



Cortland County Soil and Water Conservation District

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www.cortlandsowcd.org

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

October 11, 2018

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

Dear Mr. Warner:

Enclosed is the 2018 Quarter 2 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

Kathleen McGrath, Ph.D.
Water Quality Specialist

cc: Greg Ernst, Cortland Co. Highway Dept.
James Gruppe, NYSDEC Region 7
Amanda Barber, SWCD/files

Environmental Monitoring Report

Towslee Landfill, Cortland County, NY

Quarter 2 2018

Prepared for

Cortland County Highway Department

By

Cortland County Soil and Water Conservation District

October 11, 2018



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**Environmental Monitoring Report
Towslee Landfill, Cortland County, NY
Quarter 2, 2018**

Prepared for Cortland County Highway Department
By Cortland County Soil & Water Conservation District
October 11, 2018

Section 1 Introduction

Towslee Landfill is approximately 36 acres in size, and is part of a larger solid waste disposal site of 540 acres in the Towns of Cortlandville and Solon, owned by Cortland County. 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 sampling and analysis plan prepared by Barton & Loguidice, D.P.C (B&L).

Section 2 Site History

Landfilling 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 landfilling operations at Towslee Landfill. Towslee Landfill was open for disposal for 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.

Based on 1997 monitoring, B&L identified the following parameters that were indicative of mild

leachate impacts to groundwater:

Conventionals - chloride, COD, ammonia, alkalinity, TKN, TOC, and hardness

Metals - aluminum, arsenic, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, potassium, sodium, vanadium, and zinc

Section 3 Sampling and Analysis

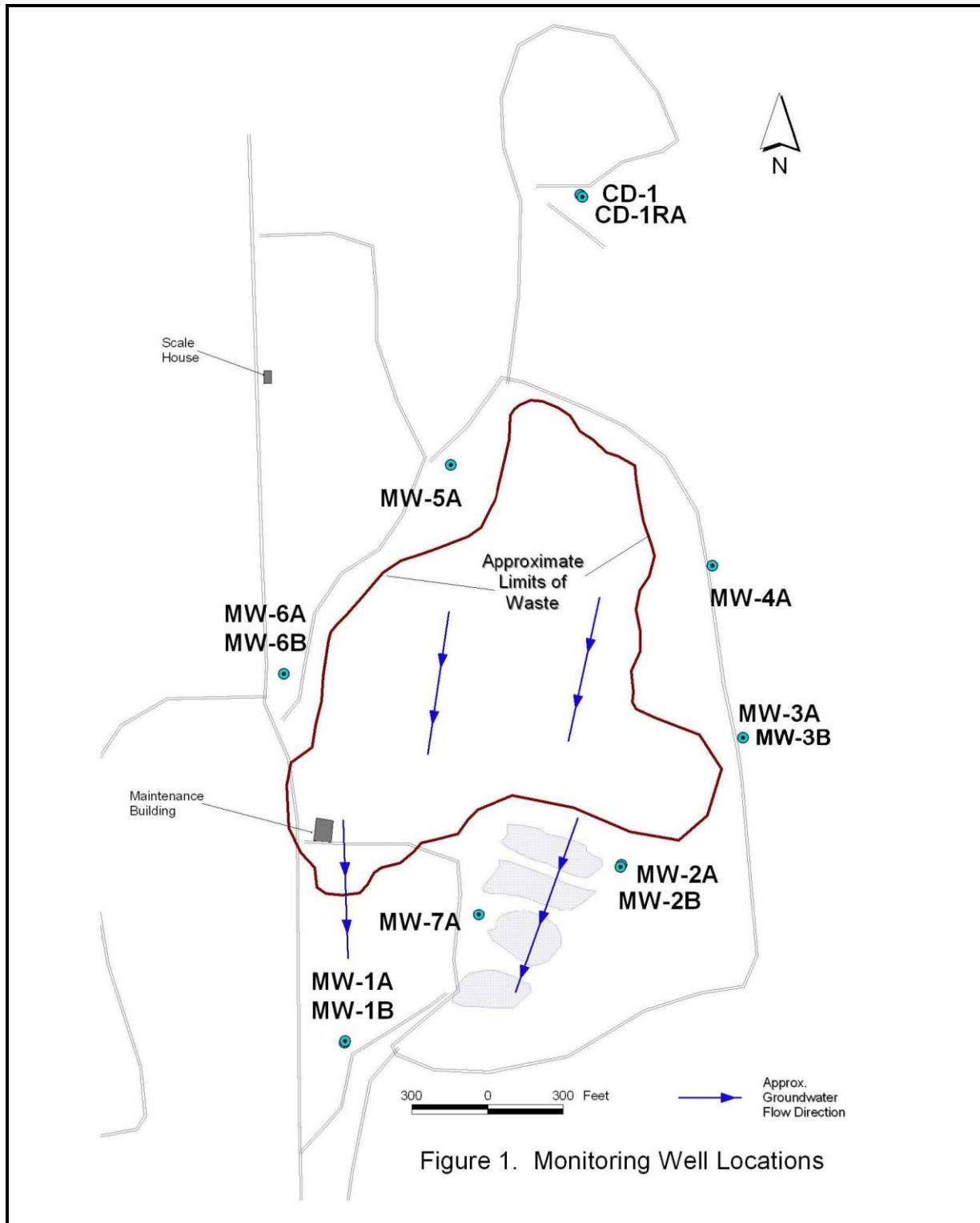
3.1 Schedule

<u>Quarter</u>	<u>Analyses</u>	<u>Date Sampled</u>
First Quarter:	-- Sampling not required --	
Second Quarter:	Routine	June 26, 2018
Third Quarter:	Routine	To be determined
Fourth Quarter:	Baseline	To be determined

3.2 Groundwater Monitoring Locations

Thirteen wells are monitored at Towslee Landfill (Figure 1) including one each bedrock and overburden upgradient wells and 7 and 4 bedrock and overburden downgradient wells, respectively:

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



3.3 Sampling and Analysis:

Water quality analyses were conducted in accordance with 1998 Part 360 regulations. TestAmerica Laboratories, Inc. (TestAmerica) conducted all sample collection and laboratory analyses for this quarter:

TestAmerica Laboratories, Inc.
10 Hazelwood Drive
Amherst, NY 14228-2298
NYELAP # 10026

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

Section 4 Groundwater Monitoring Results

The Quarter 2 TestAmerica laboratory analytical report can be found in Appendix A. Historical data can be found in Appendix B.

4.1 Contraventions of Groundwater Quality Standards

Results for most parameters were below available water quality standards at all wells (Field and organic parameters: Table 1, metals: Table 2). Contraventions of standards are described below. Available NYS water quality standards are included in the tables and contraventions of standards are highlighted.

Conventional and Field Parameters

Turbidity – Turbidity exceeded the NYS standard of 5 NTU for both upgradient wells CD-1 and CD-1RA (5.11 NTU, 56.3 NTU, respectively) and all downgradient wells (range 5.12 – 876 NTU) .

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

Total Dissolved Solids (TDS) - The TDS standard of 500 mg/L was exceeded at MW-2B (798 mg/L), and MW-7A (544 mg/L). The TDS standard has been frequently exceeded in past monitoring at these wells.

Ammonia - The ammonia standard of 2 mg/L was exceeded at MW-2A (5.7 mg/L), consistent with past findings.

Total Phenolics – The total phenolics standard of 0.001 mg/L was exceeded at MW-1B (0.019 mg/L) and MW-2A (0.086 mg/L). Total phenolics has occasionally been detected at MW-1B; this is the first detection of phenolics at MW-1B. Past trends have shown that total phenolics occurrences have been irregular and occasional without obvious trends at the Towslee Landfill

through the history of water quality monitoring.

Metals

Total Iron - The NYS standard for iron is 0.3 mg/L, and is an aesthetic standard. This standard was exceeded for upgradient well CD-1RA (4 mg/L) and nine downgradient wells (range 0.57 – 32.7 mg/L). Iron frequently exceeds the standard at Towslee. The elevated iron levels are believed to be caused at least in part by particulate in the unfiltered samples.

Total Manganese - The NYS standard for manganese is 0.3 mg/L, and is an aesthetic standard. The manganese standard was exceeded at upgradient well CD-1 (0.66 mg/L) and eight downgradient wells (range 0.59 – 9 mg/L). As with iron, the manganese standard has frequently been exceeded in past monitoring, and may be caused in part by particulate in unfiltered samples.

Dissolved Manganese – The NYS standard for manganese was also exceeded in filtered samples from wells MW-2A (8.4 mg/L) and MW-6A (2 mg/L).

No other metals contravened water quality standards at upgradient wells.

Total Lead – The NYS standard for lead of 0.015 mg/L was exceeded at well MW-2A (0.017 mg/L).

Table 1. Contraventions of NYS Water Quality Standards for Field and Inorganic Parameters, Towslee Landfill, Quarter 2, 2018.

Parameter	Units	NYS Water Quality Standard	Upgradient				Downgradient									
			OB	BR	OB	BR	BR	BR	BR	OB	BR	OB	BR	OB	BR	OB
			CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A	
Temperature	(°C)	--	4.07	3.87	8.31	6.31	7.14	5.55	5.25	6.77	3.96	4.91	3.14	4.28	6.45	
Eh	(mV)	--	55.1	71.9	-11.1	12	-13.8	74.9	127.2	135.9	94.1	27	70.7	200.9	105.3	
pH	log	6.5 - 8.5	a	7.8	7.86	7.83	7.92	6.67	6.85	7.31	7.44	7.26	8.09	6.79	7.27	6.8
Specific Conduct	(uS/cm)	--	286	319	410	225	647	1393	383	474	826	300	513	406	969	
Color	(Units)	15	a, b	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	(NTU)	5	a	5.11	56.3	8.7	5.12	876	8.43	16.8	21.4	11.8	13.5	819	8.78	6.02
Alkalinity (as CaCO ₃)	(mg/L)	--	120	150	138	104	288	619	175	170	428	118	151	157	478	
Hardness (as CaCO ₃)	(mg/L)	--	134	154	173	95.8	254	655	172	191	421	126	211	154	390	
Total Diss. Solids	(mg/L)	500	a	141	154J	237	114	315	798	206	224	443	115	243	180	544
Chloride	(mg/L)	250	a, b	2	2.8	35.9	2.8	16	95.2	5.8	23.5	15.5	6.9	47.1	21.3	39.3
Sulfate	(mg/L)	250	a, b	20.2	20.8	19.9	8.5	<5	<5	<5	12.3	7.2	13.3	<5	11.8	<5
Bromide	(mg/L)	2	a	<0.2	<0.2	<0.2	<0.2	<0.2	0.73	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2
NO ₃	(mg/L)	10	a, b	0.06	0.069	<0.05	<0.05	0.15	<0.05	<0.05	<0.05	<0.05	0.11	0.064	<0.05	<0.05
NH ₃	(mg/L)	2	a	<0.02	0.022	<0.02	<0.02	5.7	0.58	<0.02	<0.02	<0.02	<0.02	0.11	<0.02	0.076
TKN	(mg/L)	--		<0.2	0.24	0.51	0.58	6.5	1.3	0.42	0.29	<0.2	0.73	1.4	<0.2	0.94
COD	(mg/L)	--		22.1	28	32.1	30.9	28.6	53.1	47.8	39.8	17.9	30.9	35.4	<10	26.2
BOD	(mg/L)	--		2.5	2.1	2.4	<2	5.4	2	<2	<2	<2	3.1	7.3	<2	<2
TOC	(mg/L)	--		--	--	--	--	--	--	--	--	--	--	--	--	--
Phenolics, Total	(mg/L)	0.001	a	<0.01	<0.01	<0.01	0.019	0.086	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cyanide	(mg/L)	0.2	a, b	--	--	--	--	--	--	--	--	--	--	--	5	--

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

b - Part 5 Drinking Water MCL

OB = overburden well

BR = Bedrock well

1.23 indicates contravention of standard.

Sodium – The NYS sodium guidelines for people on severely and moderately restricted sodium diets is 20 mg/L and 270 mg/L, respectively. The more restrictive diet guideline was exceeded for MW-2B (43.5 mg/L), MW-6A (20.6 mg/L), and MW-7A (57.6 mg/L). The less restrictive diet guideline was not exceeded at any wells during this quarter.

Table 2. Contraventions of NYS Water Quality Standards for Metals, Towslee Landfill, Quarter 2, 2018.

Parameter	NYS Water Quality Standard	Total Metals (mg/L)														Dissolved Metals (mg/l)		
		Upgradient		Downgradient														
		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	BR CD-1RA	OB MW-2A	OB MW-6A	
Aluminum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Antimony	0.003	a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Arsenic	0.025	a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Barium	1	a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Beryllium	0.004	b	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Boron	1	a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Cadmium	0.005	a, b	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	
Calcium	--		39	43	49.8	27.6	70.1	192	51.2	51	123	34.5	57.8	42.1	112	41.2	68.3	59.3
Chromium	0.05	a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Chrom, Hex	0.05	a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Cobalt	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Copper	0.2	a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Iron	0.3	a, b	0.086	4	1.4	0.24	29.7	0.55	1.1	1.5	0.62	0.57	32.7	0.3	1.4	<0.05	<0.05	<0.05
Lead	0.015	b	<0.01	<0.01	<0.01	<0.01	0.017	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Magnesium	--		8.8	11.3	11.8	6.5	19.1	42.7	10.6	15.6	27.8	9.8	16.2	11.8	26.4	9.9	14.3	10
Manganese	0.3	a, b	0.66	0.19	0.15	2.4	9	5.3	0.65	0.59	2.9	0.14	4.4	0.18	6.4	0.11	8.4	2
Mercury	0.0007	a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Nickel	0.1	a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Potassium	--		1.5	2.1	1.4	0.68	10.7	2.2	1.4	1.3	1.4	1.3	5.8	1.1	2.1	0.85	8.9	1.8
Sodium	20	a, b	3.6	4.8	11.9	6.4	10.8	43.5	5.5	8	16.1	10.2	20.6	14.6	57.6	4.9	11.1	21.2
Selenium	0.01	a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Silver	0.05	a	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Thallium	0.002	b	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Vanadium	--		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Zinc	5	b	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

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

b - Part 5 Drinking Water MCL

OB = overburden well

BR = Bedrock well

1.23 indicates contravention of standard.

Volatile Organic Compounds (VOCs)

VOC sampling was not required for this quarter.

4.2 Groundwater Quality Trends

Historical tables of monitoring data are summarized by parameter type and well in Appendix B.

Trends at Upgradient Wells

Monitoring of wells CD-1 and CD-1RA continues to show that water quality upgradient of the Towslee Landfill has not changed significantly over time.

Trends at Downgradient Wells

Overall, groundwater quality downgradient of the Towslee Landfill has 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. At most wells, VOCs have never been detected. For a few wells, VOCs have been detected sporadically at low levels over time. Where low level organic contamination persists, there has been no clear trend.

Section 5 Landfill Gas Testing

Landfill gas measurements were taken at monitoring wells. No combustible gas was detected during this quarter's monitoring.

Section 6 Quality Control

Independent data validation was not conducted for Quarter 2 Routine monitoring.

The Quarter 2 analytical data appear adequate to characterize groundwater quality in the vicinity of the Towslee landfill.

Appendix A

Analytical Laboratory Results and Data Validation Summary

Cortland County Towslee Landfill

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-138030-1

Client Project/Site: Towslee Landfill - Routine GW

Sampling Event: Towslee Landfill - Routine

For:

Cortland Cty Soil & Water Cons District

100 Grange Place

Rm 202

Cortland, New York 13045

Attn: Patrick Reidy



Authorized for release by:

8/9/2018 8:06:17 AM

Orlette Johnson, Senior Project Manager

(484)685-0864

orlette.johnson@testamericainc.com

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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

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Definitions/Glossary

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
H	Sample was prepped or analyzed beyond the specified holding time
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation

These commonly used abbreviations may or may not be present in this report.

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

Case Narrative

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Job ID: 480-138030-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-138030-1

Receipt

The samples were received on 6/27/2018 1:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.1° C, 0.3° C, 0.5° C and 0.8° C.

HPLC/IC

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

Metals

Method(s) 6010C: The Serial Dilution (480-138030-D-3-A SD ^5) in batch 480-422181, exhibited results outside the quality control limits for Total Manganese. However, the Post Digestion Spike was compliant so no corrective action was necessary

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

General Chemistry

Method(s) SM 2540C: Reanalysis of the following sample(s) was performed outside of the analytical holding time in order to confirm results. Results did not confirm, both results are reported. CD-1RA (480-138030-2).

Method(s) 353.2: The results reported for the following sample do not concur with results previously reported for this site: CD-1RA (480-138030-2). Reanalysis was performed, and the result(s) confirmed.

Method(s) 410.4: The results reported for the following samples do not concur with results previously reported for this site: CD-1RA (480-138030-2) and (480-138030-E-2 DU). Reanalysis was performed, and the result(s) confirmed.

Method(s) SM 5210B: The RPD between the lowest and highest results used in averaging the final result was > 30%.

MW-5A (480-138030-10)

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

Detection Summary

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: CD-1

Lab Sample ID: 480-138030-1

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.80				SU	1		Field Sampling	Total/NA
Field Conductivity	286				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	4.07				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	5.11				NTU	1		Field Sampling	Total/NA
Field EH/ORP	55.1				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	4.99				mg/L	1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	39.0		0.50		mg/L	1		6010C	Total/NA
Iron	0.086		0.050		mg/L	1		6010C	Total/NA
Magnesium	8.8		0.20		mg/L	1		6010C	Total/NA
Manganese	0.66		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.5		0.50		mg/L	1		6010C	Total/NA
Sodium	3.6		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	134		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	120		20.0		mg/L	2		310.2	Total/NA
Nitrate as N	0.060		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	22.1		10.0		mg/L	1		410.4	Total/NA
Sulfate	20.2		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	141		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	2.0		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	2.5		2.0		mg/L	1		SM 5210B	Total/NA

Client Sample ID: CD-1RA

Lab Sample ID: 480-138030-2

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.86				SU	1		Field Sampling	Total/NA
Field Conductivity	319				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	3.87				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	56.3				NTU	1		Field Sampling	Total/NA
Field EH/ORP	71.9				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	5.53				mg/L	1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	43.0		0.50		mg/L	1		6010C	Total/NA
Iron	4.0		0.050		mg/L	1		6010C	Total/NA
Magnesium	11.3		0.20		mg/L	1		6010C	Total/NA
Manganese	0.19		0.0030		mg/L	1		6010C	Total/NA
Potassium	2.1		0.50		mg/L	1		6010C	Total/NA
Sodium	4.8		1.0		mg/L	1		6010C	Total/NA
Calcium	41.2		0.50		mg/L	1		6010C	Dissolved
Magnesium	9.9		0.20		mg/L	1		6010C	Dissolved
Manganese	0.11		0.0030		mg/L	1		6010C	Dissolved
Potassium	0.85		0.50		mg/L	1		6010C	Dissolved
Sodium	4.9		1.0		mg/L	1		6010C	Dissolved
Hardness as calcium carbonate	154		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	150		20.0		mg/L	2		310.2	Total/NA
Ammonia	0.022		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.24		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.069		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	28.0		10.0		mg/L	1		410.4	Total/NA
Sulfate	20.8		5.0		mg/L	1		9038	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: CD-1RA (Continued)

Lab Sample ID: 480-138030-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	154	H		10.0	mg/L	1		SM 2540C	Total/NA
Chloride	2.8			1.0	mg/L	1		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	2.1			2.0	mg/L	1		SM 5210B	Total/NA

Client Sample ID: MW-1A

Lab Sample ID: 480-138030-3

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.83				SU	1		Field Sampling	Total/NA
Field Conductivity	410				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	8.31				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	8.7				NTU	1		Field Sampling	Total/NA
Field EH/ORP	-11.1				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	5.37				mg/L	1		Field Sampling	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	49.8		0.50		mg/L	1		6010C	Total/NA
Iron	1.4		0.050		mg/L	1		6010C	Total/NA
Magnesium	11.8		0.20		mg/L	1		6010C	Total/NA
Manganese	0.15		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.4		0.50		mg/L	1		6010C	Total/NA
Sodium	11.9		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	173		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	138		20.0		mg/L	2		310.2	Total/NA
Total Kjeldahl Nitrogen	0.51		0.20		mg/L	1		351.2	Total/NA
Chemical Oxygen Demand	32.1		10.0		mg/L	1		410.4	Total/NA
Sulfate	19.9		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	237		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	35.9		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	2.4		2.0		mg/L	1		SM 5210B	Total/NA

Client Sample ID: MW-1B

Lab Sample ID: 480-138030-4

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.92				SU	1		Field Sampling	Total/NA
Field Conductivity	225				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	6.31				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	5.12				NTU	1		Field Sampling	Total/NA
Field EH/ORP	12.0				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	3.84				mg/L	1		Field Sampling	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	27.6		0.50		mg/L	1		6010C	Total/NA
Iron	0.24		0.050		mg/L	1		6010C	Total/NA
Magnesium	6.5		0.20		mg/L	1		6010C	Total/NA
Manganese	2.4		0.0030		mg/L	1		6010C	Total/NA
Potassium	0.68		0.50		mg/L	1		6010C	Total/NA
Sodium	6.4		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	95.8		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	104		20.0		mg/L	2		310.2	Total/NA
Total Kjeldahl Nitrogen	0.58		0.20		mg/L	1		351.2	Total/NA
Chemical Oxygen Demand	30.9		10.0		mg/L	1		410.4	Total/NA
Phenolics, Total Recoverable	0.019		0.010		mg/L	1		420.1	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-1B (Continued)

Lab Sample ID: 480-138030-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	8.5		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	114		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	2.8		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-2A

Lab Sample ID: 480-138030-5

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	6.67				SU	1		Field Sampling	Total/NA
Field Conductivity	647				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	7.14				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	876				NTU	1		Field Sampling	Total/NA
Field EH/ORP	-13.8				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	3.89				mg/L	1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	70.1		0.50		mg/L	1		6010C	Total/NA
Iron	29.7		0.050		mg/L	1		6010C	Total/NA
Lead	0.017		0.010		mg/L	1		6010C	Total/NA
Magnesium	19.1		0.20		mg/L	1		6010C	Total/NA
Manganese	9.0		0.0030		mg/L	1		6010C	Total/NA
Potassium	10.7		0.50		mg/L	1		6010C	Total/NA
Sodium	10.8		1.0		mg/L	1		6010C	Total/NA
Calcium	68.3		0.50		mg/L	1		6010C	Dissolved
Magnesium	14.3		0.20		mg/L	1		6010C	Dissolved
Manganese	8.4		0.0030		mg/L	1		6010C	Dissolved
Potassium	8.9		0.50		mg/L	1		6010C	Dissolved
Sodium	11.1		1.0		mg/L	1		6010C	Dissolved
Hardness as calcium carbonate	254		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	288		30.0		mg/L	3		310.2	Total/NA
Ammonia	5.7		0.10		mg/L	5		350.1	Total/NA
Total Kjeldahl Nitrogen	6.5		0.40		mg/L	2		351.2	Total/NA
Nitrate as N	0.15		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	28.6		10.0		mg/L	1		410.4	Total/NA
Phenolics, Total Recoverable	0.086		0.010		mg/L	1		420.1	Total/NA
Total Dissolved Solids	315		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	16.0		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	5.4		2.0		mg/L	1		SM 5210B	Total/NA

Client Sample ID: MW-2B

Lab Sample ID: 480-138030-6

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	6.85				SU	1		Field Sampling	Total/NA
Field Conductivity	1393				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	5.55				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	8.43				NTU	1		Field Sampling	Total/NA
Field EH/ORP	74.9				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	6.63				mg/L	1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	192		0.50		mg/L	1		6010C	Total/NA
Iron	0.55		0.050		mg/L	1		6010C	Total/NA
Magnesium	42.7		0.20		mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-2B (Continued)

Lab Sample ID: 480-138030-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	5.3		0.0030		mg/L	1		6010C	Total/NA
Potassium	2.2		0.50		mg/L	1		6010C	Total/NA
Sodium	43.5		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	655		0.50		mg/L	1		SM 2340B	Total/NA
Bromide	0.73		0.20		mg/L	1		300.0	Total/NA
Alkalinity, Total	619		70.0		mg/L	7		310.2	Total/NA
Ammonia	0.58		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	1.3		0.20		mg/L	1		351.2	Total/NA
Chemical Oxygen Demand	53.1		10.0		mg/L	1		410.4	Total/NA
Total Dissolved Solids	798		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	95.2		2.0		mg/L	2		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	2.0		2.0		mg/L	1		SM 5210B	Total/NA

Client Sample ID: MW-3A

Lab Sample ID: 480-138030-7

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.31				SU	1		Field Sampling	Total/NA
Field Conductivity	383				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	5.25				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	16.8				NTU	1		Field Sampling	Total/NA
Field EH/ORP	127.2				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	7.29				mg/L	1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	51.2		0.50		mg/L	1		6010C	Total/NA
Iron	1.1		0.050		mg/L	1		6010C	Total/NA
Magnesium	10.6		0.20		mg/L	1		6010C	Total/NA
Manganese	0.65		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.4		0.50		mg/L	1		6010C	Total/NA
Sodium	5.5		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	172		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	175		20.0		mg/L	2		310.2	Total/NA
Total Kjeldahl Nitrogen	0.42		0.20		mg/L	1		351.2	Total/NA
Chemical Oxygen Demand	47.8		10.0		mg/L	1		410.4	Total/NA
Total Dissolved Solids	206		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	5.8		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-3B

Lab Sample ID: 480-138030-8

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.44				SU	1		Field Sampling	Total/NA
Field Conductivity	474				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	6.77				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	21.4				NTU	1		Field Sampling	Total/NA
Field EH/ORP	135.9				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	6.91				mg/L	1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	51.0		0.50		mg/L	1		6010C	Total/NA
Iron	1.5		0.050		mg/L	1		6010C	Total/NA
Magnesium	15.6		0.20		mg/L	1		6010C	Total/NA
Manganese	0.59		0.0030		mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-3B (Continued)

Lab Sample ID: 480-138030-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1.3		0.50		mg/L	1		6010C	Total/NA
Sodium	8.0		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	191		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	170		20.0		mg/L	2		310.2	Total/NA
Total Kjeldahl Nitrogen	0.29		0.20		mg/L	1		351.2	Total/NA
Chemical Oxygen Demand	39.8		10.0		mg/L	1		410.4	Total/NA
Sulfate	12.3		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	224		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	23.5		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-4A

Lab Sample ID: 480-138030-9

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.26				SU	1		Field Sampling	Total/NA
Field Conductivity	826				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	3.96				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	11.8				NTU	1		Field Sampling	Total/NA
Field EH/ORP	94.1				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	6.51				mg/L	1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	123		0.50		mg/L	1		6010C	Total/NA
Iron	0.62		0.050		mg/L	1		6010C	Total/NA
Magnesium	27.8		0.20		mg/L	1		6010C	Total/NA
Manganese	2.9		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.4		0.50		mg/L	1		6010C	Total/NA
Sodium	16.1		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	421		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	428		50.0		mg/L	5		310.2	Total/NA
Chemical Oxygen Demand	17.9		10.0		mg/L	1		410.4	Total/NA
Sulfate	7.2		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	443		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	15.5		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-5A

Lab Sample ID: 480-138030-10

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	8.09				SU	1		Field Sampling	Total/NA
Field Conductivity	300				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	4.91				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	13.5				NTU	1		Field Sampling	Total/NA
Field EH/ORP	27.0				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	5.69				mg/L	1		Field Sampling	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	34.5		0.50		mg/L	1		6010C	Total/NA
Iron	0.57		0.050		mg/L	1		6010C	Total/NA
Magnesium	9.8		0.20		mg/L	1		6010C	Total/NA
Manganese	0.14		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.3		0.50		mg/L	1		6010C	Total/NA
Sodium	10.2		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	126		0.50		mg/L	1		SM 2340B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-5A (Continued)

Lab Sample ID: 480-138030-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity, Total	118		20.0		mg/L	2		310.2	Total/NA
Total Kjeldahl Nitrogen	0.73		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.11		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	30.9		10.0		mg/L	1		410.4	Total/NA
Sulfate	13.3		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	115		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	6.9		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	3.1		2.0		mg/L	1		SM 5210B	Total/NA

Client Sample ID: MW-6A

Lab Sample ID: 480-138030-11

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	6.79				SU	1		Field Sampling	Total/NA
Field Conductivity	513				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	3.14				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	819				NTU	1		Field Sampling	Total/NA
Field EH/ORP	70.7				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	4.78				mg/L	1		Field Sampling	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	57.8		0.50		mg/L	1		6010C	Total/NA
Iron	32.7		0.050		mg/L	1		6010C	Total/NA
Magnesium	16.2		0.20		mg/L	1		6010C	Total/NA
Manganese	4.4		0.0030		mg/L	1		6010C	Total/NA
Potassium	5.8		0.50		mg/L	1		6010C	Total/NA
Sodium	20.6		1.0		mg/L	1		6010C	Total/NA
Calcium	59.3		0.50		mg/L	1		6010C	Dissolved
Magnesium	10.0		0.20		mg/L	1		6010C	Dissolved
Manganese	2.0		0.0030		mg/L	1		6010C	Dissolved
Potassium	1.8		0.50		mg/L	1		6010C	Dissolved
Sodium	21.2		1.0		mg/L	1		6010C	Dissolved
Hardness as calcium carbonate	211		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	151		20.0		mg/L	2		310.2	Total/NA
Ammonia	0.11		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	1.4		0.20		mg/L	1		351.2	Total/NA
Nitrate as N	0.064		0.050		mg/L	1		353.2	Total/NA
Chemical Oxygen Demand	35.4		10.0		mg/L	1		410.4	Total/NA
Total Dissolved Solids	243		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	47.1		1.0		mg/L	1		SM 4500 Cl- E	Total/NA
Biochemical Oxygen Demand	7.3		3.0		mg/L	1		SM 5210B	Total/NA

Client Sample ID: MW-6B

Lab Sample ID: 480-138030-12

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	7.27				SU	1		Field Sampling	Total/NA
Field Conductivity	406				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	4.28				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	8.78				NTU	1		Field Sampling	Total/NA
Field EH/ORP	200.9				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	7.97				mg/L	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-6B (Continued)

Lab Sample ID: 480-138030-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	42.1		0.50		mg/L	1		6010C	Total/NA
Iron	0.30		0.050		mg/L	1		6010C	Total/NA
Magnesium	11.8		0.20		mg/L	1		6010C	Total/NA
Manganese	0.18		0.0030		mg/L	1		6010C	Total/NA
Potassium	1.1		0.50		mg/L	1		6010C	Total/NA
Sodium	14.6		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	154		0.50		mg/L	1		SM 2340B	Total/NA
Alkalinity, Total	157		20.0		mg/L	2		310.2	Total/NA
Sulfate	11.8		5.0		mg/L	1		9038	Total/NA
Total Dissolved Solids	180		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	21.3		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-7A

Lab Sample ID: 480-138030-13

Analyte	Result	Qualifier	NONE	NONE	Unit	Dil Fac	D	Method	Prep Type
Field pH	6.80				SU	1		Field Sampling	Total/NA
Field Conductivity	969				umhos/cm	1		Field Sampling	Total/NA
Field Temperature	6.45				Degrees C	1		Field Sampling	Total/NA
Field Turbidity	6.02				NTU	1		Field Sampling	Total/NA
Field EH/ORP	105.3				millivolts	1		Field Sampling	Total/NA
Oxygen, Dissolved	6.50				mg/L	1		Field Sampling	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	112		0.50		mg/L	1		6010C	Total/NA
Iron	1.4		0.050		mg/L	1		6010C	Total/NA
Magnesium	26.4		0.20		mg/L	1		6010C	Total/NA
Manganese	6.4		0.0030		mg/L	1		6010C	Total/NA
Potassium	2.1		0.50		mg/L	1		6010C	Total/NA
Sodium	57.6		1.0		mg/L	1		6010C	Total/NA
Hardness as calcium carbonate	390		0.50		mg/L	1		SM 2340B	Total/NA
Bromide	0.20		0.20		mg/L	1		300.0	Total/NA
Alkalinity, Total	478		50.0		mg/L	5		310.2	Total/NA
Ammonia	0.076		0.020		mg/L	1		350.1	Total/NA
Total Kjeldahl Nitrogen	0.94		0.20		mg/L	1		351.2	Total/NA
Chemical Oxygen Demand	26.2		10.0		mg/L	1		410.4	Total/NA
Total Dissolved Solids	544		10.0		mg/L	1		SM 2540C	Total/NA
Chloride	39.3		1.0		mg/L	1		SM 4500 Cl- E	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: CD-1

Date Collected: 06/26/18 08:15

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-1

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/29/18 08:58	06/29/18 23:42	1
Calcium	39.0		0.50		mg/L		06/29/18 08:58	06/29/18 23:42	1
Iron	0.086		0.050		mg/L		06/29/18 08:58	06/29/18 23:42	1
Lead	ND		0.010		mg/L		06/29/18 08:58	06/29/18 23:42	1
Magnesium	8.8		0.20		mg/L		06/29/18 08:58	06/29/18 23:42	1
Manganese	0.66		0.0030		mg/L		06/29/18 08:58	06/29/18 23:42	1
Potassium	1.5		0.50		mg/L		06/29/18 08:58	06/29/18 23:42	1
Sodium	3.6		1.0		mg/L		06/29/18 08:58	06/29/18 23:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	134		0.50		mg/L			07/10/18 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/30/18 00:59	1
Alkalinity, Total	120		20.0		mg/L			07/05/18 14:21	2
Ammonia	ND	F1	0.020		mg/L			06/27/18 10:56	1
Total Kjeldahl Nitrogen	ND		0.20		mg/L		06/29/18 14:38	07/02/18 08:31	1
Nitrate as N	0.060		0.050		mg/L			06/27/18 18:28	1
Chemical Oxygen Demand	22.1		10.0		mg/L			07/02/18 16:10	1
Phenolics, Total Recoverable	ND		0.010		mg/L		06/29/18 14:11	07/05/18 16:13	1
Sulfate	20.2		5.0		mg/L			07/11/18 13:06	1
Total Dissolved Solids	141		10.0		mg/L			06/28/18 14:49	1
Chloride	2.0		1.0		mg/L			07/05/18 12:09	1
Biochemical Oxygen Demand	2.5		2.0		mg/L			06/27/18 07:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.80				SU			06/26/18 08:15	1
Field Conductivity	286				umhos/cm			06/26/18 08:15	1
Field Temperature	4.07				Degrees C			06/26/18 08:15	1
Field Turbidity	5.11				NTU			06/26/18 08:15	1
Field EH/ORP	55.1				millivolts			06/26/18 08:15	1
Oxygen, Dissolved	4.99				mg/L			06/26/18 08:15	1

Client Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: CD-1RA

Date Collected: 06/26/18 08:30

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-2

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/29/18 08:58	06/29/18 23:46	1
Calcium	43.0		0.50		mg/L		06/29/18 08:58	06/29/18 23:46	1
Iron	4.0		0.050		mg/L		06/29/18 08:58	06/29/18 23:46	1
Lead	ND		0.010		mg/L		06/29/18 08:58	06/29/18 23:46	1
Magnesium	11.3		0.20		mg/L		06/29/18 08:58	06/29/18 23:46	1
Manganese	0.19		0.0030		mg/L		06/29/18 08:58	06/29/18 23:46	1
Potassium	2.1		0.50		mg/L		06/29/18 08:58	06/29/18 23:46	1
Sodium	4.8		1.0		mg/L		06/29/18 08:58	06/29/18 23:46	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		07/02/18 08:25	07/02/18 15:43	1
Calcium	41.2		0.50		mg/L		07/02/18 08:25	07/02/18 15:43	1
Iron	ND		0.050		mg/L		07/02/18 08:25	07/02/18 15:43	1
Lead	ND		0.010		mg/L		07/02/18 08:25	07/02/18 15:43	1
Magnesium	9.9		0.20		mg/L		07/02/18 08:25	07/02/18 15:43	1
Manganese	0.11		0.0030		mg/L		07/02/18 08:25	07/02/18 15:43	1
Potassium	0.85		0.50		mg/L		07/02/18 08:25	07/02/18 15:43	1
Sodium	4.9		1.0		mg/L		07/02/18 08:25	07/02/18 15:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	154		0.50		mg/L			07/10/18 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/30/18 01:14	1
Alkalinity, Total	150		20.0		mg/L			07/05/18 13:33	2
Ammonia	0.022		0.020		mg/L			06/27/18 10:59	1
Total Kjeldahl Nitrogen	0.24		0.20		mg/L		06/29/18 14:38	07/02/18 08:31	1
Nitrate as N	0.069		0.050		mg/L			06/27/18 18:30	1
Chemical Oxygen Demand	28.0		10.0		mg/L			07/02/18 16:10	1
Phenolics, Total Recoverable	ND		0.010		mg/L		06/29/18 14:11	07/05/18 16:13	1
Sulfate	20.8		5.0		mg/L			07/11/18 13:06	1
Total Dissolved Solids	ND		10.0		mg/L			06/28/18 14:49	1
Total Dissolved Solids	154 H		10.0		mg/L			07/05/18 15:40	1
Chloride	2.8		1.0		mg/L			07/05/18 12:09	1
Biochemical Oxygen Demand	2.1		2.0		mg/L			06/27/18 07:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.86				SU			06/26/18 08:30	1
Field Conductivity	319				umhos/cm			06/26/18 08:30	1
Field Temperature	3.87				Degrees C			06/26/18 08:30	1
Field Turbidity	56.3				NTU			06/26/18 08:30	1
Field EH/ORP	71.9				millivolts			06/26/18 08:30	1
Oxygen, Dissolved	5.53				mg/L			06/26/18 08:30	1

TestAmerica Buffalo

Client Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-1A

Date Collected: 06/26/18 10:20

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-3

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/29/18 08:58	06/30/18 00:01	1
Calcium	49.8		0.50		mg/L		06/29/18 08:58	06/30/18 00:01	1
Iron	1.4		0.050		mg/L		06/29/18 08:58	06/30/18 00:01	1
Lead	ND		0.010		mg/L		06/29/18 08:58	06/30/18 00:01	1
Magnesium	11.8		0.20		mg/L		06/29/18 08:58	06/30/18 00:01	1
Manganese	0.15		0.0030		mg/L		06/29/18 08:58	06/30/18 00:01	1
Potassium	1.4		0.50		mg/L		06/29/18 08:58	06/30/18 00:01	1
Sodium	11.9		1.0		mg/L		06/29/18 08:58	06/30/18 00:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	173		0.50		mg/L			07/10/18 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/30/18 01:28	1
Alkalinity, Total	138		20.0		mg/L			07/05/18 13:33	2
Ammonia	ND		0.020		mg/L			06/27/18 11:00	1
Total Kjeldahl Nitrogen	0.51		0.20		mg/L		06/29/18 14:38	07/02/18 08:31	1
Nitrate as N	ND		0.050		mg/L			06/27/18 15:02	1
Chemical Oxygen Demand	32.1		10.0		mg/L			07/02/18 16:10	1
Phenolics, Total Recoverable	ND		0.010		mg/L		06/29/18 14:11	07/05/18 16:13	1
Sulfate	19.9		5.0		mg/L			07/11/18 13:06	1
Total Dissolved Solids	237		10.0		mg/L			06/28/18 14:49	1
Chloride	35.9		1.0		mg/L			07/05/18 12:09	1
Biochemical Oxygen Demand	2.4		2.0		mg/L			06/27/18 07:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.83				SU			06/26/18 10:20	1
Field Conductivity	410				umhos/cm			06/26/18 10:20	1
Field Temperature	8.31				Degrees C			06/26/18 10:20	1
Field Turbidity	8.7				NTU			06/26/18 10:20	1
Field EH/ORP	-11.1				millivolts			06/26/18 10:20	1
Oxygen, Dissolved	5.37				mg/L			06/26/18 10:20	1

Client Sample Results

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-1B

Date Collected: 06/26/18 10:40

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-4

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/29/18 08:58	06/30/18 00:19	1
Calcium	27.6		0.50		mg/L		06/29/18 08:58	06/30/18 00:19	1
Iron	0.24		0.050		mg/L		06/29/18 08:58	06/30/18 00:19	1
Lead	ND		0.010		mg/L		06/29/18 08:58	06/30/18 00:19	1
Magnesium	6.5		0.20		mg/L		06/29/18 08:58	06/30/18 00:19	1
Manganese	2.4		0.0030		mg/L		06/29/18 08:58	06/30/18 00:19	1
Potassium	0.68		0.50		mg/L		06/29/18 08:58	06/30/18 00:19	1
Sodium	6.4		1.0		mg/L		06/29/18 08:58	06/30/18 00:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	95.8		0.50		mg/L			07/10/18 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/30/18 01:43	1
Alkalinity, Total	104		20.0		mg/L			07/05/18 13:33	2
Ammonia	ND		0.020		mg/L			06/27/18 11:00	1
Total Kjeldahl Nitrogen	0.58		0.20		mg/L		06/29/18 14:38	07/02/18 08:31	1
Nitrate as N	ND		0.050		mg/L			06/27/18 15:03	1
Chemical Oxygen Demand	30.9		10.0		mg/L			07/02/18 16:10	1
Phenolics, Total Recoverable	0.019		0.010		mg/L		06/29/18 14:11	07/05/18 16:19	1
Sulfate	8.5		5.0		mg/L			07/11/18 13:06	1
Total Dissolved Solids	114		10.0		mg/L			06/28/18 14:49	1
Chloride	2.8		1.0		mg/L			07/05/18 12:25	1
Biochemical Oxygen Demand	ND		2.0		mg/L			06/27/18 07:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.92				SU			06/26/18 10:40	1
Field Conductivity	225				umhos/cm			06/26/18 10:40	1
Field Temperature	6.31				Degrees C			06/26/18 10:40	1
Field Turbidity	5.12				NTU			06/26/18 10:40	1
Field EH/ORP	12.0				millivolts			06/26/18 10:40	1
Oxygen, Dissolved	3.84				mg/L			06/26/18 10:40	1

Client Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-2A

Date Collected: 06/26/18 09:40
Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-5

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/29/18 08:58	06/30/18 00:23	1
Calcium	70.1		0.50		mg/L		06/29/18 08:58	06/30/18 00:23	1
Iron	29.7		0.050		mg/L		06/29/18 08:58	06/30/18 00:23	1
Lead	0.017		0.010		mg/L		06/29/18 08:58	06/30/18 00:23	1
Magnesium	19.1		0.20		mg/L		06/29/18 08:58	06/30/18 00:23	1
Manganese	9.0		0.0030		mg/L		06/29/18 08:58	06/30/18 00:23	1
Potassium	10.7		0.50		mg/L		06/29/18 08:58	06/30/18 00:23	1
Sodium	10.8		1.0		mg/L		06/29/18 08:58	06/30/18 00:23	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		07/02/18 08:25	07/02/18 15:47	1
Calcium	68.3		0.50		mg/L		07/02/18 08:25	07/02/18 15:47	1
Iron	ND		0.050		mg/L		07/02/18 08:25	07/02/18 15:47	1
Lead	ND		0.010		mg/L		07/02/18 08:25	07/02/18 15:47	1
Magnesium	14.3		0.20		mg/L		07/02/18 08:25	07/02/18 15:47	1
Manganese	8.4		0.0030		mg/L		07/02/18 08:25	07/02/18 15:47	1
Potassium	8.9		0.50		mg/L		07/02/18 08:25	07/02/18 15:47	1
Sodium	11.1		1.0		mg/L		07/02/18 08:25	07/02/18 15:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	254		0.50		mg/L			07/10/18 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/30/18 01:57	1
Alkalinity, Total	288		30.0		mg/L			07/05/18 13:33	3
Ammonia	5.7		0.10		mg/L			06/27/18 12:25	5
Total Kjeldahl Nitrogen	6.5		0.40		mg/L		07/02/18 09:59	07/03/18 11:43	2
Nitrate as N	0.15		0.050		mg/L			06/27/18 18:31	1
Chemical Oxygen Demand	28.6		10.0		mg/L			07/02/18 16:10	1
Phenolics, Total Recoverable	0.086		0.010		mg/L		06/29/18 14:11	07/05/18 16:19	1
Sulfate	ND		5.0		mg/L			07/11/18 13:16	1
Total Dissolved Solids	315		10.0		mg/L			06/28/18 14:49	1
Chloride	16.0		1.0		mg/L			07/05/18 12:26	1
Biochemical Oxygen Demand	5.4		2.0		mg/L			06/27/18 07:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.67				SU			06/26/18 09:40	1
Field Conductivity	647				umhos/cm			06/26/18 09:40	1
Field Temperature	7.14				Degrees C			06/26/18 09:40	1
Field Turbidity	876				NTU			06/26/18 09:40	1
Field EH/ORP	-13.8				millivolts			06/26/18 09:40	1
Oxygen, Dissolved	3.89				mg/L			06/26/18 09:40	1

TestAmerica Buffalo

Client Sample Results

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-2B

Date Collected: 06/26/18 09:30

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-6

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/29/18 08:58	06/30/18 00:27	1
Calcium	192		0.50		mg/L		06/29/18 08:58	06/30/18 00:27	1
Iron	0.55		0.050		mg/L		06/29/18 08:58	06/30/18 00:27	1
Lead	ND		0.010		mg/L		06/29/18 08:58	06/30/18 00:27	1
Magnesium	42.7		0.20		mg/L		06/29/18 08:58	06/30/18 00:27	1
Manganese	5.3		0.0030		mg/L		06/29/18 08:58	06/30/18 00:27	1
Potassium	2.2		0.50		mg/L		06/29/18 08:58	06/30/18 00:27	1
Sodium	43.5		1.0		mg/L		06/29/18 08:58	06/30/18 00:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	655		0.50		mg/L			07/10/18 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.73		0.20		mg/L			06/30/18 02:12	1
Alkalinity, Total	619		70.0		mg/L			07/05/18 13:50	7
Ammonia	0.58		0.020		mg/L			06/27/18 11:02	1
Total Kjeldahl Nitrogen	1.3		0.20		mg/L		06/29/18 14:38	07/02/18 08:31	1
Nitrate as N	ND		0.050		mg/L			06/27/18 15:07	1
Chemical Oxygen Demand	53.1		10.0		mg/L			07/02/18 16:10	1
Phenolics, Total Recoverable	ND		0.010		mg/L		06/29/18 14:11	07/05/18 16:20	1
Sulfate	ND		5.0		mg/L			07/11/18 13:16	1
Total Dissolved Solids	798		10.0		mg/L			06/28/18 14:49	1
Chloride	95.2		2.0		mg/L			07/05/18 13:26	2
Biochemical Oxygen Demand	2.0		2.0		mg/L			06/27/18 07:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.85				SU			06/26/18 09:30	1
Field Conductivity	1393				umhos/cm			06/26/18 09:30	1
Field Temperature	5.55				Degrees C			06/26/18 09:30	1
Field Turbidity	8.43				NTU			06/26/18 09:30	1
Field EH/ORP	74.9				millivolts			06/26/18 09:30	1
Oxygen, Dissolved	6.63				mg/L			06/26/18 09:30	1

Client Sample Results

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-3A

Date Collected: 06/26/18 07:15

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-7

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/29/18 08:58	06/30/18 00:31	1
Calcium	51.2		0.50		mg/L		06/29/18 08:58	06/30/18 00:31	1
Iron	1.1		0.050		mg/L		06/29/18 08:58	06/30/18 00:31	1
Lead	ND		0.010		mg/L		06/29/18 08:58	06/30/18 00:31	1
Magnesium	10.6		0.20		mg/L		06/29/18 08:58	06/30/18 00:31	1
Manganese	0.65		0.0030		mg/L		06/29/18 08:58	06/30/18 00:31	1
Potassium	1.4		0.50		mg/L		06/29/18 08:58	06/30/18 00:31	1
Sodium	5.5		1.0		mg/L		06/29/18 08:58	06/30/18 00:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	172		0.50		mg/L			07/10/18 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/30/18 03:40	1
Alkalinity, Total	175		20.0		mg/L			07/05/18 13:59	2
Ammonia	ND		0.020		mg/L			06/27/18 11:03	1
Total Kjeldahl Nitrogen	0.42		0.20		mg/L		06/29/18 14:38	07/02/18 08:31	1
Nitrate as N	ND		0.050		mg/L			06/27/18 15:10	1
Chemical Oxygen Demand	47.8		10.0		mg/L			07/02/18 16:10	1
Phenolics, Total Recoverable	ND		0.010		mg/L		06/29/18 14:11	07/05/18 16:20	1
Sulfate	ND		5.0		mg/L			07/11/18 13:16	1
Total Dissolved Solids	206		10.0		mg/L			06/28/18 14:49	1
Chloride	5.8		1.0		mg/L			07/05/18 12:26	1
Biochemical Oxygen Demand	ND		2.0		mg/L			06/27/18 07:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.31				SU			06/26/18 07:15	1
Field Conductivity	383				umhos/cm			06/26/18 07:15	1
Field Temperature	5.25				Degrees C			06/26/18 07:15	1
Field Turbidity	16.8				NTU			06/26/18 07:15	1
Field EH/ORP	127.2				millivolts			06/26/18 07:15	1
Oxygen, Dissolved	7.29				mg/L			06/26/18 07:15	1

Client Sample Results

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-3B

Date Collected: 06/26/18 07:00

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-8

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/29/18 08:58	06/30/18 00:46	1
Calcium	51.0		0.50		mg/L		06/29/18 08:58	06/30/18 00:46	1
Iron	1.5		0.050		mg/L		06/29/18 08:58	06/30/18 00:46	1
Lead	ND		0.010		mg/L		06/29/18 08:58	06/30/18 00:46	1
Magnesium	15.6		0.20		mg/L		06/29/18 08:58	06/30/18 00:46	1
Manganese	0.59		0.0030		mg/L		06/29/18 08:58	06/30/18 00:46	1
Potassium	1.3		0.50		mg/L		06/29/18 08:58	06/30/18 00:46	1
Sodium	8.0		1.0		mg/L		06/29/18 08:58	06/30/18 00:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	191		0.50		mg/L			07/10/18 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/30/18 03:54	1
Alkalinity, Total	170		20.0		mg/L			07/05/18 14:21	2
Ammonia	ND		0.020		mg/L			06/27/18 11:04	1
Total Kjeldahl Nitrogen	0.29		0.20		mg/L		06/29/18 14:44	07/02/18 08:40	1
Nitrate as N	ND		0.050		mg/L			06/27/18 15:11	1
Chemical Oxygen Demand	39.8		10.0		mg/L			07/02/18 16:10	1
Phenolics, Total Recoverable	ND		0.010		mg/L		06/29/18 14:11	07/05/18 16:20	1
Sulfate	12.3		5.0		mg/L			07/11/18 13:16	1
Total Dissolved Solids	224		10.0		mg/L			06/28/18 14:49	1
Chloride	23.5		1.0		mg/L			07/05/18 12:26	1
Biochemical Oxygen Demand	ND		2.0		mg/L			06/27/18 07:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.44				SU			06/26/18 07:00	1
Field Conductivity	474				umhos/cm			06/26/18 07:00	1
Field Temperature	6.77				Degrees C			06/26/18 07:00	1
Field Turbidity	21.4				NTU			06/26/18 07:00	1
Field EH/ORP	135.9				millivolts			06/26/18 07:00	1
Oxygen, Dissolved	6.91				mg/L			06/26/18 07:00	1

Client Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-4A

Date Collected: 06/26/18 09:00

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-9

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/29/18 08:58	06/30/18 00:50	1
Calcium	123		0.50		mg/L		06/29/18 08:58	06/30/18 00:50	1
Iron	0.62		0.050		mg/L		06/29/18 08:58	06/30/18 00:50	1
Lead	ND		0.010		mg/L		06/29/18 08:58	06/30/18 00:50	1
Magnesium	27.8		0.20		mg/L		06/29/18 08:58	06/30/18 00:50	1
Manganese	2.9		0.0030		mg/L		06/29/18 08:58	06/30/18 00:50	1
Potassium	1.4		0.50		mg/L		06/29/18 08:58	06/30/18 00:50	1
Sodium	16.1		1.0		mg/L		06/29/18 08:58	06/30/18 00:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	421		0.50		mg/L			07/10/18 12:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/30/18 04:09	1
Alkalinity, Total	428		50.0		mg/L			07/05/18 14:00	5
Ammonia	ND	F1	0.020		mg/L			06/27/18 11:08	1
Total Kjeldahl Nitrogen	ND		0.20		mg/L		06/29/18 14:44	07/02/18 08:40	1
Nitrate as N	ND		0.050		mg/L			06/27/18 15:12	1
Chemical Oxygen Demand	17.9		10.0		mg/L			07/02/18 16:10	1
Phenolics, Total Recoverable	ND	F1	0.010		mg/L		06/29/18 14:11	07/05/18 16:20	1
Sulfate	7.2		5.0		mg/L			07/11/18 13:19	1
Total Dissolved Solids	443		10.0		mg/L			06/29/18 00:28	1
Chloride	15.5		1.0		mg/L			07/05/18 12:26	1
Biochemical Oxygen Demand	ND		2.0		mg/L			06/27/18 07:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.26				SU			06/26/18 09:00	1
Field Conductivity	826				umhos/cm			06/26/18 09:00	1
Field Temperature	3.96				Degrees C			06/26/18 09:00	1
Field Turbidity	11.8				NTU			06/26/18 09:00	1
Field EH/ORP	94.1				millivolts			06/26/18 09:00	1
Oxygen, Dissolved	6.51				mg/L			06/26/18 09:00	1

Client Sample Results

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-5A

Lab Sample ID: 480-138030-10

Matrix: Water

Date Collected: 06/26/18 08:00
 Date Received: 06/27/18 01:30

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/29/18 08:58	06/30/18 00:54	1
Calcium	34.5		0.50		mg/L		06/29/18 08:58	06/30/18 00:54	1
Iron	0.57		0.050		mg/L		06/29/18 08:58	06/30/18 00:54	1
Lead	ND		0.010		mg/L		06/29/18 08:58	06/30/18 00:54	1
Magnesium	9.8		0.20		mg/L		06/29/18 08:58	06/30/18 00:54	1
Manganese	0.14		0.0030		mg/L		06/29/18 08:58	06/30/18 00:54	1
Potassium	1.3		0.50		mg/L		06/29/18 08:58	06/30/18 00:54	1
Sodium	10.2		1.0		mg/L		06/29/18 08:58	06/30/18 00:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	126		0.50		mg/L			07/10/18 12:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/30/18 04:23	1
Alkalinity, Total	118		20.0		mg/L			07/05/18 14:21	2
Ammonia	ND		0.020		mg/L			06/27/18 11:10	1
Total Kjeldahl Nitrogen	0.73		0.20		mg/L		06/29/18 14:44	07/02/18 08:40	1
Nitrate as N	0.11		0.050		mg/L			06/27/18 18:32	1
Chemical Oxygen Demand	30.9		10.0		mg/L			07/02/18 16:10	1
Phenolics, Total Recoverable	ND		0.010		mg/L		06/29/18 14:11	07/05/18 16:20	1
Sulfate	13.3		5.0		mg/L			07/11/18 13:19	1
Total Dissolved Solids	115		10.0		mg/L			06/29/18 00:28	1
Chloride	6.9		1.0		mg/L			07/05/18 12:27	1
Biochemical Oxygen Demand	3.1		2.0		mg/L			06/27/18 07:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	8.09				SU			06/26/18 08:00	1
Field Conductivity	300				umhos/cm			06/26/18 08:00	1
Field Temperature	4.91				Degrees C			06/26/18 08:00	1
Field Turbidity	13.5				NTU			06/26/18 08:00	1
Field EH/ORP	27.0				millivolts			06/26/18 08:00	1
Oxygen, Dissolved	5.69				mg/L			06/26/18 08:00	1

Client Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-6A

Date Collected: 06/26/18 07:30

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-11

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/29/18 08:58	06/30/18 00:58	1
Calcium	57.8		0.50		mg/L		06/29/18 08:58	06/30/18 00:58	1
Iron	32.7		0.050		mg/L		06/29/18 08:58	06/30/18 00:58	1
Lead	ND		0.010		mg/L		06/29/18 08:58	06/30/18 00:58	1
Magnesium	16.2		0.20		mg/L		06/29/18 08:58	06/30/18 00:58	1
Manganese	4.4		0.0030		mg/L		06/29/18 08:58	06/30/18 00:58	1
Potassium	5.8		0.50		mg/L		06/29/18 08:58	06/30/18 00:58	1
Sodium	20.6		1.0		mg/L		06/29/18 08:58	06/30/18 00:58	1

Method: 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		07/02/18 08:25	07/02/18 15:50	1
Calcium	59.3		0.50		mg/L		07/02/18 08:25	07/02/18 15:50	1
Iron	ND		0.050		mg/L		07/02/18 08:25	07/02/18 15:50	1
Lead	ND		0.010		mg/L		07/02/18 08:25	07/02/18 15:50	1
Magnesium	10.0		0.20		mg/L		07/02/18 08:25	07/02/18 15:50	1
Manganese	2.0		0.0030		mg/L		07/02/18 08:25	07/02/18 15:50	1
Potassium	1.8		0.50		mg/L		07/02/18 08:25	07/02/18 15:50	1
Sodium	21.2		1.0		mg/L		07/02/18 08:25	07/02/18 15:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	211		0.50		mg/L			07/10/18 12:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/30/18 04:38	1
Alkalinity, Total	151		20.0		mg/L			07/05/18 14:02	2
Ammonia	0.11		0.020		mg/L			06/27/18 11:11	1
Total Kjeldahl Nitrogen	1.4		0.20		mg/L		06/29/18 14:44	07/02/18 08:40	1
Nitrate as N	0.064		0.050		mg/L			06/27/18 18:33	1
Chemical Oxygen Demand	35.4		10.0		mg/L			07/02/18 16:10	1
Phenolics, Total Recoverable	ND		0.010		mg/L		06/29/18 14:11	07/05/18 16:20	1
Sulfate	ND		5.0		mg/L			07/11/18 13:08	1
Total Dissolved Solids	243		10.0		mg/L			06/29/18 00:28	1
Chloride	47.1		1.0		mg/L			07/05/18 12:27	1
Biochemical Oxygen Demand	7.3		3.0		mg/L			06/27/18 07:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.79				SU			06/26/18 07:30	1
Field Conductivity	513				umhos/cm			06/26/18 07:30	1
Field Temperature	3.14				Degrees C			06/26/18 07:30	1
Field Turbidity	819				NTU			06/26/18 07:30	1
Field EH/ORP	70.7				millivolts			06/26/18 07:30	1
Oxygen, Dissolved	4.78				mg/L			06/26/18 07:30	1

TestAmerica Buffalo

Client Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-6B

Lab Sample ID: 480-138030-12

Matrix: Water

Date Collected: 06/26/18 07:45

Date Received: 06/27/18 01:30

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/29/18 08:58	06/30/18 01:01	1
Calcium	42.1		0.50		mg/L		06/29/18 08:58	06/30/18 01:01	1
Iron	0.30		0.050		mg/L		06/29/18 08:58	06/30/18 01:01	1
Lead	ND		0.010		mg/L		06/29/18 08:58	06/30/18 01:01	1
Magnesium	11.8		0.20		mg/L		06/29/18 08:58	06/30/18 01:01	1
Manganese	0.18		0.0030		mg/L		06/29/18 08:58	06/30/18 01:01	1
Potassium	1.1		0.50		mg/L		06/29/18 08:58	06/30/18 01:01	1
Sodium	14.6		1.0		mg/L		06/29/18 08:58	06/30/18 01:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	154		0.50		mg/L			07/10/18 12:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/30/18 04:52	1
Alkalinity, Total	157		20.0		mg/L			07/05/18 14:02	2
Ammonia	ND		0.020		mg/L			06/27/18 11:12	1
Total Kjeldahl Nitrogen	ND		0.20		mg/L		06/29/18 14:44	07/02/18 08:40	1
Nitrate as N	ND		0.050		mg/L			06/27/18 15:15	1
Chemical Oxygen Demand	ND		10.0		mg/L			07/02/18 16:10	1
Phenolics, Total Recoverable	ND		0.010		mg/L		06/29/18 14:11	07/05/18 16:22	1
Sulfate	11.8		5.0		mg/L			07/11/18 13:08	1
Total Dissolved Solids	180		10.0		mg/L			06/29/18 00:28	1
Chloride	21.3		1.0		mg/L			07/05/18 12:27	1
Biochemical Oxygen Demand	ND		2.0		mg/L			06/27/18 07:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	7.27				SU			06/26/18 07:45	1
Field Conductivity	406				umhos/cm			06/26/18 07:45	1
Field Temperature	4.28				Degrees C			06/26/18 07:45	1
Field Turbidity	8.78				NTU			06/26/18 07:45	1
Field EH/ORP	200.9				millivolts			06/26/18 07:45	1
Oxygen, Dissolved	7.97				mg/L			06/26/18 07:45	1

Client Sample Results

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-7A

Date Collected: 06/26/18 11:00

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-13

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/29/18 08:58	06/30/18 01:05	1
Calcium	112		0.50		mg/L		06/29/18 08:58	06/30/18 01:05	1
Iron	1.4		0.050		mg/L		06/29/18 08:58	06/30/18 01:05	1
Lead	ND		0.010		mg/L		06/29/18 08:58	06/30/18 01:05	1
Magnesium	26.4		0.20		mg/L		06/29/18 08:58	06/30/18 01:05	1
Manganese	6.4		0.0030		mg/L		06/29/18 08:58	06/30/18 01:05	1
Potassium	2.1		0.50		mg/L		06/29/18 08:58	06/30/18 01:05	1
Sodium	57.6		1.0		mg/L		06/29/18 08:58	06/30/18 01:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	390		0.50		mg/L			07/10/18 12:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	0.20		0.20		mg/L			06/30/18 06:05	1
Alkalinity, Total	478		50.0		mg/L			07/05/18 14:02	5
Ammonia	0.076		0.020		mg/L			06/27/18 11:13	1
Total Kjeldahl Nitrogen	0.94		0.20		mg/L		07/03/18 11:41	07/05/18 07:44	1
Nitrate as N	ND		0.050		mg/L			06/27/18 15:17	1
Chemical Oxygen Demand	26.2		10.0		mg/L			07/02/18 16:10	1
Phenolics, Total Recoverable	ND		0.010		mg/L		06/29/18 14:11	07/05/18 16:23	1
Sulfate	ND		5.0		mg/L			07/11/18 13:08	1
Total Dissolved Solids	544		10.0		mg/L			06/29/18 00:28	1
Chloride	39.3		1.0		mg/L			07/05/18 12:41	1
Biochemical Oxygen Demand	ND		2.0		mg/L			06/27/18 07:19	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.80				SU			06/26/18 11:00	1
Field Conductivity	969				umhos/cm			06/26/18 11:00	1
Field Temperature	6.45				Degrees C			06/26/18 11:00	1
Field Turbidity	6.02				NTU			06/26/18 11:00	1
Field EH/ORP	105.3				millivolts			06/26/18 11:00	1
Oxygen, Dissolved	6.50				mg/L			06/26/18 11:00	1

QC Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-422181/1-A

Matrix: Water

Analysis Batch: 422611

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422181

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0020		mg/L		06/29/18 08:58	06/29/18 23:16	1
Calcium	ND		0.50		mg/L		06/29/18 08:58	06/29/18 23:16	1
Iron	ND		0.050		mg/L		06/29/18 08:58	06/29/18 23:16	1
Lead	ND		0.010		mg/L		06/29/18 08:58	06/29/18 23:16	1
Magnesium	ND		0.20		mg/L		06/29/18 08:58	06/29/18 23:16	1
Manganese	ND		0.0030		mg/L		06/29/18 08:58	06/29/18 23:16	1
Potassium	ND		0.50		mg/L		06/29/18 08:58	06/29/18 23:16	1
Sodium	ND		1.0		mg/L		06/29/18 08:58	06/29/18 23:16	1

Lab Sample ID: LCS 480-422181/2-A

Matrix: Water

Analysis Batch: 422611

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422181

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	
Cadmium	0.200	0.214		mg/L		107	80 - 120	
Calcium	10.0	10.20		mg/L		102	80 - 120	
Iron	10.0	9.99		mg/L		100	80 - 120	
Lead	0.200	0.212		mg/L		106	80 - 120	
Magnesium	10.0	10.34		mg/L		103	80 - 120	
Manganese	0.200	0.203		mg/L		102	80 - 120	
Potassium	10.0	9.38		mg/L		94	80 - 120	
Sodium	10.0	9.31		mg/L		93	80 - 120	

Lab Sample ID: LCSD 480-422181/23-A

Matrix: Water

Analysis Batch: 422611

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 422181

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cadmium	0.200	0.206		mg/L		103	80 - 120	4	20
Calcium	10.0	9.90		mg/L		99	80 - 120	3	20
Iron	10.0	9.75		mg/L		98	80 - 120	2	20
Lead	0.200	0.207		mg/L		103	80 - 120	3	20
Magnesium	10.0	10.05		mg/L		101	80 - 120	3	20
Manganese	0.200	0.199		mg/L		99	80 - 120	2	20
Potassium	10.0	9.17		mg/L		92	80 - 120	2	20
Sodium	10.0	9.20		mg/L		92	80 - 120	1	20

Lab Sample ID: 480-138030-3 MS

Matrix: Water

Analysis Batch: 422611

Client Sample ID: MW-1A

Prep Type: Total/NA

Prep Batch: 422181

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Cadmium	ND		0.200	0.216		mg/L		108	75 - 125
Calcium	49.8		10.0	59.55	4	mg/L		98	75 - 125
Iron	1.4		10.0	11.25		mg/L		98	75 - 125
Lead	ND		0.200	0.215		mg/L		108	75 - 125
Magnesium	11.8		10.0	21.94		mg/L		102	75 - 125
Manganese	0.15		0.200	0.349		mg/L		98	75 - 125
Potassium	1.4		10.0	10.98		mg/L		96	75 - 125

TestAmerica Buffalo

QC Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

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

Lab Sample ID: 480-138030-3 MS

Matrix: Water

Analysis Batch: 422611

Analyte	Sample	Sample	Spike	MS	MS	Client Sample ID: MW-1A		
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec.
Sodium	11.9		10.0	21.49		mg/L	95	75 - 125

Lab Sample ID: 480-138030-3 MSD

Matrix: Water

Analysis Batch: 422611

Analyte	Sample	Sample	Spike	MSD	MSD	Client Sample ID: MW-1A		
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec.
Cadmium	ND		0.200	0.215		mg/L	108	75 - 125
Calcium	49.8		10.0	60.32	4	mg/L	105	75 - 125
Iron	1.4		10.0	11.26		mg/L	99	75 - 125
Lead	ND		0.200	0.216		mg/L	108	75 - 125
Magnesium	11.8		10.0	22.28		mg/L	105	75 - 125
Manganese	0.15		0.200	0.353		mg/L	100	75 - 125
Potassium	1.4		10.0	10.72		mg/L	93	75 - 125
Sodium	11.9		10.0	21.32		mg/L	94	75 - 125

Lab Sample ID: MB 480-422294/1-C

Matrix: Water

Analysis Batch: 422780

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Cadmium	ND		0.0020		mg/L	07/02/18 08:25	07/02/18 14:52		1
Calcium	ND		0.50		mg/L	07/02/18 08:25	07/02/18 14:52		1
Iron	ND		0.050		mg/L	07/02/18 08:25	07/02/18 14:52		1
Lead	ND		0.010		mg/L	07/02/18 08:25	07/02/18 14:52		1
Magnesium	ND		0.20		mg/L	07/02/18 08:25	07/02/18 14:52		1
Manganese	ND		0.0030		mg/L	07/02/18 08:25	07/02/18 14:52		1
Potassium	ND		0.50		mg/L	07/02/18 08:25	07/02/18 14:52		1
Sodium	ND		1.0		mg/L	07/02/18 08:25	07/02/18 14:52		1

Lab Sample ID: LCS 480-422294/2-C

Matrix: Water

Analysis Batch: 422780

Analyte	Spike	LCS	LCS	Client Sample ID: Lab Control Sample			
	Added	Result	Qualifier	Unit	D	%Rec.	Limits
Cadmium	0.200	0.205		mg/L	103	80 - 120	
Calcium	10.0	10.0		mg/L	100	80 - 120	
Iron	10.0	10.10		mg/L	101	80 - 120	
Lead	0.200	0.208		mg/L	104	80 - 120	
Magnesium	10.0	10.07		mg/L	101	80 - 120	
Manganese	0.200	0.202		mg/L	101	80 - 120	
Potassium	10.0	9.79		mg/L	98	80 - 120	
Sodium	10.0	9.77		mg/L	98	80 - 120	

TestAmerica Buffalo

QC Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-422432/28

Matrix: Water

Analysis Batch: 422432

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/30/18 03:25	1

Lab Sample ID: MB 480-422432/4

Matrix: Water

Analysis Batch: 422432

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromide	ND		0.20		mg/L			06/29/18 21:35	1

Lab Sample ID: LCS 480-422432/27

Matrix: Water

Analysis Batch: 422432

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Bromide	5.00	5.08		mg/L		102	90 - 110

Lab Sample ID: LCS 480-422432/3

Matrix: Water

Analysis Batch: 422432

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Bromide	5.00	4.96		mg/L		99	90 - 110

Lab Sample ID: 480-138030-6 MS

Matrix: Water

Analysis Batch: 422432

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Bromide	0.73		5.00	5.56		mg/L		97	80 - 120

Lab Sample ID: 480-138030-12 MS

Matrix: Water

Analysis Batch: 422432

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Bromide	ND		5.00	4.34		mg/L		87	80 - 120

Lab Sample ID: 480-138030-12 MSD

Matrix: Water

Analysis Batch: 422432

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Bromide	ND		5.00	4.41		mg/L		88	80 - 120	20

TestAmerica Buffalo

QC Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Method: 310.2 - Alkalinity

Lab Sample ID: MB 480-423157/50

Matrix: Water

Analysis Batch: 423157

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			07/05/18 13:31	1

Lab Sample ID: MB 480-423157/62

Matrix: Water

Analysis Batch: 423157

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			07/05/18 14:00	1

Lab Sample ID: MB 480-423157/73

Matrix: Water

Analysis Batch: 423157

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0		mg/L			07/05/18 14:19	1

Lab Sample ID: LCS 480-423157/51

Matrix: Water

Analysis Batch: 423157

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Alkalinity, Total	50.0	48.94		mg/L		98	90 - 110

Lab Sample ID: LCS 480-423157/63

Matrix: Water

Analysis Batch: 423157

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Alkalinity, Total	50.0	46.95		mg/L		94	90 - 110

Lab Sample ID: LCS 480-423157/74

Matrix: Water

Analysis Batch: 423157

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Alkalinity, Total	50.0	47.71		mg/L		95	90 - 110

Lab Sample ID: 480-138030-6 MS

Matrix: Water

Analysis Batch: 423157

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Alkalinity, Total	619		20.0	611.7	4	mg/L		-34	60 - 140

Lab Sample ID: 480-138030-6 MSD

Matrix: Water

Analysis Batch: 423157

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	Limit
Alkalinity, Total	619		20.0	622.3	4	mg/L		19	60 - 140	20

Client Sample ID: MW-2B

Prep Type: Total/NA

Client Sample ID: MW-2B

Prep Type: Total/NA

QC Sample Results

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Lab Sample ID: 480-138030-7 MS
Matrix: Water
Analysis Batch: 423157

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	175		20.0	175.3	4	mg/L	3		60 - 140

Lab Sample ID: 480-138030-7 MSD
Matrix: Water
Analysis Batch: 423157

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity, Total	175		20.0	179.6	4	mg/L	25		60 - 140	2	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-421870/123
Matrix: Water
Analysis Batch: 421870

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020		mg/L			06/27/18 12:10	1

Lab Sample ID: MB 480-421870/27
Matrix: Water
Analysis Batch: 421870

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020		mg/L			06/27/18 10:46	1

Lab Sample ID: MB 480-421870/51
Matrix: Water
Analysis Batch: 421870

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.020		mg/L			06/27/18 11:07	1

Lab Sample ID: LCS 480-421870/124
Matrix: Water
Analysis Batch: 421870

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

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

Lab Sample ID: LCS 480-421870/28
Matrix: Water
Analysis Batch: 421870

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

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

QC Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 480-421870/52

Matrix: Water

Analysis Batch: 421870

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

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

Lab Sample ID: 480-138030-1 MS

Matrix: Water

Analysis Batch: 421870

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
Ammonia	ND	F1	0.200	0.166	F1	mg/L	83		Limits
									90 - 110

Lab Sample ID: 480-138030-9 MS

Matrix: Water

Analysis Batch: 421870

Client Sample ID: MW-4A
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
Ammonia	ND	F1	0.200	0.128	F1	mg/L	64		Limits
									90 - 110

Lab Sample ID: 480-138030-1 DU

Matrix: Water

Analysis Batch: 421870

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

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

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 480-422362/1-A

Matrix: Water

Analysis Batch: 422649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 422362

Analyte	MB Result	MB Qualifier		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND			0.20		mg/L	06/29/18 14:38	07/02/18 06:47		1

Lab Sample ID: LCS 480-422362/2-A

Matrix: Water

Analysis Batch: 422649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 422362

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Total Kjeldahl Nitrogen	2.50	2.69		mg/L	108		Limits
							90 - 110

Lab Sample ID: 480-138030-2 MS

Matrix: Water

Analysis Batch: 422649

Client Sample ID: CD-1RA
Prep Type: Total/NA
Prep Batch: 422362

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
Total Kjeldahl Nitrogen	0.24		1.00	1.23		mg/L	99		Limits
									90 - 110

TestAmerica Buffalo

QC Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Method: 351.2 - Nitrogen, Total Kjeldahl (Continued)

Lab Sample ID: MB 480-422365/1-A

Matrix: Water

Analysis Batch: 422649

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		0.20		mg/L		06/29/18 14:44	07/02/18 06:47	1

Lab Sample ID: LCS 480-422365/2-A

Matrix: Water

Analysis Batch: 422649

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Kjeldahl Nitrogen	2.50	2.60		mg/L		104	90 - 110

Lab Sample ID: 480-138030-8 MS

Matrix: Water

Analysis Batch: 422649

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Total Kjeldahl Nitrogen	0.29		1.00	1.34		mg/L		105	90 - 110

Lab Sample ID: MB 480-422635/1-A

Matrix: Water

Analysis Batch: 422857

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		0.20		mg/L		07/02/18 09:59	07/03/18 09:00	1

Lab Sample ID: LCS 480-422635/2-A

Matrix: Water

Analysis Batch: 422857

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Kjeldahl Nitrogen	2.50	2.55		mg/L		102	90 - 110

Lab Sample ID: MB 480-422819/1-A

Matrix: Water

Analysis Batch: 423095

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		0.20		mg/L		07/03/18 11:41	07/05/18 06:57	1

Lab Sample ID: LCS 480-422819/2-A

Matrix: Water

Analysis Batch: 423095

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Kjeldahl Nitrogen	2.50	2.43		mg/L		97	90 - 110

TestAmerica Buffalo

QC Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Method: 410.4 - COD

Lab Sample ID: MB 480-422710/27

Matrix: Water

Analysis Batch: 422710

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			07/02/18 16:10	1

Lab Sample ID: MB 480-422710/3

Matrix: Water

Analysis Batch: 422710

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		10.0		mg/L			07/02/18 16:10	1

Lab Sample ID: LCS 480-422710/28

Matrix: Water

Analysis Batch: 422710

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec. Limits
Chemical Oxygen Demand	25.0	25.61		mg/L	102	90 - 110

Lab Sample ID: LCS 480-422710/4

Matrix: Water

Analysis Batch: 422710

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec. Limits
Chemical Oxygen Demand	25.0	27.09		mg/L	108	90 - 110

Lab Sample ID: 480-138030-1 MS

Matrix: Water

Analysis Batch: 422710

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec. Limits
Chemical Oxygen Demand	22.1		50.0	67.82		mg/L	92	75 - 125

Lab Sample ID: 480-138030-3 MS

Matrix: Water

Analysis Batch: 422710

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec. Limits
Chemical Oxygen Demand	32.1		50.0	93.21		mg/L	122	75 - 125

Lab Sample ID: 480-138030-8 MS

Matrix: Water

Analysis Batch: 422710

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec. Limits
Chemical Oxygen Demand	39.8		50.0	92.03		mg/L	105	75 - 125

Lab Sample ID: 480-138030-2 DU

Matrix: Water

Analysis Batch: 422710

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chemical Oxygen Demand	28.0		28.56		mg/L		2	20

TestAmerica Buffalo

QC Sample Results

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Method: 420.1 - Phenolics, Total Recoverable

Lab Sample ID: MB 480-422349/1-A

Matrix: Water

Analysis Batch: 423202

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 422349

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenolics, Total Recoverable	ND		0.010		mg/L		06/29/18 14:11	07/05/18 16:13	1

Lab Sample ID: LCS 480-422349/2-A

Matrix: Water

Analysis Batch: 423202

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 422349

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Phenolics, Total Recoverable	0.100	0.0958		mg/L		96	90 - 110

Lab Sample ID: 480-138030-2 MS

Matrix: Water

Analysis Batch: 423202

Client Sample ID: CD-1RA

Prep Type: Total/NA

Prep Batch: 422349

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Phenolics, Total Recoverable	ND		0.100	0.0963		mg/L		90	90 - 110

Lab Sample ID: 480-138030-9 MS

Matrix: Water

Analysis Batch: 423202

Client Sample ID: MW-4A

Prep Type: Total/NA

Prep Batch: 422349

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Phenolics, Total Recoverable	ND	F1	0.100	0.0492	F1	mg/L		49	90 - 110

Lab Sample ID: 480-138030-6 DU

Matrix: Water

Analysis Batch: 423202

Client Sample ID: MW-2B

Prep Type: Total/NA

Prep Batch: 422349

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Phenolics, Total Recoverable	ND		ND		mg/L		NC	20

Method: 9038 - Sulfate, Turbidimetric

Lab Sample ID: MB 480-423995/130

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 423995

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			07/11/18 13:13	1

Lab Sample ID: MB 480-423995/138

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 423995

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			07/11/18 13:16	1

TestAmerica Buffalo

QC Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Method: 9038 - Sulfate, Turbidimetric (Continued)

Lab Sample ID: MB 480-423995/98

Matrix: Water

Analysis Batch: 423995

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0		mg/L			07/11/18 13:02	1

Lab Sample ID: LCS 480-423995/129

Matrix: Water

Analysis Batch: 423995

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Sulfate	30.0	29.66		mg/L		99	90 - 110

Lab Sample ID: LCS 480-423995/137

Matrix: Water

Analysis Batch: 423995

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Sulfate	30.0	29.59		mg/L		99	90 - 110

Lab Sample ID: LCS 480-423995/97

Matrix: Water

Analysis Batch: 423995

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Sulfate	30.0	29.81		mg/L		99	90 - 110

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

Lab Sample ID: MB 480-422149/1

Matrix: Water

Analysis Batch: 422149

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10.0		mg/L			06/28/18 14:49	1

Lab Sample ID: LCS 480-422149/2

Matrix: Water

Analysis Batch: 422149

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	513	489.0		mg/L		95	85 - 115

Lab Sample ID: 480-138030-8 DU

Matrix: Water

Analysis Batch: 422149

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	224		234.0		mg/L		4	10

TestAmerica Buffalo

QC Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

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

Lab Sample ID: MB 480-422235/1

Matrix: Water

Analysis Batch: 422235

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10.0		mg/L			06/29/18 00:28	1

Lab Sample ID: LCS 480-422235/2

Matrix: Water

Analysis Batch: 422235

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	513	508.0		mg/L		99	85 - 115

Lab Sample ID: 480-138030-9 DU

Matrix: Water

Analysis Batch: 422235

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	443		455.0		mg/L		3	10

Lab Sample ID: MB 480-423132/1

Matrix: Water

Analysis Batch: 423132

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	ND		10.0		mg/L			07/05/18 15:40	1

Lab Sample ID: LCS 480-423132/2

Matrix: Water

Analysis Batch: 423132

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Total Dissolved Solids	506	489.0		mg/L		97	85 - 115

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 480-423158/107

Matrix: Water

Analysis Batch: 423158

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			07/05/18 14:11	1

Lab Sample ID: MB 480-423158/12

Matrix: Water

Analysis Batch: 423158

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			07/05/18 12:09	1

TestAmerica Buffalo

QC Sample Results

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

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

Lab Sample ID: MB 480-423158/21

Matrix: Water

Analysis Batch: 423158

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			07/05/18 12:26	1

Lab Sample ID: MB 480-423158/33

Matrix: Water

Analysis Batch: 423158

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			07/05/18 12:27	1

Lab Sample ID: MB 480-423158/80

Matrix: Water

Analysis Batch: 423158

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0		mg/L			07/05/18 13:20	1

Lab Sample ID: LCS 480-423158/108

Matrix: Water

Analysis Batch: 423158

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec. Limits
Chloride	25.0	25.58		mg/L	102	90 - 110

Lab Sample ID: LCS 480-423158/13

Matrix: Water

Analysis Batch: 423158

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec. Limits
Chloride	25.0	25.20		mg/L	101	90 - 110

Lab Sample ID: LCS 480-423158/22

Matrix: Water

Analysis Batch: 423158

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec. Limits
Chloride	25.0	25.28		mg/L	101	90 - 110

Lab Sample ID: LCS 480-423158/34

Matrix: Water

Analysis Batch: 423158

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec. Limits
Chloride	25.0	25.48		mg/L	102	90 - 110

Lab Sample ID: LCS 480-423158/81

Matrix: Water

Analysis Batch: 423158

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec. Limits
Chloride	25.0	25.48		mg/L	102	90 - 110

TestAmerica Buffalo

QC Sample Results

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Lab Sample ID: 480-138030-6 MS
Matrix: Water
Analysis Batch: 423158

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	95.2		20.0	111.2	4	mg/L		80	74 - 131

Lab Sample ID: 480-138030-6 MSD
Matrix: Water
Analysis Batch: 423158

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	95.2		20.0	112.8	4	mg/L		88	74 - 131	1	20

Lab Sample ID: 480-138030-7 MS
Matrix: Water
Analysis Batch: 423158

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.8		20.0	26.30		mg/L		102	74 - 131

Lab Sample ID: 480-138030-7 MSD
Matrix: Water
Analysis Batch: 423158

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	5.8		20.0	26.41		mg/L		103	74 - 131	0	20

Method: SM 5210B - BOD, 5-Day

Lab Sample ID: USB 480-421853/1
Matrix: Water
Analysis Batch: 421853

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0		mg/L			06/27/18 07:19	1

Lab Sample ID: LCS 480-421853/2
Matrix: Water
Analysis Batch: 421853

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biochemical Oxygen Demand		198	183.1	mg/L		92	85 - 115

QC Association Summary

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Metals

Prep Batch: 422181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	3005A	5
480-138030-2	CD-1RA	Total/NA	Water	3005A	5
480-138030-3	MW-1A	Total/NA	Water	3005A	5
480-138030-4	MW-1B	Total/NA	Water	3005A	5
480-138030-5	MW-2A	Total/NA	Water	3005A	5
480-138030-6	MW-2B	Total/NA	Water	3005A	5
480-138030-7	MW-3A	Total/NA	Water	3005A	5
480-138030-8	MW-3B	Total/NA	Water	3005A	5
480-138030-9	MW-4A	Total/NA	Water	3005A	5
480-138030-10	MW-5A	Total/NA	Water	3005A	5
480-138030-11	MW-6A	Total/NA	Water	3005A	5
480-138030-12	MW-6B	Total/NA	Water	3005A	5
480-138030-13	MW-7A	Total/NA	Water	3005A	5
MB 480-422181/1-A	Method Blank	Total/NA	Water	3005A	11
LCS 480-422181/2-A	Lab Control Sample	Total/NA	Water	3005A	12
LCSD 480-422181/23-A	Lab Control Sample Dup	Total/NA	Water	3005A	12
480-138030-3 MS	MW-1A	Total/NA	Water	3005A	13
480-138030-3 MSD	MW-1A	Total/NA	Water	3005A	13

Filtration Batch: 422294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-2	CD-1RA	Dissolved	Water	FILTRATION	14
480-138030-5	MW-2A	Dissolved	Water	FILTRATION	14
480-138030-11	MW-6A	Dissolved	Water	FILTRATION	14
MB 480-422294/1-C	Method Blank	Dissolved	Water	FILTRATION	15
LCS 480-422294/2-C	Lab Control Sample	Dissolved	Water	FILTRATION	15

Prep Batch: 422487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-2	CD-1RA	Dissolved	Water	3005A	422294
480-138030-5	MW-2A	Dissolved	Water	3005A	422294
480-138030-11	MW-6A	Dissolved	Water	3005A	422294
MB 480-422294/1-C	Method Blank	Dissolved	Water	3005A	422294
LCS 480-422294/2-C	Lab Control Sample	Dissolved	Water	3005A	422294

Analysis Batch: 422611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	6010C	422181
480-138030-2	CD-1RA	Total/NA	Water	6010C	422181
480-138030-3	MW-1A	Total/NA	Water	6010C	422181
480-138030-4	MW-1B	Total/NA	Water	6010C	422181
480-138030-5	MW-2A	Total/NA	Water	6010C	422181
480-138030-6	MW-2B	Total/NA	Water	6010C	422181
480-138030-7	MW-3A	Total/NA	Water	6010C	422181
480-138030-8	MW-3B	Total/NA	Water	6010C	422181
480-138030-9	MW-4A	Total/NA	Water	6010C	422181
480-138030-10	MW-5A	Total/NA	Water	6010C	422181
480-138030-11	MW-6A	Total/NA	Water	6010C	422181
480-138030-12	MW-6B	Total/NA	Water	6010C	422181
480-138030-13	MW-7A	Total/NA	Water	6010C	422181
MB 480-422181/1-A	Method Blank	Total/NA	Water	6010C	422181

TestAmerica Buffalo

QC Association Summary

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Metals (Continued)

Analysis Batch: 422611 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-422181/2-A	Lab Control Sample	Total/NA	Water	6010C	422181
LCSD 480-422181/23-A	Lab Control Sample Dup	Total/NA	Water	6010C	422181
480-138030-3 MS	MW-1A	Total/NA	Water	6010C	422181
480-138030-3 MSD	MW-1A	Total/NA	Water	6010C	422181

Analysis Batch: 422780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-2	CD-1RA	Dissolved	Water	6010C	422487
480-138030-5	MW-2A	Dissolved	Water	6010C	422487
480-138030-11	MW-6A	Dissolved	Water	6010C	422487
MB 480-422294/1-C	Method Blank	Dissolved	Water	6010C	422487
LCS 480-422294/2-C	Lab Control Sample	Dissolved	Water	6010C	422487

Analysis Batch: 423727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	SM 2340B	12
480-138030-2	CD-1RA	Total/NA	Water	SM 2340B	13
480-138030-3	MW-1A	Total/NA	Water	SM 2340B	14
480-138030-4	MW-1B	Total/NA	Water	SM 2340B	15
480-138030-5	MW-2A	Total/NA	Water	SM 2340B	
480-138030-6	MW-2B	Total/NA	Water	SM 2340B	
480-138030-7	MW-3A	Total/NA	Water	SM 2340B	
480-138030-8	MW-3B	Total/NA	Water	SM 2340B	
480-138030-9	MW-4A	Total/NA	Water	SM 2340B	
480-138030-10	MW-5A	Total/NA	Water	SM 2340B	
480-138030-11	MW-6A	Total/NA	Water	SM 2340B	
480-138030-12	MW-6B	Total/NA	Water	SM 2340B	
480-138030-13	MW-7A	Total/NA	Water	SM 2340B	

General Chemistry

Analysis Batch: 421853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	SM 5210B	
480-138030-2	CD-1RA	Total/NA	Water	SM 5210B	
480-138030-3	MW-1A	Total/NA	Water	SM 5210B	
480-138030-4	MW-1B	Total/NA	Water	SM 5210B	
480-138030-5	MW-2A	Total/NA	Water	SM 5210B	
480-138030-6	MW-2B	Total/NA	Water	SM 5210B	
480-138030-7	MW-3A	Total/NA	Water	SM 5210B	
480-138030-8	MW-3B	Total/NA	Water	SM 5210B	
480-138030-9	MW-4A	Total/NA	Water	SM 5210B	
480-138030-10	MW-5A	Total/NA	Water	SM 5210B	
480-138030-11	MW-6A	Total/NA	Water	SM 5210B	
480-138030-12	MW-6B	Total/NA	Water	SM 5210B	
480-138030-13	MW-7A	Total/NA	Water	SM 5210B	
USB 480-421853/1	Method Blank	Total/NA	Water	SM 5210B	
LCS 480-421853/2	Lab Control Sample	Total/NA	Water	SM 5210B	

QC Association Summary

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

General Chemistry (Continued)

Analysis Batch: 421870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	350.1	1
480-138030-2	CD-1RA	Total/NA	Water	350.1	2
480-138030-3	MW-1A	Total/NA	Water	350.1	3
480-138030-4	MW-1B	Total/NA	Water	350.1	4
480-138030-5	MW-2A	Total/NA	Water	350.1	5
480-138030-6	MW-2B	Total/NA	Water	350.1	6
480-138030-7	MW-3A	Total/NA	Water	350.1	7
480-138030-8	MW-3B	Total/NA	Water	350.1	8
480-138030-9	MW-4A	Total/NA	Water	350.1	9
480-138030-10	MW-5A	Total/NA	Water	350.1	10
480-138030-11	MW-6A	Total/NA	Water	350.1	11
480-138030-12	MW-6B	Total/NA	Water	350.1	12
480-138030-13	MW-7A	Total/NA	Water	350.1	13
MB 480-421870/123	Method Blank	Total/NA	Water	350.1	14
MB 480-421870/27	Method Blank	Total/NA	Water	350.1	15
MB 480-421870/51	Method Blank	Total/NA	Water	350.1	1
LCS 480-421870/124	Lab Control Sample	Total/NA	Water	350.1	2
LCS 480-421870/28	Lab Control Sample	Total/NA	Water	350.1	3
LCS 480-421870/52	Lab Control Sample	Total/NA	Water	350.1	4
480-138030-1 MS	CD-1	Total/NA	Water	350.1	5
480-138030-9 MS	MW-4A	Total/NA	Water	350.1	6
480-138030-1 DU	CD-1	Total/NA	Water	350.1	7

Analysis Batch: 421995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	353.2	1
480-138030-2	CD-1RA	Total/NA	Water	353.2	2
480-138030-3	MW-1A	Total/NA	Water	353.2	3
480-138030-4	MW-1B	Total/NA	Water	353.2	4
480-138030-5	MW-2A	Total/NA	Water	353.2	5
480-138030-6	MW-2B	Total/NA	Water	353.2	6
480-138030-7	MW-3A	Total/NA	Water	353.2	7
480-138030-8	MW-3B	Total/NA	Water	353.2	8
480-138030-9	MW-4A	Total/NA	Water	353.2	9
480-138030-10	MW-5A	Total/NA	Water	353.2	10
480-138030-11	MW-6A	Total/NA	Water	353.2	11
480-138030-12	MW-6B	Total/NA	Water	353.2	12
480-138030-13	MW-7A	Total/NA	Water	353.2	13

Analysis Batch: 422149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	SM 2540C	1
480-138030-2	CD-1RA	Total/NA	Water	SM 2540C	2
480-138030-3	MW-1A	Total/NA	Water	SM 2540C	3
480-138030-4	MW-1B	Total/NA	Water	SM 2540C	4
480-138030-5	MW-2A	Total/NA	Water	SM 2540C	5
480-138030-6	MW-2B	Total/NA	Water	SM 2540C	6
480-138030-7	MW-3A	Total/NA	Water	SM 2540C	7
480-138030-8	MW-3B	Total/NA	Water	SM 2540C	8
MB 480-422149/1	Method Blank	Total/NA	Water	SM 2540C	9
LCS 480-422149/2	Lab Control Sample	Total/NA	Water	SM 2540C	10

TestAmerica Buffalo

QC Association Summary

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

General Chemistry (Continued)

Analysis Batch: 422149 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-8 DU	MW-3B	Total/NA	Water	SM 2540C	

Analysis Batch: 422235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-9	MW-4A	Total/NA	Water	SM 2540C	
480-138030-10	MW-5A	Total/NA	Water	SM 2540C	
480-138030-11	MW-6A	Total/NA	Water	SM 2540C	
480-138030-12	MW-6B	Total/NA	Water	SM 2540C	
480-138030-13	MW-7A	Total/NA	Water	SM 2540C	
MB 480-422235/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 480-422235/2	Lab Control Sample	Total/NA	Water	SM 2540C	
480-138030-9 DU	MW-4A	Total/NA	Water	SM 2540C	

Prep Batch: 422349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	Distill/Phenol	
480-138030-2	CD-1RA	Total/NA	Water	Distill/Phenol	
480-138030-3	MW-1A	Total/NA	Water	Distill/Phenol	
480-138030-4	MW-1B	Total/NA	Water	Distill/Phenol	
480-138030-5	MW-2A	Total/NA	Water	Distill/Phenol	
480-138030-6	MW-2B	Total/NA	Water	Distill/Phenol	
480-138030-7	MW-3A	Total/NA	Water	Distill/Phenol	
480-138030-8	MW-3B	Total/NA	Water	Distill/Phenol	
480-138030-9	MW-4A	Total/NA	Water	Distill/Phenol	
480-138030-10	MW-5A	Total/NA	Water	Distill/Phenol	
480-138030-11	MW-6A	Total/NA	Water	Distill/Phenol	
480-138030-12	MW-6B	Total/NA	Water	Distill/Phenol	
480-138030-13	MW-7A	Total/NA	Water	Distill/Phenol	
MB 480-422349/1-A	Method Blank	Total/NA	Water	Distill/Phenol	
LCS 480-422349/2-A	Lab Control Sample	Total/NA	Water	Distill/Phenol	
480-138030-2 MS	CD-1RA	Total/NA	Water	Distill/Phenol	
480-138030-9 MS	MW-4A	Total/NA	Water	Distill/Phenol	
480-138030-6 DU	MW-2B	Total/NA	Water	Distill/Phenol	

Prep Batch: 422362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	351.2	
480-138030-2	CD-1RA	Total/NA	Water	351.2	
480-138030-3	MW-1A	Total/NA	Water	351.2	
480-138030-4	MW-1B	Total/NA	Water	351.2	
480-138030-6	MW-2B	Total/NA	Water	351.2	
480-138030-7	MW-3A	Total/NA	Water	351.2	
MB 480-422362/1-A	Method Blank	Total/NA	Water	351.2	
LCS 480-422362/2-A	Lab Control Sample	Total/NA	Water	351.2	
480-138030-2 MS	CD-1RA	Total/NA	Water	351.2	

Prep Batch: 422365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-8	MW-3B	Total/NA	Water	351.2	
480-138030-9	MW-4A	Total/NA	Water	351.2	
480-138030-10	MW-5A	Total/NA	Water	351.2	

TestAmerica Buffalo

QC Association Summary

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

General Chemistry (Continued)

Prep Batch: 422365 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-11	MW-6A	Total/NA	Water	351.2	
480-138030-12	MW-6B	Total/NA	Water	351.2	
MB 480-422365/1-A	Method Blank	Total/NA	Water	351.2	
LCS 480-422365/2-A	Lab Control Sample	Total/NA	Water	351.2	
480-138030-8 MS	MW-3B	Total/NA	Water	351.2	

Analysis Batch: 422432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	300.0	
480-138030-2	CD-1RA	Total/NA	Water	300.0	
480-138030-3	MW-1A	Total/NA	Water	300.0	
480-138030-4	MW-1B	Total/NA	Water	300.0	
480-138030-5	MW-2A	Total/NA	Water	300.0	
480-138030-6	MW-2B	Total/NA	Water	300.0	
480-138030-7	MW-3A	Total/NA	Water	300.0	
480-138030-8	MW-3B	Total/NA	Water	300.0	
480-138030-9	MW-4A	Total/NA	Water	300.0	
480-138030-10	MW-5A	Total/NA	Water	300.0	
480-138030-11	MW-6A	Total/NA	Water	300.0	
480-138030-12	MW-6B	Total/NA	Water	300.0	
480-138030-13	MW-7A	Total/NA	Water	300.0	
MB 480-422432/28	Method Blank	Total/NA	Water	300.0	
MB 480-422432/4	Method Blank	Total/NA	Water	300.0	
LCS 480-422432/27	Lab Control Sample	Total/NA	Water	300.0	
LCS 480-422432/3	Lab Control Sample	Total/NA	Water	300.0	
480-138030-6 MS	MW-2B	Total/NA	Water	300.0	
480-138030-12 MS	MW-6B	Total/NA	Water	300.0	
480-138030-12 MSD	MW-6B	Total/NA	Water	300.0	

Prep Batch: 422635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-5	MW-2A	Total/NA	Water	351.2	
MB 480-422635/1-A	Method Blank	Total/NA	Water	351.2	
LCS 480-422635/2-A	Lab Control Sample	Total/NA	Water	351.2	

Analysis Batch: 422649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	351.2	422362
480-138030-2	CD-1RA	Total/NA	Water	351.2	422362
480-138030-3	MW-1A	Total/NA	Water	351.2	422362
480-138030-4	MW-1B	Total/NA	Water	351.2	422362
480-138030-6	MW-2B	Total/NA	Water	351.2	422362
480-138030-7	MW-3A	Total/NA	Water	351.2	422362
480-138030-8	MW-3B	Total/NA	Water	351.2	422365
480-138030-9	MW-4A	Total/NA	Water	351.2	422365
480-138030-10	MW-5A	Total/NA	Water	351.2	422365
480-138030-11	MW-6A	Total/NA	Water	351.2	422365
480-138030-12	MW-6B	Total/NA	Water	351.2	422365
MB 480-422362/1-A	Method Blank	Total/NA	Water	351.2	422362
MB 480-422365/1-A	Method Blank	Total/NA	Water	351.2	422365
LCS 480-422362/2-A	Lab Control Sample	Total/NA	Water	351.2	422362

TestAmerica Buffalo

QC Association Summary

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

General Chemistry (Continued)

Analysis Batch: 422649 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-422365/2-A	Lab Control Sample	Total/NA	Water	351.2	422365
480-138030-2 MS	CD-1RA	Total/NA	Water	351.2	422362
480-138030-8 MS	MW-3B	Total/NA	Water	351.2	422365

Analysis Batch: 422710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	410.4	
480-138030-2	CD-1RA	Total/NA	Water	410.4	
480-138030-3	MW-1A	Total/NA	Water	410.4	
480-138030-4	MW-1B	Total/NA	Water	410.4	
480-138030-5	MW-2A	Total/NA	Water	410.4	
480-138030-6	MW-2B	Total/NA	Water	410.4	
480-138030-7	MW-3A	Total/NA	Water	410.4	
480-138030-8	MW-3B	Total/NA	Water	410.4	
480-138030-9	MW-4A	Total/NA	Water	410.4	
480-138030-10	MW-5A	Total/NA	Water	410.4	
480-138030-11	MW-6A	Total/NA	Water	410.4	
480-138030-12	MW-6B	Total/NA	Water	410.4	
480-138030-13	MW-7A	Total/NA	Water	410.4	
MB 480-422710/27	Method Blank	Total/NA	Water	410.4	
MB 480-422710/3	Method Blank	Total/NA	Water	410.4	
LCS 480-422710/28	Lab Control Sample	Total/NA	Water	410.4	
LCS 480-422710/4	Lab Control Sample	Total/NA	Water	410.4	
480-138030-1 MS	CD-1	Total/NA	Water	410.4	
480-138030-3 MS	MW-1A	Total/NA	Water	410.4	
480-138030-8 MS	MW-3B	Total/NA	Water	410.4	
480-138030-2 DU	CD-1RA	Total/NA	Water	410.4	

Prep Batch: 422819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-13	MW-7A	Total/NA	Water	351.2	
MB 480-422819/1-A	Method Blank	Total/NA	Water	351.2	
LCS 480-422819/2-A	Lab Control Sample	Total/NA	Water	351.2	

Analysis Batch: 422857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-5	MW-2A	Total/NA	Water	351.2	422635
MB 480-422635/1-A	Method Blank	Total/NA	Water	351.2	422635
LCS 480-422635/2-A	Lab Control Sample	Total/NA	Water	351.2	422635

Analysis Batch: 423095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-13	MW-7A	Total/NA	Water	351.2	422819
MB 480-422819/1-A	Method Blank	Total/NA	Water	351.2	422819
LCS 480-422819/2-A	Lab Control Sample	Total/NA	Water	351.2	422819

Analysis Batch: 423132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-2	CD-1RA	Total/NA	Water	SM 2540C	
MB 480-423132/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 480-423132/2	Lab Control Sample	Total/NA	Water	SM 2540C	

TestAmerica Buffalo

QC Association Summary

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Analysis Batch: 423157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	310.2	1
480-138030-2	CD-1RA	Total/NA	Water	310.2	2
480-138030-3	MW-1A	Total/NA	Water	310.2	3
480-138030-4	MW-1B	Total/NA	Water	310.2	4
480-138030-5	MW-2A	Total/NA	Water	310.2	5
480-138030-6	MW-2B	Total/NA	Water	310.2	6
480-138030-7	MW-3A	Total/NA	Water	310.2	7
480-138030-8	MW-3B	Total/NA	Water	310.2	8
480-138030-9	MW-4A	Total/NA	Water	310.2	9
480-138030-10	MW-5A	Total/NA	Water	310.2	10
480-138030-11	MW-6A	Total/NA	Water	310.2	11
480-138030-12	MW-6B	Total/NA	Water	310.2	12
480-138030-13	MW-7A	Total/NA	Water	310.2	13
MB 480-423157/50	Method Blank	Total/NA	Water	310.2	14
MB 480-423157/62	Method Blank	Total/NA	Water	310.2	15
MB 480-423157/73	Method Blank	Total/NA	Water	310.2	1
LCS 480-423157/51	Lab Control Sample	Total/NA	Water	310.2	2
LCS 480-423157/63	Lab Control Sample	Total/NA	Water	310.2	3
LCS 480-423157/74	Lab Control Sample	Total/NA	Water	310.2	4
480-138030-6 MS	MW-2B	Total/NA	Water	310.2	5
480-138030-6 MSD	MW-2B	Total/NA	Water	310.2	6
480-138030-7 MS	MW-3A	Total/NA	Water	310.2	7
480-138030-7 MSD	MW-3A	Total/NA	Water	310.2	8

Analysis Batch: 423158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	SM 4500 Cl- E	1
480-138030-2	CD-1RA	Total/NA	Water	SM 4500 Cl- E	2
480-138030-3	MW-1A	Total/NA	Water	SM 4500 Cl- E	3
480-138030-4	MW-1B	Total/NA	Water	SM 4500 Cl- E	4
480-138030-5	MW-2A	Total/NA	Water	SM 4500 Cl- E	5
480-138030-6	MW-2B	Total/NA	Water	SM 4500 Cl- E	6
480-138030-7	MW-3A	Total/NA	Water	SM 4500 Cl- E	7
480-138030-8	MW-3B	Total/NA	Water	SM 4500 Cl- E	8
480-138030-9	MW-4A	Total/NA	Water	SM 4500 Cl- E	9
480-138030-10	MW-5A	Total/NA	Water	SM 4500 Cl- E	10
480-138030-11	MW-6A	Total/NA	Water	SM 4500 Cl- E	11
480-138030-12	MW-6B	Total/NA	Water	SM 4500 Cl- E	12
480-138030-13	MW-7A	Total/NA	Water	SM 4500 Cl- E	13
MB 480-423158/107	Method Blank	Total/NA	Water	SM 4500 Cl- E	14
MB 480-423158/12	Method Blank	Total/NA	Water	SM 4500 Cl- E	15
MB 480-423158/21	Method Blank	Total/NA	Water	SM 4500 Cl- E	1
MB 480-423158/33	Method Blank	Total/NA	Water	SM 4500 Cl- E	2
MB 480-423158/80	Method Blank	Total/NA	Water	SM 4500 Cl- E	3
LCS 480-423158/108	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	4
LCS 480-423158/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	5
LCS 480-423158/22	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	6
LCS 480-423158/34	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	7
LCS 480-423158/81	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	8
480-138030-6 MS	MW-2B	Total/NA	Water	SM 4500 Cl- E	9
480-138030-6 MSD	MW-2B	Total/NA	Water	SM 4500 Cl- E	10
480-138030-7 MS	MW-3A	Total/NA	Water	SM 4500 Cl- E	11
480-138030-7 MSD	MW-3A	Total/NA	Water	SM 4500 Cl- E	12

TestAmerica Buffalo

QC Association Summary

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Analysis Batch: 423202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	420.1	422349
480-138030-2	CD-1RA	Total/NA	Water	420.1	422349
480-138030-3	MW-1A	Total/NA	Water	420.1	422349
480-138030-4	MW-1B	Total/NA	Water	420.1	422349
480-138030-5	MW-2A	Total/NA	Water	420.1	422349
480-138030-6	MW-2B	Total/NA	Water	420.1	422349
480-138030-7	MW-3A	Total/NA	Water	420.1	422349
480-138030-8	MW-3B	Total/NA	Water	420.1	422349
480-138030-9	MW-4A	Total/NA	Water	420.1	422349
480-138030-10	MW-5A	Total/NA	Water	420.1	422349
480-138030-11	MW-6A	Total/NA	Water	420.1	422349
480-138030-12	MW-6B	Total/NA	Water	420.1	422349
480-138030-13	MW-7A	Total/NA	Water	420.1	422349
MB 480-422349/1-A	Method Blank	Total/NA	Water	420.1	422349
LCS 480-422349/2-A	Lab Control Sample	Total/NA	Water	420.1	422349
480-138030-2 MS	CD-1RA	Total/NA	Water	420.1	422349
480-138030-9 MS	MW-4A	Total/NA	Water	420.1	422349
480-138030-6 DU	MW-2B	Total/NA	Water	420.1	422349

Analysis Batch: 423995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	9038	13
480-138030-2	CD-1RA	Total/NA	Water	9038	14
480-138030-3	MW-1A	Total/NA	Water	9038	
480-138030-4	MW-1B	Total/NA	Water	9038	15
480-138030-5	MW-2A	Total/NA	Water	9038	
480-138030-6	MW-2B	Total/NA	Water	9038	
480-138030-7	MW-3A	Total/NA	Water	9038	
480-138030-8	MW-3B	Total/NA	Water	9038	
480-138030-9	MW-4A	Total/NA	Water	9038	
480-138030-10	MW-5A	Total/NA	Water	9038	
480-138030-11	MW-6A	Total/NA	Water	9038	
480-138030-12	MW-6B	Total/NA	Water	9038	
480-138030-13	MW-7A	Total/NA	Water	9038	
MB 480-423995/130	Method Blank	Total/NA	Water	9038	
MB 480-423995/138	Method Blank	Total/NA	Water	9038	
MB 480-423995/98	Method Blank	Total/NA	Water	9038	
LCS 480-423995/129	Lab Control Sample	Total/NA	Water	9038	
LCS 480-423995/137	Lab Control Sample	Total/NA	Water	9038	
LCS 480-423995/97	Lab Control Sample	Total/NA	Water	9038	

Field Service / Mobile Lab

Analysis Batch: 423482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-1	CD-1	Total/NA	Water	Field Sampling	
480-138030-2	CD-1RA	Total/NA	Water	Field Sampling	
480-138030-3	MW-1A	Total/NA	Water	Field Sampling	
480-138030-4	MW-1B	Total/NA	Water	Field Sampling	
480-138030-5	MW-2A	Total/NA	Water	Field Sampling	
480-138030-6	MW-2B	Total/NA	Water	Field Sampling	
480-138030-7	MW-3A	Total/NA	Water	Field Sampling	
480-138030-8	MW-3B	Total/NA	Water	Field Sampling	

TestAmerica Buffalo

QC Association Summary

Client: Cortland City Soil & Water Cons District
Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Field Service / Mobile Lab (Continued)

Analysis Batch: 423482 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-138030-9	MW-4A	Total/NA	Water	Field Sampling	
480-138030-10	MW-5A	Total/NA	Water	Field Sampling	
480-138030-11	MW-6A	Total/NA	Water	Field Sampling	
480-138030-12	MW-6B	Total/NA	Water	Field Sampling	
480-138030-13	MW-7A	Total/NA	Water	Field Sampling	

Lab Chronicle

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: CD-1

Date Collected: 06/26/18 08:15

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			422181	06/29/18 08:58	KMP	TAL BUF
Total/NA	Analysis	6010C		1	422611	06/29/18 23:42	S1P	TAL BUF
Total/NA	Analysis	SM 2340B		1	423727	07/10/18 12:22	LMH	TAL BUF
Total/NA	Analysis	300.0		1	422432	06/30/18 00:59	DMR	TAL BUF
Total/NA	Analysis	310.2		2	423157	07/05/18 14:21	AED	TAL BUF
Total/NA	Analysis	350.1		1	421870	06/27/18 10:56	CLT	TAL BUF
Total/NA	Prep	351.2			422362	06/29/18 14:38	KEB	TAL BUF
Total/NA	Analysis	351.2		1	422649	07/02/18 08:31	CLT	TAL BUF
Total/NA	Analysis	353.2		1	421995	06/27/18 18:28	DCB	TAL BUF
Total/NA	Analysis	410.4		1	422710	07/02/18 16:10	CEG	TAL BUF
Total/NA	Prep	Distill/Phenol			422349	06/29/18 14:11	KEB	TAL BUF
Total/NA	Analysis	420.1		1	423202	07/05/18 16:13	MRF	TAL BUF
Total/NA	Analysis	9038		1	423995	07/11/18 13:06	AED	TAL BUF
Total/NA	Analysis	SM 2540C		1	422149	06/28/18 14:49	SLM	TAL BUF
Total/NA	Analysis	SM 4500 Cl- E		1	423158	07/05/18 12:09	SAH	TAL BUF
Total/NA	Analysis	SM 5210B		1	421853	06/27/18 07:19	LAW	TAL BUF
Total/NA	Analysis	Field Sampling		1	423482	06/26/18 08:15	FLD	TAL BUF

Client Sample ID: CD-1RA

Date Collected: 06/26/18 08:30

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			422294	06/29/18 09:43	JAK	TAL BUF
Dissolved	Prep	3005A			422487	07/02/18 08:25	JAK	TAL BUF
Dissolved	Analysis	6010C		1	422780	07/02/18 15:43	S1P	TAL BUF
Total/NA	Prep	3005A			422181	06/29/18 08:58	KMP	TAL BUF
Total/NA	Analysis	6010C		1	422611	06/29/18 23:46	S1P	TAL BUF
Total/NA	Analysis	SM 2340B		1	423727	07/10/18 12:22	LMH	TAL BUF
Total/NA	Analysis	300.0		1	422432	06/30/18 01:14	DMR	TAL BUF
Total/NA	Analysis	310.2		2	423157	07/05/18 13:33	AED	TAL BUF
Total/NA	Analysis	350.1		1	421870	06/27/18 10:59	CLT	TAL BUF
Total/NA	Prep	351.2			422362	06/29/18 14:38	KEB	TAL BUF
Total/NA	Analysis	351.2		1	422649	07/02/18 08:31	CLT	TAL BUF
Total/NA	Analysis	353.2		1	421995	06/27/18 18:30	DCB	TAL BUF
Total/NA	Analysis	410.4		1	422710	07/02/18 16:10	CEG	TAL BUF
Total/NA	Prep	Distill/Phenol			422349	06/29/18 14:11	KEB	TAL BUF
Total/NA	Analysis	420.1		1	423202	07/05/18 16:13	MRF	TAL BUF
Total/NA	Analysis	9038		1	423995	07/11/18 13:06	AED	TAL BUF
Total/NA	Analysis	SM 2540C		1	422149	06/28/18 14:49	SLM	TAL BUF
Total/NA	Analysis	SM 2540C		1	423132	07/05/18 15:40	SLM	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: CD-1RA

Date Collected: 06/26/18 08:30
Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	423158	07/05/18 12:09	SAH	TAL BUF
Total/NA	Analysis	SM 5210B		1	421853	06/27/18 07:19	LAW	TAL BUF
Total/NA	Analysis	Field Sampling		1	423482	06/26/18 08:30	FLD	TAL BUF

Client Sample ID: MW-1A

Date Collected: 06/26/18 10:20
Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			422181	06/29/18 08:58	KMP	TAL BUF
Total/NA	Analysis	6010C		1	422611	06/30/18 00:01	S1P	TAL BUF
Total/NA	Analysis	SM 2340B		1	423727	07/10/18 12:22	LMH	TAL BUF
Total/NA	Analysis	300.0		1	422432	06/30/18 01:28	DMR	TAL BUF
Total/NA	Analysis	310.2		2	423157	07/05/18 13:33	AED	TAL BUF
Total/NA	Analysis	350.1		1	421870	06/27/18 11:00	CLT	TAL BUF
Total/NA	Prep	351.2			422362	06/29/18 14:38	KEB	TAL BUF
Total/NA	Analysis	351.2		1	422649	07/02/18 08:31	CLT	TAL BUF
Total/NA	Analysis	353.2		1	421995	06/27/18 15:02	DCB	TAL BUF
Total/NA	Analysis	410.4		1	422710	07/02/18 16:10	CEG	TAL BUF
Total/NA	Prep	Distill/Phenol			422349	06/29/18 14:11	KEB	TAL BUF
Total/NA	Analysis	420.1		1	423202	07/05/18 16:13	MRF	TAL BUF
Total/NA	Analysis	9038		1	423995	07/11/18 13:06	AED	TAL BUF
Total/NA	Analysis	SM 2540C		1	422149	06/28/18 14:49	SLM	TAL BUF
Total/NA	Analysis	SM 4500 Cl- E		1	423158	07/05/18 12:09	SAH	TAL BUF
Total/NA	Analysis	SM 5210B		1	421853	06/27/18 07:19	LAW	TAL BUF
Total/NA	Analysis	Field Sampling		1	423482	06/26/18 10:20	FLD	TAL BUF

Client Sample ID: MW-1B

Date Collected: 06/26/18 10:40
Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			422181	06/29/18 08:58	KMP	TAL BUF
Total/NA	Analysis	6010C		1	422611	06/30/18 00:19	S1P	TAL BUF
Total/NA	Analysis	SM 2340B		1	423727	07/10/18 12:22	LMH	TAL BUF
Total/NA	Analysis	300.0		1	422432	06/30/18 01:43	DMR	TAL BUF
Total/NA	Analysis	310.2		2	423157	07/05/18 13:33	AED	TAL BUF
Total/NA	Analysis	350.1		1	421870	06/27/18 11:00	CLT	TAL BUF
Total/NA	Prep	351.2			422362	06/29/18 14:38	KEB	TAL BUF
Total/NA	Analysis	351.2		1	422649	07/02/18 08:31	CLT	TAL BUF
Total/NA	Analysis	353.2		1	421995	06/27/18 15:03	DCB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-1B

Date Collected: 06/26/18 10:40
Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	410.4		1	422710	07/02/18 16:10	CEG	TAL BUF
Total/NA	Prep	Distill/Phenol			422349	06/29/18 14:11	KEB	TAL BUF
Total/NA	Analysis	420.1		1	423202	07/05/18 16:19	MRF	TAL BUF
Total/NA	Analysis	9038		1	423995	07/11/18 13:06	AED	TAL BUF
Total/NA	Analysis	SM 2540C		1	422149	06/28/18 14:49	SLM	TAL BUF
Total/NA	Analysis	SM 4500 Cl- E		1	423158	07/05/18 12:25	SAH	TAL BUF
Total/NA	Analysis	SM 5210B		1	421853	06/27/18 07:19	LAW	TAL BUF
Total/NA	Analysis	Field Sampling		1	423482	06/26/18 10:40	FLD	TAL BUF

Client Sample ID: MW-2A

Date Collected: 06/26/18 09:40
Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			422294	06/29/18 09:43	JAK	TAL BUF
Dissolved	Prep	3005A			422487	07/02/18 08:25	JAK	TAL BUF
Dissolved	Analysis	6010C		1	422780	07/02/18 15:47	S1P	TAL BUF
Total/NA	Prep	3005A			422181	06/29/18 08:58	KMP	TAL BUF
Total/NA	Analysis	6010C		1	422611	06/30/18 00:23	S1P	TAL BUF
Total/NA	Analysis	SM 2340B		1	423727	07/10/18 12:22	LMH	TAL BUF
Total/NA	Analysis	300.0		1	422432	06/30/18 01:57	DMR	TAL BUF
Total/NA	Analysis	310.2		3	423157	07/05/18 13:33	AED	TAL BUF
Total/NA	Analysis	350.1		5	421870	06/27/18 12:25	CLT	TAL BUF
Total/NA	Prep	351.2			422635	07/02/18 09:59	KEB	TAL BUF
Total/NA	Analysis	351.2		2	422857	07/03/18 11:43	CLT	TAL BUF
Total/NA	Analysis	353.2		1	421995	06/27/18 18:31	DCB	TAL BUF
Total/NA	Analysis	410.4		1	422710	07/02/18 16:10	CEG	TAL BUF
Total/NA	Prep	Distill/Phenol			422349	06/29/18 14:11	KEB	TAL BUF
Total/NA	Analysis	420.1		1	423202	07/05/18 16:19	MRF	TAL BUF
Total/NA	Analysis	9038		1	423995	07/11/18 13:16	AED	TAL BUF
Total/NA	Analysis	SM 2540C		1	422149	06/28/18 14:49	SLM	TAL BUF
Total/NA	Analysis	SM 4500 Cl- E		1	423158	07/05/18 12:26	SAH	TAL BUF
Total/NA	Analysis	SM 5210B		1	421853	06/27/18 07:19	LAW	TAL BUF
Total/NA	Analysis	Field Sampling		1	423482	06/26/18 09:40	FLD	TAL BUF

Client Sample ID: MW-2B

Date Collected: 06/26/18 09:30
Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			422181	06/29/18 08:58	KMP	TAL BUF
Total/NA	Analysis	6010C		1	422611	06/30/18 00:27	S1P	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2340B		1	423727	07/10/18 12:22	LMH	TAL BUF
Total/NA	Analysis	300.0		1	422432	06/30/18 02:12	DMR	TAL BUF
Total/NA	Analysis	310.2		7	423157	07/05/18 13:50	AED	TAL BUF
Total/NA	Analysis	350.1		1	421870	06/27/18 11:02	CLT	TAL BUF
Total/NA	Prep	351.2			422362	06/29/18 14:38	KEB	TAL BUF
Total/NA	Analysis	351.2		1	422649	07/02/18 08:31	CLT	TAL BUF
Total/NA	Analysis	353.2		1	421995	06/27/18 15:07	DCB	TAL BUF
Total/NA	Analysis	410.4		1	422710	07/02/18 16:10	CEG	TAL BUF
Total/NA	Prep	Distill/Phenol			422349	06/29/18 14:11	KEB	TAL BUF
Total/NA	Analysis	420.1		1	423202	07/05/18 16:20	MRF	TAL BUF
Total/NA	Analysis	9038		1	423995	07/11/18 13:16	AED	TAL BUF
Total/NA	Analysis	SM 2540C		1	422149	06/28/18 14:49	SLM	TAL BUF
Total/NA	Analysis	SM 4500 Cl- E		2	423158	07/05/18 13:26	SAH	TAL BUF
Total/NA	Analysis	SM 5210B		1	421853	06/27/18 07:19	LAW	TAL BUF
Total/NA	Analysis	Field Sampling		1	423482	06/26/18 09:30	FLD	TAL BUF

Client Sample ID: MW-3A

Date Collected: 06/26/18 07:15

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			422181	06/29/18 08:58	KMP	TAL BUF
Total/NA	Analysis	6010C		1	422611	06/30/18 00:31	S1P	TAL BUF
Total/NA	Analysis	SM 2340B		1	423727	07/10/18 12:22	LMH	TAL BUF
Total/NA	Analysis	300.0		1	422432	06/30/18 03:40	DMR	TAL BUF
Total/NA	Analysis	310.2		2	423157	07/05/18 13:59	AED	TAL BUF
Total/NA	Analysis	350.1		1	421870	06/27/18 11:03	CLT	TAL BUF
Total/NA	Prep	351.2			422362	06/29/18 14:38	KEB	TAL BUF
Total/NA	Analysis	351.2		1	422649	07/02/18 08:31	CLT	TAL BUF
Total/NA	Analysis	353.2		1	421995	06/27/18 15:10	DCB	TAL BUF
Total/NA	Analysis	410.4		1	422710	07/02/18 16:10	CEG	TAL BUF
Total/NA	Prep	Distill/Phenol			422349	06/29/18 14:11	KEB	TAL BUF
Total/NA	Analysis	420.1		1	423202	07/05/18 16:20	MRF	TAL BUF
Total/NA	Analysis	9038		1	423995	07/11/18 13:16	AED	TAL BUF
Total/NA	Analysis	SM 2540C		1	422149	06/28/18 14:49	SLM	TAL BUF
Total/NA	Analysis	SM 4500 Cl- E		1	423158	07/05/18 12:26	SAH	TAL BUF
Total/NA	Analysis	SM 5210B		1	421853	06/27/18 07:19	LAW	TAL BUF
Total/NA	Analysis	Field Sampling		1	423482	06/26/18 07:15	FLD	TAL BUF

Client Sample ID: MW-3B

Date Collected: 06/26/18 07:00

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			422181	06/29/18 08:58	KMP	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-3B

Date Collected: 06/26/18 07:00

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		1	422611	06/30/18 00:46	S1P	TAL BUF
Total/NA	Analysis	SM 2340B		1	423727	07/10/18 12:22	LMH	TAL BUF
Total/NA	Analysis	300.0		1	422432	06/30/18 03:54	DMR	TAL BUF
Total/NA	Analysis	310.2		2	423157	07/05/18 14:21	AED	TAL BUF
Total/NA	Analysis	350.1		1	421870	06/27/18 11:04	CLT	TAL BUF
Total/NA	Prep	351.2			422365	06/29/18 14:44	KEB	TAL BUF
Total/NA	Analysis	351.2		1	422649	07/02/18 08:40	CLT	TAL BUF
Total/NA	Analysis	353.2		1	421995	06/27/18 15:11	DCB	TAL BUF
Total/NA	Analysis	410.4		1	422710	07/02/18 16:10	CEG	TAL BUF
Total/NA	Prep	Distill/Phenol			422349	06/29/18 14:11	KEB	TAL BUF
Total/NA	Analysis	420.1		1	423202	07/05/18 16:20	MRF	TAL BUF
Total/NA	Analysis	9038		1	423995	07/11/18 13:16	AED	TAL BUF
Total/NA	Analysis	SM 2540C		1	422149	06/28/18 14:49	SLM	TAL BUF
Total/NA	Analysis	SM 4500 Cl- E		1	423158	07/05/18 12:26	SAH	TAL BUF
Total/NA	Analysis	SM 5210B		1	421853	06/27/18 07:19	LAW	TAL BUF
Total/NA	Analysis	Field Sampling		1	423482	06/26/18 07:00	FLD	TAL BUF

Client Sample ID: MW-4A

Date Collected: 06/26/18 09:00

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			422181	06/29/18 08:58	KMP	TAL BUF
Total/NA	Analysis	6010C		1	422611	06/30/18 00:50	S1P	TAL BUF
Total/NA	Analysis	SM 2340B		1	423727	07/10/18 12:23	LMH	TAL BUF
Total/NA	Analysis	300.0		1	422432	06/30/18 04:09	DMR	TAL BUF
Total/NA	Analysis	310.2		5	423157	07/05/18 14:00	AED	TAL BUF
Total/NA	Analysis	350.1		1	421870	06/27/18 11:08	CLT	TAL BUF
Total/NA	Prep	351.2			422365	06/29/18 14:44	KEB	TAL BUF
Total/NA	Analysis	351.2		1	422649	07/02/18 08:40	CLT	TAL BUF
Total/NA	Analysis	353.2		1	421995	06/27/18 15:12	DCB	TAL BUF
Total/NA	Analysis	410.4		1	422710	07/02/18 16:10	CEG	TAL BUF
Total/NA	Prep	Distill/Phenol			422349	06/29/18 14:11	KEB	TAL BUF
Total/NA	Analysis	420.1		1	423202	07/05/18 16:20	MRF	TAL BUF
Total/NA	Analysis	9038		1	423995	07/11/18 13:19	AED	TAL BUF
Total/NA	Analysis	SM 2540C		1	422235	06/29/18 00:28	MLS	TAL BUF
Total/NA	Analysis	SM 4500 Cl- E		1	423158	07/05/18 12:26	SAH	TAL BUF
Total/NA	Analysis	SM 5210B		1	421853	06/27/18 07:19	LAW	TAL BUF
Total/NA	Analysis	Field Sampling		1	423482	06/26/18 09:00	FLD	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-5A

Date Collected: 06/26/18 08:00

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			422181	06/29/18 08:58	KMP	TAL BUF
Total/NA	Analysis	6010C		1	422611	06/30/18 00:54	S1P	TAL BUF
Total/NA	Analysis	SM 2340B		1	423727	07/10/18 12:23	LMH	TAL BUF
Total/NA	Analysis	300.0		1	422432	06/30/18 04:23	DMR	TAL BUF
Total/NA	Analysis	310.2		2	423157	07/05/18 14:21	AED	TAL BUF
Total/NA	Analysis	350.1		1	421870	06/27/18 11:10	CLT	TAL BUF
Total/NA	Prep	351.2			422365	06/29/18 14:44	KEB	TAL BUF
Total/NA	Analysis	351.2		1	422649	07/02/18 08:40	CLT	TAL BUF
Total/NA	Analysis	353.2		1	421995	06/27/18 18:32	DCB	TAL BUF
Total/NA	Analysis	410.4		1	422710	07/02/18 16:10	CEG	TAL BUF
Total/NA	Prep	Distill/Phenol			422349	06/29/18 14:11	KEB	TAL BUF
Total/NA	Analysis	420.1		1	423202	07/05/18 16:20	MRF	TAL BUF
Total/NA	Analysis	9038		1	423995	07/11/18 13:19	AED	TAL BUF
Total/NA	Analysis	SM 2540C		1	422235	06/29/18 00:28	MLS	TAL BUF
Total/NA	Analysis	SM 4500 Cl- E		1	423158	07/05/18 12:27	SAH	TAL BUF
Total/NA	Analysis	SM 5210B		1	421853	06/27/18 07:19	LAW	TAL BUF
Total/NA	Analysis	Field Sampling		1	423482	06/26/18 08:00	FLD	TAL BUF

Client Sample ID: MW-6A

Date Collected: 06/26/18 07:30

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Filtration	FILTRATION			422294	06/29/18 09:43	JAK	TAL BUF
Dissolved	Prep	3005A			422487	07/02/18 08:25	JAK	TAL BUF
Dissolved	Analysis	6010C		1	422780	07/02/18 15:50	S1P	TAL BUF
Total/NA	Prep	3005A			422181	06/29/18 08:58	KMP	TAL BUF
Total/NA	Analysis	6010C		1	422611	06/30/18 00:58	S1P	TAL BUF
Total/NA	Analysis	SM 2340B		1	423727	07/10/18 12:23	LMH	TAL BUF
Total/NA	Analysis	300.0		1	422432	06/30/18 04:38	DMR	TAL BUF
Total/NA	Analysis	310.2		2	423157	07/05/18 14:02	AED	TAL BUF
Total/NA	Analysis	350.1		1	421870	06/27/18 11:11	CLT	TAL BUF
Total/NA	Prep	351.2			422365	06/29/18 14:44	KEB	TAL BUF
Total/NA	Analysis	351.2		1	422649	07/02/18 08:40	CLT	TAL BUF
Total/NA	Analysis	353.2		1	421995	06/27/18 18:33	DCB	TAL BUF
Total/NA	Analysis	410.4		1	422710	07/02/18 16:10	CEG	TAL BUF
Total/NA	Prep	Distill/Phenol			422349	06/29/18 14:11	KEB	TAL BUF
Total/NA	Analysis	420.1		1	423202	07/05/18 16:20	MRF	TAL BUF
Total/NA	Analysis	9038		1	423995	07/11/18 13:08	AED	TAL BUF
Total/NA	Analysis	SM 2540C		1	422235	06/29/18 00:28	MLS	TAL BUF
Total/NA	Analysis	SM 4500 Cl- E		1	423158	07/05/18 12:27	SAH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Cortland City Soil & Water Cons District
 Project/Site: Towslee Landfill - Routine GW

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-6A

Date Collected: 06/26/18 07:30
Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 5210B		1	421853	06/27/18 07:19	LAW	TAL BUF
Total/NA	Analysis	Field Sampling		1	423482	06/26/18 07:30	FLD	TAL BUF

Client Sample ID: MW-6B

Date Collected: 06/26/18 07:45
Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			422181	06/29/18 08:58	KMP	TAL BUF
Total/NA	Analysis	6010C		1	422611	06/30/18 01:01	S1P	TAL BUF
Total/NA	Analysis	SM 2340B		1	423727	07/10/18 12:23	LMH	TAL BUF
Total/NA	Analysis	300.0		1	422432	06/30/18 04:52	DMR	TAL BUF
Total/NA	Analysis	310.2		2	423157	07/05/18 14:02	AED	TAL BUF
Total/NA	Analysis	350.1		1	421870	06/27/18 11:12	CLT	TAL BUF
Total/NA	Prep	351.2			422365	06/29/18 14:44	KEB	TAL BUF
Total/NA	Analysis	351.2		1	422649	07/02/18 08:40	CLT	TAL BUF
Total/NA	Analysis	353.2		1	421995	06/27/18 15:15	DCB	TAL BUF
Total/NA	Analysis	410.4		1	422710	07/02/18 16:10	CEG	TAL BUF
Total/NA	Prep	Distill/Phenol			422349	06/29/18 14:11	KEB	TAL BUF
Total/NA	Analysis	420.1		1	423202	07/05/18 16:22	MRF	TAL BUF
Total/NA	Analysis	9038		1	423995	07/11/18 13:08	AED	TAL BUF
Total/NA	Analysis	SM 2540C		1	422235	06/29/18 00:28	MLS	TAL BUF
Total/NA	Analysis	SM 4500 Cl- E		1	423158	07/05/18 12:27	SAH	TAL BUF
Total/NA	Analysis	SM 5210B		1	421853	06/27/18 07:19	LAW	TAL BUF
Total/NA	Analysis	Field Sampling		1	423482	06/26/18 07:45	FLD	TAL BUF

Client Sample ID: MW-7A

Date Collected: 06/26/18 11:00
Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			422181	06/29/18 08:58	KMP	TAL BUF
Total/NA	Analysis	6010C		1	422611	06/30/18 01:05	S1P	TAL BUF
Total/NA	Analysis	SM 2340B		1	423727	07/10/18 12:23	LMH	TAL BUF
Total/NA	Analysis	300.0		1	422432	06/30/18 06:05	DMR	TAL BUF
Total/NA	Analysis	310.2		5	423157	07/05/18 14:02	AED	TAL BUF
Total/NA	Analysis	350.1		1	421870	06/27/18 11:13	CLT	TAL BUF
Total/NA	Prep	351.2			422819	07/03/18 11:41	KEB	TAL BUF
Total/NA	Analysis	351.2		1	423095	07/05/18 07:44	CLT	TAL BUF
Total/NA	Analysis	353.2		1	421995	06/27/18 15:17	DCB	TAL BUF
Total/NA	Analysis	410.4		1	422710	07/02/18 16:10	CEG	TAL BUF

TestAmerica Buffalo

Lab Chronicle

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

TestAmerica Job ID: 480-138030-1

Client Sample ID: MW-7A

Date Collected: 06/26/18 11:00

Date Received: 06/27/18 01:30

Lab Sample ID: 480-138030-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Distill/Phenol			422349	06/29/18 14:11	KEB	TAL BUF
Total/NA	Analysis	420.1		1	423202	07/05/18 16:23	MRF	TAL BUF
Total/NA	Analysis	9038		1	423995	07/11/18 13:08	AED	TAL BUF
Total/NA	Analysis	SM 2540C		1	422235	06/29/18 00:28	MLS	TAL BUF
Total/NA	Analysis	SM 4500 Cl- E		1	423158	07/05/18 12:41	SAH	TAL BUF
Total/NA	Analysis	SM 5210B		1	421853	06/27/18 07:19	LAW	TAL BUF
Total/NA	Analysis	Field Sampling		1	423482	06/26/18 11:00	FLD	TAL BUF

Laboratory References:

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

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Accreditation/Certification Summary

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

TestAmerica Job ID: 480-138030-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

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

Analysis Method	Prep Method	Matrix	Analyte
9038		Water	Sulfate
Field Sampling		Water	Field Conductivity
Field Sampling		Water	Field EH/ORP
Field Sampling		Water	Field pH
Field Sampling		Water	Field Temperature
Field Sampling		Water	Field Turbidity
Field Sampling		Water	Oxygen, Dissolved

Method Summary

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

TestAmerica Job ID: 480-138030-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL BUF
SM 2340B	Total Hardness (as CaCO ₃) by calculation	SM	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
350.1	Nitrogen, Ammonia	MCAWW	TAL BUF
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
410.4	COD	MCAWW	TAL BUF
420.1	Phenolics, Total Recoverable	MCAWW	TAL BUF
9038	Sulfate, Turbidimetric	SW846	TAL BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF
SM 4500 Cl- E	Chloride, Total	SM	TAL BUF
SM 5210B	BOD, 5-Day	SM	TAL BUF
Field Sampling	Field Sampling	EPA	TAL BUF
3005A	Preparation, Total Metals	SW846	TAL BUF
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL BUF
Distill/Phenol	Distillation, Phenolics	None	TAL BUF
FILTRATION	Sample Filtration	None	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

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

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

Laboratory References:

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

Sample Summary

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

TestAmerica Job ID: 480-138030-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-138030-1	CD-1	Water	06/26/18 08:15	06/27/18 01:30
480-138030-2	CD-1RA	Water	06/26/18 08:30	06/27/18 01:30
480-138030-3	MW-1A	Water	06/26/18 10:20	06/27/18 01:30
480-138030-4	MW-1B	Water	06/26/18 10:40	06/27/18 01:30
480-138030-5	MW-2A	Water	06/26/18 09:40	06/27/18 01:30
480-138030-6	MW-2B	Water	06/26/18 09:30	06/27/18 01:30
480-138030-7	MW-3A	Water	06/26/18 07:15	06/27/18 01:30
480-138030-8	MW-3B	Water	06/26/18 07:00	06/27/18 01:30
480-138030-9	MW-4A	Water	06/26/18 09:00	06/27/18 01:30
480-138030-10	MW-5A	Water	06/26/18 08:00	06/27/18 01:30
480-138030-11	MW-6A	Water	06/26/18 07:30	06/27/18 01:30
480-138030-12	MW-6B	Water	06/26/18 07:45	06/27/18 01:30
480-138030-13	MW-7A	Water	06/26/18 11:00	06/27/18 01:30

TestAmerica Buffalo

10 Hazelwood Drive
Amherst, NY 14226 Fax (716) 691-7991

Chain of Custody Record

Client Information

Address:	100 Grange Place Rm 202	Sampler:	Jim Knollmeyer	Lab P.M.:	Johnson, Orlie S
City:	Cortland	Phone:	413-230-8415	E-Mail:	orlette.johnson@testamericainc.com
State, Zip:	NY, 13045	PO #:			
Phone:		Purchase Order not required			
Email:	patrick.reidy@cortlandsawcd.org	VVO #:			
Project Name:	Coniland Landfill/ Event Desc: Towslee Landfill - Routine	Project #:	48009337		
Site:	New York	SSOW#:			

Address:
Cortland City Soil & Water Cons District
100 Grange Place Rm 202
City:
Cortland
State, Zip:
NY, 13045
Phone:
Email:
patrick.reidy@cortlandsawcd.org
Project Name:
Coniland Landfill/ Event Desc: Towslee Landfill - Routine
Site:
New York

Due Date Requested:
TAT Requested (days):
Project #:
SSOW#:
Address:
Cortland City Soil & Water Cons District
100 Grange Place Rm 202
City:
Cortland
State, Zip:
NY, 13045
Phone:
Email:
patrick.reidy@cortlandsawcd.org
Project Name:
Coniland Landfill/ Event Desc: Towslee Landfill - Routine
Site:
New York

Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solvent, O=water+oil, T=tissue, A=air)	Preservation Code:	N	S	D	A	N	N	N	N	N	Total Number of Containers	Special Instructions/Note:			
CD-1		4-26-18	0815	G	Water		X	X	X	X	X	X	X	X	X	310.2 - Alkalinity, Total				
CD-1RA		4-26-18	0830	G	Water		X	X	X	X	X	X	X	X	X	363.2, 353.2 Nitrate, 9038, Nitrate-Calc, SM4500-Cl-E				
MW-1A		4-26-18	1620	G	Water		X	X	X	X	X	X	X	X	X	2840C-Calc - Total Dissolved Solids				
MW-1B		4-26-18	1040	G	Water		X	X	X	X	X	X	X	X	X	6210B - Biodegradable Oxygen Demand				
MW-2A		4-26-18	0940	G	Water		X	X	X	X	X	X	X	X	X	420.1 - Phenolics, Total Recoverable				
MW-2B		4-26-18	0930	G	Water		X	X	X	X	X	X	X	X	X	6010C, SM2340B				
MW-3A		4-26-18	0715	G	Water		X	X	X	X	X	X	X	X	X	280.1, 351.2, 410.4				
MW-3B		4-26-18	0700	G	Water		X	X	X	X	X	X	X	X	X	Field Sampling - (MDF) PH, cond, Temp, Turb				
MW-4A		4-26-18	0900	G	Water		X	X	X	X	X	X	X	X	X	56310D - Total Organic Carbon				
MW-5A		4-26-18	0800	G	Water		X	X	X	X	X	X	X	X	X	6032, 2, Nitrite, 9038, Nitrate-Calc, SM4500-Cl-E				
MW-6A		4-26-18	0730	G	Water		X	X	X	X	X	X	X	X	X	Dissolveable Metals				
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input type="checkbox"/> Unknown	<input type="checkbox"/> Radiological	Deliverable Requested: I, II, III, IV, Other (specify)										Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		
Empty Kit Relinquished by:				Date:	Date:	Time:	Method of Shipment		Date/Time:		Date/Time:		Date/Time:		Date/Time:					
Relinquished by:		Jim Knollmeyer		Date/Time:	4-26-18	1900	Company	Received By:	Company		Received By:		Company		Received By:		Company			
Relinquished by:				Date/Time:													Company			
Relinquished by:				Date/Time:													Company			
Custody Seals Intact:		△ Yes ▲ No		Custody Seal No.:	01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100										Cr: 08/04/2016					

FIELD OBSERVATIONS

Facility: Cortland City LF - Townsee Sample Point ID: CD-1
 Field Personnel: TDK Sample Matrix: GW

SAMPLING INFORMATION:

Date/Time 6-25-18 - Purge
6-26-18 / 0815

Method of Sampling: Baller

Dedicated: YES

Diameter of Well 2 ft

Well Depth (from top of PVC) 24.20

Water Depth (from top of PVC) 11.52

Length of water Column 12.68

Purge Volume: LWC x 0.17 x 3= 6.4668

Volume Purged 6.5 gallons

Methane Reading 0

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	ORP Mv	DO (mg/l)
<u>0815</u>	<u>4.07</u>	<u>7.80</u>	<u>286</u>	<u>5.11</u>	<u>55.1</u>	<u>4.99</u>

INSTRUMENT CHECK DATA:

Turbidity 0.0 Serial #: _____

See Page 1

Turbidity 1.0 Serial #: _____

Turbidity 10.0 Serial #: _____

pH 4.0 Serial #: _____

pH 7.0 Serial #: _____

pH 10.0 Serial #: _____

Cond Serial #: _____ umhos/cm@25 C

ORP Serial # _____ Mv

DO Calibrated to _____ @ _____

Weather conditions @ time of sampling:

Sunny 60's

COMMENTS AND OBSERVATIONS:

Balled dry @ 6.5 gallons.

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/26/18 By: JAC Company: JA

6

8/9/2018

FIELD OBSERVATIONS

Facility: Cortland City LF - Townsee Sample Point ID: PFES - CD - RA
 Field Personnel: TDK Sample Matrix: GW

SAMPLING INFORMATION:

Date/Time 6-26-18 / 0830
 Method of Sampling: Baller

Diameter of Well

Well Depth (from top of PVC)

Water Depth (from top of PVC)

Length of water Column

Purge Volume: LWC x 0.17 x 3 =

2"

48.95

9.12

39.87

20.3337

Dedicated:

YES

Volume Purged 20.5 Gallon

Methane Reading

0

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	ORP Mv	DO (mg/l)
<u>0830</u>	<u>3.87</u>	<u>7.86</u>	<u>319</u>	<u>56.3</u>	<u>71.9</u>	<u>5.53</u>

INSTRUMENT CHECK DATA:

Turbidity 0.0 Serial #: _____

Turbidity 1.0 Serial #: _____

Turbidity 10.0 Serial #: _____

See Page 1

pH 4.0 Serial #:

pH 7.0 Serial #:

pH 10.0 Serial #:

Cond Serial #: _____ umhos/cm@25 C

ORP Serial # _____ Mv

DO Calibrated to _____ @ _____

Weather conditions @ time of sampling:

SUNNY 60's

Comments and Observations:

Collect diss metals - very fine

Silt, almost milky.

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/26/18 By: TDK

Company: TA

7

FIELD OBSERVATIONS

Facility: Cortland City LF-Townsee **Sample Point ID:** MW-1A
Field Personnel: TDK **Sample Matrix:** GW

SAMPLING INFORMATION:

Date/Time 6-25-18
6-26-18 / 1020

Method of Sampling: Bailer **Dedicated:** YES

Diameter of Well

Well Depth (from top of PVC)

Water Depth (from top of PVC)

Length of water Column

Puge Volume: LWC x 0.17 x 3 =

8"

33.50

0

33.50 *

-

Volume Purged 0

Methane Reading

NA

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	ORP Mv	DO (mg/l)
1020	8.31	7.83	410	8.7	-11.1	5.37

INSTRUMENT CHECK DATA:

Turbidity 0.0 Serial #: _____
Turbidity 1.0 Serial #: _____
Turbidity 10.0 Serial #: _____

See page 1

pH 4.0 Serial #: _____
pH 7.0 Serial #: _____
pH 10.0 Serial #: _____

Cond Serial #: _____ umhos/cm@25 C

ORP Serial # _____ Mv

DO Calibrated to _____ @ _____

Weather conditions @ time of sampling:

Sunny, 70's

COMMENTS AND OBSERVATIONS:

* Artesian well.

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6-26-18 By: TDK Company: TA

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FIELD OBSERVATIONS

Facility: Cortland City LF Townsee **Sample Point ID:** MW-1B

Field Personnel: 401K **Sample Matrix:** GW

SAMPLING INFORMATION:

Date/Time 6-26-18 / 1040

Method of Sampling: Baller

Dedicated:

Diameter of Well

2"

Well Depth (from top of PVC)

55.00

Water Depth (from top of PVC)

0

Length of water Column

55.00

Puge Volume: LWC x 0.17 x 3=

Volume Purged 0

Methane Reading

NA

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	ORP Mv	DO (mg/l)
1040	6.31	7.92	225	5.12	12.0	3.84

INSTRUMENT CHECK DATA:

Turbidity 0.0 Serial #: _____

See Page 1

Turbidity 1.0 Serial #: _____

Turbidity 10.0 Serial #: _____

pH 4.0 Serial #: _____

pH 7.0 Serial #: _____

pH 10.0 Serial #: _____

Cond Serial #: _____ umhos/cm@25 C

ORP Serial # _____ Mv

DO Calibrated to _____ @ _____

Weather conditions @ time of sampling:

SUNNY 70's

COMMENTS AND OBSERVATIONS:

* Artesian well

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/26/18 By: TDL Company: TA

12

FIELD OBSERVATIONS

Facility: Costland City LP - Tawsee Sample Point ID: MW-2A

Field Personnel: TDL Sample Matrix: GW

SAMPLING INFORMATION:

Date/Time 6-25-18 - Purge.

6-26-18 / 0940

Method of Sampling: Bailer

Dedicated: YES

Diameter of Well 2"

Well Depth (from top of PVC) 12.82

Water Depth (from top of PVC) 6.47

Length of water Column 6.35

Purge Volume: LWC x 0.17 x 3=

3.2385

Volume Purged 2 gallons.

Methane Reading 0

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	ORP Mv	DO (mg/l)
<u>0940</u>	<u>7.14</u>	<u>6.67</u>	<u>647</u>	<u>876</u>	<u>-13.8</u>	<u>3.89</u>

INSTRUMENT CHECK DATA:

Turbidity 0.0 Serial #: _____

Turbidity 1.0 Serial #: _____

Turbidity 10.0 Serial #: _____

See page 1

pH 4.0 Serial #: _____

pH 7.0 Serial #: _____

pH 10.0 Serial #: _____

Cond Serial #: _____ umhos/cm@25 C

ORP Serial # _____ Mv

DO Calibrated to _____ @ _____

Weather conditions @ time of sampling: Sunny 70's

COMMENTS AND OBSERVATIONS: Turbid water, collect diss metals

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/26/18 By: TDL Company: J4

16

FIELD OBSERVATIONS

Facility: Cortland County LF-Tankless Sample Point ID: Mcu-2B
 Field Personnel: TDC Sample Matrix: GW

SAMPLING INFORMATION:

Date/Time 6-26-18 0930

Method of Sampling: Baller

Diameter of Well

2"

Well Depth (from top of PVC)

33.52

Water Depth (from top of PVC)

10.14

Length of water Column

23.38

Purge Volume: LWC x 0.17 x 3 =

11.9238

VOLUME PURGED 6.5 Gallons

Methane Reading

0

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	ORP Mv	DO (mg/l)
<u>0930</u>	<u>5.55</u>	<u>6.85</u>	<u>1393</u>	<u>8.43</u>	<u>74.9</u>	<u>6.63</u>

INSTRUMENT CHECK DATA:

Turbidity 0.0 Serial #: _____

See page 1

Turbidity 1.0 Serial #: _____

Turbidity 10.0 Serial #: _____

pH 4.0 Serial #: _____

pH 7.0 Serial #: _____

pH 10.0 Serial #: _____

Cond Serial #: _____ umhos/cm@25 C

ORP Serial # _____ Mv

DO Calibrated to _____ @ _____

Weather conditions @ time of sampling: Sunny 70's

COMMENTS AND OBSERVATIONS: Bailed dry @ 6.5 Gallons

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/26/18 By: TDC Company: TM

9

FIELD OBSERVATIONS

Facility: Cortland City LF - Townlee **Sample Point ID:** MW-3A
Field Personnel: TJK **Sample Matrix:** GW

SAMPLING INFORMATION:

Date/Time 6-25-18 **Purge** 6-26-18 / 0715

Method of Sampling: Baller

Dedicated: YES

Diameter of Well

Well Depth (from top of PVC) 22.43

Water Depth (from top of PVC) 8.90

Length of water Column 13.53

Purge Volume: LWC x 0.17 x 3 = 4.9003

Volume Purged 4 gallons.

Methane Reading 0

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	ORP Mv	DO (mg/l)
<u>0715</u>	<u>5.25</u>	<u>7.31</u>	<u>383</u>	<u>16.8</u>	<u>127.2</u>	<u>7.25</u>

INSTRUMENT CHECK DATA:

Turbidity 0.0 Serial #: _____

See Page 1

Turbidity 1.0 Serial #: _____

Turbidity 10.0 Serial #: _____

pH 4.0 Serial #: _____

pH 7.0 Serial #: _____

pH 10.0 Serial #: _____

Cond Serial #: _____ umhos/cm@25 C

ORP Serial # _____ Mv

DO Calibrated to _____ @ _____

Weather conditions @ time of sampling: _____

Sunny 60's

COMMENTS AND OBSERVATIONS: _____

Bullet dry e 4 galmo-

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/26/18 By: TJK Company: TA

2

FIELD OBSERVATIONS

Facility: Cortland dry - Townee Sample Point ID: MW-3B

Field Personnel: TAC Sample Matrix: GW

SAMPLING INFORMATION: 6-26-18 Purge.

Date/Time 6-26-18 / 0700

Method of Sampling: Baller

Dedicated: YES

Diameter of Well 2"

Well Depth (from top of PVC) 44.38

Water Depth (from top of PVC) 19.09

Length of water Column 25.29

Purge Volume: LWC x 0.17 x 3=

12.8979

Volume Purged 4.5 gallons

Methane Reading 0

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	ORP Mv	DO (mg/l)
<u>0700</u>	<u>6.77</u>	<u>7.44</u>	<u>474</u>	<u>21.4</u>	<u>135.9</u>	<u>6.91</u>

INSTRUMENT CHECK DATA:

Lamotte 2020 Turbidity meter

Turbidity 0.0 Serial #: C80 1968 Exp 6-19

Turbidity 1.0 Serial #: C80 1306 Exp 8-19

Turbidity 10.0 Serial #: C69 333C Exp 4-19

YSI 556 multi met

pH 4.0 Serial #: LG 1281 Exp 9-18

pH 7.0 Serial #: LG 1910 Exp 9-18

pH 10.0 Serial #: LG F777 Exp 6-18

Cond Serial #: 7GL 100 1,413 umhos/cm@25 C Exp 12-18

ORP Serial # 6448 240 Mv Exp 7-18

DO Calibrated to 98.7 % @ 14.3D'

Weather conditions @ time of sampling:

Sunny 60's

Comments and Observations:

Balled dry 4.5 gallons.

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/26/18 By: TAC Company: TA

①

FIELD OBSERVATIONS

Facility: Cortland City LF-Towslee Sample Point ID: Mnr-4A
 Field Personnel: TDR Sample Matrix: GW

SAMPLING INFORMATION: 6-25-18 - Bee's - No purge.

Date/Time 6-26-18 / 0900

Method of Sampling: Bailer Dedicated: YES

Diameter of Well 7"

Well Depth (from top of PVC) 32.43

Water Depth (from top of PVC) 10.18

Length of water Column 22.25

Purge Volume: LWC x 0.17 x 3= 11.3475

Volume Purged 5 gallons

Metname Reading 0

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	ORP Mv	DO (mg/l)
<u>0900</u>	<u>3.96</u>	<u>7.26</u>	<u>826</u>	<u>11.8</u>	<u>94.1</u>	<u>6.51</u>

INSTRUMENT CHECK DATA:

Turbidity 0.0 Serial #: _____

Turbidity 1.0 Serial #: _____

Turbidity 10.0 Serial #: _____

See Page 1

pH 4.0 Serial #: _____

pH 7.0 Serial #: _____

pH 10.0 Serial #: _____

Cond Serial #: _____ umhos/cm@25 C

ORP Serial # _____ Mv

DO Calibrated to _____ @ _____

Weather conditions @ time of sampling: Sunny 60's

COMMENTS AND OBSERVATIONS:

Excellent recharge. Bailed dry e 5 gallon @ 0650

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/26/18 By: TDR Company: JM

(8)

FIELD OBSERVATIONS

Facility: Cortlawn dry LF-Pwslee Sample Point ID: MW-5A
 Field Personnel: TDK Sample Matrix: GW

SAMPLING INFORMATION:

Date/Time 6-25-18

6-26-18 / 0800

Method of Sampling: Baller

Dedicated: YES

Diameter of Well 2"

Well Depth (from top of PVC) 32.28

Water Depth (from top of PVC) 13.65

Length of water Column 18.63

Purge Volume: LWC x 0.17 x 3= 9,5013

Volume Purged 1 gallon

Methane Reading 0

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	ORP Mv	DO (mg/l)
<u>0800</u>	<u>4.91</u>	<u>8.09</u>	<u>300</u>	<u>13.5</u>	<u>27.0</u>	<u>5.69</u>

INSTRUMENT CHECK DATA:

Turbidity 0.0 Serial #: _____

See page 1

Turbidity 1.0 Serial #: _____

Turbidity 10.0 Serial #: _____

pH 4.0 Serial #: _____

pH 7.0 Serial #: _____

pH 10.0 Serial #: _____

Cond Serial #: _____ umhos/cm @ 25 C

ORP Serial # _____ Mv

DO Calibrated to _____ @ _____

Weather conditions @ time of sampling:

Sunny 60's

COMMENTS AND OBSERVATIONS:

dry @ 1 gallon
Obstruction in well. Buried

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date:

6/26/18

By:

TDK

Company:

TA

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8/9/2018

FIELD OBSERVATIONS

Facility: Cortland City LF- Townee Sample Point ID: MW-6A
 Field Personnel: TDK Sample Matrix: GW

SAMPLING INFORMATION:

Date/Time 6-25-18

6-26-18, 0730

Method of Sampling: Baller

Dedicated:

Diameter of Well 2"

Well Depth (from top of PVC) 19.16

Water Depth (from top of PVC) 15.19

Length of water Column 3.97

Purge Volume: LWC x 0.17 x 3= 2.0247

Volume Purged 2 gallon

Methane Reading 0

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	ORP Mv	DO (mg/l)
<u>0730</u>	<u>3.14</u>	<u>6.79</u>	<u>513</u>	<u>819</u>	<u>70.7</u>	<u>4.78</u>

INSTRUMENT CHECK DATA:

Turbidity 0.0 Serial #: _____

See page 1

Turbidity 1.0 Serial #: _____

Turbidity 10.0 Serial #: _____

pH 4.0 Serial #: _____

pH 7.0 Serial #: _____

pH 10.0 Serial #: _____

Cond Serial #: _____ umhos/cm@25 C

ORP Serial # _____ Mv

DO Calibrated to _____ @ _____

Weather conditions @ time of sampling:

Sunny 60's

water very turbid. Barreled

dry @ 2 gallons. Collected Diss metals sample.

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/26/18 By: TDK Company: TA

3

FIELD OBSERVATIONS

Facility: Cortland City LF - Tawsee Sample Point ID: MW-LB
 Field Personnel: TDL Sample Matrix: Gw

SAMPLING INFORMATION: 6-25-18
 Date/Time 6-26-18 / 0745

Method of Sampling: Bailer Dedicated: YES

Diameter of Well 2"

Well Depth (from top of PVC) 40.78

Water Depth (from top of PVC) 12.42

Length of water Column 23.37

Purge Volume: LWC x 0.17 x 3 = 11,918.7

Volume Purged 4 gallons

Methane Reading 0

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	ORP Mv	DO (mg/l)
<u>0745</u>	<u>42.8</u>	<u>7.27</u>	<u>406</u>	<u>8.78</u>	<u>200.9</u>	<u>7.97</u>

INSTRUMENT CHECK DATA:

Turbidity 0.0 Serial #: _____

Turbidity 1.0 Serial #: _____

Turbidity 10.0 Serial #: _____

pH 4.0 Serial #: _____

pH 7.0 Serial #: _____

pH 10.0 Serial #: _____

Cond Serial #: _____ umhos/cm@25 C

ORP Serial # _____ Mv

DO Calibrated to _____ @ _____

Weather conditions @ time of sampling: SUNNY 50's

COMMENTS AND OBSERVATIONS: Bailed dry @ 4 gallon

SUNNY 50's

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/26/18 By: TDL Company: TA

ED

FIELD OBSERVATIONS

Facility: Cortland City LF - Tawsee Sample Point ID: MW-7A
 Field Personnel: TDK Sample Matrix: GW

SAMPLING INFORMATION:

Date/Time 6-25-18 - Purge.
6-26-18 / 1100

Method of Sampling: Baller

Dedicated:

Diameter of Well 2"

Well Depth (from top of PVC) 22.65

Water Depth (from top of PVC) 10.42

Length of water Column 12.23

Purge Volume: LWC x 0.17 x 3= 6.3373

Volume Purged 6 gallon

Methane Reading 0

SAMPLING DATA:

Time	Temp. (°C)	pH (std units)	Conduct (Umhos/cm)	Turb. (NTU)	ORP Mv	DO (mg/l)
1100	6.45	6.80	969	1.02	105.3	6.50

INSTRUMENT CHECK DATA:

Turbidity 0.0 Serial #: _____
 Turbidity 1.0 Serial #: _____
 Turbidity 10.0 Serial #: _____

See Page 1

pH 4.0 Serial #: _____
 pH 7.0 Serial #: _____
 pH 10.0 Serial #: _____

Cond Serial #: _____ umhos/cm@25 C

ORP Serial # _____ Mv

DO Calibrated to _____ @ _____

Weather conditions @ time of sampling: Sunny 70's

COMMENTS AND OBSERVATIONS:

I certify that sampling procedures were in accordance with all applicable EPA, State and Site-Specific protocols.

Date: 6/26/18 By: TDK Company: DA

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Login Sample Receipt Checklist

Client: Cortland Cty Soil & Water Cons District

Job Number: 480-138030-1

Login Number: 138030

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	TAL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Appendix B

Historical Analytical Data

Cortland County Towslee Landfill

History of Well Monitoring at the Towslee Landfill

In 1997, Barton & Loguidice (B&L) conducted two rounds of monitoring for the 13 wells that are currently being monitored. This was done as part of an initial investigation of contamination. B&L then prepared a monitoring plan and submitted the plan to NYSDEC for review and approval.

In late 2005, the county received correspondence from NYSDEC indicating that the county should begin monitoring at least the downgradient wells, until the monitoring plan was approved.

Cortland County SWCD recommended to Cortland County that of the 13 wells, 3 overburden wells (MW-1A, MW-2A, and MW-7A) and 4 bedrock wells (MW-1B, MW-2B, MW-3A, and MW-6B) be sampled during interim monitoring. Monitoring of these wells began in Quarter 1 of 2006.

The monitoring plan was approved in 2011, and monitoring of the remaining 6 wells was initiated in Quarter 3 of 2011.

Historical Data Page Index
Cortland County Towslee Landfill

Well	Field/ Inorganic Parameters	Total Metals	Dissolved Metals	Organics
CD-1	1	14	32	45
CD-1RA	2	15	33	46
MW-1A	3	16	34	47
MW-1B	4	17	35	48
MW-2A	5	18	36	49
MW-2B	6	20	37	50
MW-3A	7	22	38	51
MW-3B	8	24	39	52
MW-4A	9	25	40	53
MW-5A	10	26	41	54
MW-6A	11	27	42	55
MW-6B	12	28	43	56
MW-7A	13	30	44	57

Historical Water Quality Database - Towslee Landfill
 Field and Inorganic Parameters
 Well CD-1 - Overburden

Analyte	Temperature	Specific Conductance																		Phenolics, Total			
Units	(°C)	Eh (mV)	pH	SU	(µS/cm)	(SU)	Turbidity (NTU)	ALK as CaCO ₃ (mg/l)	HARD as CaCO ₃ (mg/l)	TDS (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Bromide (mg/l)	NO ₃ (mg/l)	NH ₃ (mg/l)	TKN (as N) (mg/l)	COD (mg/l)	BOD (mg/l)	TOC (mg/l)	Cyanide (mg/l)			
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2 *	--	--	--	--	0.001	0.2			
9/20/11	19.1	152	8.2	303	--	9.58	130	150	220	1.41	10.8	<8	0.054	<0.5	<0.5	<20	<4	<3	<0.005	--			
12/13/11	7.7	164	7.91	282	6	10.2	140J	145	210	6.88J	16.9	<0.8	0.068	<0.5J	<0.5	<20	<4	<3	<0.005	<0.01J			
3/20/12	18.2	179	7.89	274	6	46.2	130J	144	180	<1J	15.6	<0.8J	0.055	<0.5	<0.5J	<20	<6J	<3	<0.005J	<0.01			
5/22/12	19	137	7.53	257	--	40.9	120	146	380	1.2	12.2	<8	0.068	<0.5	<0.5	<20	<4	<3	<0.005	--			
8/29/12	19.8	129	7.75	263	--	12.6	130	119	200	1.45	10.9	<8	0.072	<0.5	<0.5	<20	<4	<3	<0.005	--			
11/21/12	12.3	169	7.3	275	--	24.1	130	158	200	1.34	15.7	<0.5	<0.05	<0.5	<0.5	<20	<4	<3	<0.05	--			
4/2/13	5.5	419	8.24	257	--	11	121	149	149	<2	15.4	<0.1	0.081	<0.5	<0.5	<10	<2	2.31	<0.02	--			
7/11/13	15.6	358	8.42	353	<5	9.9	82	88.6	209R	1.56J	13.5J	<0.1J	0.166J	<0.5	<0.5	<10	7	7.34	<0.02	<0.02R			
9/17/13	15.7	138	8.18	290	--	3.3	127	125	170	1.47	13.6	<0.1	0.081	<0.1	<0.5	<10	<2	1.49	<0.005	--			
11/5/13	12.1	210	7.99	294	--	2.4	117	129	189	1.41	13.1	<0.1	0.084	<0.1	<1	<10	<2	<0.5	0.059	--			
3/18/14	8.11	257.9	6.99	249	--	75.4	158	194	153	<1	21.7	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	--			
5/21/14	10.31	179.2	7.77	255	--	666	79.7	222	156	2.2	18.5	<0.2	0.12	0.042	0.56	<10	<2	<1	<0.01	--			
9/15/14	12.73	95.8	8.1	292	<5	82.9	129	162	172	1.4	20.7	<0.2	0.063	0.022J	0.56	<10	<2	<1	<0.01	<0.01			
12/15/14	9.75	58.4	7.95	287	--	47.2	139	144	190	1.4	21	<0.2	<0.05	0.029	<0.2	<10	<2	<1	<0.01	--			
6/23/15	13.41	109.1	8.04	273	--	9.88	127	128	56	1.7	17.9	<0.4	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	--			
9/22/15	13.56	109.3	7.87	256	--	8.91	144	119	158	1.2	18.3	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	--			
12/1/15	7.59	305.4	7.8	264	10	11.5	148	142	146	2.9	18.6	<0.2	<0.05	<0.02	0.32	<10	<2	<1	0.02J	<0.01			
6/8/16	6.15	119.4	8.24	233	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			
9/29/16	8.7	271.1	7.86	308	--	15.8	118	130	155	<1	14.2	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	--			
12/14/16	3.15	147.8	8.07	259	--	24.9	132	136	169	1	14.5	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	--			
5/31/17	5.9	154.3	7.56	280	--	7.24	125	132	149	1.9	15.6	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	0.013	--			
9/26/17	10.11	58.1	7.36	292	15	31.2	137	129	137	2.3	15.2	<0.2	<0.05	<0.02J	<0.2	<10	<2	<1	<0.01	<0.01			
12/19/17	7.81	-48.9	7.47	275	--	6.44	140	143	165	1.7	17.1	<0.2	0.056	<0.02	<0.2	<10	<2	<1	<0.01	--			
6/26/18	4.07	55.1	7.8	286	--	5.11	120	134	141	2	20.2	<0.2	0.06	<0.02	<0.2	22	2.5	--	<0.01	--			

Historical Water Quality Database - Towslee Landfill
Field and Inorganic Parameters
Well CD-1RA - Bedrock

Units	Analyte	Temperature (°C)	Eh (mV)	pH	SU (µS/cm)	Specific Conductance (µS/cm)	Color (SU)	Turbidity (NTU)	ALK as CaCO ₃ (mg/l)	HARD as CaCO ₃ (mg/l)	TDS (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Bromide (mg/l)	NO ₃ (mg/l)	NH ₃ (mg/l)	TKN (as N) (mg/l)	COD (mg/l)	BOD (mg/l)	TOC (mg/l)	Phenolics, Total (mg/l)	Cyanide (mg/l)
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2 *	--	--	--	--	--	0.001	0.2	
8/1/97	--	--	--	--	<5	--	134	160	163	<2	10.8	1	<0.1	0.04	0.2	<15	<2	2.1	<1	--		
10/1/97	--	--	--	--	20	--	132	160	150	2.5	15.3	1.2	<0.1	0.11	0.21	<15	<2	<1	<1	--		
9/20/11	20.3	146	8.29	343	--	53	120	135	180	2.2	17.3	<8	0.054	<0.5	<0.5	<20	5	<3	<0.005	--		
12/13/11	9.6	164	7.79	312	6	25.3	150J	155	170	3.67J	18.4	<0.8	0.058	<0.5J	<0.5	<20	<4	<3	<0.005	<0.01J		
3/20/12	17.7	180	7.98	299	<5	20.3	140J	164	150	1.43J	15.8	<0.8J	0.079	<0.5	<0.5J	<20	<4J	<3	<0.005J	<0.01		
5/22/12	185	142	7.45	295	--	8.26	140	155	310	1.46	15.9	<0.8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--		
8/29/12	20.5	131	7.66	353	--	6.25	130	135	220	1.77	13.7	<0.8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--		
11/21/12	13.5	168	7.28	290	--	11.6	130	156	170	1.78	15.7	<0.5	0.053	<0.5	<0.5	<20	<4	<3	<0.05	--		
4/2/13	5.8	416	8.43	224	--	3.3	92	118	146	<2	25.2	<0.1	0.062	<0.5	<0.5	<10	<2	1.6	<0.02	--		
7/11/13	17.1	343	7.98	519	7.4	38	120	138	185R	1.85J	16.1J	<0.1J	<0.01J	0.555	0.517	<10	3	1.01	<0.02	<0.02R		
9/17/13	15.5	137	8.03	331	--	19	138	145	194	1.95	13.9	<0.1	<0.01	<0.1	<0.5	<10	<2	1.8	0.006	--		
11/5/13	12.6	209	7.66	332	--	36	107	149	232	2.01	13.6	<0.1	<0.01	<0.1	<1	<10	<2	<0.5	<0.005	--		
3/18/14	7.04	38.9	7.1	285	--	3600	169	624	175	1.4	22.5	<0.2	<0.05	<0.02	3.1	<10	<2	<1	<0.01	--		
5/21/14	10.51	152	8	299	--	--	151	500	177	1.4	22.7	<0.2	<0.05	0.095	2.4	<10	<2	<1	<0.01	--		
9/15/14	10.99	110.4	8.19	313	<5	104	144	181	173	2.8	18.7	<0.2	<0.05	0.026J	0.31	<10J	<2	<1	<0.01	<0.01		
12/15/14	9.52	63.9	7.85	305	--	106	140	169	191	2	20.5	<0.2	<0.05	<0.02	0.3	<10	<2	<1	<0.01	--		
6/23/15	13.65	77.7	7.95	308	--	32.9	145	158	109	1.8	20.4	<0.2	<0.05	<0.02	0.24	<10	<2	<1	<0.01	--		
9/22/15	12.66	93.1	7.77	276	--	33.7	152	167	195	1.9	20.3	<0.2	<0.05	0.02	0.36	<10	<2	<1	0.023	--		
12/1/15	7.61	331.1	7.76	270	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		
6/8/16	5.98	102.9	7.83	276	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		
9/29/16	8.24	272.3	7.81	330	--	18.4	140	160	179	1.8	16	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	--		
12/14/16	3.07	124.8	7.91	276	--	102	132	144	166	1.8	29.5	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	--		
5/31/17	5.94	170.8	7.22	317	--	31.7	128	154	176	3.1	18.2	<0.2	<0.05	<0.02	0.35	<10	<2	<1	<0.01	--		
9/26/17	9.62	50.7	7.26	326	<5	36.5	156	151	160	1.9	18	<0.2	<0.05	<0.02J	0.26	<10	<2	<1	<0.01	<0.01		
12/19/17	8.2	-57.9	7.62	301	--	29.7	137	166	196	2.2	38.3	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	--		
6/26/18	3.87	71.9	7.86	319	--	56.3	150	154	154J	2.8	20.8	<0.2	0.069	0.022	0.24	28	2.1	--	<0.01	--		

Historical Water Quality Database - Towslee Landfill
Field and Inorganic Parameters
Well MW-1A - Overburden

Analyte	Units	Water Quality Parameters																	Phenolics, Total (mg/l)	Cyanide (mg/l)
		Temperature (°C)	Eh (mV)	pH	SU	Specific Conductance (µS/cm)	Color (SU)	Turbidity (NTU)	ALK as CaCO ₃ (mg/l)	HARD as CaCO ₃ (mg/l)	TDS (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Bromide (mg/l)	NO ₃ (mg/l)	NH ₃ (mg/l)	TKN (as N) (mg/l)	COD (mg/l)	BOD (mg/l)	TOC (mg/l)
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2 *	--	--	--	--	0.001	0.2
8/1/97	--	--	--	--	5	--	160	4000	494	152	20.6	1.2	<0.1	6	18	305	5	4.2	0.003	<0.01
10/1/97	--	--	--	--	20	--	145	240	214	46	14.6	0.8	<0.1	2.6	3.8	64	<2	1.6	0.0015	<0.01
3/22/06	8.5	700	7.8	306	--	660	127	167	340	21.3	27.3	<0.1	<0.1	0.276	23.3	<10	<3	4.76	<0.005	--
5/31/06	12.8	105	7.7	355	--	73	139	140	213	22.2	12.3	<0.1	0.217	<0.02	0.529H	<10	<3	2.61	<0.005	--
8/9/06	19.5	190	7.52	353	<5	131	122	148	236	34.2	16.5	<0.1	<0.1	0.161	0.366	<10	<3	<2	<0.005	<0.01
10/10/06	15.9	170	7.69	369	--	29	132	148	229	26.7	14.9	0.117	<0.1	<0.1	<0.2	<10	<3	<2	<0.005	--
3/20/07	9.3	59	8.29	204	--	55.6	140	134	127	28.7	8.79	<0.2	<0.2	<0.5	2.2	<20	<4	<3	<0.005	--
4/26/07	6.7	-107	7.93	221	--	34.8	120	153	208	27	14.2	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	0.005	--
7/31/07	21.6	-111	7.83	241	--	24.3	120	148	250	27	48.6	<0.2	<0.2	<0.5	5.66	<20	<4	<3	<0.005	--
10/10/07	16	-68	8.01	658	30	28.1	130	146	204	27.9	11.2	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
4/16/08	11.2	-57	7.85	351	--	16	120	151	195	28	16.3	<0.2	<0.2	<0.5	<0.5	<20	9	<3	<0.005	--
7/23/08	21.7	-62	8.07	344	--	11.6	120	159	116	25.9	<5	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
10/24/08	10.6	-69	8.23	334	--	24.6	120	165	188H	29.7	11.6	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
3/12/09	3.6	-21	7.4	344	--	16.7	130	161	256	30.4	14	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
6/17/09	19.6	143	8.09	199	18	23.4	100H	163	180	30.7	14.3	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
9/30/09	12.6	162	7.67	201	--	30.6	120H	158	210	29.5	12.7	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
12/1/09	6.6	107	8.35	862	--	47.4	120	161	190	30	6.3	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
4/27/10	8.2	180	7.28	1580	--	22.7	140	161	270	31.7	9.43	<0.8	0.0721	<0.5	<0.5	<20	<4	<3	<0.005	--
7/20/10	18.9	151	7.73	263	35	18.6	120	167	320	33	17.9	<1.6	0.066	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
10/26/10	15.6	110	7.95	345	--	37.7	120	169	170	31.4	14.8	<0.8	0.102	<0.5	0.897	<20	<4	<3	<0.005	--
3/22/11	9.8	228	7.52	347	--	24.2	130	159	150	32	13.6	<8	0.102	<0.5	<0.5	<20	<4	<3	<0.005	--
5/24/11	19.2	109	8.26	364	--	45.2	120	164	460	30.5	10.2	<0.8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--
9/20/11	17.9	160	7.96	372	--	20.89	130	172	220	32.1	14.1	<8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--
12/14/11	6.6	147	8.62	375	80	24	150J	177	210R	28.5J	15.8	<0.8	0.075	<0.5J	<0.5	<20	<4	<3	<0.005	<0.01J
3/21/12	19.8	116	7.91	401	6	572	130J	225	190	33.9J	11.4	<8J	<0.05	<0.5J	0.994J	<20	<4R	<3	<0.005J	<0.01
5/22/12	20.3	163	6.94	376	--	26.5	140	175	450	33.1	12.2	<8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--
8/30/12	19.9	147	7.97	368	--	17.2	120	148	270	33.5	13.2	<8	1.09	<0.5	<0.5	<20	<4	<3	<0.005	--
11/21/12	14.1	164	7.63	379	--	23.8	130	169	230	33.5	12.1	<0.5	<0.05	<0.5	<0.5	<20	<4	<3	<0.05	--
4/2/13	5.6	430	8.2	400	--	12	128	187	208	33.9	15.1	<0.1	0.044	<0.5	<0.5	<10	<2	0.947	<0.02	--
7/11/13	19.1	339	7.91	681	<5	59	94	168	295R	31.6J	13.4J	<0.1J	0.106J	<0.5	<0.5	<10	6	1.04	<0.02	<0.02R
9/17/13	14.8	200	7.82	369	--	9.6	143	157	231	31.8	13.3	<0.1	0.082	<0.1	<0.5	<10	<2	1.58	0.009	--
11/5/13	10.7	199	7.94	418	--	54	128	155	102	30.3	13.8	<0.1	<0.01	<0.1	<1	<10	<2	<0.5	<0.005	--
5/21/14	11.18	144.6	8.03	379	--	--	149	303	239	33.7	21.4	<0.2	<0.05	0.06	1.2	<10	<2	<1	<0.01	--
9/16/14	13.29	4.5	7.96	374	<5	>3600	159	208	237	38.5	19.1	<0.2	<0.05	0.035J	0.51	<10	<2	<1	<0.01	<0.01
6/23/15	16.85	-71.7	7.72	441	--	14.7	104	161	136	33.8	38	<1	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	--
9/23/15	14.89	26.7	7.39	327	--	25.5	147	157	229	33.4	18.9	<0.2	<0.05	0.022	<0.2	<10	<2	<1J	<0.01	--
12/1/15	5.83	19	7.49	347	<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
6/8/16	8.52	26	7.61	353	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
9/29/16	10.31	17.7	7.03	432	--	29.9	130	166	216	34	14	<0.2	<0.05	0.046	<0.2	<10	<2	<1	<0.01	--
12/14/16	3.59	22.1	7.58	355	--	35.5	123	157	222	36	15.9	<0.2	<0.05	<0.02	0.34	<10	<2	<1	<0.01	--
5/31/17	7.13	38.3	7.84	442	--	58.2	112	166	223	35.2	17.6	<0.2	<0.05	<0.02	0.36	<10	<2	<1	<0.01	--
9/26/17	12.17	-16.1	7.07	420	<5	30.8	130	161	203	36.1	17.3	<0.2	<0.05	<0.02J	<0.2	<10	<2	<1	<0.01	<0.01
12/19/17	7.56	-44.6	7.42	380	--	31.8	128	170	220	37.7	18.7	<0.2	0.097	<0.02	<0.2	<10	<2	<1	<0.01	--
6/26/18	8.31	-11.1	7.83	410	--	8.7	138	173	237	35.9	19.9	<0.2	<0.05	<0.02	0.51	32.1	2.4	--	<0.01	--

Historical Water Quality Database - Towslee Landfill

Field and Inorganic Parameters

Well MW-1B - Bedrock

Units	Analyte	Specific Conductance																		
		(°C)	Eh	pH	SU	(µS/cm)	Color	Turbidity	ALK as CaCO ₃	HARD as CaCO ₃	TDS	Chloride	Sulfate	Bromide	NO ₃	NH ₃	TKN (as N)	COD	BOD	TOC
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2*	--	--	--	--	0.001	0.2
8/1/97	--	--	--	--	<5	--	94.8	88	143	<2	5.2	<0.5	0.2	<0.02	<0.2	<15	<2	9.3	<0.001	--
10/1/97	--	--	--	--	<5	--	93.6	140	86	<2	<5	<0.5	<0.1	0.04	<0.2	<15	<2	<1	<0.001	--
3/22/06	5	385	7.7	157	--	187	92	97.6	120	2.55	4.72	<0.1	<0.1	0.0938	0.54	<10	<3	5.41	<0.005	--
5/31/06	11.4	45	7.8	257	--	45	94	81.9	111	2.28	5.51	<0.1	<0.1	<0.02	0.755H	<10	<3	2.34	<0.005	--
8/9/06	16.4	155	7.69	244	<5	70	91	89	142	3.47	5.33	<0.1	<0.1	<0.02	0.497	<10	<3	<2	<0.005	<0.01
10/10/06	15.8	115	7.9	200	--	15.6	89	82	120	0.611	3.76	<0.1	<0.1	<0.1	<0.2	<10	<3	<2	<0.005	--
3/20/07	9.6	84	8.47	156	--	67.4	99	83.6	62	3.24	7.09	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
4/26/07	7.2	-122	8.24	141	--	9.62	96	105	162	4.45	6.31	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	0.006	--
7/31/07	21.5	-143	8.03	1241	--	10.2	100	104	130	3.16	28.8	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
10/10/07	16.3	-80	8.28	943	30	22.8	100	90.8	104	6.44	5.26	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
2/1/08	1.7	196	8.66	1075	7	35.8	100	89.3	152	3.15	<5	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<10
4/16/08	10.2	-78	8.34	245	--	14.6	100	103	130	5.95	9.42	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
7/23/08	20.9	-78	8.33	223	--	12.3	100	107	80	5.61	<5	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
10/24/08	11.8	-78	8.38	229	--	6.33	99	105	140	6.03	<5	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
3/12/09	2.7	-44	7.8	205	--	2.47	92H	97.1	160	2.86H	6.37	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
6/17/09	18.7	139	8.13	124	9	8.2	100	111	110	4.74	5.19	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
9/30/09	12.1	155	7.76	1145	--	12.2	98	108	88	6.86	10.4	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
12/1/09	7.5	114	8.23	681	--	16.4	86	206	110	4.71	18.3	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
4/27/10	7.9	173	7.4	975	--	10.8	100	92.9	170	3.54	<5	<0.4	0.0512	<0.5	<0.5	<20	<4	<3	<0.005	--
7/20/10	18.2	167	7.99	1221	15	17	91	106	130	3.63	7.05	<0.8	0.063	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
10/26/10	15.2	104	8.11	228	--	8.46	90	104	200	6.11	<5	<0.8	<0.05	<0.5	0.924	<20	<4	<3	<0.005	--
3/22/11	7.6	225	7.87	234	--	14.1	100	108	80	4.07	<5	<0.8	0.095	<0.5	<0.5	<20	<4	<3	<0.005	--
5/24/11	19.7	100	8.3	206	--	1.08	93	87.4	180	1.7	5.6	<0.8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--
9/20/11	17.7	157	8.13	215	--	5.69	100	115	140	3.4	<5	<0.8	<0.05	<0.5	<0.5	<20	<4	<3	<0.05	--
12/14/11	9.1	136	8.56	232	11	22.73	120J	108	130	1.69J	7.9	<0.8	0.054	<0.5J	<0.5	<20	<4	<3	<0.005	<0.01J
3/21/12	22.8	115	7.93	279	<5	9.46	110J	124	170	6.68J	5.8	<0.8J	<0.05	<0.5	<0.5J	<20	<4J	<3	<0.005J	<0.01
5/22/12	21.2	155	7.19	243	--	16.1	100	111	340	2.47	<5	<0.8	0.075	<0.5	<0.5	<20	<4	<3	<0.005	--
8/30/12	20.3	138	8.51	249	--	12	100	107	180	6.77	5.74	<8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--
11/21/12	11.8	162	7.76	214	--	10.6	95	94.4	110	2.23	<5	<0.5	<0.05	<0.5	0.594	<20	<4	<3	<0.05	--
4/2/13	4.1	418	8.5	199	--	1.2	101	97.8	117	2.18	6.92	<0.1	<0.01	4.2	<0.5	<10	<2	<1	<0.02	--
7/11/13	13	336	8.13	380	8.3	<1	96	92.1	147R	2.14J	7.25J	<0.1J	<0.01J	5.79	<0.5	<10	5	0.643 J	<0.02	<0.02R
9/17/13	15.1	194	7.94	192	--	<1	86	84.5	123	2.18	6.96	<0.1	<0.01	<0.1	<0.5	<10	<2	1.26	<0.005	--
11/5/13	12.3	199	8.13	212	--	1.4	96	81.3	271	2.13	6.76	<0.1	0.069	<0.1	<1	<10	<2	<0.5	<0.005	--
5/21/14	11.69	151.3	8.09	227	--	3.47	110	79.1	121	1.8	8.8	<0.2	0.068	<0.02	<0.2	<10	<2	<1	<0.01	--
9/15/14	15.04	108.1	8.21	206	<5	38.3	99.3	82.2	90	2.1	8.3	<0.2	<0.05	<0.02J	<0.2	<10J	<2	<1	<0.01	<0.01
12/15/14	7.64	57.1	8.01	235	--	62.7	99.6	85	104	2.3	9	<0.2	<0.05	<0.02	0.31	<10	<2	<1	<0.01	--
6/23/15	13.67	-49.7	8.03	216	--	3.16	95.9	89.6	23	2.4	9.1	<0.4	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	--
9/23/15	13.92	-33.9	7.25	208	--	7.12	92.6	89.3	124	3.6	9.8	<0.2	0.051	<0.02	<0.2	<10	<2	<1	<0.01	--
12/1/15	6.55	61.3	7.94	185	<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
6/7/16	10.07	-47.4	7.86	194	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
9/29/16	11.02	84.1	7.72	228	--	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	--
12/14/16	4.18	73	7.92	198	--	7.55	97.2	84.2	108	2.5	5.3	<0.2	<0.05	<0.02	0.21	<10	<2	<1	<0.01	--
5/31/17	7.42	66.5	7.66	225	--	10.84	93.9	93.1	120	3.3	<5	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	--
9/26/17	12.77	20.1	7.32	224	<5	5.38	100	86.2	90	3.5	<5	<0.2	<0.05	<0.02J	<0.2	<10	<2	<1	<0.01	<0.01
6/26/18	6.31	12	7.92	225	--	5.12	104	95.8	114	2.8	8.5	<0.2	<0.05	<0.02	0.58	30.9	<2	--	0.019	--

Historical Water Quality Database - Towslee Landfill

Field and Inorganic Parameters

Well MW-2A - Overburden

Analyte	Temperature	Specific Conductance													Turbidity										ALK as CaCO ₃																			
Units	(°C)	(mV)	Eh	pH	(µS/cm)	SU	(SU)	Color	(NTU)	Turbidity	(mg/l)	ALK as CaCO ₃	(mg/l)	TDS	(mg/l)	Chloride	(mg/l)	Sulfate	(mg/l)	Bromide	(mg/l)	NO ₃	(mg/l)	NH ₃	(mg/l)	TKN (as N)	(mg/l)	COD	(mg/l)	BOD	(mg/l)	TOC	(mg/l)	Phenolics, Total	(mg/l)	Cyanide	(mg/l)							
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2 *	--	--	--	--	--	--	--	--	--	--	--	0.001	0.2																	
8/1/97	--	--	--	--	30	--	702	1300	1180	156	<5	0.8	<0.1	23	31.5	127	6	42.5	0.0071	<0.01																								
10/1/97	--	--	--	--	60	--	784	720	986	149	<5	<0.5	0.14	9.1	21.2	136	3	24.1	0.0066	<0.01																								
3/22/06	4.4	140	6.4	621	--	18.6	330	241	381	23.3	4.22	0.189	0.228	10.6	10.6	<10	16	10.1	<0.005	--																								
5/31/06	11.6	-5	6.4	767	--	18.3	355	260	397	25.7	5.5	0.18	<0.1	18.4	14H	13.8	4.5	7.18	0.008	--																								
8/9/06	17.2	120	6.15	784	33	195	384	265	491	23.5	3.43	0.237	<0.1	16	16.5	27	3.4	5.67	<0.005	<0.01																								
10/10/06	14.2	90	6.41	1100	--	27	423	301	487	25.7	3.18	0.261	<0.1	15.1	15	15.6	<3	5.68	<0.005	--																								
3/20/07	9.2	136	7.31	364	--	48.9	380	225	262	21.2	<5	<0.2	<0.2	10.2	132	<20	6	6.7	<0.005	--																								
4/26/07	7.7	-62	7.14	450	--	30.7	320	262	355	14.7	<5	<0.2	<0.2	9.89	12.5	<20	7	4.8	0.01	--																								
7/31/07	18	-81	7.41	395	--	15	420	275	395	24.4	<10	<2	<0.2	14.1	16.1	46	7	7.3	<0.005	--																								
10/10/07	14.6	-25	7.12	574	210	5.07	290	165	284	10.6	9.93	<2	<0.2	13.5	12.6	22	<4	6.3	<0.005	<0.01																								
2/1/08	3.1	42	7.94	617	40	7.83	360	246	410	21	<10	<2	<0.2	8.78	10.7	23	<4	21.8	<0.005	<10																								
4/16/08	11.1	-48	7.81	424	--	26.8	290	203	357	13.5	<5	<200	<0.2	8.2	11.2	21	5	5.2	<0.005	--																								
7/23/08	19.1	-31	7.58	402	--	49.2	380	303	320	20.2	<20	<20	<0.2	11.9	12.9	36	7	6.3	<0.005	--																								
10/24/08	12	-34	7.63	695	--	8.52	360	343	356	15.5	<10	<20	<0.2	10.8	11.6	32	<4	6	<0.005	--																								
3/12/09	3.1	-34	7.63	601	--	5.6	320	229	316	13.7	<5	<2	<0.2	8.43	10.3	<20	<4	4.8	<0.005	--																								
6/17/09	16.5	239	6.44	413	65	40.9	360	295	220	20.5	<5	<2	<0.2	11.8	13.5	31	12	7.2	<0.005	<0.01																								
9/30/09	13	227	6.52	382	--	17.8	340	265	310	17.7	7.79	<2	<0.2	10.3	13.1	32	<4	5.9	<0.005	--																								
12/1/09	6.4	143	7.78	1406	--	19.6	280	95	230	12.5	10.2	<2	<0.2	8.75	12.5	26	<4	6.5	<0.005	--																								
1/28/10	4.4	148	7.53	1474	--	492	310	291	360	12.4	<5	<2	<0.2	8.45	11.6	41	8	5.2	<0.005	--																								
4/27/10	6.6	256	5.94	294	--	41.5	300	235	350	14.5	<5	<2	0.0809	8.06	11.9	23	<4	6.7	0.006	--																								
7/20/10	18.8	162	7.77	329	55	8.18	360	313	370	22.5	<5	<4	0.139	10.1	16.5	50	7	7.8	<0.005	<0.01																								
11/12/10	14	17	7.06	613	--	38.1	310	260	300	17.1	<5	<20	0.08	6.9	9.84	20	<4	6	<0.005	--																								
3/22/11	9.8	6	6.94	519	--	9.77	260	190	200	11.2	<5	<80	0.117	5.38	7.95	<20	<4	4.4	<0.005	--																								
5/24/11	17.9	-43	7.31	482	--	20.7	250	167	240	8.33	<5	<8	0.073	7.03	8.21	24	<4	<3	<0.005	--																								
9/20/11	18.4	-47	7.04	653	--	40.12	300	253	340	16.2	<5	<8	0.065	5.16	9.52	<20	9	5.1	<0.005	--																								
12/14/11	8.2	25	7.62	501	70	24.16	270J	199	260	10.2J	<5	<8J	0.074	5.24J	6.86	<20	<4	3.4	<0.005	<0.01J																								
3/21/12	21.3	72	6.84	448	<5	25.9	260J	170	250	8.96J	<5	<8J	<0.05	5.32J	4.95J	<20	<6J	7.4	<0.005J	<0.01																								
5/23/12	18.9	133	6.72	515	--	27.5	250	207	290	11.6	8.79	<80	0.076	5.9	6.56	36	<4	5.5	<0.005	--																								
8/30/12	20.2	147	7.14	674	--	40.2	340	268	420	17.6	<5	<80	0.109	8.45	8.58	24	<4	6.9	<0.005	--																								
11/21/12	11.8	186	6.93	488	--	17.3	250	212	270	10.7	<5	<0.5	0.081	4.73	6.56	<20	<4	7	<0.05	--																								
4/2/13	4.4	176	7.07	463	--	31	198	188	218	10.8	4.55	<0.2	0.119	<0.5	4.83	<10	<2	5.98	<0.02	--																								
7/11/13	15	-154	6.75	9.29	14	11	232	124	306R	8.57J	4.73J	<0.1J	<0.01J	<0.5	6.92	<10	5	6.46	<0.02	<0.02R																								
9/17/13	13.6	164	6.62	603	--	1.5	440	691	916	116	4.78	1.36	<0.01	1.03	1.09	13	<2	8.86	0.008	--																								
11/5/13	11.5	383	6.58	624	--	10	207	226	294	10.7	5.93	<0.1	0.072	<0.1	6.13	14	<2	4.56	<0.005	--																								
3/19/14	3.44	810	6.59	599	--	1285	321	273	295	17.1	<5	<0.2	0.086	7.1	7	54.8	4.5	5.6	<0.01	--																								
5/21/14	10.44	30.4	6.77	600	--	1674	250	236	273	10.8	<5	<0.2	0.15	5.2	8.2	17.6	8.9B	4.6	<0.01	--																								
9/16/14	12.81	-38.5	6.96	777	<5	>3600	351	313	379	18.5	<5	0.31	0.081	7.2J	9.1	20.3	3.3b	5.2	<0.01	<0.01																								
12/15/14	5.66	-12.8	6.73	713	--	>3600	329	279	282	15.5	<5	<0.2	<0.05	6.8	8.7	28	6.8B	4.7	<0.01	--																								
6/23/15	16.93	-66.4	6.62	522	--	5.23	213	182	172																																			

Historical Water Quality Database - Towslee Landfill

Field and Inorganic Parameters

Well MW-2B - Bedrock

Units	Analyte	Specific Conductance																			
		(°C)	(mV)	pH	SU	(µS/cm)	Color	(NTU)	Turbidity	ALK as CaCO ₃	HARD as CaCO ₃	TDS	Chloride	Sulfate	Bromide	NO ₃	NH ₃	TKN (as N)	COD	BOD	TOC
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2*	--	--	--	--	--	0.001	0.2
8/1/97	--	--	--	--	5	--	577	960	1640	267	<5	1.1	<0.1	0.95	2.6	58	2	12.3	0.0044	--	
10/1/97	--	--	--	--	10	--	673	900	1230	238	<5	0.9	<0.1	1.3	2	61	2	11.9	0.0039	--	
3/22/06	4.5	175	6.4	1350	--	17.3	652	697	982	145	1.18	0.878	<0.1	0.389	1.31	<10	9.3	<2	<0.005	--	
5/31/06	10.5	110	6.4	1560	--	19.8	670	726	1020	154	2.96	1.01	0.216	0.824	1.78H	17.2	5.1	7.76	<0.005	--	
8/9/06	15.9	125	6.35	1420	<5	18.7	612	686	1040	122	<1	0.902	<0.1	0.786	1.64	24.6	3.7	4.82	<0.005	0.024	
10/10/06	14.5	115	6.52	1540	--	28	646	675	980	121	<1	0.912	<0.1	0.282	1.9	27	13	7.49	0.1	--	
3/20/07	9.1	136	7.14	701	--	14.2	650	723	825	167	<5	0.95	<0.2	0.921	1.84	21	<4	6.4	<0.005	--	
4/26/07	8.3	-73	7.35	682	--	11	480	575	823	131	<5	<2	<0.2	0.844	1.62	<20	4	3	0.006	--	
7/31/07	16.5	-77	7.37	500	--	9.48	600	716	935	163	10	<2	<0.2	1.31	1.67	<20	<4	5.7	<0.005	--	
10/10/07	15.8	-34	7.35	329	15	37	640	652	868	161	<5	0.92	<0.2	1.22	1.53	<20	<4	17.2	<0.005	<0.01	
2/1/08	3.2	40	8.34	339	7	41.5	640	678	840	160	<5	<2	<0.2	0.785	1.33	24	<4	82.6	<0.005	<10	
4/16/08	10.3	-46	7.77	1205	--	13.5	620	654	808	132	<5	<20	<0.2	0.572	1.55	<20	5	23.2	<0.005	--	
7/23/08	18.3	-38	7.73	1132	--	15.4	640	728	720	148	7.62	<2	<0.2	1.01	1.03	<20	<4	4.7	<0.005	--	
10/24/08	12.9	-33	7.59	1137	--	3.14	680	788	864	162	<5	<0.2	<0.2	0.504	1.13	<20	<4	6.8	<0.005	--	
3/12/09	4.9	-22	7.42	1135	--	11	650	678	872	118	<5	<0.2	<0.2	0.642	1.22	<20	<4	4.5	<0.005	--	
6/17/09	15.5	237	6.43	739	8	4.17	580	782	870	159	<5	<0.2	<0.2	0.665	1.19	23	<4	5.5	<0.005	<0.01	
9/30/09	13.2	229	6.47	670	--	5.88	650	755	860	150	<5	<0.2	<0.2	0.73	1.07	26	<4	4.6	<0.005	--	
12/1/09	8.3	174	7.19	1978	--	14	610	608	680	140	<5	<0.2	<0.2	0.696	1.12	<20	<4	4.6	<0.005	--	
1/28/10	3.7	184	6.9	1880	--	12.7	600	609	820	112	7.9	<0.2	<0.2	0.69	1.28	22	<4	3.5	<0.005	--	
4/27/10	6.9	249	6.03	567	--	12	610	681	860	130	<5	<0.4	<0.05	1.18	1.55	<20	<4	5.8	0.006	--	
7/20/10	19	117	7.52	391	11	17.3	630	730	790	139	<5	<4	0.071	0.812	1.37	<20	<4	5.7	<0.005	<0.01	
10/26/10	15.1	153	6.75	1228	--	14.1	600	693	860	127	<5	<0.8	<0.05	<0.5	2.45	25	<4	5.4	<0.005	--	
3/22/11	9.8	6	6.94	519	--	9.77	260	190	200	11.2	<5	<80	0.117	5.38	7.95	<20	<4	4.4	<0.005	--	
5/24/11	17.9	-43	7.31	482	--	20.7	250	167	240	8.33	<5	<8	0.073	7.03	8.21	24	<4	<3	<0.005	--	
9/20/11	18	-2	6.93	1428	--	8.77	630	773	890	108	<5	<8	<0.05	<0.5	1.95	<20	<4	5.4	<0.005	--	
12/14/11	7.9	27	7.14	1363	12	18.6	570J	713	770	102J	<5R	<0.8R	0.064	<0.5J	1.46	25	<4	3.4	<0.005	<0.01J	
3/21/12	18	88	6.6	1377	<5	17.6	490J	712	830	123J	<5	<0.8J	0.053	<0.5	<0.5J	<20	<4J	20.7	<0.005R	<0.01	
5/23/12	18.2	161	6.12	1378	--	5.44	790	643	890	124	<5	<8	<0.05	0.76	0.811	<20	<4	14.4	<0.005	--	
8/30/12	19.5	110	6.54	1390	--	5.13	670	664	940	118	<5	<8	<0.05	0.899	1.38	21	<4	6.6	<0.005	--	
11/21/12	11.7	201	6.36	1376	--	15	650	730	770	120	<5	0.82	<0.05	1.21	1.66	<20	<4	<3	<0.05	--	
4/2/13	5.8	301	6.94	1418	--	6.6	626	737	821	118	3.99	<0.2	<0.01	0.74	0.883	<10	<2	8.99	<0.02	--	
7/11/13	14.1	332	6.68	<5	7.4	1.8	552	411	954R	>50J	4.44J	1.32J	0.157J	1.08	1.44	<10	<2	10.1	<0.02	<0.02R	
9/17/13	13.5	259	6.95	1391	--	6.4	288	241	345	11.6	5.42	0.303	0.109	7.8	7.19	12	<2	8.07	0.006	--	
11/5/13	11.9	305	6.76	1556	--	4.4	701	654	816	88.6	4.62	0.355	<0.01	<0.1	1.17	<10	<2	2.34	0.072	--	
3/19/14	7.14	547.3	6.36	1330	--	855	684	677	812	114	<5	<0.2	<0.05	0.7	1.3	<10	<2	4.3	<0.01	--	
5/21/14	10.24	55.2	6.83	1358	--	19.1	657	622	812	98.8	<5	<0.2	0.054	0.77	1.4	13.2	<2	4.6	<0.01	--	
9/16/14	9.9	33	7.17	1388	<5	39.3	339	653	817	117	<5	0.84	<0.05	0.57J	1.3	16.4	<2	4.2	<0.01	<0.01	
12/21/14	8.38	191.1	6.71	1375	--	98.5	696	676	752	99.2	<5	<0.2	<0.05	0.78	1.4	18.1	2B	4	<0.01	--	
6/23/15	14.56	-49.4	6.69	1391	--	5.94	650	614	709	107	<5	<4	<0.05	0.75	1.1J	<10	<2	4.2	<0.01	--	
9/23/15	11.13	171.3	6.29	1139	--	5.01	655	624	759	96	<5	0.79	<0.05	0.66	1.3	<10J	2.2J	4.7	<0.01	--	
12/1/15	7.21	179.7	6.66	1212	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	
6/8/16	5.75	128	6.76	1231	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	
9/29/16	8.96	294.1	6.61	1418	--	40.8	641	633	807	84.3	<5	0.71	<0.05	1	1.6J	25.6	<3	5	<0.01	--	
12/14/16	2.05	240.9	7.86	1546	--	21.8	652	636	806	99.2	<5	0.74	<0.05	0.44	1.4	11.6	4.9	4.8	<0.01	--	
5/31/17	6.75	68.1	7.24	1404	--	7.49	602	650	757	98.5	<5	0.69	<0.05	0.55	1.1	<10	<2	3.8	<0.01	--	
9/26/17	11.85	29.7	5.88	1412	<5	9.75	637	618	749	99.8	<5	<1	0.13	0.42J	1.6	<10	<2	5.2	<0.01	<0.01	
12/19/17	6.83	-26.5	6.6	1329	--	7.75	644	647	798	98.5	<5	<1	<0.05	0.69	0.99	<10	<2	4.1	<0.01	--	
6/26/18	5.55	74.9	6.85	1393	--	8.43	619	655	798	95.2	<5	0.73	<0.05	0.58	1.3	53.1	2	--	<0.01	--	

Historical Water Quality Database - Towslee Landfill

Field and Inorganic Parameters

Well MW-3A - Bedrock

Analyte	Units	Water Quality Parameters																		
		Temperature (°C)	Eh (mV)	pH	SU (µS/cm)	Specific Conductance (µS/cm)	Color (SU)	Turbidity (NTU)	ALK as CaCO ₃ (mg/l)	HARD as CaCO ₃ (mg/l)	TDS (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Bromide (mg/l)	NO ₃ (mg/l)	NH ₃ (mg/l)	TKN (as N) (mg/l)	COD (mg/l)	BOD (mg/l)	TOC (mg/l)
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2 *	--	--	--	--	0.001	0.2
8/1/97	--	--	--	--	<5	--	145	1250	320	31.4	16	0.5	<0.1	<0.02	0.4	19	<2	4.5	0.0027	--
10/1/97	--	--	--	--	<5	--	146	200	269	28.7	13	<0.5	0.19	0.09	0.24	<15	<2	1.9	<0.001	--
3/22/06	6.4	215	7.2	286	--	58	162	153	215	14	9.14	<0.1	<0.1	0.0969	0.455	<10	<3	5.58	<0.005	--
5/31/06	11.7	45	6.9	299	--	11.9	170	179	208	12.7	11	<0.1	<0.1	<0.02	1.09H	<10	<3	<2	<0.005	--
8/9/06	15.3	115	7.01	342	<5	5.2	140	191	207	13.5	9.98	0.152	<0.1	<0.02	0.239	13	<3	<2	<0.005	<0.01
10/10/06	15.7	220	6.84	397	--	7.2	152	158	207	12.7	8.01	0.143	<0.1	<0.1	0.266	<10	<3	<2	<0.005	--
3/20/07	9.3	-50	7.82	143	--	10.6	82	74	38	3.37	<5	1.2	<0.2	1.45	4.26	47	<4	<3	<0.005	--
4/26/07	5.6	-94	7.64	898	--	19.6	59	58.1	168	1.8	<5	<2	<0.2	<0.5	1.47	<20	8	<3	<0.005	--
7/31/07	17.9	-115	7.84	1757	--	16.4	170	150	210	12	20.5	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
10/10/07	14.6	-76	8.25	939	115	13.7	130	86.2	144	5.73	<5	<2	<0.2	<0.5	<0.5	<20	<4	3.7	<0.005	<0.01
2/1/08	3.4	174	8.06	1074	15	17	110	97.7	115	2.43	<5	<2	0.338	<0.5	<0.5	23	<4	<3	<0.005	<10
4/16/08	12.1	-34	7.62	261	--	17.7	170	123	188	10.5	7.74	<0.2	<0.2	<0.5	<0.5	<20	7	<3	<0.005	--
7/23/08	20.6	-39	7.66	1759	--	17.9	91	76.7	60	1.1	19.9	<20	<0.2	<0.5	0.718	34	9	7.3	<0.005	--
10/24/08	13.5	-41	7.72	204	--	6.67	97	97.9	112	1.75	<5	<2	1.14	<0.5	<0.5	<20	<4	3.6	<0.005	--
3/12/09	4.2	-26	7.49	1069	--	10.9	18	38.1	88	1.85	7.53	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
6/17/09	14.8	359	8.16	187	7	4.55	160	196	120	9.25	11.2	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
9/30/09	14.2	219	6.69	658	--	20.2	50	37.8	100	<1	<5	<2	<0.2	<0.5	0.786	40	8	9.2	<0.005	--
12/1/09	9.9	172	7.32	673	--	22.4	79	65.4	120	<1	<5	<2	<0.2	<0.5	1.36	35	6	5.7	<0.005	--
1/28/10	6.1	101	8.41	646	--	11	180	93.2	160	14.8	<5	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
4/27/10	7.4	263	5.83	706	--	11.8	93	58	75	1.31	<5	<0.8	<0.05	<0.5	1.14	30	10	9	0.006	--
7/20/10	17.9	173	7.8	943	35	13.9	160	194	230	7.44	12.6	<4	0.053	<0.5	1.26	27	<4	<3	<0.005	<0.01
10/26/10	15.6	74	6.9	1806	--	7.61	130	66.9	98	3.3	<5	<4	0.054	<0.5	1.83	29	7	6.6	<0.005	--
3/22/11	8.7	282	6.2	128	--	11.6	75	45.7	60	2.69	<5	<8	0.103	<0.5	<0.5	<20	<4	<3	<0.005	--
5/24/11	16.7	9	7.15	308	--	4.3	150	137	320	2.28	<5	<0.8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--
9/20/11	17.4	159	7.38	361	--	4.39	180	187	260	4.03	<5	<8	<0.05	<0.5	0.508	<20	<4	3.1	<0.005	--
12/13/11	7	171	7.71	257	6	10.69	140J	122	160	3.44J	6.3	<0.8	<0.05	<0.5J	<0.5	<20	<4	<3	<0.005	<0.01J
3/20/12	17.7	194	7.27	284	11	29.9	130J	147	140	1.88J	<5	<0.8J	<0.05	<0.5	<0.5J	<20	5J	4.4	<0.005J	<0.01
5/22/12	20	153	7.07	340	--	41.7	160	146	240	1.59	<5	<8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--
8/29/12	18.8	133	7.63	368	--	13.4	160	159	240	7.33	9.49	<8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--
11/21/12	12.4	186	6.73	254	--	13.7	110	118	210	1.44	<5	<0.5	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--
4/2/13	6.4	342	6.88	231	--	7.1	102	88.3	102	2.8	4.42	<0.1	<0.01	<0.5	<0.5	<10	<2	3.78	<0.02	--
7/11/13	17.3	339	6.23	482	16	3	120	135	195R	1.28J	2.79J	<0.1J	<0.01J	<0.5	0.896	<10	7	9.41	<0.02	<0.02
9/17/13	15.7	211	6.56	274	--	2.9	151	137	187	1.37	3.61	<0.1	<0.01	<0.1	0.54	24	2	10.9	0.012	--
11/5/13	12.6	179	6.35	292	--	2	91	125	10200	1.35	3.79	<0.1	<0.01	<0.1	<1	<10	5	5.35	<0.005	--
3/18/14	7.87	386.8	7.23	319	--	82.1	143	179	172	4	<5	<0.2	<0.05	<0.02	0.41	12.6	<2	2.2	<0.01	--
5/21/14	9.73	-9.4	6.67	334	--	1123	139	127	172	3	<5	<0.2	<0.05	<0.02	0.52	10.7	3.6B	2.6	<0.01	--
9/16/14	13.07	56.7	6.68	309	50	24.9	162	136	202	2.6	<5	<0.2	<0.05	0.13J	1.3	36.1	2.6b	9.1	<0.01	<0.01
12/15/14	9.17	27.3	6.66	312	--	48.1	160	144	182	3.2	<5	<0.2	<0.05	0.18	0.74	18.7	2.3B	3	<0.01	--
6/23/15	12.24	-17.4	6.38	319	--	3.92	154	130	96	1.4	<5	<0.4	<0.05	0.073	0.6	13.7	5.3J	5.4	<0.01	--
9/23/15	11.96	196	5.93	187	--	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	--
12/1/15	7.59	174	6.09	241	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
6/7/16	7.87	202.1	6.7	374	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
9/29/16	9.15	285.4	7.49	361	--	9.6	169	160	188	5.2	9.8	<0.2	<0.05	0.03	0.32	15.5	<2	2.1	<0.01	--
12/14/16	2.78	219.8	6.79	385	--	12.4	57.3	58.8	88	2.5	<5	<0.2	<0.086	<0.02	0.51	11.2	3	3.2	<0.01	--
5/31/17	6.24	38.1	6.81	178	--	15.8	64.9	68.5	101	1.3	<5	0.54	<0.05	<0.02	1	11.2	3.9	9.3	<0.01	--
9/26/17	10.22	44.4	6.76	436	15	5.01	184	161	173	4.8	<5	<0.2	<0.05	0.074J	0.45	<10	<2	2.9	<0.01	<0.01
12/19/17	8.41	-30.4	6.77	293	--	13	128	133	158	1.1	<5	<0.2	<0.058	<0.02J	0.21	<10	<2	2.6	<0.01	--
6/26/18	5.25	127.2	7.31	383	--	16.8	175	172	206	5.8	<5	<0.2	<0.05	<0.02	0.42	47.8	<2	<0.01	<0.01	--

Historical Water Quality Database - Towslee Landfill

Field and Inorganic Parameters

Well MW-3B - Bedrock

Units	Analyte	Water Quality Standard																															
		(°C)	(mV)	pH	SU	(µS/cm)	Specific Conductance	(SU)	Color	Turbidity	(mg/l)	ALK as CaCO ₃	HARD as CaCO ₃	(mg/l)	TDS	Chloride	(mg/l)	Sulfate	(mg/l)	Bromide	(mg/l)	NO ₃	(mg/l)	TKN (as N)	(mg/l)	COD	(mg/l)	BOD	(mg/l)	TOC	(mg/l)	Phenolics, Total	(mg/l)
8/1/97	--	--	--	--	<5	--	235	280	349	32	13.8	<0.5	<0.1	<0.02	0.3	22	<2	7.9	2.3	--	--	--	--	--	--	0.001	0.2						
10/1/97	--	--	--	--	<5	--	190	300	332	33.6	12.4	<0.5	<0.1	0.04	<0.2	<15	<2	3.7	1.1	--	--	--	--	--	--	--	--						
9/20/11	17.1	158	7.68	494	--	25	240	274	310	23.7	7.9	<0.8	<0.05	<0.5	<0.5	<20	6	<3	<0.005	--	--	--	--	--	--	--	--						
12/13/11	9.9	174	7.6	522	<5	7.59	240J	264	260	27.7J	11.5	<0.8	0.07	<0.5J	<0.5	<20	<4	<3	<0.005	<0.01J	--	--	--	--	--	--	--	--					
3/20/12	15.8	203	7.04	482	<5	13.2	260J	262	250	23.8J	8.7	<0.8J	<0.05	<0.5	<0.5J	<20	<4J	4.5	<0.005J	<0.01	--	--	--	--	--	--	--	--					
5/22/12	18.3	170	6.61	479	--	2.51	210	259	300	23.4	7.7	<0.8	0.07	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--					
8/29/12	16.5	141	7.44	458	--	7.38	200	223	310	23.4	<5	<8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--					
11/21/12	12.9	189	6.63	464	--	10.2	200	248	300	23.2	7.18	<0.5	<0.05	<0.5	<0.5	<20	<4	<3	<0.05	--	--	--	--	--	--	--	--	--					
4/2/13	8.1	373	7.65	470	--	5.2	204	249	281	24.4	10.9	<0.2	<0.01	1.2	<0.5	<10	<2	1.74	<0.02	--	--	--	--	--	--	--	--	--					
7/11/13	13.2	353	7.54	8.52	6.5	1.9	195	145	355R	21.4J	9.9J	<0.1J	<0.01J	<0.5	<0.5	<10	5	1.89	<0.02	<0.02	--	--	--	--	--	--	--	--					
9/17/13	13.1	215	6.82	467	--	4.7	208	218	301	21.4	10	0.219	0.084	<0.1	<0.5	<10	<2	2.96	0.015	--	--	--	--	--	--	--	--	--					
11/5/13	13.3	201	7.45	519	--	6.1	211	235	273	19.5	9.52	<0.1	<0.01	0.1	<1	<10	<2	0.894	<0.005	--	--	--	--	--	--	--	--	--					
3/18/14	9.84	94.1	7.46	437	--	61.7	227	283	235	25.2	16.1	<0.2	<0.05	<0.02	<0.2	<10	<2	1.2	<0.01	--	--	--	--	--	--	--	--	--					
5/21/14	12.03	112.2	7.55	450	--	83	250	213	263	24.1	15.3	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	--	--	--	--	--	--	--	--	--					
9/16/14	10.72	184.6	7.95	452	<5	30.9	185	221	265	25.3	15.2	<0.2	<0.05	<0.02J	0.3	<10	<2	<1	<0.01	<0.01	--	--	--	--	--	--	--	--	--				
12/15/14	9.72	156.9	7.14	465	--	56	205	223	284	23.7	17.9	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	--	--	--	--	--	--	--	--	--					
6/23/15	11.85	-76.1	7.26	446	--	21.4	181	233	176	24.4	13.4	<1	0.059	<0.02	0.44	<10	<2	1.2	<0.01	--	--	--	--	--	--	--	--	--					
9/23/15	9.44	266.2	6.82	332	--	2.47	169	190	225	25.2	12.8	<0.2	<0.05	0.035	0.25	<10	<2	1	<0.01	--	--	--	--	--	--	--	--	--					
12/1/15	8.47	158	7.09	364	25	7.9	202	190	199	25	16.4	<0.2	<0.05	<0.02	0.42	<10	<2	1	<0.01	<0.01	--	--	--	--	--	--	--	--	--				
6/7/16	9.26	254.4	6.24	228	50	11.7	97.9	98	115	1.4	<5	<0.2	<0.05	0.076	1.1	26	2.6	5.8	<0.01	<0.01	--	--	--	--	--	--	--	--	--				
9/29/16	7.69	294.1	7.62	474	--	8.81	168	190	218	22.7	10.1	<0.2	0.069	<0.02	<0.2	15	<2	1.1	<0.01	--	--	--	--	--	--	--	--	--	--				
12/14/16	2.96	263	6.55	217	--	13.8	174	182	235	24.8	8.9	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--			
5/31/17	5.47	84	7.04	416	--	5.25	166	193	236	23.9	<5	<0.2	<0.05	<0.02	0.33	<10	<2	<1	<0.01	--	--	--	--	--	--	--	--	--	--				
9/26/17	10.9	61.4	6.55	397	10	12.1	183	188	197	22.4	<5	<0.2	0.064	<0.02J	0.48	<10	<2	1.5	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--			
12/19/17	10.08	-37.5	7.16	392	--	8.15	175	191	230	22.8	10.8	<0.2	0.057	<0.02	<0.2	<10	<2	<1	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--			
6/26/18	6.77	135.9	7.44	474	--	21.4	170	191	224	23.5	12.3	<0.2	<0.05	<0.02	0.29	40	<2	--	<0.01	--	--	--	--	--	--	--	--	--	--				

Historical Water Quality Database - Towslee Landfill
 Field and Inorganic Parameters
 Well MW-4A - Bedrock

Units	Analyte	Specific Conductance																			
		(°C)	(mV)	Eh	pH	(µS/cm)	(SU)	Color	Turbidity	ALK as CaCO ₃	HARD as CaCO ₃	TDS	Chloride	Sulfate	Bromide	NO ₃	NH ₃	TKN (as N)	COD	BOD	TOC
Water Quality Standard	--	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2 *	--	--	--	--	0.001	0.2
8/1/97	--	--	--	<5	--	253	308	550	79.1	9.8	<0.5	<0.1	<0.02	0.5	37	<2	7.7	1.8	--	--	
10/1/97	--	--	--	<5	--	355	464	493	74.6	11.5	<0.5	<0.1	0.2	0.4	22	<2	5.6	<1.0	--	--	
9/20/11	17.5	174	7.36	789	--	5.86	410	496	490	23.6	10.5	<0.8	<0.05	<0.5	<0.5	<20	5	4	<0.005	--	--
12/13/11	8.6	174	7.48	734	6	10.34	400J	430	430	25.5J	11.1	<0.8	<0.05	<0.5J	<0.5	<20	<4	<3	<0.005	<0.01J	--
3/20/12	14.6	193	7.1	762	<5	35	460J	444	460	21.5J	7	<0.8J	<0.05	<0.5	<0.5J	<20	<4J	8.4	<0.005J	<0.01	--
5/22/12	15.8	160	6.83	714	--	7.45	350	384	490	22.3	6.5	<8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--	--
8/29/12	17	153	7.05	818	--	15.8	450	421	520	19.4	6.99	<8	0.085	<0.5	<0.5	<20	<4	<3	<0.005	--	--
11/21/12	12.9	184	6.78	804	--	19.4	390	469	410	18.5	6.06	<0.5	<0.05	<0.5	<0.5	<20	<4	<3	<0.05	--	--
4/2/13	5.9	262	7.4	801	--	2.6	420	491	464	17.1	10.3	<0.2	<0.01	<0.5	<0.5	<10	<2	4.89	<0.02	--	--
7/11/13	13.9	338	7.72	630	5.6	6.8	315	237	496R	16.9J	9.11J	0.298J	0.048J	<0.5	<0.5	<10	6	3.56	<0.02	<0.02	--
9/17/13	14.7	207	7.19	742	--	3.6	379	394	470	17.7	9.67	0.182	<0.01	<0.1	<0.5	<10	<2	8.21	0.012	--	--
11/5/13	13.2	205	7.19	833	--	7.1	375	405	441	15.7	9.52	<0.1	<0.01	<0.1	<1	<10	<2	1.96	<0.005	--	--
3/18/14	7.68	476.1	6.97	685	--	46.6	470	461	420	18.6	11.2	<0.2	<0.05	<0.02	0.31	11.6	<2	2.3	<0.01	--	--
5/21/14	9.32	241.2	6.91	787	--	14.8	319	337	413	16.9	15.8	<0.2	0.068	<0.02	0.22	21.7	<2	1.3	<0.01	--	--
9/16/14	12.36	72.5	7.5	751	<5	12.7	300	393	453	19.7	15.5	<0.2	0.066	<0.02J	0.28	<10	<2	1.7	<0.01	<0.01	--
12/15/14	9.02	67.1	7.24	738	--	73.1	398	364	440	16.5	13.5	<0.2	<0.05	<0.02	<0.2	<10	<2	1.7	<0.01	--	--
6/23/15	12.98	88.1	7.6	740	--	17	336	378	355	17.2	13.3	<2	<0.05	<0.02	0.81	<10	3.1J	1.2	<0.01	--	--
9/22/15	13.91	118.4	7.32	675	--	5.74	418	396	458	15.8	7.7	<0.2	<0.05	<0.02J	0.3	<10	<2	2	<0.01	--	--
12/1/15	7.26	344.1	7.25	713	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	--
6/7/16	7.63	335.1	7.38	725	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	--
9/29/16	9.08	292.9	7.15	941	--	11.7	497	457	525	13.3	5	<0.2	<0.05	<0.02	<0.2	10.1	<2	2.3	<0.01	--	--
12/14/16	2.5	239	7.64	960	--	5.99	427	423	479	13.6	6.7	<0.2	<0.05	<0.02	0.27	<10	<2	2.2	<0.01	--	--
5/31/17	5.24	163.3	7.29	769	--	7.93	400	399	427	14.6	<5	<0.2	<0.05	<0.02	0.43	<10	<2	1.6	<0.01	--	--
9/26/17	9.84	64.8	6.44	816	<5	9.43	426	392	441	13.2	<5	<0.4	<0.05	<0.02J	0.26	<10	<2	2.1	<0.01	<0.01	--
12/19/17	8.81	-40.7	7.13	756	--	12.8	465	418	442	12.6	6.9	<0.4	<0.05	<0.02	<0.2	<10	<2	1.4	<0.01	--	--
6/26/18	3.96	94.1	7.26	826	--	11.8	428	421	443	15.5	7.2	<0.2	<0.05	<0.02	<0.2	17.9	<2	--	<0.01	--	--

Historical Water Quality Database - Towslee Landfill

Field and Inorganic Parameters

Well MW-5A - Bedrock

Analyte	Units	Specific Conductance																																				
		(°C)	(mV)	Eh	SU	pH	(µS/cm)	(SU)	Color	(NTU)	Turbidity	(mg/l)	ALK as CaCO ₃	(mg/l)	HARD as CaCO ₃	(mg/l)	TDS	(mg/l)	Chloride	(mg/l)	Sulfate	(mg/l)	Bromide	(mg/l)	NO ₃	(mg/l)	NH ₃	(mg/l)	TKN (as N)	(mg/l)	COD	(mg/l)	BOD	(mg/l)	TOC	(mg/l)	Phenolics, Total	(mg/l)
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2*	--	--	--	--	--	--	--	--	--	--	--	0.001	0.2											
8/1/97	--	--	--	--	20	--	130	250	116	44.5	22	<0.5	0.8	<0.02	0.4	16	<2	2.7	1.1	--	--	--	--	--	--	--	--	--	--	--	--							
10/1/97	--	--	--	--	<5	--	115	140	156	10.1	11.5	<0.5	<0.1	0.18	0.24	<15	<2	<1.0	<1.0	--	--	--	--	--	--	--	--	--	--	--	--	--						
11/21/12	12.1	172	7.24	238	--	25.2	94	112	100	5.28	14.1	<0.5	0.08	<0.5	<0.5	<20	<4	<3	<0.05	--	--	--	--	--	--	--	--	--	--	--	--	--						
4/2/13	4.5	224	8.77	226	--	1.8	104	94	163	6.09	13.5	<0.1	<0.01	<0.5	<0.5	<10	<2	0.612	<0.02	--	--	--	--	--	--	--	--	--	--	--	--	--						
7/11/13	14.8	323	7.35	373	7.4	1.9	100	100	209	5.39J	11.4J	0.288J	0.102J	<0.5	<0.5	<10	6	1.58	<0.02	<0.02	--	--	--	--	--	--	--	--	--	--	--	--						
9/17/13	17.1	193	7.44	261	--	3.2	123	113	151	5.61	10.9	<0.1	0.183	<0.1	<0.5	<10	<2	1.64	0.016	--	--	--	--	--	--	--	--	--	--	--	--	--						
11/5/13	13.8	204	8.28	283	--	4.6	90	108	164	5.1	11.3	<0.1	0.129	<0.1	<1	<10	<2	0.685	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--						
3/18/14	6.59	165.2	7.28	219	--	16.8	125	120	128	5.6	19.3	<0.2	<0.05	<0.02	0.23	<10	<2	1.4	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--						
5/21/14	11.03	-31.4	8.2	248	--	12	139	105	145	6	17.7	<0.2	0.097	<0.02	<0.2	<10	<2	<1	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--						
9/16/14	14.14	6.7	8.47	266	<5	8.14	129	117	154	6.9	14.8	<0.2	0.11	<0.02J	0.27	<10	2.5b	<1	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--					
12/15/14	9.21	46.4	7.9	267	--	13.8	114	105	153	6.1	13.5	<0.2	0.11	<0.02	<0.2	<10	<2	<1	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--						
6/23/15	12.85	107.7	8.12	283	--	7.66	110	111	83	6	16.8	<0.4	0.054	<0.02	<0.2	<10	<2	<1	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--						
9/22/15	14.92	100.1	7.91	235	--	5.08	117	113	155	6.3	14.7	<0.2	0.091	<0.02	<0.2	<10	<2	<1	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--						
12/1/15	7.32	233.3	7.71	248	20	8.8	132	114	147	6.7	17	<0.2	0.051	<0.02	0.46	<10	<2	<1	0.015	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--					
6/8/16	6.14	117	7.94	251	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	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--				
9/29/16	9.09	231.6	7.2	256	--	23.2	125	124	156	6.5	10.1	<0.2	0.18	<0.02	0.22	<10	<2	<1	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--						
12/14/16	2.8	286.7	7.3	316	--	4.18	124	119	167	7.3	9.8	<0.2	0.085	<0.02	0.29	<10	<2	<1	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--						
5/31/17	5.19	-4.8	7.93	272	--	8.3	108	116	158	6.3	11.2	<0.2	0.18	<0.02	0.26	<10	<2	<1	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--						
9/26/17	10.81	43.1	7.28	296	10	17.2	132	116	139	7.6	6.7	<0.2	0.1	<0.02J	0.37	<10	2.4	1.2	0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--					
12/19/17	9.08	-47.9	7.11	280	--	16.5	130	132	157	6.1	13.3	<0.2	0.1	<0.02J	<0.2	<10	<2	<1	<0.01J	--	--	--	--	--	--	--	--	--	--	--	--	--						
6/26/18	4.91	27	8.09	300	--	13.5	118	126	115	6.9	13.3	<0.2	0.11	<0.02	0.73	31	3.1	--	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--						

Historical Water Quality Database - Towslee Landfill
Field and Inorganic Parameters
Well MW-6A - Overburden

Analyte	Temperature	(°C)	Eh	pH	Specific Conductance (µS/cm)	Color (SU)	Turbidity (NTU)	ALK as CaCO ₃ (mg/l)	HARD as CaCO ₃ (mg/l)	TDS (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Bromide (mg/l)	NO ₃ (mg/l)	NH ₃ (mg/l)	TKN (as N) (mg/l)	COD (mg/l)	BOD (mg/l)	TOC (mg/l)	Phenolics, Total (mg/l)	Cyanide (mg/l)
Units		(mV)	(mV)	SU	(µS/cm)																
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2*	--	--	--	--	--	0.001	0.2
8/1/97	--	--	--	--	60	--	357	650	595	79.1	13.8	0.9	<0.1	1.6	1.5	94	3	14	3	<10	
10/1/97	--	--	--	--	80	--	325	550	472	71.8	30.6	1	<0.1	0.02	<0.2	82	6	10.6	1.8	<10	
9/20/11	17.8	125	7.04	446	--	33.14	200	208	270	21.4	10.6	<0.8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--	
12/13/11	9.8	156	7.87	425	200	8.52	210J	194	280	13.9J	16.1	<0.8	<0.05	<0.5J	1.12	<20	<4	<3	<0.005	<0.01J	
3/20/12	23.8	193	7.38	415	<5	922	200J	197	230	8.86J	13.8	<8J	0.094	<0.5J	1.16J	<20	<6R	5.6	<0.005J	<0.01	
5/22/12	18.9	133	7.35	408	--	241	130	169	310	20	13.6	<8	0.09	<0.5	1.89	<20	<4	<3	<0.005	--	
8/30/12	18.4	118	6.67	491	--	71.9	180	185	390	23.8	11.4	<80	<0.05	<0.5	2.38	27	<4	<3	<0.005	--	
11/21/12	13.5	186	7.1	448	--	48.7	200	214	230	12.1	13.1	<0.5	<0.05	<0.5	1.27	<20	<4	<3	<0.05	--	
4/2/13	6.2	265	7.05	424	--	7.2	185	202	238	13.6	14.9	<0.1	0.1	<0.5	<0.5	<10	<2	3.56	<0.02	--	
7/11/13	13.9	356	6.82	728	14	>100	152	160	293	10.2J	14J	0.401J	0.281J	<0.5	3.12	<10	2	4.91	<0.02	<0.02	
9/17/13	15.3	171	7.2	393	--	9.4	301	171	231	12.4	12.8	<0.1	0.155	<0.1	1.34	<10	<2	5.3	0.009	--	
11/5/13	13.2	219	6.72	446	--	79	176	174	210	11.3	12.4	<0.1	0.195	<0.1	<1	<10	<2	2.25	<0.005	--	
3/17/14	7.31	354	5.63	380	--	3600	214	266	252	14.5	15	<0.2	<0.05	0.096	0.43	<10	<2	2.5	<0.01	--	
5/21/14	9.02	127	6.8	408	--	--	136	226	233	6.1	17.7	<0.2	0.24	0.24	5.9	15.4	<2	2.2	<0.01	--	
9/15/14	14	54.1	7.1	461	<5	>3600	162	213	232	30.2	17.8	<0.2	<0.05	0.091J	1.5	11.9	<2	2.2	<0.01	<0.01	
12/15/14	9.85	18.6	6.81	438	--	>3600	204	218	264	13.8	<5	<0.2	0.071	0.13	1.3	14.9	<2	2.1	<0.01	--	
6/23/15	11.5	119.1	7.22	427	--	12.1	166	174	154	14.7	9.2	<1	0.054	0.044	0.99	10	<2	1.3	<0.01	--	
12/1/15	7.15	298	6.7	371	10	102.3	215	184	273	11.2	8.4	<0.2	<0.05	0.27J	2	12.3	<2	3.4	<0.01	<0.01	
6/8/16	5.87	140.2	7.05	428	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	
9/29/16	7.6	228.1	7.07	509	--	777	147	188	1000	38.3	14.9	<0.2	<0.05	0.31	8.4	24.4	3J	4.3	<0.01	--	
12/14/16	2.87	316	7.62	449	--	192	189	183	708	8.3	15	<0.2	0.24	0.092	0.96	<10	<2	3.2	<0.01	--	
5/31/17	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	2.3	<0.01	--	
9/26/17	10.7	63.6	5.72	472	<5	66	173	166	225	33.4	5.5	<0.2	0.14	0.099J	0.72	<10	<2	2.3	<0.01	<0.01	
12/19/17	8.43	-33.7	6.69	421	--	109	199	191	279	12.8	<5	<0.2	0.3	0.1	0.65	<10	<2	2.5	<0.01	--	
6/26/18	3.14	70.7	6.79	513	--	819	151	211	243	47.1	<5	<0.2	0.064	0.11	1.4	35.4	7.3	--	<0.01	--	

Historical Water Quality Database - Towslee Landfill

Field and Inorganic Parameters

Well MW-6B - Bedrock

Units	Analyte	Specific Conductance																		
		(°C)	Eh	pH	(µS/cm)	Color	Turbidity	ALK as CaCO ₃	HARD as CaCO ₃	TDS	Chloride	Sulfate	Bromide	NO ₃	NH ₃	TKN (as N)	COD	BOD	TOC	Phenolics, Total
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2 *	--	--	--	--	0.001	0.2
8/1/97	--	--	--	--	<5	--	240	300	98	38.2	27.1	<0.5	0.6	0.09	0.6	40	<2	6	0.0032	--
10/1/97	--	--	--	--	20	--	224	240	280	35	22.2	<0.5	<0.1	2.5	3.3	19	2	5.8	<0.001	--
3/22/06	7.9	250	6.7	347	--	40	131	135	209	21.1	13.8	<0.1	<0.1	0.055	0.392	<10	<3	5.22	<0.005	--
5/31/06	10.5	85	7.4	287	--	19.9	148	144	175	2.33	3.95	<0.1	<0.1	<0.02	0.904H	<10	5.1	3.14	<0.005	--
8/9/06	12.2	225	7.52	304	<5	15.8	154	131	190	2.32	3.28	0.122	<0.1	0.096	0.214	11.6	3.2	<2	<0.005	<0.01
10/10/06	14.3	180	7.11	329	--	14.2	153	133	187	3.39	6.14	<0.1	<0.1	<0.1	0.279	<10	<3	<2	<0.005	--
3/20/07	9.7	82	8.04	220	--	68.9	180	156	127	11.6	8.54	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
4/26/07	7.4	-92	7.73	249	--	8.1	160	139	105	6.99	6.79	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
7/31/07	15.6	-105	7.85	236	--	9.48	150	138	220	13.8	17.3	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
10/10/07	14.8	-57	7.82	810	6	12.5	140	124	208	25.9	12.7	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
2/1/08	3.7	121	8.55	199	7	13.6	140	136	198	16.7	18.1	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<10
4/16/08	10.4	-71	8.25	360	--	11.6	140	142	225	16.9	16.5	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
7/23/08	16.1	-81	8.21	343	--	2.19	110	137	116	31.1	26.8	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
10/24/08	12.6	-54	7.96	355	--	5.24	120	134	168	28.6	17.2	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
3/12/09	6.5	-38	7.7	327	--	9.56	120	142	188	13.3	13.2	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
6/17/09	14.1	186	7.32	187	11	3.62	140	154	190H	19.4	14.2	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
9/30/09	12.7	190	7.2	1999	--	5.13	140	148	170	19.7	10.3	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
12/1/09	9	180	7.09	1108	--	13.3	140	138	130	14.7	13.5	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
1/28/10	4.7	102	8.35	922	--	12.5	150	163	240	13.2	13.4	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
4/27/10	8.1	222	6.54	1673	--	43.6	150	147	220	12	7.57	<1	0.0804	<0.5	0.522	<20	<4	<3	<0.005	--
7/20/10	18.2	144	7.66	249	35	4.71	140	144	200	14	11	<0.8	0.092	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
10/26/10	14.6	132	7.39	342	--	16	160	147	190	16	11.2	<1.6	0.051	<0.5	0.799	<20	<4	<3	<0.005	--
3/22/11	9.8	102	7.41	372	--	10.8	130	145	160	11.9	15	<0.8	0.47	<0.5	<0.5	<20	<4	<3	<0.005	--
5/24/11	15.7	88	7.75	399	--	7.65	150	153	250	16.4	19.2	<0.8	0.058	<0.5	<0.5	<20	<4	<3	<0.005	--
9/20/11	16.7	133	7.34	355	--	6.94	160	172	230	12.7	18.7	<0.8	0.056	<0.5	<0.5	<20	<4	<3	<0.005	--
12/13/11	10.6	153	8.25	387	5	4.1	180J	166	200	19.4J	18.6	<0.8	0.087	<0.5J	0.546	<20	<4	<3	<0.005	<0.01J
3/20/12	18.5	190	7.3	344	<5	6.83	140J	146	170	16.2J	21.5	<0.8J	0.073	<0.5	<0.5J	<20	<4J	<3	<0.005J	<0.01
5/22/12	17.7	139	7.29	363	--	17.1	190	150	240	10.1	17.9	<80	0.081	<0.5	<0.5	<20	<4	<3	<0.005	--
8/30/12	18.7	119	6.72	377	--	4.95	140	151	270	23.3	16.7	<8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--
11/21/12	12.7	184	7.03	376	--	14.5	140	168	220	17.3	20.7	<0.5	0.065	<0.5	<0.5	<20	<4	<3	<0.05	--
4/2/13	6.4	259	7.82	349	--	9.4	155	154	192	8.22	10.2	<0.1	0.053	<0.5	<0.5	<10	<2	1.09	<0.02	--
7/11/13	12.3	88	7.9	475	8.3	3.2	149	138	272	11.4J	16.7J	<0.1J	0.076J	<0.5	<0.5	<10	<2	1.73	<0.02	<0.02
9/17/13	13.1	153	7.45	389	--	11	153	153	207	17.1	13.5	<0.1	0.085	<0.1	<0.5	<10	<2	3.27	0.013	--
11/5/13	13.2	215	6.95	398	--	6.7	151	143	201	13.4	12.3	<0.1	0.084	<0.1	<1	<10	<2	1.03	<0.005	--
3/17/14	7.58	502	5.93	317	--	11.4	154	152	238	26.3	21.2	<0.2	<0.05	<0.02	<0.2	<10	<2	1.3	<0.01	--
5/21/14	10.36	131.1	7.13	354	--	29.7	203	140	188	17.4	37.6	<0.2	0.098	<0.02	<0.2	<10	<2	<1	<0.01	--
9/15/14	11.47	138.9	7.18	372	<5	30.1	173	157	193	23.6	17.9	<0.2	<0.05	<0.02J	0.58	<10J	<2	1.6	<0.01	<0.01
12/15/14	9.7	23.6	7.26	346	--	43.4	160	144	193	10.1	20.9	<0.2	0.06	<0.02	<0.2	<10	<2	<1	<0.01	--
6/23/15	11.84	123.6	7.07	386	--	8.42	160	149	154	24.8	20.8	<1	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	--
9/22/15	12.35	90.4	6.74	352	--	5.67	155	161	235	28	20	<0.2	<0.05	<0.02	0.37	<10	<2	1	<0.01	--
12/1/15	7.44	394.3	6.55	297	25	10.3	151	136	180	12.5	32	<0.2	0.059	<0.02	0.48	<10	<2	1.1	<0.01	<0.01
6/8/16	5.56	100.2	7.92	359	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
9/29/16	7.02	315.7	7.38	338	--	32.2	147	132	175	3.5	6.7	<0.2	0.37	0.055	0.35J	11.3	3.6J	1.1	<0.01	--
12/14/16	3.42	305.4	7.91	401	--	29.2	153	139	215	6.9	15.9	<0.2	<0.05	<0.02	<0.2	<10	<2	<1	<0.01	--
5/31/17	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	--
9/26/17	8.5	46.3	6.69	418	10	37	176	155	188	25.2	<5	<0.2	<0.05	<0.02J	0.31	<10	<2	1.2	<0.01	<0.01
12/19/17	10.22	-29.5	6.97	337	--	19.7	172	159	196	11.3	10.6	<0.2	0.062	0.032	<0.2	<10	<2	<1	<0.01	--
6/26/18	4.28	200.9	7.27	406	--	8.78	157	154	180	21.3	11.8	<0.2	<0.05	<0.02	<0.2	<10	<2	--	<0.01	--

Historical Water Quality Database - Towslee Landfill

Field and Inorganic Parameters

Well MW-7A - Overburden

Analyte	Temperature	Eh	pH	Specific Conductance	Color	Turbidity	ALK as CaCO ₃	HARD as CaCO ₃	TDS	Chloride	Sulfate	Bromide	NO ₃	NH ₃	TKN (as N)	COD	BOD	TOC	Phenolics, Total	Cyanide
Units	(°C)	(mV)	SU	(μS/cm)	(SU)	(NTU)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2 *	--	--	--	--	0.001	0.2
8/1/97	--	--	--	--	20	--	569	1010	1220	300	27.4	0.6	<0.1	0.93	1.1	43	<2	10.1	0.0051	<0.01
10/1/97	--	--	--	--	5	--	660	1150	1240	276	20.2	<0.5	0.2	0.89	1.4	112	2	12.6	0.0027	<0.01
3/22/06	4.5	215	6.5	1360	--	214	648	627	981	144	20.6	0.753	<0.1	0.34	1.5	21.2	<3	12.8	<0.005	--
5/31/06	11.6	120	6.4	1520	--	18	675	599	967	143	22.5	0.633	<0.1	<0.02	1.68H	16.5	<3	8.19	0.007	--
8/9/06	17.4	245	6.34	1440	<5	13.6	595	531	963	119	19.7	0.822	<0.1	<0.02	0.75	26.4	<3	6.12	<0.005	<0.01
10/10/06	13.9	190	6.62	1480	--	42	635	526	949	85	14.1	0.483	<0.1	<0.1	1.11	20.5	<3	7.46	<0.005	--
3/20/07	9.3	77	7.04	893	--	45.3	640	529	753	145	16.5	0.6	<0.2	<0.5	1.47	27	<4	8.1	<0.005	--
4/26/07	7.8	-64	7.12	765	--	54.3	510	499	865	131	23.2	<0.2	<0.2	<0.5	3.6	<20	<4	6	0.006	--
7/31/07	18.8	-69	7.2	514	--	40.9	530	481	3000	145	22.7	<2	<0.2	<0.5	0.784	<20	<4	7.2	0.007	--
10/10/07	15.2	-24	7.11	972	85	48.1	540	459	752	141	17.8	<2	<0.2	<0.5	0.591	<20	<4	11.5	<0.005	<0.01
2/1/08	2	245	7.77	561	7	39.3	570	528	800	141	12.2	<2	<0.2	<0.5	0.522	<20	<4	69.9	<0.005	<10
4/16/08	9.8	-37	7.63	1174	--	44.4	560	506	1560	1260	<20	<200	0.25	<0.5	0.949	36	<4	17.8	<0.005	--
7/23/08	18.6	-42	7.73	618	--	41.6	600	538	668	136	21	<20	<0.2	<0.5	<0.5	22	<4	5.2	<0.005	--
10/24/08	11.1	-41	8.09	214	--	42.7	670	569	728	135	16.1	<20	<0.2	<0.5	<0.5	29	<4	6.1	<0.005	--
3/12/09	4.2	-19	7.35	1014	--	40.9	500	496	748	114	21	<0.2	<0.2	<0.5	1.92	<20	<4	5.1	<0.005	--
6/17/09	16	219	6.77	622	80	375	500	534	720	128	22.3	<0.2	<0.2	<0.5	0.851	38	<4	5.7	<0.005	<0.01
9/30/09	12.6	194	7.12	644	--	33.5	480	499	620	120	19.5	<2	<0.2	<0.5	0.927	37	<4	5	<0.005	--
12/1/09	8.1	141	7.86	217	--	40.1	520	473	640	117	23.1	<2	<0.2	<0.5	0.599	21	<4	5.2	<0.005	--
1/28/10	5.2	192	6.73	260	--	23.6	600	508	520	104	19.2	<2	<0.2	<0.5	1.02	33	<4	4.9	<0.005	--
4/27/10	7.3	246	6.13	483	--	31.4	500	435	730	89.1	22.5	<1	<0.05	<0.5	1.4	28	<4	6.7	<0.005	--
7/20/10	19	149	7.89	412	8	20.1	510	520	690	128	25.2	<4	0.059	<0.5	1.27	31	<4	6	<0.005	<0.01
10/26/10	14.5	155	6.87	1133	--	328	520	507	710	115	23.9	<8	<0.05	<0.5	2.15	40	<4	6.1	<0.005	--
3/22/11	9	260	6.78	1184	--	20.7	600	484	660	95.7	21.7	<80	0.103	<0.5	0.639	28	<4	5.1	<0.005	--
5/24/11	18.3	135	7.02	1179	--	69.2	510	465	710	99	18.7	<8	<0.05	<0.5	<0.5	33	<4	4.8	<0.005	--
9/20/11	18	166	6.92	1236	--	169	560	585	750	100	18.8	<8	0.081	<0.5	1.03	29	<4	6.1	<0.005	--
12/13/11	8.6	185	7.26	1127	7	36.38	550J	505	620	108J	21.6	<8	0.063	<0.5J	2.19	40	<4	4.1	<0.005	<0.01J
3/21/12	18	172	6.74	1172	6	24.6	500J	524	1000	99.4J	21.9	<80J	<0.05	<0.5	<0.5J	22	<4J	15.1	<0.005J	<0.01
5/22/12	15.8	184	6.36	1085	--	>1000E	520	449	630	99.5	20	<80	<0.05	<0.5	<0.5	22	<4	7.3	<0.005	--
8/30/12	19.5	170	6.97	1134	--	40.9	490	431	750	103	17.8	<80	<0.05	<0.5	0.627	21	<4	6.7	<0.005	--
11/21/12	10.1	203	6.31	1122	--	28	510	515	480	98.6	18.2	<0.5	<0.05	<0.5	0.608	<20	<4	4.2	<0.05	--
4/2/13	3.2	273	7.42	1172	--	9.8	504	518	691	93.7	21.4	<0.2	<0.01	<0.5	<0.5	<10	<2	8.17	<0.02	--
7/11/13	14.2	314	7.19	<5	<5	22	428	271	812	>50J	17.4J	0.159J	<0.01J	<0.5	0.634	<10	<2	6.56	<0.02R	<0.02
9/17/13	14.6	221	7.21	1027	--	6.7	465	446	613	80.6	17.8	0.354	<0.01	<0.1	<0.5	13	<2	14.3	0.007	--
11/5/13	12	209	6.86	1234	--	23	411	426	641	72.4	17.8	<0.1	<0.01	<0.1	<1	12	<2	2.96	<0.005	--
5/21/14	11.1	203	6.96	1099	--	99.7	520	414	645	73.5	31.6	<0.2	0.055	0.027	0.62	17.3	<2	4.8	<0.01	--
9/16/14	11.5	101	7	1128	<5	>3600	388	506	649	78.3	33.1	0.92	<0.05	0.091J	1.4	19	<2	4.3	<0.01	<0.01
12/15/14	7.8	149	6.67	1095	--	652	562	459	636	71.1	26	0.27	<0.05	0.05	0.69	22.9	<2	4.4	<0.01	--
6/23/15	12.1	31.3	6.96	1055	--	22.5	403	392	550	64.9	25.7	<2	<0.05	<0.02	0.41	15.3	<2	3.5	<0.01	--
9/23/15	13.8	70.7	6.76	866	--	17.3	460	375	585	56.8	17.7	0.25	<0.05	0.031	0.39	17.9	<2	3.9	<0.01	--
12/1/15	7.36	197	6.72	941	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
6/8/16	7	76.7	7.15	867	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
9/29/16	10.1	211	6.87	1042	--	42.7	488	396	565	53.4	25.8	<0.2	<0.05	0.021J	0.53	19.5	<2	5	<0.01	--
12/14/16	3.72	96.2	7.62	859	--	79.9	411	308	487	36.9	12.5	<0.2	<0.05	<0.02	0.59	10.6	<2	6.7	<0.01	--
5/31/17	6.3	88.2	6.46	694	--	52	357	311	402	14.6	<5	<0.2	0.051	0.11	0.87	<10	<2	6.8	<0.01	--
9/26/17	11.1	38.8	6.08	984	5	9.33	505	361	537	38.2	<5	<0.4	0.062	0.1J	0.74	<10	<2	7.7	<0.01	<0.01
12/19/17	7.21	-28	6.87	885	--	18	490	392	553	32.3	<5	<0.4	<0.05	0.19J	0.55	<10	<2	7.6	<0.01	--
6/26/18	6.45	105	6.8	969	--	6.02	478	390	544	39.3	<5	0.2	<0.05	0.076	0.94	26.2	<2	--	<0.01	--

Historical Water Quality Data - Towslee Landfill

CD-1 Total Metals (all values in mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc	
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
9/20/11	--	--	--	--	--	--	<0.005	45.2	--	--	--	0.126	<0.003	9.04	0.18	--	--	<5	<5	--	--	--	--	--	
12/13/11	0.383	<0.005J	<0.005J	0.077	<0.003	<0.5	<0.005	41.6	<0.01	<0.01	<0.02	<0.01	0.688	<0.003J	10.1	0.256	<0.0002	<0.03	<5	<5	<0.003J	<0.01	<0.003J	<0.03	<0.01
3/20/12	1.32	<0.005	<0.005	0.106	<0.003	<0.5	<0.005	40.7	<0.01	<0.01	<0.02	<0.01	2.04J	<0.003	10.3	1.62	<0.0002	<0.03	<5	<5	<0.003	<0.01J	<0.003	<0.03	0.0119
5/22/12	--	--	--	--	--	--	<0.005	41.2	--	--	--	--	2.34	<0.003	10.5	1.3	--	--	<5	<5	--	--	--	--	--
8/29/12	--	--	--	--	--	--	<0.005	34.7	--	--	--	--	0.15	<0.003	7.92	0.0614	--	--	<5	<5	--	--	--	--	--
11/21/12	--	--	--	--	--	--	<0.005	45.2	--	--	--	--	0.366	<0.015	11	0.439	--	--	<5	<5	--	--	--	--	--
4/2/13	--	--	--	--	--	--	<0.05	44.9	--	--	--	--	<0.2	<0.05	9.06	0.27	--	--	0.99	4.4	--	--	--	--	--
7/11/13	0.73	<0.005	<0.005	<0.1	<0.003	<0.5	<0.05	26.6R	<0.005	<0.005J	<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
9/17/13	--	--	--	--	--	--	<0.001	37.2	--	--	--	--	<0.2	0.019	7.81	0.063	--	--	1.4	3.8	--	--	--	--	--
11/5/13	--	--	--	--	--	--	<0.005	37.4	--	--	--	--	<0.2	<0.005	8.53	0.22	--	--	1.3	3.9	--	--	--	--	--
3/18/14	--	--	--	--	--	--	<0.002	56.8	--	--	--	--	10.8	<0.01	12.8	7	--	--	2.7	4.1	--	--	--	--	--
5/21/14	--	--	--	--	--	--	<0.002	65.6	--	--	--	--	20	0.011	14.2	5.5	--	--	4.3	4	--	--	--	--	--
9/15/14	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
12/15/14	--	--	--	--	--	--	<0.002	40.2	--	--	--	--	3.2	<0.01	10.7	1.5	--	--	1.8	4.7	--	--	--	--	--
6/23/15	--	--	--	--	--	--	<0.002	36.8	--	--	--	--	0.11	<0.01	8.9	0.14	--	--	1.4	3.8	--	--	--	--	--
9/22/15	--	--	--	--	--	--	<0.002	35.5	--	--	--	--	0.13	<0.01	7.4	0.32	--	--	2.2	4.5	--	--	--	--	--
12/1/15	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
6/8/16	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
9/29/16	--	--	--	--	--	--	<0.002	38.7	--	--	--	--	0.76	<0.01	8.1	1.6	--	--	2.2	4.4	--	--	--	--	--
12/14/16	--	--	--	--	--	--	<0.002	39.9	--	--	--	--	0.32	<0.01	8.9	0.79	--	--	0.95	3.6	--	--	--	--	--
5/31/17	--	--	--	--	--	--	<0.002	38.3	--	--	--	--	0.56	<0.01	8.9	1.8	--	--	1.1	3.5	--	--	--	--	--
9/26/17	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
12/19/17	--	--	--	--	--	--	<0.002	41.4	--	--	--	--	0.28	<0.01	9.5	0.43	--	--	1.1	4.4	--	--	--	--	--
6/26/18	--	--	--	--	--	--	<0.002	39	--	--	--	--	0.086	<0.01	8.8	0.66	--	--	1.5	3.6	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

CD-1RA Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	0.587	0.0035B	0.0032B	0.168B	<0.0001	0.0227B	<0.0003	41.5	0.0042B	NA	<0.0011	0.004B	1.01	0.0017B	9.5	0.19	NA	<0.0013	1.01B	5.41	NA	NA	<0.0026	<0.0012	0.024
10/1/97	5.24	0.0031B	0.004B	0.229	0.0011B	0.0253B	0.0011B	45.7	0.0089B	NA	0.0053B	0.0085B	10.3	0.0049	10.4	0.352	NA	0.0104B	1.91B	4.76B	NA	NA	<0.0026	0.0086B	0.0366
9/20/11	--	--	--	--	--	--	<0.005	41	--	--	--	--	0.662	<0.003	7.95	0.119	--	--	<5	<5	--	--	--	--	--
12/13/11	1.7	<0.005J	<0.005J	0.2	<0.003	<0.5	<0.005	44.1	<0.01	<0.01	<0.02	<0.01	2.75	<0.003J	10.8	0.211	<0.0002	<0.03	<5	6.69	<0.003J	<0.01	<0.003J	<0.03	0.0146
3/20/12	0.145	<0.005	<0.005	0.243	<0.003	<0.5	<0.005	47.1	<0.01	<0.01	<0.02	<0.01	0.248J	<0.003	11.4	0.188	<0.0002	<0.03	<5	6.24	<0.003	<0.01J	<0.003	<0.03	<0.01
5/22/12	--	--	--	--	--	--	<0.005	43.1	--	--	--	--	0.509	<0.003	11.5	0.23	--	--	<5	5.26	--	--	--	--	
8/29/12	--	--	--	--	--	--	<0.005	38.5	--	--	--	--	0.15	<0.003	9.47	0.139	--	--	<5	<5	--	--	--	--	
11/21/12	--	--	--	--	--	--	<0.005	44.3	--	--	--	--	0.136	<0.015	11	0.18	--	--	<5	5.25	--	--	--	--	
4/2/13	--	--	--	--	--	--	<0.05	37.2	--	--	--	--	<0.2	<0.05	6.14	<0.05	--	--	0.98	5	--	--	--	--	
7/11/13	1.5	<0.005	<0.005	0.15	<0.003	<0.5	<0.05	39.9R	0.0084	<0.005J	<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
9/17/13	--	--	--	--	--	--	<0.001	42.6	--	--	--	--	1.1	0.013	9.39	0.12	--	--	0.99	5.2	--	--	--	--	
11/5/13	--	--	--	--	--	--	<0.005	42.2	--	--	--	--	4.5	0.0099	10.6	0.2	--	--	1.6	5	--	--	--	--	
3/18/14	--	--	--	--	--	--	0.0025	169	--	--	--	--	97.7	0.39	49.1	4.2	--	--	9.3	5.7	--	--	--	--	
5/21/14	--	--	--	--	--	--	<0.002	127	--	--	--	--	96.9	0.24	44.7	3.1	--	--	9.7	5.1	--	--	--	--	
9/15/14	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
12/15/14	--	--	--	--	--	--	<0.002	44.1	--	--	--	--	10	0.014	14.2	0.44	--	--	2.4	4.9	--	--	--	--	
6/23/15	--	--	--	--	--	--	<0.002	43.9	--	--	--	--	6.4	0.015	11.8	0.27	--	--	2.6	5.1	--	--	--	--	
9/22/15	--	--	--	--	--	--	<0.002	47.5	--	--	--	--	4.6	<0.01	11.9	0.37	--	--	1.9	5.5	--	--	--	--	
12/1/15	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
6/8/16	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
9/29/16	--	--	--	--	--	--	<0.002	46.1	--	--	--	--	1.2	<0.01	10.9	0.27	--	--	1.1	5.8	--	--	--	--	
12/14/16	--	--	--	--	--	--	<0.002	40.7	--	--	--	--	4.2	<0.01	10.4	0.2	--	--	1.7	4.8	--	--	--	--	
5/31/17	--	--	--	--	--	--	<0.002	43.2	--	--	--	--	3	<0.01	11.1	0.13	--	--	1.6	5.1	--	--	--	--	
9/26/17	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
12/19/17	--	--	--	--	--	--	<0.002	47.2	--	--	--	--	3.3	<0.01	11.8	0.26	--	--	1.6	5.8	--	--	--	--	
6/26/18	--	--	--	--	--	--	<0.002	43	--	--	--	--	4	<0.01	11.3	0.19	--	--	2.1	4.8	--	--	--	--	

Historical Water Quality Data - Towslee Landfill

MW-1A Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium (V)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc	
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	724	<0.003	0.353	8.11	0.0287	0.0873B	<0.0003	430	1.04	--	0.59	0.996	1550	0.454	309	24.6	0.0014	1.33	77.5	37.3	<0.028	<0.009	<0.026	0.856	3.36
10/1/97	16.9	<0.003	0.0134	0.258	0.00083B	0.0665B	<0.0003	48.6	0.0265	--	0.0168B	0.0254	35.7	0.0123	15.6	0.783	<0.0001	0.0364B	6.97	26	<0.0028	<0.0009	<0.0026	0.0243B	0.0874
3/22/06	--	--	--	--	--	--	<0.005	46.2	--	--	--	--	19.4	0.00716	12.6	0.534	--	--	2.72	17.1	--	--	--	--	--
5/31/06	--	--	--	--	--	--	<0.005	41.8	--	--	--	--	2.99	0.007	8.67	0.194	--	--	1.6	13	--	--	--	--	--
8/9/06	2.96	<0.05	<0.025	0.104	<0.005	0.073	<0.005	43.2	<0.005	<0.02	<0.015	0.022	6.03	<0.005	9.7	0.38	<0.0004	<0.01	1.7	13.6	<0.02	<0.015	<0.03	<0.015	0.106
10/10/06	--	--	--	--	--	--	<0.005	43.9	--	--	--	--	2.11	<0.005	9.43	0.306	--	--	1.62	13.5	--	--	--	--	--
3/20/07	--	--	--	--	--	--	<0.005	39.2	--	--	--	--	1.67	<0.003	8.87	0.19	--	--	1.74	12.2	--	--	--	--	--
4/26/07	--	--	--	--	--	--	<0.005	44.5	--	--	--	--	2.14	<0.003	10.2	0.193	--	--	2.31	12.5	--	--	--	--	--
7/31/07	--	--	--	--	--	--	<0.005	43.5	--	--	--	--	1.21	<0.003	9.67	0.206	--	--	1.59	13	--	--	--	--	--
10/10/07	2.07	<0.015	<0.01	0.0917	<0.003	<0.5	<0.005	42.2	<0.005	<0.01	<0.02	<0.01	3.49	<0.003	9.8	0.203	<0.0002	<0.03	2.06	11.8	<0.005	<0.01	<0.01	<0.03	0.0235
4/16/08	--	--	--	--	--	--	<0.005	43.2	--	--	--	--	1.17	<0.003	10.6	0.157	--	--	1.65	12.5	--	--	--	--	--
7/23/08	--	--	--	--	--	--	<0.005	46.2	--	--	--	--	0.217	<0.003	10.7	0.135	--	--	1.51	13.8	--	--	--	--	--
10/24/08	--	--	--	--	--	--	<0.005	48.3	--	--	--	--	0.429	<0.003	10.8	0.151	--	--	1.69	13.2	--	--	--	--	--
3/12/09	--	--	--	--	--	--	<0.005	47.2	--	--	--	--	0.818	<0.003	10.6	0.0917	--	--	1.52	13.4	--	--	--	--	--
6/17/09	1.57	<0.015	<0.01	0.0732	<0.003	<0.5	<0.005	47	<0.005	<0.01	<0.02	<0.01	1.65	<0.003	11.1	0.169	<0.0002	<0.03	1.78	13.9	<0.005	<0.01	<0.01	<0.03	<0.01
9/30/09	--	--	--	--	--	--	<0.005	46.5	--	--	--	--	0.348	<0.003	10	0.155	--	--	<1	12.5	--	--	--	--	--
12/1/09	--	--	--	--	--	--	<0.005	45	--	--	--	--	6.19	<0.003	11.9	0.251	--	--	<5	12.6	--	--	--	--	--
4/27/10	--	--	--	--	--	--	<0.005	47	--	--	--	--	0.484	<0.003	10.5	0.118	--	--	<5	12.8	--	--	--	--	--
7/20/10	0.142	<0.005	<0.005	0.0757	<0.003	<0.5	<0.005	48.9	<0.01	<0.01	<0.02	<0.01	0.219	<0.003	10.8	0.156	<0.0002	<0.03	<5	13.2	<0.003	<0.01	<0.003	<0.03	<0.01
10/26/10	--	--	--	--	--	--	<0.005	49	--	--	--	--	1.99	<0.003	11.3	0.329	--	--	<5	15.3	--	--	--	--	--
3/22/11	--	--	--	--	--	--	<0.005	45.6	--	--	--	--	1.47	<0.003	11	0.236	--	--	<5	13.6	--	--	--	--	--
5/24/11	--	--	--	--	--	--	<0.005	46.9	--	--	--	--	3.13	<0.003	11.5	0.215	--	--	<5	13.1	--	--	--	--	--
9/20/11	--	--	--	--	--	--	<0.005	51.5	--	--	--	--	0.872	<0.003	10.5	0.139	--	--	<5	13.2	--	--	--	--	--
12/14/11	0.711	<0.005J	<0.005J	0.0774	<0.003	<0.5	<0.005	51	<0.01	<0.01	<0.02	<0.01	0.987	<0.003J	12	0.119	<0.0002	<0.03	<5	14.9	<0.003J	<0.01	<0.003J	<0.03	<0.01
3/21/12	19.1	<0.005	0.0115J	0.273	<0.003	<0.5	<0.005	58.2	0.0267	<0.01	<0.02	0.0218	33.7J	0.0108	19.3	0.691	<0.0002	0.0409	<5	15.6	<0.003	<0.01J	<0.003	<0.03	0.0792
5/22/12	--	--	--	--	--	--	<0.005	49.4	--	--	--	--	1.65	<0.003	12.6	0.121	--	--	<5	12.6	--	--	--	--	--
8/30/12	--	--	--	--	--	--	<0.005	42.8	--	--	--	--	0.702	<0.003	9.95	0.0453	--	--	<5	10.4	--	--	--	--	--
11/21/12	--	--	--	--	--	--	<0.005	47.9	--	--	--	--	0.844	<0.015	11.8	0.121	--	--	<5	12.3	--	--	--	--	--
4/2/13	--	--	--	--	--	--	<0.05	56.1	--	--	--	--	4	<0.05	11.4	0.61	--	--	1.3	13	--	--	--	--	--
7/11/13	6.4	<0.005	<0.005	0.16	<0.003	<0.5	<0.05	47R	0.0093	<0.005J	<0.05	<0.05	13	0.005	12.3	2.4	<0.0002	<0.05	2.4	11	<0.005	<0.005	<0.05	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	46.7	--	--	--	--	0.56	0.0021	9.79	<0.05	--	--	1.3	12	--	--	--	--	--
11/5/13	--	--	--	--	--	--	<0.005	45.1	--	--	--	--	1.1	<0.005	10.3	0.064	--	--	1.4	12	--	--	--	--	--
5/21/14	--	--	--	--	--	--	<0.002	68.4	--	--	--	--	103	0.044	32.1	2.5	--	--	12.1	11.6	--	--	--	--	--
9/16/14	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
6/23/15	--	--	--	--	--	--	<0.002	45.6	--	--	--	--	0.94	<0.01	10.8	0.34	--	--	1.3	11.8	--	--	--	--	--
9/23/15	--	--	--	--	--	--	<0.002	45.6	--	--	--	--	1.9	<0.01	10.5	0.15	--	--	1.8	12.2	--	--	--	--	--
12/1/15	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
6/8/16	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
9/29/16	--	--	--	--	--	--	<0.002	48.2	--	--	--	--	1.6	<0.01	11	0.2	--	--	1.5	12.8	--	--	--	--	--
12/14/16	--	--	--	--	--	--	<0.002	45.1	--	--	--	--	3.3	<0.01	10.7	0.29	--	--	1.7	11.4	--	--	--	--	--
5/31/17	--	--	--	--	--	--	<0.002	47.5	--	--	--	--	3.4	<0.01	11.5	0.31	--	--	2	11.8	--	--	--	--	--
9/26/17	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
12/19/17	--	--	--	--	--	--	<0.002	48.9	--	--	--	--	2.8	<0.01	11.6	0.26	--	--	1.7	13.1	--	--	--	--	--
6/26/18	--	--	--	--	--	--	<0.002	49.8	--	--	--	--	1.4	<0.01	11.8	0.15	--	--	1.4	11.9	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-1B Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc	
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	0.662	<0.003	<0.0024	0.168B	0.0001B	0.0197B	<0.0003	26.7	0.002B	--	<0.0011	0.004B	1.33	<0.001	6.47	0.195	--	<0.0013	1.56B	7.38	--	--	<0.0026	<0.0012	0.0351
10/1/97	0.134B	<0.003	<0.0024	0.154B	<0.0001	0.0247B	<0.0003	24.7	<0.0004	--	<0.0011	0.0025B	0.226	<0.001	5.84	0.146	--	<0.0013	0.529B	6.18	--	--	<0.0026	<0.0012	0.0163B
3/22/06	--	--	--	--	--	--	<0.005	26.8	--	--	--	--	9.42	<0.005	7.46	2.28	--	--	0.973	6.31	--	--	--	--	--
5/31/06	--	--	--	--	--	--	<0.005	23.9	--	--	--	--	1.48	<0.005	5.39	0.191	--	--	0.468	5.22	--	--	--	--	--
8/9/06	1.09	<0.05	<0.025	0.194	<0.005	<0.05	<0.005	25.8	<0.005	<0.02	<0.015	0.017	1.84	<0.005	6.05	0.251	<0.0004	<0.01	0.523	6.35	<0.02	<0.015	<0.03	<0.015	0.052
10/10/06	--	--	--	--	--	--	<0.005	24.1	--	--	--	--	0.273	<0.005	5.31	0.126	--	--	0.374	5.92	--	--	--	--	--
3/20/07	--	--	--	--	--	--	<0.005	23.7	--	--	--	--	2.39	0.00431	5.94	0.521	--	--	<1	5.22	--	--	--	--	--
4/26/07	--	--	--	--	--	--	<0.005	30	--	--	--	--	0.508	<0.003	7.4	0.169	--	--	<1	6.82	--	--	--	--	--
7/31/07	--	--	--	--	--	--	<0.005	29.9	--	--	--	--	0.465	<0.003	7.12	0.19	--	--	<1	7.1	--	--	--	--	--
10/10/07	0.537	<0.015	<0.01	0.172	<0.003	<0.5	<0.005	26	<0.005	<0.01	<0.02	<0.01	0.73	<0.003	6.28	0.176	<0.0002	<0.03	<1	5.84	<0.005	<0.01	<0.01	<0.03	0.0168
2/1/08	0.518	<0.015	<0.01	0.199	<0.003	<0.5	<0.005	25.1	<0.005	<0.01	<0.02	<0.01	1	<0.003	6.44	0.26	<0.0002	<0.03	<1	5.66	<0.005	<0.01	<0.01	<0.03	0.0112
4/16/08	--	--	--	--	--	--	<0.005	28.6	--	--	--	--	1.38	<0.003	7.58	0.198	--	--	<1	6.73	--	--	--	--	--
7/23/08	--	--	--	--	--	--	<0.005	30.2	--	--	--	--	0.185	<0.003	7.74	0.169	--	--	<1	7.29	--	--	--	--	--
10/24/08	--	--	--	--	--	--	<0.005	30	--	--	--	--	0.174	<0.003	7.28	0.153	--	--	<1	6.81	--	--	--	--	--
3/12/09	--	--	--	--	--	--	0.00542	27.7	--	--	--	--	2.92	<0.003	6.76	0.223	--	--	<1	6.37	--	--	--	--	--
6/17/09	0.255	<0.03	<0.01	0.232	<0.003	<0.5	<0.005	31.4	<0.01	<0.01	<0.02	<0.01	0.523	<0.003	7.83	0.25	<0.0002	<0.03	<1	8.15	<0.005	<0.01	<0.01	<0.03	<0.01
9/30/09	--	--	--	--	--	--	<0.005	31.1	--	--	--	--	0.115	<0.003	7.34	0.149	--	--	<1	7.32	--	--	--	--	--
12/1/09	--	--	--	--	--	--	<0.005	58.7	--	--	--	--	6.72	<0.003	14.4	9.34	--	--	8.56	14.9	--	--	--	--	--
4/27/10	--	--	--	--	--	--	<0.005	26.5	--	--	--	--	0.423	<0.003	6.49	0.13	--	--	<5	6.29	--	--	--	--	--
7/20/10	<0.1	<0.005	<0.005	0.204	<0.003	<0.5	<0.005	30.3	<0.01	<0.01	<0.02	<0.01	0.159	<0.003	7.27	0.188	<0.0002	<0.03	<5	7.12	<0.003	<0.01	<0.003	<0.03	<0.01
10/26/10	--	--	--	--	--	--	<0.005	29.7	--	--	--	--	1.02	<0.003	7.29	0.153	--	--	<5	8.95	--	--	--	--	--
3/22/11	--	--	--	--	--	--	<0.005	30.5	--	--	--	--	1.19	<0.003	7.75	0.269	--	--	<5	7.99	--	--	--	--	--
5/24/11	--	--	--	--	--	--	<0.005	24.9	--	--	--	--	<0.06	<0.003	6.14	0.24	--	--	<5	6.48	--	--	--	--	--
9/20/11	--	--	--	--	--	--	<0.005	34.3	--	--	--	--	0.121	<0.003	7.05	0.275	--	--	<5	27	--	--	--	--	--
12/14/11	0.305	<0.005J	<0.005J	0.185	<0.003	<0.5	<0.005	30.8	<0.01	<0.01	<0.02	<0.01	0.341	<0.003J	7.66	0.0807	<0.0002	<0.03	<5	8.23	<0.003J	<0.01	<0.003J	<0.03	<0.01
3/21/12	0.141	<0.005	<0.005	0.222	<0.003	<0.5	<0.005	35	<0.01	<0.01	<0.02	<0.01	0.238J	<0.003	8.85	0.223	<0.0002	<0.03	<5	9.91	<0.003	<0.01J	<0.003	<0.03	<0.01
5/22/12	--	--	--	--	--	--	<0.005	30.4	--	--	--	--	3.2	0.00423	8.66	0.232	--	--	<5	7.92	--	--	--	--	--
8/30/12	--	--	--	--	--	--	<0.005	30.4	--	--	--	--	0.39	<0.003	7.48	0.148	--	--	<5	7.34	--	--	--	--	--
11/21/12	--	--	--	--	--	--	<0.005	26.5	--	--	--	--	1.3	<0.015	6.9	0.195	--	--	<5	6.54	--	--	--	--	--
4/2/13	--	--	--	--	--	--	<0.05	29.3	--	--	--	--	0.61	<0.05	6	5.1	--	--	0.5	6.8	--	--	--	--	--
7/11/13	<0.2	<0.005	<0.005	0.17	<0.003	<0.5	<0.05	26.7R	<0.005	<0.005J	<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
9/17/13	--	--	--	--	--	--	<0.001	24.7	--	--	--	--	<0.2	<0.001	5.53	0.053	--	--	0.53	6	--	--	--	--	--
11/5/13	--	--	--	--	--	--	<0.005	23.4	--	--	--	--	<0.2	<0.005	5.55	1.4	--	--	0.5	5.6	--	--	--	--	--
5/21/14	--	--	--	--	--	--	<0.002	22.6	--	--	--	--	0.26	<0.01	5.5	0.41	--	--	<0.5	5.4	--	--	--	--	--
9/15/14	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
12/15/14	--	--	--	--	--	--	<0.002	23.8	--	--	--	--	0.42	<0.01	6.2	4.9	--	--	0.5	5.6	--	--	--	--	--
6/23/15	--	--	--	--	--	--	<0.002	25	--	--	--	--	0.1	<0.01	6.6	0.6	--	--	0.56	6.1	--	--	--	--	--
9/23/15	--	--	--	--	--	--	<0.002	25.9	--	--	--	--	0.37	<0.01	6	1.5	--	--	0.61	6.4	--	--	--	--	--
12/1/15	<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
6/7/16	<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
9/29/16	--	--	--	--	--	--	<0.002	25.6	--	--	--	--	1.6	<0.01	6	5.7	--	--	0.77	6.2	--	--	--	--	--
12/14/16	--	--	--	--	--	--	<0.002	24.4	--	--	--	--	0.45	<0.01	5.7	3.3	--	--	<0.5	5.5	--	--	--	--	--
5/31/17	--	--	--	--	--	--	<0.002	26.8	--	--	--	--	0.21	<0.01	6.3	2.5	--	--	0.51	6.3	--	--	--	--	--
9/26/17	<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
6/26/18	--	--	--	--	--	--	<0.002	27.6	--	--	--	--	0.24	<0.01	6.5	2.4	--	--	0.68	6.4	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-2A Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	79.3	0.0049B	0.0631	1.75	0.0037B	1.21	<0.0003	186	0.112	--	0.0719	0.104	154	0.0561	61.6	35.7	<0.0001	0.151	23.4	119	<0.0028	0.0024B	0.004B	0.102	0.4
10/1/97	59.1	<0.003	0.0537	1.49	0.0025B	0.961	0.0016B	172	0.0967	--	0.0628	0.0779	131	0.0436	53.6	31.6	<0.0001	0.132	17	102	<0.0028	0.0014B	<0.0026	0.0866	0.278
3/22/06	--	--	--	--	--	--	<0.005	69.1	--	--	--	--	8.29	<0.005	16.6	12.2	--	--	9.29	26.3	--	--	--	--	--
5/31/06	--	--	--	--	--	--	<0.005	74.1	--	--	--	--	24	0.019	18.3	11.5	--	--	11.2	25.2	--	--	--	--	--
8/9/06	0.43	<0.05	<0.025	0.502	<0.005	0.584	<0.005	77.3	<0.005	<0.02	<0.015	0.012	6.5	<0.005	17.5	12	<0.0004	<0.01	12.3	31.4	<0.02	<0.015	<0.03	<0.015	<0.01
10/10/06	--	--	--	--	--	--	<0.005	88.5	--	--	--	--	10.1	0.006	19.4	13.6	--	--	12.7	31.4	--	--	--	--	--
3/20/07	--	--	--	--	--	--	<0.005	64.2	--	--	--	--	10.8	0.00524	15.7	9.93	--	--	9.02	19.5	--	--	--	--	--
4/26/07	--	--	--	--	--	--	<0.005	75.3	--	--	--	--	6.86	<0.003	17.9	11.7	--	--	10.8	22.9	--	--	--	--	--
7/31/07	--	--	--	--	--	--	<0.005	80.4	--	--	--	--	7.67	<0.003	18	12.7	--	--	13.3	26.1	--	--	--	--	--
10/10/07	0.444	<0.015	<0.01	0.265	<0.003	<0.5	<0.005	47.9	<0.005	<0.02	<0.02	<0.01	4.95	<0.003	11	7.05	<0.0002	<0.03	2.14	13.8	<0.005	<0.01	<0.01	<0.03	<0.01
2/1/08	1.98	<0.015	0.0145	0.377	<0.003	<0.5	<0.005	70.3	0.0177	<0.05	<0.02	<0.01	9.77	<0.003	17.1	11.2	<0.0002	<0.03	8.56	19.2	<0.005	<0.01	<0.01	<0.03	0.0101
4/16/08	--	--	--	--	--	--	<0.005	57.5	--	--	--	--	4.1	<0.003	14.3	9.3	--	--	7.56	16.5	--	--	--	--	--
7/23/08	--	--	--	--	--	--	<0.005	87.8	--	--	--	--	10.6	0.0039	20.3	13.8	--	--	12.3	25.6	--	--	--	--	--
10/24/08	--	--	--	--	--	--	<0.005	99	--	--	--	--	9.51	<0.003	23.1	15.1	--	--	15.1	25.9	--	--	--	--	--
3/12/09	--	--	--	--	--	--	<0.005	66.7	--	--	--	--	7.77	<0.003	15.1	10.7	--	--	7.48	17.8	--	--	--	--	--
6/17/09	<0.1	<0.03	<0.01	0.471	<0.003	<0.5	<0.005	87.1	<0.01	<0.01	<0.02	<0.01	8.28	<0.003	18.8	12.8	<0.0002	<0.03	12.4	23.8	<0.005	<0.01	<0.01	<0.03	<0.01
9/30/09	--	--	--	--	--	--	<0.005	78.6	--	--	--	--	5.21	<0.003	16.8	11.4	--	--	13.6	21.1	--	--	--	--	--
12/1/09	--	--	--	--	--	--	<0.005	26.5	--	--	--	--	0.827	<0.003	7.01	0.144	--	--	<5	6.59	--	--	--	--	--
1/28/10	--	--	--	--	--	--	<0.005	71.1	--	--	--	--	64.2	0.0187	27.6	11.6	--	--	12.8	15.5	--	--	--	--	--
4/27/10	--	--	--	--	--	--	<0.005	68.7	--	--	--	--	6.1	<0.003	15.4	9.79	--	--	9.42	16.3	--	--	--	--	--
7/20/10	3.37	<0.005	<0.005	0.545	<0.003	<0.5	<0.005	91.2	<0.01	<0.01	<0.02	<0.01	13	<0.003	20.6	12.2	<0.0002	<0.03	14.3	21.9	<0.003	<0.01	<0.003	<0.03	0.0269
11/12/10	--	--	--	--	--	--	<0.005	74.6	--	--	--	--	9.73	<0.003	17.9	11.1	--	--	11.9	19	--	--	--	--	--
3/22/11	--	--	--	--	--	--	<0.005	54.9	--	--	--	--	4.73	<0.003	12.9	8.18	--	--	7.2	13.5	--	--	--	--	--
5/24/11	--	--	--	--	--	--	<0.005	48.7	--	--	--	--	4.27	<0.003	11	7.05	--	--	7.47	12.5	--	--	--	--	--
3/22/11	--	--	--	--	--	--	<0.005	54.9	--	--	--	--	4.73	<0.003	12.9	8.18	--	--	7.2	13.5	--	--	--	--	--
5/24/11	--	--	--	--	--	--	<0.005	48.7	--	--	--	--	4.27	<0.003	11	7.05	--	--	7.47	12.5	--	--	--	--	--
9/20/11	--	--	--	--	--	--	<0.005	76.9	--	--	--	--	5.34	<0.003	14.8	9.08	--	--	11.4	22.1	--	--	--	--	--
12/14/11	0.317	<0.005J	<0.005J	0.269	<0.003	<0.5	<0.005	58.1	<0.01	<0.01	<0.02	<0.01	5.42	<0.003J	13.1	7.78	<0.0002	<0.03	7.62	13.6	<0.003J	<0.01	<0.003J	<0.03	<0.01
3/21/12	0.323	<0.005	0.00679BJ	0.259	<0.003	<0.5	<0.005	49.6	<0.01	<0.01	<0.02	<0.01	2.9J	<0.003	11.2	6.81	<0.0002	<0.03	6.33	11	<0.003	<0.01J	<0.003	<0.03	<0.01
5/23/12	--	--	--	--	--	--	<0.005	59.2	--	--	--	--	3.15	<0.003	14.4	8.49	--	--	8.15	11.9	--	--	--	--	--
8/30/12	--	--	--	--	--	--	<0.005	78.8	--	--	--	--	7.39	<0.003	17.4	10.3	--	--	10.9	14.7	--	--	--	--	--
11/21/12	--	--	--	--	--	--	<0.005	61.5	--	--	--	--	5.21	<0.015	14.2	8.5	--	--	8.64	12.8	--	--	--	--	--
4/2/13	--	--	--	--	--	--	<0.05	57.6	--	--	--	--	2.3	<0.05	10.6	6.9	--	--	5.9	9.9	--	--	--	--	--
7/11/13	0.53J	<0.005	0.0054	0.26	<0.003	<0.5	<0.05	30.7	<0.005	<0.005J	<0.05	<0.05	2.3J	<0.005	11.5J	3.9	<0.0002	<0.05	4.3DJ	11J	<0.005	<0.005	<0.05	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	213	--	--	--	--	0.3	<0.001	38.9	6.4	--	--	2.9	50	--	--	--	--	--
11/5/13	--	--	--	--	--	--	<0.005	68.7	--	--	--	--	5.2	<0.005	13.2	9.7	--	--	8.4	12	--	--	--	--	--
3/19/14	--	--	--	--	--	--	<0.002	74.4	--	--	--	--	33.8	0.012	21.1	10	--	--	10.3	13	--	--	--	--	--
5/21/14	--	--	--	--	--	--	<0.002	61.6	--	--	--	--	43.3	0.022	19.9	9	--	--	11.2	11.1	--	--	--	--	--
9/16/14	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
12/15/14	--	--	--	--	--	--	<0.002	78.5	--	--	--	--	28.5	<0.01	20.1	10.8	--	--	10.9	13.6	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-2A Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
6/23/15	--	--	--	--	--	--	0.0025	53.6	--	--	--	--	3.3	<0.01	11.6	6.8	--	--	8.3	10.2	--	--	--	--	--
9/23/15	--	--	--	--	--	--	<0.002	81.9	--	--	--	--	16.8	<0.01	18.5	9.6	--	--	12.1	14.2	--	--	--	--	--
12/1/15	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
6/8/16	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
9/29/16	--	--	--	--	--	--	<0.002	82	--	--	--	--	22.3	<0.01	19.8	11.1	--	--	12.9	15.7	--	--	--	--	--
12/14/16	--	--	--	--	--	--	<0.002	60.2	--	--	--	--	18.3	<0.01	14.9	8.5	--	--	8	10.2	--	--	--	--	--
5/31/17	--	--	--	--	--	--	<0.002	57.1	--	--	--	--	9.9	<0.01	13.2	7.6	--	--	8.4	9.6	--	--	--	--	--
9/26/17	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
12/19/17	--	--	--	--	--	--	<0.002	69	--	--	--	--	11	<0.01	15.4	8.8	--	--	8.1	11.4	--	--	--	--	--
6/26/18	--	--	--	--	--	--	<0.002	70.1	--	--	--	--	29.7	0.017	19.1	9	--	--	10.7	10.8	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-2B Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	2.03	<0.003	0.007B	1.59	0.00023B	0.355	0.0003B	288	0.004B	--	0.0091B	0.0069B	4.3	0.0044	61.7	8.24	--	0.0129B	3B	64.1	--	--	0.0037B	0.0029B	0.103
10/1/97	5.31	<0.003	0.0083B	1.36	0.00037B	0.292	<0.003	245	0.0086B	--	0.0141B	0.0118B	10.7	0.0058	49.9	7.43	--	0.0188B	2.9B	53.9	--	--	<0.0026	0.0075B	0.0484
3/22/06	--	--	--	--	--	--	<0.005	203	--	--	--	--	0.913	<0.005	46.1	6.98	--	--	2.42	53.8	--	--	--	--	--
5/31/06	--	--	--	--	--	--	<0.005	216E	--	--	--	--	0.836	0.009	45.3	6.8	--	--	2.25	49.7	--	--	--	--	--
8/9/06	0.18	<0.05	<0.025	1.22	<0.005	0.256	<0.005	203E	<0.005	<0.02	<0.015	0.017	1.2	<0.005	43.5	6.63	<0.0004	<0.01	2.28	51.1	<0.02	<0.015	<0.03	<0.015	<0.01
10/10/06	--	--	--	--	--	--	<0.005	200	--	--	--	--	1.07	<0.005	42.7	6.46	--	--	2.38	51	--	--	--	--	--
3/20/07	--	--	--	--	--	--	<0.005	216	--	--	--	--	0.637	<0.003	44.8	6.42	--	--	2.74	50.9	--	--	--	--	--
4/26/07	--	--	--	--	--	--	<0.005	170	--	--	--	--	0.469	<0.003	36.3	4.93	--	--	2.14	40.8	--	--	--	--	--
7/31/07	--	--	--	--	--	--	<0.005	214	--	--	--	--	0.468	<0.003	44.1	6.6	--	--	2.44	52.3	--	--	--	--	--
10/10/07	<0.1	<0.015	<0.01	1.09	<0.003	<0.5	<0.005	195	<0.005	<0.01	<0.02	<0.01	0.323	<0.003	39.9	5.7	<0.0002	<0.03	<1	48.2	<0.005	<0.01	<0.01	<0.03	0.0469
2/1/08	0.168	<0.015	<0.01	1.18	<0.003	<0.5	<0.005	201	0.00816	<0.01	<0.02	<0.01	0.439	<0.003	42.8	6.21	<0.0002	<0.03	2.44	50.6	<0.005	<0.01	<0.01	<0.03	<0.01
4/16/08	--	--	--	--	--	--	<0.005	192	--	--	--	--	0.56	<0.003	42.4	5.96	--	--	2.2	47.4	--	--	--	--	--
7/23/08	--	--	--	--	--	--	<0.005	214	--	--	--	--	0.236	<0.003	47.1	6.49	--	--	2.23	51.4	--	--	--	--	--
10/24/08	--	--	--	--	--	--	<0.005	235	--	--	--	--	0.28	<0.003	49.1	6.84	--	--	3.13	58.2	--	--	--	--	--
3/12/09	--	--	--	--	--	--	<0.005	201	--	--	--	--	0.466	<0.003	42.9	6.5	--	--	2.44	49.3	--	--	--	--	--
6/17/09	0.235	<0.03	<0.01	1.43	<0.003	<0.5	<0.005	237	<0.01	<0.01	<0.02	<0.01	0.464	<0.003	45.9	6.63	<0.0002	<0.03	2.71	55.4	<0.005	<0.01	<0.01	<0.03	<0.01
9/30/09	--	--	--	--	--	--	<0.005	227	--	--	--	--	0.222	<0.003	45.6	6.31	--	--	<1	58.6	--	--	--	--	--
12/1/09	--	--	--	--	--	--	<0.005	178	--	--	--	--	0.235	<0.003	39.7	5.63	--	--	<5	49	--	--	--	--	--
1/28/10	--	--	--	--	--	--	<0.005	177	--	--	--	--	0.451	<0.003	40.4	5.48	--	--	<5	48.9	--	--	--	--	--
4/27/10	--	--	--	--	--	--	<0.005	202	--	--	--	--	0.329	<0.003	43.1	6.2	--	--	<5	53.1	--	--	--	--	--
7/20/10	<0.1	<0.005	<0.005	1.37	<0.003	<0.5	<0.005	216	<0.01	<0.01	<0.02	<0.01	0.149	<0.003	46.2	6.35	<0.0002	<0.03	<5	56.9	0.004	<0.01	<0.003	<0.03	<0.01
10/26/10	--	--	--	--	--	--	<0.005	207	--	--	--	--	0.273	<0.003	43	6.82	--	--	<5	65.4	--	--	--	--	--
3/22/11	--	--	--	--	--	--	<0.005	200	--	--	--	--	0.345	<0.003	42.8	6.23	--	--	<5	56.7	--	--	--	--	--
5/24/11	--	--	--	--	--	--	<0.005	172	--	--	--	--	0.312	<0.003	38.8	5.23	--	--	<5	51	--	--	--	--	--
3/22/11	--	--	--	--	--	--	<0.005	200	--	--	--	--	0.345	<0.003	42.8	6.23	--	--	<5	56.7	--	--	--	--	--
5/24/11	--	--	--	--	--	--	<0.005	172	--	--	--	--	0.312	<0.003	38.8	5.23	--	--	<5	51	--	--	--	--	--
9/20/11	--	--	--	--	--	--	<0.005	237	--	--	--	--	0.276	<0.003	43.9	5.99	--	--	<5	55.3	--	--	--	--	--
12/14/11	0.175	<0.005J	<0.005J	1.31	<0.003	<0.5	<0.005	212	<0.01	<0.01	<0.02	<0.01	0.333	<0.003J	44.7	5.93	<0.0002	<0.03	<5	57.7	<0.003J	<0.01	<0.003J	<0.03	0.0118
3/21/12	0.536	<0.005	<0.005	1.4	<0.003	<0.5	<0.005	208	<0.01	<0.01	<0.02	<0.01	1.11J	<0.003	46.6	6.23	<0.0002	<0.03	<5	58.5	<0.003	<0.01J	<0.003	<0.03	0.0177
5/23/12	--	--	--	--	--	--	<0.005	184	--	--	--	--	0.337	<0.003	44.9	6.4	--	--	<5	47.4	--	--	--	--	--
8/30/12	--	--	--	--	--	--	<0.005	196	--	--	--	--	0.319	<0.003	42.2	6.38	--	--	<5	50.8	--	--	--	--	--
11/21/12	--	--	--	--	--	--	<0.005	216	--	--	--	--	0.416	<0.015	46.6	6.49	--	--	<5	59.4	--	--	--	--	--
4/2/13	--	--	--	--	--	--	<0.05	225	--	--	--	--	0.31	<0.05	42.3	6.7	--	--	2.3	51	--	--	--	--	--
7/11/13	<0.2	<0.005	<0.005	1	<0.003	<0.5	<0.05	105	<0.005	<0.005J	<0.05	<0.05	0.32J	<0.005	36.4J	3.2	<0.0002	<0.05	2.9J	45J	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	73.7	--	--	--	--	1.5	<0.001	13.8	9	--	--	9.3	13	--	--	--	--	--
11/5/13	--	--	--	--	--	--	<0.005	199	--	--	--	--	0.4	<0.005	38	6.1	--	--	2.9	46	--	--	--	--	--
3/19/14	--	--	--	--	--	--	<0.002	198	--	--	--	--	6.8	<0.01	44.4	5.9	--	--	3.4	48.1	--	--	--	--	--
5/21/14	--	--	--	--	--	--	<0.002	182	--	--	--	--	9.8	0.013	41	5.5	--	--	4	42.9	--	--	--	--	--
9/16/14	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
12/21/14	--	--	--	--	--	--	<0.002	199	--	--	--	--	6.2	<0.01	43.7	5.8	--	--	3.6	47.7	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-2B Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
6/23/15	--	--	--	--	--	--	<0.002	177	--	--	--	--	0.33	<0.01	42	5.5	--	--	2.3	41.8	--	--	--	--	--
9/23/15	--	--	--	--	--	--	<0.002	184	--	--	--	--	0.6	<0.01	39.8	5.2	--	--	2.4	45.5	--	--	--	--	--
12/1/15	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
6/8/16	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
9/29/16	--	--	--	--	--	--	<0.002	188	--	--	--	--	4	<0.01	39.8	6.1	--	--	3.1	45.4	--	--	--	--	--
12/14/16	--	--	--	--	--	--	<0.002	187	--	--	--	--	1.2	<0.01	40.8	5.6	--	--	2.4	44.9	--	--	--	--	--
5/31/17	--	--	--	--	--	--	<0.002	191	--	--	--	--	0.5	<0.01	42	5.5	--	--	2.1	43.3	--	--	--	--	--
9/26/17	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
12/19/17	--	--	--	--	--	--	<0.002	192	--	--	--	--	0.29	<0.01	40.7	5.4	--	--	2.2	47.6	--	--	--	--	--
6/26/18	--	--	--	--	--	--	<0.002	192	--	--	--	--	0.55	<0.01	42.7	5.3	--	--	2.2	43.5	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-3A Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc		
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5	
8/1/97	21.7	<0.003	0.0127	0.567	0.001B	<0.0709	<0.0003	57.8	0.0249	--	0.0121B	0.0315	26.6	0.0077	17	0.732	--	0.0248B	7.43	10.4	--	--	<0.0026	0.0296B	0.112	
10/1/97	2.39	0.0034B	<0.0024	0.343	0.00013B	0.0286B	<0.0003	53.7	0.0022B	--	0.0019B	0.0076B	3.58	<0.001	11	0.174	--	0.0038B	1.87B	6.54	--	--	<0.0026	0.0039B	0.0265	
3/22/06	--	--	--	--	--	--	--	<0.005	46.3	--	--	--	--	1.88	<0.005	9.13	0.208	--	--	0.938	5.66	--	--	--	--	--
5/31/06	--	--	--	--	--	--	--	<0.005	55.3	--	--	--	--	0.626	0.005	10	0.175	--	--	0.829	6.4	--	--	--	--	--
8/9/06	0.078	<0.05	<0.025	0.41	<0.005	0.063	<0.005	57.9	<0.005	<0.02	<0.015	0.023	0.104	0.005	11.2	0.416	<0.0004	<0.01	1.09	8.92	<0.02	<0.015	<0.03	<0.015	0.025	
10/10/06	--	--	--	--	--	--	<0.005	48.3	--	--	--	--	0.283	<0.005	9.2	0.176	--	--	0.937	6.03	--	--	--	--	--	
3/20/07	--	--	--	--	--	--	<0.005	23	--	--	--	--	1.18	<0.003	4.04	0.415	--	--	<1	2.11	--	--	--	--	--	
4/26/07	--	--	--	--	--	--	<0.005	18.1	--	--	--	--	0.599	<0.003	3.1	0.501	--	--	<1	1.14	--	--	--	--	--	
7/31/07	--	--	--	--	--	--	<0.005	45.1	--	--	--	--	0.231	<0.003	9.15	0.116	--	--	<1	5.1	--	--	--	--	--	
10/10/07	0.33	<0.015	<0.01	0.332	<0.003	<0.5	<0.005	27.5	<0.005	<0.01	<0.02	<0.01	0.537	<0.003	4.26	0.287	<0.0002	<0.03	<1	2.64	<0.005	<0.01	<0.01	<0.03	0.0106	
2/1/08	0.23	<0.015	<0.01	0.441	<0.003	<0.5	<0.005	30.2	<0.005	<0.01	<0.02	<0.01	0.451	<0.003	5.42	0.0373	<0.0002	<0.03	<1	2.9	<0.005	<0.01	<0.01	<0.03	<0.01	
4/16/08	--	--	--	--	--	--	<0.005	37.6	--	--	--	--	0.574	<0.003	7.04	0.141	--	--	<1	3.52	--	--	--	--	--	
7/23/08	--	--	--	--	--	--	<0.005	24.4	--	--	--	--	0.508	<0.003	3.83	0.618	--	--	1.06	2.77	--	--	--	--	--	
10/24/08	--	--	--	--	--	--	<0.005	31.3	--	--	--	--	0.177	<0.003	4.8	0.0424	--	--	<1	2.69	--	--	--	--	--	
3/12/09	--	--	--	--	--	--	<0.005	12.3	--	--	--	--	0.6	<0.003	1.82	0.294	--	--	<1	<1	--	--	--	--	--	
6/17/09	<0.1	<0.015	<0.01	0.458	<0.003	<0.5	<0.005	59.5	<0.01	<0.01	<0.02	<0.01	0.155	<0.003	11.6	0.164	<0.0002	<0.03	<1	6.81	<0.005	<0.01	<0.01	<0.03	<0.01	
9/30/09	--	--	--	--	--	--	<0.005	15.2	--	--	--	--	0.534	<0.003	<1	0.331	--	--	<1	<1	--	--	--	--	--	
12/1/09	--	--	--	--	--	--	<0.005	26.2	--	--	--	--	1.44	<0.003	<5	0.597	--	--	<5	<5	--	--	--	--	--	
1/28/10	--	--	--	--	--	--	<0.005	28.8	--	--	--	--	0.366	<0.003	5.17	0.568	--	--	<5	<5	--	--	--	--	--	
4/27/10	--	--	--	--	--	--	<0.005	23.2	--	--	--	--	0.291	<0.003	<5	0.218	--	--	<5	<5	--	--	--	--	--	
7/20/10	5.32	<0.005	<0.005	0.627	<0.003	<0.5	<0.005	57.3	<0.01	<0.01	<0.02	<0.01	6.97	<0.003	12.5	0.282	<0.0002	<0.03	<5	6.53	<0.003	<0.01	<0.003	<0.03	0.0285	
10/26/10	--	--	--	--	--	--	<0.005	26.8	--	--	--	--	2.42	<0.003	<5	0.471	--	--	<5	<5	--	--	--	--	--	
3/22/11	--	--	--	--	--	--	<0.005	18.3	--	--	--	--	0.232	<0.003	<5	0.575	--	--	<5	<5	--	--	--	--	--	
5/24/11	--	--	--	--	--	--	<0.005	42.9	--	--	--	--	0.121	<0.003	7.25	0.704	--	--	<5	<5	--	--	--	--	--	
9/20/11	--	--	--	--	--	--	<0.005	58.9	--	--	--	--	0.121	<0.003	9.72	0.635	--	--	<5	5.9	--	--	--	--	--	
12/13/11	0.107	<0.005J	<0.005J	0.498	<0.003	<0.5	<0.005	38.6	<0.01	<0.01	<0.02	<0.01	0.345	<0.003J	6.31	0.726	<0.0002	<0.03	<5	<5	<0.003J	<0.01	<0.003J	<0.03	<0.01	
3/20/12	1.33	<0.005	<0.005	0.627	<0.003	<0.5	<0.005	44.9	<0.01	<0.01	<0.02	<0.01	1.77J	<0.003	8.39	0.802	<0.0002	<0.03	<5	<5	<0.003	<0.01J	<0.003	<0.03	0.0106	
5/22/12	--	--	--	--	--	--	<0.005	43.6	--	--	--	--	0.451	<0.003	9.02	0.926	--	--	<5	<5	<5	<5	--	--	--	
8/29/12	--	--	--	--	--	--	<0.005	47.5	--	--	--	--	0.238	<0.003	9.93	0.371	--	--	<5	5.41	--	--	--	--	--	
11/21/12	--	--	--	--	--	--	<0.005	36.9	--	--	--	--	0.319	<0.015	6.27	0.891	--	--	<5	<5	<5	<5	--	--	--	
4/2/13	--	--	--	--	--	--	<0.05	28.8	--	--	--	--	0.37	<0.05	4	0.78	--	--	1.1	2.1	--	--	--	--	--	
7/11/13	<0.2	<0.005	0.0098	0.59	<0.003	<0.5	<0.05	43.6	<0.005	<0.005J	<0.05	<0.05	0.42J	<0.005	6.22J	1.9	<0.0002	<0.05	1.6J	2J	<0.005	<0.005	<0.005	<0.05	<0.1	
9/17/13	--	--	--	--	--	--	<0.001	44.3	--	--	--	--	0.49	<0.001	6.33	1.8	--	--	1.5	2.6	--	--	--	--	--	
11/5/13	--	--	--	--	--	--	<0.005	39.7	--	--	--	--	1.1	<0.005	6.3	1.8	--	--	1.1	2.9	--	--	--	--	--	
3/18/14	--	--	--	--	--	--	<0.002	54.2	--	--	--	--	4.1	<0.01	10.7	1.2	--	--	2.1	5.3	--	--	--	--	--	
5/21/14	--	--	--	--	--	--	<0.002	37.3	--	--	--	--	6.8	<0.01	8.3	1.4	--	--	2.9	3.2	--	--	--	--	--	
9/16/14	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	
12/15/14	--	--	--	--	--	--	<0.002	42.5	--	--	--	--	3.9	<0.01	9.1	2.4	--	--	2.4	3.3	--	--	--	--	--	
6/23/15	--	--	--	--	--	--	<0.002	40.9	--	--	--	--	0.3	<0.01	6.8	2.8	--	--	1.8	2.1	--	--	--	--	--	

Historical Water Quality Data - Towslee Landfill

MW-3A Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc	
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
9/23/15	--	--	--	--	--	--	<0.002	28.9	--	--	--	0.51	<0.01	4.4	2.5	--	--	1.5	1.6	--	--	--	--	--	
12/1/15	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
6/7/16	<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
9/29/16	--	--	--	--	--	--	<0.002	48	--	--	--	--	0.49	<0.01	9.7	0.64	--	--	1.5	5.8	--	--	--	--	--
12/14/16	--	--	--	--	--	--	<0.002	17.9	--	--	--	--	1.4	<0.01	3.4	0.098	--	--	1	1.5	--	--	--	--	--
5/31/17	--	--	--	--	--	--	<0.002	22.1	--	--	--	--	1.2	<0.01	3.2	0.88	--	--	1.3	<1	--	--	--	--	--
9/26/17	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
12/19/17	--	--	--	--	--	--	<0.002	41.4	--	--	--	--	0.46	<0.01	7.2	0.68	--	--	0.97	3.4	--	--	--	--	--
6/26/18	--	--	--	--	--	--	<0.002	51.2	--	--	--	--	1.1	<0.01	10.6	0.65	--	--	1.4	5.5	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-3B Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	2.01	<0.003	<0.0024	0.402	0.0001B	0.0662B	<0.0003	73.8	0.0032B	NA	0.002B	0.0051B	3.04	0.0013B	22.8	0.12	NA	0.0036B	2.05B	11.2	NA	NA	<0.0026	0.003B	0.0621
10/1/97	0.184	<0.003	<0.0024	0.291	0.00013B	0.0626B	<0.0003	74.4	<0.0004	NA	0.0014B	0.0018B	0.372	<0.001	21.5	0.0697	NA	0.0018B	1.2B	9.78	NA	NA	<0.0026	<0.0012	0.0155B
9/20/11	--	--	--	--	--	--	<0.005	75.8	--	--	--	--	0.578	<0.003	20.5	0.184	--	--	^5	11.1	--	--	--	--	--
12/13/11	0.253	<0.005J	<0.005J	0.294	<0.003	<0.5	<0.005	70	<0.01	<0.01	<0.02	<0.01	0.344	<0.003J	21.6	0.125	<0.0002	<0.03	^5	12.5	<0.003J	<0.01	<0.003J	<0.03	0.0114
3/20/12	0.148	<0.005	<0.005	0.339	<0.003	<0.5	<0.005	69	<0.01	<0.01	<0.02	<0.01	0.386J	<0.003	21.6	0.102	<0.0002	<0.03	^5	11.9	<0.003	<0.01J	<0.003	<0.03	0.017
5/22/12	--	--	--	--	--	--	<0.005	66.6	--	--	--	--	0.0945	<0.003	22.4	0.1	--	--	^5	10.4	--	--	--	--	--
8/29/12	--	--	--	--	--	--	<0.005	59.1	--	--	--	--	0.142	<0.003	18.4	0.092	--	--	^5	8.61	--	--	--	--	--
11/21/12	--	--	--	--	--	--	<0.005	65.1	--	--	--	--	0.0777	<0.015	20.7	0.0979	--	--	^5	10.4	--	--	--	--	--
4/2/13	--	--	--	--	--	--	<0.05	69.8	--	--	--	--	<0.2	<0.05	18.2	0.073	--	--	1.2	11	--	--	--	--	--
7/11/13	<0.2	<0.005	<0.005	0.22	<0.003	<0.5	<0.05	31.3	<0.005	<0.005J	<0.05	<0.05	0.37J	<0.005	16.3J	0.17	<0.0002	<0.05	1.3J	9J	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	60.3	--	--	--	--	0.27	<0.001	16.3	0.25	--	--	1.3	9.2	--	--	--	--	--
11/5/13	--	--	--	--	--	--	<0.005	64.4	--	--	--	--	0.22	<0.005	18.1	0.11	--	--	1.4	9.6	--	--	--	--	--
3/18/14	--	--	--	--	--	--	<0.002	75.6	--	--	--	--	7.2	<0.01	22.9	0.3	--	--	2.9	11.1	--	--	--	--	--
5/21/14	--	--	--	--	--	--	<0.002	56.3	--	--	--	--	1.7	<0.01	17.6	0.17	--	--	1.4	8.6	--	--	--	--	--
9/16/14	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
12/15/14	--	--	--	--	--	--	<0.002	56.3	--	--	--	--	4.1	<0.01	19.9	0.37	--	--	2	9.6	--	--	--	--	--
6/23/15	--	--	--	--	--	--	<0.002	64.2	--	--	--	--	1.5	<0.01	17.8	0.19	--	--	1.8	9	--	--	--	--	--
9/23/15	--	--	--	--	--	--	<0.002	51.7	--	--	--	--	0.093	<0.01	14.7	0.16	--	--	1.1	8.2	--	--	--	--	--
12/1/15	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
6/7/16	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
9/29/16	--	--	--	--	--	--	<0.002	52	--	--	--	--	0.28	<0.01	14.7	0.43	--	--	1.3	8.7	--	--	--	--	--
12/14/16	--	--	--	--	--	--	<0.002	48.8	--	--	--	--	0.35	<0.01	14.5	0.13	--	--	1	7.9	--	--	--	--	--
5/31/17	--	--	--	--	--	--	<0.002	51.8	--	--	--	--	0.18	<0.01	15.6	0.13	--	--	1.1	8.2	--	--	--	--	--
9/26/17	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
12/19/17	--	--	--	--	--	--	<0.002	52	--	--	--	--	0.23	<0.01	15	0.15	--	--	1.1	9	--	--	--	--	--
6/26/18	--	--	--	--	--	--	<0.002	51	--	--	--	--	1.5	<0.01	15.6	0.59	--	--	1.3	8	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-4A Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	1.61	<0.003	<0.0024	0.803	0.0001B	0.0765B	<0.0003	110	0.0015B	NA	0.0036B	0.0066B	2.2	0.0031	24.3	1.14	NA	0.0044B	2.01B	13	NA	NA	<0.0026	0.0016B	0.0501
10/1/97	1.32	<0.003	<0.0024	1.26	0.00013B	0.124	0.0004B	127	0.00093B	NA	0.0035B	0.0076B	1.99	0.0024B	26	2.15	NA	0.0063B	2.02B	16	NA	NA	<0.0026	0.0019B	0.0238
9/20/11	--	--	--	--	--	--	<0.005	153	--	--	--	--	0.261	<0.003	27.3	1.91	--	--	<5	17	--	--	--	--	--
12/13/11	0.153	<0.005J	<0.005J	1.16	<0.003	<0.5	<0.005	128	<0.01	<0.01	<0.02	<0.01	0.174	<0.003J	26.8	1.73	<0.0002	<0.03	<5	18	<0.003J	<0.01	<0.003J	<0.03	0.013
3/20/12	0.39	<0.005	<0.005	1.3	<0.003	<0.5	<0.005	131	<0.01	<0.01	<0.02	0.0224	0.427J	<0.003	28.3	1.75	<0.0002	<0.03	<5	18	<0.003	<0.01J	<0.003	<0.03	0.0154
5/22/12	--	--	--	--	--	--	<0.005	110	--	--	--	--	0.146	<0.003	26.5	1.44	--	--	<5	14	--	--	--	--	--
8/29/12	--	--	--	--	--	--	<0.005	123	--	--	--	--	0.209	<0.003	27.8	2.05	--	--	<5	15	--	--	--	--	--
11/21/12	--	--	--	--	--	--	<0.005	137	--	--	--	--	0.265	<0.015	31	1.63	--	--	<5	19	--	--	--	--	--
4/2/13	--	--	--	--	--	--	<0.05	150	--	--	--	--	<0.2	<0.05	28.3	2.9	--	--	1.4	19	--	--	--	--	--
7/11/13	<0.2	<0.005	<0.005	0.88	<0.003	<0.5	<0.05	60	<0.005	<0.005J	<0.05	<0.05	<0.2	<0.005	21.5J	0.97	<0.0002	<0.05	1.5J	14J	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	119	--	--	--	--	0.23	<0.001	23.4	0.7	--	--	1.8	16	--	--	--	--	--
11/5/13	--	--	--	--	--	--	<0.005	122	--	--	--	--	<0.2	<0.005	24.5	0.59	--	--	1.8	16	--	--	--	--	--
3/18/14	--	--	--	--	--	--	<0.002	135	--	--	--	--	5.2	<0.01	30	5.3	--	--	2.7	17	--	--	--	--	--
5/21/14	--	--	--	--	--	--	<0.002	99	--	--	--	--	0.36	<0.01	21.9	1.4	--	--	1.2	13	--	--	--	--	--
9/16/14	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	16	<0.025	<0.006	<0.02	<0.005	0.01
12/15/14	--	--	--	--	--	--	<0.002	102	--	--	--	--	1.1	<0.01	26.3	1.3	--	--	1.6	13	--	--	--	--	--
6/23/15	--	--	--	--	--	--	<0.002	110	--	--	--	--	0.4	<0.01	24.9	1.6	--	--	1.5	15	--	--	--	--	--
9/22/15	--	--	--	--	--	--	<0.002	117	--	--	--	--	0.27	<0.01	25.2	1.1	--	--	1.6	15	--	--	--	--	--
12/1/15	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	<0.025	<0.006	<0.02	<0.005	<0.01
6/7/16	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	<0.025	<0.006	<0.02	<0.005	<0.01
9/29/16	--	--	--	--	--	--	<0.002	135	--	--	--	--	0.13	<0.01	29	1.8	--	--	1.6	18	--	--	--	--	--
12/14/16	--	--	--	--	--	--	<0.002	124	--	--	--	--	0.38	<0.01	27.8	0.67	--	--	1.4	17	--	--	--	--	--
5/31/17	--	--	--	--	--	--	<0.002	117	--	--	--	--	0.15	<0.01	26.1	1.1	--	--	1.3	15	--	--	--	--	--
9/26/17	<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	17	<0.025	<0.006	<0.02	<0.005	<0.01
12/19/17	--	--	--	--	--	--	<0.002	123	--	--	--	--	0.26	<0.01	26.8	0.47	--	--	1.5	18	--	--	--	--	--
6/26/18	--	--	--	--	--	--	<0.002	123	--	--	--	--	0.62	<0.01	27.8	2.9	--	--	1.4	16	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-5A Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	10.1	0.0045B	0.0061B	1.58	0.00063B	0.0348B	0.0042B	45.8	0.0092	NA	0.0105B	0.0181B	11.5	0.0114	14.8	0.485	NA	0.011B	3.03B	31.6	NA	NA	<0.0026	0.0102B	0.105
10/1/97	0.228	<0.003	<0.0024	0.502	<0.0001	0.021B	<0.0003	32.1	<0.0004	NA	<0.0011	0.0037B	0.46	<0.001	9.45	0.0661	NA	<0.0013	0.897B	9.53	NA	NA	<0.0026	0.0012B	0.0212
11/21/12	--	--	--	--	--	--	<0.005	29.1	--	--	--	--	0.536	<0.015	9.56	0.0531	--	--	<5	18.7	--	--	--	--	--
4/2/13	--	--	--	--	--	--	<0.05	25.2	--	--	--	--	<0.2	<0.05	7.58	<0.05	--	--	1.1	16	--	--	--	--	--
7/11/13	<0.2	<0.005	<0.005	0.4	<0.003	<0.5	<0.05	27.4	<0.005	<0.005J	<0.05	<0.05	<0.2	<0.005	7.74J	<0.05	<0.0002	<0.05	1.5J	13J	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	30.8	--	--	--	--	<0.2	<0.001	8.67	<0.05	--	--	1.3	12	--	--	--	--	--
11/5/13	--	--	--	--	--	--	<0.005	28.4	--	--	--	--	<0.2	<0.005	9.03	<0.05	--	--	1.2	12	--	--	--	--	--
3/18/14	--	--	--	--	--	--	<0.002	31.8	--	--	--	--	1.2	<0.01	9.8	0.1	--	--	1.4	11.9	--	--	--	--	--
5/21/14	--	--	--	--	--	--	<0.002	28.5	--	--	--	--	0.52	<0.01	8.3	0.05	--	--	0.98	11.1	--	--	--	--	--
9/16/14	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
12/15/14	--	--	--	--	--	--	<0.002	26.7	--	--	--	--	0.25	<0.01	9.2	0.066	--	--	0.98	10.7	--	--	--	--	--
6/23/15	--	--	--	--	--	--	<0.002	29.7	--	--	--	--	0.16	<0.01	9.1	0.093	--	--	1.1	10.7	--	--	--	--	--
9/22/15	--	--	--	--	--	--	<0.002	31.1	--	--	--	--	0.16	<0.01	8.6	0.031	--	--	1.1	11.2	--	--	--	--	--
12/1/15	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
6/8/16	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
9/29/16	--	--	--	--	--	--	0.0025	33.7	--	--	--	--	0.69	<0.01	9.6	0.12	--	--	1.3	12.4	--	--	--	--	--
12/14/16	--	--	--	--	--	--	0.002	31.8	--	--	--	--	0.36	<0.01	9.6	0.066	--	--	0.96	11.6	--	--	--	--	--
5/31/17	--	--	--	--	--	--	<0.002	31.9	--	--	--	--	0.29	<0.01	8.9	0.076	--	--	1.2	12.4	--	--	--	--	--
9/26/17	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
12/19/17	--	--	--	--	--	--	<0.002	35.9	--	--	--	--	0.62	<0.01	10.4	0.089	--	--	1.1	12.6	--	--	--	--	--
6/26/18	--	--	--	--	--	--	<0.002	34.5	--	--	--	--	0.57	<0.01	9.8	0.14	--	--	1.3	10.2	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-6A Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	59.1	0.0036B	0.0476	1.79	0.0023B	0.282	<0.0003	99.1	0.0859	NA	0.056	0.0973	111	0.0168	37.6	14.5	<0.0001	0.112	14.4	53.3	<0.0028	0.0013B	<0.0026	0.0726	0.271
10/1/97	38.6	NA	0.0404	1.63	0.0017B	0.32	0.0011B	82.2	0.0705	NA	0.0463B	0.0689	85.5	0.0113	28.8	12.7	<0.0001	0.0963	10.1	46.8	<0.0028	<0.0009	<0.0026	0.053	0.177
9/20/11	--	--	--	--	--	--	<0.005	66.6	--	--	--	--	0.835	<0.003	10.2	1.33	--	--	<5	19.5	--	--	--	--	--
12/13/11	0.683	<0.005J	<0.005J	0.327	<0.003	<0.5	<0.005	59.7	<0.01	<0.01	<0.02	<0.01	1.32	<0.003J	10.8	1.78	<0.0002	<0.03	<5	19.8	<0.003J	<0.01	<0.003J	<0.03	<0.01
3/20/12	3.91	<0.005	0.00689BJ	0.343	<0.003	<0.5	<0.005	58.8	<0.01	<0.01	<0.02	<0.01	7.22J	<0.003	12.2	1.63	<0.0002	<0.03	<5	19	<0.003	<0.01J	<0.003	<0.03	0.0235
5/22/12	--	--	--	--	--	--	<0.005	50.9	--	--	--	--	0.98	<0.003	10.3	2.16	--	--	<5	14.8	--	--	--	--	--
8/30/12	--	--	--	--	--	--	<0.005	57.5	--	--	--	--	6.38	<0.015	10.2	2.84	--	--	<5	16.5	--	--	--	--	--
11/21/12	--	--	--	--	--	--	<0.005	65.7	--	--	--	--	0.892	<0.015	12.2	1.57	--	--	<5	19.3	--	--	--	--	--
4/2/13	--	--	--	--	--	--	<0.05	64.3	--	--	--	--	6.1	<0.05	9.96	1.8	--	--	2.4	17	--	--	--	--	--
7/11/13	3.7J	<0.005	<0.005	0.21	<0.003	<0.5	<0.05	47.7	0.0054	<0.005J	<0.05	<0.05	4J	<0.005	10J	0.59	<0.0002	<0.05	2.7J	16J	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	54.5	--	--	--	--	0.76	<0.001	8.49	0.46	--	--	2.3	16	--	--	--	--	--
11/5/13	--	--	--	--	--	--	<0.005	55.5	--	--	--	--	0.51	<0.005	8.6	1.4	--	--	2.3	15	--	--	--	--	--
3/17/14	--	--	--	--	--	--	<0.002	60.4	--	--	--	--	113	0.02	27.8	4.3	--	--	12.1	15.4	--	--	--	--	--
5/21/14	--	--	--	--	--	--	<0.002	54.6	--	--	--	--	76.8	0.025	21.8	4.8	--	--	10.6	13.1	--	--	--	--	--
9/15/14	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
12/15/14	--	--	--	--	--	--	<0.002	57.4	--	--	--	--	43	0.02	18.2	3.8	--	--	7.9	14.3	--	--	--	--	--
6/23/15	--	--	--	--	--	--	<0.002	53.3	--	--	--	--	0.91	<0.01	10	0.7	--	--	2.4	14.8	--	--	--	--	--
12/1/15	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
6/8/16	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
9/29/16	--	--	--	--	--	--	<0.002	58.7	--	--	--	--	4.2	<0.01	10.1	2.9	--	--	2.9	19.9	--	--	--	--	--
12/14/16	--	--	--	--	--	--	<0.002	55.8	--	--	--	--	6.3	<0.01	10.5	1.4	--	--	3.4	14.8	--	--	--	--	--
5/31/17	--	--	--	--	--	--	<0.002	57.9	--	--	--	--	10	<0.01	10.8	3.1	--	--	4.4	12.3	--	--	--	--	--
9/26/17	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
12/19/17	--	--	--	--	--	--	<0.002	55.5	--	--	--	--	21.3	0.013	12.8	3.3	--	--	5.6	22.4	--	--	--	--	--
6/26/18	--	--	--	--	--	--	<0.002	57.8	--	--	--	--	32.7	<0.01	16.2	4.4	--	--	5.8	20.6	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-6B Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc	
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	8.59	<0.003	0.009B	0.521	0.0004B	0.145	<0.0003	70.5	0.0092B	--	0.0112B	0.0116B	10.6	0.0044	19	3.43	--	0.0144B	4.08B	38	--	--	<0.0026	0.0083B	0.0894
10/1/97	0.642	<0.003	0.0084B	0.48	0.0001B	0.145	<0.0003	55.6	0.0017B	--	0.0056B	0.0051B	3	<0.001	12.7	4.17	--	0.0059B	2.72B	31.4	--	--	<0.0026	0.0012B	0.0248
3/22/06	--	--	--	--	--	--	<0.005	39.3	--	--	--	--	1.09	<0.005	8.94	0.559	--	--	1.15	14.9	--	--	--	--	--
5/31/06	--	--	--	--	--	--	<0.005	39.6	--	--	--	--	0.511	<0.005	10.9	0.12	--	--	0.825	9.93	--	--	--	--	--
8/9/06	0.115	<0.05	<0.025	0.313	<0.005	<0.05	<0.005	36.1	<0.005	<0.02	<0.015	0.016	0.306	<0.005	9.86	0.297	<0.0004	<0.01	0.634	10.1	<0.02	<0.015	<0.03	<0.015	0.014
10/10/06	--	--	--	--	--	--	<0.005	37.4	--	--	--	--	0.195	<0.005	9.71	0.185	--	--	0.69	10.7	--	--	--	--	--
3/20/07	--	--	--	--	--	--	<0.005	45.6	--	--	--	--	1.87	<0.003	10.2	0.331	--	--	1.05	11.2	--	--	--	--	--
4/26/07	--	--	--	--	--	--	<0.005	39.9	--	--	--	--	0.486	<0.003	9.68	0.0908	--	--	<1	10.2	--	--	--	--	--
7/31/07	--	--	--	--	--	--	<0.005	40.2	--	--	--	--	0.163	<0.003	9.12	0.671	--	--	<1	15	--	--	--	--	--
10/10/07	0.102	<0.015	<0.01	0.301	<0.003	<0.5	<0.005	36.7	<0.005	<0.01	<0.02	<0.01	0.216	<0.003	7.81	0.712	<0.0002	<0.03	<1	14.7	<0.005	<0.01	<0.01	<0.03	0.0213
2/1/08	0.134	<0.015	<0.01	0.337	<0.003	<0.5	<0.005	39.2	<0.005	<0.01	<0.02	<0.01	0.229	<0.003	9.37	0.327	<0.0002	<0.03	<1	13.8	<0.005	<0.01	<0.01	<0.03	0.0103
4/16/08	--	--	--	--	--	--	<0.005	39.5	--	--	--	--	0.33	<0.003	10.4	0.102	--	--	<1	12.7	--	--	--	--	--
7/23/08	--	--	--	--	--	--	<0.005	39	--	--	--	--	<0.06	<0.003	9.61	0.666	--	--	<1	18.1	--	--	--	--	--
10/24/08	--	--	--	--	--	--	<0.005	38.7	--	--	--	--	<0.06	<0.003	9.13	0.619	--	--	1.4	17.6	--	--	--	--	--
3/12/09	--	--	--	--	--	--	<0.005	39.6	--	--	--	--	0.268	<0.003	10.5	0.0257	--	--	1.01	13.1	--	--	--	--	--
6/17/09	<0.1	<0.03	<0.01	0.404	<0.003	<0.5	<0.005	42.9	<0.01	<0.01	<0.02	<0.01	0.104	<0.003	11.4	0.0585	<0.0002	<0.03	1.03	17.9	<0.005	<0.01	<0.01	<0.03	<0.01
9/30/09	--	--	--	--	--	--	<0.005	42	--	--	--	--	0.0703	<0.003	10.4	0.255	--	--	<1	18.5	--	--	--	--	--
12/1/09	--	--	--	--	--	--	<0.005	38.2	--	--	--	--	0.417	<0.003	10.4	0.167	--	--	<5	15.8	--	--	--	--	--
1/28/10	--	--	--	--	--	--	<0.005	45	--	--	--	--	0.448	<0.003	12.3	0.0606	--	--	<5	16.8	--	--	--	--	--
4/27/10	--	--	--	--	--	--	<0.005	40.6	--	--	--	--	0.226	<0.003	11	0.027	--	--	<5	14.2	--	--	--	--	--
7/20/10	<0.1	<0.005	<0.005	0.348	<0.003	<0.5	<0.005	39.9	<0.01	<0.01	<0.02	<0.01	<0.06	<0.003	10.7	0.087	<0.0002	<0.03	<5	15	<0.003	<0.01	<0.003	<0.03	<0.01
10/26/10	--	--	--	--	--	--	<0.005	40.9	--	--	--	--	0.337	<0.003	10.9	0.242	--	--	<5	17.8	--	--	--	--	--
3/22/11	--	--	--	--	--	--	<0.005	40.1	--	--	--	--	0.114	<0.003	10.8	0.0452	--	--	<5	14.1	--	--	--	--	--
5/24/11	--	--	--	--	--	--	<0.005	43.3	--	--	--	--	0.235	<0.003	10.8	0.0213	--	--	<5	17	--	--	--	--	--
9/20/11	--	--	--	--	--	--	<0.005	49.7	--	--	--	--	0.835	<0.003	11.7	0.166	--	--	<5	18.3	--	--	--	--	--
12/13/11	<0.1	<0.005J	<0.005J	0.414	<0.003	<0.5	<0.005	48.1	<0.01	<0.01	<0.02	<0.01	0.0989	<0.003J	11.3	0.231	<0.0002	<0.03	<5	21.7	<0.003J	<0.01	<0.003J	<0.03	0.0159
3/20/12	<0.1	<0.005	<0.005	0.354	<0.003	<0.5	<0.005	40.8	<0.01	<0.01	<0.02	<0.01	1.05J	<0.003	10.8	0.0335	<0.0002	<0.03	<5	16.5	<0.003	<0.01J	<0.003	<0.03	<0.01
5/22/12	--	--	--	--	--	--	<0.005	39.8	--	--	--	--	7.38	<0.015	12.4	0.781	--	--	<5	14.6	--	--	--	--	--
8/30/12	--	--	--	--	--	--	<0.005	42.9	--	--	--	--	<0.06	<0.003	10.6	0.0693	--	--	<5	17.3	--	--	--	--	--
11/21/12	--	--	--	--	--	--	<0.005	47.5	--	--	--	--	0.177	<0.015	12	0.0675	--	--	<5	19.5	--	--	--	--	--
4/2/13	--	--	--	--	--	--	<0.05	44.3	--	--	--	--	0.38	<0.05	10.6	0.051	--	--	0.92	14	--	--	--	--	--
7/11/13	0.48J	<0.005	<0.005	0.29	<0.003	<0.5	<0.05	40.2	<0.005	<0.005J	<0.05	<0.05	0.35J	<0.005	9.19J	0.064	<0.0002R	<0.05	1.1J	13J	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	44.1	--	--	--	--	0.29	<0.001	10.3	0.18	--	--	1.3	19	--	--	--	--	--
11/5/13	--	--	--	--	--	--	<0.005	40.6	--	--	--	--	0.29	<0.005	10.1	0.062	--	--	1.3	17	--	--	--	--	--
3/17/14	--	--	--	--	--	--	<0.002	43.2	--	--	--	--	0.69	<0.01	10.7	0.15	--	--	1.3	17.8	--	--	--	--	--
5/21/14	--	--	--	--	--	--	<0.002	38.3	--	--	--	--	2.6	<0.01	10.8	0.26	--	--	1.3	12.8	--	--	--	--	--
9/15/14	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
12/15/14	--	--	--	--	--	--	<0.002	37.6	--	--	--	--	2.1	<0.01	12.2	0.51	--	--	1.3	12.5	--	--	--	--	--
6/23/15	--	--	--	--	--	--	<0.002	41.3	--	--	--	--	0.58	<0.01	11.1	0.19	--	--	1.2	15.6	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-6B Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc	
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
9/22/15	--	--	--	--	--	--	<0.002	45.2	--	--	--	0.32	<0.01	11.6	0.11	--	--	1.2	18.6	--	--	--	--	--	
12/1/15	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
6/8/16	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
9/29/16	--	--	--	--	--	--	0.0071	35.5	--	--	--	--	2.4	<0.01	10.4	0.33	--	--	1.8	11	--	--	--	--	--
12/14/16	--	--	--	--	--	--	0.0041	38.3	--	--	--	--	0.76	<0.01	10.6	0.47	--	--	1	11	--	--	--	--	--
5/31/17	--	--	--	--	--	--	<0.002	50.1	--	--	--	--	0.38	<0.01	12.5	0.12	--	--	1.2	22.7	--	--	--	--	--
9/26/17	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
12/19/17	--	--	--	--	--	--	<0.002	44	--	--	--	--	0.63	<0.01	11.9	0.15	--	--	1.1	16.1	--	--	--	--	--
6/26/18	--	--	--	--	--	--	<0.002	42.1	--	--	--	--	0.3	<0.01	11.8	0.18	--	--	1.1	14.6	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-7A Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	40	<0.003	0.0176	1.36	0.0015B	0.332	0.00047B	234	0.0556	--	0.0311	0.0637	65.9	0.0251	67	5.87	<0.0001	0.0783	10.4	118	0.0041B	<0.0009	<0.0026	0.0487B	0.2
10/1/97	88.4	<0.003	0.0459	1.99	0.0037B	0.41	0.002B	271	0.146	--	0.0791	0.129	174	0.0585	88.3	9.55	<0.0001	0.192	13.5	113	0.0047B	<0.0009	<0.0026	0.127	0.408
3/22/06	--	--	--	--	--	--	<0.005	171	--	--	--	--	14.5	0.0175	48.6	6.08	--	--	3.06	134	--	--	--	--	--
5/31/06	--	--	--	--	--	--	<0.005	165	--	--	--	--	1.33	0.009	45.5	5.69	--	--	1.91	129	--	--	--	--	--
8/9/06	0.415	<0.05	<0.025	0.684	<0.005	0.55	<0.005	150	<0.005	<0.02	<0.015	0.013	0.722	0.006	38	4.4	<0.0004	0.013	1.81	124	<0.02	<0.015	<0.03	<0.015	<0.01
10/10/06	--	--	--	--	--	--	<0.005	148	--	--	--	--	2.78	<0.005	38	4.85	--	--	2.03	128	--	--	--	--	--
3/20/07	--	--	--	--	--	--	<0.005	149	--	--	--	--	1.68	<0.003	38.4	4.51	--	--	2.03	112	--	--	--	--	--
4/26/07	--	--	--	--	--	--	<0.005	140	--	--	--	--	1.52	<0.003	36.4	4.18	--	--	1.95	104	--	--	--	--	--
7/31/07	--	--	--	--	--	--	<0.005	135	--	--	--	--	9.97	0.00656	35	3.98	--	--	2.87	95.8	--	--	--	--	--
10/10/07	2.43	<0.015	<0.01	0.576	<0.003	0.65	<0.005	131	<0.005	<0.01	<0.02	<0.01	3.65	<0.003	32.1	3.47	<0.0002	<0.03	<1	95.2	<0.005	<0.01	<0.01	<0.03	0.0263
2/1/08	0.919	<0.015	<0.01	0.68	<0.003	0.588	<0.005	148	0.00667	<0.05	<0.02	<0.01	1.68	<0.003	38.4	4.17	<0.0002	<0.03	1.85	104	<0.005	<0.01	<0.01	<0.03	0.0102
4/16/08	--	--	--	--	--	--	<0.005	139	--	--	--	--	1.99	<0.003	38.5	4.34	--	--	1.98	99.6	--	--	--	--	--
7/23/08	--	--	--	--	--	--	<0.005	150	--	--	--	--	0.342	<0.003	39.5	4.82	--	--	1.82	113	--	--	--	--	--
10/24/08	--	--	--	--	--	--	<0.005	162	--	--	--	--	1.16	<0.003	39.8	4.57	--	--	2.41	116	--	--	--	--	--
3/12/09	--	--	--	--	--	--	<0.005	140	--	--	--	--	0.322	<0.003	35.8	4.31	--	--	1.62	97	--	--	--	--	--
6/17/09	9.56	<0.03	<0.01	0.714	<0.003	<0.5	<0.005	150	<0.01	<0.01	<0.02	<0.01	10.1	<0.003	38.7	4.21	<0.0002	<0.03	3.58	103	<0.005	<0.01	<0.01	<0.03	0.0297
9/30/09	--	--	--	--	--	--	<0.005	144	--	--	--	--	0.108	<0.003	34	3.8	--	--	<1	110	--	--	--	--	--
12/1/09	--	--	--	--	--	--	<0.005	131	--	--	--	--	1.19	<0.003	35.3	3.68	--	--	<5	105	--	--	--	--	--
1/28/10	--	--	--	--	--	--	<0.005	139	--	--	--	--	3.95	<0.003	38.8	3.87	--	--	<5	112	--	--	--	--	--
4/27/10	--	--	--	--	--	--	<0.005	122	--	--	--	--	0.469	<0.003	31.4	3.85	--	--	<5	109	--	--	--	--	--
7/20/10	1.52	<0.005	<0.005	0.556	<0.003	<0.5	<0.005	147	<0.01	<0.01	<0.02	<0.01	1.71	<0.003	36.9	3.82	<0.0002	<0.03	<5	110	<0.003	<0.01	<0.003	<0.03	<0.01
10/26/10	--	--	--	--	--	--	<0.005	143	--	--	--	--	3.06	<0.003	36.4	4.5	--	--	<5	127	--	--	--	--	--
3/22/11	--	--	--	--	--	--	<0.005	136	--	--	--	--	0.162	<0.003	35	4.33	--	--	<5	110	--	--	--	--	--
5/24/11	--	--	--	--	--	--	<0.005	130	--	--	--	--	0.418	<0.003	34.4	3.8	--	--	<5	114	--	--	--	--	--
9/20/11	--	--	--	--	--	--	0.258	173	--	--	--	--	4.66	0.00321	37.2	4.86	--	--	<5	114	--	--	--	--	--
12/13/11	2.12	<0.005J	<0.005J	0.601	<0.003	0.53	<0.005	146	<0.01	<0.01	<0.02	<0.01	3.03	<0.003J	33.9	3.57	<0.0002	<0.03	<5	104	<0.003J	<0.01	<0.003J	<0.03	0.0156
3/21/12	0.709	<0.005	0.00582BJ	0.59	<0.003	<0.5	<0.005	149	<0.01	<0.01	<0.02	<0.01	0.931J	<0.003	36.8	1.62	<0.0002	<0.03	<5	108	<0.003	<0.01J	<0.003	<0.03	<0.01
5/22/12	--	--	--	--	--	--	<0.005	123	--	--	--	--	2.9	0.00328	34.8	3.27	--	--	<5	91	--	--	--	--	--
8/30/12	--	--	--	--	--	--	<0.005	123	--	--	--	--	0.869	<0.003	30.1	2.91	--	--	<5	81.6	--	--	--	--	--
11/21/12	--	--	--	--	--	--	<0.005	144	--	--	--	--	4.19	<0.015	37.6	2.94	--	--	<5	99.9	--	--	--	--	--
4/2/13	--	--	--	--	--	--	<0.05	150	--	--	--	--	0.66	<0.05	34.5	3.8	--	--	1.4	94	--	--	--	--	--
7/11/13	1.3J	<0.005	<0.005	0.41	<0.003	<0.5	<0.05	64	<0.005	<0.005J	<0.05	<0.05	2J	<0.005	26.9J	1.4	<0.0002R	<0.05	1.9J	40J	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	133	--	--	--	--	2.3	0.0013	27.9	1.8	--	--	2.1	82	--	--	--	--	--
11/5/13	--	--	--	--	--	--	<0.005	124	--	--	--	--	0.97	<0.005	28	1.4	--	--	2	77	--	--	--	--	--
5/21/14	--	--	--	--	--	--	<0.002	115	--	--	--	--	7.6	<0.01	31	3.2	--	--	3.3	81.4	--	--	--	--	--
9/16/14	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

Historical Water Quality Data - Towslee Landfill

MW-7A Total Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
12/15/14	--	--	--	--	--	--	<0.002	124	--	--	--	--	22.1	0.021	36.6	4	--	--	5.1	81.1	--	--	--	--	--
6/23/15	--	--	--	--	--	--	<0.002	109	--	--	--	--	1.8	<0.01	28.7	1.7	--	--	1.9	79.3	--	--	--	--	--
9/23/15	--	--	--	--	--	--	<0.002	107	--	--	--	--	0.92	<0.01	26.4	0.91	--	--	1.5	70.9	--	--	--	--	--
12/1/15	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
6/8/16	2.7	<0.02	<0.015	0.33	<0.002	0.27	<0.002	94	<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
9/29/16	--	--	--	--	--	--	<0.002	114	--	--	--	--	4.2	<0.01	27.2	2	--	--	2.3	79.5	--	--	--	--	--
12/14/16	--	--	--	--	--	--	<0.002	89	--	--	--	--	5.3	<0.01	21.1	1.2	--	--	2.3	52.5	--	--	--	--	--
5/31/17	--	--	--	--	--	--	<0.002	95	--	--	--	--	5.8	<0.01	18.4	6.2	--	--	3.6	30.9	--	--	--	--	--
9/26/17	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
12/19/17	--	--	--	--	--	--	<0.002	117	--	--	--	--	1.4	<0.01	24.2	7.2	--	--	2.4	57.9	--	--	--	--	--
6/26/18	--	--	--	--	--	--	<0.002	112	--	--	--	--	1.4	<0.01	26.4	6.4	--	--	2.1	57.6	--	--	--	--	--

Historical Water Quality Database - Towslee Landfill
 CD-1 - Dissolved Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
3/18/14	--	--	--	--	--	--	<0.002	37	--	--	--	<0.05	<0.01	8.7	<0.003	--	--	0.83	4.1	--	--	--	--	--	
5/21/14	--	--	--	--	--	--	<0.002	33	--	--	--	<0.05	<0.01	7.9	<0.003	--	--	0.85	3.9	--	--	--	--	--	
9/15/14	<0.2	<0.02	<0.015	0.061	<0.002	<0.02	<0.002	36.6	<0.004	--	<0.004	<0.01	<0.05	<0.01	9.7	0.0082	--	<0.01	1	4.5	<0.025	<0.006	<0.02	<0.005	<0.01

Historical Water Quality Database - Towslee Landfill

CD-1RA - Dissolved Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc	
Water Quality Standard	--	0.003	0.025	1	0.004	Beryllium	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5	
8/1/97	0.0198B	<0.003	<0.0024	0.163B	<0.0001	0.0199B	<0.0003	40.7	<0.0004	--	<0.0011	0.0026B	0.0238B	--	9.65	0.168	--	<0.0013	0.911B	5.5	--	--	--	0.0825	
10/1/97	0.0442B	<0.003	<0.0024	0.173B	0.00067B	0.0285B	0.00063B	39.5	<0.0012	--	<0.0011	0.0012B	0.0394B	--	8.3	0.148	--	<0.0013	0.951B	5.29	--	--	--	0.0148B	
9/20/11	--	--	--	--	--	--	--	<0.005	41	--	--	--	--	0.0795	<0.003	7.56	0.0636	--	--	<5	5.23	--	--	--	
3/18/14	--	--	--	--	--	--	--	<0.002	38.3	--	--	--	--	<0.05	<0.01	8.9	0.1	--	--	0.75	4.9	--	--	--	
5/21/14	--	--	--	--	--	--	--	<0.002	40	--	--	--	--	<0.05	<0.01	9.5	0.12	--	--	0.64	5.1	--	--	--	
9/15/14	<0.2	<0.02	<0.015	0.16	<0.002	<0.02	<0.002	37.8	<0.004	--	<0.004	<0.01	<0.05	<0.01	10.4	0.22	--	<0.01	0.76	5.3	<0.025	<0.006	<0.02	<0.005	<0.01
12/15/14	--	--	--	--	--	--	--	<0.002	41.3	--	--	--	--	<0.05	<0.01	10	0.2	--	--	0.7	5.3	--	--	--	
12/1/15	<0.2	<0.02	<0.015	0.14	<0.002	<0.02	<0.002	41	<0.004	--	<0.004	<0.01	<0.05	<0.01	9.6	0.12	--	<0.01	0.7	4.9	<0.025	<0.006	<0.02	<0.005	<0.01
12/14/16	--	--	--	--	--	--	--	<0.002	40.9	--	--	--	--	<0.05	<0.01	9.9	0.12	--	--	0.87	5.3	--	--	--	
6/26/18	--	--	--	--	--	--	--	<0.002	41.2	--	--	--	--	<0.05	<0.01	9.9	0.11	--	--	0.85	4.9	--	--	--	

Historical Water Quality Database - Towslee Landfill

MW-1A - Dissolved Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	--	0.002	--	5
8/1/97	0.0163B	--	<0.0024	0.137B	<0.0001	0.0631B	<0.0003	67.6	<0.0004	--	<0.0011	0.0008B	0.0348B	0.0052	15.4	0.22	0.0014	<0.0013	10.6	59.3	--	--	<0.0026	<0.0012	0.12
10/1/97	0.0407B	--	<0.0024	0.068B	<0.0001	0.0561B	<0.0003	40.3	<0.0004	--	<0.0011	<0.0007	0.0471B	<0.001	8.69	0.174	<0.0001	<0.0013	4.92B	27.1	--	--	<0.0026	<0.0012	0.0161B
3/22/06	--	--	--	--	--	--	<0.005	40.7	--	--	--	--	13.5	<0.005	10.4	0.238	--	--	2.52	14.7	--	--	--	--	--
5/31/06	--	--	--	--	--	--	<0.005	38.9	--	--	--	--	0.315	0.005	8.12	0.127	--	--	1.38	12.3	--	--	--	--	--
8/9/06	0.066	<0.05	<0.025	0.066	<0.005	<0.07	<0.005	38.6	<0.005	--	<0.015	0.013	0.125	<0.005	8.18	0.248	<0.0004	<0.01	1.31	13	<0.02	<0.015	<0.03	<0.015	0.033
3/20/07	--	--	--	--	--	--	<0.005	40.3	--	--	--	--	<0.06	<0.003	8.83	<0.01	--	--	1.72	12.3	--	--	--	--	--
3/21/12	<0.1	<0.005	<0.005	0.0742	<0.003	--	<0.005	47.8	<0.01	--	<0.02	<0.01	0.102 J	<0.003	11.3	0.0327	<0.0002	<0.03	<5	14.3	<0.003	<0.01 J	<0.003	<0.03	0.0107
7/11/13	<0.2	<0.005	<0.005	<0.1	<0.003	<0.5	<0.005	46	<0.005	--	<0.05	<0.05	<0.2	<0.005	10	0.26	<0.0002	<0.05	1.11	12	<0.005	<0.005	<0.005	<0.05	<0.1
5/21/14	--	--	--	--	--	--	<0.002	41.9	--	--	--	<0.05	<0.01	9.5	0.064	--	--	0.92	11.7	--	--	--	--	--	
9/16/14	<0.2	<0.02	<0.015	0.14B	<0.002	0.022	<0.002	46.1	<0.004	--	<0.004	<0.01	<0.05	<0.01	10.6	0.089	--	<0.01	0.84	12.1	<0.025	<0.006	<0.02	<0.005	<0.01
5/31/17	--	--	--	--	--	--	<0.002	43.2	--	--	--	<0.05	<0.01	10.3	<0.003	--	--	0.97	11.5	--	--	--	--	--	

Historical Water Quality Database - Towslee Landfill

MW-1B - Dissolved Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium(VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.06	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	--	0.05	--	5
8/1/97	0.0146B	<0.003	<0.0024	0.151B	<0.0001	0.0195B	<0.0003	24.8	0.0008B	--	<0.0011	<0.0007	0.0172B	--	6.62	0.141	--	<0.0013	1.63B	7.53	--	--	--	--	0.0396
10/1/97	0.0209B	<0.003	<0.0024	0.155B	<0.0001	0.0162B	<0.0003	24.5	0.00073B	--	<0.0011	<0.0007	0.0141B	--	5.88	0.134	--	<0.0013	0.514B	6.59	--	--	--	--	0.0152B
3/22/06	--	--	--	--	--	--	<0.005	22.8	--	--	--	--	0.339	<0.005	5.15	0.0136	--	--	0.487	4.75	--	--	--	--	--
8/9/06	0.195	<0.05	<0.025	0.162	<0.005	<0.07	<0.005	24.4	<0.005	--	<0.015	0.013	0.339	<0.005	5.54	0.135	<0.0004	<0.01	0.403	5.31	<0.02	<0.015	<0.03	<0.015	0.029
3/20/07	--	--	--	--	--	--	<0.005	24.5	--	--	--	--	<0.06	<0.003	5.88	<0.01	--	--	<1	5.73	--	--	--	--	--
12/15/14	--	--	--	--	--	--	<0.002	24.5	--	--	--	--	<0.05	<0.01	5.8	<0.003	--	--	<0.5	6.1	--	--	--	--	--

Historical Water Quality Database - Towslee Landfill
 MW-2A - Dissolved Metals (mg/l)

Parameter		Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	0.004	1	0.005	0.005	0.05	--	0.05	--	0.2	0.3	0.015	--	0.0007	0.1	--	20	0.01	0.05	0.002	--	5	
8/1/97	<0.0083	--	0.0123	0.787	0.00017B	1.21	0.00053B	183	0.0035B	--	0.0107B	0.0162B	5.4	<0.001	41	30.4	<0.0001	0.0179B	17.5	121	--	--	0.003B	<0.0012	0.117
10/1/97	0.0482B	--	0.0139	0.786	0.0001B	0.992	<0.0003	183	0.0057B	--	0.0095B	<0.0007	11.5	0.0011B	38.5	30.9	<0.0001	0.0162B	14.2	115	--	--	<0.0026	<0.0012	0.0207
8/9/06	0.044	<0.05	<0.025	0.427	<0.005	0.562	<0.005	77.6	<0.005	--	<0.015	0.015	0.204	<0.005	17.1	12.1	<0.0004	<0.01	12.5	29.6	<0.02	<0.015	<0.03	<0.015	0.013
3/19/14	--	--	--	--	--	--	<0.002	64.7	--	--	--	--	<0.05	<0.01	14.7	8.6	--	--	7.2	11.3	--	--	--	--	--
5/21/14	--	--	--	--	--	--	<0.002	56.5	--	--	--	--	<0.05	<0.01	12	7.2	--	--	7.4	11	--	--	--	--	--
9/16/14	<0.2	<0.02	<0.015	0.44B	<0.002	0.31	<0.002	86.7	<0.004	--	<0.004	<0.01	<0.05	<0.01	18.4	10.2	--	<0.01	11.3	16.2	<0.025	<0.006	<0.02	<0.005	<0.01
12/15/14	--	--	--	--	--	--	<0.002	72.2	--	--	--	--	<0.05	<0.01	15.7	9.5	--	--	8.3	12.9	--	--	--	--	--
9/23/15	--	--	--	--	--	--	<0.002	84.8	--	--	--	--	<0.05	<0.01	17	9.1	--	--	11.7J	14.2	--	--	--	--	--
12/1/15	<0.2	<0.02	<0.015	0.25	<0.002	0.19	<0.002	58.1	<0.004	--	<0.004	<0.01	0.69	<0.01	12.1	7.2	--	<0.01	7.6	9.7	<0.025	<0.006	<0.02	<0.005	<0.01
6/8/16	--	--	--	--	--	--	<0.002	57.1	--	--	--	--	<0.05	<0.01	12	7	--	--	7.9	10	--	--	--	--	--
9/29/16	--	--	--	--	--	--	<0.002	78.5	--	--	--	--	<0.05	<0.01	16.5	9.8	--	--	10.6	14.7	--	--	--	--	--
12/14/16	--	--	--	--	--	--	<0.002	59.4	--	--	--	--	<0.05	<0.01	13	8.3	--	--	7.9	11	--	--	--	--	--
5/31/17	--	--	--	--	--	--	<0.002	52.9	--	--	--	--	<0.05	<0.01	11.7	7.4	--	--	7.7	10.6	--	--	--	--	--
9/26/17	2.2	<0.02	<0.015	0.41	<0.002	0.24	<0.002	79.4	<0.004	--	<0.004	<0.01	<0.05	<0.01	16.9	8.4	--	<0.01	10.4	15.4	<0.025	<0.006	<0.02	<0.005	0.016
6/26/18	--	--	--	--	--	--	<0.002	68.3	--	--	--	--	<0.05	<0.01	14.3	8.4	--	--	8.9	11.1	--	--	--	--	--

Historical Water Quality Database - Towslee Landfill
 MW-2B - Dissolved Metals (mg/l)

Parameter	Water Quality Standard	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	0.0179B	<0.003	0.0036B	1.55	<0.0001	0.334	<0.0003	281	0.0009B	--	0.0067B	0.0022B	0.582	--	61.7	8.07	--	0.0093B	2.8B	62.5	--	--	--	--	0.0635	
10/1/97	0.0154B	<0.003	<0.0024	1.45	<0.0001	0.321	<0.0003	274	0.0014B	--	0.0061B	<0.0007	0.595	--	55	8	--	0.0097B	2.34B	62.8	--	--	--	--	0.023	
3/19/14	--	--	--	--	--	--	<0.002	168	--	--	--	<0.05	<0.01	38	5.2	--	--	1.9	40.7	--	--	--	--	--	--	
12/21/14	--	--	--	--	--	--	<0.002	200	--	--	--	<0.05	<0.01	43	5.8	--	--	2.3	47.8	--	--	--	--	--	--	

Historical Water Quality Database - Towslee Landfill

MW-3A - Dissolved Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Boron	Beryllium	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	0.005	--	0.05	--	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	<0.0083	0.0038B	<0.0024	0.242	<0.0001	0.0324B	<0.0003	57.9	<0.0004	--	<0.0011	0.0024B	0.0061B	--	12.9	0.123	--	<0.0013	2.75B	10.2	--	--	--	0.0249	
10/1/97	0.0158	<0.003	<0.0024	0.276	<0.0001	0.0275B	<0.0003	54.6	<0.0004	--	<0.0011	0.00083B	0.0114B	--	10.9	0.0941	--	0.0017B	1.42B	7.98	--	--	--	0.0387	
3/22/06	--	--	--	--	--	--	--	^0.005	44.3	--	--	--	--	0.168	<0.005	8.7	0.0963	--	--	0.803	4.83	--	--	--	--
3/18/14	--	--	--	--	--	--	--	^0.002	45.4	--	--	--	--	<0.05	<0.01	8.3	0.98	--	--	0.92	4.7	--	--	--	--
5/21/14	--	--	--	--	--	--	--	^0.002	38.3	--	--	--	--	<0.05	<0.01	7.3	1.3	--	--	0.82	3.7	--	--	--	--

Historical Water Quality Database - Towslee Landfill

MW-3B - Dissolved Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004		0.005		0.05		--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	0.016B	<0.003	<0.0024	0.257	0.0001B	0.0531B	<0.0003	73.2	<0.0004	--	<0.0011	0.0024B	0.0091B	--	23	0.0617	--	<0.0013	1.62B	11.1	--	--	--	0.0375	
10/1/97	0.0273B	<0.003	<0.0024	0.271	<0.0001	0.0559B	<0.0003	71.9	<0.0004	--	<0.0011	0.0007B	0.0191B	--	20.9	0.0553	--	0.0014B	1.27B	10.2	--	--	--	0.0155B	
3/18/14	--	--	--	--	--	--	<0.002	55.9	--	--	--	--	<0.05	<0.01	16.6	0.032	--	--	1.1	9.3	--	--	--	--	--
5/21/14	--	--	--	--	--	--	<0.002	55.8	--	--	--	--	<0.05	<0.01	16.4	0.0073	--	--	0.99	9.2	--	--	--	--	--
12/15/14	--	--	--	--	--	--	<0.002	57.5	--	--	--	--	0.062	<0.01	17.5	0.082	--	--	1.1	10.1	--	--	--	--	--

Historical Water Quality Database - Towslee Landfill

MW-4A - Dissolved Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	-	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	0.0173B	<0.003	<0.0024	0.686	0.0001B	0.073B	<0.0003	112	<0.0004	--	0.0024B	0.0069B	0.005B	--	25.2	1.08	--	0.0021B	1.71B	13.5	--	--	--	0.0393	
10/1/97	0.0228B	<0.003	<0.0024	1.06	<0.0001	0.12	<0.0003	129	<0.0004	--	0.0022B	0.0011B	0.0372B	--	26.1	2.08	--	0.0051B	1.93B	16.1	--	--	--	0.0166B	
12/15/14	--	--	--	--	--	--	<0.002	104	--	--	--	--	<0.05	0.01	22.7	0.43	--	--	1.2	13.9	--	--	--	--	--

Historical Water Quality Database - Towslee Landfill

MW-5A - Dissolved Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004		0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	<0.0083	0.0059B	<0.0024	0.267	<0.0001	0.028B	<0.0003	41.2	<0.0004	--	0.0014B	0.0057B	0.0081B	--	12.6	0.0951	--	<0.0013	1.19B	31.9	--	--	--	0.0262	
10/1/97	0.019B	<0.003	<0.0024	0.396	<0.0001	0.0218B	<0.0003	34.1	0.0004B	--	<0.0011	<0.0007	0.0117B	--	10.2	0.0433	--	<0.0013	0.84B	10.3	--	--	--	0.0182B	

Historical Water Quality Database - Towslee Landfill

MW-6A - Dissolved Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
8/1/97	0.0142B	--	0.0198	0.847	0.0001B	0.284	<0.0003	104	0.0019B	--	0.0063B	0.0014B	7.81	<0.001	21	14.1	--	0.0096B	7.64	55.4	--	--	<0.0026	<0.0012	0.047
10/1/97	0.0382B	--	0.0189	0.88	--	0.333	<0.0003	88.7	0.0027B	--	0.006B	0.00077B	8.07	<0.001	17.3	12.9	--	0.0108B	7.4	55	--	--	<0.0026	<0.0012	0.0219
3/20/12	<0.1	<0.005	<0.005	0.246	<0.003	--	<0.005	53.7	<0.01	--	<0.02	<0.01	<0.06 J	<0.003	9.95	0.836	<0.0002	<0.03	<5	18	<0.003	<0.01 J	<0.003	<0.03	0.0132
5/22/12	--	--	--	--	--	--	<0.005	45.4	--	--	--	--	0.149	<0.003	9.33	0.213	--	--	<5	14	--	--	--	--	--
8/30/12	--	--	--	--	--	--	<0.005	52	--	--	--	--	2.14	--	9.23	1.36	--	--	<5	15.6	--	--	--	--	--
7/11/13	<0.2	<0.005	<0.005	0.19	<0.003	<0.5	<0.005	53	<0.005	--	<0.05	<0.05	<0.2	<0.005	9.2	1.4	<0.0002	<0.05	2.76	16	<0.005	<0.005	<0.005	<0.05	0.18
3/17/14	--	--	--	--	--	--	<0.002	48.3	--	--	--	--	<0.05	<0.01	7.9	1.9	--	--	1.8	14.3	--	--	--	--	--
5/21/14	--	--	--	--	--	--	<0.002	49.6	--	--	--	--	<0.05	<0.01	9	1.7	--	--	1.9	13.6	--	--	--	--	--
9/15/14	<0.2	<0.02	<0.015	0.44	<0.002	0.028	<0.002	53	<0.004	--	<0.004	<0.01	<0.05	<0.01	9.2	2.7	--	<0.01	1.9	18.6	<0.025	<0.006	<0.02	<0.005	<0.01
12/15/14	--	--	--	--	--	--	<0.002	55.9	--	--	--	--	<0.05	<0.01	9.1	2.5	--	--	1.9	14.5	--	--	--	--	--
12/1/15	<0.2	<0.02	<0.015	0.26	<0.002	0.039	<0.002	58.5	<0.004	--	<0.004	<0.01	<0.05	<0.01	9.7	2.1	--	<0.01	2.3	14.4	<0.025	<0.006	<0.02	<0.005	<0.01
6/8/16	--	--	--	--	--	--	<0.002	54.2	--	--	--	--	<0.05	<0.01	8.9	2.7	--	--	1.8	17.6	--	--	--	--	--
9/29/16	--	--	--	--	--	--	<0.002	56.9	--	--	--	--	<0.05	<0.01	9	3	--	--	2.1	18.9	--	--	--	--	--
12/14/16	--	--	--	--	--	--	<0.002	52.5	--	--	--	--	<0.05	<0.01	9.7	1.6	--	--	2.5	15.3	--	--	--	--	--
5/31/17	--	--	--	--	--	--	<0.002	48.9	--	--	--	--	<0.05	<0.01	8.9	1.6	--	--	2.3	11.9	--	--	--	--	--
9/26/17	<0.2	<0.02	<0.015	0.21	<0.002	0.027	<0.002	52	<0.004	--	<0.004	<0.01	<0.05	<0.01	8.3	2.2	--	<0.01	2.5	22.1	<0.025	<0.006	<0.02	<0.005	<0.01
12/19/17	--	--	--	--	--	--	<0.002	54.8	--	--	--	--	<0.05	<0.01	9.6	1.9	--	--	2.3	21.3	--	--	--	--	--
6/26/18	--	--	--	--	--	--	<0.002	59.3	--	--	--	--	<0.05	<0.01	10	2	--	--	1.8	21.2	--	--	--	--	--

Historical Water Quality Database - Towslee Landfill

MW-6B - Dissolved Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
8/1/97	<0.0083	<0.003	0.0048B	0.396	<0.0001	0.125	<0.0003	67.7	<0.0004	--	0.0052B	0.0011B	0.346	--	17.3	3.3	--	0.0046B	2.97B	38.2	--	--	--	0.0651	
10/1/97	0.0132B	<0.003	0.0073B	0.478	<0.0001	0.14	<0.0003	56.3	0.00087B	--	0.0041B	<0.0007	1.42	--	12.9	3.99	--	0.0048B	2.77B	33.3	--	--	--	0.0207	
3/20/07	--	--	--	--	--	--	<0.005	45.6	--	--	--	--	<0.06	<0.003	10.6	0.137	--	--	1.19	12.1	--	--	--	--	--

Historical Water Quality Database - Towslee Landfill

MW-7A - Dissolved Metals (mg/l)

Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium (VI)	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Standard	--	0.003	0.025	1	0.004	1	0.005	--	0.05	--	0.2	0.3	0.015	--	0.3	0.1	--	20	0.01	--	0.05	--	0.002	5	
8/1/97	<0.0083	--	<0.0024	0.822	0.0001B	0.331	0.0003B	220	0.0008B	--	0.0017B	0.0086B	0.009B	<0.001	56.2	4.53	<0.0001	0.0129B	5.28	120	--	--	<0.0026	<0.0012	0.0455
10/1/97	0.0755B	--	<0.0024	0.887	<0.0001	0.396	<0.0003	255	0.0011B	--	0.0031B	<0.0007	0.753	<0.001	59.9	7.12	<0.0001	0.0196B	3.98B	129	--	--	<0.0026	<0.0012	0.0186
3/22/06	--	--	--	--	--	--	<0.005	158	--	--	--	--	0.0637	<0.005	43.6	5.35	--	--	1.9	126	--	--	--	--	--
6/17/09	<0.1	<0.03	<0.01	0.599	<0.003	--	<0.005	140	<0.01	--	<0.02	<0.01	<0.06	<0.003	34.1	3.78	<0.0002	<0.03	1.82	97.2	<0.005	<0.01	<0.01	<0.03	0.0228
7/20/10	<0.1	<0.005	<0.005	0.477	<0.003	--	<0.005	129	<0.01	--	<0.02	<0.01	<0.06	<0.003	31.6	2.57	<0.0002	<0.03	<5	91.6	<0.003	<0.01	<0.003	<0.03	0.0102
10/26/10	--	--	--	--	--	--	<0.005	120	--	--	--	--	0.0978	<0.003	31.5	3.26	--	--	<5	105	--	--	--	--	--
5/24/11	--	--	--	--	--	--	<0.005	126	--	--	--	--	<0.06	<0.003	33.6	3.04	--	--	<5	113	--	--	--	--	--
9/20/11	--	--	--	--	--	--	<0.005	172	--	--	--	--	<0.06	<0.003	34.3	4.39	--	--	<5	104	--	--	--	--	--
5/22/12	--	--	--	--	--	--	<0.005	115	--	--	--	--	<0.06	<0.003	32.1	2.64	--	--	<5	81.6	--	--	--	--	--
5/21/14	--	--	--	--	--	--	<0.002	113	--	--	--	--	<0.05	<0.01	28.8	2.9	--	--	1.1	74.4	--	--	--	--	--
9/16/14	<0.2	<0.02	<0.015	0.51B	<0.002	0.39	<0.002	133	<0.004	--	<0.004	<0.01	<0.05	<0.01	34	3.2	--	0.014	1.5	85.5	<0.025	<0.006	<0.02	<0.005	<0.01
12/15/14	--	--	--	--	--	--	<0.002	123	--	--	--	--	3.3	<0.01	32.1	2.9	--	--	2.2	77.2	--	--	--	--	--
12/14/16	--	--	--	--	--	--	<0.002	60	--	--	--	--	<0.05	<0.01	13	8.2	--	--	7.8	11.2	--	--	--	--	--
5/31/17	--	--	--	--	--	--	<0.002	87	--	--	--	--	<0.05	<0.01	16.8	3.5	--	--	2.5	30.2	--	--	--	--	--

Historical Water Quality Database - Towslee Landfill

Organics (ug/l) (includes only detected compounds)

Well CD-1 - Overburden

	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
Water Quality Standard	2	5	50	5	5	5	5	1	5	5	5	5	5
8/1/97	<10	<10	10	2JB	<10	<10	<10	<10	<10	<10	<10	<10	<10
10/1/97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
12/12/11	≤5	≤5	<10 J	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
3/19/12	≤5	≤5	<10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
7/11/13	≤5	≤5	<25	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
9/15/14	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
12/1/15	<1J	<1J	<10J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<2J	<1J
6/8/16	<1J	<1J	<10J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<2J	<1J
9/26/17	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

Historical Water Quality Database - Towslee Landfill

Organics (ug/l) (includes only detected compounds)

Well CD-1RA - Bedrock

	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
Water Quality Standard	2	5	50	5	5	5	5	1	5	5	5	5	5
8/1/97	<10	<10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
10/1/97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
12/12/11	≤5	≤5	<10 J	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
3/19/12	≤5	≤5	<10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
7/11/13	≤5	≤5	<25	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
9/15/14	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
12/1/15	<1J	<1J	<10J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J
6/8/16	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
9/26/17	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

Historical Water Quality Database - Towslee Landfill

Organics (ug/l) (includes only detected compounds)

Well MW-1A - Overburden

	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
Water Quality Standard	2	5	50	5	5	5	5	1	5	5	5	5	5
8/1/97	<10	<10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
10/1/97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
8/9/06	<5	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<10	<5
10/9/07	<5	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5
6/17/09	<5	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5
7/20/10	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
12/13/11	<5	<5	<10J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3/21/12	<5 J	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
7/11/13	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
9/16/14	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
12/1/15	<1J	<1J	<10J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<2J	<1J
6/8/16	<1J	<1J	<10J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<2J	<1J
9/26/17	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

Historical Water Quality Database - Towslee Landfill

Organics (ug/l) (includes only detected compounds)

Well MW-1B - Bedrock

	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
Water Quality Standard	2	5	50	5	5	5	5	1	5	5	5	5	5
8/1/97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
10/1/97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
8/9/06	≤5	≤5	≤5	≤25	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤10	≤5
10/9/07	≤5	≤5	≤5	≤10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
2/1/08	≤5	≤5	≤5	≤10	13 B	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
6/17/09	≤5	≤5	≤10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
7/20/10	≤5	≤5	≤10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
12/13/11	≤5 J	≤5	<10 J	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
3/21/12	≤5 J	≤5	<10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
7/11/13	≤5	≤5	≤25	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤10	≤5
9/15/14	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
12/1/15	<1J	<1J	<10J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<2J	<1J
6/7/16	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
9/26/17	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

Historical Water Quality Database - Towslee Landfill

Organics (ug/l) (includes only detected compounds)

Well MW-2A - Overburden

	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
Water Quality Standard	2	5	50	5	5	5	5	1	5	5	5	5	5
8/1/97	<10	5 J	<10	1 JB	<10	<10	<10	5 J	1 J	5 J	2 J	5 J	1 J
10/1/97	<10	4 J	<10	<10	<10	<10	<10	6 J	<10	<10	<10	<10	2 J
8/9/06	≤5	≤5	≤25	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤10	≤5
10/9/07	≤5	≤5	≤5	≤10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
2/1/08	≤5	≤5	≤5	<10	12 B	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
6/17/09	≤5	≤5	<10	<5	<5	<5	<5	≤5	≤5	≤5	≤5	≤5	≤5
7/20/10	≤5	≤5	<10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
12/13/11	≤5	≤5	<10 J	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
3/21/12	≤5 J	≤5	<10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
7/11/13	≤5	≤5	≤25	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	<10	≤5
9/16/14	<1	<1	<10	<1	<1	<1	<1	1.1	<1	2	<1	<2	<1
12/1/15	<1J	<1J	<10J	<1J	<1J	<1J	<1J	<1J	<1J	1.2J	<1J	<2J	<1J
6/8/16	<1	<1	<10	<1	<1	<1	<1	<1	<1	1.2J	<1	<2	<1
9/26/17	<1	<1	<10	<1	<1	<1	<1	<1	<1	1.1	<1	<2	<1

Historical Water Quality Database - Towslee Landfill

Organics (ug/l) (includes only detected compounds)

Well MW-2B - Bedrock

	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
Water Quality Standard	2	5	50	5	5	5	5	1	5	5	5	5	5
8/1/97	<10	4 J	<10	1 JB	1 J	1 J	1 J	<10	<10	<10	<10	<10	<10
10/1/97	<10	3 J	<10	<10	<10	<10	1 J	2 J	<10	1 J	<10	<10	<10
8/9/06	<5	<5	<25	<5	<5	6.2	<5	<5	<5	<5	<5	<10	<5
10/9/07	5.8	4 J	<10	<5	<5	9.2	<5	<5	<5	<5	<5	<5	<5
2/1/08	<5	<5	<10	11 B	<5	9.4	<5	<5	<5	<5	<5	<5	<5
6/17/09	12	5.9	<10	<5	<5	19	<5	<5	<5	<5	<5	<5	<5
7/20/10	13	7	<10	<5	<5	19	<5	<5	<5	<5	<5	<5	<5
12/13/11	<5	3 J	<10 J	<5	<5	16	<5	<5	<5	<5	<5	<5	<5
3/21/12	8 J	4 J	<10	<5	<5	15	<5	<5	<5	<5	<5	<5	<5
7/11/13	<5	5.02	<25	<5	<5	28.3J	<5	<5	<5	<5	<5	<10	<5
9/16/14	6.9	3.5	<10	<1	<1	15	<1	<1	<1	<1	<1	<2	<1
12/1/15	16J	6.3J	<10J	<1J	<1J	20J	<1J	<1J	<1J	<1J	<1J	<2J	<1J
6/8/16	14J	5J	<10J	<1J	<1J	19J	<1J	<1J	<1J	<1J	<1J	<2J	<1J
9/26/17	11J	4.4J	<10J	<1J	<1J	25J	<1J	<1J	<1J	<1J	<1J	<2J	<1J

Historical Water Quality Database - Towslee Landfill

Organics (ug/l) (includes only detected compounds)

Well MW-3A - Bedrock

	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
Water Quality Standard	2	5	50	5	5	5	5	1	5	5	5	5	5
8/1/97	<10	<10	2 J	5 JB	<10	<10	<10	<10	<10	<10	<10	<10	<10
10/1/97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
8/9/06	≤5	≤5	<25	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤10	≤5
10/9/07	≤5	≤5	<10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
2/1/08	≤5	≤5	<10	11 B	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
6/17/09	≤5	≤5	24	<5	<5	<5	<5	<5	82	<5	<5	<5	≤5
7/20/10	≤5	≤5	<10	≤5	≤5	≤5	≤5	≤5	77 J	≤5	≤5	≤5	≤5
12/12/11	≤5	≤5	<10 J	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
3/19/12	≤5	≤5	<10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
7/11/13	≤5	≤5	<25	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	<10	≤5
9/16/14	≤1	≤1	11J	≤1	≤1	≤1	≤1	≤1	≤1	≤1	≤1	≤2	≤1
12/1/15	<1J	<1J	<10J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<2J	<1J
6/7/16	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
9/26/17	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

Historical Water Quality Database - Towslee Landfill

Organics (ug/l) (includes only detected compounds)

Well MW-3B - Bedrock

	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
Water Quality Standard	2	5	50	5	5	5	5	1	5	5	5	5	5
8/1/97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
10/1/97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
12/12/11	≤5	≤5	<10 J	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
3/19/12	≤5	≤5	<10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
7/11/13	≤5	≤5	<25	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
9/16/14	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
12/1/15	<1J	<1J	<10J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J
6/7/16	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
9/26/17	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

Historical Water Quality Database - Towslee Landfill

Organics (ug/l) (includes only detected compounds)

Well MW-4A - Bedrock

	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
Water Quality Standard	2	5	50	5	5	5	5	1	5	5	5	5	5
8/1/97	<10	<10	<10	6JB	<10	<10	<10	<10	<10	<10	<10	<10	<10
10/1/97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
12/12/11	≤5	≤5	<10 J	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
3/19/12	≤5	≤5	<10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
7/11/13	≤5	≤5	<25	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
9/16/14	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
12/1/15	<1J	<1J	<10J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J
6/7/16	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
9/26/17	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

Historical Water Quality Database - Towslee Landfill

Organics (ug/l) (includes only detected compounds)

Well MW-5A - Bedrock

	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
Water Quality Standard	2	5	50	5	5	5	5	1	5	5	5	5	5
8/1/97	<10	<10	<10	7JB	<10	<10	<10	<10	<10	<10	<10	<10	<10
10/1/97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
7/11/13	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5
9/16/14	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
12/1/15	<1J	<1J	<10J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<2J	<1J
6/8/16	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
9/26/17	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

Historical Water Quality Database - Towslee Landfill

Organics (ug/l) (includes only detected compounds)

Well MW-6A - Overburden

	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
Water Quality Standard	2	5	50	5	5	5	5	1	5	5	5	5	5
8/1/97	<10	<10	<10	<10	<10	<10	1J	<10	<10	<10	<10	<10	<10
10/1/97	<10	1J	<10	<10	<10	<10	1J	<10	<10	<10	<10	<10	<10
12/12/11	≤5	≤5	<10 J	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
3/19/12	≤5	≤5	<10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
7/11/13	≤5	≤5	<25	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
9/15/14	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
12/1/15	<1J	<1J	<10J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<2J	<1J
6/8/16	<1J	<1J	<10J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<2J	<1J
9/26/17	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

Historical Water Quality Database - Towslee Landfill

Organics (ug/l) (includes only detected compounds)

Well MW-6B - Bedrock

	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
Water Quality Standard	2	5	50	5	5	5	5	1	5	5	5	5	5
8/1/97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
10/1/97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
8/9/06	≤5	≤5	≤5	≤25	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤10	≤5
10/9/07	≤5	≤5	≤5	≤10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
2/1/08	≤5	≤5	≤5	≤10	12 B	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
6/17/09	≤5	≤5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<10	≤5
7/20/10	≤5	≤5	<10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
12/12/11	≤5	≤5	<10 J	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
3/19/12	≤5	≤5	<10	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5
7/11/13	≤5	≤5	≤25	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤5	≤10	≤5
9/15/14	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
12/1/15	<1J	<1J	<10J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J	<1J
6/8/16	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1
9/26/17	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1

Historical Water Quality Database - Towslee Landfill

Organics (ug/l) (includes only detected compounds)

Well MW-7A - Overburden

	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
Water Quality Standard	2	5	50	5	5	5	5	1	5	5	5	5	5
8/1/97	2 J	<10	<10	1 JB	1 J	1 J	3 J	<10	<10	<10	<10	<10	<10
10/1/97	5 J	1 J	<10	<10	2 J	2 J	4 J	<10	<10	<10	<10	<10	<10
8/9/06	<5	<5	<25	<5	<5	7.1	6.1	<5	<5	<5	<5	<10	<5
10/9/07	4 J	<5	<10	<5	<5	6.1	5 J	<5	<5	<5	<5	<5	<5
2/1/08	8.2	<5	<10	<5	<5	9	7.9	<5	<5	<5	<5	<5	<5
6/17/09	5.7	< 5	< 10	< 5	< 5	5.4	5 J	< 5	< 5	< 5	< 5	< 5	< 5
7/20/10	4 J	<5	11	<5	<5	5 J	4 J	<5	<5	<5	<5	<5	<5
12/12/11	4 J	<5	<10 J	<5	<5	5 J	4 J	<5	<5	<5	<5	<5	<5
3/20/12	<5	<5	<10	<5	<5	3 J	3 J	<5	<5	<5	<5	<5	<5
7/11/13	<5	<5	<25	<5	<5	6.59J	5.22J	<5	<5	<5	<5	<10	<5
9/16/14	3.2	<1	<10	<1	<1	4.1	2.9	<1	<1	<1	<1	<1	<1
12/1/15	1.9J	<1J	<10J	<1J	<1J	3.9J	3.9J	<1J	<1J	<1J	<1J	<2J	<1J
6/8/16	1.4	<1	<10	<1	<1	2.9	2.4	<1	<1	<1	<1	<2	<1
9/26/17	1.1	<1	<10	<1	<1	2.2	1.9	<1	<1	<1	<1	<2	<1