



Cortland County Soil and Water Conservation District

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

February 26, 2014

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

Dear Mr. Warner:

Enclosed is the 2013 Quarter 3 environmental monitoring report for Cortland County's Towslee Landfill. Please contact our office at (607) 756-5991, or Don Chambers at (607) 753-9377, if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick Reidy".

Patrick Reidy
Water Quality Specialist

cc: Don Chambers
James Gruppe, NYSDEC Region 7
Amanda Barber, SWCD/files

w/ report
w/ report

Environmental Monitoring Report 2013 Quarter 3

Cortland County Towslee Landfill

Town Line Road
Cortland County, New York

NYSDEC Region 7

Prepared for:
Cortland County Highway Department
Traction Drive
Cortland, NY 13045

Prepared by:
Cortland County Soil and Water Conservation District
100 Grange Place
Cortland, NY 13045



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1.0 Introduction

Cortland County is the current owner of the inactive Towslee Landfill located at the county's solid waste disposal site in the Towns of Cortlandville and Solon, near the center of the county. The Towslee Landfill has previously been called the Old County Landfill, and the Town Line Landfill. It is referred to as the Towslee Landfill in this report.

DEC requires environmental monitoring at Towslee Landfill. The monitoring follows the sampling and analysis plan prepared by Barton & Loguidice, D.P.C (B&L) in 2006. This report summarizes monitoring activities for Quarter 3 of 2013.

Figure 1 shows well locations monitored for this program, and the approximate limits of hazardous waste. Figure 1 also shows the surface water sampling locations that are tested as part of the monitoring of the active West Side Landfill, located adjacent to Towslee Landfill.

Microbac Laboratories, Inc. (herein referred to as Microbac) conducted all sample collection activities, and performed all laboratory analyses for Quarter 3 of 2013. Water quality analyses were conducted in accordance with 1998 Part 360 regulations. SWCD performed data management and analysis, and prepared this report.

2.0 Site History

Towslee Landfill is approximately thirty-six acres in size, and is part of a 540-acre parcel owned by Cortland County. Landfilling began onsite at Towslee in the 1940's by a private disposal company. The site was later leased to the City of Cortland for waste disposal operations in the 1960's. In 1972 Cortland County purchased the site from a private landowner and began landfilling operations in Towslee Landfill. This area was open for disposal until 1987 for municipal solid waste (MSW), and until 1992 for construction and demolition debris (C&D).

A Remedial Investigation/Feasibility Study (RI/FS) was conducted for Cortland County in accordance with NYSDEC Order on 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.

The Remedial Investigation concluded that there was mild landfill leachate contamination of groundwater in the vicinity of Wells MW-2A/B and MW-7A. Very mild impacts from leachate contamination occurred in the vicinity of Well MW-1A. Groundwater contamination occurred primarily in the overburden, and extended downgradient of the site for a distance of about 450 feet.

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 No. 7-12-001.

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

3.0 Monitoring Schedule and Locations

3.1 Schedule

<u>Quarter</u>	<u>Analyses</u>	<u>Date Sampled</u>
First Quarter:	Routine	April 2, 2013
Second Quarter:	Baseline	July 11, 2013
Third Quarter:	Routine	September 17, 2013
Fourth Quarter:	Routine	to be completed

3.2 Monitoring Locations

Groundwater quality monitoring occurs at the following wells, which are shown on Figure 1.

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

Landfill gas monitoring occurs at each of the groundwater monitoring wells, and within the scale house.

4.0 Groundwater Monitoring Results

This section provides an evaluation of groundwater monitoring results for Quarter 3 of 2013. Groundwater quality data are compared to NYS water quality standards to assess current conditions. Recent data are also compared to past data to evaluate trends.

- Appendix A contains the Quarter 3 laboratory analytical report.
- Appendix B contains tables of historical water quality data for each monitoring well.

4.1 Contraventions of Groundwater Quality Standards

This subsection compares groundwater quality to NYS water quality standards. Tables 1 and 2 summarize groundwater quality results for Quarter 3 for the Towslee wells. Available NYS water quality standards are included in these tables, and contraventions of standards are highlighted.

Results for most parameters in Quarter 3 of 2013 were below available water quality standards at all wells, although there continues to be evidence of mild landfill leachate contamination. Contraventions of standards are described below for the Towslee monitoring wells.

4.1.1 Conventional and Field Parameters

Turbidity – Turbidity exceeded the NYS standard of 5 NTU for one of the upgradient wells, and 5 of 11 downgradient wells in Quarter 3. Results ranged from about 6 to over 20 NTU. Based on separate monitoring conducted at the closed Pine Tree Landfill, and the active West Side Landfill, natural groundwater in this area appears to have elevated turbidity.

Total Dissolved Solids (TDS) - The TDS standard of 500 mg/l has been consistently exceeded for the same two wells (MW-2B and MW-7A). The trend continued this quarter, with MW-2B at 916 mg/l, and MW-7A at 613 mg/l.

Ammonia - The ammonia standard of 2 mg/l was exceeded at MW-2B (7.8 mg/l) in Quarter 3.

Total Phenolics – The aesthetics-based phenolics standard of 0.001 mg/l was exceeded for one upgradient well and 10 of 11 downgradient wells.

4.1.2 Metals

Total Iron - The NYS standard for iron is 0.3 mg/l. The standard was exceeded for one upgradient well and 5 of 11 downgradient wells in Quarter 3, ranging from about 0.5 to 2.3 mg/l. Iron has frequently exceeded the standard in past monitoring at Towslee. The elevated iron levels are believed to be due at least in part to particulate in the unfiltered samples.

Total Lead - The NYS standard for lead is 0.015 mg/l. This standard was slightly exceeded for upgradient well CD-1RA.

Total Manganese - The NYS standard for manganese is 0.3 mg/l. The manganese standard was exceeded for 6 of 11 downgradient wells in Quarter 3, ranging from about 0.5 to 6.4 mg/l. As with iron, the manganese standard has frequently been exceeded in past monitoring, and may be due in part to particulate in unfiltered samples.

Sodium – Of the several NYS sodium standards, the lowest is 20 mg/l, and applies to people on severely restricted sodium diets. Contraventions in Quarter 3 were observed at MW-2A (50 mg/l) and MW-7A (82 mg/l).

4.1.3 Volatile Organic Compounds (VOCs)

VOC analysis was not required during the Routine monitoring event for Quarter 3.

4.2 Groundwater Quality Trends

Groundwater monitoring at Towslee Landfill occurred twice in 1997, and quarterly monitoring was resumed for seven wells in 2006. Monitoring was resumed for an additional six wells in Quarter 3 of 2011.

As described in Section 2, B&L identified a subset of parameters that suggested mild leachate impacts to groundwater, based on 1997 monitoring. For this report, these parameters are described as contaminants of concern (COCs). The main focus of the trends assessment is on COCs.

Appendix B contains historical tables of the results for all parameters. Appendix C contains historical summary tables of results for the COCs for conventionals and total metals.

4.2.1 Upgradient Wells

Wells CD-1 and CD-1RA are upgradient of the landfill. CD-1RA was tested in 1997; CD-1 was not. The 2013 Quarter 3 testing continues to show that water quality in upgradient well CD-1RA has not changed significantly over time. The water quality for CD-1 is generally similar to CD-1RA.

4.2.2 Trend for Downgradient Wells

In general, downgradient groundwater quality has improved over time at the Towslee Landfill, particularly for parameters with elevated levels in 1997. In recent years, groundwater quality has generally either been slowly improving, or has remained fairly stable.

Trends for Conventionals

B&L identified the following conventionals as suggestive of mild landfill leachate contamination: alkalinity, chloride, hardness, ammonia, TKN, COD, and TOC. These are discussed below.

Note that we believe the samples for Wells MW-2A and MW-2B, were switched in error. Historically, the results for a number of parameters for these two wells showed clear differences. It appears clear that the Quarter 3 results for MW-2A are consistent with historical results for MW-2B, and vice versa.

- o Alkalinity continues to be generally lower than 1997 levels for wells with elevated alkalinity in 1997. Otherwise, alkalinity has been fairly stable over the past 7 years.
- o Chloride levels continue to be significantly lower than 1997 levels, especially for wells with the highest initial chloride levels. Otherwise, chloride has been relatively stable over the past few years.
- o Hardness is significantly lower in 2013 for the wells with elevated levels in 1997. Hardness in general has been fairly stable for the past 7 years.
- o Ammonia – Ammonia levels have been generally been stable for a number of years, and been below the detection limit at most wells.
- o TKN at most wells has been relatively stable over time, and 9 of 13 results were below the detection limit in Quarter 3.
- o COD continues to show an overall decrease compared to 1997 levels. Results for most wells have been below the detection limit in recent quarters.
- o Total Organic Carbon (TOC) - TOC levels are generally lower than those measured in 1997, and have been relatively stable in recent years.
- o For all other conventionals, the results Quarter 3 are lower than or similar to past results.

Trends for Total Metals

B&L identified the following metals as suggestive of mild landfill leachate contamination:

aluminum	cobalt	magnesium *	vanadium
arsenic	copper	manganese *	zinc
calcium *	iron *	potassium *	
chromium	lead *	sodium *	

Only the metals noted with an asterisk (*) were analyzed during the Routine monitoring of Quarter 3.

- o Calcium, for all wells with elevated levels in 1997, is significantly lower in 2013, and has been relatively stable for all wells in recent monitoring.
- o Iron continues to show an overall decrease compared to 1997 levels. Fluctuations in total iron levels over time are likely due to varying amounts of particulate in unfiltered samples.
- o Lead levels have generally been below the detection limit for the past 7 years.
- o Magnesium concentrations for all wells with elevated levels in 1997 are significantly lower in 2013. Magnesium levels have been fairly stable for all wells over the past few years.
- o Manganese continues to show an overall decrease compared to 1997 levels, and has been fairly stable over the past few years. As with iron, fluctuations in total manganese levels over time are likely due to varying amounts of particulate in unfiltered samples.
- o Potassium levels continue to show an overall decrease through Quarter 3 of 2013, compared to 1997.
- o Sodium levels have continued to show a general decrease through Quarter 3 of 2013, or have remained fairly stable.

Trends for Organics

VOC analysis was not required in Quarter 3 of 2013.

5.0 Surface Water Monitoring

Surface water monitoring is not required under monitoring at Towslee Landfill, but is required as part of monitoring of the active West Side Landfill. A summary of the results are presented herein for informational purposes.

There are three surface water locations (SW-1, SW-2, and SW-3) that are sampled. These locations are downgradient of the Towslee Landfill and shown on Figure 1. Tables 3 and 4 summarize water quality results for the surface water monitoring, and contraventions of standards are highlighted. The recent monitoring is consistent with past results. Most results are below water quality standards.

6.0 Landfill Gas Testing

Landfill gas measurements were taken at 13 monitoring wells, and within the scale house. No gas was detected at any of the locations.

7.0 Quality Control

QA/QC performed on the Quarter 3 results suggests that the data are generally usable and adequate to characterize water quality at the Towslee Landfill. Microbac reports that analytical methods, preservatives, hold times and containers for all laboratory analytes complied with requirements of the New York State Department of Health ELAP program. Instrument calibrations, blanks, spikes and duplicate analyses met the Laboratory's QC protocol. All analytical results were reviewed for compliance with the Laboratory QA/QC Manual, the NYSDOH-ELAP Certification Manual.

A duplicate sample was collected for MW-6B in Quarter 3 of 2013. Relative Percent Differences (RPDs) were calculated when both the sample and the duplicate were above the detection limit.

The following criteria were used to evaluate duplicates:

- RPDs should be less than 20 if the result for a given analyte exceeds five times the Practical Quantitation Limit (PQL).
- If the result for a given analyte is less than five times the PQL, the duplicate result should not differ by more than the PQL from the initial result.

The RPD for phenolics was the only one that did not meet acceptance criteria.

Independent data validation was not required for the Quarter 3 monitoring.

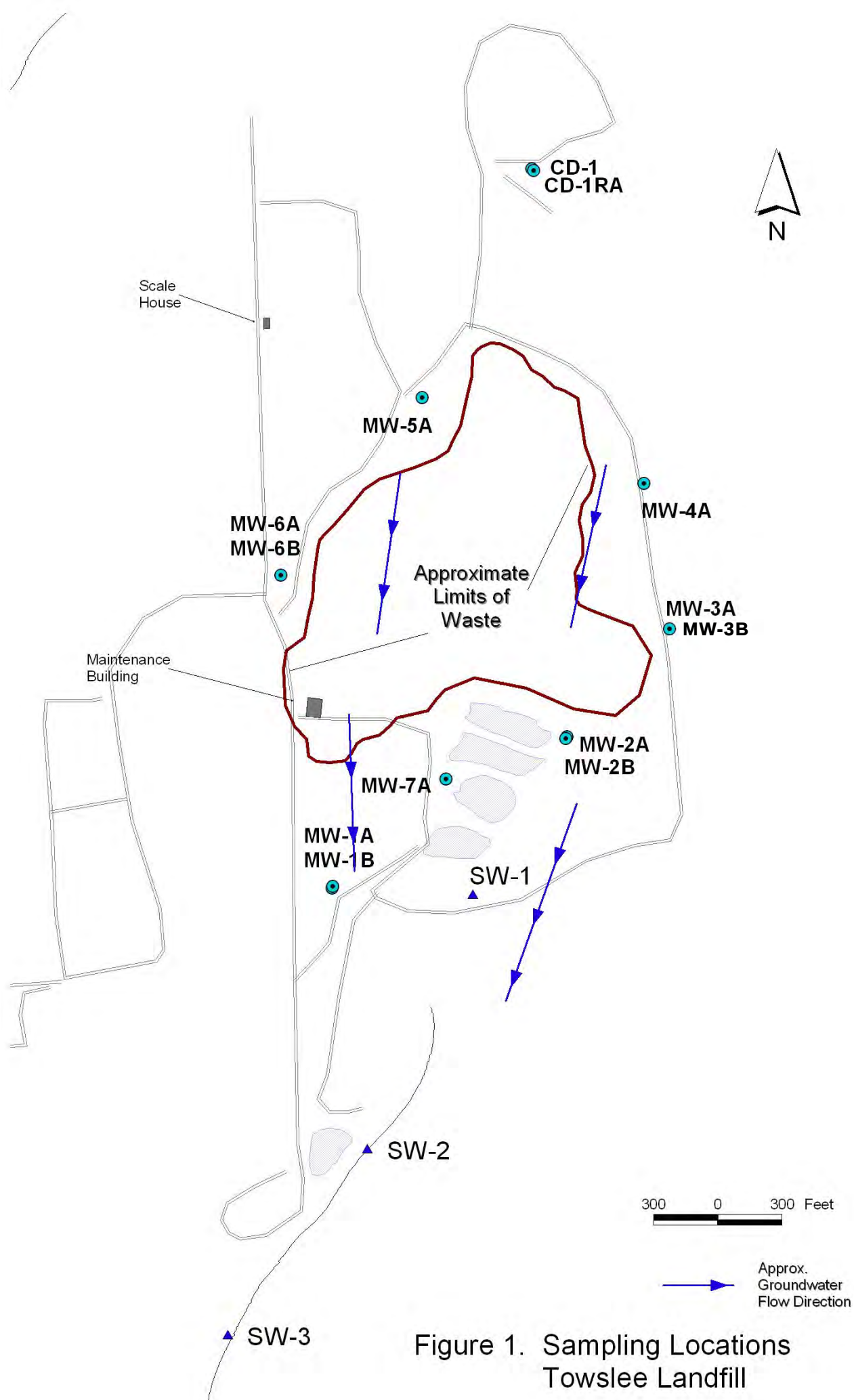


Figure 1. Sampling Locations
Towslee Landfill

**Table1. Contraventions of NYS Water Quality Standards
for Field and Inorganic Parameters
Towslee Landfill - Quarter 3 2013**

Parameter	Units	NYS Water Quality Standard	Upgradient		Downgradient										
			OB	BR	OB	BR	OB	BR	BR	BR	BR	BR	OB	BR	OB
			CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Temperature	(deg. C)	--	15.7	15.5	14.8	15.1	13.6	13.5	15.7	13.1	14.7	17.1	15.3	13.1	14.6
Eh	(mV)	--	138	137	200	194	164	259	211	215	207	193	171	153	221
pH	log	6.5 - 8.5 a	8.18	8.03	7.82	7.94	6.62	6.95	6.56	6.82	7.19	7.44	7.2	7.45	7.21
Specific Conduct.	(uS/cm)	--	290	331	369	192	603	1391	274	467	742	261	393	389	1027
Color	(Units)	15 a, b	--	--	--	--	--	--	--	--	--	--	--	--	--
Turbidity	(NTU)	5 a	3.3	19	9.6	<1	1.5	6.4	2.9	4.7	3.6	3.2	9.4	11	6.7
Alkalinity (as CaCO3)	(mg/l)	--	127	138	143	86	440	288	151	208	379	123	301	153	465
Hardness (as CaCO3)	(mg/l)	--	125	145	157	84.5	691	241	137	218	394	113	171	153	446
Total Diss. Solids	(mg/l)	500 a	170	194	231	123	916	345	187	301	470	151	231	207	613
Chloride	(mg/l)	250 a, b	1.47	1.95	31.8	2.18	116	11.6	1.37	21.4	17.7	5.61	12.4	17.1	80.6
Sulfate	(mg/l)	250 a, b	13.6	13.9	13.3	6.96	4.78	5.42	3.61	10	9.67	10.9	12.8	13.5	17.8
Bromide	(mg/l)	2 a	<0.1	<0.1	<0.1	<0.1	1.36	0.303	<0.1	0.219	0.182	<0.1	<0.1	<0.1	0.354
Nitrate (As N)	(mg/l)	10 a, b	0.081	<0.01	0.082	<0.01	<0.01	0.109	<0.01	0.084	<0.01	0.183	0.155	0.085	<0.01
Ammonia (As N)	(mg/l)	2 a	<0.1	<0.1	<0.1	<0.1	1.03	7.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TKN	(mg/l)	--	<0.5	<0.5	<0.5	<0.5	1.09	7.19	0.54	<0.5	<0.5	<0.5	1.34	<0.5	<0.5
COD	(mg/l)	--	<10	<10	<10	<10	13	12	24	<10	<10	<10	<10	<10	13
BOD	(mg/l)	--	<2	<2	<2	<2	<2	<2	2	<2	<2	<2	<2	<2	<2
TOC	(mg/l)	--	1.49	1.8	1.58	1.26	8.86	8.07	10.9	2.96	8.21	1.64	5.3	3.27	14.3
Phenolics, Total	(mg/l)	0.001 a	<0.005	0.006	0.009	<0.005	0.008	0.006	0.012	0.015	0.012	0.016	0.009	0.013	0.007
Cyanide	(mg/l)	0.2 a, b	--	--	--	--	--	--	--	--	--	--	--	--	--

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

b - Part 5 Drinking Water MCL

OB = overburden well

BR = Bedrock well

1.23 indicates contravention of standard.

Table 2. Contraventions of NYS Water Quality Standards
for Metals (units are mg/l)
Towslee Landfill - Quarter 3 2013

Parameter	NYS Water Quality Standard	Total Metals												
		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
Aluminum	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony	0.003 a	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic	0.025 a	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium	1 a	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium	0.004 b	--	--	--	--	--	--	--	--	--	--	--	--	--
Boron	1 a	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium	0.005 a, b	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Calcium	--	37.2	42.6	46.7	24.7	213	73.7	44.3	60.3	119	30.8	54.5	44.1	133
Chromium	0.05 a	--	--	--	--	--	--	--	--	--	--	--	--	--
Chrom, Hex	0.05 a	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper	0.2 a	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	0.3 a, b	<0.2	1.1	0.56	<0.2	0.3	1.5	0.49	0.27	0.23	<0.2	0.76	0.29	2.3
Lead	0.015 b	0.019	0.013	0.0021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0013
Magnesium	--	7.81	9.39	9.79	5.53	38.9	13.8	6.33	16.3	23.4	8.67	8.49	10.3	27.9
Manganese	0.3 a, b	0.063	0.12	<0.05	0.053	6.4	9	1.8	0.25	0.7	<0.05	0.46	0.18	1.8
Mercury	0.0007 a	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel	0.1 a	--	--	--	--	--	--	--	--	--	--	--	--	--
Potassium	--	1.4	0.99	1.3	0.53	2.9	9.3	1.5	1.3	1.8	1.3	2.3	1.3	2.1
Sodium	20 a, b	3.8	5.2	12	6	50	13	2.6	9.2	16	12	16	19	82
Selenium	0.01 a	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver	0.05 a	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	0.002 b	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc	5 b	--	--	--	--	--	--	--	--	--	--	--	--	--

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

b - Part 5 Drinking Water MCL

-- not analyzed

OB = overburden well

BR = Bedrock well

1.23 indicates contravention of standard.

Table 3
Contraventions of Surface Water Quality Standards
Field/ Inorganic Parameters - Quarter 3 2013

Parameter	Units	NYS Water Quality Standard	Surface Water Sample Locations		
			SW-1	SW-2	SW-3
Temperature	(deg. C)	--	9.4	10.5	9.9
EH	(mV)	--	173	159	135
pH	(Std Units)	6.5 - 8.5 a	8.11	8.13	7.96
Specific Conductance	(uS/cm)	--	290	277	351
Oxygen, Dissolved	mg/l	5 a	12.17	11.84	9.93
Color	(Units)	15 b	--	--	--
Turbidity	(NTU)	--	3.2	1.2	3.4
Alkalinity (as CaCO3)	(mg/l)	--	110	119	461
Hardness (as CaCO3)	(mg/l)	--	132	96.3	176
Total Dissolved Solids	(mg/l)	500 a	182	163	208
Chloride	(mg/l)	250 a	7.93	6.98	14.1
Sulfate	(mg/l)	250 a, b	5.67	3.47	2.21
Bromide	(mg/l)	--	<0.1	<0.1	<0.1
Boron, tot	(mg/l)	10 a	--	--	--
Nitrate (As N)	(mg/l)	10 a, b	0.24	0.074	0.077
Ammonia (As N)	(mg/l)	2 a	<0.1	<0.1	0.13
TKN (as N)	(mg/l)	--	<0.5	<0.5	1.64
COD	(mg/l)	--	<10	12	22
BOD	(mg/l)	--	4	5	6
TOC	(mg/l)	--	4.53	5.4	9.82
Phenolics, Total	(mg/l)	0.001 a	0.005	0.007	0.005
Cyanide	(mg/l)	0.0052 a	--	--	--

a - Part 703 Water Quality Standard (assumes Class A waters)

b - Part 5 Drinking Water MCL

1.23 indicates value exceeded standard

Table 4
Contraventions of Surface Water Quality Standards
Metals - Quarter 3 2013

Parameter	Units	NYS Water Quality Standard	Surface Water Sample Locations		
			SW-1	SW-2	SW-3
Al	(mg/l)	0.1 a	--	--	--
Sb	(mg/l)	0.003 a	--	--	--
As	(mg/l)	0.05 a, b	--	--	--
Ba	(mg/l)	1 a	--	--	--
Be *	(mg/l)	0.004 a	--	--	--
Cd *	(mg/l)	0.0021 a	<0.001	<0.001	<0.001
Ca	(mg/l)	--	42.1	29.1	54.7
Cr *	(mg/l)	0.05 a, b	--	--	--
Cr+6	(mg/l)	0.011 a	--	--	--
Co	(mg/l)	0.005 a	--	--	--
Cu *	(mg/l)	0.009 a	--	--	--
Fe	(mg/l)	0.3	<0.2	<0.2	5.7
Pb *	(mg/l)	0.004 a	<0.001	0.0013	0.0097
Mg	(mg/l)	35 a	6.54	5.76	9.54
Mn	(mg/l)	0.3	<0.05	<0.05	5.2
Hg	(mg/l)	0.0007 a	--	--	--
Ni *	(mg/l)	0.052 a	--	--	--
K	(mg/l)	--	1.9	2	3.7
Na	(mg/l)	20 b	8.2	7.3	14
Se	(mg/l)	0.0046 a	--	--	--
Ag	(mg/l)	0.0001 a	--	--	--
Tl	(mg/l)	0.002 b	--	--	--
V	(mg/l)	0.014 a	--	--	--
Zn *	(mg/l)	0.083 a	--	--	--

a - Part 703 Water Quality Standard (assumes Class A waters)

b - Part 5 Drinking Water MCL

* assumes hardness = 100 mg/l

1.23 indicates value exceeded standard

J - estimated

Appendix A

Analytical Laboratory Results

Cortland County Towslee Landfill

**Microbac Laboratories, Inc.**

New York Division
3821 Buck Drive
Cortland, New York 13045
Phone: 607-753-3403

Work Order Number: 1341317

Certificate of Results

Cortland Co Soil & Water

Amanda Barber
100 Grange Place, Room 204
Cortland, NY 13045

Contact: Amanda Barber

Project Name: Towslee Landfill - Routine

Date Received: September 17, 2013

Time Received: 1:00 pm

Case Narrative

Re: Cortland County Landfill Towslee Landfill
Third Quarter - 2013

The data in this package represent results of analysis of the Part 360 Routine Parameters for samples from 14 wells from the Towslee Site of the Cortland County Landfill. Eric Monsen and Robert Mundy of Microbac Laboratories, Inc. New York Division were onsite on September 16, 2013 to take methane readings and purge the wells.

Following water depth measurement (from top of casing to water), a minimum of three well volumes were purged using manual bailers or the well was purged to dryness. Eric Monsen and Robert Mundy sampled the wells the following day, September 17, 2013. Field measurements of temperature, pH, Eh, Conductivity and Turbidity were measured. All of the sites were sampled for routine parameters.

Analytical methods, preservatives, hold times and containers for all laboratory analytes complied with requirements of the New York State Department of Health ELAP program. Instrument calibrations, blanks, spikes and duplicate analyses met the Laboratory's QC protocol.

All analytical results were reviewed for compliance with the Laboratory QA/QC Manual, the NYSDOH-ELAP Certification Manual and the contractual requirements with Cortland County Soil & Water Conservation District.

The laboratory QA/QC forms enclosed in this volume include those for a fortified sample (spike, labeled MS) and a duplicate fortified sample (dup, labeled MSD).

Analytical Testing Parameters

Client Sample ID: **CD-1**Lab Sample ID: **1341317-01**Collection Date: **9/17/2013**Collection Time: **9:37 am**

Collected By: EM/RM - Lab

ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Chloride	16887-00-6	1	1.47	mg/L	1.00		EPA 300.0	9/18/2013 1613	MMG
Nitrate as N	NA	1	0.0810	mg/L	0.0100		EPA 300.0	9/18/2013 1613	MMG
Sulfate as SO4	148-08-798	1	13.6	mg/L	1.00		EPA 300.0	9/18/2013 1613	MMG
Bromide	24959-67-9	1	<0.100	mg/L	0.100		EPA 300.0	9/18/2013 1613	MMG

FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Conductivity		1	290	umhos/cm	5		SM 2510B	9/17/2013 0937	RM
Eh		1	138	mV	-700		-	9/17/2013 0937	RM
pH	NA	1	8.18	pH Units	0.01		SM (20) 4500-H B	9/17/2013 0937	RM
Temperature	NA	1	15.7	°C	0		SM 2550B	9/17/2013 0937	RM
Turbidity	NA	1	3.3	NTU	1.0		SM 2130B	9/17/2013 0937	RM

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Certificate of Results

METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Cadmium	7440-43-9	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1020	SBH
Calcium	7440-70-2	1	37.2	mg/L	0.500	CPA NSC	EPA 200.7	9/24/2013 1111	JAJ
Iron	7439-89-6	1	<0.20	mg/L	0.20	CPA	EPA 200.7	9/24/2013 1111	JAJ
Lead	7439-92-1	1	0.019	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1020	SBH
Magnesium	7439-95-4	1	7.81	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1111	JAJ
Manganese	7439-96-5	1	0.063	mg/L	0.050	CPA	EPA 200.7	9/24/2013 1111	JAJ
Potassium	7440-09-7	1	1.4	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1111	JAJ
Sodium	7440-23-5	1	3.8	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1111	JAJ
Total Hardness (as CaCO ₃)		1	125	mg/L	3.31	CPA	EPA 200.7	9/24/2013 1111	JAJ

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Alkalinity (as CaCO ₃)		1	127	mg CaCO ₃ /L	20.0		SM 2320B	9/23/2013 1215	CS
Ammonia as N	NA	1	<0.100	mg/L	0.100		Lachat 107-06-1B	9/24/2013 1455	MMG
COD, Total		1	<10	mg/L	10		HACH 8000	9/19/2013 1430	MMG
Phenolics	NA	1	<0.00500	mg/L	0.00500		ACHAT 10-210-00-1-F	9/20/2013 1545	MMG
Total Dissolved Solids	NA	1	170	mg/L	10.0		SM 2540C	9/19/2013 1539	CS
Total Kjeldahl Nitrogen	NA	1	<0.500	mg/L	0.500	CPA	SM 4500NH3BF	9/24/2013 0944	BAH
Biochemical Oxygen Demand	NA	1	<2.0	mg/L	2.0		SM 5210B	9/18/2013 1000	CS

Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

Total Organic Carbon

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Total Organic Carbon	TOC	1	1.49	mg/L	1.00		E415.1	9/19/2013 2247	DIH

Analytical Testing Parameters

Client Sample ID: **CD-1 RA**
Lab Sample ID: **1341317-02**

Collection Date: **9/17/2013**
Collection Time: **9:34 am**
Collected By: EM/RM - Lab

ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Chloride	16887-00-6	1	1.95	mg/L	1.00		EPA 300.0	9/18/2013 1640	MMG
Nitrate as N	NA	1	<0.0100	mg/L	0.0100		EPA 300.0	9/18/2013 1640	MMG
Sulfate as SO ₄	148-08-798	1	13.9	mg/L	1.00		EPA 300.0	9/18/2013 1640	MMG
Bromide	24959-67-9	1	<0.100	mg/L	0.100		EPA 300.0	9/18/2013 1640	MMG

FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Conductivity		1	331	umhos/cm	5		SM 2510B	9/17/2013 0934	RM
Eh		1	137	mV	-700		-	9/17/2013 0934	RM

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FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
pH	NA	1	8.03	pH Units	0.01		SM (20) 4500-H B	9/17/2013 0934	RM
Temperature	NA	1	15.5	°C	0		SM 2550B	9/17/2013 0934	RM
Turbidity	NA	1	19	NTU	1.0		SM 2130B	9/17/2013 0934	RM

METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Cadmium	7440-43-9	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1025	SBH
Calcium	7440-70-2	1	42.6	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1116	JAJ
Iron	7439-89-6	1	1.1	mg/L	0.20	CPA	EPA 200.7	9/24/2013 1116	JAJ
Lead	7439-92-1	1	0.013	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1025	SBH
Magnesium	7439-95-4	1	9.39	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1116	JAJ
Manganese	7439-96-5	1	0.12	mg/L	0.050	CPA	EPA 200.7	9/24/2013 1116	JAJ
Potassium	7440-09-7	1	0.99	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1116	JAJ
Sodium	7440-23-5	1	5.2	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1116	JAJ
Total Hardness (as CaCO ₃)		1	145	mg/L	3.31	CPA	EPA 200.7	9/24/2013 1116	JAJ

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Alkalinity (as CaCO ₃)		1	138	mg CaCO ₃ /L	20.0		SM 2320B	9/23/2013 1215	CS
Ammonia as N	NA	1	<0.100	mg/L	0.100		Lachat 107-06-1B	9/24/2013 1455	MMG
COD, Total		1	<10	mg/L	10		HACH 8000	9/19/2013 1430	MMG
Phenolics	NA	1	0.00600	mg/L	0.00500		ACHAT 10-210-00-1-A	9/20/2013 1545	MMG
Total Dissolved Solids	NA	1	194	mg/L	10.0		SM 2540C	9/19/2013 1539	CS
Total Kjeldahl Nitrogen	NA	1	<0.500	mg/L	0.500	CPA	SM 4500NH3BF	9/24/2013 0946	BAH
Biochemical Oxygen Demand	NA	1	<2.0	mg/L	2.0		SM 5210B	9/18/2013 1000	CS

Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

Total Organic Carbon

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Total Organic Carbon	TOC	1	1.80	mg/L	1.00		E415.1	9/19/2013 2300	DIH

Analytical Testing Parameters

Client Sample ID: **MW-1A**

Lab Sample ID: **1341317-03**

Collection Date: **9/17/2013**

Collection Time: **11:10 am**

Collected By: EM/RM - Lab

ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Chloride	16887-00-6	1	31.8	mg/L	1.00		EPA 300.0	9/18/2013 1649	MMG
Nitrate as N	NA	1	0.0820	mg/L	0.0100		EPA 300.0	9/18/2013 1649	MMG
Sulfate as SO ₄	148-08-798	1	13.3	mg/L	1.00		EPA 300.0	9/18/2013 1649	MMG

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ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Bromide	24959-67-9	1	<0.100	mg/L	0.100		EPA 300.0	9/18/2013 1649	MMG

FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Conductivity		1	369	umhos/cm	5		SM 2510B	9/17/2013 1110	RM
Eh		1	200	mV	-700		-	9/17/2013 1110	RM
pH	NA	1	7.82	pH Units	0.01		SM (20) 4500-H B	9/17/2013 1110	RM
Temperature	NA	1	14.8	°C	0		SM 2550B	9/17/2013 1110	RM
Turbidity	NA	1	9.6	NTU	1.0		SM 2130B	9/17/2013 1110	RM

METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Cadmium	7440-43-9	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1030	SBH
Calcium	7440-70-2	1	46.7	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1120	JAJ
Iron	7439-89-6	1	0.56	mg/L	0.20	CPA	EPA 200.7	9/24/2013 1120	JAJ
Lead	7439-92-1	1	0.0021	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1030	SBH
Magnesium	7439-95-4	1	9.79	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1120	JAJ
Manganese	7439-96-5	1	<0.050	mg/L	0.050	CPA	EPA 200.7	9/24/2013 1120	JAJ
Potassium	7440-09-7	1	1.3	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1120	JAJ
Sodium	7440-23-5	1	12	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1120	JAJ
Total Hardness (as CaCO3)		1	157	mg/L	3.31	CPA	EPA 200.7	9/24/2013 1120	JAJ

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Alkalinity (as CaCO3)		1	143	mg CaCO3/L	20.0		SM 2320B	9/23/2013 1215	CS
Ammonia as N	NA	1	<0.100	mg/L	0.100		Lachat 107-06-1B	9/24/2013 1455	MMG
COD, Total		1	<10	mg/L	10		HACH 8000	9/19/2013 1430	MMG
Phenolics	NA	1	0.00900	mg/L	0.00500		ACHAT 10-210-00-1-1	9/20/2013 1545	MMG
Total Dissolved Solids	NA	1	231	mg/L	10.0		SM 2540C	9/19/2013 1539	CS
Total Kjeldahl Nitrogen	NA	1	<0.500	mg/L	0.500	CPA	SM 4500NH3BF	9/24/2013 0948	BAH
Biochemical Oxygen Demand	NA	1	<2.0	mg/L	2.0		SM 5210B	9/18/2013 1000	CS

Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

Total Organic Carbon

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Total Organic Carbon	TOC	1	1.58	mg/L	1.00		E415.1	9/19/2013 2313	DIH

Analytical Testing Parameters

Client Sample ID: **MW-1B**
Lab Sample ID: **1341317-04**

Collection Date: **9/17/2013**
Collection Time: **11:15 am**
Collected By: EM/RM - Lab

Certificate of Results

ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Chloride	16887-00-6	1	2.18	mg/L	1.00		EPA 300.0	9/18/2013 1658	MMG
Nitrate as N	NA	1	<0.0100	mg/L	0.0100		EPA 300.0	9/18/2013 1658	MMG
Sulfate as SO4	148-08-798	1	6.96	mg/L	1.00		EPA 300.0	9/18/2013 1658	MMG
Bromide	24959-67-9	1	<0.100	mg/L	0.100		EPA 300.0	9/18/2013 1658	MMG

FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Conductivity		1	192	umhos/cm	5		SM 2510B	9/17/2013 1115	RM
Eh		1	194	mV	-700		-	9/17/2013 1115	RM
pH	NA	1	7.94	pH Units	0.01		SM (20) 4500-H B	9/17/2013 1115	RM
Temperature	NA	1	15.1	°C	0		SM 2550B	9/17/2013 1115	RM
Turbidity	NA	1	<1.0	NTU	1.0		SM 2130B	9/17/2013 1115	RM

METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Cadmium	7440-43-9	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1035	SBH
Calcium	7440-70-2	1	24.7	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1124	JAJ
Iron	7439-89-6	1	<0.20	mg/L	0.20	CPA	EPA 200.7	9/24/2013 1124	JAJ
Lead	7439-92-1	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1035	SBH
Magnesium	7439-95-4	1	5.53	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1124	JAJ
Manganese	7439-96-5	1	0.053	mg/L	0.050	CPA	EPA 200.7	9/24/2013 1124	JAJ
Potassium	7440-09-7	1	0.53	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1124	JAJ
Sodium	7440-23-5	1	6.0	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1124	JAJ
Total Hardness (as CaCO3)		1	84.5	mg/L	3.31	CPA	EPA 200.7	9/24/2013 1124	JAJ

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Alkalinity (as CaCO3)		1	86.0	mg CaCO3/L	20.0		SM 2320B	9/23/2013 1215	CS
Ammonia as N	NA	1	<0.100	mg/L	0.100		Lachat 107-06-1B	9/24/2013 1455	MMG
COD, Total		1	<10	mg/L	10		HACH 8000	9/19/2013 1430	MMG
Phenolics	NA	1	<0.00500	mg/L	0.00500		ACHAT 10-210-00-1-A	9/20/2013 1545	MMG
Total Dissolved Solids	NA	1	123	mg/L	10.0		SM 2540C	9/19/2013 1539	CS
Total Kjeldahl Nitrogen	NA	1	<0.500	mg/L	0.500	CPA	SM 4500NH3BF	9/24/2013 0954	BAH
Biochemical Oxygen Demand	NA	1	<2.0	mg/L	2.0		SM 5210B	9/18/2013 1000	CS

Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

Total Organic Carbon

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Total Organic Carbon	TOC	1	1.26	mg/L	1.00		E415.1	9/19/2013 2346	DIH

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Analytical Testing Parameters

Client Sample ID: **MW-2A**
Lab Sample ID: **1341317-05**

Collection Date: **9/17/2013**
Collection Time: **9:00 am**
Collected By: EM/RM - Lab

ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Chloride	16887-00-6	6	116	mg/L	6.00		EPA 300.0	9/19/2013 1855	MMG
Nitrate as N	NA	1	<0.0100	mg/L	0.0100		EPA 300.0	9/18/2013 1705	MMG
Sulfate as SO4	148-08-798	1	4.78	mg/L	1.00		EPA 300.0	9/18/2013 1705	MMG
Bromide	24959-67-9	1	1.36	mg/L	0.100		EPA 300.0	9/18/2013 1705	MMG

FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Conductivity		1	603	umhos/cm	5		SM 2510B	9/17/2013 0900	RM
Eh		1	164	mV	-700		-	9/17/2013 0900	RM
pH	NA	1	6.62	pH Units	0.01		SM (20) 4500-H B	9/17/2013 0900	RM
Temperature	NA	1	13.6	°C	0		SM 2550B	9/17/2013 0900	RM
Turbidity	NA	1	1.5	NTU	1.0		SM 2130B	9/17/2013 0900	RM

METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Cadmium	7440-43-9	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1040	SBH
Calcium	7440-70-2	10	213	mg/L	5.00	CPA	EPA 200.7	9/24/2013 1455	JAJ
Iron	7439-89-6	1	0.30	mg/L	0.20	CPA	EPA 200.7	9/24/2013 1129	JAJ
Lead	7439-92-1	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1040	SBH
Magnesium	7439-95-4	1	38.9	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1129	JAJ
Manganese	7439-96-5	10	6.4	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1455	JAJ
Potassium	7440-09-7	1	2.9	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1129	JAJ
Sodium	7440-23-5	10	50	mg/L	5.0	CPA	EPA 200.7	9/24/2013 1455	JAJ
Total Hardness (as CaCO3)		10	691	mg/L	14.5	CPA	EPA 200.7	9/24/2013 1455	JAJ

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Alkalinity (as CaCO3)		1	440	mg CaCO3/L	20.0		SM 2320B	9/23/2013 1215	CS
Ammonia as N	NA	1	1.03	mg/L	0.100		Lachat 107-06-1B	9/30/2013 1048	MMG
COD, Total		1	13	mg/L	10		HACH 8000	9/19/2013 1430	MMG
Phenolics	NA	1	0.00800	mg/L	0.00500		ACHAT 10-210-00-1-1	9/26/2013 1545	MMG
Total Dissolved Solids	NA	1	916	mg/L	10.0		SM 2540C	9/19/2013 1539	CS
Total Kjeldahl Nitrogen	NA	1	1.09	mg/L	0.500	CPA	SM 4500NH3BF	9/24/2013 0956	BAH
Biochemical Oxygen Demand	NA	1	<2.0	mg/L	2.0		SM 5210B	9/18/2013 1000	CS

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Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

Total Organic Carbon

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Total Organic Carbon	TOC	3	8.86	mg/L	3.00		E415.1	9/23/2013 1943	DIH

Analytical Testing Parameters

Client Sample ID: **MW-2B**

Lab Sample ID: **1341317-06**

Collection Date: **9/17/2013**

Collection Time: **9:06 am**

Collected By: EM/RM - Lab

ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Chloride	16887-00-6	1	11.6	mg/L	1.00		EPA 300.0	9/18/2013 1716	MMG
Nitrate as N	NA	1	0.109	mg/L	0.0100		EPA 300.0	9/18/2013 1716	MMG
Sulfate as SO4	148-08-798	1	5.42	mg/L	1.00		EPA 300.0	9/18/2013 1716	MMG
Bromide	24959-67-9	1	0.303	mg/L	0.100		EPA 300.0	9/18/2013 1716	MMG

FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Conductivity		1	1391	umhos/cm	5		SM 2510B	9/17/2013 0906	RM
Eh		1	259	mV	-700		-	9/17/2013 0906	RM
pH	NA	1	6.95	pH Units	0.01		SM (20) 4500-H B	9/17/2013 0906	RM
Temperature	NA	1	13.5	°C	0		SM 2550B	9/17/2013 0906	RM
Turbidity	NA	1	6.4	NTU	1.0		SM 2130B	9/17/2013 0906	RM

METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Cadmium	7440-43-9	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1045	SBH
Calcium	7440-70-2	10	73.7	mg/L	5.00	CPA	EPA 200.7	9/24/2013 1500	JAJ
Iron	7439-89-6	1	1.5	mg/L	0.20	CPA	EPA 200.7	9/24/2013 1133	JAJ
Lead	7439-92-1	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1045	SBH
Magnesium	7439-95-4	1	13.8	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1133	JAJ
Manganese	7439-96-5	10	9.0	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1500	JAJ
Potassium	7440-09-7	10	9.3	mg/L	5.0	CPA	EPA 200.7	9/24/2013 1500	JAJ
Sodium	7440-23-5	1	13	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1133	JAJ
Total Hardness (as CaCO3)		10	241	mg/L	14.5	CPA	EPA 200.7	9/24/2013 1500	JAJ

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Alkalinity (as CaCO3)		1	288	mg CaCO3/L	20.0		SM 2320B	9/23/2013 1215	CS
Ammonia as N	NA	10	7.80	mg/L	1.00		Lachat 107-06-1B	9/30/2013 1048	MMG
COD, Total		1	12	mg/L	10		HACH 8000	9/19/2013 1430	MMG
Phenolics	NA	1	0.00600	mg/L	0.00500		ACHAT 10-210-00-1-f	9/26/2013 1545	MMG

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Certificate of Results

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Total Dissolved Solids	NA	1	345	mg/L	10.0		SM 2540C	9/19/2013 1539	CS
Total Kjeldahl Nitrogen	NA	1	7.19	mg/L	1.00	CPA	SM 4500NH3BF	9/24/2013 0958	BAH
Biochemical Oxygen Demand	NA	1	<2.0	mg/L	2.0		SM 5210B	9/18/2013 1000	CS

Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

Total Organic Carbon

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Total Organic Carbon	TOC	3	8.07	mg/L	3.00		E415.1	9/24/2013 1857	DIH

Analytical Testing Parameters

Client Sample ID: **MW-3A**

Lab Sample ID: **1341317-07**

Collection Date: **9/17/2013**

Collection Time: **10:17 am**

Collected By: EM/RM - Lab

ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Chloride	16887-00-6	1	1.37	mg/L	1.00		EPA 300.0	9/18/2013 1725	MMG
Nitrate as N	NA	1	<0.0100	mg/L	0.0100		EPA 300.0	9/18/2013 1725	MMG
Sulfate as SO4	148-08-798	1	3.61	mg/L	1.00		EPA 300.0	9/18/2013 1725	MMG
Bromide	24959-67-9	1	<0.100	mg/L	0.100		EPA 300.0	9/18/2013 1725	MMG

FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Conductivity		1	274	umhos/cm	5		SM 2510B	9/17/2013 1017	RM
Eh		1	211	mV	-700		-	9/17/2013 1017	RM
pH	NA	1	6.56	pH Units	0.01		SM (20) 4500-H B	9/17/2013 1017	RM
Temperature	NA	1	15.7	°C	0		SM 2550B	9/17/2013 1017	RM
Turbidity	NA	1	2.9	NTU	1.0		SM 2130B	9/17/2013 1017	RM

METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Cadmium	7440-43-9	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1050	SBH
Calcium	7440-70-2	1	44.3	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1137	JAJ
Iron	7439-89-6	1	0.49	mg/L	0.20	CPA	EPA 200.7	9/24/2013 1137	JAJ
Lead	7439-92-1	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1050	SBH
Magnesium	7439-95-4	1	6.33	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1137	JAJ
Manganese	7439-96-5	1	1.8	mg/L	0.050	CPA	EPA 200.7	9/24/2013 1137	JAJ
Potassium	7440-09-7	1	1.5	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1137	JAJ
Sodium	7440-23-5	1	2.6	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1137	JAJ
Total Hardness (as CaCO3)		1	137	mg/L	3.31	CPA	EPA 200.7	9/24/2013 1137	JAJ

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WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Alkalinity (as CaCO ₃)		1	151	mg CaCO ₃ /L	20.0		SM 2320B	9/23/2013 1215	CS
Ammonia as N	NA	1	<0.100	mg/L	0.100		Lachat 107-06-1B	9/24/2013 1455	MMG
COD, Total		1	24	mg/L	10		HACH 8000	9/19/2013 1430	MMG
Phenolics	NA	1	0.0120	mg/L	0.00500		ACHAT 10-210-00-1-A	9/26/2013 1545	MMG
Total Dissolved Solids	NA	1	187	mg/L	10.0		SM 2540C	9/19/2013 1539	CS
Total Kjeldahl Nitrogen	NA	1	0.540	mg/L	0.500	CPA	SM 4500NH3BF	9/24/2013 1000	BAH
Biochemical Oxygen Demand	NA	1	2.0	mg/L	2.0		SM 5210B	9/18/2013 1000	CS

Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

Total Organic Carbon

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Total Organic Carbon	TOC	2	10.9	mg/L	2.00		E415.1	9/24/2013 1910	DIH

Analytical Testing Parameters

Client Sample ID: **MW-3B**

Lab Sample ID: **1341317-08**

Collection Date: **9/17/2013**

Collection Time: **10:13 am**

Collected By: EM/RM - Lab

ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Chloride	16887-00-6	1	21.4	mg/L	1.00		EPA 300.0	9/18/2013 1735	MMG
Nitrate as N	NA	1	0.0840	mg/L	0.0100		EPA 300.0	9/18/2013 1735	MMG
Sulfate as SO ₄	148-08-798	1	10.0	mg/L	1.00		EPA 300.0	9/18/2013 1735	MMG
Bromide	24959-67-9	1	0.219	mg/L	0.100		EPA 300.0	9/18/2013 1735	MMG

FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Conductivity		1	467	umhos/cm	5		SM 2510B	9/17/2013 1013	RM
Eh		1	215	mV	-700		-	9/17/2013 1013	RM
pH	NA	1	6.82	pH Units	0.01		SM (20) 4500-H B	9/17/2013 1013	RM
Temperature	NA	1	13.1	°C	0		SM 2550B	9/17/2013 1013	RM
Turbidity	NA	1	4.7	NTU	1.0		SM 2130B	9/17/2013 1013	RM

METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Cadmium	7440-43-9	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1055	SBH
Calcium	7440-70-2	5	60.3	mg/L	2.50	CPA NSC	EPA 200.7	9/24/2013 1505	JAJ
Iron	7439-89-6	1	0.27	mg/L	0.20	CPA	EPA 200.7	9/24/2013 1141	JAJ
Lead	7439-92-1	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1055	SBH
Magnesium	7439-95-4	1	16.3	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1141	JAJ
Manganese	7439-96-5	1	0.25	mg/L	0.050	CPA	EPA 200.7	9/24/2013 1141	JAJ

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METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Potassium	7440-09-7	1	1.3	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1141	JAJ
Sodium	7440-23-5	1	9.2	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1141	JAJ
Total Hardness (as CaCO ₃)		5	218	mg/L	8.30	CPA	EPA 200.7	9/24/2013 1505	JAJ

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Alkalinity (as CaCO ₃)		1	208	mg CaCO ₃ /L	20.0		SM 2320B	9/23/2013 1215	CS
Ammonia as N	NA	1	<0.100	mg/L	0.100		Lachat 107-06-1B	9/24/2013 1455	MMG
COD, Total		1	<10	mg/L	10		HACH 8000	9/19/2013 1430	MMG
Phenolics	NA	1	0.0150	mg/L	0.00500		ACHAT 10-210-00-1-7	9/26/2013 1545	MMG
Total Dissolved Solids	NA	1	301	mg/L	10.0		SM 2540C	9/19/2013 1539	CS
Total Kjeldahl Nitrogen	NA	1	<0.500	mg/L	0.500	CPA	SM 4500NH3BF	9/24/2013 1002	BAH
Biochemical Oxygen Demand	NA	1	<2.0	mg/L	2.0		SM 5210B	9/18/2013 1000	CS

Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

Total Organic Carbon

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Total Organic Carbon	TOC	1	2.96	mg/L	1.00		E415.1	9/23/2013 2025	DIH

Analytical Testing Parameters

Client Sample ID: **MW-4A**

Lab Sample ID: **1341317-09**

Collection Date: **9/17/2013**

Collection Time: **10:29 am**

Collected By: EM/RM - Lab

ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Chloride	16887-00-6	1	17.7	mg/L	1.00		EPA 300.0	9/18/2013 1802	MMG
Nitrate as N	NA	1	<0.0100	mg/L	0.0100		EPA 300.0	9/18/2013 1802	MMG
Sulfate as SO ₄	148-08-798	1	9.67	mg/L	1.00		EPA 300.0	9/18/2013 1802	MMG
Bromide	24959-67-9	1	0.182	mg/L	0.100		EPA 300.0	9/18/2013 1802	MMG

FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Conductivity		1	742	umhos/cm	5		SM 2510B	9/17/2013 1029	RM
Eh		1	207	mV	-700		-	9/17/2013 1029	RM
pH	NA	1	7.19	pH Units	0.01		SM (20) 4500-H B	9/17/2013 1029	RM
Temperature	NA	1	14.7	°C	0		SM 2550B	9/17/2013 1029	RM
Turbidity	NA	1	3.6	NTU	1.0		SM 2130B	9/17/2013 1029	RM

METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Cadmium	7440-43-9	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1110	SBH

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METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analized	Analyst
Calcium	7440-70-2	5	119	mg/L	2.50	CPA	EPA 200.7	9/24/2013 1509	JAJ
Iron	7439-89-6	1	0.23	mg/L	0.20	CPA	EPA 200.7	9/24/2013 1146	JAJ
Lead	7439-92-1	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1110	SBH
Magnesium	7439-95-4	1	23.4	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1146	JAJ
Manganese	7439-96-5	1	0.70	mg/L	0.050	CPA	EPA 200.7	9/24/2013 1146	JAJ
Potassium	7440-09-7	1	1.8	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1146	JAJ
Sodium	7440-23-5	1	16	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1146	JAJ
Total Hardness (as CaCO3)		5	394	mg/L	8.30	CPA	EPA 200.7	9/24/2013 1509	JAJ

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analized	Analyst
Alkalinity (as CaCO3)		1	379	mg CaCO3/L	20.0		SM 2320B	9/23/2013 1215	CS
Ammonia as N	NA	1	<0.100	mg/L	0.100		Lachat 107-06-1B	9/27/2013 1215	MMG
COD, Total		1	<10	mg/L	10		HACH 8000	9/19/2013 1430	MMG
Phenolics	NA	1	0.0120	mg/L	0.00500		ACHAT 10-210-00-1-7	9/26/2013 1545	MMG
Total Dissolved Solids	NA	1	470	mg/L	10.0		SM 2540C	9/19/2013 1539	CS
Total Kjeldahl Nitrogen	NA	1	<0.500	mg/L	0.500	CPA	SM 4500NH3BF	9/24/2013 1004	BAH
Biochemical Oxygen Demand	NA	1	<2.0	mg/L	2.0		SM 5210B	9/18/2013 1000	CS

Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

Total Organic Carbon

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analized	Analyst
Total Organic Carbon	TOC	2	8.21	mg/L	2.00		E415.1	9/24/2013 1923	DIH

Analytical Testing Parameters

Client Sample ID: **MW-5A**

Lab Sample ID: **1341317-10**

Collection Date: **9/17/2013**

Collection Time: **10:40 am**

Collected By: EM/RM - Lab

ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analized	Analyst
Chloride	16887-00-6	1	5.61	mg/L	1.00		EPA 300.0	9/18/2013 1829	MMG
Nitrate as N	NA	1	0.183	mg/L	0.0100		EPA 300.0	9/18/2013 1829	MMG
Sulfate as SO4	148-08-798	1	10.9	mg/L	1.00		EPA 300.0	9/18/2013 1829	MMG
Bromide	24959-67-9	1	<0.100	mg/L	0.100		EPA 300.0	9/18/2013 1829	MMG

FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analized	Analyst
Conductivity		1	261	umhos/cm	5		SM 2510B	9/17/2013 1040	RM
Eh		1	193	mV	-700		-	9/17/2013 1040	RM
pH	NA	1	7.44	pH Units	0.01		SM (20) 4500-H B	9/17/2013 1040	RM

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FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Temperature	NA	1	17.1	°C	0		SM 2550B	9/17/2013 1040	RM
Turbidity	NA	1	3.2	NTU	1.0		SM 2130B	9/17/2013 1040	RM

METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Cadmium	7440-43-9	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1115	SBH
Calcium	7440-70-2	1	30.8	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1150	JAJ
Iron	7439-89-6	1	<0.20	mg/L	0.20	CPA	EPA 200.7	9/24/2013 1150	JAJ
Lead	7439-92-1	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1115	SBH
Magnesium	7439-95-4	1	8.67	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1150	JAJ
Manganese	7439-96-5	1	<0.050	mg/L	0.050	CPA	EPA 200.7	9/24/2013 1150	JAJ
Potassium	7440-09-7	1	1.3	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1150	JAJ
Sodium	7440-23-5	1	12	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1150	JAJ
Total Hardness (as CaCO3)		1	113	mg/L	3.31	CPA	EPA 200.7	9/24/2013 1150	JAJ

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Alkalinity (as CaCO3)		1	123	mg CaCO3/L	20.0		SM 2320B	9/23/2013 1215	CS
Ammonia as N	NA	1	<0.100	mg/L	0.100		Lachat 107-06-1B	9/27/2013 1215	MMG
COD, Total		1	<10	mg/L	10		HACH 8000	9/19/2013 1430	MMG
Phenolics	NA	1	0.0160	mg/L	0.00500		ACHAT 10-210-00-1-1	9/26/2013 1545	MMG
Total Dissolved Solids	NA	1	151	mg/L	10.0		SM 2540C	9/19/2013 1539	CS
Total Kjeldahl Nitrogen	NA	1	<0.500	mg/L	0.500	CPA	SM 4500NH3BF	9/24/2013 1006	BAH
Biochemical Oxygen Demand	NA	1	<2.0	mg/L	2.0		SM 5210B	9/18/2013 1000	CS

Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

Total Organic Carbon

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Total Organic Carbon	TOC	1	1.64	mg/L	1.00		E415.1	9/23/2013 2113	DIH

Analytical Testing Parameters

Client Sample ID: **MW-6A**
Lab Sample ID: **1341317-11**

Collection Date: **9/17/2013**
Collection Time: **10:58 am**
Collected By: EM/RM - Lab

ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Chloride	16887-00-6	1	12.4	mg/L	1.00		EPA 300.0	9/18/2013 1839	MMG
Nitrate as N	NA	1	0.155	mg/L	0.0100		EPA 300.0	9/18/2013 1839	MMG
Sulfate as SO4	148-08-798	1	12.8	mg/L	1.00		EPA 300.0	9/18/2013 1839	MMG
Bromide	24959-67-9	1	<0.100	mg/L	0.100		EPA 300.0	9/18/2013 1839	MMG

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FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Conductivity		1	393	umhos/cm	5		SM 2510B	9/17/2013 1058	RM
Eh		1	171	mV	-700		-	9/17/2013 1058	RM
pH	NA	1	7.2	pH Units	0.01		SM (20) 4500-H B	9/17/2013 1058	RM
Temperature	NA	1	15.3	°C	0		SM 2550B	9/17/2013 1058	RM
Turbidity	NA	1	9.4	NTU	1.0		SM 2130B	9/17/2013 1058	RM

METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Cadmium	7440-43-9	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1120	SBH
Calcium	7440-70-2	5	54.5	mg/L	2.50	CPA	EPA 200.7	9/24/2013 1513	JAJ
Iron	7439-89-6	1	0.76	mg/L	0.20	CPA	EPA 200.7	9/24/2013 1203	JAJ
Lead	7439-92-1	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1120	SBH
Magnesium	7439-95-4	1	8.49	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1203	JAJ
Manganese	7439-96-5	1	0.46	mg/L	0.050	CPA	EPA 200.7	9/24/2013 1203	JAJ
Potassium	7440-09-7	1	2.3	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1203	JAJ
Sodium	7440-23-5	1	16	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1203	JAJ
Total Hardness (as CaCO3)		5	171	mg/L	8.30	CPA	EPA 200.7	9/24/2013 1513	JAJ

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Alkalinity (as CaCO3)		1	301	mg CaCO3/L	20.0		SM 2320B	9/23/2013 1215	CS
Ammonia as N	NA	1	<0.100	mg/L	0.100		Lachat 107-06-1B	9/27/2013 1215	MMG
COD, Total		1	<10	mg/L	10		HACH 8000	9/19/2013 1430	MMG
Phenolics	NA	1	0.00900	mg/L	0.00500		ACHAT 10-210-00-1-7	9/26/2013 1545	MMG
Total Dissolved Solids	NA	1	231	mg/L	10.0		SM 2540C	9/19/2013 1539	CS
Total Kjeldahl Nitrogen	NA	1	1.34	mg/L	1.00	CPA	SM 4500NH3BF	9/24/2013 1009	BAH
Biochemical Oxygen Demand	NA	1	<2.0	mg/L	2.0		SM 5210B	9/18/2013 1000	CS

Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

Total Organic Carbon

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Total Organic Carbon	TOC	1	5.30	mg/L	1.00		E415.1	9/23/2013 2127	DIH

Analytical Testing Parameters

Client Sample ID: **MW-6B**

Lab Sample ID: **1341317-12**

Collection Date: **9/17/2013**

Collection Time: **10:53 am**

Collected By: EM/RM - Lab

ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Chloride	16887-00-6	1	17.1	mg/L	1.00		EPA 300.0	9/18/2013 1847	MMG

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ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Nitrate as N	NA	1	0.0850	mg/L	0.0100		EPA 300.0	9/18/2013 1847	MMG
Sulfate as SO ₄	148-08-798	1	13.5	mg/L	1.00		EPA 300.0	9/18/2013 1847	MMG
Bromide	24959-67-9	1	<0.100	mg/L	0.100		EPA 300.0	9/18/2013 1847	MMG

FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Conductivity		1	389	umhos/cm	5		SM 2510B	9/17/2013 1053	RM
Eh		1	153	mV	-700		-	9/17/2013 1053	RM
pH	NA	1	7.45	pH Units	0.01		SM (20) 4500-H B	9/17/2013 1053	RM
Temperature	NA	1	13.1	°C	0		SM 2550B	9/17/2013 1053	RM
Turbidity	NA	1	11	NTU	1.0		SM 2130B	9/17/2013 1053	RM

METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Cadmium	7440-43-9	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1125	SBH
Calcium	7440-70-2	1	44.1	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1208	JAJ
Iron	7439-89-6	1	0.29	mg/L	0.20	CPA	EPA 200.7	9/24/2013 1208	JAJ
Lead	7439-92-1	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1125	SBH
Magnesium	7439-95-4	1	10.3	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1208	JAJ
Manganese	7439-96-5	1	0.18	mg/L	0.050	CPA	EPA 200.7	9/24/2013 1208	JAJ
Potassium	7440-09-7	1	1.3	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1208	JAJ
Sodium	7440-23-5	1	19	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1208	JAJ
Total Hardness (as CaCO ₃)		1	153	mg/L	3.31	CPA	EPA 200.7	9/24/2013 1208	JAJ

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Alkalinity (as CaCO ₃)		1	153	mg CaCO ₃ /L	20.0		SM 2320B	9/23/2013 1215	CS
Ammonia as N	NA	1	<0.100	mg/L	0.100		Lachat 107-06-1B	9/27/2013 1215	MMG
COD, Total		1	<10	mg/L	10		HACH 8000	9/19/2013 1430	MMG
Phenolics	NA	1	0.0130	mg/L	0.00500		ACHAT 10-210-00-1-1	9/26/2013 1545	MMG
Total Dissolved Solids	NA	1	207	mg/L	10.0		SM 2540C	9/19/2013 1539	CS
Total Kjeldahl Nitrogen	NA	1	<0.500	mg/L	0.500	CPA	SM 4500NH3BF	9/24/2013 1011	BAH
Biochemical Oxygen Demand	NA	1	<2.0	mg/L	2.0		SM 5210B	9/18/2013 1000	CS

Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

Total Organic Carbon

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Total Organic Carbon	TOC	1	3.27	mg/L	1.00		E415.1	9/23/2013 2140	DIH

Member



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Certificate of Results

Analytical Testing Parameters

Client Sample ID: **MW-7A**

Lab Sample ID: **1341317-13**

Collection Date: **9/17/2013**

Collection Time: **11:20 am**

Collected By: EM/RM - Lab

ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Chloride	16887-00-6	2	80.6	mg/L	2.00		EPA 300.0	9/19/2013 1904	MMG
Nitrate as N	NA	1	<0.0100	mg/L	0.0100		EPA 300.0	9/18/2013 1856	MMG
Sulfate as SO4	148-08-798	1	17.8	mg/L	1.00		EPA 300.0	9/18/2013 1856	MMG
Bromide	24959-67-9	1	0.354	mg/L	0.100		EPA 300.0	9/18/2013 1856	MMG

FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Conductivity		1	1027	umhos/cm	5		SM 2510B	9/17/2013 1120	RM
Eh		1	221	mV	-700		-	9/17/2013 1120	RM
pH	NA	1	7.21	pH Units	0.01		SM (20) 4500-H B	9/17/2013 1120	RM
Temperature	NA	1	14.6	°C	0		SM 2550B	9/17/2013 1120	RM
Turbidity	NA	1	6.7	NTU	1.0		SM 2130B	9/17/2013 1120	RM

METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Cadmium	7440-43-9	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1130	SBH
Calcium	7440-70-2	10	133	mg/L	5.00	CPA	EPA 200.7	9/24/2013 1517	JAJ
Iron	7439-89-6	1	2.3	mg/L	0.20	CPA	EPA 200.7	9/24/2013 1212	JAJ
Lead	7439-92-1	1	0.0013	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1130	SBH
Magnesium	7439-95-4	1	27.9	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1212	JAJ
Manganese	7439-96-5	1	1.8	mg/L	0.050	CPA	EPA 200.7	9/24/2013 1212	JAJ
Potassium	7440-09-7	1	2.1	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1212	JAJ
Sodium	7440-23-5	10	82	mg/L	5.0	CPA	EPA 200.7	9/24/2013 1517	JAJ
Total Hardness (as CaCO3)		10	446	mg/L	14.5	CPA	EPA 200.7	9/24/2013 1517	JAJ

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Alkalinity (as CaCO3)		1	465	mg CaCO3/L	20.0		SM 2320B	9/23/2013 1215	CS
Ammonia as N	NA	1	<0.100	mg/L	0.100		Lachat 107-06-1B	9/27/2013 1215	MMG
COD, Total		1	13	mg/L	10		HACH 8000	9/19/2013 1430	MMG
Phenolics	NA	1	0.00700	mg/L	0.00500		ACHAT 10-210-00-1-A	9/26/2013 1545	MMG
Total Dissolved Solids	NA	1	613	mg/L	10.0		SM 2540C	9/19/2013 1539	CS
Total Kjeldahl Nitrogen	NA	1	<0.500	mg/L	0.500	CPA	SM 4500NH3BF	9/24/2013 1012	BAH
Biochemical Oxygen Demand	NA	1	<2.0	mg/L	2.0		SM 5210B	9/18/2013 1000	CS

Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

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Certificate of Results

Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

Total Organic Carbon

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Total Organic Carbon	TOC	2	14.3	mg/L	2.00		E415.1	9/24/2013 1936	DIH

Analytical Testing Parameters

Client Sample ID: **Scalehouse**

Lab Sample ID: **1341317-14**

Collection Date: **9/17/2013**

Collection Time: **11:34 am**

Collected By: EM/RM - Lab

ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Chloride	16887-00-6	1	10.8	mg/L	1.00		EPA 300.0	9/18/2013 1906	MMG
Nitrate as N	NA	1	0.0700	mg/L	0.0100		EPA 300.0	9/18/2013 1906	MMG
Sulfate as SO4	148-08-798	1	28.5	mg/L	1.00		EPA 300.0	9/18/2013 1906	MMG
Bromide	24959-67-9	1	<0.100	mg/L	0.100		EPA 300.0	9/18/2013 1906	MMG

FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Conductivity		1	336	umhos/cm	5		SM 2510B	9/17/2013 1134	RM
Eh		1	217	mV	-700		-	9/17/2013 1134	RM
pH	NA	1	7.91	pH Units	0.01		SM (20) 4500-H B	9/17/2013 1134	RM
Temperature	NA	1	19	°C	0		SM 2550B	9/17/2013 1134	RM
Turbidity	NA	1	<1.0	NTU	1.0		SM 2130B	9/17/2013 1134	RM

METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Cadmium	7440-43-9	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1135	SBH
Calcium	7440-70-2	1	44.1	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1217	JAJ
Iron	7439-89-6	1	<0.20	mg/L	0.20	CPA	EPA 200.7	9/24/2013 1217	JAJ
Lead	7439-92-1	1	0.0019	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1135	SBH
Magnesium	7439-95-4	1	9.09	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1217	JAJ
Manganese	7439-96-5	1	<0.050	mg/L	0.050	CPA	EPA 200.7	9/24/2013 1217	JAJ
Potassium	7440-09-7	1	0.53	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1217	JAJ
Sodium	7440-23-5	1	8.0	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1217	JAJ
Total Hardness (as CaCO3)		1	148	mg/L	3.31	CPA	EPA 200.7	9/24/2013 1217	JAJ

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Alkalinity (as CaCO3)		1	118	mg CaCO3/L	20.0		SM 2320B	9/23/2013 1215	CS
Ammonia as N	NA	1	<0.100	mg/L	0.100		Lachat 107-06-1B	9/27/2013 1215	MMG
COD, Total		1	<10	mg/L	10		HACH 8000	9/19/2013 1430	MMG
Phenolics	NA	1	0.00700	mg/L	0.00500		ACHAT 10-210-00-1-f	9/26/2013 1545	MMG

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Certificate of Results

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Total Dissolved Solids	NA	1	230	mg/L	10.0		SM 2540C	9/19/2013 1539	CS
Total Kjeldahl Nitrogen	NA	1	<0.500	mg/L	0.500	CPA	SM 4500NH3BF	9/24/2013 1017	BAH
Biochemical Oxygen Demand	NA	1	<2.0	mg/L	2.0		SM 5210B	9/18/2013 1000	CS

Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

Total Organic Carbon

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Total Organic Carbon	TOC	1	1.31	mg/L	1.00		E415.1	9/23/2013 2206	DIH

Analytical Testing Parameters

Client Sample ID: **DUP (MW-6B)**
Lab Sample ID: **1341317-15**

Collection Date: **9/17/2013**
Collection Time: **10:53 am**
Collected By: EM/RM - Lab

ANIONS BY ION CHROMATOGRAPHY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Chloride	16887-00-6	1	17.3	mg/L	1.00		EPA 300.0	9/18/2013 1915	MMG
Nitrate as N	NA	1	0.0810	mg/L	0.0100		EPA 300.0	9/18/2013 1915	MMG
Sulfate as SO4	148-08-798	1	13.6	mg/L	1.00		EPA 300.0	9/18/2013 1915	MMG
Bromide	24959-67-9	1	<0.100	mg/L	0.100		EPA 300.0	9/18/2013 1915	MMG

FIELD SAMPLING/TESTING

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Conductivity		1	417	umhos/cm	5		SM 2510B	9/17/2013 1053	RM
Eh		1	153	mV	-700		-	9/17/2013 1053	RM
pH	NA	1	7.44	pH Units	0.01		SM (20) 4500-H B	9/17/2013 1053	RM

METALS

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Cadmium	7440-43-9	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1140	SBH
Calcium	7440-70-2	1	40.7	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1221	JAJ
Iron	7439-89-6	1	0.25	mg/L	0.20	CPA	EPA 200.7	9/24/2013 1221	JAJ
Lead	7439-92-1	1	<0.0010	mg/L	0.0010	CPA	EPA 200.8	10/24/2013 1140	SBH
Magnesium	7439-95-4	1	9.50	mg/L	0.500	CPA	EPA 200.7	9/24/2013 1221	JAJ
Manganese	7439-96-5	1	0.14	mg/L	0.050	CPA	EPA 200.7	9/24/2013 1221	JAJ
Potassium	7440-09-7	1	1.2	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1221	JAJ
Sodium	7440-23-5	1	17	mg/L	0.50	CPA	EPA 200.7	9/24/2013 1221	JAJ
Total Hardness (as CaCO3)		1	141	mg/L	3.31	CPA	EPA 200.7	9/24/2013 1221	JAJ

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analyzed	Analyst
Alkalinity (as CaCO3)		1	151	mg CaCO3/L	20.0		SM 2320B	9/23/2013 1215	CS

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Certificate of Results

WET CHEMISTRY

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analized	Analyst
Ammonia as N	NA	1	<0.100	mg/L	0.100		Lachat 107-06-1B	9/27/2013 1215	MMG
COD, Total		1	<10	mg/L	10		HACH 8000	9/19/2013 1430	MMG
Phenolics	NA	1	0.00500	mg/L	0.00500		ACHAT 10-210-00-1-1	9/26/2013 1545	MMG
Total Dissolved Solids	NA	1	213	mg/L	10.0		SM 2540C	9/19/2013 1539	CS
Total Kjeldahl Nitrogen	NA	1	<0.500	mg/L	0.500	CPA	SM 4500NH3BF	9/24/2013 1019	BAH
Biochemical Oxygen Demand	NA	1	<2.0	mg/L	2.0		SM 5210B	9/18/2013 1000	CS

Subcontracted To: Microbac Laboratories, Inc. - Ohio Valley

Total Organic Carbon

Parameter	CAS	DF	Result	Units	PQL	Qualifier	Method	Analized	Analyst
Total Organic Carbon	TOC	1	2.63	mg/L	1.00		E415.1	9/23/2013 2219	DIH

**Microbac Laboratories, Inc.**

New York Division
3821 Buck Drive
Cortland, New York 13045
Phone: 607-753-3403

Work Order Number: 1341317**Certificate of Results****WET CHEMISTRY - Quality Control Summary****Microbac Laboratories Inc., New York Division**

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
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Batch 3I18025 - WetChem Prep-NY**Blank (3I18025-BLK1)**

Prepared & Analyzed: 09/18/2013

Biochemical Oxygen Demand 2.0 mg/L

LCS (3I18025-BS1)

Prepared & Analyzed: 09/18/2013

Biochemical Oxygen Demand 176 2.0 mg/L 300 58.7 85-115

Duplicate (3I18025-DUP2)**Source: 1341317-08**

Prepared & Analyzed: 09/18/2013

Biochemical Oxygen Demand 2.0 mg/L ND 15

Batch 3I18085 - WetChem_IC-NY**Blank (3I18085-BLK1)**

Prepared & Analyzed: 09/18/2013

Bromide 0.100 mg/L

Chloride 1.00 mg/L

Nitrate as N 0.0100 mg/L

Sulfate as SO4 1.00 mg/L

LCS (3I18085-BS1)

Prepared & Analyzed: 09/18/2013

Bromide 9.74 0.100 mg/L 10.0 97.4 90-110

Chloride 4.87 1.00 mg/L 5.00 97.5 90-110

Nitrate as N 2.50 0.0100 mg/L 2.50 100 90-110

Sulfate as SO4 15.0 1.00 mg/L 15.0 100 90-110

Duplicate (3I18085-DUP2)**Source: 1341317-08**

Prepared & Analyzed: 09/18/2013

Bromide 0.214 0.100 mg/L 0.219 2.31 20

Chloride 21.4 1.00 mg/L 21.4 0.0655 20

Nitrate as N 0.0850 0.0100 mg/L 0.0840 1.18 20

Sulfate as SO4 10.0 1.00 mg/L 10.0 0.0598 20

Matrix Spike (3I18085-MS2)**Source: 1341317-08**

Prepared & Analyzed: 09/18/2013

Bromide 2.24 0.100 mg/L 2.00 0.219 101 90-110

Chloride 36.0 1.00 mg/L 20.0 21.4 73.2 10-154

Nitrate as N 2.04 0.0100 mg/L 2.00 0.0840 97.6 90-110

Sulfate as SO4 25.4 1.00 mg/L 20.0 10.0 77.0 90-110

Batch 3I19056 - WetChem Prep-NY**Blank (3I19056-BLK1)**

Prepared: 09/19/2013 Analyzed: 09/20/2013

Phenolics 0.00500 mg/L

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**Microbac Laboratories, Inc.**

New York Division
3821 Buck Drive
Cortland, New York 13045
Phone: 607-753-3403

Work Order Number: 1341317

Certificate of Results

WET CHEMISTRY - Quality Control Summary**Microbac Laboratories Inc., New York Division**

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3I19056 - WetChem Prep-NY										
LCS (3I19056-BS1)				Prepared: 09/19/2013 Analyzed: 09/20/2013						
Phenolics	0.202	0.00500	mg/L	0.200		101	80-120			
Batch 3I19068 - WetChem Prep-NY										
Blank (3I19068-BLK1)				Prepared & Analyzed: 09/19/2013						
COD, Total		10	mg/L							
LCS (3I19068-BS1)				Prepared & Analyzed: 09/19/2013						
COD, Total	101	10	mg/L	100		101	95-105			
Matrix Spike (3I19068-MS1)				Source: 1341317-08		Prepared & Analyzed: 09/19/2013				
COD, Total	52.2	10	mg/L	50.0	ND	104	80-120			
Matrix Spike Dup (3I19068-MSD1)				Source: 1341317-08		Prepared & Analyzed: 09/19/2013				
COD, Total	54.2	10	mg/L	50.0	ND	108	80-120	3.76	20	
Batch 3I19081 - WetChem Prep-NY										
Blank (3I19081-BLK1)				Prepared & Analyzed: 09/19/2013						
Total Dissolved Solids		10.0	mg/L							
LCS (3I19081-BS1)				Prepared & Analyzed: 09/19/2013						
Total Dissolved Solids	19	10.0	mg/L	20.0		95.0	68.1-133			
Duplicate (3I19081-DUP1)				Source: 1341317-08		Prepared & Analyzed: 09/19/2013				
Total Dissolved Solids	300	10.0	mg/L		300			1.32	5	
Batch 3I19106 - WetChem_IC-NY										
Blank (3I19106-BLK1)				Prepared & Analyzed: 09/19/2013						
Chloride		1.00	mg/L							
LCS (3I19106-BS1)				Prepared & Analyzed: 09/19/2013						
Chloride	4.91	1.00	mg/L	5.00		98.2	90-110			
Batch 3I23041 - WetChem Prep-NY										
Blank (3I23041-BLK1)				Prepared & Analyzed: 09/23/2013						
Alkalinity (as CaCO ₃)		20.0	mg CaCO ₃ /L							

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Certificate of Results

WET CHEMISTRY - Quality Control Summary Microbac Laboratories Inc., New York Division

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3I23041 - WetChem Prep-NY										
Blank (3I23041-BLK2)				Prepared & Analyzed: 09/23/2013						
Alkalinity (as CaCO ₃)	20.0		mg CaCO ₃ /L							
LCS (3I23041-BS1)				Prepared & Analyzed: 09/23/2013						
Alkalinity (as CaCO ₃)	199	20.0	mg CaCO ₃ /L	200		99.5	0-200			
LCS (3I23041-BS2)				Prepared & Analyzed: 09/23/2013						
Alkalinity (as CaCO ₃)	200	20.0	mg CaCO ₃ /L	200		100	0-200			
Duplicate (3I23041-DUP1)				Source: 1341317-08		Prepared & Analyzed: 09/23/2013				
Alkalinity (as CaCO ₃)	211	20.0	mg CaCO ₃ /L		208			1.43	14	
Batch 3I23048 - WetChem Prep-NY										
Blank (3I23048-BLK1)				Prepared: 09/23/2013 Analyzed: 09/24/2013						
Ammonia as N	0.100		mg/L							
LCS (3I23048-BS1)				Prepared: 09/23/2013 Analyzed: 09/24/2013						
Ammonia as N	1.89	0.100	mg/L	2.00		94.5	85-115			
Matrix Spike (3I23048-MS1)				Source: 1341317-08		Prepared: 09/23/2013 Analyzed: 09/26/2013				
Ammonia as N	1.03	0.100	mg/L	1.00	0.0900	94.0	80-120			
Matrix Spike Dup (3I23048-MSD1)				Source: 1341317-08		Prepared: 09/23/2013 Analyzed: 09/26/2013				
Ammonia as N	1.05	0.100	mg/L	1.00	0.0900	96.0	80-120	1.92	10	
Batch 3I25086 - WetChem Prep-NY										
Blank (3I25086-BLK1)				Prepared: 09/25/2013 Analyzed: 09/26/2013						
Phenolics	0.00500		mg/L							
LCS (3I25086-BS1)				Prepared: 09/25/2013 Analyzed: 09/26/2013						
Phenolics	0.188	0.00500	mg/L	0.200		94.0	80-120			
Matrix Spike (3I25086-MS1)				Source: 1341317-08		Prepared: 09/25/2013 Analyzed: 09/26/2013				
Phenolics	0.105	0.00500	mg/L	0.100	0.0150	90.0	80-120			

**Microbac Laboratories, Inc.**

New York Division
3821 Buck Drive
Cortland, New York 13045
Phone: 607-753-3403

Work Order Number: 1341317

Certificate of Results

WET CHEMISTRY - Quality Control Summary**Microbac Laboratories Inc., New York Division**

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
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Batch 3I25086 - WetChem Prep-NY**Matrix Spike Dup (3I25086-MSD1)****Source: 1341317-08**

Prepared: 09/25/2013 Analyzed: 09/26/2013

Phenolics	0.105	0.00500	mg/L	0.100	0.0150	90.0	80-120	0.00	20
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Batch 3I27046 - WetChem Prep-NY**Blank (3I27046-BLK1)**

Prepared & Analyzed: 09/27/2013

Ammonia as N	0.100		mg/L
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LCS (3I27046-BS1)

Prepared & Analyzed: 09/27/2013

Ammonia as N	1.81	0.100	mg/L	2.00	90.5	85-115
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Batch 3I30016 - WetChem Prep-NY**Blank (3I30016-BLK1)**

Prepared: 09/27/2013 Analyzed: 09/30/2013

Ammonia as N	0.100		mg/L
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LCS (3I30016-BS1)

Prepared: 09/27/2013 Analyzed: 09/30/2013

Ammonia as N	1.80	0.100	mg/L	2.00	90.0	85-115
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Member

The data and information contained in this report represents only the samples analyzed. It is rendered under the condition that it not be reproduced wholly or in part for advertising purposes without the prior written approval of Microbac Laboratories, Inc.



Microbac Laboratories, Inc.
New York Division
3821 Buck Drive
Cortland, New York 13045
Phone: 607-753-3403

Work Order Number: 1341317

Certificate of Results

Total Organic Carbon - Quality Control Summary

Microbac Laboratories, Inc. - Ohio Valley

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
---------	--------	-----	-------	-------------	---------------	------	-------------	-----	-----------	------------

Batch WG445318 - NONE

BLK (WG445318-01)

Prepared: Analyzed: 09/19/2013

Total Organic Carbon	1.00		mg/L				-			U
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BS (WG445318-02)

Prepared: Analyzed: 09/19/2013

Total Organic Carbon	24.2	1.00	mg/L	25.0		96.7	85-115	0.742	15	
----------------------	------	------	------	------	--	------	--------	-------	----	--

BSD (WG445318-03)

Prepared: Analyzed: 09/19/2013

Total Organic Carbon	24.4	1.00	mg/L	25.0		97.4	85-115	0.742	15	
----------------------	------	------	------	------	--	------	--------	-------	----	--

Batch WG445704 - NONE

BLK (WG445704-01)

Prepared & Analyzed: 09/23/2013

Total Organic Carbon	1.00		mg/L				-			U
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Total Organic Carbon	1.00		mg/L				-			U
----------------------	------	--	------	--	--	--	---	--	--	---

BS (WG445704-02)

Prepared & Analyzed: 09/23/2013

Total Organic Carbon	24.3	1.00	mg/L	25.0		97.0	85-115	0.745	15	
----------------------	------	------	------	------	--	------	--------	-------	----	--

Total Organic Carbon	24.2	1.00	mg/L	25.0		96.6	85-115	0.748	15	
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BSD (WG445704-03)

Prepared & Analyzed: 09/23/2013

Total Organic Carbon	24.1	1.00	mg/L	25.0		96.3	85-115	0.745	15	
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Total Organic Carbon	24.0	1.00	mg/L	25.0		95.9	85-115	0.748	15	
----------------------	------	------	------	------	--	------	--------	-------	----	--

Member



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**Microbac Laboratories, Inc.**

New York Division
3821 Buck Drive
Cortland, New York 13045
Phone: 607-753-3403

Work Order Number: 1341317

Certificate of Results

METALS - Quality Control Summary**Microbac Laboratories, Inc., Central Pennsylvania**

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
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Batch 3I19004 - EPA 200.2 ICP**Blank (3I19004-BLK1)**

Prepared: 09/19/2013 Analyzed: 09/24/2013

Calcium	0.500		mg/L
Iron	0.20		mg/L
Magnesium	0.500		mg/L
Manganese	0.050		mg/L
Potassium	0.50		mg/L
Sodium	0.50		mg/L

LCS (3I19004-BS1)

Prepared: 09/19/2013 Analyzed: 09/24/2013

Calcium	4.97	0.500	mg/L	5.00		99.4	85-115
Iron	0.990	0.20	mg/L	1.00		99.0	85-115
Magnesium	4.88	0.500	mg/L	5.00		97.6	85-115
Manganese	0.499	0.050	mg/L	0.500		99.8	85-115
Potassium	1.96	0.50	mg/L	2.00		98.1	85-115
Sodium	4.69	0.50	mg/L	5.00		93.9	85-115

Matrix Spike (3I19004-MS1)**Source: 1341317-01**

Prepared: 09/19/2013 Analyzed: 09/24/2013

Calcium	44.3	0.500	mg/L	5.00	37.2	141	70-130
Iron	1.05	0.20	mg/L	1.00	0.0734	98.1	70-130
Magnesium	12.9	0.500	mg/L	5.00	7.81	102	70-130
Manganese	0.550	0.050	mg/L	0.500	0.0632	97.4	70-130
Potassium	3.45	0.50	mg/L	2.00	1.38	104	70-130
Sodium	9.28	0.50	mg/L	5.00	3.81	109	70-130

Matrix Spike (3I19004-MS2)**Source: 1341317-08**

Prepared: 09/19/2013 Analyzed: 09/24/2013

Calcium	N/A	0.500	mg/L	5.00	60.3	NR	70-130
Iron	1.20	0.20	mg/L	1.00	0.271	92.4	70-130
Magnesium	20.2	0.500	mg/L	5.00	16.3	77.9	70-130
Manganese	0.704	0.050	mg/L	0.500	0.246	91.6	70-130
Potassium	3.30	0.50	mg/L	2.00	1.31	99.6	70-130
Sodium	13.7	0.50	mg/L	5.00	9.19	90.6	70-130

Matrix Spike Dup (3I19004-MSD1)**Source: 1341317-01**

Prepared: 09/19/2013 Analyzed: 09/24/2013

Calcium	45.3	0.500	mg/L	5.00	37.2	162	70-130	2.30	20
Iron	1.08	0.20	mg/L	1.00	0.0734	101	70-130	2.63	20
Magnesium	13.2	0.500	mg/L	5.00	7.81	108	70-130	2.44	20
Manganese	0.566	0.050	mg/L	0.500	0.0632	100	70-130	2.78	20
Potassium	3.53	0.50	mg/L	2.00	1.38	108	70-130	2.32	20
Sodium	9.43	0.50	mg/L	5.00	3.81	112	70-130	1.64	20

Member

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Microbac Laboratories, Inc.
New York Division
3821 Buck Drive
Cortland, New York 13045
Phone: 607-753-3403

Work Order Number: 1341317

Certificate of Results

METALS - Quality Control Summary

Microbac Laboratories, Inc., Central Pennsylvania

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
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Batch 3I19004 - EPA 200.2 ICP

Matrix Spike Dup (3I19004-MSD2)

Source: 1341317-08

Prepared: 09/19/2013 Analyzed: 09/24/2013

Calcium	N/A	0.500	mg/L	5.00	60.3	NR	70-130	0.00	20	
Iron	1.28	0.20	mg/L	1.00	0.271	101	70-130	6.93	20	
Magnesium	21.6	0.500	mg/L	5.00	16.3	107	70-130	6.93	20	
Manganese	0.740	0.050	mg/L	0.500	0.246	98.7	70-130	4.89	20	
Potassium	3.48	0.50	mg/L	2.00	1.31	108	70-130	5.24	20	
Sodium	14.7	0.50	mg/L	5.00	9.19	110	70-130	6.78	20	

Batch 3I19005 - EPA 200.2 ICPMS

Blank (3I19005-BLK1)

Prepared: 09/19/2013 Analyzed: 10/24/2013

Cadmium	0.0010	mg/L								
Lead	0.0010	mg/L								

LCS (3I19005-BS1)

Prepared: 09/19/2013 Analyzed: 10/24/2013

Cadmium	0.049	0.0010	mg/L	0.0500		97.5	85-115			
Lead	0.0504	0.0010	mg/L	0.0500		101	85-115			

Matrix Spike (3I19005-MS1)

Source: 1341317-01

Prepared: 09/19/2013 Analyzed: 10/24/2013

Cadmium	0.056	0.0010	mg/L	0.0500	0.000030	111	70-130			
Lead	0.0780	0.0010	mg/L	0.0500	0.0190	118	70-130			

Matrix Spike (3I19005-MS2)

Source: 1341317-08

Prepared: 09/19/2013 Analyzed: 10/24/2013

Cadmium	0.055	0.0010	mg/L	0.0500	0.00037	109	70-130			
Lead	0.0538	0.0010	mg/L	0.0500	0.000340	107	70-130			

Matrix Spike Dup (3I19005-MSD1)

Source: 1341317-01

Prepared: 09/19/2013 Analyzed: 10/24/2013

Cadmium	0.054	0.0010	mg/L	0.0500	0.000030	109	70-130	2.16	20	
Lead	0.0777	0.0010	mg/L	0.0500	0.0190	117	70-130	0.334	20	

Matrix Spike Dup (3I19005-MSD2)

Source: 1341317-08

Prepared: 09/19/2013 Analyzed: 10/24/2013

Cadmium	0.053	0.0010	mg/L	0.0500	0.00037	106	70-130	2.31	20	
Lead	0.0521	0.0010	mg/L	0.0500	0.000340	104	70-130	3.25	20	

Batch 3I23004 - WetChem_SEAL

Blank (3I23004-BLK1)

Prepared: 09/23/2013 Analyzed: 09/24/2013

Total Kjeldahl Nitrogen	0.500	mg/L								
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Member



The data and information contained in this report represents only the samples analyzed. It is rendered under the condition that it not be reproduced wholly or in part for advertising purposes without the prior written approval of Microbac Laboratories, Inc.

Certificate of Results

WET CHEMISTRY - Quality Control Summary Microbac Laboratories, Inc., Central Pennsylvania

Analyte	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch 3I23004 - WetChem_SEAL										
LCS (3I23004-BS1)				Prepared: 09/23/2013 Analyzed: 09/24/2013						
Total Kjeldahl Nitrogen	4.80	0.500	mg/L	5.00		95.9	80-120			
Duplicate (3I23004-DUP1)				Prepared: 09/23/2013 Analyzed: 09/24/2013						
Total Kjeldahl Nitrogen		0.500	mg/L		ND				20	
Matrix Spike (3I23004-MS1)				Prepared: 09/23/2013 Analyzed: 09/24/2013						
Total Kjeldahl Nitrogen	4.60	0.500	mg/L	5.00	ND	92.0	80-120			

Laboratory Certifications:

Below is a list of certifications maintained by Microbac Laboratories, Inc. New York Division. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. A complete list of individual analytes pursuant to each certification below is available upon request.

- NYELAP # 10795
- EPA # NY00935
- PADEP # 68-01385
- Connecticut #PH-0331
- New Hampshire #2985
- NYS Ag & Markets #36-142

Qualifiers and Definitions:

- **NSC:** No Spike Calculated. The analyte concentration was greater than 4X the spike level.
- **CPA:** Denotes results analyzed by Microbac Laboratories, Inc. Central Pennsylvania Division. NELAP accredited by NYELAP # 11650.
- **CAS:** Chemical Abstract Series identification for the analyte.
- **DF:** "1" indicates that there was no dilution. Any other number indicates that the sample was diluted by that factor.
- **PQL:** The **Practical Quantitation Limit**, which is defined as the lowest quantitation level of an analyte that can be readily achieved within the specified limits of precision and accuracy of an analytical method during routine laboratory operating conditions. The value may be raised depending on the characteristics or behavior of the target analyte.
- **Units:** The units of measure for the analysis. Ug/L (ppb) and mg/L (ppm) are for liquid samples. Ug/kg (ppb) and mg/kg (ppm) are for solid wet-based results while ug/kg-dry and mg/kg-dry are for solid-dry-based results.

Certificate of Results

Report Comments:

The analytical results for your samples are presented on the enclosed laboratory report(s). The data and information on this report and other accompanying documents represent on the sample(s) analyzed. In accordance with NYSDOH-ELAP and NELAC regulations, we are required to notify you of any aspects of the analysis that did not comply with these regulations. Any data qualifiers are noted directly on the laboratory report. The Laboratory also maintains a "Sample Receipt Checklist" and the submitted "Chain of Custody" form in its files that are available on request.

The pagination at the bottom of the narrative and reports indicates the total number of pages in the client submittal. No duplication of this report should be done without duplication of the entire package, including cover letter and narrative if present.

Thank you for the opportunity to provide these analytical services. Please contact Pamela Davis, Client Services Manager, with questions on the analysis.

Reviewed and Approved By:

Date Reviewed and Approved:



12/31/2013

Jennifer Walker
Quality Assurance Officer

For any feedback concerning our services, please contact Peter Indick, the Managing Director at 607.753.3403. You may also contact both James Nokes, President at president@microbac.com and Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com.

Please help us in meeting our Go Green initiative by selecting to have reports and invoices submitted via email only. Please contact nyresults@microbac.com to set up email reporting and invoicing options.

3821 Buck Drive
Cortland NY 13045
Phone: (607) 753-3403 Fax: (607) 753-3415
NY #10795, EPA #NY00935

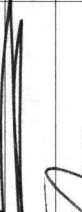
Microbac Laboratories, Inc.

CHAIN OF CUSTODY

Client Information				Billing/Invoice:				Analysis Requested						Receiving Info (Lab Use Only)							
Name: Cortland Soil and Water				Project: Towslee Landfill Routine				Field-Spec. Cond, pH, Temp, eH, Turb		TKN		COD, NH3		TOC		T-Alkalinity		Total Phenols		T-Cd, Ca, Fe, Pb, Mg, Mn, K, Na, T-hard	
Address:				Cortland, NY				Plastic		Plastic		Plastic		Plastic		Plastic		Plastic		Plastic	
Contact: Pat Reidy				Pat Reidy				Liter		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4	
Phone:				PO#:				None		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4	
Project: Towslee Landfill Routine				Date Req.:				BOD5, NO3, TDS, SO4, Cl, Br		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4	
Quote ID:				Date Req.:				None		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4	
Rush TAT Bus. Days: <2 2-5 5-7 7-10				Date Req.:				None		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4	
Carbon Copy: Yes				Date Req.:				None		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4	
Email Results: Yes				Date Req.:				None		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4	
Fax Results: Yes				Date Req.:				None		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4		H2SO4	
Sample Information				Date				Time		Initial		Matrix		Type		Number of Containers for Analysis Requested		Comments		MS / MSD	
Description/Location				Date		Time		Initial		Matrix		Type		Number of Containers for Analysis Requested		Comments		MS / MSD		MS / MSD	
1	CD - 1	9/17/13	937	EW/PM	GW	Grab	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1
2	CD - 1 RA	934	GW	Grab	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	MW - 1A	1110	GW	Grab	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	MW - 1B	1115	GW	Grab	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	MW - 2 A	900	GW	Grab	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	MW - 2 B	906	GW	Grab	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	MW - 3 A	1017	GW	Grab	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	MW - 3 B	1013	GW	Grab	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1



1341317

Print Name and Company		Signature		Date/Time		Comments	
Eric Thompson				9/17/13 1300		Routine List ASP A Deliverables,	
received:				9/17/13 1300			
received:							
received:							

Microbac Laboratories (MNY) may be unable to perform a portion of the requested testing in which case we will subcontract the analysis to another accredited laboratory. By signing this document you are attesting that you have been informed by MNY of the intent to subcontract and are in agreement with this action.

3821 Buck Drive
Cortland NY 13045
Phone: (607) 753-3403 Fax: (607) 753-3415
NY #10795, EPA #NY00935

Microbac Laboratories, Inc. CHAIN OF CUSTODY

Client Information				Billing/Invoice:		Analysis Requested						Receiving Info (Lab Use Only)			
Name:	Cortland Soil and Water					Field-Spec. Cond, pH, Temp, H, Turb	BOD ₅ , NO ₃ , TDS, SO ₄ , Cl, Br	TKN	COD, NH ₃	TOC	T-Alkalinity	Total Phenols	T-Cd, Ca, Fe, Pb, Mg, Mn, K, Na, T-hard	Ice: YES NO	
Address:	Cortland, NY							Plastic	Plastic	Amber	Plastic	Amber	Plastic	Cooler: YES NO	
Contact:	Pat Reidy							250	250	2(40 ml)	250 ml	500 ml	500 ml	Sample Temp: 23°	
Phone:								H2SO4	H2SO4	H2SO4	None	H2SO4	HNO3	Cooler Seal: YES NO	
Project:	Towslee Landfill Routine							None						Pickup: YES NO	
Quote ID:	PO#:													Dropoff: C W	
Rush TAT Bus. Days: <2 2-5 5-7 7-10	Date Req.:													Accepted?: YES NO	
Carbon Copy: Yes														Container Material	
Email Results: Yes														Container Size (in ml)	
Fax Results: Yes														Preservative	
Sample Information						Number of Containers for Analysis Requested								Comments	
Description/Location	Date	Time	Initial	Matrix	Type	X	1	2	3	4	5	6	7	8	
1 MW - 4 A	9/17/13	1029	EM/PM	GW	Grab	X	1	1	2	1	1	1	1		
2 MW - 5 A		1040		GW	Grab	X	1	1	2	1	1	1	1		
3 MW - 6 A		1058		GW	Grab	X	1	1	2	1	1	1	1		
4 MW - 6 B		1053		GW	Grab	X	1	1	2	1	1	1	1		
5 MW - 7 A		1120		GW	Grab	X	1	1	2	1	1	1	1		
6 Scalehouse		1134		GW	Grab	X	1	1	2	1	1	1	1		
7 DUPE - (MW-6B)		1053		GW	Grab	X	1	1	2	1	1	1	1		
8															


1341317

Print Name and Company		Signature	Date/Time	Comments
Eddie Monson			9/17/13 1300	Routine List ASP A Deliverables,
Microbac Labs, NY			9/17/13 13:00	

Microbac Laboratories (MNY) may be unable to perform a portion of the requested testing in which case we will subcontract the analysis to another accredited laboratory.
By signing this document you are attesting that you have been informed by MNY of the intent to subcontract and are in agreement with this action.

Appendix B

Historical Analytical Data

Cortland County Towslee Landfill

Historical Data Page Index

Cortland County Towslee Landfill

Well	Field/ Inorganic Parameters	Total Metals	Dissolved Metals	Organics
CD-1	2	15	28	41
CD-1RA	3	16	29	42
MW-1A	4	17	30	43
MW-1B	5	18	31	44
MW-2A	6	19	32	45
MW-2B	7	20	33	46
MW-3A	8	21	34	47
MW-3A	9	22	35	48
MW-4A	10	23	36	49
MW-5A	11	24	37	50
MW-6A	12	25	38	51
MW-6B	13	26	39	52
MW-7A	14	27	40	53

Historical Water Quality Database - Towslee Landfill

Field and Inorganic Parameters

Well CD-1 - Overburden

Analyte	Temp	Eh	pH	Sp. Conduct	Color	Turbidity	ALK as CaCO3	HARD as CaCO3	TDS	Chloride	Sulfate	Bromide	NO3 (As N)	NH4 (As N)	TKN (as N)	COD	BOD	TOC	Phenolics, Tot	Cyanide
Units	(oC)	(mV)	SU	(uS/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)	(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	140	145	210	6.88	16.9	<0.8	0.068	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
3/20/12	18.2	179	7.89	274	6	46.2	130	144	180	<1	15.6	<0.8	0.055	<0.5	<0.5	<20	<6	<3	<0.005	<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	209	1.56	13.5	<0.1	0.160	<0.5	<0.5	<10	7	7.34	<0.02	<0.02
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	--

Historical Water Quality Database - Towslee Landfill

Field and Inorganic Parameters

Well CD-1RA - Bedrock

Analyte	Temp	Eh	pH	Sp. Conduct	Color	Turbidity	ALK as CaCO3	HARD as CaCO3	TDS	Chloride	Sulfate	Bromide	NO3 (As N)	NH4 (As N)	TKN (as N)	COD	BOD	TOC	Phenolics, Tot	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)	(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	150	155	170	3.67	18.4	<0.8	0.058	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
3/20/12	17.7	180	7.98	299	<5	20.3	140	164	150	1.43	15.8	<0.8	0.079	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
5/22/12	18.5	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	185	1.85	16.1	<0.1	<0.01	0.555	0.517	<10	3	1.01	<0.02	<0.02
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	--

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

Analyte	Temp	pH	pH	Sp. Conduct	Color	Turbidity	ALK as CaCO3	HARD as CaCO3	TDS	Chloride	Sulfate	Bromide	NO3 (As N)	NH4 (As N)	TKN (as N)	COD	BOD	TOC	Phenolics, Tot	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)	(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	295	31.6	13.4	<0.1	0.106	<0.5	<0.5	<10	6	1.04	<0.02	<0.02
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	-

Historical Water Quality Database - Towslee Landfill
Field and Inorganic Parameters
Well MW-1B - Bedrock

Analyte	Temp	Eh	pH	Sp. Conduct	Color	Turbidity	ALK as CaCO3	HARD as CaCO3	TDS	Chloride	Sulfate	Bromide	NO3 (As N)	NH4 (As N)	TKN (as N)	COD	BOD	TOC	Phenolics, Tot	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)	(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	--	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	147	2.14	7.25	<0.1	<0.01	5.79	<0.5	<10	5	0.643 J	<0.02	<0.02
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	--

Historical Water Quality Database - Towslee Landfill
Field and Inorganic Parameters
Well MW-2A - Overburden

Analyte	Temp	EH	pH	Sp. Conduct	Color	Turbidity	ALK as CaCO3	HARD as CaCO3	TDS	Chloride	Sulfate	Bromide	NO3 (As N)	NH4 (As N)	TKN (as N)	COD	BOD	TOC	Phenolics, Tot	Cyanide
Units	(oC)	(mV)	su	(uS/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)	(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	<8	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	306	8.57	4.73	<0.1	<0.01	<0.5	6.92	<10	5	6.46	<0.02	<0.02
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	--

Historical Water Quality Database - Towslee Landfill

Field and Inorganic Parameters

Well MW-2B - Bedrock

Analyte	Temp	EH	pH	Sp. Conduct	Color	Turbidity	ALK as CaCO3	HARD as CaCO3	TDS	Chloride	Sulfate	Bromide	NO3 (As N)	NH4 (As N)	TKN (as N)	COD	BOD	TOC	Phenolics, Tot	Cyanide
Units	(oC)	(mV)	su	(uS/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)	(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	-	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	954	93.2	4.44	1.32	0.157	1.08	1.44	<10	<2	10.1	<0.02	<0.02
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	--

Historical Water Quality Database - Towslee Landfill
Field and Inorganic Parameters
Well MW-3A - Bedrock

Analyte	Temp	EH	pH	Sp. Conduct	Color	Turbidity	ALK as CaCO3	HARD as CaCO3	TDS	Chloride	Sulfate	Bromide	NO3 (As N)	NH4 (As N)	TKN (as N)	COD	BOD	TOC	Phenolics, Tot	Cyanide
Units	(oC)	(mV)	su	(uS/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)	(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	<0.05	--
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	195	1.28	2.79	<0.1	<0.01	<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	--

Historical Water Quality Database - Towslee Landfill
Field and Inorganic Parameters
Well MW-3B - Bedrock

Analyte	Temp	Eh	pH	Sp. Conduct	Color	Turbidity	ALK as CaCO3	HARD as CaCO3	TDS	Chloride	Sulfate	Bromide	NO3 (As N)	NH4 (As N)	TKN (as N)	COD	BOD	TOC	Phenolics, Tot	Cyanide
Units	(°C)	(mV)	U	(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)	(mg/l)
Water Quality Standard	-	-	6.5 to 8.5	-	150	5	-	-	500	250	250	2	10	2 *	-	-	-	-	0.001	0.2
8/1/97	-	-	-	-	<5	-	235	280	349	32	13.8	<0.5	<0.1	<0.02	0.3	22	<2	7.9	2.3	--
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	240	264	260	27.7	11.5	<0.8	0.07	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
3/20/12	15.8	203	7.04	482	<5	13.2	260	262	250	23.8	8.7	<0.8	<0.05	<0.5	<0.5	<20	<4	4.5	<0.005	<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	355	21.4	9.9	<0.1	<0.01	<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	--

Historical Water Quality Database - Towslee Landfill

Field and Inorganic Parameters

Well MW-4A - Bedrock

Analyte	Temp	Ek	pH	Sp. Conduct	Color	Turbidity	ALK as CaCO3	HARD as CaCO3	TDS	Chloride	Sulfate	Bromide	NO3 (As N)	NH4 (As N)	TKN (as N)	COD	BOD	TOC	Phenolics, Tot	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)	(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	--	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	496	16.9	9.11	0.298	0.048	<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	--

Historical Water Quality Database - Towslee Landfill
Field and Inorganic Parameters
Well MW-5A - Bedrock

Analyte	Temp	Eh	pH	Sp. Conduct	Color	Turbidity	ALK as CaCO3	HARD as CaCO3	TDS	Chloride	Sulfate	Bromide	NO3 (As N)	NH4 (As N)	TKN (as N)	COD	BOD	TOC	Phenolics, Tot	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)	(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	5.39	11.4	0.288	0.102	<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	--

Historical Water Quality Database - Towslee Landfill

Field and Inorganic Parameters

Well MW-6A - Overburden

Analyte	Temp	EH	pH	Sp. Conduct	Color	Turbidity	ALK as CaCO3	HARD as CaCO3	TDS	Chloride	Sulfate	Bromide	NO3 (As N)	NH4 (As N)	TKN (as N)	COD	BOD	TOC	Phenolics, Tot	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)	(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	--	--	--	--	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	10.2	14	0.401	0.281	<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	--

Historical Water Quality Database - Towslee Landfill

Field and Inorganic Parameters

Well MW-6B - Bedrock

Analyte	Temp	EH	pH	Sp. Conduct	Color	Turbidity	ALK as CaCO3	HARD as CaCO3	TDS	Chloride	Sulfate	Bromide	NO3 (As N)	NH4 (As N)	TKN (as N)	COD	BOD	TOC	Phenolics, Tot	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)	(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	--	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	0.0549	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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	<2	<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	11.4	16.7	<0.1	0.076	<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	--

Historical Water Quality Database - Towslee Landfill

Field and Inorganic Parameters

Well MW-7A - Overburden

Analyte	Temp	EH	pH	Sp. Conduct	Color	Turbidity	ALK as CaCO3	HARD as CaCO3	TDS	Chloride	Sulfate	Bromide	NO3 (As N)	NH4 (As N)	TKN (as N)	COD	BOD	TOC	Phenolics, Tot	Cyanide
Units	(oC)	(mV)	SU	(uS/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)	(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	--	>1000 E	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	76.8	17.4	0.159	<0.01	<0.5	0.634	<10	<2	6.56	<0.02	<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	--

Historical Water Quality Data - Towslee Landfill
CD-1 Total Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	-	0.2	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	26.6	<0.005	<0.005	<0.05	<0.05	1.3	<0.005	5.38	1.4	<0.0002	<0.05	3	4.3	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	-	-	-	-	-	-	<0.001	37.2	-	-	-	-	<0.2	0.019	7.81	0.063	-	-	1.4	3.8	-	-	-	-	-

Historical Water Quality Data - Towslee Landfill
CD-1RA Total Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	--	0.2	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	39.9	0.0084	<0.005	<0.05	<0.05	2.9	<0.005	9.25	0.13	<0.0002	<0.05	1.5	5.2	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	42.6	--	--	--	--	1.1	0.013	9.39	0.12	--	--	0.99	5.2	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill
MW-1A Total Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	--	0.2	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	47	0.0093	<0.005	<0.05	<0.05	13	0.005	12.3	2.4	<0.0002	<0.05	2.4	11	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	46.7	--	--	--	--	0.56	0.0021	9.79	<0.05	--	--	1.3	12	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill
MW-1B Total Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	--	0.2	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	--	--	<5	6.8	--	--	--	--	--
7/11/13	<0.2	<0.005	<0.005	0.17	<0.003	<0.5	<0.05	26.7	<0.005	<0.005	<0.05	<0.05	<0.2	<0.005	6.18	0.23	<0.0002	<0.05	0.57	6.5	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	24.7	--	--	--	--	<0.2	<0.001	5.53	0.053	--	--	0.53	6	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill
MW-2A Total Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	--	0.2	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	0.00679B	0.259	<0.003	<0.5	<0.005	49.6	<0.01	<0.01	<0.02	<0.01	2.93	<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	0.53	<0.005	0.0054	0.26	<0.003	<0.5	<0.05	30.7	<0.005	<0.005	<0.05	<0.05	2.3	<0.005	11.5	3.9	<0.0002	<0.05	4.3	11	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	213	--	--	--	--	0.3	<0.001	38.9	6.4	--	--	2.9	50	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill
MW-2B Total Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	--	0.2	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	<0.0003	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	216 E	--	--	--	--	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	203 E	<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	<0.01	<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	<0.005	<0.05	<0.05	0.32	<0.005	36.4	3.2	<0.0002	<0.05	2.9	45	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	73.7	--	--	--	--	1.5	<0.001	13.8	9	--	--	9.3	13	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill
MW-3A Total Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	--	0.2	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	--	--	--	--	--
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	--	--	--	--	--
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	<0.005	<0.05	<0.05	0.42	<0.005	6.22	1.9	<0.0002	<0.05	1.6	2	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	44.3	--	--	--	--	0.49	<0.001	6.33	1.8	--	--	1.5	2.6	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill
MW-3B Total Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	--	0.2	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	<0.005	<0.05	<0.05	0.37	<0.005	16.3	0.17	<0.0002	<0.05	1.3	9	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	60.3	--	--	--	--	0.27	<0.001	16.3	0.25	--	--	1.3	9.2	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill
MW-4A Total Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	--	0.2	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	13.3	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	15.7	NA	NA	<0.0026	0.0019B	0.0238
9/20/11	--	--	--	--	--	--	<0.005	153	--	--	--	--	0.261	<0.003	27.3	1.91	--	--	<5	16.7	--	--	--	--	--
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	17.8	<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	17.7	<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	14.2	--	--	--	--	--
8/29/12	--	--	--	--	--	--	<0.005	123	--	--	--	--	0.209	<0.003	27.8	2.05	--	--	<5	14.7	--	--	--	--	--
11/21/12	--	--	--	--	--	--	<0.005	137	--	--	--	--	0.265	<0.015	31	1.63	--	--	<5	18.7	--	--	--	--	--
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	59.7	<0.005	<0.005	<0.05	<0.05	<0.2	<0.005	21.5	0.97	<0.0002	<0.05	1.5	14	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	119	--	--	--	--	0.23	<0.001	23.4	0.7	--	--	1.8	16	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill
MW-5A Total Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	-	0.2	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	<0.005	<0.05	<0.05	<0.2	<0.005	7.74	<0.05	<0.0002	<0.05	1.5	13	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	-	-	-	-	-	-	<0.001	30.8	-	-	-	-	<0.2	<0.001	8.67	<0.05	-	-	1.3	12	-	-	-	-	-

Historical Water Quality Data - Towslee Landfill
MW-6A Total Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	--	0.2	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	3.7	<0.005	<0.005	0.21	<0.003	<0.5	<0.05	47.7	0.0054	<0.005	<0.05	<0.05	4	<0.005	10	0.59	<0.0002	<0.05	2.7	16	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	54.5	--	--	--	--	0.76	<0.001	8.49	0.46	--	--	2.3	16	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill
MW-6B Total Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	--	0.2	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	0.48	<0.005	<0.005	0.29	<0.003	<0.5	<0.05	40.2	<0.005	<0.005	<0.05	<0.05	0.35	<0.005	9.19	0.064	<0.0002	<0.05	1.1	13	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	44.1	--	--	--	--	0.29	<0.001	10.3	0.18	--	--	1.3	19	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill
MW-7A Total Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	--	0.2	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	1.3	<0.005	<0.005	0.41	<0.003	<0.5	<0.05	64.3	<0.005	<0.005	<0.05	<0.05	2	<0.005	26.9	1.4	<0.0002	<0.05	1.9	40	<0.005	<0.005	<0.005	<0.05	<0.1
9/17/13	--	--	--	--	--	--	<0.001	133	--	--	--	--	2.3	0.0013	27.9	1.8	--	--	2.1	82	--	--	--	--	--

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

Water Quality Stand.	Aluminum
	-
	Antimony
	0.003
	Arsenic
	0.025
	Barium
	1
	Beryllium
	0.004
	Boron
	1
	Cadmium
	0.005
	Calcium
	-
	Chromium
	0.05
	Chromium, Hex
	0.05
	Cobalt
	-
	Copper
	0.2
	Iron
	0.3
	Lead
	0.015
	Magnesium
	-
	Manganese
	0.3
	Mercury
	0.0007
	Nickel
	0.1
	Potassium
	-
	Sodium
	20
	Selenium
	0.01
	Silver
	0.05
	Thallium
	0.002
	Vanadium
	-
	Zinc
	5

No dissolved metals to date

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	--	0.2	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	-	-	-	-	-

Historical Water Quality Database - Towslee Landfill
MW-1A - Dissolved Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
	1	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	0.0163B	--	<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

Historical Water Quality Database - Towslee Landfill
MW-1B - Dissolved Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	-	0.2	0.3	0.015	-	0.3	0.0007	0.1	-	20	0.01	0.05	0.002	-	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	-	-	-	-	-

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	-	0.2	0.3	0.015	-	0.3	0.007	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

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
	1	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.007	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	1	0.0067B	0.0022B	0.582	1	61.7	8.07	1	0.0093B	2.8B	62.5	1	1	1	1	0.0635
10/1/97	0.0154B	<0.003	<0.0024	1.45	<0.0001	0.321	<0.0003	274	0.0014B	1	0.0061B	<0.0007	0.595	1	55	8	1	0.0097B	2.34B	62.8	1	1	1	1	0.023

Historical Water Quality Database - Towslee Landfill
MW-3A - Dissolved Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	-	0.2	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	-	-	-	-	-	-	<0.0003	44.3	-	-	-	-	0.168	<0.0005	8.7	0.0963	-	-	0.803	4.83	-	-	-	-	-

Historical Water Quality Database - Towslee Landfill
 MW-3B - Dissolved Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	-	0.2	0.3	0.015	-	0.3	0.007	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

Historical Water Quality Database - Towslee Landfill
 MW-4A - Dissolved Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
	1	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.007	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	1	0.0024B	0.0069B	0.005B	1	25.2	1.08	1	0.0021B	1.71B	13.5	1	1	1	1	0.0393
10/1/97	0.0228B	<0.003	<0.0024	1.06	<0.0001	0.12	<0.0003	129	<0.0004	1	0.0022B	0.0011B	0.0372B	1	26.1	2.08	1	0.0051B	1.93B	16.1	1	1	1	1	0.0166B

Historical Water Quality Database - Towslee Landfill
MW-5A - Dissolved Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
	1	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	<0.0083	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 (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	-	0.2	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

Historical Water Quality Database - Towslee Landfill
MW-6B - Dissolved Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	-	0.2	0.3	0.015	-	0.3	0.007	0.1	-	20	0.01	0.05	0.002	-	5
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 (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	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	-	0.2	0.3	0.015	-	0.3	0.0007	0.1	-	20	0.01	0.05	0.002	-	5
8/1/97	<0.0083	-	<0.0024	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	-	-	-	-	-

Historical Water Quality Database - Towslee Landfill

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

Well CD-1 - Overburden

Water Quality Standard	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
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<10	10	2JB	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-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	<10	<5

Historical Water Quality Database - Towslee Landfill

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

Well CD-1RA - Bedrock

Water Quality Standard	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
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-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	<10	<5

Historical Water Quality Database - Towslee Landfill
Organics (ug/l) (includes only detected compounds)
Well MW-1A - Overburden

Water Quality Standard	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
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-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
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

Historical Water Quality Database - Towslee Landfill

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

Well MW-1B - Bedrock

Water Quality Standard	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
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-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	13 B	<5	<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

Historical Water Quality Database - Towslee Landfill

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

Well MW-2A - Overburden

Water Quality Standard	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
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	5 J	<10	1 JB	<10	<10	<10	5 J	1 J	5 J	2 J	5 J	1 J
Oct-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	<10	<5	<5	<5	<5	<5	<5	4 J	<5	<5	<5
2/1/08	<5	<5	<10	12 B	<5	<5	<5	<5	<5	<5	<5	<5	<5
6/17/09	< 5	< 5	< 10	< 5	< 5	< 5	< 5	< 5	< 5	3 J	< 5	< 5	< 5
7/20/10	<5	<5	<10	<5	<5	<5	<5	<5	<5	3 J	<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

Historical Water Quality Database - Towslee Landfill
Organics (ug/l) (includes only detected compounds)
Well MW-2B - Bedrock

Water Quality Standard	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
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	4 J	<10	1 JB	1 J	1 J	1 J	<10	<10	<10	<10	<10	<10
Oct-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	28.3	<5	<5	<5	<5	<5	<10	<5

Historical Water Quality Database - Towslee Landfill

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

Well MW-3A - Bedrock

Water Quality Standard	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
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<10	2 J	5 JB	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-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

Historical Water Quality Database - Towslee Landfill

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

Well MW-3B - Bedrock

Water Quality Standard	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
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-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	<10	<5

Historical Water Quality Database - Towslee Landfill

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

Well MW-4A - Bedrock

Water Quality Standard	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
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<10	<10	6JB	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-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	<10	<5

Historical Water Quality Database - Towslee Landfill

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

Well MW-5A - Bedrock

Water Quality Standard	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
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<10	<10	7JB	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-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

Historical Water Quality Database - Towslee Landfill

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

Well MW-6A - Overburden

Water Quality Standard	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
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<10	<10	<10	<10	<10	1J	<10	<10	<10	<10	<10	<10
Oct-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	<10	<5

Historical Water Quality Database - Towslee Landfill

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

Well MW-6B - Bedrock

Water Quality Standard	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
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-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	12 B	<5	<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
12/12/11	<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

Historical Water Quality Database - Towslee Landfill

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

Well MW-7A - Overburden

Water Quality Standard	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
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	2 J	<10	<10	1 JB	1 J	1 J	3 J	<10	<10	<10	<10	<10	<10
Oct-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	6.59	5.22	<5	<5	<5	<5	<10	<5

Appendix C

Historical Summary of Parameters Identified by B&L in 1997 that are Suggestive of Mild Leachate Contamination

Cortland County Towslee Landfill

Conventional

Alkalinity
Hardness
Chloride
Ammonia
TKN
COD
TOC

Metals

Aluminum
Arsenic
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Potassium
Sodium
Vanadium
Zinc

Historical Summary of Parameters Identified by B&L in 1997 that are Indicative of Mild Leachate Conventionals

(Note: Qualifiers are not included in these tables, except"<")

Analyte	Year/ Quarter	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
Alkalinity mg/l	1997_Q3	--	134	160	94.8	702	577	145	235	253	130	357	240	569
	1997_Q4	--	132	145	93.6	784	673	146	190	355	115	325	224	660
	2006_Q1	--	--	127	92	330	652	162	--	--	--	--	131	648
	2006_Q2	--	--	139	94	355	670	170	--	--	--	--	148	675
	2006_Q3	--	--	122	91	384	612	140	--	--	--	--	154	595
	2006_Q4	--	--	132	89	423	646	152	--	--	--	--	153	635
	2007_Q1	--	--	140	99	380	650	82	--	--	--	--	180	640
	2007_Q2	--	--	120	96	320	480	59	--	--	--	--	160	510
	2007_Q3	--	--	120	100	420	600	170	--	--	--	--	150	530
	2007_Q4	--	--	130	100	290	640	130	--	--	--	--	140	540
	2008_Q1	--	--	--	100	360	640	110	--	--	--	--	140	570
	2008_Q2	--	--	120	100	290	620	170	--	--	--	--	140	560
	2008_Q3	--	--	120	100	380	640	91	--	--	--	--	110	600
	2008_Q4	--	--	120	99	360	680	97	--	--	--	--	120	670
	2009_Q1	--	--	130	92	320	650	18	--	--	--	--	120	500
	2009_Q2	--	--	100	100	360	580	160	--	--	--	--	140	500
	2009_Q3	--	--	120	98	340	650	50	--	--	--	--	140	480
	2009_Q4	--	--	120	86	280	610	79	--	--	--	--	140	520
	2010_Q1	--	--	--	--	310	600	180	--	--	--	--	150	600
	2010_Q2	--	--	140	100	300	610	93	--	--	--	--	150	500
	2010_Q3	--	--	120	91	360	630	160	--	--	--	--	140	510
	2010_Q4	--	--	120	90	310	600	130	--	--	--	--	160	520
	2011_Q1	--	--	130	100	260	710	75	--	--	--	--	130	600
	2011_Q2	--	--	120	93	250	540	150	--	--	--	--	150	510
	2011_Q3	130	120	130	100	300	630	180	240	410	--	200	160	560
	2011_Q4	140	150	150	120	270	570	140	240	400	--	210	180	550
	2012_Q1	130	140	130	110	260	490	130	260	460	--	200	140	500
	2012_Q2	120	140	140	100	250	790	160	210	350	--	130	190	520
	2012_Q3	130	130	120	100	340	670	160	200	450	--	180	140	490
	2012_Q4	130	130	130	95	250	650	110	200	390	94	200	140	510
	2013_Q1	121	92	128	101	198	626	102	204	420	104	185	155	504
	2013_Q2	82	120	94	96	232	552	120	195	315	100	152	149	428
	2013_Q3	127	138	143	86	440	288	151	208	379	123	301	153	465

Historical Summary of Parameters Identified by B&L in 1997 that are Indicative of Mild Leachate Conventionals

(Note: Qualifiers are not included in these tables, except"<")

Analyte	Year/ Quarter	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
Hardness mg/l	1997_Q3	--	160	4000	88	1300	960	1250	280	308	250	650	300	1010
	1997_Q4	--	160	240	140	720	900	200	300	464	140	550	240	1150
	2006_Q1	--	--	167	97.6	241	697	153	--	--	--	--	135	627
	2006_Q2	--	--	140	81.9	260	726	179	--	--	--	--	144	599
	2006_Q3	--	--	148	89	265	686	191	--	--	--	--	131	531
	2006_Q4	--	--	148	82	301	675	158	--	--	--	--	133	526
	2007_Q1	--	--	134	83.6	225	723	74	--	--	--	--	156	529
	2007_Q2	--	--	153	105	262	575	58.1	--	--	--	--	139	499
	2007_Q3	--	--	148	104	275	716	150	--	--	--	--	138	481
	2007_Q4	--	--	146	90.8	165	652	86.2	--	--	--	--	124	459
	2008_Q1	--	--	--	89.3	246	678	97.7	--	--	--	--	136	528
	2008_Q2	--	--	151	103	203	654	123	--	--	--	--	142	506
	2008_Q3	--	--	159	107	303	728	76.7	--	--	--	--	137	538
	2008_Q4	--	--	165	105	343	788	97.9	--	--	--	--	134	569
	2009_Q1	--	--	161	97.1	229	678	38.1	--	--	--	--	142	496
	2009_Q2	--	--	163	111	295	782	196	--	--	--	--	154	534
	2009_Q3	--	--	158	108	265	755	37.8	--	--	--	--	148	499
	2009_Q4	--	--	161	206	95	608	65.4	--	--	--	--	138	473
	2010_Q1	--	--	--	--	291	609	93.2	--	--	--	--	163	508
	2010_Q2	--	--	161	92.9	235	681	58	--	--	--	--	147	435
	2010_Q3	--	--	167	106	313	730	194	--	--	--	--	144	520
	2010_Q4	--	--	169	104	260	693	66.9	--	--	--	--	147	507
	2011_Q1	--	--	159	108	190	677	45.7	--	--	--	--	145	484
	2011_Q2	--	--	164	87.4	167	589	137	--	--	--	--	153	465
	2011_Q3	150	135	172	115	253	773	187	274	496	--	208	172	585
	2011_Q4	145	155	177	108	199	713	122	264	430	--	194	166	505
	2012_Q1	144	164	225	124	170	712	147	262	444	--	197	146	524
	2012_Q2	146	155	175	111	207	643	146	259	384	--	169	150	449
	2012_Q3	119	135	148	107	268	664	159	223	421	--	185	151	431
	2012_Q4	158	156	169	94.4	212	730	118	248	469	112	214	168	515
	2013_Q1	149	118	187	97.8	188	737	88.3	249	491	94	202	154	518
	2013_Q2	88.6	138	168	92.1	124	411	135	145	237	100	160	138	271
	2013_Q3	125	145	157	84.5	691	241	137	218	394	113	171	153	446

Historical Summary of Parameters Identified by B&L in 1997 that are Indicative of Mild Leachate Conventionals

(Note: Qualifiers are not included in these tables, except"<")

Analyte	Year/ Quarter	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
Chloride mg/l	1997_Q3	--	<2	152	<2	156	267	31.4	32	79.1	44.5	79.1	38.2	300
	1997_Q4	--	2.5	46	<2	149	238	28.7	33.6	74.6	10.1	71.8	35	276
	2006_Q1	--	--	21.3	2.55	23.3	145	14	--	--	--	--	21.1	144
	2006_Q2	--	--	22.2	2.28	25.7	154	12.7	--	--	--	--	2.33	143
	2006_Q3	--	--	34.2	3.47	23.5	122	13.5	--	--	--	--	2.32	119
	2006_Q4	--	--	26.7	0.611	25.7	121	12.7	--	--	--	--	3.39	85
	2007_Q1	--	--	28.7	3.24	21.2	167	3.37	--	--	--	--	11.6	145
	2007_Q2	--	--	27	4.45	14.7	131	1.8	--	--	--	--	6.99	131
	2007_Q3	--	--	27	3.16	24.4	163	12	--	--	--	--	13.8	145
	2007_Q4	--	--	27.9	6.44	10.6	161	5.73	--	--	--	--	25.9	141
	2008_Q1	--	--	--	3.15	21	160	2.43	--	--	--	--	16.7	141
	2008_Q2	--	--	28	5.95	13.5	132	10.5	--	--	--	--	16.9	1260
	2008_Q3	--	--	25.9	5.61	20.2	148	1.1	--	--	--	--	31.1	136
	2008_Q4	--	--	29.7	6.03	15.5	162	1.75	--	--	--	--	28.6	135
	2009_Q1	--	--	30.4	2.86	13.7	118	1.85	--	--	--	--	13.3	114
	2009_Q2	--	--	30.7	4.74	20.5	159	9.25	--	--	--	--	19.4	128
	2009_Q3	--	--	29.5	6.86	17.7	150	<1	--	--	--	--	19.7	120
	2009_Q4	--	--	30	4.71	12.5	140	<1	--	--	--	--	14.7	117
	2010_Q1	--	--	--	--	12.4	112	14.8	--	--	--	--	13.2	104
	2010_Q2	--	--	31.7	3.54	14.5	130	1.31	--	--	--	--	12	89.1
	2010_Q3	--	--	33	3.63	22.5	139	7.44	--	--	--	--	14	128
	2010_Q4	--	--	31.4	6.11	17.1	127	3.3	--	--	--	--	16	115
	2011_Q1	--	--	32	4.07	11.2	124	2.69	--	--	--	--	11.9	95.7
	2011_Q2	--	--	30.5	1.7	8.33	104	2.28	--	--	--	--	16.4	99
	2011_Q3	1.41	2.2	32.1	3.4	16.2	108	4.03	23.7	23.6	--	21.4	12.7	100
	2011_Q4	6.88	3.67	28.5	1.69	10.2	102	3.44	27.7	25.5	--	13.9	19.4	108
	2012_Q1	<1	1.43	33.9	6.68	8.96	123	1.88	23.8	21.5	--	8.86	16.2	99.4
	2012_Q2	1.2	1.46	33.1	2.47	11.6	124	1.59	23.4	22.3	--	20	10.1	99.5
	2012_Q3	1.45	1.77	33.5	6.77	17.6	118	7.33	23.4	19.4	--	23.8	23.3	103
	2012_Q4	1.34	1.78	33.5	2.23	10.7	120	1.44	23.2	18.5	5.28	12.1	17.3	98.6
	2013_Q1	<2	<2	33.9	2.18	10.8	118	2.8	24.4	17.1	6.09	13.6	8.22	93.7
	2013_Q2	1.56	1.85	31.6	2.14	8.57	93.2	1.28	21.4	16.9	5.39	10.2	11.4	76.8
	2013_Q3	1.47	1.95	31.8	2.18	116	11.6	1.37	21.4	17.7	5.61	12.4	17.1	80.6

Historical Summary of Parameters Identified by B&L in 1997 that are Indicative of Mild Leachate Conventionals

(Note: Qualifiers are not included in these tables, except"<")

Analyte	Year/ Quarter	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
Ammonia mg/l	1997_Q3	--	0.04	6	<0.02	23	0.95	<0.02	<0.02	<0.02	<0.02	1.6	0.09	0.93
	1997_Q4	--	0.11	2.6	0.04	9.1	1.3	0.09	0.04	0.2	0.18	0.02	2.5	0.89
	2006_Q1	--	--	0.276	0.0938	10.6	0.389	0.0969	--	--	--	--	0.0549	0.34
	2006_Q2	--	--	<0.02	<0.02	18.4	0.824	<0.02	--	--	--	--	<0.02	<0.02
	2006_Q3	--	--	0.161	<0.02	16	0.786	<0.02	--	--	--	--	0.096	<0.02
	2006_Q4	--	--	<0.1	<0.1	15.1	0.282	<0.1	--	--	--	--	<0.1	<0.1
	2007_Q1	--	--	<0.5	<0.5	10.2	0.921	1.45	--	--	--	--	<0.5	<0.5
	2007_Q2	--	--	<0.5	<0.5	9.89	0.844	<0.5	--	--	--	--	<0.5	<0.5
	2007_Q3	--	--	<0.5	<0.5	14.1	1.31	<0.5	--	--	--	--	<0.5	<0.5
	2007_Q4	--	--	<0.5	<0.5	13.5	1.22	<0.5	--	--	--	--	<0.5	<0.5
	2008_Q1	--	--	--	<0.5	8.78	0.785	<0.5	--	--	--	--	<0.5	<0.5
	2008_Q2	--	--	<0.5	<0.5	8.2	0.572	<0.5	--	--	--	--	<0.5	<0.5
	2008_Q3	--	--	<0.5	<0.5	11.9	1.01	<0.5	--	--	--	--	<0.5	<0.5
	2008_Q4	--	--	<0.5	<0.5	10.8	0.504	<0.5	--	--	--	--	<0.5	<0.5
	2009_Q1	--	--	<0.5	<0.5	8.43	0.642	<0.5	--	--	--	--	<0.5	<0.5
	2009_Q2	--	--	<0.5	<0.5	11.8	0.665	<0.5	--	--	--	--	<0.5	<0.5
	2009_Q3	--	--	<0.5	<0.5	10.3	0.73	<0.5	--	--	--	--	<0.5	<0.5
	2009_Q4	--	--	<0.5	<0.5	8.75	0.696	<0.5	--	--	--	--	<0.5	<0.5
	2010_Q1	--	--	--	--	8.45	0.69	<0.5	--	--	--	--	<0.5	<0.5
	2010_Q2	--	--	<0.5	<0.5	8.06	1.18	<0.5	--	--	--	--	<0.5	<0.5
	2010_Q3	--	--	<0.5	<0.5	10.1	0.812	<0.5	--	--	--	--	<0.5	<0.5
	2010_Q4	--	--	<0.5	<0.5	6.9	<0.5	<0.5	--	--	--	--	<0.5	<0.5
	2011_Q1	--	--	<0.5	<0.5	5.38	0.593	<0.5	--	--	--	--	<0.5	<0.5
	2011_Q2	--	--	<0.5	<0.5	7.03	0.752	<0.5	--	--	--	--	<0.5	<0.5
	2011_Q3	<0.5	<0.5	<0.5	<0.5	5.16	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5
	2011_Q4	<0.5	<0.5	<0.5	<0.5	5.24	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5
	2012_Q1	<0.5	<0.5	<0.5	<0.5	5.32	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5
	2012_Q2	<0.5	<0.5	<0.5	<0.5	5.9	0.76	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5
	2012_Q3	<0.5	<0.5	<0.5	<0.5	8.45	0.899	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5
	2012_Q4	<0.5	<0.5	<0.5	<0.5	4.73	1.21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2013_Q1	<0.5	<0.5	<0.5	4.2	<0.5	0.74	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5
	2013_Q2	<0.5	0.555	<0.5	5.79	<0.5	1.08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2013_Q3	<0.1	<0.1	<0.1	<0.1	1.03	7.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Historical Summary of Parameters Identified by B&L in 1997 that are Indicative of Mild Leachate Conventionals

(Note: Qualifiers are not included in these tables, except"<")

Analyte	Year/ Quarter	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
TKN mg/l	1997_Q3	--	0.2	18	<0.2	31.5	2.6	0.4	0.3	0.5	0.4	1.5	0.6	1.1
	1997_Q4	--	0.21	3.8	<0.2	21.2	2	0.24	<0.2	0.4	0.24	<0.2	3.3	1.4
	2006_Q1	--	--	23.3	0.54	10.6	1.31	0.455	--	--	--	--	0.392	1.5
	2006_Q2	--	--	0.529	0.755	14	1.78	1.09	--	--	--	--	0.904	1.68
	2006_Q3	--	--	0.366	0.497	16.5	1.64	0.239	--	--	--	--	0.214	0.75
	2006_Q4	--	--	<0.2	<0.2	15	1.9	0.266	--	--	--	--	0.279	1.11
	2007_Q1	--	--	2.2	<0.5	132	1.84	4.26	--	--	--	--	<0.5	1.47
	2007_Q2	--	--	<0.5	<0.5	12.5	1.62	1.47	--	--	--	--	<0.5	3.6
	2007_Q3	--	--	5.66	<0.5	16.1	1.67	<0.5	--	--	--	--	<0.5	0.784
	2007_Q4	--	--	<0.5	<0.5	12.6	1.53	<0.5	--	--	--	--	<0.5	0.591
	2008_Q1	--	--	--	<0.5	10.7	1.33	<0.5	--	--	--	--	<0.5	0.522
	2008_Q2	--	--	<0.5	<0.5	11.2	1.55	<0.5	--	--	--	--	<0.5	0.949
	2008_Q3	--	--	<0.5	<0.5	12.9	1.03	0.718	--	--	--	--	<0.5	<0.5
	2008_Q4	--	--	<0.5	<0.5	11.6	1.13	<0.5	--	--	--	--	<0.5	<0.5
	2009_Q1	--	--	<0.5	<0.5	10.3	1.22	<0.5	--	--	--	--	<0.5	1.92
	2009_Q2	--	--	<0.5	<0.5	13.5	1.19	<0.5	--	--	--	--	<0.5	0.851
	2009_Q3	--	--	<0.5	<0.5	13.1	1.07	0.786	--	--	--	--	<0.5	0.927
	2009_Q4	--	--	<0.5	<0.5	12.5	1.12	1.36	--	--	--	--	<0.5	0.599
	2010_Q1	--	--	--	--	11.6	1.28	<0.5	--	--	--	--	<0.5	1.02
	2010_Q2	--	--	<0.5	<0.5	11.9	1.55	1.14	--	--	--	--	0.522	1.4
	2010_Q3	--	--	<0.5	<0.5	16.5	1.37	1.26	--	--	--	--	<0.5	1.27
	2010_Q4	--	--	0.897	0.924	9.84	2.45	1.83	--	--	--	--	0.799	2.15
	2011_Q1	--	--	<0.5	<0.5	7.95	1.14	<0.5	--	--	--	--	<0.5	0.639
	2011_Q2	--	--	<0.5	<0.5	8.21	0.948	<0.5	--	--	--	--	<0.5	<0.5
	2011_Q3	<0.5	<0.5	<0.5	<0.5	9.52	1.95	0.508	<0.5	<0.5	--	<0.5	<0.5	1.03
	2011_Q4	<0.5	<0.5	<0.5	<0.5	6.86	1.46	<0.5	<0.5	<0.5	--	1.12	0.546	2.19
	2012_Q1	<0.5	<0.5	0.994	<0.5	4.95	<0.5	<0.5	<0.5	<0.5	--	1.16	<0.5	<0.5
	2012_Q2	<0.5	<0.5	<0.5	<0.5	6.56	0.811	<0.5	<0.5	<0.5	--	1.89	<0.5	<0.5
	2012_Q3	<0.5	<0.5	<0.5	<0.5	8.58	1.38	<0.5	<0.5	<0.5	--	2.38	<0.5	0.627
	2012_Q4	<0.5	<0.5	<0.5	0.594	6.56	1.66	<0.5	<0.5	<0.5	<0.5	1.27	<0.5	0.608
	2013_Q1	<0.5	<0.5	<0.5	<0.5	4.83	0.883	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	2013_Q2	<0.5	0.517	<0.5	<0.5	6.92	1.44	0.896	<0.5	<0.5	<0.5	3.12	<0.5	0.634
	2013_Q3	<0.5	<0.5	<0.5	<0.5	1.09	7.19	0.54	<0.5	<0.5	<0.5	1.34	<0.5	<0.5

Historical Summary of Parameters Identified by B&L in 1997 that are Indicative of Mild Leachate Conventionals

(Note: Qualifiers are not included in these tables, except"<")

Analyte	Year/ Quarter	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
COD mg/l	1997_Q3	--	<15	305	<15	127	58	19	22	37	16	94	40	43
	1997_Q4	--	<15	64	<15	136	61	<15	<15	22	<15	82	19	112
	2006_Q1	--	--	<10	<10	<10	<10	<10	--	--	--	--	<10	21.2
	2006_Q2	--	--	<10	<10	13.8	17.2	<10	--	--	--	--	<10	16.5
	2006_Q3	--	--	<10	<10	27	24.6	13	--	--	--	--	11.6	26.4
	2006_Q4	--	--	<10	<10	15.6	27	<10	--	--	--	--	<10	20.5
	2007_Q1	--	--	<20	<20	<20	21	47	--	--	--	--	<20	27
	2007_Q2	--	--	<20	<20	<20	<20	<20	--	--	--	--	<20	<20
	2007_Q3	--	--	<20	<20	46	<20	<20	--	--	--	--	<20	<20
	2007_Q4	--	--	<20	<20	22	<20	<20	--	--	--	--	<20	<20
	2008_Q1	--	--	--	<20	23	24	23	--	--	--	--	<20	<20
	2008_Q2	--	--	<20	<20	21	<20	<20	--	--	--	--	<20	36
	2008_Q3	--	--	<20	<20	36	<20	34	--	--	--	--	<20	22
	2008_Q4	--	--	<20	<20	32	<20	<20	--	--	--	--	<20	29
	2009_Q1	--	--	<20	<20	<20	<20	<20	--	--	--	--	<20	<20
	2009_Q2	--	--	<20	<20	31	23	<20	--	--	--	--	<20	38
	2009_Q3	--	--	<20	<20	32	26	40	--	--	--	--	<20	37
	2009_Q4	--	--	<20	<20	26	<20	35	--	--	--	--	<20	21
	2010_Q1	--	--	--	--	41	22	<20	--	--	--	--	<20	33
	2010_Q2	--	--	<20	<20	23	<20	30	--	--	--	--	<20	28
	2010_Q3	--	--	<20	<20	50	<20	27	--	--	--	--	<20	31
	2010_Q4	--	--	<20	<20	20	25	29	--	--	--	--	<20	40
	2011_Q1	--	--	<20	<20	<20	<20	<20	--	--	--	--	<20	28
	2011_Q2	--	--	<20	<20	24	<20	<20	--	--	--	--	<20	33
	2011_Q3	<20	<20	<20	<20	<20	<20	<20	<20	<20	--	<20	<20	29
	2011_Q4	<20	<20	<20	<20	<20	25	<20	<20	<20	--	<20	<20	40
	2012_Q1	<20	<20	<20	<20	<20	<20	<20	<20	<20	--	<20	<20	22
	2012_Q2	<20	<20	<20	<20	36	<20	<20	<20	<20	--	<20	<20	22
	2012_Q3	<20	<20	<20	<20	24	21	<20	<20	<20	--	27	<20	21
	2012_Q4	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
	2013_Q1	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	2013_Q2	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	2013_Q3	<10	<10	<10	<10	13	12	24	<10	<10	<10	<10	<10	13

Historical Summary of Parameters Identified by B&L in 1997 that are Indicative of Mild Leachate Conventionals

(Note: Qualifiers are not included in these tables, except"<")

Analyte	Year/ Quarter	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
TOC mg/l	1997_Q3	--	2.1	4.2	9.3	42.5	12.3	4.5	7.9	7.7	2.7	14	6	10.1
	1997_Q4	--	<1	1.6	<1	24.1	11.9	1.9	3.7	5.6	<1	10.6	5.8	12.6
	2006_Q1	--	--	4.76	5.41	10.1	<2	5.58	--	--	--	--	5.22	12.8
	2006_Q2	--	--	2.61	2.34	7.18	7.76	<2	--	--	--	--	3.14	8.19
	2006_Q3	--	--	<2	<2	5.67	4.82	<2	--	--	--	--	<2	6.12
	2006_Q4	--	--	<2	<2	5.68	7.49	<2	--	--	--	--	<2	7.46
	2007_Q1	--	--	<3	<3	6.7	6.4	<3	--	--	--	--	<3	8.1
	2007_Q2	--	--	<3	<3	4.8	3	<3	--	--	--	--	<3	6
	2007_Q3	--	--	<3	<3	7.3	5.7	<3	--	--	--	--	<3	7.2
	2007_Q4	--	--	<3	<3	6.3	17.2	3.7	--	--	--	--	<3	11.5
	2008_Q1	--	--	--	<3	21.8	82.6	<3	--	--	--	--	<3	69.9
	2008_Q2	--	--	<3	<3	5.2	23.2	<3	--	--	--	--	<3	17.8
	2008_Q3	--	--	<3	<3	6.3	4.7	7.3	--	--	--	--	<3	5.2
	2008_Q4	--	--	<3	<3	6	6.8	3.6	--	--	--	--	<3	6.1
	2009_Q1	--	--	<3	<3	4.8	4.5	<3	--	--	--	--	<3	5.1
	2009_Q2	--	--	<3	<3	7.2	5.5	<3	--	--	--	--	<3	5.7
	2009_Q3	--	--	<3	<3	5.9	4.6	9.2	--	--	--	--	<3	5
	2009_Q4	--	--	<3	<3	6.5	4.6	5.7	--	--	--	--	<3	5.2
	2010_Q1	--	--	--	--	5.2	3.5	<3	--	--	--	--	<3	4.9
	2010_Q2	--	--	<3	<3	6.7	5.8	9	--	--	--	--	<3	6.7
	2010_Q3	--	--	<3	<3	7.8	5.7	<3	--	--	--	--	<3	6
	2010_Q4	--	--	<3	<3	6	5.4	6.6	--	--	--	--	<3	6.1
	2011_Q1	--	--	<3	<3	4.4	4.2	<3	--	--	--	--	<3	5.1
	2011_Q2	--	--	<3	<3	<3	3.6	<3	--	--	--	--	<3	4.8
	2011_Q3	<3	<3	<3	<3	5.1	5.4	3.1	<3	4	--	<3	<3	6.1
	2011_Q4	<3	<3	<3	<3	3.4	3.4	<3	<3	<3	--	<3	<3	4.1
	2012_Q1	<3	<3	<3	<3	7.4	20.7	4.4	4.5	8.4	--	5.6	<3	15.1
	2012_Q2	<3	<3	<3	<3	5.5	14.4	<3	<3	<3	--	<3	<3	7.3
	2012_Q3	<3	<3	<3	<3	6.9	6.6	<3	<3	<3	--	<3	<3	6.7
	2012_Q4	<3	<3	<3	<3	7	<3	<3	<3	<3	<3	<3	<3	4.2
	2013_Q1	2.31	1.6	0.947	<1	5.98	8.99	3.78	1.74	4.89	0.612	3.56	1.09	8.17
	2013_Q2	7.34	1.01	1.04	0.643	6.46	10.1	9.41	1.89	3.56	1.58	4.91	1.73	6.56
	2013_Q3	1.49	1.8	1.58	1.26	8.86	8.07	10.9	2.96	8.21	1.64	5.3	3.27	14.3

Historical Summary of Parameters Identified by B&L in 1997 that are Indicative of Mild Leachate Contamination

Total Metals (all values in mg/l)
(Note: Qualifiers are not included in these tables)

Analyte	Year/ Quarter	CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Aluminum	1997_Q3	--	0.587	724	0.662	79.3	2.03	21.7	2.01	1.61	10.1	59.1	8.59	40
	1997_Q4	--	5.24	16.9	0.134	59.1	5.31	2.39	0.184	1.32	0.228	38.6	0.642	88.4
	2006_Q3	--	--	2.96	1.09	0.43	0.18	0.078	--	--	--	--	0.115	0.415
	2007_Q4	--	--	2.07	0.537	0.444	<0.1	0.33	--	--	--	--	0.102	2.43
	2008_Q1	--	--	--	0.518	1.98	0.168	0.23	--	--	--	--	0.134	0.919
	2009_Q2	--	--	1.57	0.255	<0.1	0.235	<0.1	--	--	--	--	<0.1	9.56
	2010_Q3	--	--	0.142	<0.1	3.37	<0.1	5.32	--	--	--	--	<0.1	1.52
	2011_Q4	0.383	1.7	0.711	0.305	0.317	0.175	0.107	0.253	0.153	--	0.683	<0.1	2.12
	2012_Q1	1.32	0.145	19.1	0.141	0.323	0.536	1.33	0.148	0.39	--	3.91	<0.1	0.709
	2013_Q2	0.73	1.5	6.4	<0.2	0.53	<0.2	<0.2	<0.2	<0.2	<0.2	3.7	0.48	1.3
Arsenic	1997_Q3	--	0.0032	0.353	<0.0024	0.0631	0.007	0.0127	<0.0024	<0.0024	0.0061	0.0476	0.009	0.0176
	1997_Q4	--	0.004	0.0134	<0.0024	0.0537	0.0083	<0.0024	<0.0024	<0.0024	<0.0024	0.0404	0.008	0.0459
	2006_Q3	--	--	<0.025	<0.025	<0.025	<0.025	<0.025	--	--	--	--	<0.025	<0.025
	2007_Q4	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2008_Q1	--	--	--	<0.01	0.0145	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2009_Q2	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2010_Q3	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	<0.005	<0.005
	2011_Q4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.005
	2012_Q1	<0.005	<0.005	0.0115	<0.005	0.0068	<0.005	<0.005	<0.005	<0.005	--	0.0069	<0.005	0.0058
	2013_Q2	<0.005	<0.005	<0.005	<0.005	0.0054	<0.005	0.0098	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Historical Summary of Parameters Identified by B&L in 1997 that are Indicative of Mild Leachate Contamination

Total Metals (all values in mg/l)
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Analyte	Year/ Quarter	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
Calcium	1997_Q3	--	41.5	430	26.7	186	288	57.8	73.8	110	45.8	99.1	70.5	234
	1997_Q4	--	45.7	48.6	24.7	172	245	53.7	74.4	127	32.1	82.2	55.6	271
	2006_Q1	--	--	46.2	26.8	69.1	203	46.3	--	--	--	--	39.3	171
	2006_Q2	--	--	41.8	23.9	74.1	216	55.3	--	--	--	--	39.6	165
	2006_Q3	--	--	43.2	25.8	77.3	203	57.9	--	--	--	--	36.1	150
	2006_Q4	--	--	43.9	24.1	88.5	200	48.3	--	--	--	--	37.4	148
	2007_Q1	--	--	39.2	23.7	64.2	216	23	--	--	--	--	45.6	149
	2007_Q2	--	--	44.5	30	75.3	170	18.1	--	--	--	--	39.9	140
	2007_Q3	--	--	43.5	29.9	80.4	214	45.1	--	--	--	--	40.2	135
	2007_Q4	--	--	42.2	26	47.9	195	27.5	--	--	--	--	36.7	131
	2008_Q1	--	--	--	25.1	70.3	201	30.2	--	--	--	--	39.2	148
	2008_Q2	--	--	43.2	28.6	57.5	192	37.6	--	--	--	--	39.5	139
	2008_Q3	--	--	46.2	30.2	87.8	214	24.4	--	--	--	--	39	150
	2008_Q4	--	--	48.3	30	99	235	31.3	--	--	--	--	38.7	162
	2009_Q1	--	--	47.2	27.7	66.7	201	12.3	--	--	--	--	39.6	140
	2009_Q2	--	--	47	31.4	87.1	237	59.5	--	--	--	--	42.9	150
	2009_Q3	--	--	46.5	31.1	78.6	227	15.2	--	--	--	--	42	144
	2009_Q4	--	--	45	58.7	26.5	178	26.2	--	--	--	--	38.2	131
	2010_Q1	--	--	--	--	71.1	177	28.8	--	--	--	--	45	139
	2010_Q2	--	--	47	26.5	68.7	202	23.2	--	--	--	--	40.6	122
	2010_Q3	--	--	48.9	30.3	91.2	216	57.3	--	--	--	--	39.9	147
	2010_Q4	--	--	49	29.7	74.6	207	26.8	--	--	--	--	40.9	143
	2011_Q1	--	--	45.6	30.5	54.9	200	18.3	--	--	--	--	40.1	136
	2011_Q2	--	--	46.9	24.9	48.7	172	42.9	--	--	--	--	43.3	130
	2011_Q3	45.2	41	51.5	34.3	76.9	237	58.9	75.8	153	--	66.6	49.7	173
	2011_Q4	41.6	44.1	51	30.8	58.1	212	38.6	70	128	--	59.7	48.1	146
	2012_Q1	40.7	47.1	58.2	35	49.6	208	44.9	69	131	--	58.8	40.8	149
	2012_Q2	41.2	43.1	49.4	30.4	59.2	184	43.6	66.6	110	--	50.9	39.8	123
	2012_Q3	34.7	38.5	42.8	30.4	78.8	196	47.5	59.1	123	--	57.5	42.9	123
	2012_Q4	45.2	44.3	47.9	26.5	61.5	216	36.9	65.1	137	29.1	65.7	47.5	144
	2013_Q1	44.9	37.2	56.1	29.3	57.6	225	28.8	69.8	150	25.2	64.3	44.3	150
	2013_Q2	26.6	39.9	47	26.7	30.7	105	43.6	31.3	59.7	27.4	47.7	40.2	64.3
	2013_Q3	37.2	42.6	46.7	24.7	213	73.7	44.3	60.3	119	30.8	54.5	44.1	133

Historical Summary of Parameters Identified by B&L in 1997 that are Indicative of Mild Leachate Contamination

Total Metals (all values in mg/l)
(Note: Qualifiers are not included in these tables)

Analyte	Year/ Quarter	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
Chromium	1997_Q3	--	0.0042	1.04	0.002	0.112	0.004	0.0249	0.0032	0.0015	0.0092	0.0859	0.009	0.0556
	1997_Q4	--	0.0089	0.0265	<0.0004	0.0967	0.0086	0.0022	<0.0004	0.00093	<0.0004	0.0705	0.002	0.146
	2006_Q3	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	<0.005	<0.005
	2007_Q4	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	<0.005	<0.005
	2008_Q1	--	--	--	<0.005	0.0177	0.0082	<0.005	--	--	--	--	<0.005	0.0067
	2009_Q2	--	--	<0.005	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2010_Q3	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2011_Q4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01
	2012_Q1	<0.01	<0.01	0.0267	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01
	2013_Q2	<0.005	0.0084	0.0093	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0054	<0.005	<0.005
Cobalt	1997_Q3	--	<0.0011	0.59	<0.0011	0.0719	0.0091	0.0121	0.002	0.0036	0.0105	0.056	0.011	0.0311
	1997_Q4	--	0.0053	0.0168	<0.0011	0.0628	0.0141	0.0019	0.0014	0.0035	<0.0011	0.0463	0.006	0.0791
	2006_Q3	--	--	<0.015	<0.015	<0.015	<0.015	<0.015	--	--	--	--	<0.015	<0.015
	2007_Q4	--	--	<0.02	<0.02	<0.02	<0.02	<0.02	--	--	--	--	<0.02	<0.02
	2008_Q1	--	--	--	<0.02	<0.02	<0.02	<0.02	--	--	--	--	<0.02	<0.02
	2009_Q2	--	--	<0.02	<0.02	<0.02	<0.02	<0.02	--	--	--	--	<0.02	<0.02
	2010_Q3	--	--	<0.02	<0.02	<0.02	<0.02	<0.02	--	--	--	--	<0.02	<0.02
	2011_Q4	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.02
	2012_Q1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.02
	2013_Q2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper	1997_Q3	--	0.004	0.996	0.004	0.104	0.0069	0.0315	0.0051	0.0066	0.0181	0.0973	0.012	0.0637
	1997_Q4	--	0.0085	0.0254	0.0025	0.0779	0.0118	0.0076	0.0018	0.0076	0.0037	0.0689	0.005	0.129
	2006_Q3	--	--	0.022	0.017	0.012	0.017	0.023	--	--	--	--	0.016	0.013
	2007_Q4	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2008_Q1	--	--	--	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2009_Q2	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2010_Q3	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2011_Q4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01
	2012_Q1	<0.01	<0.01	0.0218	<0.01	<0.01	<0.01	<0.01	<0.01	0.0224	--	<0.01	<0.01	<0.01
	2013_Q2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Historical Summary of Parameters Identified by B&L in 1997 that are Indicative of Mild Leachate Contamination

Total Metals (all values in mg/l)
(Note: Qualifiers are not included in these tables)

Analyte	Year/ Quarter	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
Iron	1997_Q3	--	1.01	1550	1.33	154	4.3	26.6	3.04	2.2	11.5	111	10.6	65.9
	1997_Q4	--	10.3	35.7	0.226	131	10.7	3.58	0.372	1.99	0.46	85.5	3	174
	2006_Q1	--	--	19.4	9.42	8.29	0.913	1.88	--	--	--	--	1.09	14.5
	2006_Q2	--	--	2.99	1.48	24	0.836	0.626	--	--	--	--	0.511	1.33
	2006_Q3	--	--	6.03	1.84	6.5	1.2	0.104	--	--	--	--	0.306	0.722
	2006_Q4	--	--	2.11	0.273	10.1	1.07	0.283	--	--	--	--	0.195	2.78
	2007_Q1	--	--	1.67	2.39	10.8	0.637	1.18	--	--	--	--	1.87	1.68
	2007_Q2	--	--	2.14	0.508	6.86	0.469	0.599	--	--	--	--	0.486	1.52
	2007_Q3	--	--	1.21	0.465	7.67	0.468	0.231	--	--	--	--	0.163	9.97
	2007_Q4	--	--	3.49	0.73	4.95	0.323	0.537	--	--	--	--	0.216	3.65
	2008_Q1	--	--	--	1	9.77	0.439	0.451	--	--	--	--	0.229	1.68
	2008_Q2	--	--	1.17	1.38	4.1	0.56	0.574	--	--	--	--	0.33	1.99
	2008_Q3	--	--	0.217	0.185	10.6	0.236	0.508	--	--	--	--	<0.06	0.342
	2008_Q4	--	--	0.429	0.174	9.51	0.28	0.177	--	--	--	--	<0.06	1.16
	2009_Q1	--	--	0.818	2.92	7.77	0.466	0.6	--	--	--	--	0.268	0.322
	2009_Q2	--	--	1.65	0.523	8.28	0.464	0.155	--	--	--	--	0.104	10.1
	2009_Q3	--	--	0.348	0.115	5.21	0.222	0.534	--	--	--	--	0.07	0.108
	2009_Q4	--	--	6.19	6.72	0.827	0.235	1.44	--	--	--	--	0.417	1.19
	2010_Q1	--	--	--	--	64.2	0.451	0.366	--	--	--	--	0.448	3.95
	2010_Q2	--	--	0.484	0.423	6.1	0.329	0.291	--	--	--	--	0.226	0.469
	2010_Q3	--	--	0.219	0.159	13	0.149	6.97	--	--	--	--	<0.06	1.71
	2010_Q4	--	--	1.99	1.02	9.73	0.273	2.42	--	--	--	--	0.337	3.06
	2011_Q1	--	--	1.47	1.19	4.73	0.345	0.232	--	--	--	--	0.114	0.162
	2011_Q2	--	--	3.13	<0.06	4.27	0.312	0.121	--	--	--	--	0.235	0.418
	2011_Q3	0.126	0.662	0.872	0.121	5.34	0.276	0.121	0.578	0.261	--	0.835	0.835	4.66
	2011_Q4	0.688	2.75	0.987	0.341	5.42	0.333	0.345	0.344	0.174	--	1.32	0.099	3.03
	2012_Q1	2.04	0.248	33.7	0.238	2.9	1.11	1.77	0.386	0.427	--	7.22	1.05	0.931
	2012_Q2	2.34	0.509	1.65	3.2	3.15	0.337	0.451	0.0945	0.146	--	0.98	7.38	2.9
	2012_Q3	0.15	0.15	0.702	0.39	7.39	0.319	0.238	0.142	0.209	--	6.38	<0.06	0.869
	2012_Q4	0.366	0.136	0.844	1.3	5.21	0.416	0.319	0.0777	0.265	0.536	0.892	0.177	4.19
	2013_Q1	<0.2	<0.2	4	0.61	2.3	0.31	0.37	<0.2	<0.2	<0.2	6.1	0.38	0.66
	2013_Q2	1.3	2.9	13	<0.2	2.3	0.32	0.42	0.37	<0.2	<0.2	4	0.35	2
	2013_Q3	<0.2	1.1	0.56	<0.2	0.3	1.5	0.49	0.27	0.23	<0.2	0.76	0.29	2.3

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Analyte	Year/ Quarter	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
Lead	1997_Q3	--	0.0017	0.454	<0.001	0.0561	0.0044	0.0077	0.0013	0.0031	0.0114	0.0168	0.004	0.0251
	1997_Q4	--	0.0049	0.0123	<0.001	0.0436	0.0058	<0.001	<0.001	0.0024	<0.001	0.0113	<0.001	0.0585
	2006_Q1	--	--	0.0072	<0.005	<0.005	<0.005	<0.005	--	--	--	--	<0.005	0.0175
	2006_Q2	--	--	0.007	<0.005	0.019	0.009	0.005	--	--	--	--	<0.005	0.009
	2006_Q3	--	--	<0.005	<0.005	<0.005	<0.005	0.005	--	--	--	--	<0.005	0.006
	2006_Q4	--	--	<0.005	<0.005	0.006	<0.005	<0.005	--	--	--	--	<0.005	<0.005
	2007_Q1	--	--	<0.003	0.0043	0.0052	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2007_Q2	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2007_Q3	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	0.0066
	2007_Q4	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2008_Q1	--	--	--	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2008_Q2	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2008_Q3	--	--	<0.003	<0.003	0.0039	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2008_Q4	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2009_Q1	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2009_Q2	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2009_Q3	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2009_Q4	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2010_Q1	--	--	--	--	0.0187	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2010_Q2	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2010_Q3	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2010_Q4	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2011_Q1	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2011_Q2	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003
	2011_Q3	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	--	<0.003	<0.003	0.0032
	2011_Q4	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	--	<0.003	<0.003	<0.003
	2012_Q1	<0.003	<0.003	0.0108	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	--	<0.003	<0.003	<0.003
	2012_Q2	<0.003	<0.003	<0.003	0.0042	<0.003	<0.003	<0.003	<0.003	<0.003	--	<0.003	<0.015	0.0033
	2012_Q3	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	--	<0.015	<0.003	<0.003
	2012_Q4	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
	2013_Q1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	2013_Q2	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	2013_Q3	0.019	0.013	0.0021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0013

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Magnesium	1997_Q3	--	9.5	309	6.47	61.6	61.7	17	22.8	24.3	14.8	37.6	19	67
	1997_Q4	--	10.4	15.6	5.84	53.6	49.9	11	21.5	26	9.45	28.8	12.7	88.3
	2006_Q1	--	--	12.6	7.46	16.6	46.1	9.13	--	--	--	--	8.94	48.6
	2006_Q2	--	--	8.67	5.39	18.3	45.3	10	--	--	--	--	10.9	45.5
	2006_Q3	--	--	9.7	6.05	17.5	43.5	11.2	--	--	--	--	9.86	38
	2006_Q4	--	--	9.43	5.31	19.4	42.7	9.2	--	--	--	--	9.71	38
	2007_Q1	--	--	8.87	5.94	15.7	44.8	4.04	--	--	--	--	10.2	38.4
	2007_Q2	--	--	10.2	7.4	17.9	36.3	3.1	--	--	--	--	9.68	36.4
	2007_Q3	--	--	9.67	7.12	18	44.1	9.15	--	--	--	--	9.12	35
	2007_Q4	--	--	9.8	6.28	11	39.9	4.26	--	--	--	--	7.81	32.1
	2008_Q1	--	--	--	6.44	17.1	42.8	5.42	--	--	--	--	9.37	38.4
	2008_Q2	--	--	10.6	7.58	14.3	42.4	7.04	--	--	--	--	10.4	38.5
	2008_Q3	--	--	10.7	7.74	20.3	47.1	3.83	--	--	--	--	9.61	39.5
	2008_Q4	--	--	10.8	7.28	23.1	49.1	4.8	--	--	--	--	9.13	39.8
	2009_Q1	--	--	10.6	6.76	15.1	42.9	1.82	--	--	--	--	10.5	35.8
	2009_Q2	--	--	11.1	7.83	18.8	45.9	11.6	--	--	--	--	11.4	38.7
	2009_Q3	--	--	10	7.34	16.8	45.6	<1	--	--	--	--	10.4	34
	2009_Q4	--	--	11.9	14.4	7.01	39.7	<5	--	--	--	--	10.4	35.3
	2010_Q1	--	--	--	--	27.6	40.4	5.17	--	--	--	--	12.3	38.8
	2010_Q2	--	--	10.5	6.49	15.4	43.1	<5	--	--	--	--	11	31.4
	2010_Q3	--	--	10.8	7.27	20.6	46.2	12.5	--	--	--	--	10.7	36.9
	2010_Q4	--	--	11.3	7.29	17.9	43	<5	--	--	--	--	10.9	36.4
	2011_Q1	--	--	11	7.75	12.9	42.8	<5	--	--	--	--	10.8	35
	2011_Q2	--	--	11.5	6.14	11	38.8	7.25	--	--	--	--	10.8	34.4
	2011_Q3	9.04	7.95	10.5	7.05	14.8	43.9	9.72	20.5	27.3	--	10.2	11.7	37.2
	2011_Q4	10.1	10.8	12	7.66	13.1	44.7	6.31	21.6	26.8	--	10.8	11.3	33.9
	2012_Q1	10.3	11.4	19.3	8.85	11.2	46.6	8.39	21.6	28.3	--	12.2	10.8	36.8
	2012_Q2	10.5	11.5	12.6	8.66	14.4	44.9	9.02	22.4	26.5	--	10.3	12.4	34.8
	2012_Q3	7.92	9.47	9.95	7.48	17.4	42.2	9.93	18.4	27.8	--	10.2	10.6	30.1
	2012_Q4	11	11	11.8	6.9	14.2	46.6	6.27	20.7	31	9.56	12.2	12	37.6
	2013_Q1	9.06	6.14	11.4	6	10.6	42.3	4	18.2	28.3	7.58	9.96	10.6	34.5
	2013_Q2	5.38	9.25	12.3	6.18	11.5	36.4	6.22	16.3	21.5	7.74	10	9.19	26.9
	2013_Q3	7.81	9.39	9.79	5.53	38.9	13.8	6.33	16.3	23.4	8.67	8.49	10.3	27.9

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Manganese	1997_Q3	--	0.19	24.6	0.195	35.7	8.24	0.732	0.12	1.14	0.485	14.5	3.43	5.87
	1997_Q4	--	0.352	0.783	0.146	31.6	7.43	0.174	0.0697	2.15	0.0661	12.7	4.17	9.55
	2006_Q1	--	--	0.534	2.28	12.2	6.98	0.208	--	--	--	--	0.559	6.08
	2006_Q2	--	--	0.194	0.191	11.5	6.8	0.175	--	--	--	--	0.12	5.69
	2006_Q3	--	--	0.38	0.251	12	6.63	0.416	--	--	--	--	0.297	4.4
	2006_Q4	--	--	0.306	0.126	13.6	6.46	0.176	--	--	--	--	0.185	4.85
	2007_Q1	--	--	0.19	0.521	9.93	6.42	0.415	--	--	--	--	0.331	4.51
	2007_Q2	--	--	0.193	0.169	11.7	4.93	0.501	--	--	--	--	0.091	4.18
	2007_Q3	--	--	0.206	0.19	12.7	6.6	0.116	--	--	--	--	0.671	3.98
	2007_Q4	--	--	0.203	0.176	7.05	5.7	0.287	--	--	--	--	0.712	3.47
	2008_Q1	--	--	--	0.26	11.2	6.21	0.0373	--	--	--	--	0.327	4.17
	2008_Q2	--	--	0.157	0.198	9.3	5.96	0.141	--	--	--	--	0.102	4.34
	2008_Q3	--	--	0.135	0.169	13.8	6.49	0.618	--	--	--	--	0.666	4.82
	2008_Q4	--	--	0.151	0.153	15.1	6.84	0.0424	--	--	--	--	0.619	4.57
	2009_Q1	--	--	0.0917	0.223	10.7	6.5	0.294	--	--	--	--	0.026	4.31
	2009_Q2	--	--	0.169	0.25	12.8	6.63	0.164	--	--	--	--	0.059	4.21
	2009_Q3	--	--	0.155	0.149	11.4	6.31	0.331	--	--	--	--	0.255	3.8
	2009_Q4	--	--	0.251	9.34	0.144	5.63	0.597	--	--	--	--	0.167	3.68
	2010_Q1	--	--	--	--	11.6	5.48	0.568	--	--	--	--	0.061	3.87
	2010_Q2	--	--	0.118	0.13	9.79	6.2	0.218	--	--	--	--	0.027	3.85
	2010_Q3	--	--	0.156	0.188	12.2	6.35	0.282	--	--	--	--	0.087	3.82
	2010_Q4	--	--	0.329	0.153	11.1	6.82	0.471	--	--	--	--	0.242	4.5
	2011_Q1	--	--	0.236	0.269	8.18	6.23	0.575	--	--	--	--	0.045	4.33
	2011_Q2	--	--	0.215	0.24	7.05	5.23	0.704	--	--	--	--	0.021	3.8
	2011_Q3	0.18	0.119	0.139	0.275	9.08	5.99	0.635	0.184	1.91	--	1.33	0.166	4.86
	2011_Q4	0.256	0.211	0.119	0.0807	7.78	5.93	0.726	0.125	1.73	--	1.78	0.231	3.57
	2012_Q1	1.62	0.188	0.691	0.223	6.81	6.23	0.802	0.102	1.75	--	1.63	0.034	1.62
	2012_Q2	1.3	0.23	0.121	0.232	8.49	6.4	0.926	0.1	1.44	--	2.16	0.781	3.27
	2012_Q3	0.061	0.139	0.0453	0.148	10.3	6.38	0.371	0.092	2.05	--	2.84	0.069	2.91
	2012_Q4	0.439	0.18	0.121	0.195	8.5	6.49	0.891	0.0979	1.63	0.0531	1.57	0.068	2.94
	2013_Q1	0.27	<0.05	0.61	5.1	6.9	6.7	0.78	0.073	2.9	<0.05	1.8	0.051	3.8
	2013_Q2	1.4	0.13	2.4	0.23	3.9	3.2	1.9	0.17	0.97	<0.05	0.59	0.064	1.4
	2013_Q3	0.063	0.12	<0.05	0.053	6.4	9	1.8	0.25	0.7	<0.05	0.46	0.18	1.8

Historical Summary of Parameters Identified by B&L in 1997 that are Indicative of Mild Leachate Contamination

Total Metals (all values in mg/l)
(Note: Qualifiers are not included in these tables)

Analyte	Year/ Quarter	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
Potassium	1997_Q3	--	1.01	77.5	1.56	23.4	3	7.43	2.05	2.01	3.03	14.4	4.08	10.4
	1997_Q4	--	1.91	6.97	0.529	17	2.9	1.87	1.2	2.02	0.897	10.1	2.72	13.5
	2006_Q1	--	--	2.72	0.973	9.29	2.42	0.938	--	--	--	--	1.15	3.06
	2006_Q2	--	--	1.6	0.468	11.2	2.25	0.829	--	--	--	--	0.825	1.91
	2006_Q3	--	--	1.7	0.523	12.3	2.28	1.09	--	--	--	--	0.634	1.81
	2006_Q4	--	--	1.62	0.374	12.7	2.38	0.937	--	--	--	--	0.69	2.03
	2007_Q1	--	--	1.74	<1	9.02	2.74	<1	--	--	--	--	1.05	2.03
	2007_Q2	--	--	2.31	<1	10.8	2.14	<1	--	--	--	--	<1	1.95
	2007_Q3	--	--	1.59	<1	13.3	2.44	<1	--	--	--	--	<1	2.87
	2007_Q4	--	--	2.06	<1	2.14	<1	<1	--	--	--	--	<1	<1
	2008_Q1	--	--	--	<1	8.56	2.44	<1	--	--	--	--	<1	1.85
	2008_Q2	--	--	1.65	<1	7.56	2.2	<1	--	--	--	--	<1	1.98
	2008_Q3	--	--	1.51	<1	12.3	2.23	1.06	--	--	--	--	<1	1.82
	2008_Q4	--	--	1.69	<1	15.1	3.13	<1	--	--	--	--	1.4	2.41
	2009_Q1	--	--	1.52	<1	7.48	2.44	<1	--	--	--	--	1.01	1.62
	2009_Q2	--	--	1.78	<1	12.4	2.71	<1	--	--	--	--	1.03	3.58
	2009_Q3	--	--	<1	<1	13.6	<1	<1	--	--	--	--	<1	<1
	2009_Q4	--	--	<5	8.56	<5	<5	<5	--	--	--	--	<5	<5
	2010_Q1	--	--	--	--	12.8	<5	<5	--	--	--	--	<5	<5
	2010_Q2	--	--	<5	<5	9.42	<5	<5	--	--	--	--	<5	<5
	2010_Q3	--	--	<5	<5	14.3	<5	<5	--	--	--	--	<5	<5
	2010_Q4	--	--	<5	<5	11.9	<5	<5	--	--	--	--	<5	<5
	2011_Q1	--	--	<5	<5	7.2	<5	<5	--	--	--	--	<5	<5
	2011_Q2	--	--	<5	<5	7.47	<5	<5	--	--	--	--	<5	<5
	2011_Q3	<5	<5	<5	<5	11.4	<5	<5	<5	<5	--	<5	<5	<5
	2011_Q4	<5	<5	<5	<5	7.62	<5	<5	<5	<5	--	<5	<5	<5
	2012_Q1	<5	<5	<5	<5	6.33	<5	<5	<5	<5	--	<5	<5	<5
	2012_Q2	<5	<5	<5	<5	8.15	<5	<5	<5	<5	--	<5	<5	<5
	2012_Q3	<5	<5	<5	<5	10.9	<5	<5	<5	<5	--	<5	<5	<5
	2012_Q4	<5	<5	<5	<5	8.64	<5	<5	<5	<5	<5	<5	<5	<5
	2013_Q1	0.99	0.98	1.3	0.5	5.9	2.3	1.1	1.2	1.4	1.1	2.4	0.92	1.4
	2013_Q2	3	1.5	2.4	0.57	4.3	2.9	1.6	1.3	1.5	1.5	2.7	1.1	1.9
	2013_Q3	1.4	0.99	1.3	0.53	2.9	9.3	1.5	1.3	1.8	1.3	2.3	1.3	2.1

Historical Summary of Parameters Identified by B&L in 1997 that are Indicative of Mild Leachate Contamination

Total Metals (all values in mg/l)
(Note: Qualifiers are not included in these tables)

Analyte	Year/ Quarter	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
Sodium	1997_Q3	--	5.41	37.3	7.38	119	64.1	10.4	11.2	13.3	31.6	53.3	38	118
	1997_Q4	--	4.76	26	6.18	102	53.9	6.54	9.78	15.7	9.53	46.8	31.4	113
	2006_Q1	--	--	17.1	6.31	26.3	53.8	5.66	--	--	--	--	14.9	134
	2006_Q2	--	--	13	5.22	25.2	49.7	6.4	--	--	--	--	9.93	129
	2006_Q3	--	--	13.6	6.35	31.4	51.1	8.92	--	--	--	--	10.1	124
	2006_Q4	--	--	13.5	5.92	31.4	51	6.03	--	--	--	--	10.7	128
	2007_Q1	--	--	12.2	5.22	19.5	50.9	2.11	--	--	--	--	11.2	112
	2007_Q2	--	--	12.5	6.82	22.9	40.8	1.14	--	--	--	--	10.2	104
	2007_Q3	--	--	13	7.1	26.1	52.3	5.1	--	--	--	--	15	95.8
	2007_Q4	--	--	11.8	5.84	13.8	48.2	2.64	--	--	--	--	14.7	95.2
	2008_Q1	--	--	--	5.66	19.2	50.6	2.9	--	--	--	--	13.8	104
	2008_Q2	--	--	12.5	6.73	16.5	47.4	3.52	--	--	--	--	12.7	99.6
	2008_Q3	--	--	13.8	7.29	25.6	51.4	2.77	--	--	--	--	18.1	113
	2008_Q4	--	--	13.2	6.81	25.9	58.2	2.69	--	--	--	--	17.6	116
	2009_Q1	--	--	13.4	6.37	17.8	49.3	<1	--	--	--	--	13.1	97
	2009_Q2	--	--	13.9	8.15	23.8	55.4	6.81	--	--	--	--	17.9	103
	2009_Q3	--	--	12.5	7.32	21.1	58.6	<1	--	--	--	--	18.5	110
	2009_Q4	--	--	12.6	14.9	6.59	49	<5	--	--	--	--	15.8	105
	2010_Q1	--	--	--	--	15.5	48.9	<5	--	--	--	--	16.8	112
	2010_Q2	--	--	12.8	6.29	16.3	53.1	<5	--	--	--	--	14.2	109
	2010_Q3	--	--	13.2	7.12	21.9	56.9	6.53	--	--	--	--	15	110
	2010_Q4	--	--	15.3	8.95	19	65.4	<5	--	--	--	--	17.8	127
	2011_Q1	--	--	13.6	7.99	13.5	56.7	<5	--	--	--	--	14.1	110
	2011_Q2	--	--	13.1	6.48	12.5	51	<5	--	--	--	--	17	114
	2011_Q3	<5	<5	13.2	27	22.1	55.3	5.9	11.1	16.7	--	19.5	18.3	114
	2011_Q4	<5	6.69	14.9	8.23	13.6	57.7	<5	12.5	17.8	--	19.8	21.7	104
	2012_Q1	<5	6.24	15.6	9.91	11	58.5	<5	11.9	17.7	--	19	16.5	108
	2012_Q2	<5	5.26	12.6	7.92	11.9	47.4	<5	10.4	14.2	--	14.8	14.6	91
	2012_Q3	<5	<5	10.4	7.34	14.7	50.8	5.41	8.61	14.7	--	16.5	17.3	81.6
	2012_Q4	<5	5.25	12.3	6.54	12.8	59.4	<5	10.4	18.7	18.7	19.3	19.5	99.9
	2013_Q1	4.4	5	13	6.8	9.9	51	2.1	11	19	16	17	14	94
	2013_Q2	4.3	5.2	11	6.5	11	45	2	9	14	13	16	13	40
	2013_Q3	3.8	5.2	12	6	50	13	2.6	9.2	16	12	16	19	82

Historical Summary of Parameters Identified by B&L in 1997 that are Indicative of Mild Leachate Contamination

Total Metals (all values in mg/l)
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Analyte	Year/ Quarter	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
Vanadium	1997_Q3	--	<0.0012	0.856	<0.0012	0.102	0.0029	0.0296	0.003	0.0016	0.0102	0.0726	0.008	0.0487
	1997_Q4	--	0.0086	0.0243	<0.0012	0.0866	0.0075	0.0039	<0.0012	0.0019	0.0012	0.053	0.001	0.127
	2006_Q3	--	--	<0.015	<0.015	<0.015	<0.015	<0.015	--	--	--	--	<0.015	<0.015
	2007_Q4	--	--	<0.03	<0.03	<0.03	<0.03	<0.03	--	--	--	--	<0.03	<0.03
	2008_Q1	--	--	--	<0.03	<0.03	<0.03	<0.03	--	--	--	--	<0.03	<0.03
	2009_Q2	--	--	<0.03	<0.03	<0.03	<0.03	<0.03	--	--	--	--	<0.03	<0.03
	2010_Q3	--	--	<0.03	<0.03	<0.03	<0.03	<0.03	--	--	--	--	<0.03	<0.03
	2011_Q4	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	--	<0.03	<0.03	<0.03
	2012_Q1	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	--	<0.03	<0.03	<0.03
	2013_Q2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Zinc	1997_Q3	--	0.024	3.36	0.0351	0.4	0.103	0.112	0.0621	0.0501	0.105	0.271	0.089	0.2
	1997_Q4	--	0.0366	0.0874	0.0163	0.278	0.0484	0.0265	0.0155	0.0238	0.0212	0.177	0.025	0.408
	2006_Q3	--	--	0.106	0.052	<0.01	<0.01	0.025	--	--	--	--	0.014	<0.01
	2007_Q4	--	--	0.0235	0.0168	<0.01	0.0469	0.0106	--	--	--	--	0.021	0.0263
	2008_Q1	--	--	--	0.0112	0.0101	<0.01	<0.01	--	--	--	--	0.01	0.0102
	2009_Q2	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	0.0297
	2010_Q3	--	--	<0.01	<0.01	0.0269	<0.01	0.0285	--	--	--	--	<0.01	<0.01
	2011_Q4	<0.01	0.0146	<0.01	<0.01	<0.01	0.0118	<0.01	0.0114	0.013	--	<0.01	0.016	0.0156
	2012_Q1	0.012	<0.01	0.0792	<0.01	<0.01	0.0177	0.0106	0.017	0.0154	--	0.0235	<0.01	<0.01
	2013_Q2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1