02	0.3	<10	<2	2.4	<0.01	
2021Q4	10.8	125.2	7.16	561	3.18	15	3	429	420	468	9.9	<5	<0.4	<0.05	<0.02	0.23	<10	<2	2.1	<0.01	<0.01

MW-4A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, hexavalent	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Min	<0.2	<0.005	<0.005	0.88	<0.002	<0.5	<0.001	59.7	<0.004	<0.005	<0.004	<0.01	<0.2	<0.001	21.5	0.32	<0.0002	<0.01	<5	12.9	<0.003	<0.005	<0.003	<0.005	<0.01
Min Year	mult	mult	mult	2013	mult	mult	2013	2013	mult	2013	mult	mult	mult	2013	2013	2019	mult	mult	mult	2014	mult	mult	mult	mult	mult
Max	5.8	<0.02	<0.015	1.5	<0.003	0.093	<0.05	153	<0.01	<0.01	0.0041	0.0224	5.2	<0.05	364	7.6	<0.0002	<0.05	2.7	19	<0.025	<0.01	<0.02	0.05	0.0154
Max Year	2019	nd	nd	2019	nd	2020	nd	2011	nd	nd	2019	2012	2014	nd	2018	2019	nd	nd	2014	2013	nd	nd	nd	2019	2012
2012Q1	0.39	<0.005	<0.005	1.3	<0.003	<0.5	<0.005	131	<0.01	<0.01	<0.02	0.0224	0.427	<0.003	28.3	1.75	<0.0002	<0.03	<5	17.7	<0.003	<0.01	<0.003	<0.03	0.0154
2012Q2							<0.005	110					0.146	<0.003	26.5	1.44			<5	14.2					
2012Q3							<0.005	123					0.209	<0.003	27.8	2.05			<5	14.7					
2012Q4							<0.005	137					0.265	<0.015	31	1.63			<5	18.7					
2013Q1							<0.05	150					<0.2	<0.05	28.3	2.9			1.4	19					
2013Q2	<0.2	<0.005	<0.005	0.88	<0.003	<0.5	<0.05	59.7	<0.005	<0.005	<0.05	<0.05	<0.2	<0.005	21.5	0.97	<0.0002	<0.05	1.5	14	<0.005	<0.005	<0.005	<0.05	<0.1
2013Q3							<0.001	119					0.23	<0.001	23.4	0.7			1.8	16					
2013Q4							<0.005	122					<0.2	<0.005	24.5	0.59			1.8	16					
2014Q1							<0.002	135					5.2	<0.01	30	5.3			2.7	17.3					
2014Q2							<0.002	98.8					0.36	<0.01	21.9	1.4			1.2	12.9					
2014Q3	1.1	<0.02	<0.015	1.1	<0.002	0.079	<0.002	115	<0.004	<0.01	<0.004	<0.01	0.64	<0.01	25.7	1.3	<0.0002	<0.01	1.7	15.6	<0.025	<0.006	<0.02	<0.005	0.01
2014Q4							<0.002	102					1.1	<0.01	26.3	1.3			1.6	13.4					
2015Q2							<0.002	110					0.4	<0.01	24.9	1.6			1.5	14.7					
2015Q3							<0.002	117					0.27	<0.01	25.2	1.1			1.6	14.7					
2015Q4	0.29	<0.02	<0.015	1.1	<0.002	0.09	<0.002	118	<0.004	<0.01	<0.004	<0.01	0.19	<0.01	26	0.71	<0.0002	<0.01	1.5	16.1	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q2	0.36	<0.02	<0.015	0.99	<0.002	0.066	<0.002	108	<0.004	<0.01	<0.004	<0.01	0.19	<0.01	24.2	2	<0.0002	<0.01	1.4	15.3	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q3							<0.002	135					0.13	<0.01	29	1.8			1.6	17.7					
2016Q4							<0.002	124					0.38	<0.01	27.8	0.67			1.4	16.6					
2017Q2							<0.002	117					0.15	<0.01	26.1	1.1			1.3	14.9					
2017Q3	<0.2	<0.02	<0.015	1	<0.002	0.084	<0.002	115	<0.004	<0.01	<0.004	<0.01	0.13	<0.01	25.3	1.1	<0.0002	<0.01	1.4	16.9	<0.025	<0.006	<0.02	<0.005	<0.01
2017Q4							<0.002	123					0.26	<0.01	26.8	0.47			1.5	17.6					
2018Q2							<0.002	123					0.62	<0.01	27.8	2.9			1.4	16.1					
2018Q3							<0.002	112					0.086	<0.01	24.9	0.71			1.4	15.4					
2018Q4	0.75	<0.02	<0.015	1.3	<0.002	0.085	<0.002	138	<0.004	<0.01	<0.004	<0.01	0.52	<0.01	31.4	2.5	<0.0002	<0.01	1.7	17.6	<0.025	<0.006	<0.02	<0.005	0.01
2019Q2	5.8	<0.02	<0.015	1.5	<0.002	0.072	<0.002	120	<0.004	<0.01	0.0041	<0.01	3.5	<0.01	26.5	7.6	<0.0002	<0.01	2	15.7	<0.025	<0.006	<0.02	0.005	0.015
2019Q3							<0.002	118					1	<0.01	25.6	1.4			1.7	14					
2019Q4							<0.002	117					0.084	<0.01	26.1	0.32			1.4	15.9					
2020Q2							<0.002	105					0.1	<0.01	22.2	0.37			1.1	13.8					
2020Q3	0.49	<0.02	<0.015	1.2	<0.002	0.093	<0.002	130	<0.004	<0.01	<0.004	<0.01	0.26	<0.01	28.9	1.4	<0.0002	<0.01	1.7	15.8	<0.025	<0.006	<0.02	<0.005	<0.01
2020Q4							<0.002	140					0.14	<0.01	31.3	0.47			1.7	17.7					
2021Q2							<0.002	124					0.14	<0.01	26.8	0.67			1.3	16.3					
2021Q3							<0.002	123					0.12	<0.01	25.6	0.63			1.5	17.4					
2021Q4	0.29	<0.02	<0.015	1	<0.002	0.078	<0.002	124	<0.004	<0.01	<0.004	<0.01	0.13	<0.01	26.9	0.11	<0.0002	<0.01	1.5	15.4	<0.025	<0.006	<0.02	<0.005	<0.01

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Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Vinyl chloride	Chloroethane	Acetone	Methylene chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes, Total	1,4-Dichlorobenzene
Min	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
Min Year	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult
Max	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<2	<5
Max Year	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2012Q1	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5		<5
2012Q2													
2012Q3													
2012Q4													
2013Q1													
2013Q2	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5		<5
2013Q3													
2013Q4													
2014Q1													
2014Q2													
2014Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2014Q4													
2015Q2													
2015Q3													
2015Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q3													
2016Q4													
2017Q2													
2017Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2017Q4													
2018Q2													
2018Q3													
2018Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q3													
2019Q4													
2020Q2													
2020Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2020Q4													
2021Q2													
2021Q3													
2021Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

MW-5A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Temperature (°C)	EH/ORP (mV)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Color (Color Units)	Turbidity (NTU)	Alkalinity, Total (mg/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Bromide (mg/L)	Nitrate as N (mg/L)	Ammonia (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Biochemical Oxygen Demand (mg/L)	Total Organic Carbon (mg/L)	Phenolics, Total Recoverable (mg/L)	Cyanide, Total (mg/L)
Min	0.33	-47.9	6.9	156	3.67	<5	1.8	90	71.3	83	5.1	6.7	<0.1	<0.01	<0.02	<0.2	<10	<2	<1	<0.005	<0.01
Min Year	2019	2017	2021	2019	2018	mult	2013	2013	2014	2015	2013	2017	mult	mult	mult	mult	mult	mult	mult	2013	mult
Max	17.1	323	8.77	373	9.9	20	28.5	149	146	303	9.4	21.9	0.288	0.19	0.067	0.73	30.9	6	1.64	0.016	0.011
Max Year	2013	2013	2013	2013	2019	2015	2019	2020	2018	2019	2019	2020	2013	2018	2016	2018	2018	2013	2013	2013	2020
2012Q4	12.1	172	7.24	238			25.2	94	112	100	5.28	14.1	<0.5	0.08		<0.5	<20	<4	<3	<0.05	
2013Q1	4.5	224	8.77	226			1.8	104	94	163	6.09	13.5	<0.1	<0.01		<0.5	<10	<2	0.612	<0.02	
2013Q2	14.8	323	7.525	373		7.4	1.9	100	100	209	5.39	11.4	0.288	0.102		<0.5	<10	6	1.58	<0.02	<0.02
2013Q3	17.1	193	7.44	261			3.2	123	113	151	5.61	10.9	<0.1	0.183		<0.5	<10	<2	1.64	0.016	
2013Q4	13.8	204	8.28	283			4.6	90	108	164	5.1	11.3	<0.1	0.129		<1	<10	<2	0.685	<0.005	
2014Q1	6.59	165.2	7.28	219	4.36		16.8	125	120	128	5.6	19.3	<0.2	<0.05	<0.02	0.23	<10	<2	1.4	<0.01	
2014Q2	11.03	-31.4	8.2	248	5.63		12	139	88.15	145	6	17.7	<0.2	0.097	<0.02	<0.2	<10	<2	<1	<0.01	
2014Q3	14.14	6.7	8.47	266	4.99	<5	8.14	129	99	154	6.9	14.8	<0.2	0.11	<0.02	0.27	<10	2.5	<1	<0.01	<0.01
2014Q4	9.21	46.4	7.9	267	5.44		13.8	114	105	153	6.1	13.5	<0.2	0.11	<0.02	<0.2	<10	<2	<1	<0.01	
2015Q2	12.85	107.7	8.12	283	3.79		7.66	110	92.6	83	6	16.8	<0.4	0.054	<0.02	<0.2	<10	<2	<1	<0.01	
2015Q3	14.92	100.1	7.91	235	3.77		5.08	117	113	155	6.3	14.7	<0.2	0.091	<0.02	<0.2	<10	<2	<1	<0.01	
2015Q4	7.32	233.3	7.71	248	7.18	20	8.8	132	114	147	6.7	17	<0.2	0.051	<0.02	0.46	<10	<2	<1	0.015	<0.01
2016Q2	6.14	117	7.94	251	6.26	10	4.94	113	118	133	5.5	17.5	<0.2	0.086	0.067	0.32	<10	<2	<1	<0.01	<0.01
2016Q3	9.09	231.6	7.2	256	5.39		23.2	125	124	156	6.5	10.1	<0.2	0.18	<0.02	0.22	<10	<2	<1	<0.01	
2016Q4	2.8	286.7	7.3	316	6.78		4.18	124	119	167	7.3	9.8	<0.2	0.085	<0.02	0.29	<10	<2	<1	<0.01	
2017Q2	5.19	-4.8	7.93	272	5.28		8.3	108	116	158	6.3	11.2	<0.2	0.18	<0.02	0.26	<10	<2	<1	<0.01	
2017Q3	10.81	43.1	7.28	296		10	17.2	132	116	139	7.6	6.7	<0.2	0.1	<0.02	0.37	<10	2.4	1.2	0.01	<0.01
2017Q4	9.08	-47.9	7.11	280	6.25		16.5	130	132	157	6.1	13.3	<0.2	0.1	<0.02	<0.2	<10	<2	<1	<0.01	
2018Q2	4.91	27	8.09	300	5.69		13.5	118	126	115	6.9	13.3	<0.2	0.11	<0.02	0.73	30.9	3.1		<0.01	
2018Q3	9.47	72.1	8.2	308	5.32		9.74	124	119	154	6.3	9.3	<0.2	0.19	<0.02	0.21	<10	<2	<1	0.011	
2018Q4	1.4	165.8	7.78	224	3.67	10	2.84	132	146	159	6.1	16	<0.2	<0.05	<0.02	<0.2	<10	<3	1.2	<0.01	<0.01
2019Q2	5.77	244.5	8.27	187	4.95	10	28.5	113	123	144	5.2	8.8	<0.2	0.13	<0.02	0.34	15.1	<2	<1	<0.01	<0.01
2019Q3	5.21	184.1	7.85	302	6.52		23.2	146	135	170	9.4	11.7	<0.2	0.062	<0.02	<0.2	<10	<2	<1	<0.01	
2019Q4	0.33	169.1	7.81	156	9.9		8.4	130	133	303	5.4	12	<0.2	0.079	<0.02	0.2	<10	<2	<1	<0.01	
2020Q2	10.5	138	7.79	257.4	6.07		16	143	136	137	5.9	15.8	<0.2	<0.05	<0.02	0.53	<10	<2	<1	<0.01	
2020Q3	15	159.6	7.01	242.5	6.3	<5	8.49	149	137	236	5.6	13.4	<0.2	0.14	<0.02	0.7	14	<2	<1	<0.01	0.011
2020Q4	8.6	229.4	8.34	232.5	5.64		6.74	142	143	183	5.7	21.9	<0.2	<0.05	<0.02	0.23	<10	<2	<1	<0.01	
2021Q2	10.8	94.6	6.9	221.1	4.78		6.73	145	144	174	5.4	17.6	<0.2	<0.05	<0.2	<0.2	<10	<2	<1	<0.01	
2021Q3	16.5	124.1	7.07	262.6	3.72		3.22	146	142	198	4.7	17.6	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2021Q4	10.2	119.5	7.48	224	4.89	15	3.66	156	151	183	4.8	16.5	<0.2	<0.05	<0.02	0.25	11.2	<2	<1	<0.01	0.013

MW-5A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, hexavalent	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Min	<0.2	<0.005	<0.005	0.4	<0.002	<0.02	<0.001	25.2	<0.004	<0.005	<0.004	<0.01	<0.2	<0.001	7.58	<0.05	<0.0002	<0.01	<5	8.7	<0.005	<0.005	<0.005	<0.005	<0.01
Min Year	2013	2013	2013	2013	mult	2019	2013	2013	mult	2013	mult	mult	mult	2013	2013	mult	mult	mult	2012	2020	2013	2013	2013	mult	mult
Max	1.1	<0.02	<0.015	0.64	<0.003	0.029	0.0025	41.1	<0.005	<0.01	<0.05	<0.05	1.2	<0.05	11.8	0.15	<0.0002	<0.05	1.5	18.7	<0.025	<0.006	<0.02	<0.05	0.012
Max Year	2016	nd	nd	2020	nd	2016	2016	2021	nd	nd	nd	nd	2014	nd	mult	2016	nd	nd	2013	2012	nd	nd	nd	nd	2018
2012Q4							<0.005	29.1					0.536	<0.015	9.56	0.0531			<5	18.7					
2013Q1							<0.05	25.2					<0.2	<0.05	7.58	<0.05			1.1	16					
2013Q2	<0.2	<0.005	<0.005	0.4	<0.003	<0.5	<0.05	27.4	<0.005	<0.005	<0.05	<0.05	<0.2	<0.005	7.74	<0.05	<0.0002	<0.05	1.5	13	<0.005	<0.005	<0.005	<0.05	<0.1
2013Q3							<0.001	30.8					<0.2	<0.001	8.67	<0.05			1.3	12					
2013Q4							<0.005	28.4					<0.2	<0.005	9.03	<0.05			1.2	12					
2014Q1							<0.002	31.8					1.2	<0.01	9.8	0.1			1.4	11.9					
2014Q2							<0.002	28.5					0.52	<0.01	8.3	0.05			0.98	11.1					
2014Q3	0.51	<0.02	<0.015	0.47	<0.002	0.02	<0.002	32.4	<0.004	<0.01	<0.004	<0.01	0.55	<0.01	8.6	0.056	<0.0002	<0.01	1.3	11.7	<0.025	<0.006	<0.02	<0.005	0.011
2014Q4							<0.002	26.7					0.25	<0.01	9.2	0.066			0.98	10.7					
2015Q2							<0.002	29.7					0.16	<0.01	9.1	0.093			1.1	10.7					
2015Q3							<0.002	31.1					0.16	<0.01	8.6	0.031			1.1	11.2					
2015Q4	0.69	<0.02	<0.015	0.41	<0.002	0.023	<0.002	30.5	<0.004	<0.01	<0.004	<0.01	0.41	<0.01	9.3	0.046	<0.0002	<0.01	1	11.6	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q2	1.1	<0.02	<0.015	0.44	<0.002	0.029	<0.002	32.1	<0.004	<0.01	<0.004	<0.01	0.56	<0.01	9.2	0.15	<0.0002	<0.01	1.2	13.4	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q3							0.0025	33.7					0.69	<0.01	9.6	0.12			1.3	12.4					
2016Q4							0.002	31.8					0.36	<0.01	9.6	0.066			0.96	11.6					
2017Q2							<0.002	31.9					0.29	<0.01	8.9	0.076			1.2	12.4					
2017Q3	0.25	<0.02	<0.015	0.44	<0.002	0.022	<0.002	31.9	<0.004	<0.01	<0.004	<0.01	0.24	<0.01	8.9	0.07	<0.0002	<0.01	1.1	10.7	<0.025	<0.006	<0.02	<0.005	<0.01
2017Q4							<0.002	35.9					0.62	<0.01	10.4	0.089			1.1	12.6					
2018Q2							<0.002	34.5					0.57	<0.01	9.8	0.14			1.3	10.2					
2018Q3							<0.002	32.1					0.13	<0.01	9.4	0.077			1	10.1					
2018Q4	0.68	<0.02	<0.015	0.5	<0.002	0.021	<0.002	39.1	<0.004	<0.01	<0.004	<0.01	0.39	<0.01	11.8	0.087	<0.0002	<0.01	0.99	9.4	<0.025	<0.006	<0.02	<0.005	0.012
2019Q2	0.25	<0.02	<0.015	0.5	<0.002	<0.02	<0.002	33.5	<0.004	<0.01	<0.004	<0.01	0.17	<0.01	9.5	0.12	<0.0002	<0.01	0.95	9.5	<0.025	<0.006	<0.02	<0.005	<0.01
2019Q3							<0.002	36.7					0.26	<0.01	10.5	0.14			1	10.3					
2019Q4							<0.002	35.6					0.65	<0.01	10.8	0.12			0.95	9.4					
2020Q2							<0.002	37.1					0.12	<0.01	10.4	0.093			0.85	8.7					
2020Q3	0.42	<0.02	<0.015	0.64	<0.002	0.02	<0.002	37.2	<0.004	<0.01	<0.004	<0.01	0.3	<0.01	10.8	0.1	<0.0002	<0.01	1	9.1	<0.025	<0.006	<0.02	<0.005	<0.01
2020Q4							<0.002	38.4					0.12	<0.01	11.5	0.034			0.94	9.1					
2021Q2							<0.002	38.9					0.22	<0.01	11.4	0.058			0.95	10					
2021Q3							<0.002	39.2					0.096	<0.01	10.7	0.083			0.83	9.4					
2021Q4	0.23	<0.02	<0.015	0.57	<0.002	<0.02	<0.002	41.1	<0.004	<0.01	<0.004	<0.01	0.12	<0.01	11.8	0.024	<0.0002	<0.01	0.82	8.5	<0.025	<0.006	<0.02	<0.005	<0.01

MW-5A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Vinyl chloride	Chloroethane	Acetone	Methylene chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes, Total	1,4-Dichlorobenzene
Min	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
Min Year	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult
Max	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<2	<5
Max Year	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2012Q4													
2013Q1													
2013Q2	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5		<5
2013Q3													
2013Q4													
2014Q1													
2014Q2													
2014Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2014Q4													
2015Q2													
2015Q3													
2015Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q3													
2016Q4													
2017Q2													
2017Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2017Q4													
2018Q2													
2018Q3													
2018Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q3													
2019Q4													
2020Q2													
2020Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2020Q4													
2021Q2													
2021Q3													
2021Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

MW-6A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Temperature (°C)	EH/ORP (mV)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Color (Color Units)	Turbidity (NTU)	Alkalinity, Total (mg/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Bromide (mg/L)	Nitrate as N (mg/L)	Ammonia (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Biochemical Oxygen Demand (mg/L)	Total Organic Carbon (mg/L)	Phenolics, Total Recoverable (mg/L)	Cyanide, Total (mg/L)
Min	0.27	-33.7	5.63	237	1.84	<5	7.2	<10	133	154	2.3	<5	<1	<0.05	<0.2	<0.5	<10	<2	<3	<0.005	<0.01
Min Year	2019	2017	2014	2019	2020	mult	2013	2019	2015	2015	2020	mult	mult	mult	2021	mult	mult	mult	mult	mult	mult
Max	23.8	362.3	7.87	728	13.06	200	3600	301	285	1000	91.1	17.8	0.401	0.61	2	8.4	51.3	58.9	7	0.011	<0.02
Max Year	2012	2019	2011	2013	2019	2011	2014	2013	2018	2016	2019	2014	2013	2019	2020	2016	2019	2020	2020	2019	nd
2012Q1	23.8	193	7.38	415		<5	922	200	197	230	8.86	13.8	<8	0.094		1.16	<20	<6	5.6	<0.005	<0.01
2012Q2	18.9	133	7.35	408			241	130	169	310	20	13.6	<8	0.09		1.89	<20	<4	<3	<0.005	
2012Q3	18.4	118	6.67	491			71.9	180	185	390	23.8	11.4	<80	<0.05		2.38	27	<4	<3	<0.005	
2012Q4	13.5	186	7.1	448			48.7	200	214	230	12.1	13.1	<0.5	<0.05		1.27	<20	<4	<3	<0.05	
2013Q1	6.2	265	7.05	424			7.2	185	202	238	13.6	14.9	<0.1	0.1		<0.5	<10	<2	3.56	<0.02	
2013Q2	13.9	356	6.76	728		14	OR	152	160	293	10.2	14	0.401	0.281		3.12	<10	2	4.91	<0.02	<0.02
2013Q3	15.3	171	7.2	393			9.4	301	171	231	12.4	12.8	<0.1	0.155		1.34	<10	<2	5.3	0.009	
2013Q4	13.2	219	6.72	446			79	176	174	210	11.3	12.4	<0.1	0.195		<1	<10	<2	2.25	<0.005	
2014Q1	7.31	354	5.63	380	5.1		3600	214	266	252	14.5	15	<0.2	<0.05	0.096	0.43	<10	<2	2.5	<0.01	
2014Q2	9.02	127	6.8	408	4.36			136	181	233	6.1	17.7	<0.2	0.24	0.24	5.9	15.4	<2	2.2	<0.01	
2014Q3	14.02	54.1	7.1	461	4.44	<5	OR	162	173.5	232	30.2	17.8	<0.2	<0.05	0.091	1.5	11.9	<2	2.2	<0.01	<0.01
2014Q4	9.85	18.6	6.81	438	3.56		OR	204	218	264	13.8	<5	<0.2	0.071	0.13	1.3	14.9	<2	2.1	<0.01	
2015Q2	11.46	119.1	7.22	427	4.4		12.1	166	153.5	154	14.7	9.2	<1	0.054	0.044	0.99	10	<2	1.3	<0.01	
2015Q4	7.15	298	6.7	371	6.87	10	102.3	215	184	273	11.2	8.4	<0.2	<0.05	0.27	2	12.3	<2	3.4	<0.01	<0.01
2016Q2	5.87	140.2	7.05	428	7.18	20	777	137	238	259	40.2	14.2	<0.2	<0.05	0.078	3.9	33.4	<2	2.1	<0.01	<0.01
2016Q3	7.6	228.1	7.07	509	5.61		777	147	188	1000	38.3	14.9	<0.2	<0.05	0.31	8.4	24.4	3	4.3	<0.01	
2016Q4	2.87	316	7.62	449	7.76		192	189	183	708	8.3	15	<0.2	0.24	0.092	0.96	<10	<2	3.2	<0.01	
2017Q2	4.47	14.3	7.76	400			82.8	167	189	218	5.8	<5	<0.2	0.088	0.19	0.68	<10	<2	2.25	<0.01	
2017Q3	10.74	63.6	5.72	472		<5	66	173	166	225	33.4	5.5	<0.2	0.14	0.099	0.72	<10	<2	2.3	<0.01	<0.01
2017Q4	8.43	-33.7	6.69	421	4.73		109	199	191	279	12.8	<5	<0.2	0.3	0.1	0.65	<10	<2	2.5	<0.01	
2018Q2	3.14	70.7	6.79	513	4.78		819	151	211	243	47.1	<5	<0.2	0.064	0.11	1.4	35.4	7.3		<0.01	
2018Q3	7.36	85.9	6.96	591	7.64		2326	166	257	352	59	<5	<0.2	0.37	0.076	1.7	<10	<2	2.1	<0.01	
2018Q4	1.94	209	6.63	330	4.31	25		219	285	298	2.9	<5	<0.2	0.41	0.27	1	<10	<2	3.4	<0.01	<0.01
2019Q2	6.16	362.3	6.78	276	4.41	10	OR	<10	188	231	15.1	<5	<0.2	0.61	0.22	3.9	51.3	<3	3.9	<0.01	<0.01
2019Q3	4.15	243.6	7.51	633	3.75		77	177	239	352	91.1	<5	<0.2	0.12	0.26	1.9	43.5	<2	3.5	<0.01	
2019Q4	0.27	181.4	7.01	237	13.06		77	181	244	296	2.9	<5	<0.2	0.52	0.027	1.2	<10	<2	3.6	0.011	
2020Q2	13.9	93.3	6.89	462.6	2.38		OR	185	268	347	70.8	<5	<0.2	<0.05	0.22	3.1	18.4	<2	3	<0.01	
2020Q3	12.6	45.1	6.02	418.5	1.84	<5	OR	211	249	359	55.5	<5	<0.2	<0.05	2	6.6	45.5	43.75	5.8	<0.01	<0.01
2020Q4	7.4	235.3	7.61	300.1	5.99		97.6	208	241	262	2.3	<5	<0.2	0.54	0.054	1.3	24.6	<2	7	<0.01	
2021Q2	9.6	131.2	6.3	337.1	1.9		OR	166	263	261	35.8	<5	<0.2	<0.05	<0.2	2	<10	3	3	<0.01	
2021Q3	14.3	153.2	6.46	402.4	2.97		199	289	283	325	1.8	<5	<0.2	0.14	<0.02	1.5	21.8	<2	73.1	<0.01	
2021Q4	9.4	143.7	6.96	313.6	7.51	20	348	221	263	259	2.1	<5	<0.2	0.43	<0.02	2.4	26.1	<2	4.2	<0.01	<0.01

MW-6A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, hexavalent	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Min	<0.1	<0.005	<0.005	0.21	<0.002	<0.5	<0.001	45.4	<0.004	<0.005	<0.02	<0.01	<0.06	<0.001	8.49	0.213	<0.0002	<0.01	<5	3.9	<0.003	<0.005	<0.003	<0.005	<0.01
Min Year	2012	mult	mult	2013	mult	mult	2013	2012	2019	2013	mult	mult	2012	2013	2013	2012	mult	2019	mult	2019	mult	2013	mult	2019	mult
Max	46.1	<0.02	0.075	1.3	0.0022	0.045	<0.05	93.9	0.062	<0.25	0.12	0.088	113	0.035	27.8	16.5	<0.0002	0.091	12.2	34.4	<0.025	<0.01	<0.02	0.056	0.15
Max Year	2016	nd	2020	2016	2016	2015	nd	2021	2016	2016	2020	2016	2014	2018	2014	2020	nd	2020	2018	2019	nd	nd	nd	mult	2016
2012Q1	1.905	<0.005	0.0009	0.2945	<0.003	<0.5	<0.005	56.25	<0.01	<0.01	<0.02	<0.01	3.58	<0.003	11.075	1.233	<0.0002	<0.03	<5	18.5	<0.003	<0.01	<0.003	<0.03	0.0184
2012Q2							<0.005	48.15					0.5645	<0.003	9.815	1.1865			<5	14.4					
2012Q3							<0.005	54.75					4.26	<0.015	9.715	2.1			<5	16.05					
2012Q4							<0.005	65.7					0.892	<0.015	12.2	1.57			<5	19.3					
2013Q1							<0.05	64.3					6.1	<0.05	9.96	1.8			2.4	17					
2013Q2	3.7	<0.005	<0.005	0.21	<0.003	<0.5	<0.05	47.7	0.0054	<0.005	<0.05	<0.05	4	<0.005	10	0.59	<0.0002	<0.05	2.7	16	<0.005	<0.005	<0.005	<0.05	<0.1
2013Q3							<0.001	54.5					0.76	<0.001	8.49	0.46			2.3	16					
2013Q4							<0.005	55.5					0.51	<0.005	8.6	1.4			2.3	15					
2014Q1							<0.002	60.4					113	0.02	27.8	4.3			12.1	15.4					
2014Q2							<0.002	54.6					76.8	0.025	21.8	4.8			10.6	13.1					
2014Q3	37.6	<0.02	0.039	0.83	<0.002	0.038	<0.002	53.5	0.052	<0.01	0.038	0.054	57.3	0.028	19.2	3.4	<0.0002	0.072	9.3	17.6	<0.025	<0.006	<0.02	0.051	0.12
2014Q4							<0.002	57.4					43	0.02	18.2	3.8			7.9	14.3					
2015Q2							<0.002	53.3					0.91	<0.01	10	0.7			2.4	14.8					
2015Q4	7.4	<0.02	<0.015	0.3	<0.002	0.045	<0.002	55.8	0.0092	<0.02	0.0063	<0.01	9.2	<0.01	11	0.96	<0.0002	0.01	4	14.4	<0.025	<0.006	<0.02	0.0098	0.02
2016Q2	46.1	<0.02	0.066	1.3	0.0022	0.039	<0.002	61.4	0.062	<0.25	0.062	0.088	70.4	0.027	20.7	3.5	<0.0002	0.078	9.5	19.3	<0.025	<0.006	<0.02	0.056	0.15
2016Q3							<0.002	58.7					4.2	<0.01	10.1	2.9			2.9	19.9					
2016Q4							<0.002	55.8					6.3	<0.01	10.5	1.4			3.4	14.8					
2017Q2							<0.002	57.9					10	<0.01	10.8	3.1			4.4	12.3					
2017Q3	8.9	<0.02	0.018	0.39	<0.002	0.031	<0.002	49.5	0.012	<0.01	0.012	0.016	13.8	<0.01	10.3	2.9	<0.0002	0.015	4.1	20.8	<0.025	<0.006	<0.02	0.013	0.033
2017Q4							<0.002	55.5					21.3	0.013	12.8	3.3			5.6	22.4					
2018Q2							<0.002	57.8					32.7	<0.01	16.2	4.4			5.8	20.6					
2018Q3							<0.002	63					88.1	0.035	24.3	6.6			12.2	25.6					
2018Q4	40.3	<0.02	0.028	0.73	<0.002	0.038	<0.002	75.5	0.061	<0.01	0.043	0.051	64.8	0.021	23.5	2	<0.0002	0.069	11.2	12	<0.025	<0.006	<0.02	0.055	0.13
2019Q2	1.4	<0.02	<0.015	0.23	<0.002	0.025	<0.002	59.5	<0.004	<0.01	0.0052	<0.01	1.8	<0.01	9.5	2.8	<0.0002	<0.01	3.2	10.5	<0.025	<0.006	<0.02	<0.005	<0.01
2019Q3							<0.002	62					77.5	0.019	20.5	9.3			9.7	34.4					
2019Q4							<0.002	72					37.9	0.012	15.5	3.2			6.8	3.9					
2020Q2							<0.002	76.1					53.9	0.023	19.1	12.9			8.2	24.4					
2020Q3	38.5	<0.02	0.075	1.2	<0.002	0.042	<0.002	65.9	0.057	<0.01	0.12	0.064	70.9	0.029	20.5	16.5	<0.0002	0.091	9	24.3	<0.025	<0.006	<0.02	0.056	0.13
2020Q4							<0.002	77.3					15.7	<0.01	11.6	0.59			4.5	4					
2021Q2							<0.002	71.9					69	<0.05	20.2	3.5			10.6	11					
2021Q3							<0.002	93.9					15.6	<0.01	11.7	1.1			5.5	4.8					
2021Q4	21.7	<0.02	<0.015	0.42	<0.002	0.02	<0.002	82.5	0.03	<0.01	0.018	0.023	29.8	0.01	13.8	0.83	<0.0002	0.032	6.9	3.2	<0.025	<0.006	<0.02	0.031	0.06

MW-6A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2011 - present.

Period	Vinyl chloride	Chloroethane	Acetone	Methylene chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes, Total	1,4-Dichlorobenzene
Min	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
Min Year	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult
Max	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<2	<5
Max Year	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
2012Q1	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5		<5
2012Q2													
2012Q3													
2012Q4													
2013Q1													
2013Q2	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5		<5
2013Q3													
2013Q4													
2014Q1													
2014Q2													
2014Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2014Q4													
2015Q2													
2015Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q3													
2016Q4													
2017Q2													
2017Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2017Q4													
2018Q2													
2018Q3													
2018Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q3													
2019Q4													
2020Q2													
2020Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2020Q4													
2021Q2													
2021Q3													
2021Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

MW-6B

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Temperature (°C)	EH/ORP (mV)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Color (Color Units)	Turbidity (NTU)	Alkalinity, Total (mg/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Bromide (mg/L)	Nitrate as N (mg/L)	Ammonia (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Biochemical Oxygen Demand (mg/L)	Total Organic Carbon (mg/L)	Phenolics, Total Recoverable (mg/L)	Cyanide, Total (mg/L)
Min	0.03	-105	5.93	177	3.3	<5	2.19	110	95.6	105	2.32	<5	<0.1	<0.05	<0.02	<0.2	<10	<2	<1	<0.005	<0.01
Min Year	2019	2007	2014	2019	2021	mult	2008	2008	2014	2007	2006	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult
Max	18.7	502	8.55	1999	10.5	35	68.9	203	191	334	67.6	37.6	0.122	0.47	0.063	0.904	22.8	5.1	5.22	0.013	<0.02
Max Year	2012	2014	2008	2009	2019	2010	2007	2014	2019	2019	2020	2014	2006	2011	2019	2006	2020	2006	2006	2013	nd
2012Q1	18.5	190	7.3	344		<5	6.83	140	146	170	16.2	21.5	<0.8	0.073		<0.5	<20	<4	<3	<0.005	<0.01
2012Q2	17.7	139	7.29	363			17.1	190	150	240	10.1	17.9	<80	0.081		<0.5	<20	<4	<3	<0.005	
2012Q3	18.7	119	6.72	377			4.95	140	151	270	23.3	16.7	<8	<0.05		<0.5	<20	<4	<3	<0.005	
2012Q4	12.7	184	7.03	376			14.5	140	168	220	17.3	20.7	<0.5	0.065		<0.5	<20	<4	<3	<0.05	
2013Q1	6.4	259	7.82	349			9.4	155	154	192	8.22	10.2	<0.1	0.053		<0.5	<10	<2	1.09	<0.02	
2013Q2	12.3	88	7.4	475		8.3	3.2	149	138	272	11.4	16.7	<0.1	0.076		<0.5	<10	<2	1.73	<0.02	<0.02
2013Q3	13.1	153	7.45	389			11	153	153	207	17.1	13.5	<0.1	0.085		<0.5	<10	<2	3.27	0.013	
2013Q4	13.2	215	6.95	398			6.7	151	143	201	13.4	12.3	<0.1	0.084		<1	<10	<2	1.03	<0.005	
2014Q1	7.58	502	5.93	317	4.88		11.4	154	152	238	26.3	21.2	<0.2	<0.05	<0.02	<0.2	<10	<2	1.3	<0.01	
2014Q2	10.36	131.1	7.13	354	7.27		29.7	203	117.8	188	17.4	37.6	<0.2	0.098	<0.02	<0.2	<10	<2	<1	<0.01	
2014Q3	11.47	138.9	7.18	372	5.01	<5	30.1	173	127.7	193	23.6	17.9	<0.2	<0.05	<0.02	0.58	<10	<2	1.6	<0.01	<0.01
2014Q4	9.7	23.6	7.26	346	5.13		43.4	160	144	193	10.1	20.9	<0.2	0.06	<0.02	<0.2	<10	<2	<1	<0.01	
2015Q2	11.84	123.6	7.07	386	5.47		8.42	160	126	154	24.8	20.8	<1	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2015Q3	12.35	90.4	6.74	352	6		5.67	155	161	235	28	20	<0.2	<0.05	<0.02	0.37	<10	<2	1	<0.01	
2015Q4	7.44	394.3	6.55	297	7.11	25	10.26	151	136	180	12.5	32	<0.2	0.059	<0.02	0.48	<10	<2	1.1	<0.01	<0.01
2016Q2	5.56	100.2	7.92	359	6.92	10	6.24	151	151	195	20.3	16.1	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	<0.01
2016Q3	7.02	315.7	7.38	338	4.34		32.2	147	132	175	3.5	6.7	<0.2	0.37	0.055	0.35	11.3	3.6	1.1	<0.01	
2016Q4	3.42	305.4	7.91	401	6.45		29.2	153	139	215	6.9	15.9	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	
2017Q2	4.32	129.9	7.97	480			4.71	137	177	249	45.7	17.7	<0.2	0.055	<0.02	0.26	<10	<2	<1	<0.01	
2017Q3	8.5	46.3	6.69	418		10	37	176	155	188	25.2	<5	<0.2	<0.05	<0.02	0.31	<10	<2	1.2	<0.01	<0.01
2017Q4	10.22	-29.5	6.97	337	5.92		19.7	172	159	196	11.3	10.6	<0.2	0.062	0.032	<0.2	<10	<2	<1	<0.01	
2018Q2	4.28	200.9	7.27	406	7.97		8.78	157	154	180	21.3	11.8	<0.2	<0.05	<0.02	<0.2	<10	<2		<0.01	
2018Q3	7.01	98.7	7.15	475	9.4		13.5	150	156	244	42.2	<5	<0.2	<0.05	<0.02	0.23	<10	<2	3.2	<0.01	
2018Q4	2.13	191.7	6.98	273	5.26	10	16.2	136	159	202	16.1	23.5	<0.2	0.091	<0.02	0.28	<10	<2	1.3	<0.01	<0.01
2019Q2	5.23	294	6.98	250	4.25	10	12	154	191	213	35.9	19.6	<0.2	<0.05	0.063	0.36	21.1	<2	<1	<0.01	<0.01
2019Q3	3.24	175.4	7.21	422	4.08		6	158	157	231	34.7	5.2	<0.2	0.054	0.044	0.28	11.8	<2	1.1	<0.01	
2019Q4	0.03	205.7	7.27	177	10.5		12.7	133	142	334	12.6	16.1	<0.2	0.14	<0.02	0.76	<10	<2	<1	<0.01	
2020Q2	11.9	141.3	6.98	469.2	5.18		11.29	157	175	257	67.6	10.9	<0.2	<0.05	<0.02	0.44	16.5	<2	1.8	<0.01	
2020Q3	11.8	113	6.13	342.6	5.78	<5	4.77	169	168	313	44.5	18.4	<0.2	<0.05	<0.02	0.41	22.8	<2	<1	<0.01	<0.01
2020Q4	8.6	217.9	7.55	225.1	4.84		6.89	146	131	170	6.7	35.5	<0.2	0.065	<0.02	0.2	<10	<2	2	<0.01	
2021Q2	9.7	129	6.31	325.7	3.3		7.21	146	187	270	49.3	13.8	<0.2	<0.05	<0.2	<0.2	<10	<2	<1	<0.01	
2021Q3	13.3	146.4	6.38	313	1.98		5.72	137	151	203	34.8	17.3	<0.2	<0.05	<0.02	0.2	<10	<2	1.2	<0.01	
2021Q4	10.8	139.3	6.97	236.6	3.78	5	9.08	142	137	180	18.3	23.5	<0.2	0.063	<0.02	<0.2	<10	<2	<1	<0.01	<0.01

MW-6B

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, hexavalent	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Min	<0.1	<0.005	<0.005	0.29	<0.002	<0.05	<0.001	35.5	<0.004	<0.005	<0.004	<0.01	<0.06	<0.001	7.81	0.021	<0.0002	<0.01	<1	9.8	<0.003	<0.005	<0.003	<0.005	<0.01
Min Year	mult	mult	mult	2013	mult	2006	2013	2016	mult	2013	mult	mult	mult	2013	2007	2016	mult	mult	mult	2020	mult	2013	mult	mult	mult
Max	17.3	<0.05	<0.025	0.99	<0.005	0.035	0.0071	52.9	0.018	<0.02	0.018	0.018	19.1	0.024	16.1	2	<0.0004	0.019	3.6	30.2	<0.025	<0.015	<0.03	0.015	0.059
Max Year	2019	nd	nd	2019	nd	2019	2016	2021	2019	nd	2019	2019	2019	2014	2019	2019	nd	2019	2019	2020	nd	nd	nd	2019	2019
2012Q1	<0.1	<0.005	<0.005	0.354	<0.003	<0.5	<0.005	40.8	<0.01	<0.01	<0.02	<0.01	1.05	<0.003	10.8	0.0335	<0.0002	<0.03	<5	16.5	<0.003	<0.01	<0.003	<0.03	<0.01
2012Q2							<0.005	39.8					7.38	<0.015	12.4	0.781			<5	14.6					
2012Q3							<0.005	42.9					<0.06	<0.003	10.6	0.0693			<5	17.3					
2012Q4							<0.005	47.5					0.177	<0.015	12	0.0675			<5	19.5					
2013Q1							<0.05	44.3					0.38	<0.05	10.6	0.051			0.92	14					
2013Q2	0.48	<0.005	<0.005	0.29	<0.003	<0.5	<0.05	40.2	<0.005	<0.005	<0.05	<0.05	0.35	<0.005	9.19	0.064	<0.0002	<0.05	1.1	13	<0.005	<0.005	<0.005	<0.05	<0.1
2013Q3							<0.001	44.1					0.29	<0.001	10.3	0.18			1.3	19					
2013Q4							<0.005	40.6					0.29	<0.005	10.1	0.062			1.3	17					
2014Q1							<0.002	43.2					0.69	<0.01	10.7	0.15			1.3	17.8					
2014Q2							<0.002	38.3					2.6	<0.01	10.8	0.26			1.3	12.8					
2014Q3	13.4	<0.02	<0.015	0.69	<0.002	0.033	<0.002	39.4	0.0044	<0.01	0.0042	<0.01	7.2	0.024	14.2	1.5	<0.0002	<0.01	2	11	<0.025	<0.006	<0.02	0.0062	0.036
2014Q4							<0.002	37.6					2.1	<0.01	12.2	0.51			1.3	12.5					
2015Q2							<0.002	41.3					0.58	<0.01	11.1	0.19			1.2	15.6					
2015Q3							<0.002	45.2					0.32	<0.01	11.6	0.11			1.2	18.6					
2015Q4	1.6	<0.02	<0.015	0.31	<0.002	0.026	<0.002	37.9	<0.004	<0.01	<0.004	<0.01	0.75	<0.01	10.1	0.12	<0.0002	<0.01	1.1	12.2	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q2	0.47	<0.02	<0.015	0.34	<0.002	0.022	<0.002	42.1	<0.004	<0.01	<0.004	<0.01	0.26	<0.01	11.1	0.021	<0.0002	<0.01	0.92	16.7	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q3							0.0071	35.5					2.4	<0.01	10.4	0.33			1.8	11					
2016Q4							0.0041	38.3					0.76	<0.01	10.6	0.47			1	11					
2017Q2							<0.002	50.1					0.38	<0.01	12.5	0.12			1.2	22.7					
2017Q3	0.53	<0.02	<0.015	0.38	<0.002	0.028	<0.002	43.3	<0.004	<0.01	<0.004	<0.01	0.61	<0.01	11.5	0.2	<0.0002	<0.01	1.2	19.4	<0.025	<0.006	<0.02	<0.005	<0.01
2017Q4							<0.002	44					0.63	<0.01	11.9	0.15			1.1	16.1					
2018Q2							<0.002	42.1					0.3	<0.01	11.8	0.18			1.1	14.6					
2018Q3							<0.002	43.8					0.68	<0.01	11.5	0.14			1.2	22.3					
2018Q4	1.1	<0.02	<0.015	0.34	<0.002	0.023	<0.002	44.2	<0.004	<0.01	<0.004	<0.01	0.81	<0.01	11.9	0.11	<0.0002	<0.01	1.2	14.7	<0.025	<0.006	<0.02	<0.005	<0.01
2019Q2	17.3	<0.02	<0.015	0.99	<0.002	0.035	<0.002	49.9	0.018	<0.01	0.018	0.018	19.1	0.016	16.1	2	<0.0002	0.019	3.6	20.4	<0.025	<0.006	<0.02	0.015	0.059
2019Q3							<0.002	43.8					0.59	<0.01	11.5	0.35			1.2	20.4					
2019Q4							<0.002	39.5					1	<0.01	10.6	0.16			1.1	12.4					
2020Q2							<0.002	50.2					0.46	<0.01	11.9	0.18			1.2	30.2					
2020Q3	0.36	<0.02	<0.015	0.45	<0.002	0.021	<0.002	47.9	<0.004	<0.01	<0.004	<0.01	0.22	<0.01	11.7	0.28	<0.0002	<0.01	1.1	27.4	<0.025	<0.006	<0.02	<0.005	<0.01
2020Q4							<0.002	37.4					0.28	<0.01	9.1	0.064			1.1	9.8					
2021Q2							<0.002	52.9					0.45	<0.01	13.4	0.05			1.2	26.7					
2021Q3							<0.002	43.2					0.27	<0.01	10.6	0.067			1	19.9					
2021Q4	1.2	<0.02	<0.015	0.33	<0.002	0.02	<0.002	38.5	<0.004	<0.01	<0.004	<0.01	0.58	<0.01	9.9	0.24	<0.0002	<0.01	1	14.2	<0.025	<0.006	<0.02	<0.005	0.013

MW-6B

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Vinyl chloride	Chloroethane	Acetone	Methylene chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes, Total	1,4-Dichlorobenzene
Min	<1	<1	<10	12	<1	<1	<1	<1	<1	<1	<1	<2	<1
Min Year	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult	mult
Max	<5	<5	<25	12	<5	<5	<5	<5	<5	<5	<5	<2	<5
Max Year	nd	nd	nd	2008	nd	nd	nd	nd	nd	nd	nd	nd	nd
2012Q1	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5		<5
2012Q2													
2012Q3													
2012Q4													
2013Q1													
2013Q2	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5		<5
2013Q3													
2013Q4													
2014Q1													
2014Q2													
2014Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2014Q4													
2015Q2													
2015Q3													
2015Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2016Q3													
2016Q4													
2017Q2													
2017Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2017Q4													
2018Q2													
2018Q3													
2018Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q2	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q3													
2019Q4													
2020Q2													
2020Q3	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2020Q4													
2021Q2													
2021Q3													
2021Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

MW-7A

Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Temperature (°C)	EH/ORP (mV)	pH	Conductivity (umhos/cm)	Dissolved Oxygen (mg/L)	Color (Color Units)	Turbidity (NTU)	Alkalinity, Total (mg/L)	Hardness (mg/L)	Total Dissolved Solids (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Bromide (mg/L)	Nitrate as N (mg/L)	Ammonia (mg/L)	Total Kjeldahl Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Biochemical Oxygen Demand (mg/L)	Total Organic Carbon (mg/L)	Phenolics, Total Recoverable (mg/L)	Cyanide, Total (mg/L)
Min	-1.27	-69	5.96	<5	3.99	<5	4.01	230	201	305	8.1	<5	<0.1	<0.01	<0.02	<0.5	<10	<2	2.96	<0.005	<0.01
Min Year	2019	2007	2020	2013	2014	mult	2020	2019	2019	2019	2019	mult	2013	mult	mult	mult	mult	mult	2013	mult	mult
Max	19.5	314	8.74	1520	11.11	85	1000	675	627	3000	1260	37	0.92	0.25	0.2	3.6	40	<4	69.9	0.012	0.011
Max Year	2012	2013	2019	2006	2019	2007	2012	2006	2006	2007	2008	2020	2014	2008	2018	2007	2011	nd	2008	2019	mult
2012Q1	18	172	6.74	1172		6	24.6	500	524	1000	99.4	21.9	<80	<0.05		<0.5	22	<4	15.1	<0.005	<0.01
2012Q2	15.8	184	6.36	1085			1000	520	449	630	99.5	20	<80	<0.05		<0.5	22	<4	7.3	<0.005	
2012Q3	19.5	170	6.97	1134			40.9	490	431	750	103	17.8	<80	<0.05		0.627	21	<4	6.7	<0.005	
2012Q4	10.1	203	6.31	1122			28	510	515	480	98.6	18.2	<0.5	<0.05		0.608	<20	<4	4.2	<0.05	
2013Q1	3.2	273	7.42	1172			9.8	504	518	691	93.7	21.4	<0.2	<0.01		<0.5	<10	<2	8.17	<0.02	
2013Q2	14.2	314	6.995	<5		<5	22	428	271	812	76.8	17.4	0.159	<0.01		0.634	<10	<2	6.56	<0.02	<0.02
2013Q3	14.6	221	7.21	1027			6.7	465	446	613	80.6	17.8	0.354	<0.01		<0.5	13	<2	14.3	0.007	
2013Q4	12	209	6.86	1234			23	411	426	641	72.4	17.8	<0.1	<0.01		<1	12	<2	2.96	<0.005	
2014Q2	11.05	202.5	6.96	1099	7.52		99.7	520	350	645	73.5	31.6	<0.2	0.055	0.027	0.62	17.3	<2	4.8	<0.01	
2014Q3	11.53	101	7	1128	4.36	<5	OR	388	418	649	78.3	33.1	0.92	<0.05	0.091	1.4	19	<2	4.3	<0.01	<0.01
2014Q4	7.8	149.3	6.67	1095	3.99		652	562	459	636	71.1	26	0.27	<0.05	0.05	0.69	22.9	<2	4.4	<0.01	
2015Q2	12.14	31.3	6.96	1055	7.6		22.5	403	332.5	550	64.9	25.7	<2	<0.05	<0.02	0.41	15.3	<2	3.5	<0.01	
2015Q3	13.75	70.7	6.76	866	6.23		17.3	460	375	585	56.8	17.7	0.25	<0.05	0.031	0.39	17.9	<2	3.9	<0.01	
2015Q4	7.36	197	6.72	941	6.01	25	26	537	429	657	70.4	28.2	0.32	<0.05	0.058	0.75	<10	<2	4.9	<0.01	<0.01
2016Q2	7	76.7	7.15	867	9.05	15	25.5	460	330	571	46.5	33	0.3	0.087	<0.02	0.5	13.4	<2	3.8	<0.01	<0.01
2016Q3	10.13	210.6	6.87	1042	6.71		42.7	488	396	565	53.4	25.8	<0.2	<0.05	0.021	0.53	19.5	<2	5	<0.01	
2016Q4	3.72	96.2	7.62	859	9.72		79.9	411	308	487	36.9	12.5	<0.2	<0.05	<0.02	0.59	10.6	<2	6.65	<0.01	
2017Q2	6.3	88.2	6.46	694			52	357	311	402	14.6	<5	<0.2	0.051	0.11	0.87	<10	<2	6.85	<0.01	
2017Q3	11.12	38.8	6.08	984		5	9.33	505	361	537	38.2	<5	<0.4	0.062	0.1	0.74	<10	<2	7.7	<0.01	<0.01
2017Q4	7.21	-28	6.87	885	6.3		18	490	392	553	32.3	<5	<0.4	<0.05	0.19	0.55	<10	<2	7.55	<0.01	
2018Q2	6.45	105.3	6.8	969	6.5		6.02	478	390	544	39.3	<5	0.2	<0.05	0.076	0.94	26.2	<2		<0.01	
2018Q3	11.01	53.6	6.97	990	7.42		28.3	494	362	572	45	<5	0.25	0.11	0.051	0.47	<10	<2	4.8	<0.01	
2018Q4	0.34	50.1	6.83	454	6.99	20	13.4	305	305	369	11.2	<5	<0.4	0.086	0.2	0.59	17.4	<2	6.1	<0.01	<0.01
2019Q2	5.46	241	6.96	472	9.37	25	21.3	389	333	571	28.8	<5	<1	<0.05	0.091	0.57	27.6	<2	6.2	0.01	<0.01
2019Q3	7.12	98.6	8.74	904	7.51		23.6	435	350	551	40.3	<5	<1	0.1	0.07	0.52	23.5	<2	6	<0.01	
2019Q4	-1.27	139.1	7.55	238	11.11		18.2	230	201	305	8.1	<5	<1	0.22	0.055	0.5	12.5	<2	5.1	0.012	
2020Q2	12.2	160.8	7.12	667	7.76		26.4	462	378	528	34.5	<5	<1	<0.05	0.022	0.58	15.9	<2	4.6	<0.01	
2020Q3	14.8	145.8	5.96	771	6.03	<5	4.97	508	394	552	43.3	<5	<1	0.098	<0.02	0.77	30.9	<2	3.5	<0.01	0.011
2020Q4	7.6	224	7.2	543	5.9		4.01	376	258	455	37.6	37	<1	0.091	<0.02	0.54	20.9	<2	5.9	<0.01	
2021Q2	11.2	156.1	6.34	636	6.01		48.9	386	380	510	33.6	<5	0.25	<0.05	<0.2	0.49	<10	<2	3.7	<0.01	
2021Q3	15.4	12.3	7.02	500	2.32		3.9	291	239	339	13.9	<5	<0.4	<0.05	0.12	1.2	25.8	<2	9.4	<0.01	
2021Q4	8.4	133.5	6.57	372.2	5.42	15	3.89	279	251	295	9.8	<5	<0.4	0.12	<0.02	0.49	20.1	<2	6.4	<0.01	0.011

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Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, hexavalent	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Min	<0.1	<0.005	<0.005	0.23	<0.002	<0.5	<0.001	61.5	<0.004	<0.005	<0.004	<0.01	<0.06	<0.003	11.4	0.66	<0.0002	<0.01	<1	20.4	<0.003	<0.005	<0.003	<0.005	<0.1
Min Year	mult	mult	mult	2018	mult	mult	2013	2019	mult	2013	mult	mult	mult	mult	2019	2020	mult	mult	mult	2019	mult	mult	mult	mult	mult
Max	36.4	<0.05	0.016	0.95	<0.005	0.65	0.258	173	0.046	<0.05	0.023	0.039	49.1	0.021	48.6	7.2	<0.0004	0.068	8	134	<0.025	<0.015	<0.03	0.048	0.12
Max Year	2014	nd	2014	2014	nd	2007	2011	2011	2014	nd	2014	2014	2014	2014	2006	2017	nd	2014	2014	2006	nd	nd	nd	2014	2014
2012Q1	0.709	<0.005	0.0058	0.59	<0.003	<0.5	<0.005	149	<0.01	<0.01	<0.02	<0.01	0.931	<0.003	36.8	1.62	<0.0002	<0.03	<5	108	<0.003	<0.01	<0.003	<0.03	<0.01
2012Q2							<0.005	119					1.42	0.0001	33.45	2.955			<5	86.3					
2012Q3							<0.005	123					0.869	<0.003	30.1	2.91			<5	81.6					
2012Q4							<0.005	144					4.19	<0.015	37.6	2.94			<5	99.9					
2013Q1							<0.05	150					0.66	<0.05	34.5	3.8			1.4	94					
2013Q2	1.3	<0.005	<0.005	0.41	<0.003	<0.5	<0.05	64.3	<0.005	<0.005	<0.05	<0.05	2	<0.005	26.9	1.4	<0.0002	<0.05	1.9	40	<0.005	<0.005	<0.005	<0.05	<0.1
2013Q3							<0.001	133					2.3	0.0013	27.9	1.8			2.1	82					
2013Q4							<0.005	124					0.97	<0.005	28	1.4			2	77					
2014Q2							<0.002	115					7.6	<0.01	31	3.2			3.3	81.4					
2014Q3	36.4	<0.02	0.016	0.95	<0.002	0.37	<0.002	132	0.046	<0.01	0.023	0.039	49.1	0.018	42.7	5	<0.0002	0.068	8	84.7	<0.025	<0.006	<0.02	0.048	0.12
2014Q4							<0.002	124					22.1	0.021	36.6	4			5.1	81.1					
2015Q2							<0.002	109					1.8	<0.01	28.7	1.7			1.9	79.3					
2015Q3							<0.002	107					0.92	<0.01	26.4	0.91			1.5	70.9					
2015Q4	2.1	<0.02	<0.015	0.41	<0.002	0.33	<0.002	121	<0.004	<0.01	<0.004	<0.01	1.5	<0.01	31.1	1.6	<0.0002	0.012	1.8	80.2	<0.025	<0.006	<0.02	<0.005	<0.01
2016Q2	2.7	<0.02	<0.015	0.33	<0.002	0.27	<0.002	93.6	<0.004	<0.01	<0.004	<0.01	2.3	<0.01	23.5	1.3	<0.0002	0.01	1.6	90.8	<0.025	<0.006	<0.02	<0.005	0.011
2016Q3							<0.002	114					4.2	<0.01	27.2	2			2.3	79.5					
2016Q4							<0.002	88.5					5.3	<0.01	21.1	1.2			2.3	52.5					
2017Q2							<0.002	94.5					5.8	<0.01	18.4	6.2			3.6	30.9					
2017Q3	0.77	<0.02	<0.015	0.32	<0.002	0.23	<0.002	106	<0.004	<0.01	<0.004	<0.01	0.8	<0.01	23.4	3.4	<0.0002	<0.01	2.3	59.1	<0.025	<0.006	<0.02	<0.005	0.014
2017Q4							<0.002	117					1.4	<0.01	24.2	7.2			2.4	57.9					
2018Q2							<0.002	112					1.4	<0.01	26.4	6.4			2.1	57.6					
2018Q3							<0.002	104					2.6	<0.01	25	2			2.4	64.9					
2018Q4	0.77	<0.02	<0.015	0.23	<0.002	0.13	<0.002	91.3	<0.004	<0.01	<0.004	<0.01	1.2	<0.01	18.8	5.2	<0.0002	<0.01	3.2	25.5	<0.025	<0.006	<0.02	<0.005	0.014
2019Q2	1.3	<0.02	<0.015	0.34	<0.002	0.22	<0.002	98.2	<0.004	<0.01	<0.004	<0.01	1.9	<0.01	21.3	4.8	<0.0002	<0.01	2.2	43	<0.025	<0.006	<0.02	<0.005	0.011
2019Q3							<0.002	102					3.1	<0.01	23.4	2.9			2.4	64.6					
2019Q4							<0.002	61.5					0.7	<0.01	11.4	1.4			2.4	20.4					
2020Q2							<0.002	112					2.2	<0.01	24	3.6			2.2	52.2					
2020Q3	0.33	<0.02	<0.015	0.36	<0.002	0.26	<0.002	115	<0.004	<0.01	<0.004	<0.01	0.38	<0.01	25.6	1.3	<0.0002	<0.01	1.7	60.9	<0.025	<0.006	<0.02	<0.005	<0.01
2020Q4							<0.002	75.8					0.27	<0.01	16.7	0.66			2.4	44.8					
2021Q2							<0.002	111					7.3	<0.01	24.8	3.2			3.7	56.5					
2021Q3							<0.002	72.8					5	<0.01	13.9	3.4			2.4	35.5					
2021Q4	0.22	<0.02	<0.015	0.19	<0.002	0.12	<0.002	75.8	<0.004	<0.01	<0.004	<0.01	0.32	<0.01	15	2.3	<0.0002	<0.01	2.2	20.8	<0.025	<0.006	<0.02	<0.005	<0.01

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Historical ranges and ten-year trends in water quality at the Towslee Landfill, Cortland County. Metals units are mg/L, organics units are µg/L. Period of record is 2006 - present.

Period	Vinyl chloride	Chloroethane	Acetone	Methylene chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes, Total	1,4-Dichlorobenzene
Min	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
Min Year	2018	mult	mult	mult	mult	2018	2018	mult	mult	mult	mult	mult	mult
Max	8.2	<5	11	<5	<5	9	7.9	<5	<5	<5	<5	<2	<5
Max Year	2008	nd	2010	nd	nd	2008	2008	nd	nd	nd	nd	nd	nd
2012Q1	<5	<5	<10	<5	<5	**3**	**3**	<5	<5	<5	<5		<5
2012Q2													
2012Q3													
2012Q4													
2013Q1													
2013Q2	<5	<5	<25	<5	<5	**6.59**	**5.22**	<5	<5	<5	<5		<5
2013Q3													
2013Q4													
2014Q2													
2014Q3	**3.2**	<1	<10	<1	<1	**4.1**	**2.9**	<1	<1	<1	<1	<2	<1
2014Q4													
2015Q2													
2015Q3													
2015Q4	**1.9**	<1	<10	<1	<1	**3.9**	**3.9**	<1	<1	<1	<1	<2	<1
2016Q2	**1.4**	<1	<10	<1	<1	**2.9**	**2.4**	<1	<1	<1	<1	<2	<1
2016Q3													
2016Q4													
2017Q2													
2017Q3	**1.1**	<1	<10	<1	<1	**2.2**	**1.9**	<1	<1	<1	<1	<2	<1
2017Q4													
2018Q2													
2018Q3													
2018Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
2019Q2	**1.9**	<1	<10	<1	<1	**1.9**	**1.9**	<1	<1	<1	<1	<2	<1
2019Q3													
2019Q4													
2020Q2													
2020Q3	**1.7**	<1	<10	<1	<1	**3.6**	**3.4**	<1	<1	<1	<1	<2	<1
2020Q4													
2021Q2													
2021Q3													
2021Q4	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

X.X Baseline organic detections