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

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

February 21, 2012

Brian Jankauskas
NYS DEC
Div. of Environmental Remediation
625 Broadway, 11th Floor
Albany, NY 12233-7015

Dear Mr. Jankauskas:

Enclosed is a report summarizing monitoring activities for Quarter 3 of 2011 at the Towslee Landfill in Cortland County. Cortland County Soil and Water Conservation District prepared this report for Don Chambers, Superintendent of Cortland County Highway Department.

Please contact our office at (607) 756-5991, or Don Chambers at (607) 753-9377, if you have any questions.

Sincerely,

Patrick Reidy
Water Quality Specialist

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

Environmental Monitoring Report
2011 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. This report summarizes groundwater quality monitoring activities at the Towslee Landfill for Quarter 3 of 2011.

The Towslee Landfill is designated by New York State Department of Environmental Conservation (NYSDEC) as a Class 2 inactive hazardous waste disposal site, and has been listed in the Registry of Inactive Hazardous Waste Disposal Sites (#7-12-001). NYSDEC issued an Order of Consent (#B7-0486-12-95), effective May 31, 1996, making it the responsibility of Cortland County to develop and enact a remedial investigation plan towards the closure and cleanup of the facility.

Barton & Loguidice (B&L) completed a remedial investigation report in March 1998 that included the results of a hydrogeologic investigation and a "limits of waste" investigation, among other things. Groundwater monitoring wells were installed and tested as part of this investigation.

Upstate Laboratories, Inc. (herein referred to as Upstate Labs) conducted all sample collection activities, and performed all laboratory analyses for Quarter 3 of 2011. Water quality analyses were conducted in accordance with 1998 Part 360 regulations. SWCD performed data management and analysis, and prepared this report.

Updated Monitoring Plan

Since 2006, Cortland County had been conducting interim monitoring of seven groundwater monitoring wells based on a letter to NYSDEC dated February 17, 2006. ***Starting in Quarter 3 of 2011, a revised monitoring plan is being implemented.*** The revised plan is dated June 2006, and was prepared by Barton & Loguidice. The revised plan includes:

- Six additional groundwater monitoring wells, for a total of 13 wells
- Gas testing of 13 groundwater monitoring wells
- Inspections (Quarter 2 and 4)

2.0 Site History

The site was a private disposal facility starting in the 1940s. The City of Cortland leased the site for municipal disposal in the mid-1960s in the portion of the site now referred to as the Abandoned City of Cortland Landfill. Cortland County purchased the site in 1972. In April 1972 the County began landfill operations north of the Abandoned City operation. The County stopped disposing of municipal solid waste at this site in 1987, but continued to dispose of construction debris until early 1992.

Based on landfill records, hazardous wastes were believed to have been deposited at the site. The wastes were believed to have been generated by one or more local industries. B&L delineated the limits of hazardous waste associated with the site. Figure 1 shows well locations monitored for this program, and approximate limits of hazardous waste. The B&L Remedial Investigation concluded that in 1997 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.

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

Quarter	Analyses	Date Sampled
First Quarter:	Routine	March 22, 2011
Second Quarter:	Routine	May 24, 2011
Third Quarter:	Routine	September 20, 21 and 23, 2011
Fourth Quarter:	Baseline	To be completed

3.2 Groundwater Monitoring Locations

Monitoring wells for the Towslee monitoring program are listed below, and shown on Figure 1.

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

(a) MW-5A cannot be sampled because of a blockage above the water table.

4.0 Assessment of Monitoring Results

This section provides an evaluation of groundwater monitoring results for Quarter 3 of 2011. 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 Water Quality Standards

This subsection compares 2011 groundwater quality data to NYS water quality standards. Tables 1 and 2 summarize water quality results for Quarter 3. Available NYS water quality standards are included in these tables, and contraventions of standards are highlighted.

Results for most parameters in Quarter 3 of 2011 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 13 Towslee monitoring wells.

4.1.1 Conventionals and Field Parameters

Turbidity – Turbidity exceeded the NYS standard of 5 NTU for the two upgradient wells and 7 of the 10 sampled downgradient wells in Quarter 3, ranging from about 6 to 160 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, and this trend continued in Quarter 3. Ammonia was 890 mg/l at MW-2B, and 750 mg/l at MW-7A.

Ammonia - The ammonia standard of 2 mg/l was exceeded at MW-2A (5.16 mg/l) in Quarter 3, and was exceeded in all previous monitoring events at this well.

4.1.2 Metals

Total Cadmium - The NYS standard for cadmium is 0.005 mg/l. The standard was exceeded for MW-7A in Quarter 3. Because turbidity for this well was above 50 NTU, a filtered sample was collected and analyzed. Dissolved (filtered) cadmium was below the detection limit of 0.005 mg/l for MW-7A. This suggests that the elevated total cadmium level was due to particulate in the unfiltered sample, and did not represent groundwater quality.

Total Iron - The NYS standard for iron is 0.3 mg/l. The standard was exceeded for one upgradient well and 6 of 10 sampled downgradient wells in Quarter 3, ranging from about 0.6 to 5.7 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 samples.

Total Manganese - The NYS standard for manganese is 0.3 mg/l. The manganese standard was exceeded for 6 of 10 downgradient wells in Quarter 3, ranging from about 0.6 to 9 mg/l. As with iron, the manganese standard has frequently been exceeded in past monitoring, and may be due to particulate in unfiltered samples.

Sodium – The NYS sodium standard is 20 mg/l, and is relevant for people on severely restricted sodium diets. Contraventions in Quarter 3 were observed at MW-1B (27 mg/l), MW-2A (22.1 mg/l), MW-2B (55.3 mg/l) and MW-7A (114 mg/l). These results are consistent with past monitoring. Elevated sodium may be at least partially related to deicing activities on the road network within the landfill.

4.1.3 Volatile Organics (VOCs)

VOC testing was not required in Quarter 3 of 2011.

4.2 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.

Appendix B contains historical tables of all results to date.

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.

4.2.1 Trends for Wells for which Monitoring was Resumed in Quarter 3 2011

Monitoring of six wells (listed below) was resumed in this monitoring round. Previous monitoring for these wells occurred in 1997. A separate discussion of trends for these wells is presented here.

Bedrock	Overburden
CD-1RA	CD-1
MW-3B	MW-6A
MW-4A	
MW-5A (a)	

(a) MW-5A could not be sampled because of a blockage above the water table.

Upgradient Wells

Wells CD-1 and CD-1RA are upgradient of the landfill. CD-1 was only tested for VOCs in 1997, which were not tested in Q3 of 2011.

As expected, water quality in upgradient well CD-1RA is generally good, and has not changed significantly over time. Note that water quality for CD-1 is generally similar to CD-1RA.

Downgradient Wells

MW-3B - Recent results are generally similar to 1997 results. Sulfate, TOC and total phenolics decreased somewhat from 1997 levels. BOD showed an increase, but results are similar to the upgradient well CD-1RA.

MW-4A - Recent results are generally similar to 1997 results. Sulfate, COD, TOC and total phenolics decreased somewhat from 1997 levels. BOD showed an increase, but results are similar to the upgradient well CD-1RA.

MW-6A - Recent results are generally improved compared to 1997 results. Significant decreases in concentration were observed for alkalinity, hardness, TDS, chloride, ammonia, TKN, COD, TOC, total phenolics, calcium, iron, lead, magnesium, potassium, and sodium.

4.2.2 Trends for other Wells

There has been an overall significant improvement in groundwater quality downgradient of the Towslee landfill between 1997 and 2006. Monitoring since 2006 shows that groundwater quality is generally improving, or has remained stable over the past 6 years.

The following sections describe trends for the COCs.

Conventionals Trends

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

- Alkalinity continues to be generally lower than 1997 levels, and fairly stable over the past 6 years.

- Chloride levels continue to be significantly lower than 1997 levels.

- Hardness levels continue to be much lower than in 1997, and fairly stable over the past 6 years.

- Ammonia - Five of seven wells have decreased over time to the point that no ammonia has been detected in the past several years. Well MW-2A continues to have elevated ammonia levels, but continues to show an overall, slowly decreasing trend over time. MW-2B is the only other well at which ammonia was detected in the past several years. Ammonia levels at MW-2B have been fairly stable over time, and generally below the water quality standard of 2 mg/l.

- TKN levels in general show an overall decreasing trend over time. Results for three of seven wells have been below, or near, the detection limit for the past several years. TKN results for MW-2A are elevated, but show an overall decreasing trend. Results for MW-2B are somewhat elevated, but have remained relatively stable for the past 6 years. TKN at MW-3A fluctuates more than at other wells, with no clear trend either up or down since 1997.

- COD continues to show an overall decrease compared to 1997 levels, with many results below the detection limit in recent years. COD at MW-3A fluctuates over time, with no clear trend up or down.

- Total Organic Carbon (TOC) - TOC has been below the detection limit at MW-1A, MW-1B and MW-6B for the past six years. TOC at MW-2A, MW-2B and MW-7A has decreased compared to 1997 levels, and has been relatively stable in the past 4 years. TOC at MW-3A fluctuates over time, with no clear trend up or down.

- For all other conventionals, the results for 2011 are lower than or similar to past results.

Total Metals Trends

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	

Routine monitoring was conducted in Quarter 3 of 2011, and the only "COC" metals analyzed were calcium, iron, lead, magnesium, manganese, potassium, and sodium.

- Calcium levels continue to show an overall decrease through 2011, compared to 1997 levels, and have been relatively stable over the past 6 years.

- Iron continues to show an overall decrease compared to 1997 levels. Variability in total iron levels over the past 6 years is likely due to varying amounts of particulate in samples.

- Lead levels are generally below the detection limit, and where detected, continue to show an overall decrease through 2011, compared to 1997.

- Magnesium levels continue to show an overall decrease compared to 1997 observations, and have been fairly stable over the past few years.

- Manganese continues to show an overall decrease compared to 1997 levels.

- Potassium levels continue to show an overall decrease through 2011, compared to 1997.

- Sodium levels have continued to show a general decrease through 2011, or have remained fairly stable.

Organics Trends

VOC analysis was not required in Quarter 3 of 2011.

5.0 Landfill Gas Testing

Landfill gas measurements were made at each of 13 monitoring wells in Quarter 3. The landfill gas results are presented in Appendix C. The lower explosive limit (LEL) of methane is 5 percent in air by volume. All measurements are expressed as a percentage of the LEL.

In Quarter 3 of 2011, landfill gas was not detected at any of the monitoring locations. Note that a gas measurement was made a MW-5A despite a blockage preventing water sample collection.

5.0 Quality Control

Quality control samples and data validation are discussed below. Based on a review of this information, we believe the Quarter 3 data are adequate to characterize groundwater quality in the vicinity of the Towslee landfill.

5.1 Quality Control Samples

Duplicate samples were collected for MW-6B in Quarter 3 of 2011. Relative Percent Differences (RPDs) were calculated if results for both the sample and the duplicate were above the detection limit.

- 7 of 10 RPDs were below 20%, with 6 of 10 below 10%.
- The RPD for total iron was 102%, and may be due to varying amounts of particulate in the unfiltered split samples.
- The RPD for sulfate was 29%. Since the sulfate results were less than five times the practical quantitation limit (PQL) and different differ by no more than the PQL, no qualification of the results is warranted.
- The RPD for TDS was 24%. Since the TDS results were less than five times the PQL and different differ by less no more than the PQL, no qualification of the results is warranted.

5.2 Data Validation

Upstate Labs performed internal data validation for the Quarter 3 monitoring of Towslee Landfill. The results generally met acceptance criteria. Summaries of Upstate Labs internal validation are included in the laboratory report of Appendix A.

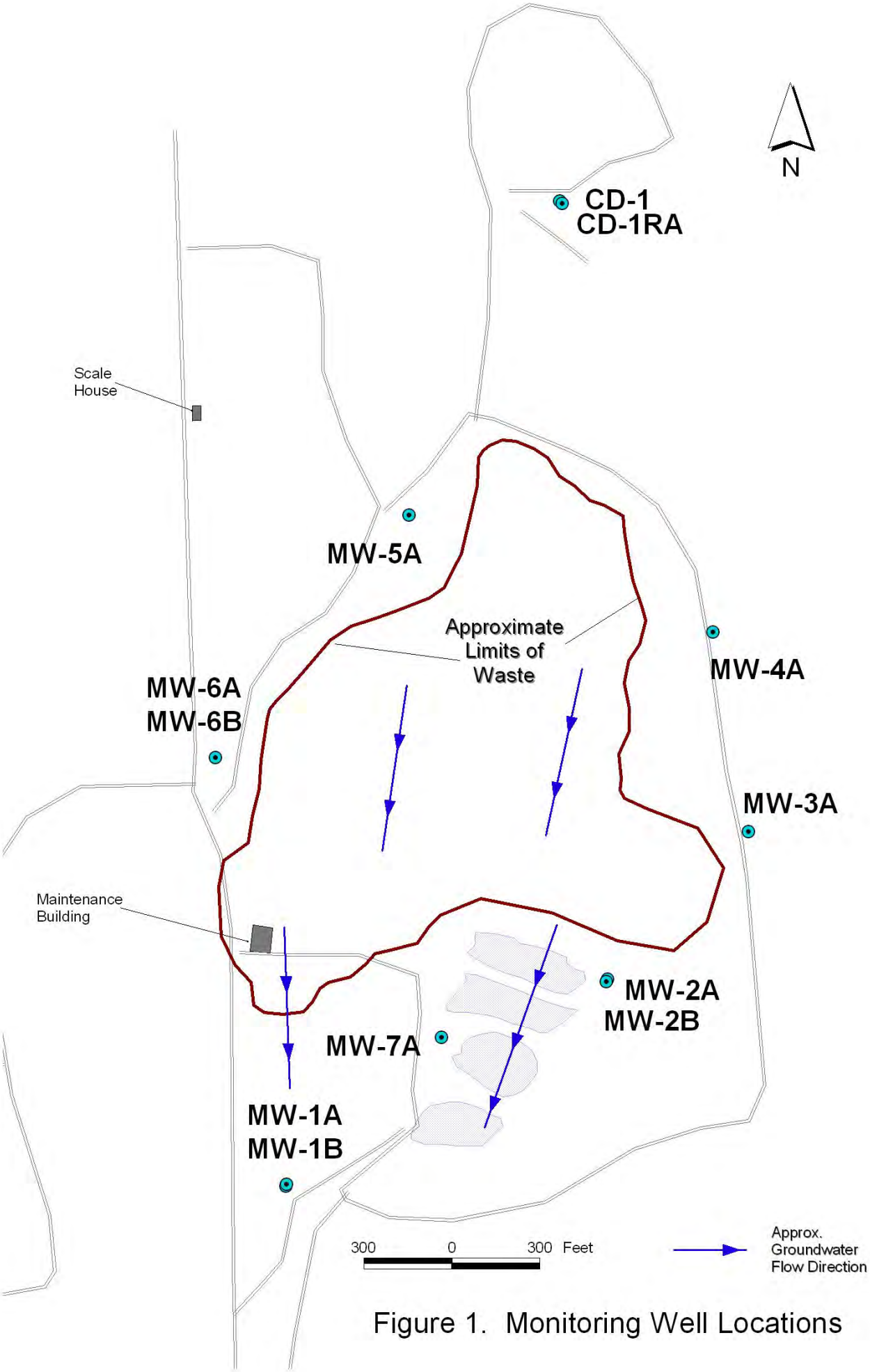

Figure 1. Monitoring Well Locations

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

Towslee Landfill - Quarter 3 2011

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)	--		19.1	20.3	17.9	17.7	18.4	18.0	17.4	17.1	17.5	NS	17.8	16.7	18.0
Eh	(mV)	--		152	146	160	157	-47	-2	159	158	174	NS	125	133	166
pH	(Std Units)	6.5 - 8.5	a	8.2	8.29	7.96	8.13	7.04	6.93	7.38	7.68	7.36	NS	7.04	7.34	6.92
Specific Conductance	(uS/cm)	--		303	343	372	215	653	1428	361	494	789	NS	446	355	1236
Color	(Units)	15	a, b	--	--	--	--	--	--	--	--	--	NS	--	--	--
Turbidity	(NTU)	5	a	**9.58**	**53**	**20.89**	**5.69**	**40.12**	**8.77**	4.39	**25**	**5.86**	NS	**33.14**	**6.94**	**169**
Alkalinity, Total (As CaCO3)	(mg/l)	--		130	120	130	100	300	630	180	240	410	NS	200	160	560
Hardness (As CaCO3)	(mg/l)	--		150	135	172	115	253	773	187	274	496	NS	208	172	585
Total Dissolved Solids	(mg/l)	500	a	220	180	220	140	340	**890**	260	310	490	NS	270	230	**750**
Chloride	(mg/l)	250	a, b	1.41	2.2	32.1	3.4	16.2	108	4.03	23.7	23.6	NS	21.4	12.7	100
Sulfate	(mg/l)	250	a, b	10.8	17.3	14.1	<5	<5	<5	<5	7.9	10.5	NS	10.6	18.7	18.8
Bromide	(mg/l)	2	a	<8	<8	<8	<0.8	<8	<8	<8	<0.8	<0.8	NS	<0.8	<0.8	<8
Nitrogen, Nitrate (As N)	(mg/l)	10	a, b	0.054	0.054	<0.05	<0.05	0.065	<0.05	<0.05	<0.05	<0.05	NS	<0.05	0.056	0.081
Nitrogen, Ammonia (As N)	(mg/l)	2 *	a	<0.5	<0.5	<0.5	<0.5	**5.16**	<0.5	<0.5	<0.5	<0.5	NS	<0.5	<0.5	<0.5
Nitrogen, Kjeldahl, Total	(mg/l)	--		<0.5	<0.5	<0.5	<0.5	9.52	1.95	0.508	<0.5	<0.5	NS	<0.5	<0.5	1.03
Chemical Oxygen Demand	(mg/l)	--		<20	<20	<20	<20	<20	<20	<20	<20	<20	NS	<20	<20	29
Biochemical Oxygen Demand	(mg/l)	--		<4	5	<4	<4	9	<4	<4	6	5	NS	<4	<4	<4
Organic Carbon, Total	(mg/l)	--		<3	<3	<3	<3	5.1	5.4	3.1	<3	4	NS	<3	<3	6.1
Phenolics, Total Recoverable	(mg/l)	0.001	a	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	NS	<0.005	<0.005	<0.005
Cyanide	(mg/l)	0.2	a, b	--	--	--	--	--	--	--	--	--	NS	--	--	--

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

b - Part 5 Drinking Water MCL

* Standard is for NH4+ and NH3 combined, as is the laboratory analysis

1.23 indicates contravention of standard.

-- not analyzed

NS - not sampled

OB = overburden well

BR = Bedrock well

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

Towslee Landfill - Quarter 3 2011

Parameter	NYS Water Quality Standard		Total Metals													Dissolved Metals	
			Upgradient		Downgradient											Upgrdnt	Dwngrdnt
			OB CD-1	BR CD-1RA	OB MW-1A	BR MW-1B	OB MW-2A	BR MW-2B	BR MW-3A	BR MW-3B	BR MW-4A	BR MW-5A	OB MW-6A	BR MW-6B	OB MW-7A	BR CD-1RA	OB MW-7A
Aluminum	--		--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Antimony	0.003	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Arsenic	0.025	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Barium	1	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Beryllium	0.004	b	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Boron	1	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Cadmium	0.005	a, b	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NS	<0.005	<0.005	**0.258**	<0.005	<0.005
Calcium	--		45.2	41	51.5	34.3	76.9	237	58.9	75.8	153	NS	66.6	49.7	173	41	172
Chromium	0.05	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Chrom, Hex	0.05	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Cobalt	--		--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Copper	0.2	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Iron	0.3	a, b	0.126	**0.662**	**0.872**	0.121	**5.34**	0.276	0.121	**0.578**	0.261	NS	**0.835**	**0.835**	**4.66**	0.0795	<0.06
Lead	0.015	b	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	NS	<0.003	<0.003	0.00321	<0.003	<0.003
Magnesium	--		9.04	7.95	10.5	7.05	14.8	43.9	9.72	20.5	27.3	NS	10.2	11.7	37.2	7.56	34.3
Manganese	0.3	a, b	0.18	0.119	0.139	0.275	**9.08**	**5.99**	**0.635**	0.184	**1.91**	NS	**1.33**	0.166	**4.86**	0.0636	**4.39**
Mercury	0.0007	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Nickel	0.1	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Potassium	--		<5	<5	<5	<5	11.4	<5	<5	<5	<5	NS	<5	<5	<5	<5	<5
Sodium	20	a, b	<5	<5	13.2	**27**	**22.1**	**55.3**	5.9	11.1	16.7	NS	19.5	18.3	**114**	5.23	**104**
Selenium	0.01	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Silver	0.05	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Thallium	0.002	b	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Vanadium	--		--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--
Zinc	5	b	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	--

a - Part 703 Water Quality Standard (assumes Class GA waters
b - Part 5 Drinking Water MCL

-- not analyzed
NS - not sampled

OB = overburden well
BR = Bedrock well

1.23 indicates contravention of standard.

Appendix A

Analytical Laboratory Results and Internal Quality Control Summary

Quarter 3 2011

Cortland County Towslee Landfill

Upstate Laboratories, Inc.

Shipping: 6034 Corporate Dr. * E. Syracuse, NY 13057-1017 * (315) 437-0255 * Fax (315) 437-1209
Mailing: Box 169 * Syracuse, NY 13206
Albany (518) 459-3134 * Binghamton (607) 724-0478 * Buffalo (716) 972-0371
Rochester (866) 437-0255 * New Jersey (908) 581-4285

Mr. Patrick Reidy
Cortland Co. Soil and Water Cons. Dist.
100 Grange Place
Room 202
Cortland, New York 13045

October 19, 2011

RE: Towslee Landfill, Cortlandville, New York,
Samples Collected September 20, 21 and 23, 2011
Case Narrative for ULI SDG Number COR52, Workorder #U1109504

The following is a New York State Department of Environmental Conservation Analytical Services Protocol (NYSDEC ASP) Category A case narrative for the above referenced project. The test results were subject to an internal validation as described below:

Internal Validation

For each test, the chemist sorted the samples into batches of twenty samples or less and added quality control (QC) samples. The batches were analyzed by USEPA and NYSDEC approved test procedures (Table 1). During the course of the analyses the chemist compared the quality control test results to performance criteria and (if necessary) took corrective actions. At the end of the analysis, the data was assembled into data packages and submitted to the section supervisor for review and approval. On the cover of each data package the analyst described any anomaly that may have occurred and, if it did occur, why the data was still found acceptable. A summary of the comments on the cover sheet of each test from each laboratory follows:

Trace Metals

Test	Batch	Anomaly
Cd,Ca,Fe,Mg,Mn,K,Na	R65453	The CCV recoveries for Potassium were above QC acceptance limits. The initial ICSAB recovery for Calcium was slightly above QC acceptance limits. The Duplicate %RPD for Iron was outside QC acceptance limits for the Duplicate performed on sample location MW-4A. All other criteria were satisfied.
Pb	R65443	The CCV1 recovery for Lead was slightly below QC acceptance limits. All other criteria were satisfied.

Wet Chemistry

Test	Batch	Anomaly
BOD	R65374	Criteria were satisfied.
	R65501	Criteria were satisfied.
TDS	R65274	Criteria were satisfied.
	R65297	Criteria were satisfied.
	R65432	Criteria were satisfied.

The total number of pages in this Data Package is : 4 .

Wet Chemistry

Test	Batch	Anomaly
COD	R65273	The CCV3 recovery for COD was slightly above QC acceptance limits. All other criteria were satisfied.
	R65349	The MS/MSD analysis for sample location MW-4A was inadvertently missed for COD by the analyst. All other criteria were satisfied.
	R65484	The ICV recovery for COD was above QC acceptance limits. All other criteria were satisfied.
Nitrate-Nitrogen	R65199	Criteria were satisfied.
	R65289	Criteria were satisfied.
	R65506	Criteria were satisfied.
TKN	R65562	Criteria were satisfied.
	R65615	Criteria were satisfied.
	R65737	Criteria were satisfied.
	R65813	Criteria were satisfied.
Alkalinity, Total	R65320	Criteria were satisfied.
	R65578	Total Alkalinity was detected at concentrations above the CRDL in CCB1 and CCB2. All other criteria were satisfied.
Chloride	R65321	Criteria were satisfied.
	R65491	Chloride was detected at concentrations above the CRDL in CCB1 and CCB2. All other criteria were satisfied.
Ammonia-Nitrogen	R65562	Criteria were satisfied.
	R65737	The MS/MSD recoveries for Ammonia were above QC acceptance limits for the MS/MSD performed on sample location MW-4A. All other criteria were satisfied.
	R65803	Criteria were satisfied.
	R65813	Criteria were satisfied.
Phenols, Total	R65300	Criteria were satisfied.
	R65425	The ICV and CCV4 recoveries for Total Phenols were slightly outside QC acceptance limits. All other criteria were satisfied.
	R65499	Criteria were satisfied.
	R65630	Criteria were satisfied.

Wet Chemistry

Test	Batch	Anomaly
Bromide	R65504	Criteria were satisfied.
	R65863	Criteria were satisfied.
Sulfate	R65259	Criteria were satisfied.
	R65536	Criteria were satisfied.
TOC	R65639	Criteria were satisfied.
	R65694	The CCV5 recovery for TOC was below QC acceptance limits. All other criteria were satisfied.

Should questions arise please do not hesitate to call the Environmental Project Coordinator (EPC) assigned to your job or myself.

I certify that this data package is in compliance with the terms and conditions of the Contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and/or in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Sincerely,
UPSTATE LABORATORIES, INC.

Anthony J. Scala
Director

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Table 1
Methodologies

The analyses were performed using test methods developed by the USEPA and reorganized by the NYSDEC in the Analytical Services Protocol (ASP). The specific method numbers are:

Parameter	Method	Reference
Cadmium	200.7	(1)
Calcium	200.7	(1)
Iron	200.7	(1)
Lead	200.8	(1)
Magnesium	200.7	(1)
Manganese	200.7	(1)
Potassium	200.7	(1)
Sodium	200.7	(1)
BOD	SM 5210B	(1)
Nitrate-Nitrogen	10-107-04-1C	(1)
Alkalinity, Total	310.2	(1)
Chloride	10-117-07-1A	(1)
COD	410.4	(1)
Ammonia-Nitrogen	10-107-06-1B	(1)
Sulfate	D516-90	(1)
TDS	SM 2540C	(1)
TKN	10-107-06-2	(1)
TOC	SM 5310B	(1)
Phenols	10-210-00-1A	(1)
Bromide	SM 4110B	(1)

Reference
1) New York State Department of Environmental Conservation Analytical Services Protocol (NYSDEC ASP), 7/05 Revision

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: CD-1
Lab Order: U1109504
Collection Date: 9/20/2011 11:58:00 AM
Project: Towslee Landfill
Lab ID: U1109504-001
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FIELD**		Analyst:
Conductivity	303	1.0		umhos/cm		9/20/2011 11:58:00 AM
Eh	152	-300		mV		9/20/2011 11:58:00 AM
pH	8.20	2-12.5		SU		9/20/2011 11:58:00 AM
Temperature	19.1			°C		9/20/2011 11:58:00 AM
Turbidity	9.58	5.0		NTU		9/20/2011 11:58:00 AM
BROMIDE BY SM 18-21 4110B (00)				**BROMIDE_W**		Analyst: **BY**
Bromide	ND	8.0		mg/L	10	9/30/2011
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL BY NYSDEC ASP 2005				**200.7WTASP**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	9/29/2011 10:29:22 AM
Calcium	45200	5000		µg/L	1	9/29/2011 10:29:22 AM
Iron	126	60.0		µg/L	1	9/29/2011 10:29:22 AM
Magnesium	9040	5000		µg/L	1	9/29/2011 10:29:22 AM
Manganese	180	10.0		µg/L	1	9/29/2011 10:29:22 AM
Potassium	ND	5000		µg/L	1	9/29/2011 10:29:22 AM
Sodium	ND	5000		µg/L	1	9/29/2011 10:29:22 AM
Hardness, Total(CaCO3)	150000	7000		µg/L	1	9/29/2011 10:29:22 AM
ASP TOTAL METALS BY ICP-MS				**200.8ASP**	**(E200.8)**	Analyst: **LJ**
Lead	ND	3.00		µg/L	1	9/29/2011 8:45:00 AM
ALKALINITY BY EPA 310.2				**ALK_W_AUTO**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	130	10		mg/L	1	9/23/2011
BOD, 5 DAY BY SM 18-20 5210B (01)				**BOD**		Analyst: **CAS**
Biochemical Oxygen Demand	ND	4.0		mg/L	1	9/21/2011 8:17:00 AM
CHLORIDE WATERS BY LACHAT 10-117-07-1 A				**CL_W_AUTO**		Analyst: **BY**
Chloride	1.41	1.00		mg/L	1	9/23/2011
COD BY EPA 410.4 REV. 2.0				**COD**		Analyst: **KLS**
Chemical Oxygen Demand	ND	20		mg/L	1	9/22/2011
NH3 BY LACHAT 10-107-06-1-B				**NH3_W_AUTO**		Analyst: **GWL**
Nitrogen, Ammonia (As N)	ND	0.500		mg/L	1	10/3/2011
NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C				**NO3_W**		Analyst: **SAB**
Nitrogen, Nitrate (as N)	0.054	0.050		mg/L	1	9/21/2011 9:56:00 AM
PHENOLICS, TOTAL BY LACHAT 10-210-00-1A				**PHENOL_W**	**(E420.4)**	Analyst: **SAB**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	9/22/2011 2:59:00 PM

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	CD-1
Lab Order:	U1109504	**Collection Date:**	9/20/2011 11:58:00 AM
Project:	Towslee Landfill		
Lab ID:	U1109504-001	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE BY ASTM D516-90, 02 & 07				**SULFATE_W**		Analyst: **CAS**
Sulfate	10.8	5.00		mg/L	1	9/22/2011
TDS BY SM 18-21 2540C (97)				**TDS**		Analyst: **SAB**
Residue, Dissolved (TDS)	220	25		mg/L	1	9/21/2011
TKN BY LACHAT 10-107-06-2				**TKN_W_AUTO**	**(E351.2)**	Analyst: **GWL**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	10/3/2011
TOC BY SM 18-21 5310B (00)				**TOC_W**		Analyst: **BY**
Organic Carbon, Total	ND	3.0		mg/L	1	10/3/2011

Approved By: PH **Date:** 10/18/11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: CD-1RA
Lab Order: U1109504
Collection Date: 9/20/2011 12:13:00 PM
Project: Towslee Landfill
Lab ID: U1109504-002
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS			**FIELD**			Analyst:
Conductivity	343	1.0		umhos/cm		9/20/2011 12:13:00 PM
Eh	146	-300		mV		9/20/2011 12:13:00 PM
pH	8.29	2-12.5		SU		9/20/2011 12:13:00 PM
Temperature	20.3			°C		9/20/2011 12:13:00 PM
Turbidity	53.0	5.0		NTU		9/20/2011 12:13:00 PM
BROMIDE BY SM 18-21 4110B (00)			**BROMIDE_W**			Analyst: **BY**
Bromide	ND	8.0		mg/L	10	9/30/2011
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL BY NYSDEC ASP 2005			**200.7WTASP**		**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	9/29/2011 10:36:04 AM
Calcium	41000	5000		µg/L	1	9/29/2011 10:36:04 AM
Iron	662	60.0		µg/L	1	9/29/2011 10:36:04 AM
Magnesium	7950	5000		µg/L	1	9/29/2011 10:36:04 AM
Manganese	119	10.0		µg/L	1	9/29/2011 10:36:04 AM
Potassium	ND	5000		µg/L	1	9/29/2011 10:36:04 AM
Sodium	ND	5000		µg/L	1	9/29/2011 10:36:04 AM
Hardness, Total(CaCO3)	135000	7000		µg/L	1	9/29/2011 10:36:04 AM
ASP TOTAL METALS BY ICP-MS			**200.8ASP**		**(E200.8)**	Analyst: **LJ**
Lead	ND	3.00		µg/L	1	9/29/2011 8:45:00 AM
ICP METALS, DISSOLVED BY NYSDEC ASP 2005			**200.7WDASP**		**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	9/29/2011 9:56:46 AM
Calcium	41000	5000		µg/L	1	9/29/2011 9:56:46 AM
Iron	79.5	60.0		µg/L	1	9/29/2011 9:56:46 AM
Magnesium	7560	5000		µg/L	1	9/29/2011 9:56:46 AM
Manganese	63.6	10.0		µg/L	1	9/29/2011 9:56:46 AM
Potassium	ND	5000		µg/L	1	9/29/2011 9:56:46 AM
Sodium	5230	5000		µg/L	1	9/29/2011 9:56:46 AM
NOTES: Dissolved value may be higher than total, however, the values are within experimental error. Dissolved Metals filtered in Laboratory. 9/28/11 8AM						
ICPMS METALS, DISSOLVED BY NYSDEC ASP 2005			**200.8_D_ASP**		**(E200.8)**	Analyst: **LJ**
Lead	ND	3.00		µg/L	1	9/29/2011 8:45:00 AM
ALKALINITY BY EPA 310.2			**ALK_W_AUTO**			Analyst: **BY**
Alkalinity, Total (As CaCO3)	120	10		mg/L	1	9/23/2011

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: CD-1RA
Lab Order: U1109504
Collection Date: 9/20/2011 12:13:00 PM
Project: Towslee Landfill
Lab ID: U1109504-002
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
BOD, 5 DAY BY SM 18-20 5210B (01)				**BOD**		Analyst: **CAS**
Biochemical Oxygen Demand	5.0	4.0		mg/L	1	9/21/2011 8:17:00 AM
CHLORIDE WATERS BY LACHAT 10-117-07-1 A				**CL_W_AUTO**		Analyst: **BY**
Chloride	2.20	1.00		mg/L	1	9/23/2011
COD BY EPA 410.4 REV. 2.0				**COD**		Analyst: **KLS**
Chemical Oxygen Demand	ND	20		mg/L	1	9/22/2011
NH3 BY LACHAT 10-107-06-1-B				**NH3_W_AUTO**		Analyst: **GWL**
Nitrogen, Ammonia (As N)	ND	0.500		mg/L	1	10/3/2011
NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C				**NO3_W**		Analyst: **SAB**
Nitrogen, Nitrate (as N)	0.054	0.050		mg/L	1	9/21/2011 9:56:00 AM
PHENOLICS, TOTAL BY LACHAT 10-210-00-1A				**PHENOL_W**	**(E420.4)**	Analyst: **SAB**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	9/28/2011 1:29:00 PM
SULFATE BY ASTM D516-90, 02 & 07				**SULFATE_W**		Analyst: **CAS**
Sulfate	17.3	5.00		mg/L	1	9/22/2011
TDS BY SM 18-21 2540C (97)				**TDS**		Analyst: **SAB**
Residue, Dissolved (TDS)	180	25		mg/L	1	9/21/2011
TKN BY LACHAT 10-107-06-2				**TKN_W_AUTO**	**(E351.2)**	Analyst: **GWL**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	10/3/2011
TOC BY SM 18-21 5310B (00)				**TOC_W**		Analyst: **BY**
Organic Carbon, Total	ND	3.0		mg/L	1	10/3/2011

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-1A
Lab Order: U1109504
Collection Date: 9/20/2011 1:12:00 PM
Project: Towslee Landfill
Lab ID: U1109504-003
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FIELD**		Analyst:
Conductivity	372	1.0		umhos/cm		9/20/2011 1:12:00 PM
Eh	160	-300		mV		9/20/2011 1:12:00 PM
pH	7.96	2-12.5		SU		9/20/2011 1:12:00 PM
Temperature	17.9			°C		9/20/2011 1:12:00 PM
Turbidity	20.89	5.0		NTU		9/20/2011 1:12:00 PM
BROMIDE BY SM 18-21 4110B (00)				**BROMIDE_W**		Analyst: **BY**
Bromide	ND	8.0		mg/L	10	9/30/2011
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL BY NYSDEC ASP 2005				**200.7WTASP**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	9/29/2011 10:42:43 AM
Calcium	51500	5000		µg/L	1	9/29/2011 10:42:43 AM
Iron	872	60.0		µg/L	1	9/29/2011 10:42:43 AM
Magnesium	10500	5000		µg/L	1	9/29/2011 10:42:43 AM
Manganese	139	10.0		µg/L	1	9/29/2011 10:42:43 AM
Potassium	ND	5000		µg/L	1	9/29/2011 10:42:43 AM
Sodium	13200	5000		µg/L	1	9/29/2011 10:42:43 AM
Hardness, Total(CaCO3)	172000	7000		µg/L	1	9/29/2011 10:42:43 AM
ASP TOTAL METALS BY ICP-MS				**200.8ASP**	**(E200.8)**	Analyst: **LJ**
Lead	ND	3.00		µg/L	1	9/29/2011 8:45:00 AM
ALKALINITY BY EPA 310.2				**ALK_W_AUTO**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	130	10		mg/L	1	9/23/2011
BOD, 5 DAY BY SM 18-20 5210B (01)				**BOD**		Analyst: **CAS**
Biochemical Oxygen Demand	ND	4.0		mg/L	1	9/21/2011 8:17:00 AM
CHLORIDE WATERS BY LACHAT 10-117-07-1 A				**CL_W_AUTO**		Analyst: **BY**
Chloride	32.1	1.00		mg/L	1	9/23/2011
COD BY EPA 410.4 REV. 2.0				**COD**		Analyst: **KLS**
Chemical Oxygen Demand	ND	20		mg/L	1	9/22/2011
NH3 BY LACHAT 10-107-06-1-B				**NH3_W_AUTO**		Analyst: **GWL**
Nitrogen, Ammonia (As N)	ND	0.500		mg/L	1	10/3/2011
NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C				**NO3_W**		Analyst: **SAB**
Nitrogen, Nitrate (as N)	ND	0.050		mg/L	1	9/21/2011 9:56:00 AM
PHENOLICS, TOTAL BY LACHAT 10-210-00-1A				**PHENOL_W**	**(E420.4)**	Analyst: **SAB**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	9/22/2011 2:59:00 PM

Approved By: *PH* **Date:** *10-18-11*

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-1A
Lab Order:	U1109504	**Collection Date:**	9/20/2011 1:12:00 PM
Project:	Towslee Landfill		
Lab ID:	U1109504-003	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE BY ASTM D516-90, 02 & 07				**SULFATE_W**		Analyst: **CAS**
Sulfate	14.1	5.00		mg/L	1	9/22/2011
TDS BY SM 18-21 2540C (97)				**TDS**		Analyst: **SAB**
Residue, Dissolved (TDS)	220	25		mg/L	1	9/21/2011
TKN BY LACHAT 10-107-06-2				**TKN_W_AUTO**	**(E351.2)**	Analyst: **GWL**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	10/3/2011
TOC BY SM 18-21 5310B (00)				**TOC_W**		Analyst: **BY**
Organic Carbon, Total	ND	3.0		mg/L	1	10/3/2011

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-1B
Lab Order: U1109504
Collection Date: 9/20/2011 1:28:00 PM
Project: Towslee Landfill
Lab ID: U1109504-004
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FIELD**		Analyst:
Conductivity	215	1.0		umhos/cm		9/20/2011 1:28:00 PM
Eh	157	-300		mV		9/20/2011 1:28:00 PM
pH	8.13	2-12.5		SU		9/20/2011 1:28:00 PM
Temperature	17.7			°C		9/20/2011 1:28:00 PM
Turbidity	5.69	5.0		NTU		9/20/2011 1:28:00 PM
BROMIDE BY SM 18-21 4110B (00)				**BROMIDE_W**		Analyst: **BY**
Bromide	ND	0.8		mg/L	1	9/30/2011
ICP METALS, TOTAL BY NYSDEC ASP 2005				**200.7WTASP**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	9/29/2011 10:49:23 AM
Calcium	34300	5000		µg/L	1	9/29/2011 10:49:23 AM
Iron	121	60.0		µg/L	1	9/29/2011 10:49:23 AM
Magnesium	7050	5000		µg/L	1	9/29/2011 10:49:23 AM
Manganese	275	10.0		µg/L	1	9/29/2011 10:49:23 AM
Potassium	ND	5000		µg/L	1	9/29/2011 10:49:23 AM
Sodium	27000	5000		µg/L	1	9/29/2011 10:49:23 AM
Hardness, Total(CaCO3)	115000	7000		µg/L	1	9/29/2011 10:49:23 AM
ASP TOTAL METALS BY ICP-MS				**200.8ASP**	**(E200.8)**	Analyst: **LJ**
Lead	ND	3.00		µg/L	1	9/29/2011 8:45:00 AM
ALKALINITY BY EPA 310.2				**ALK_W_AUTO**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	100	10		mg/L	1	9/23/2011
BOD, 5 DAY BY SM 18-20 5210B (01)				**BOD**		Analyst: **CAS**
Biochemical Oxygen Demand	ND	4.0		mg/L	1	9/21/2011 8:17:00 AM
CHLORIDE WATERS BY LACHAT 10-117-07-1 A				**CL_W_AUTO**		Analyst: **BY**
Chloride	3.40	1.00		mg/L	1	9/23/2011
COD BY EPA 410.4 REV. 2.0				**COD**		Analyst: **KLS**
Chemical Oxygen Demand	ND	20		mg/L	1	9/22/2011
NH3 BY LACHAT 10-107-06-1-B				**NH3_W_AUTO**		Analyst: **GWL**
Nitrogen, Ammonia (As N)	ND	0.500		mg/L	1	10/3/2011
NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C				**NO3_W**		Analyst: **SAB**
Nitrogen, Nitrate (as N)	ND	0.050		mg/L	1	9/21/2011 9:56:00 AM
PHENOLICS, TOTAL BY LACHAT 10-210-00-1A				**PHENOL_W**	**(E420.4)**	Analyst: **SAB**
Phenolics, Total Recoverable	ND	0.050		mg/L	10	9/28/2011 1:29:00 PM

NOTES:
The reporting limits were raised due to matrix interference.

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-1B
Lab Order:	U1109504	**Collection Date:**	9/20/2011 1:28:00 PM
Project:	Towslee Landfill		
Lab ID:	U1109504-004	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE BY ASTM D516-90, 02 & 07				**SULFATE_W**		Analyst: **CAS**
Sulfate	ND	5.00		mg/L	1	9/22/2011
TDS BY SM 18-21 2540C (97)				**TDS**		Analyst: **SAB**
Residue, Dissolved (TDS)	140	25		mg/L	1	9/21/2011
TKN BY LACHAT 10-107-06-2				**TKN_W_AUTO**	**(E351.2)**	Analyst: **GWL**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	10/3/2011
TOC BY SM 18-21 5310B (00)				**TOC_W**		Analyst: **BY**
Organic Carbon, Total	ND	3.0		mg/L	1	10/3/2011

Approved By: DH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-2A
Lab Order:	U1109504	**Collection Date:**	9/20/2011 2:00:00 PM
Project:	Towslee Landfill		
Lab ID:	U1109504-005	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FIELD**		Analyst:
Conductivity	653	1.0		umhos/cm		9/20/2011 2:00:00 PM
Eh	-47	-300		mV		9/20/2011 2:00:00 PM
pH	7.04	2-12.5		SU		9/20/2011 2:00:00 PM
Temperature	18.4			°C		9/20/2011 2:00:00 PM
Turbidity	40.12	5.0		NTU		9/20/2011 2:00:00 PM
BROMIDE BY SM 18-21 4110B (00)				**BROMIDE_W**		Analyst: **BY**
Bromide	ND	8.0		mg/L	10	9/30/2011
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL BY NYSDEC ASP 2005				**200.7WTASP**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	9/29/2011 10:56:09 AM
Calcium	76900	5000		µg/L	1	9/29/2011 10:56:09 AM
Iron	5340	60.0		µg/L	1	9/29/2011 10:56:09 AM
Magnesium	14800	5000		µg/L	1	9/29/2011 10:56:09 AM
Manganese	9080	10.0		µg/L	1	9/29/2011 10:56:09 AM
Potassium	11400	5000		µg/L	1	9/29/2011 10:56:09 AM
Sodium	22100	5000		µg/L	1	9/29/2011 10:56:09 AM
Hardness, Total(CaCO3)	253000	7000		µg/L	1	9/29/2011 10:56:09 AM
ASP TOTAL METALS BY ICP-MS				**200.8ASP**	**(E200.8)**	Analyst: **LJ**
Lead	ND	3.00		µg/L	1	9/29/2011 8:45:00 AM
ALKALINITY BY EPA 310.2				**ALK_W_AUTO**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	300	10		mg/L	1	9/23/2011
BOD, 5 DAY BY SM 18-20 5210B (01)				**BOD**		Analyst: **CAS**
Biochemical Oxygen Demand	9.0	4.0		mg/L	1	9/21/2011 8:17:00 AM
CHLORIDE WATERS BY LACHAT 10-117-07-1 A				**CL_W_AUTO**		Analyst: **BY**
Chloride	16.2	1.00		mg/L	1	9/23/2011
COD BY EPA 410.4 REV. 2.0				**COD**		Analyst: **KLS**
Chemical Oxygen Demand	ND	20		mg/L	1	9/22/2011
NH3 BY LACHAT 10-107-06-1-B				**NH3_W_AUTO**		Analyst: **GWL**
Nitrogen, Ammonia (As N)	5.16	0.500		mg/L	1	10/11/2011
NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C				**NO3_W**		Analyst: **SAB**
Nitrogen, Nitrate (as N)	0.065	0.050		mg/L	1	9/21/2011 9:56:00 AM
PHENOLICS, TOTAL BY LACHAT 10-210-00-1A				**PHENOL_W**	**(E420.4)**	Analyst: **SAB**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	9/28/2011 1:29:00 PM

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-2A
Lab Order:	U1109504	**Collection Date:**	9/20/2011 2:00:00 PM
Project:	Towslee Landfill		
Lab ID:	U1109504-005	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE BY ASTM D516-90, 02 & 07				**SULFATE_W**		Analyst: **CAS**
Sulfate	ND	5.00		mg/L	1	9/22/2011
TDS BY SM 18-21 2540C (97)				**TDS**		Analyst: **SAB**
Residue, Dissolved (TDS)	340	25		mg/L	1	9/21/2011
TKN BY LACHAT 10-107-06-2				**TKN_W_AUTO**	**(E351.2)**	Analyst: **GWL**
Nitrogen, Kjeldahl, Total	9.52	0.500		mg/L	1	10/3/2011
TOC BY SM 18-21 5310B (00)				**TOC_W**		Analyst: **BY**
Organic Carbon, Total	5.1	3.0		mg/L	1	10/3/2011

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-2B
Lab Order:	U1109504	**Collection Date:**	9/20/2011 2:16:00 PM
Project:	Towslee Landfill		
Lab ID:	U1109504-006	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FIELD**		Analyst:
Conductivity	1428	1.0		umhos/cm		9/20/2011 2:16:00 PM
Eh	-2	-300		mV		9/20/2011 2:16:00 PM
pH	6.93	2-12.5		SU		9/20/2011 2:16:00 PM
Temperature	18.0			°C		9/20/2011 2:16:00 PM
Turbidity	8.77	5.0		NTU		9/20/2011 2:16:00 PM
BROMIDE BY SM 18-21 4110B (00)				**BROMIDE_W**		Analyst: **BY**
Bromide	ND	8.0		mg/L	10	10/8/2011
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL BY NYSDEC ASP 2005				**200.7WTASP**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	9/29/2011 11:15:12 AM
Calcium	237000	5000		µg/L	1	9/29/2011 11:15:12 AM
Iron	276	60.0		µg/L	1	9/29/2011 11:15:12 AM
Magnesium	43900	5000		µg/L	1	9/29/2011 11:15:12 AM
Manganese	5990	10.0		µg/L	1	9/29/2011 11:15:12 AM
Potassium	ND	5000		µg/L	1	9/29/2011 11:15:12 AM
Sodium	55300	5000		µg/L	1	9/29/2011 11:15:12 AM
Hardness, Total(CaCO3)	773000	7000		µg/L	1	9/29/2011 11:15:12 AM
ASP TOTAL METALS BY ICP-MS				**200.8ASP**	**(E200.8)**	Analyst: **LJ**
Lead	ND	3.00		µg/L	1	9/29/2011 8:45:00 AM
ALKALINITY BY EPA 310.2				**ALK_W_AUTO**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	630	100		mg/L	10	9/23/2011
BOD, 5 DAY BY SM 18-20 5210B (01)				**BOD**		Analyst: **CAS**
Biochemical Oxygen Demand	ND	4.0		mg/L	1	9/21/2011 8:17:00 AM
CHLORIDE WATERS BY LACHAT 10-117-07-1 A				**CL_W_AUTO**		Analyst: **BY**
Chloride	108	1.00		mg/L	1	9/23/2011
COD BY EPA 410.4 REV. 2.0				**COD**		Analyst: **KLS**
Chemical Oxygen Demand	ND	20		mg/L	1	9/22/2011
NH3 BY LACHAT 10-107-06-1-B				**NH3_W_AUTO**		Analyst: **GWL**
Nitrogen, Ammonia (As N)	ND	0.500		mg/L	1	10/11/2011
NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C				**NO3_W**		Analyst: **SAB**
Nitrogen, Nitrate (as N)	ND	0.050		mg/L	1	9/21/2011 9:56:00 AM
PHENOLICS, TOTAL BY LACHAT 10-210-00-1A				**PHENOL_W**	**(E420.4)**	Analyst: **SAB**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	9/28/2011 1:29:00 PM

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-2B
Lab Order:	U1109504	**Collection Date:**	9/20/2011 2:16:00 PM
Project:	Towslee Landfill		
Lab ID:	U1109504-006	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE BY ASTM D516-90, 02 & 07				**SULFATE_W**		Analyst: **CAS**
Sulfate	ND	5.00		mg/L	1	9/22/2011
TDS BY SM 18-21 2540C (97)				**TDS**		Analyst: **SAB**
Residue, Dissolved (TDS)	890	25		mg/L	1	9/21/2011
TKN BY LACHAT 10-107-06-2				**TKN_W_AUTO**	**(E351.2)**	Analyst: **GWL**
Nitrogen, Kjeldahl, Total	1.95	0.500		mg/L	1	10/3/2011
TOC BY SM 18-21 5310B (00)				**TOC_W**		Analyst: **BY**
Organic Carbon, Total	5.4	3.0		mg/L	1	10/3/2011

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-3A
Lab Order: U1109504
Collection Date: 9/20/2011 12:36:00 PM
Project: Towslee Landfill
Lab ID: U1109504-007
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FIELD**		Analyst:
Conductivity	361	1.0		umhos/cm		9/20/2011 12:36:00 PM
Eh	159	-300		mV		9/20/2011 12:36:00 PM
pH	7.38	2-12.5		SU		9/20/2011 12:36:00 PM
Temperature	17.4			°C		9/20/2011 12:36:00 PM
Turbidity	4.39	5.0		NTU		9/20/2011 12:36:00 PM
BROMIDE BY SM 18-21 4110B (00)				**BROMIDE_W**		Analyst: **BY**
Bromide	ND	8.0		mg/L	10	9/30/2011
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL BY NYSDEC ASP 2005				**200.7WTASP**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	9/29/2011 11:22:05 AM
Calcium	58900	5000		µg/L	1	9/29/2011 11:22:05 AM
Iron	121	60.0		µg/L	1	9/29/2011 11:22:05 AM
Magnesium	9720	5000		µg/L	1	9/29/2011 11:22:05 AM
Manganese	635	10.0		µg/L	1	9/29/2011 11:22:05 AM
Potassium	ND	5000		µg/L	1	9/29/2011 11:22:05 AM
Sodium	5900	5000		µg/L	1	9/29/2011 11:22:05 AM
Hardness, Total(CaCO3)	187000	7000		µg/L	1	9/29/2011 11:22:05 AM
ASP TOTAL METALS BY ICP-MS				**200.8ASP**	**(E200.8)**	Analyst: **LJ**
Lead	ND	3.00		µg/L	1	9/29/2011 8:45:00 AM
ALKALINITY BY EPA 310.2				**ALK_W_AUTO**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	180	10		mg/L	1	9/23/2011
BOD, 5 DAY BY SM 18-20 5210B (01)				**BOD**		Analyst: **CAS**
Biochemical Oxygen Demand	ND	4.0		mg/L	1	9/21/2011 8:17:00 AM
CHLORIDE WATERS BY LACHAT 10-117-07-1 A				**CL_W_AUTO**		Analyst: **BY**
Chloride	4.03	1.00		mg/L	1	9/23/2011
COD BY EPA 410.4 REV. 2.0				**COD**		Analyst: **KLS**
Chemical Oxygen Demand	ND	20		mg/L	1	9/22/2011
NH3 BY LACHAT 10-107-06-1-B				**NH3_W_AUTO**		Analyst: **GWL**
Nitrogen, Ammonia (As N)	ND	0.500		mg/L	1	10/11/2011
NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C				**NO3_W**		Analyst: **SAB**
Nitrogen, Nitrate (as N)	ND	0.050		mg/L	1	9/21/2011 9:56:00 AM
PHENOLICS, TOTAL BY LACHAT 10-210-00-1A				**PHENOL_W**	**(E420.4)**	Analyst: **SAB**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	9/28/2011 1:29:00 PM

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-3A
Lab Order:	U1109504	**Collection Date:**	9/20/2011 12:36:00 PM
Project:	Towslee Landfill		
Lab ID:	U1109504-007	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE BY ASTM D516-90, 02 & 07			**SULFATE_W**			Analyst: **CAS**
Sulfate	ND	5.00		mg/L	1	9/22/2011
TDS BY SM 18-21 2540C (97)			**TDS**			Analyst: **SAB**
Residue, Dissolved (TDS)	260	25		mg/L	1	9/21/2011
TKN BY LACHAT 10-107-06-2			**TKN_W_AUTO**		**(E351.2)**	Analyst: **GWL**
Nitrogen, Kjeldahl, Total	0.508	0.500		mg/L	1	10/3/2011
TOC BY SM 18-21 5310B (00)			**TOC_W**			Analyst: **BY**
Organic Carbon, Total	3.1	3.0		mg/L	1	10/3/2011

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-3B
Lab Order: U1109504
Collection Date: 9/20/2011 12:53:00 PM
Project: Towslee Landfill
Lab ID: U1109504-008
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FIELD**		Analyst:
Conductivity	494	1.0		umhos/cm		9/20/2011 12:53:00 PM
Eh	158	-300		mV		9/20/2011 12:53:00 PM
pH	7.68	2-12.5		SU		9/20/2011 12:53:00 PM
Temperature	17.1			°C		9/20/2011 12:53:00 PM
Turbidity	25.0	5.0		NTU		9/20/2011 12:53:00 PM
BROMIDE BY SM 18-21 4110B (00)				**BROMIDE_W**		Analyst: **BY**
Bromide	ND	0.8		mg/L	1	9/30/2011
ICP METALS, TOTAL BY NYSDEC ASP 2005				**200.7WTASP**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	9/29/2011 11:28:46 AM
Calcium	75800	5000		µg/L	1	9/29/2011 11:28:46 AM
Iron	578	60.0		µg/L	1	9/29/2011 11:28:46 AM
Magnesium	20500	5000		µg/L	1	9/29/2011 11:28:46 AM
Manganese	184	10.0		µg/L	1	9/29/2011 11:28:46 AM
Potassium	ND	5000		µg/L	1	9/29/2011 11:28:46 AM
Sodium	11100	5000		µg/L	1	9/29/2011 11:28:46 AM
Hardness, Total(CaCO3)	274000	7000		µg/L	1	9/29/2011 11:28:46 AM
ASP TOTAL METALS BY ICP-MS				**200.8ASP**	**(E200.8)**	Analyst: **LJ**
Lead	ND	3.00		µg/L	1	9/29/2011 8:45:00 AM
ALKALINITY BY EPA 310.2				**ALK_W_AUTO**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	240	10		mg/L	1	9/23/2011
BOD, 5 DAY BY SM 18-20 5210B (01)				**BOD**		Analyst: **CAS**
Biochemical Oxygen Demand	6.0	4.0		mg/L	1	9/21/2011 8:17:00 AM
CHLORIDE WATERS BY LACHAT 10-117-07-1 A				**CL_W_AUTO**		Analyst: **BY**
Chloride	23.7	1.00		mg/L	1	9/23/2011
COD BY EPA 410.4 REV. 2.0				**COD**		Analyst: **KLS**
Chemical Oxygen Demand	ND	20		mg/L	1	9/22/2011
NH3 BY LACHAT 10-107-06-1-B				**NH3_W_AUTO**		Analyst: **GWL**
Nitrogen, Ammonia (As N)	ND	0.500		mg/L	1	10/3/2011
NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C				**NO3_W**		Analyst: **SAB**
Nitrogen, Nitrate (as N)	ND	0.050		mg/L	1	9/21/2011 9:56:00 AM
PHENOLICS, TOTAL BY LACHAT 10-210-00-1A				**PHENOL_W**	**(E420.4)**	Analyst: **SAB**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	9/28/2011 1:29:00 PM
SULFATE BY ASTM D516-90, 02 & 07				**SULFATE_W**		Analyst: **CAS**

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-3B
Lab Order:	U1109504	**Collection Date:**	9/20/2011 12:53:00 PM
Project:	Towslee Landfill		
Lab ID:	U1109504-008	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE BY ASTM D516-90, 02 & 07				**SULFATE_W**		Analyst: **CAS**
Sulfate	7.90	5.00		mg/L	1	9/22/2011
TDS BY SM 18-21 2540C (97)				**TDS**		Analyst: **SAB**
Residue, Dissolved (TDS)	310	25		mg/L	1	9/21/2011
TKN BY LACHAT 10-107-06-2				**TKN_W_AUTO**	**(E351.2)**	Analyst: **GWL**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	10/3/2011
TOC BY SM 18-21 5310B (00)				**TOC_W**		Analyst: **BY**
Organic Carbon, Total	ND	3.0		mg/L	1	10/3/2011

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-4A
Lab Order: U1109504
Collection Date: 9/20/2011 12:19:00 PM
Project: Towslee Landfill
Lab ID: U1109504-009
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FIELD**		Analyst:
Conductivity	789	1.0		umhos/cm		9/20/2011 12:19:00 PM
Eh	174	-300		mV		9/20/2011 12:19:00 PM
pH	7.36	2-12.5		SU		9/20/2011 12:19:00 PM
Temperature	17.5			°C		9/20/2011 12:19:00 PM
Turbidity	5.86	5.0		NTU		9/20/2011 12:19:00 PM
BROMIDE BY SM 18-21 4110B (00)				**BROMIDE_W**		Analyst: **BY**
Bromide	ND	0.8		mg/L	1	9/30/2011
ICP METALS, TOTAL BY NYSDEC ASP 2005				**200.7WTASP**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	9/29/2011 11:35:30 AM
Calcium	153000	5000		µg/L	1	9/29/2011 11:35:30 AM
Iron	261	60.0		µg/L	1	9/29/2011 11:35:30 AM
Magnesium	27300	5000		µg/L	1	9/29/2011 11:35:30 AM
Manganese	1910	10.0		µg/L	1	9/29/2011 11:35:30 AM
Potassium	ND	5000		µg/L	1	9/29/2011 11:35:30 AM
Sodium	16700	5000		µg/L	1	9/29/2011 11:35:30 AM
Hardness, Total(CaCO3)	496000	7000		µg/L	1	9/29/2011 11:35:30 AM
ASP TOTAL METALS BY ICP-MS				**200.8ASP**	**(E200.8)**	Analyst: **LJ**
Lead	ND	3.00		µg/L	1	9/29/2011 8:45:00 AM
ALKALINITY BY EPA 310.2				**ALK_W_AUTO**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	410	10		mg/L	1	9/23/2011
BOD, 5 DAY BY SM 18-20 5210B (01)				**BOD**		Analyst: **CAS**
Biochemical Oxygen Demand	5.0	4.0		mg/L	1	9/21/2011 8:17:00 AM
CHLORIDE WATERS BY LACHAT 10-117-07-1 A				**CL_W_AUTO**		Analyst: **BY**
Chloride	23.6	1.00		mg/L	1	9/23/2011
COD BY EPA 410.4 REV. 2.0				**COD**		Analyst: **KLS**
Chemical Oxygen Demand	ND	20		mg/L	1	9/22/2011
NH3 BY LACHAT 10-107-06-1-B				**NH3_W_AUTO**		Analyst: **GWL**
Nitrogen, Ammonia (As N)	ND	0.500		mg/L	1	10/10/2011
NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C				**NO3_W**		Analyst: **SAB**
Nitrogen, Nitrate (as N)	ND	0.050		mg/L	1	9/21/2011 9:56:00 AM
PHENOLICS, TOTAL BY LACHAT 10-210-00-1A				**PHENOL_W**	**(E420.4)**	Analyst: **SAB**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	9/28/2011 1:29:00 PM
SULFATE BY ASTM D516-90, 02 & 07				**SULFATE_W**		Analyst: **CAS**

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-4A
Lab Order:	U1109504	**Collection Date:**	9/20/2011 12:19:00 PM
Project:	Towslee Landfill		
Lab ID:	U1109504-009	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE BY ASTM D516-90, 02 & 07				**SULFATE_W**		Analyst: **CAS**
Sulfate	10.5	5.00		mg/L	1	9/22/2011
TDS BY SM 18-21 2540C (97)				**TDS**		Analyst: **SAB**
Residue, Dissolved (TDS)	490	25		mg/L	1	9/21/2011
TKN BY LACHAT 10-107-06-2				**TKN_W_AUTO**	**(E351.2)**	Analyst: **GWL**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	10/10/2011
TOC BY SM 18-21 5310B (00)				**TOC_W**		Analyst: **BY**
Organic Carbon, Total	4.0	3.0		mg/L	1	10/3/2011

Approved By: DH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-7A
Lab Order: U1109504
Collection Date: 9/20/2011 1:44:00 PM
Project: Towslee Landfill
Lab ID: U1109504-010
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS			**FIELD**			Analyst:
Conductivity	1236	1.0		umhos/cm		9/20/2011 1:44:00 PM
Eh	166	-300		mV		9/20/2011 1:44:00 PM
pH	6.92	2-12.5		SU		9/20/2011 1:44:00 PM
Temperature	18.0			°C		9/20/2011 1:44:00 PM
Turbidity	169.0	5.0		NTU		9/20/2011 1:44:00 PM
BROMIDE BY SM 18-21 4110B (00)			**BROMIDE_W**			Analyst: **BY**
Bromide	ND	8.0		mg/L	10	9/30/2011
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL BY NYSDEC ASP 2005			**200.7WTASP**		**(E200.7)**	Analyst: **LJ**
Cadmium	258	5.00		µg/L	1	9/29/2011 11:56:03 AM
Calcium	173000	5000		µg/L	1	9/29/2011 11:56:03 AM
Iron	4660	60.0		µg/L	1	9/29/2011 11:56:03 AM
Magnesium	37200	5000		µg/L	1	9/29/2011 11:56:03 AM
Manganese	4860	10.0		µg/L	1	9/29/2011 11:56:03 AM
Potassium	ND	5000		µg/L	1	9/29/2011 11:56:03 AM
Sodium	114000	5000		µg/L	1	9/29/2011 11:56:03 AM
Hardness, Total(CaCO3)	585000	7000		µg/L	1	9/29/2011 11:56:03 AM
ASP TOTAL METALS BY ICP-MS			**200.8ASP**		**(E200.8)**	Analyst: **LJ**
Lead	3.21	3.00		µg/L	1	9/29/2011 8:45:00 AM
ICP METALS, DISSOLVED BY NYSDEC ASP 2005			**200.7WDASP**		**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	9/29/2011 10:03:26 AM
Calcium	172000	5000		µg/L	1	9/29/2011 10:03:26 AM
Iron	ND	60.0		µg/L	1	9/29/2011 10:03:26 AM
Magnesium	34300	5000		µg/L	1	9/29/2011 10:03:26 AM
Manganese	4390	10.0		µg/L	1	9/29/2011 10:03:26 AM
Potassium	ND	5000		µg/L	1	9/29/2011 10:03:26 AM
Sodium	104000	5000		µg/L	1	9/29/2011 10:03:26 AM
NOTES: Dissolved Metals filtered in Laboratory. 9/28/11 8AM						
ICPMS METALS, DISSOLVED BY NYSDEC ASP 2005			**200.8_D_ASP**		**(E200.8)**	Analyst: **LJ**
Lead	ND	3.00		µg/L	1	9/29/2011 8:45:00 AM
ALKALINITY BY EPA 310.2			**ALK_W_AUTO**			Analyst: **BY**
Alkalinity, Total (As CaCO3)	560	100		mg/L	10	9/23/2011
BOD, 5 DAY BY SM 18-20 5210B (01)			**BOD**			Analyst: **CAS**

Approved By: DH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-7A
Lab Order:	U1109504	**Collection Date:**	9/20/2011 1:44:00 PM
Project:	Towslee Landfill		
Lab ID:	U1109504-010	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
BOD, 5 DAY BY SM 18-20 5210B (01)				**BOD**		Analyst: **CAS**
Biochemical Oxygen Demand	ND	4.0		mg/L	1	9/21/2011 8:17:00 AM
CHLORIDE WATERS BY LACHAT 10-117-07-1 A				**CL_W_AUTO**		Analyst: **BY**
Chloride	100	1.00		mg/L	1	9/23/2011
COD BY EPA 410.4 REV. 2.0				**COD**		Analyst: **KLS**
Chemical Oxygen Demand	29	20		mg/L	1	9/22/2011
NH3 BY LACHAT 10-107-06-1-B				**NH3_W_AUTO**		Analyst: **GWL**
Nitrogen, Ammonia (As N)	ND	0.500		mg/L	1	10/11/2011
NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C				**NO3_W**		Analyst: **SAB**
Nitrogen, Nitrate (as N)	0.081	0.050		mg/L	1	9/21/2011 9:56:00 AM
PHENOLICS, TOTAL BY LACHAT 10-210-00-1A				**PHENOL_W**	**(E420.4)**	Analyst: **SAB**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	9/28/2011 1:29:00 PM
SULFATE BY ASTM D516-90, 02 & 07				**SULFATE_W**		Analyst: **CAS**
Sulfate	18.8	5.00		mg/L	1	9/22/2011
TDS BY SM 18-21 2540C (97)				**TDS**		Analyst: **SAB**
Residue, Dissolved (TDS)	750	25		mg/L	1	9/21/2011
TKN BY LACHAT 10-107-06-2				**TKN_W_AUTO**	**(E351.2)**	Analyst: **GWL**
Nitrogen, Kjeldahl, Total	1.03	0.500		mg/L	1	10/3/2011
TOC BY SM 18-21 5310B (00)				**TOC_W**		Analyst: **BY**
Organic Carbon, Total	6.1	3.0		mg/L	1	10/3/2011

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation rauge	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-6A
Lab Order: U1109504
Collection Date: 9/21/2011 10:10:00 AM
Project: Towslee Landfill
Lab ID: U1109504-011
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS			**FIELD**			Analyst:
Conductivity	446	1.0		umhos/cm		9/21/2011 10:10:00 AM
Eh	125	-300		mV		9/21/2011 10:10:00 AM
pH	7.04	2-12.5		SU		9/21/2011 10:10:00 AM
Temperature	17.8			°C		9/21/2011 10:10:00 AM
Turbidity	33.14	5.0		NTU		9/21/2011 10:10:00 AM
BROMIDE BY SM 18-21 4110B (00)			**BROMIDE_W**			Analyst: **BY**
Bromide	ND	0.8		mg/L	1	9/30/2011
ICP METALS, TOTAL BY NYSDEC ASP 2005			**200.7WTASP**		**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	9/29/2011 12:09:39 PM
Calcium	66600	5000		µg/L	1	9/29/2011 12:09:39 PM
Iron	835	60.0		µg/L	1	9/29/2011 12:09:39 PM
Magnesium	10200	5000		µg/L	1	9/29/2011 12:09:39 PM
Manganese	1330	10.0		µg/L	1	9/29/2011 12:09:39 PM
Potassium	ND	5000		µg/L	1	9/29/2011 12:09:39 PM
Sodium	19500	5000		µg/L	1	9/29/2011 12:09:39 PM
Hardness, Total(CaCO3)	208000	7000		µg/L	1	9/29/2011 12:09:39 PM
ASP TOTAL METALS BY ICP-MS			**200.8ASP**		**(E200.8)**	Analyst: **LJ**
Lead	ND	3.00		µg/L	1	9/29/2011 8:45:00 AM
ALKALINITY BY EPA 310.2			**ALK_W_AUTO**			Analyst: **BY**
Alkalinity, Total (As CaCO3)	200	10		mg/L	1	9/23/2011
BOD, 5 DAY BY SM 18-20 5210B (01)			**BOD**			Analyst: **BY**
Biochemical Oxygen Demand	ND	4.0		mg/L	1	9/23/2011 8:04:00 AM
CHLORIDE WATERS BY LACHAT 10-117-07-1 A			**CL_W_AUTO**			Analyst: **BY**
Chloride	21.4	1.00		mg/L	1	9/23/2011
COD BY EPA 410.4 REV. 2.0			**COD**			Analyst: **KLS**
Chemical Oxygen Demand	ND	20		mg/L	1	9/26/2011
NH3 BY LACHAT 10-107-06-1-B			**NH3_W_AUTO**			Analyst: **GWL**
Nitrogen, Ammonia (As N)	ND	0.500		mg/L	1	10/11/2011
NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C			**NO3_W**			Analyst: **SAB**
Nitrogen, Nitrate (as N)	ND	0.050		mg/L	1	9/22/2011 11:46:00 AM
PHENOLICS, TOTAL BY LACHAT 10-210-00-1A			**PHENOL_W**		**(E420.4)**	Analyst: **SAB**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	9/28/2011 1:29:00 PM
SULFATE BY ASTM D516-90, 02 & 07			**SULFATE_W**			Analyst: **CAS**

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-6A
Lab Order:	U1109504	**Collection Date:**	9/21/2011 10:10:00 AM
Project:	Towslee Landfill		
Lab ID:	U1109504-011	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE BY ASTM D516-90, 02 & 07				**SULFATE_W**		Analyst: **CAS**
Sulfate	10.6	5.00		mg/L	1	9/29/2011
TDS BY SM 18-21 2540C (97)				**TDS**		Analyst: **SAB**
Residue, Dissolved (TDS)	270	50		mg/L	1	9/22/2011
TKN BY LACHAT 10-107-06-2				**TKN_W_AUTO**	**(E351.2)**	Analyst: **GWL**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	10/11/2011
TOC BY SM 18-21 5310B (00)				**TOC_W**		Analyst: **BY**
Organic Carbon, Total	ND	3.0		mg/L	1	10/6/2011

Approved By: PH **Date:** 10/18/11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-6B
Lab Order: U1109504
Collection Date: 9/21/2011 10:25:00 AM
Project: Towslee Landfill
Lab ID: U1109504-012
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS			**FIELD**			Analyst:
Conductivity	355	1.0		umhos/cm		9/21/2011 10:25:00 AM
Eh	133	-300		mV		9/21/2011 10:25:00 AM
pH	7.34	2-12.5		SU		9/21/2011 10:25:00 AM
Temperature	16.7			°C		9/21/2011 10:25:00 AM
Turbidity	6.94	5.0		NTU		9/21/2011 10:25:00 AM
BROMIDE BY SM 18-21 4110B (00)			**BROMIDE_W**			Analyst: **BY**
Bromide	ND	0.8		mg/L	1	9/30/2011
ICP METALS, TOTAL BY NYSDEC ASP 2005			**200.7WTASP**		**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	9/29/2011 12:16:17 PM
Calcium	49700	5000		µg/L	1	9/29/2011 12:16:17 PM
Iron	835	60.0		µg/L	1	9/29/2011 12:16:17 PM
Magnesium	11700	5000		µg/L	1	9/29/2011 12:16:17 PM
Manganese	166	10.0		µg/L	1	9/29/2011 12:16:17 PM
Potassium	ND	5000		µg/L	1	9/29/2011 12:16:17 PM
Sodium	18300	5000		µg/L	1	9/29/2011 12:16:17 PM
Hardness, Total(CaCO3)	172000	7000		µg/L	1	9/29/2011 12:16:17 PM
ASP TOTAL METALS BY ICP-MS			**200.8ASP**		**(E200.8)**	Analyst: **LJ**
Lead	ND	3.00		µg/L	1	9/29/2011 8:45:00 AM
ALKALINITY BY EPA 310.2			**ALK_W_AUTO**			Analyst: **BY**
Alkalinity, Total (As CaCO3)	160	10		mg/L	1	9/23/2011
BOD, 5 DAY BY SM 18-20 5210B (01)			**BOD**			Analyst: **BY**
Biochemical Oxygen Demand	ND	4.0		mg/L	1	9/23/2011 8:04:00 AM
CHLORIDE WATERS BY LACHAT 10-117-07-1 A			**CL_W_AUTO**			Analyst: **BY**
Chloride	12.7	1.00		mg/L	1	9/23/2011
COD BY EPA 410.4 REV. 2.0			**COD**			Analyst: **KLS**
Chemical Oxygen Demand	ND	20		mg/L	1	9/26/2011
NH3 BY LACHAT 10-107-06-1-B			**NH3_W_AUTO**			Analyst: **GWL**
Nitrogen, Ammonia (As N)	ND	0.500		mg/L	1	10/11/2011
NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C			**NO3_W**			Analyst: **SAB**
Nitrogen, Nitrate (as N)	0.056	0.050		mg/L	1	9/22/2011 11:46:00 AM
PHENOLICS, TOTAL BY LACHAT 10-210-00-1A			**PHENOL_W**		**(E420.4)**	Analyst: **SAB**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	9/28/2011 1:29:00 PM
SULFATE BY ASTM D516-90, 02 & 07			**SULFATE_W**			Analyst: **CAS**

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-6B
Lab Order:	U1109504	**Collection Date:**	9/21/2011 10:25:00 AM
Project:	Towslee Landfill		
Lab ID:	U1109504-012	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE BY ASTM D516-90, 02 & 07				**SULFATE_W**		Analyst: **CAS**
Sulfate	18.7	5.00		mg/L	1	9/29/2011
TDS BY SM 18-21 2540C (97)				**TDS**		Analyst: **SAB**
Residue, Dissolved (TDS)	230	50		mg/L	1	9/22/2011
TKN BY LACHAT 10-107-06-2				**TKN_W_AUTO**	**(E351.2)**	Analyst: **GWL**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	10/11/2011
TOC BY SM 18-21 5310B (00)				**TOC_W**		Analyst: **BY**
Organic Carbon, Total	ND	3.0		mg/L	1	10/6/2011

Approved By: DH **Date:** 10/18/11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: Dupe
Lab Order: U1109504
Collection Date: 9/21/2011 10:25:00 AM
Project: Towslee Landfill
Lab ID: U1109504-013
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
BROMIDE BY SM 18-21 4110B (00)				**BROMIDE_W**		Analyst: **BY**
Bromide	ND	0.8		mg/L	1	9/30/2011
ICP METALS, TOTAL BY NYSDEC ASP 2005				**200.7WTASP**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	9/29/2011 12:35:19 PM
Calcium	49500	5000		µg/L	1	9/29/2011 12:35:19 PM
Iron	271	60.0		µg/L	1	9/29/2011 12:35:19 PM
Magnesium	11200	5000		µg/L	1	9/29/2011 12:35:19 PM
Manganese	182	10.0		µg/L	1	9/29/2011 12:35:19 PM
Potassium	ND	5000		µg/L	1	9/29/2011 12:35:19 PM
Sodium	17200	5000		µg/L	1	9/29/2011 12:35:19 PM
Hardness, Total(CaCO3)	170000	7000		µg/L	1	9/29/2011 12:35:19 PM
ASP TOTAL METALS BY ICP-MS				**200.8ASP**	**(E200.8)**	Analyst: **LJ**
Lead	ND	3.00		µg/L	1	9/29/2011 8:45:00 AM
ALKALINITY BY EPA 310.2				**ALK_W_AUTO**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	160	10		mg/L	1	9/23/2011
BOD, 5 DAY BY SM 18-20 5210B (01)				**BOD**		Analyst: **BY**
Biochemical Oxygen Demand	ND	4.0		mg/L	1	9/23/2011 8:04:00 AM
CHLORIDE WATERS BY LACHAT 10-117-07-1 A				**CL_W_AUTO**		Analyst: **BY**
Chloride	11.1	1.00		mg/L	1	9/23/2011
COD BY EPA 410.4 REV. 2.0				**COD**		Analyst: **KLS**
Chemical Oxygen Demand	ND	20		mg/L	1	9/26/2011
NH3 BY LACHAT 10-107-06-1-B				**NH3_W_AUTO**		Analyst: **GWL**
Nitrogen, Ammonia (As N)	ND	0.500		mg/L	1	10/11/2011
NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C				**NO3_W**		Analyst: **SAB**
Nitrogen, Nitrate (as N)	ND	0.050		mg/L	1	9/22/2011 11:46:00 AM
PHENOLICS, TOTAL BY LACHAT 10-210-00-1A				**PHENOL_W**	**(E420.4)**	Analyst: **SAB**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	9/28/2011 1:29:00 PM
SULFATE BY ASTM D516-90, 02 & 07				**SULFATE_W**		Analyst: **CAS**
Sulfate	14.0	5.00		mg/L	1	9/29/2011
TDS BY SM 18-21 2540C (97)				**TDS**		Analyst: **SAB**
Residue, Dissolved (TDS)	180	50		mg/L	1	9/22/2011
TKN BY LACHAT 10-107-06-2				**TKN_W_AUTO**	**(E351.2)**	Analyst: **GWL**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	10/11/2011

Approved By: PH **Date:** 10/18/11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	Dupe
Lab Order:	U1109504	**Collection Date:**	9/21/2011 10:25:00 AM
Project:	Towslee Landfill		
Lab ID:	U1109504-013	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TOC BY SM 18-21 5310B (00)				**TOC_W**		Analyst: **BY**
Organic Carbon, Total	ND	3.0		mg/L	1	10/6/2011

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: Scale House(SH-1)
Lab Order: U1109504
Collection Date: 9/23/2011 10:05:00 AM
Project: Towslee Landfill
Lab ID: U1109504-014
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS			**FIELD**			Analyst:
Conductivity	332	1.0		umhos/cm		9/23/2011 10:05:00 AM
Eh	135	-300		mV		9/23/2011 10:05:00 AM
pH	8.06	2-12.5		SU		9/23/2011 10:05:00 AM
Temperature	16.8			°C		9/23/2011 10:05:00 AM
Turbidity	0.05	5.0		NTU		9/23/2011 10:05:00 AM
BROMIDE BY SM 18-21 4110B (00)			**BROMIDE_W**			Analyst: **BY**
Bromide	ND	0.8		mg/L	1	9/30/2011
ICP METALS, TOTAL BY NYSDEC ASP 2005			**200.7WTASP**		**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	9/29/2011 12:42:02 PM
Calcium	54300	5000		µg/L	1	9/29/2011 12:42:02 PM
Iron	ND	60.0		µg/L	1	9/29/2011 12:42:02 PM
Magnesium	10800	5000		µg/L	1	9/29/2011 12:42:02 PM
Manganese	10.0	10.0		µg/L	1	9/29/2011 12:42:02 PM
Potassium	ND	5000		µg/L	1	9/29/2011 12:42:02 PM
Sodium	9500	5000		µg/L	1	9/29/2011 12:42:02 PM
Hardness, Total(CaCO3)	180000	7000		µg/L	1	9/29/2011 12:42:02 PM
ASP TOTAL METALS BY ICP-MS			**200.8ASP**		**(E200.8)**	Analyst: **LJ**
Lead	ND	3.00		µg/L	1	9/29/2011 8:45:00 AM
ALKALINITY BY EPA 310.2			**ALK_W_AUTO**			Analyst: **KLS**
Alkalinity, Total (As CaCO3)	180	10		mg/L	1	9/30/2011
BOD, 5 DAY BY SM 18-20 5210B (01)			**BOD**			Analyst: **CAS**
Biochemical Oxygen Demand	ND	4.0		mg/L	1	9/26/2011 2:41:00 PM
CHLORIDE WATERS BY LACHAT 10-117-07-1 A			**CL_W_AUTO**			Analyst: **KLS**
Chloride	45.9	1.00		mg/L	1	9/30/2011
COD BY EPA 410.4 REV. 2.0			**COD**			Analyst: **KLS**
Chemical Oxygen Demand	ND	20		mg/L	1	9/30/2011
NH3 BY LACHAT 10-107-06-1-B			**NH3_W_AUTO**			Analyst: **GWL**
Nitrogen, Ammonia (As N)	ND	0.500		mg/L	1	10/11/2011
NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C			**NO3_W**			Analyst: **GWL**
Nitrogen, Nitrate (as N)	0.135	0.050		mg/L	1	9/26/2011 1:56:00 PM
PHENOLICS, TOTAL BY LACHAT 10-210-00-1A			**PHENOL_W**		**(E420.4)**	Analyst: **SAB**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	10/5/2011 7:16:00 AM
SULFATE BY ASTM D516-90, 02 & 07			**SULFATE_W**			Analyst: **CAS**

Approved By: DH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *18-Oct-11*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	Scale House(SH-1)
Lab Order:	U1109504	**Collection Date:**	9/23/2011 10:05:00 AM
Project:	Towslee Landfill		
Lab ID:	U1109504-014	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE BY ASTM D516-90, 02 & 07				**SULFATE_W**		Analyst: **CAS**
Sulfate	31.8	5.00		mg/L	1	9/29/2011
TDS BY SM 18-21 2540C (97)				**TDS**		Analyst: **SAB**
Residue, Dissolved (TDS)	230	25		mg/L	1	9/27/2011
TKN BY LACHAT 10-107-06-2				**TKN_W_AUTO**	**(E351.2)**	Analyst: **GWL**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	10/11/2011
TOC BY SM 18-21 5310B (00)				**TOC_W**		Analyst: **BY**
Organic Carbon, Total	ND	3.0		mg/L	1	10/6/2011

Approved By: PH **Date:** 10-18-11

Qualifiers:

#	Accreditation not offered by NYS DOH for this parameter	*	Low Level
**	Value exceeds Maximum Contaminant Value	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
Q	Outlying QC recoveries were associated with this parameter	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01 Revised: 2/10/2001

Client: **Cortland County**

Project: **Towslee Landfill**

ULI ID No: (enter by lab)

Well ID.: **CD-1**

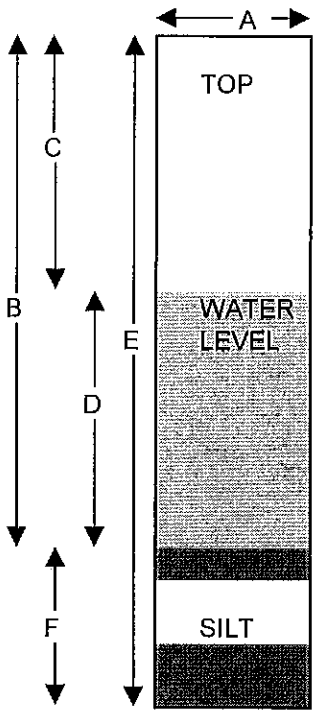
Condition of Well: Good

Locked: No

Method of Evacuation: Dedicated Bailer

Lock ID: 3900

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	24.70	feet
C.	Depth to Water	6.97	feet
D.	Length of Water Column (calculated)	17.73	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	2.8368	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	8.5104	gallons
	Actual Volume Evacuated	8.5	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	9/19/2011	9/20/2011
Time	1:45 PM	11:58 AM
EH	121	152
Temperature	19.0 c	19.1 c
pH	8.89	8.20
Specific Cond.	106	303
Turbidity	2.25	9.58
Dissolved Oxygen	N/A	N/A
Appearance	Clear	Clear

% Recharge:

Initial Depth to Water 6.97 feet

Recharge Depth to Water 7.07 feet

2nd water column height 98.59 %

1st water column height

Elevation(Top of Casing) N/A feet

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather: 70* F Sun 60* F Rain

Observations:

Sampler: Dan Aumell

Signature: Dan Aumell

Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01 Revised: 2/10/2001

Client: **Cortland County**

Project: **Towslee Landfill**

ULI ID No. (enter by lab)

Well ID.: **CD-1RA**

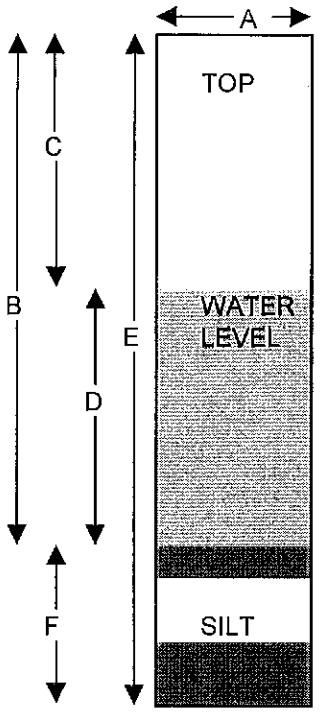
Condition of Well: Good

Locked: No

Method of Evacuation: Dedicated Bailer

Lock ID: 3900

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	50.60	feet
C.	Depth to Water	4.21	feet
D.	Length of Water Column (calculated)	46.39	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	7.4224	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	22.2672	gallons
	Actual Volume Evacuated	22.5	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	9/19/2011	9/20/2011
Time	1:39 PM	12:13 PM
EH	127	146
Temperature	20.2 c	20.3 c
pH	8.50	8.29
Specific Cond.	65	343
Turbidity	3.28	53.0
Dissolved Oxygen	N/A	N/A
Appearance	Clear	Cloudy

% Recharge:

Initial Depth to Water 4.21 feet

Recharge Depth to Water 4.18 feet

2nd water column height 100.72 %

1st water column height

Elevation(Top of Casing) N/A feet

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather: 70* F Sun 60* F Rain

Observations: Dissolved metals sample collected, Filtered at lab.

Sampler: Dan Aumell

Signature: Dan Aumell

Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01 Revised: 2/10/2001

Client: **Cortland County**

Project: **Towslee Landfill**

Well ID.: **MW-1A**

ULI ID No. (enter by lab)

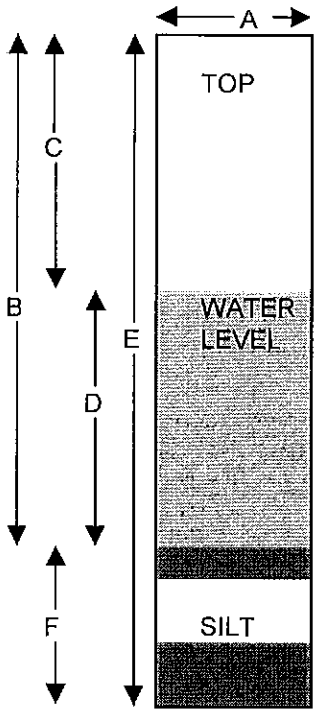
Condition of Well: Good

Locked: No

Method of Evacuation: Dedicated Bailer

Lock ID: 3900

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	33.7	feet
C.	Depth to Water	0.40	feet
D.	Length of Water Column (calculated)	33.3	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	5.328	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	15.984	gallons
	Actual Volume Evacuated	16	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	9/19/2011	9/20/2011
Time	2:28 PM	1:12 PM
EH	142	160
Temperature	19.1 c	17.9 c
pH	8.06	7.96
Specific Cond.	319	372
Turbidity	6.76	20.89
Dissolved Oxygen	N/A	N/A
Appearance	Clear	Cloudy

% Recharge:

Initial Depth to Water 0.40 feet

Recharge Depth to Water 0.40 feet

2nd water column height 100.00 %

1st water column height

Elevation(Top of Casing) N/A feet

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather: 70* F Sun 62* F Cloudy

Observations:

Sampler: Dan Aumell

Signature: Dan Aumell

Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01 Revised: 2/10/2001

Client: **Cortland County**

Project: **Towslee Landfill**

Well ID.: **MW-1B**

ULI ID No. (enter by lab)

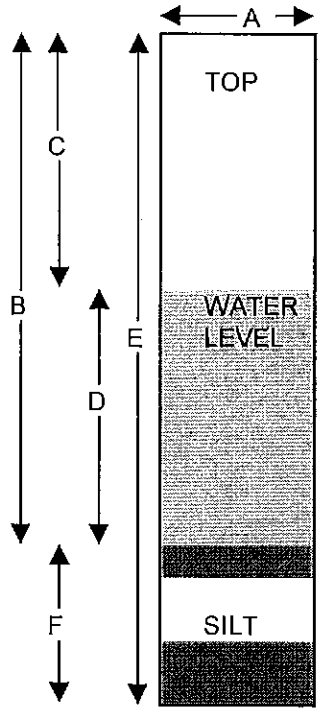
Condition of Well: Good

Locked: No

Method of Evacuation: Dedicated Bailer

Lock ID: 3900

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	55.5	feet
C.	Depth to Water	0.54	feet
D.	Length of Water Column (calculated)	54.96	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	8.7936	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	26.3808	gallons
	Actual Volume Evacuated	26.5	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	9/19/2011	9/20/2011
Time	2:34 PM	1:28 PM
EH	161	157
Temperature	19.4 c	17.7 c
pH	8.37	8.13
Specific Cond.	192	215
Turbidity	0.25	5.69
Dissolved Oxygen	N/A	N/A
Appearance	Clear	Clear

% Recharge:

Initial Depth to Water 0.54 feet

Recharge Depth to Water 0.51 feet

2nd water column height 105.88 %

1st water column height

Elevation(Top of Casing) N/A feet

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather: 70* F Sun 62* F Cloudy

Observations:

Sampler: Dan Aumell

Signature: Dan Aumell

Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01 Revised: 2/10/2001

Client: **Cortland County**

Project: **Towslee Landfill**

ULI ID No. (enter by lab)

Well ID.: **MW-2A**

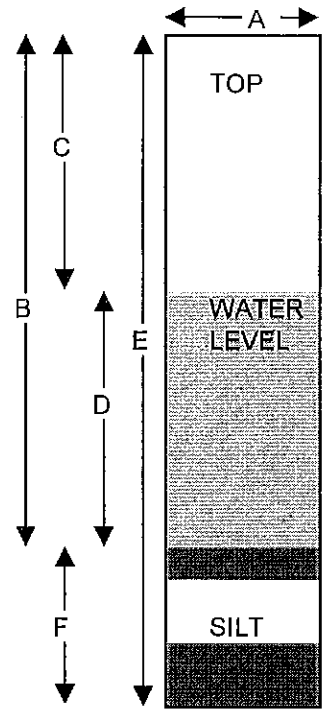
Condition of Well: Good

Locked: No

Method of Evacuation: Dedicated Bailer

Lock ID: 3900

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	12.8	feet
C.	Depth to Water	5.98	feet
D.	Length of Water Column (calculated)	6.82	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	1.0912	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	3.2736	gallons
	Actual Volume Evacuated	3.5	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	9/19/2011	9/20/2011
Time	3:21 PM	2:00 PM
EH	-59	-47
Temperature	18.2 c	18.4 c
pH	7.11	7.04
Specific Cond.	569	653
Turbidity	47.40	40.12
Dissolved Oxygen	N/A	N/A
Appearance	Cloudy	Cloudy

% Recharge:

Initial Depth to Water 5.98 feet

Recharge Depth to Water 5.83 feet

2nd water column height 102.57 %

1st water column height

Elevation(Top of Casing) N/A feet

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather: 70* F Sun | 65* F Partly Sunny

Observations:

Sampler: Dan Aumell

Signature: Dan Aumell

Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01 Revised: 2/10/2001

Client: **Cortland County**

Project: **Towslee Landfill**

ULI ID No. (enter by lab)

Well ID.: **MW-2B**

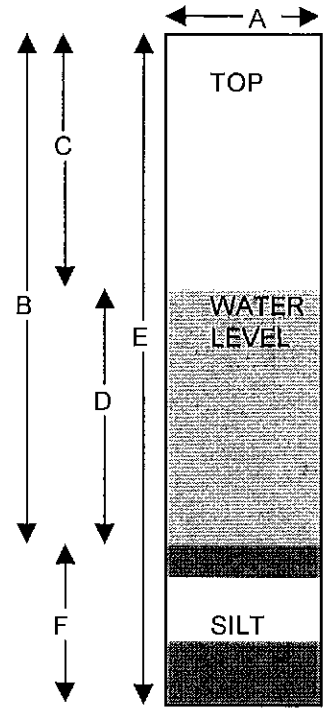
Condition of Well: Good

Locked: No

Method of Evacuation: Dedicated Bailer

Lock ID: 3900

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	33.5	feet
C.	Depth to Water	5.83	feet
D.	Length of Water Column (calculated)	27.67	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	4.4272	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	13.2816	gallons
	Actual Volume Evacuated	13.5	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	9/19/2011	9/20/2011
Time	3:26 PM	2:16 PM
EH	-44	-2
Temperature	18.1 c	18.0 c
pH	7.01	6.93
Specific Cond.	1091	1428
Turbidity	7.21	8.77
Dissolved Oxygen	N/A	N/A
Appearance	Clear	Clear

% Recharge:

Initial Depth to Water 5.83 feet

Recharge Depth to Water 6.67 feet

2nd water column height 87.41 %

1st water column height

Elevation(Top of Casing) N/A feet

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather: 70* F Sun 65* F Partly Sunny

Observations:

Sampler: Dan Aumell

Signature:

Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01 Revised: 2/10/2001

Client: **Cortland County**

Project: **Towslee Landfill**

ULI ID No. (enter by lab)

Well ID.: **MW-3A**

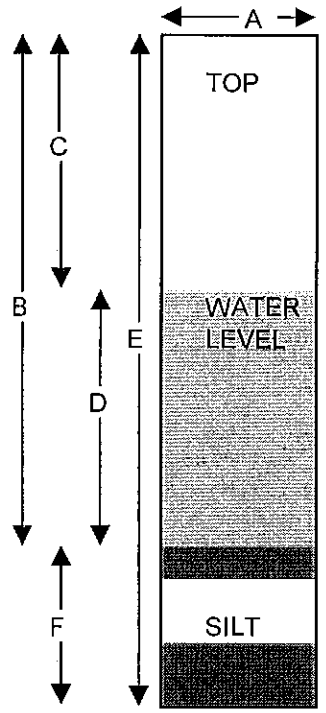
Condition of Well: Good

Locked: No

Method of Evacuation: Dedicated Bailer

Lock ID: 3900

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	22.40	feet
C.	Depth to Water	7.95	feet
D.	Length of Water Column (calculated)	14.45	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	2.312	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	6.94	gallons
	Actual Volume Evacuated	7	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	9/19/2011	9/20/2011
Time	12:55 PM	12:36 PM
EH	-6	159
Temperature	19.4 c	17.4 c
pH	7.68	7.38
Specific Cond.	142	361
Turbidity	7.13	4.39
Dissolved Oxygen	N/A	N/A
Appearance	Clear	Clear

% Recharge:

Initial Depth to Water 7.95 feet

Recharge Depth to Water 7.88 feet

2nd water column height 100.89 %

1st water column height

Elevation(Top of Casing) N/A feet

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather: 68* F Sun 60* F Rain

Observations:

Sampler: Dan Aumell

Signature:

Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01 Revised: 2/10/2001

Client: **Cortland County**

Project: **Towslee Landfill**

ULI ID No. (enter by lab)

Well ID.: **MW-3B**

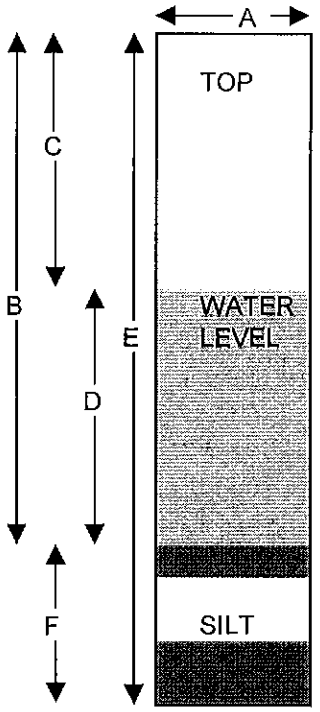
Condition of Well: Good

Locked: No

Method of Evacuation: Dedicated Bailer

Lock ID: 3900

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	44.40	feet
C.	Depth to Water	14.39	feet
D.	Length of Water Column (calculated)	30.01	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	4.8016	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	14.4048	gallons
	Actual Volume Evacuated	14.5	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	9/19/2011	9/20/2011
Time	1:02 PM	12:53 PM
EH	37	158
Temperature	18.1 c	17.1 c
pH	7.76	7.68
Specific Cond.	463	494
Turbidity	0.18	25.0
Dissolved Oxygen	N/A	N/A
Appearance	Clear	Cloudy

% Recharge:

Initial Depth to Water 14.39 feet

Recharge Depth to Water 13.20 feet

2nd water column height 109.02 %

1st water column height

Elevation(Top of Casing) N/A feet

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather: 68* F Sun 60* F Rain

Observations:

Sampler: Dan Aumell

Signature:

Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01 Revised: 2/10/2001

Client: **Cortland County**

Project: **Towslee Landfill**

ULI ID No: (enter by lab)

Well ID.: **MW-4A**

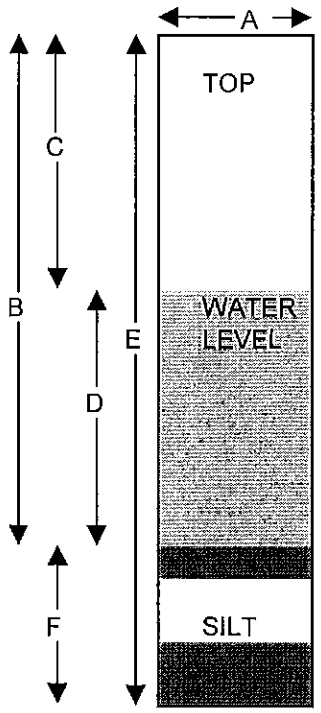
Condition of Well: Good

Locked: No

Method of Evacuation: Dedicated Bailer

Lock ID: 3900

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	32.40	feet
C.	Depth to Water	7.48	feet
D.	Length of Water Column (calculated)	24.92	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	3.9872	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	11.9616	gallons
	Actual Volume Evacuated	12	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	9/19/2011	9/20/2011
Time	12:35 PM	12:19 PM
EH	6	174
Temperature	19.7 c	17.5 c
pH	8.76	7.36
Specific Cond.	861	789
Turbidity	8.26	5.86
Dissolved Oxygen	N/A	N/A
Appearance	Clear	Clear

% Recharge:

Initial Depth to Water	7.48	feet
Recharge Depth to Water	7.32	feet
2nd water column height	102.19	%
1st water column height		
Elevation(Top of Casing)	N/A	feet
G.W. Elevation=	N/A	feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather:	65* F Sun	60* F Rain
Observations:	MSD	
	Blockage at approximately 23 feet.	

Sampler: Dan Aumell

Signature: Dan Aumell

Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01 Revised: 2/10/2001

Client: **Cortland County**

Project: **Towslee Landfill**

ULI ID No. (enter by lab)

Well ID.: **MW-5A**

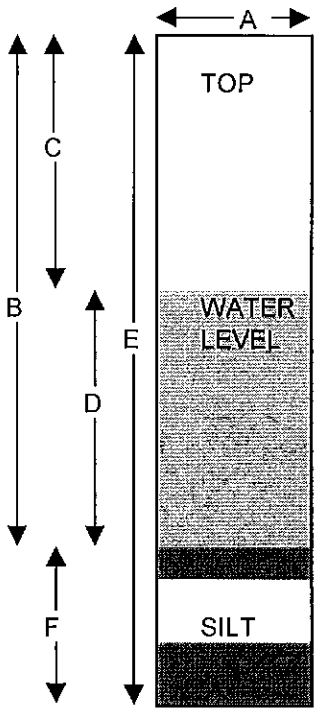
Condition of Well: Good

Locked: No

Method of Evacuation: Dedicated Bailer

Lock ID: 3900

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	32.30	feet
C.	Depth to Water	5.64	feet
D.	Length of Water Column (calculated)	26.66	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	4.2656	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	12.7968	gallons
	Actual Volume Evacuated	13	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	9/19/2011	
Time	11:40 AM	
EH	18	
Temperature	19.2 c	
pH	11.72	
Specific Cond.	2454	
Turbidity	11.91	
Dissolved Oxygen	N/A	N/A
Appearance	Clear	

% Recharge:

Initial Depth to Water 5.64 feet

Recharge Depth to Water feet

2nd water column height %

1st water column height

Elevation(Top of Casing) N/A feet

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather: 65* F Sun

Observations: Blocked at 7.5 feet unable to purge or sample.

Sampler: Dan Aumell

Signature:

Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01 Revised: 2/10/2001

Client: **Cortland County**

Project: **Towslee Landfill**

Well ID.: **MW-7A**

ULI ID No. (enter by lab)

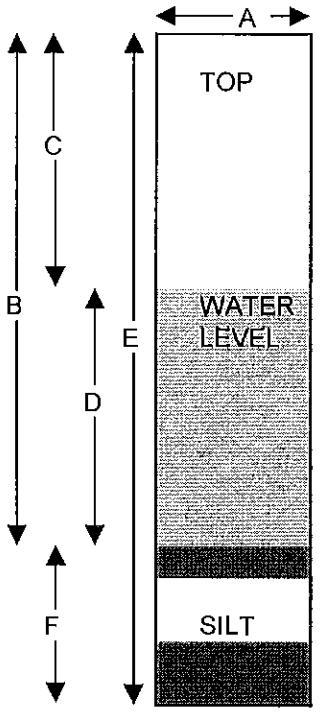
Condition of Well: Good

Locked: No

Method of Evacuation: Dedicated Bailer

Lock ID: 3900

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	22.20	feet
C.	Depth to Water	4.40	feet
D.	Length of Water Column (calculated)	17.80	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	2.848	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	8.544	gallons
	Actual Volume Evacuated	8.5	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	9/19/2011	9/20/2011
Time	3:02 PM	1:44 PM
EH	190	166
Temperature	17.9 c	18.0 c
pH	7.25	6.92
Specific Cond.	959	1236
Turbidity	126.0	169.0
Dissolved Oxygen	N/A	N/A
Appearance	Very Cloudy Gray	Very Cloudy Gray

% Recharge:

Initial Depth to Water 4.40 feet

Recharge Depth to Water 3.42 feet

2nd water column height 128.65 %

1st water column height

Elevation(Top of Casing) N/A feet

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather: 70* F Sun 62* F Cloudy

Observations: Dissolved metals sample collected, Filtered at lab.

Sampler: Dan Aumell

Signature: Dan Aumell

Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01 Revised: 2/10/2001

Client: **Cortland County**

Project: **Towslee Landfill**

Well ID.: **MW-6A**

ULI ID No. (enter by lab)

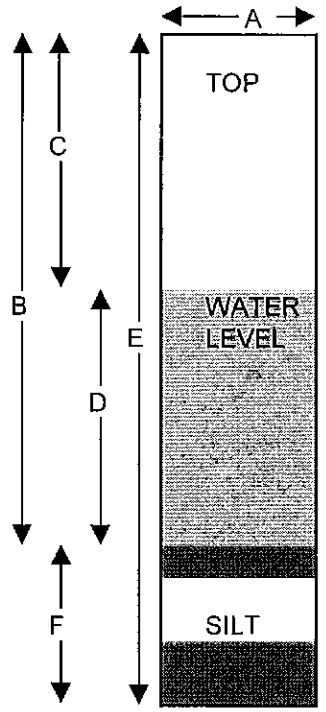
Condition of Well: Good

Locked: No

Method of Evacuation: Dedicated Bailer

Lock ID: 3900

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	19.10	feet
C.	Depth to Water	12.85	feet
D.	Length of Water Column (calculated)	6.25	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	1.00	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	3.00	gallons
	Actual Volume Evacuated	3	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	9/20/2011	9/21/2011
Time	2:30 PM	10:10 AM
EH	84	125
Temperature	17.9 c	17.8 c
pH	7.05	7.04
Specific Cond.	505	446
Turbidity	24.36	33.14
Dissolved Oxygen	N/A	N/A
Appearance	Cloudy	Cloudy

% Recharge:

Initial Depth to Water 12.85 feet

Recharge Depth to Water 12.89 feet

2nd water column height 99.69 %

1st water column height

Elevation(Top of Casing) N/A feet

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather: 65* F Partly Sunny 58* F Cloudy

Observations:

Sampler: Dan Aumell

Signature: Dan Aumell

Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01 Revised: 2/10/2001

Client: **Cortland County**

Project: **Towslee Landfill**

ULI ID No. (enter by lab)

Well ID.: **MW-6B**

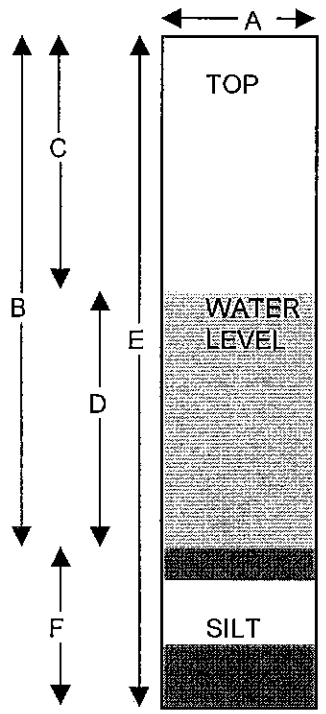
Condition of Well: Good

Locked: No

Method of Evacuation: Dedicated Bailer

Lock ID: 3900

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	40.75	feet
C.	Depth to Water	12.98	feet
D.	Length of Water Column (calculated)	27.77	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	4.4432	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	13.2960	gallons
	Actual Volume Evacuated	13.5	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	9/20/2011	9/21/2011
Time	2:34 PM	10:25 AM
EH	88	133
Temperature	16.7 c	16.7 c
pH	7.69	7.34
Specific Cond.	331	355
Turbidity	9.30	6.94
Dissolved Oxygen	N/A	N/A
Appearance	Clear	Clear

% Recharge:

Initial Depth to Water 12.98 feet

Recharge Depth to Water 13.00 feet

2nd water column height 99.85 %

1st water column height

Elevation(Top of Casing) N/A feet

G.W. Elevation= N/A feet

G.W.Elevation =Top of Case Elev-Total Depth

Weather: 65* F Partly Sunny 58* F Cloudy

Observations:

Sampler: Dan Aumell

Signature: Dan Aumell

Upstate Laboratories, Inc.

Tap Water / Surface Water / Wastewater Field Log

Client: Cortland County **Sampler** (print): Dan Aunell

Project: Towslee Landfill **Signature:** Dan Aunell

Date: 9/23/2011

Location	SH-1	TIME SAMPLED	10:05 AM ULI ID. NO.
EH	135 MV	WEATHER CONDITION:	66* F Partly Cloudy
TEMPERATURE	16.8 C		
PH	8.06 STD.UNITS	APPEARANCE / OBSERVATIONS	Clear
SPEC. CON.	332 UMHOS/CM	DO	N/A MG/L
TURB	0.05 NTU	STAFF GAUGE	N/A

Location		TIME SAMPLED	ULI ID. NO.
EH	MV	WEATHER CONDITION:	
TEMPERATURE	C		
PH	STD.UNITS	APPEARANCE / OBSERVATIONS	
SPEC. CON.	UMHOS/CM	DO	N/A MG/L
TURB	NTU	STAFF GAUGE	N/A

Location		TIME SAMPLED	ULI ID. NO.
EH	MV	WEATHER CONDITION:	
TEMPERATURE	C		
PH	STD.UNITS	APPEARANCE / OBSERVATIONS	
SPEC. CON.	UMHOS/CM	DO	MG/L
TURB	NTU.	STAFF GAUGE	N/A

Location		TIME SAMPLED	ULI ID. NO.
EH	MV	WEATHER CONDITION:	
TEMPERATURE	C		
PH	STD.UNITS	APPEARANCE / OBSERVATIONS	
SPEC. CON.	UMHOS/CM	DO	MG/L
TURB	NTU	STAFF GAUGE	

Location		TIME SAMPLED	ULI ID. NO.
EH	MV	WEATHER CONDITION:	
TEMPERATURE	C		
PH	STD.UNITS	APPEARANCE / OBSERVATIONS	
SPEC. CON.	UMHOS/CM	DO	MG/L.
TURB	NTU	STAFF GAUGE	

Location		TIME SAMPLED	ULI ID. NO.
EH	MV	WEATHER CONDITION:	
TEMPERATURE	C		
PH	STD.UNITS	APPEARANCE / OBSERVATIONS	
SPEC. CON.	UMHOS/CM	DO	MG/L
TURB	NTU	STAFF GAUGE	

Upstate Laboratories, Inc.

Chain of Custody Record

6034 Corporate Drive E. Syracuse New York 13057
Phone (315) 437 0255 Fax (315) 437 1209

Client: CORTLAND COUNTY
Project #/ Project Name: TOWSLEE LANDFILL
Client Contact: PATRICK REIDY
Phone #: 607-753-0851
Location (city/state) Address: CORTLANDVILLE, NY

ULI Computer Input Form

Sample ID	Date	Time	Matrix	Grab or Comp	ULI Internal Use Only U1109504	Number of Containers	1	2	3	4	5	6	7	8	9	10	Remarks: 1993 PART 360 ROUTINE ASP-A
CD-1	9/20/11	11:58am	WATER	GRAB	1	~~6~~ 6	X	X	X	X	X	X	X				
CD-1RA	9/20/11	12:13pm	WATER	GRAB	2	7 ~~6~~	X	X	X	X	X	X	X	X			
MW-1A	9/20/11	1:12pm	WATER	GRAB	3	6	X	X	X	X	X	X	X				
MW-1B	9/20/11	1:28pm	WATER	GRAB	4	6	X	X	X	X	X	X	X				
MW-2A	9/20/11	2:00pm	WATER	GRAB	5	6	X	X	X	X	X	X	X				
MW-2B	9/20/11	2:16pm	WATER	GRAB	6	6	X	X	X	X	X	X	X				
MW-3A	9/20/11	12:36pm	WATER	GRAB	7	6	X	X	X	X	X	X	X				
MW-3B	9/20/11	12:53pm	WATER	GRAB	8	6	X	X	X	X	X	X	X				
MW-4A	9/20/11	12:19pm	WATER	GRAB	9	7 ~~6~~	X	X	X	X	X	X	X				MSD
MW-5A	9/19/11	11:40am	WATER	GRAB		~~6~~	X	X	X	X	X	X	X				Well pipe blocked
MW-6A			WATER	GRAB		6	X	X	X	X	X	X	X				
MW-6B			WATER	GRAB		6	X	X	X	X	X	X	X				
MW-7A	9/20/11	1:44pm	WATER	GRAB	10	7 ~~6~~	X	X	X	X	X	X	X	X			(D-metals
DUPE			WATER	GRAB		6		X	X	X	X	X	X				filtered in lab) ~~10/20/11~~
MS/MSD																	

	Parameter and Method	Type	Size	Preservative
1	FIELD PH,TEMP,EH,SPEC.COND.,TURBIDITY	N/A		
2	BOD5,NO3,TDS,SO4,CL-,BROMIDE	PLASTIC	2000ML	NONE
3	TKN,NH3,COD	PLASTIC	500 ML	H2SO4
4	TOC	PLASTIC	120 ML	1:1 HCL
5	ALKALINITY	GLASS	250 ML	NONE
6	T-PHENOLS	AMBER	LITER	H2SO4
7	T-CD,CA,FE,PB*,MG,MN,K,NA,+CALC. HARDNESS	PLASTIC	500 ML	HNO3
8	D-CD,CA,FE,PB*,MG,MN,K,NA,+CALC. HARDNESS	PLASTIC	500 ML	HNO3
9				
10				

Sampled by (Print): Dan Aumell
Company: ULI
Name of Courier:

Relinquished by:(sign)	Date	Time	Received by: (sign)

Relinquished by:(sign)	Date	Time	Rec'd for Lab by:
Dan Aumell	9/20/11	4:30 pm	Brittany Meurch

Syracuse Rochester Buffalo Albany Binghamton Fair Lawn (NJ) 9/21/11 0830

PRH diss/11

Upstate Laboratories, Inc.

Chain of Custody Record

6034 Corporate Drive E. Syracuse New York 13057
Phone (315) 437 0255 Fax (315) 437 1209

Client: CORTLAND COUNTY

Project #/ Project Name: TOWSLEE LANDFILL

Client Contact: PATRICK REIDY

Phone #: 607-753-0851

Location (city/state) Address: CORTLANDVILLE, NY

Sample ID	Date	Time	Matrix	Grab or Comp	ULI Internal Use Only U1109504	Number of Containers	ULI Computer Input Form 1	2	3	4	5	6	7	8	9	10	Remarks: 1993 PART 360 ROUTINE ASP-A
CD-1			WATER	GRAB		6	X	X	X	X	X	X	X				
CD-1RA			WATER	GRAB		6	X	X	X	X	X	X	X				
MW-1A			WATER	GRAB		6	X	X	X	X	X	X	X				
MW-1B			WATER	GRAB		6	X	X	X	X	X	X	X				
MW-2A			WATER	GRAB		6	X	X	X	X	X	X	X				
MW-2B			WATER	GRAB		6	X	X	X	X	X	X	X				
MW-3A			WATER	GRAB		6	X	X	X	X	X	X	X				
MW-3B			WATER	GRAB		6	X	X	X	X	X	X	X				
MW-4A			WATER	GRAB		6	X	X	X	X	X	X	X				
MW-5A			WATER	GRAB		6	X	X	X	X	X	X	X				
MW-6A	9/21/11	10:10am	WATER	GRAB	11	6	X	X	X	X	X	X	X				
MW-6B	9/21/11	10:25am	WATER	GRAB	12	6	X	X	X	X	X	X	X				
MW-7A			WATER	GRAB		6	X	X	X	X	X	X	X				
DUPE	9/21/11	10:25am	WATER	GRAB	13	6		X	X	X	X	X	X				
MS/MSD																	

	Parameter and Method	Sample bottle: Type	Size	Preservative
1	FIELD PH,TEMP,EH,SPEC.COND.,TURBIDITY	N/A		
2	BOD5,NO3,TDS,SO4,CL-,BROMIDE	PLASTIC	2000ML	NONE
3	TKN,NH3,COD	PLASTIC	500 ML	H2SO4
4	TOC	PLASTIC	120 ML	1:1 HCL
5	ALKALINITY	GLASS	250 ML	NONE
6	T-PHENOLS	AMBER	LITER	H2SO4
7	T-CD,CA,FE,PB*,MG,MN,K,NA,+CALC. HARDNESS	PLASTIC	500 ML	HNO3
8	D-CD,CA,FE,PB*,MG,MN,K,NA,+CALC. HARDNESS	PLASTIC	500 ML	HNO3
9				
10				

Sampled by (Print): Dan Aunell

Company: ULI

Name of Courier:

Relinquished by:(sign)	Date	Time	Received by: (sign)
Relinquished by:(sign)	Date	Time	Received by: (sign)
Relinquished by:(sign) Dan Aunell	Date 9/21/11	Time 4:30pm	Rec'd for Lab by: Brittany Mervish

Syracuse Rochester Buffalo Albany Binghamton Fair Lawn (NJ) 9/22/11 0830

Upstate Laboratories, Inc.

6034 Corporate Drive E. Syracuse New York 13057
Phone (315) 437 0255 Fax (315) 437 1209

Chain of Custody Record

ULI Computer Input Form

Client:	Project #/ Project Name					Number of Containers	1	2	3	4	5	6	7	8	9	10	Remarks
CORTLAND COUNTY	TOWSLEE LANDFILL																
Client Contact: / Phone #	Location (city/state) Address																
PATRICK REIDY / 607-753-0851	CORTLANDVILLE, NY																
Sample ID	Date	Time	Matrix	Grab or Comp	ULI Internal Use Only U1109504												1993 PART 360 ROUTINE ASP-A
SCALE HOUSE (SH-1)	9/23/11	10:05m	WATER	GRAB	14	6	X	X	X	X	X	X	X				

	Parameter and Method	Sample bottle: Type	Size	Preservative
1	FIELD PH,TEMP,EH,SPEC.COND.,TURBIDITY	N/A		
2	BOD5,NO3,TDS,SO4,CL-,BROMIDE	PLASTIC	2000ML	NONE
3	TKN,NH3,COD	PLASTIC	500 ML	H2SO4
4	TOC	PLASTIC	120 ML	1:1 HCL
5	ALKALINITY	GLASS	250 ML	NONE
6	T-PHENOLS	AMBER	LITER	H2SO4
7	T-CD,CA,FE,PB*,MG,MN,K,NA,+CALC. HARDNESS	PLASTIC	500 ML	HNO3
8				
9				
10				

Sampled by (Print) Dan Aurell
Company: ULI
Name of Courier

Relinquished by:(sign)	Date	Time	Received by: (sign)
Relinquished by:(sign)	Date	Time	Received by: (sign)
Relinquished by:(sign) Dan Aurell	Date 9/23/11	Time 3:30 PM	Rec'd for Lab by: 9/26/11 0830

Syracuse Rochester Buffalo Albany Binghamton Fair Lawn (NJ)

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

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

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	(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)
Aug-97	--	--	--	--	<5	--	134	160	163	<2	10.8	1	<0.1	0.04	0.2	<15	<2	2.1	<1	--
Oct-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	--

Historical Water Quality Database - Towslee Landfill
Field and Inorganic Parameters
Well MW-1A - 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	(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)
Aug-97	--	--	--	--	5	--	160	4000	494	152	20.6	1.2	<0.1	6	18	305	5	4.2	0.003	<0.01
Oct-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	0.529 H	<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	188 H	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	100 H	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	120 H	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	--

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	(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)
Aug-97	--	--	--	--	<5	--	94.8	88	143	<2	5.2	<0.5	0.2	<0.02	<0.2	<15	<2	9.3	<0.001	--
Oct-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	0.755 H	<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	92 H	97.1	160	2.86 H	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	--

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

Analyte / Units	Temp (°C)	Eh (mV)	pH SU	Sp. Conduct (uS/ cm)	Color (SU)	Turbidity (NTU)	ALK as CaCO3 (mg/l)	HARD as CaCO3 (mg/l)	TDS (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Bromide (mg/l)	NO3 (As N) (mg/l)	NH4 (As N) (mg/l)	TKN (as N) (mg/l)	COD (mg/l)	BOD (mg/l)	TOC (mg/l)	Phenolics, Tot (mg/l)	Cyanide (mg/l)
Aug-97	--	--	--	--	30	--	702	1300	1180	156	<5	0.8	<0.1	23	31.5	127	6	42.5	0.0071	<0.01
Oct-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	14 H	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	--

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	(°C)	(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)
Aug-97	--	--	--	--	5	--	577	960	1640	267	<5	1.1	<0.1	0.95	2.6	58	2	12.3	0.0044	--
Oct-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	1.78 H	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	--

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	(°C)	(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)
Aug-97	--	--	--	--	<5	--	145	1250	320	31.4	16	0.5	<0.1	<0.02	0.4	19	<2	4.5	0.0027	--
Oct-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	1.09 H	<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	--

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	(^{0}C)	(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)
Aug-97	--	--	--	--	<5	--	235	280	349	32	13.8	<0.5	<0.1	<0.02	0.3	22	<2	7.9	2.3	--
Oct-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	--

Historical Water Quality Database - Towslee Landfill
Field and Inorganic Parameters
Well MW-4A - 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	(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)
Aug-97	--	--	--	--	<5	--	253	308	550	79.1	9.8	<0.5	<0.1	<0.02	0.5	37	<2	7.7	1.8	--
Oct-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	--

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	(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)
Aug-97	--	--	--	--	20	--	130	250	116	44.5	22	<0.5	0.8	<0.02	0.4	16	<2	2.7	1.1	--
Oct-97	--	--	--	--	<5	--	115	140	156	10.1	11.5	<0.5	<0.1	0.18	0.24	<15	<2	<1.0	<1.0	--

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	(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)
Aug-97	--	--	--	--	60	--	357	650	595	79.1	13.8	0.9	<0.1	1.6	1.5	94	3	14	3	<10
Oct-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	--

Historical Water Quality Database - Towslee Landfill
Field and Inorganic Parameters
Well MW-6B - Bedrock

Analyte / Units	Temp (°C)	Eh (mV)	pH SU	Sp. Conduct (uS/ cm)	Color (SU)	Turbidity (NTU)	ALK as CaCO3 (mg/l)	HARD as CaCO3 (mg/l)	TDS (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Bromide (mg/l)	NO3 (As N) (mg/l)	NH4 (As N) (mg/l)	TKN (as N) (mg/l)	COD (mg/l)	BOD (mg/l)	TOC (mg/l)	Phenolics, Tot (mg/l)	Cyanide (mg/l)
Aug-97	--	--	--	--	<5	--	240	300	98	38.2	27.1	<0.5	0.6	0.09	0.6	40	<2	6	0.0032	--
Oct-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	0.904 H	<10	5.1	3.14	<0.005	--
8/9/06	12.2	225	7.52	304	<5	15.8	154	131	190	2.32	3.28	0.122	<0.1	0.096	0.214	11.6	3.2	<2	<0.005	<0.01
10/10/06	14.3	180	7.11	329	--	14.2	153	133	187	3.39	6.14	<0.1	<0.1	<0.1	0.279	<10	<3	<2	<0.005	--
3/20/07	9.7	82	8.04	220	--	68.9	180	156	127	11.6	8.54	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
4/26/07	7.4	-92	7.73	249	--	8.1	160	139	105	6.99	6.79	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
7/31/07	15.6	-105	7.85	236	--	9.48	150	138	220	13.8	17.3	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
10/10/07	14.8	-57	7.82	810	6	12.5	140	124	208	25.9	12.7	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
2/1/08	3.7	121	8.55	199	7	13.6	140	136	198	16.7	18.1	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<10
4/16/08	10.4	-71	8.25	360	--	11.6	140	142	225	16.9	16.5	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
7/23/08	16.1	-81	8.21	343	--	2.19	110	137	116	31.1	26.8	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
10/24/08	12.6	-54	7.96	355	--	5.24	120	134	168	28.6	17.2	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
3/12/09	6.5	-38	7.7	327	--	9.56	120	142	188	13.3	13.2	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
6/17/09	14.1	186	7.32	187	11	3.62	140	154	190 H	19.4	14.2	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	< 0.01
9/30/09	12.7	190	7.2	1999	--	5.13	140	148	170	19.7	10.3	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
12/1/09	9	180	7.09	1108	--	13.3	140	138	130	14.7	13.5	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
1/28/10	4.7	102	8.35	922	--	12.5	150	163	240	13.2	13.4	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
4/27/10	8.1	222	6.54	1673	--	43.6	150	147	220	12	7.57	<1	0.0804	<0.5	0.522	<20	<4	<3	<0.005	--
7/20/10	18.2	144	7.66	249	35	4.71	140	144	200	14	11	<0.8	0.092	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
10/26/10	14.6	132	7.39	342	--	16	160	147	190	16	11.2	<1.6	0.051	<0.5	0.799	<20	<4	<3	<0.005	--
3/22/11	9.8	102	7.41	372	--	10.8	130	145	160	11.9	15	<0.8	0.47	<0.5	<0.5	<20	<4	<3	<0.005	--
5/24/11	15.7	88	7.75	399	--	7.65	150	153	250	16.4	19.2	<0.8	0.058	<0.5	<0.5	<20	<4	<3	<0.005	--
9/20/11	16.7	133	7.34	355	--	6.94	160	172	230	12.7	18.7	<0.8	0.056	<0.5	<0.5	<20	<4	<3	<0.005	--

Historical Water Quality Database - Towslee Landfill
Field and Inorganic Parameters
Well MW-7A - Overburden

Analyte / Units	Temp (°C)	Eh (mV)	pH SU	Sp. Conduct (uS/ cm)	Color (SU)	Turbidity (NTU)	ALK as CaCO3 (mg/l)	HARD as CaCO3 (mg/l)	TDS (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Bromide (mg/l)	NO3 (As N) (mg/l)	NH4 (As N) (mg/l)	TKN (as N) (mg/l)	COD (mg/l)	BOD (mg/l)	TOC (mg/l)	Phenolics, Tot (mg/l)	Cyanide (mg/l)
Aug-97	--	--	--	--	20	--	569	1010	1220	300	27.4	0.6	<0.1	0.93	1.1	43	<2	10.1	0.0051	<0.01
Oct-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	1.68 H	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	--

Historical Water Quality Data - Towslee Landfill

CD-1 Total Metals (mg/l)

	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
9/20/11	--	--	--	--	--	--	<0.005	45.2	--	--	--	--	0.126	<0.003	9.04	0.18	--	--	<5	<5	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

CD-1RA Total Metals (mg/l)

	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
8/1/97	0.587	0.0035 B	0.0032 B	0.168 B	<0.0001	0.0227 B	<0.0003	41.5	0.0042 B	NA	<0.0011	0.004 B	1.01	0.0017 B	9.5	0.19	NA	<0.0013	1.01 B	5.41	NA	NA	<0.0026	<0.0012	0.024
Oct-97	5.24	0.0031 B	0.004 B	0.229	0.0011 B	0.0253 B	0.0011 B	45.7	0.0089 B	NA	0.0053 B	0.0085 B	10.3	0.0049	10.4	0.352	NA	0.0104 B	1.91 B	4.76 B	NA	NA	<0.0026	0.0086 B	0.0366
9/20/11	--	--	--	--	--	--	<0.005	41	--	--	--	--	0.662	<0.003	7.95	0.119	--	--	<5	<5	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-1A Total Metals (mg/l)

	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
8/1/97	724	<0.003	0.353	8.11	0.0287	0.0873 B	<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
Oct-97	16.9	<0.003	0.0134	0.258	0.00083 B	0.0665 B	<0.0003	48.6	0.0265	--	0.0168 B	0.0254	35.7	0.0123	15.6	0.783	<0.0001	0.0364 B	6.97	26	<0.0028	<0.0009	<0.0026	0.0243 B	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	0.14	<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	--	--	--	--	--
40806	--	--	--	--	--	--	<0.005	52	--	--	--	--	0.87	<0.003	11	0.139	--	--	<5	13	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-1B Total Metals

	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
8/1/97	0.662	<0.003	<0.0024	0.168 B	0.0001 B	0.0197 B	<0.0003	26.7	0.002 B	--	<0.0011	0.004 B	1.33	<0.001	6.47	0.195	--	<0.0013	1.56 B	7.38	--	--	<0.0026	<0.0012	0.0351
Oct-97	0.134 B	<0.003	<0.0024	0.154 B	<0.0001	0.0247 B	<0.0003	24.7	<0.0004	--	<0.0011	0.0025 B	0.226	<0.001	5.84	0.146	--	<0.0013	0.529 B	6.18	--	--	<0.0026	<0.0012	0.0163 B
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	--	--	--	--	--
40687	--	--	--	--	--	--	<0.005	24.9	--	--	--	--	<0.06	<0.003	6.14	0.24	--	--	<5	6.48	--	--	--	--	
40806	--	--	--	--	--	--	<0.005	34.3	--	--	--	--	0.121	<0.003	7.05	0.275	--	--	<5	27	--	--	--	--	

Historical Water Quality Data - Towslee Landfill

MW-2A Total Metals

	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
8/1/97	79.3	0.0049 B	0.0631	1.75	0.0037 B	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	0.0024 B	0.004 B	0.102	0.4
Oct-97	59.1	<0.003	0.0537	1.49	0.0025 B	0.961	0.0016 B	172	0.0967	--	0.0628	0.0779	131	0.0436	53.6	31.6	<0.0001	0.132	17	102	<0.0028	0.0014 B	<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	--	--	--	--	--
40624	--	--	--	--	--	--	<0.005	54.9	--	--	--	--	4.73	<0.003	12.9	8.18	--	--	7.2	13.5	--	--	--	--	--
40687	--	--	--	--	--	--	<0.005	48.7	--	--	--	--	4.27	<0.003	11	7.05	--	--	7.47	12.5	--	--	--	--	--
40624	--	--	--	--	--	--	<0.005	54.9	--	--	--	--	4.73	<0.003	12.9	8.18	--	--	7.2	13.5	--	--	--	--	--
40687	--	--	--	--	--	--	<0.005	48.7	--	--	--	--	4.27	<0.003	11	7.05	--	--	7.47	12.5	--	--	--	--	--
40806	--	--	--	--	--	--	<0.005	76.9	--	--	--	--	5.34	<0.003	14.8	9.08	--	--	11.4	22.1	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-2B Total Metals

	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
8/1/97	2.03	<0.003	0.007 B	1.59	0.00023 B	0.355	0.0003 B	288	0.004 B	--	0.0091 B	0.0069 B	4.3	0.0044	61.7	8.24	--	0.0129 B	3 B	64.1	--	--	0.0037 B	0.0029 B	0.103
Oct-97	5.31	<0.003	0.0083 B	1.36	0.00037 B	0.292	<0.0003	245	0.0086 B	--	0.0141 B	0.0118 B	10.7	0.0058	49.9	7.43	--	0.0188 B	2.9 B	53.9	--	--	<0.0026	0.0075 B	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	--	--	--	--	--
40624	--	--	--	--	--	--	<0.005	200	--	--	--	--	0.345	<0.003	42.8	6.23	--	--	<5	56.7	--	--	--	--	--
40687	--	--	--	--	--	--	<0.005	172	--	--	--	--	0.312	<0.003	38.8	5.23	--	--	<5	51	--	--	--	--	--
40624	--	--	--	--	--	--	<0.005	200	--	--	--	--	0.345	<0.003	42.8	6.23	--	--	<5	56.7	--	--	--	--	--
40687	--	--	--	--	--	--	<0.005	172	--	--	--	--	0.312	<0.003	38.8	5.23	--	--	<5	51	--	--	--	--	--
40806	--	--	--	--	--	--	<0.005	237	--	--	--	--	0.276	<0.003	43.9	5.99	--	--	<5	55.3	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-3A Total Metals

	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
8/1/97	21.7	<0.003	0.0127	0.567	0.001 B	<0.0709	<0.0003	57.8	0.0249	--	0.0121 B	0.0315	26.6	0.0077	17	0.732	--	0.0248 B	7.43	10.4	--	--	<0.0026	0.0296 B	0.112
Oct-97	2.39	0.0034 B	<0.0024	0.343	0.00013 B	0.0286 B	<0.0003	53.7	0.0022 B	--	0.0019 B	0.0076 B	3.58	<0.001	11	0.174	--	0.0038 B	1.87 B	6.54	--	--	<0.0026	0.0039 B	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	--	--	--	--	--
40624	--	--	--	--	--	--	<0.005	18.3	--	--	--	--	0.232	<0.003	<5	0.575	--	--	<5	<5	--	--	--	--	--
40687	--	--	--	--	--	--	<0.005	42.9	--	--	--	--	0.121	<0.003	7.25	0.704	--	--	<5	<5	--	--	--	--	--
40806	--	--	--	--	--	--	<0.005	58.9	--	--	--	--	0.121	<0.003	9.72	0.635	--	--	<5	5.9	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-3B Total Metals (mg/l)

	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
8/1/97	2.01	<0.003	<0.0024	0.402	0.0001 B	0.0662 B	<0.0003	73.8	0.0032 B	NA	0.002 B	0.0051 B	3.04	0.0013 B	22.8	0.12	NA	0.0036 B	2.05 B	11.2	NA	NA	<0.0026	0.003 B	0.0621
Oct-97	0.184	<0.003	<0.0024	0.291	0.00013 B	0.0626 B	<0.0003	74.4	<0.0004	NA	0.0014 B	0.0018 B	0.372	<0.001	21.5	0.0697	NA	0.0018 B	1.2 B	9.78	NA	NA	<0.0026	<0.0012	0.0155 B
9/20/11	--	--	--	--	--	--	<0.005	75.8	--	--	--	--	0.578	<0.003	20.5	0.184	--	--	<5	11.1	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-4A Total Metals (mg/l)

	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
8/1/97	1.61	<0.003	<0.0024	0.803	0.0001 B	0.0765 B	<0.0003	110	0.0015 B	NA	0.0036 B	0.0066 B	2.2	0.0031	24.3	1.14	NA	0.0044 B	2.01 B	13.3	NA	NA	<0.0026	0.0016 B	0.0501
Oct-97	1.32	<0.003	<0.0024	1.26	0.00013 B	0.124	0.0004 B	127	0.00093 B	NA	0.0035 B	0.0076 B	1.99	0.0024 B	26	2.15	NA	0.0063 B	2.02 B	15.7	NA	NA	<0.0026	0.0019 B	0.0238
9/20/11	--	--	--	--	--	--	<0.005	153	--	--	--	--	0.261	<0.003	27.3	1.91	--	--	<5	16.7	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-5A Total Metals (mg/l)

	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
8/1/97	10.1	0.0045 B	0.0061 B	1.58	0.00063 B	0.0348 B	0.0042 B	45.8	0.0092	NA	0.0105 B	0.0181 B	11.5	0.0114	14.8	0.485	NA	0.011 B	3.03 B	31.6	NA	NA	<0.0026	0.0102 B	0.105
Oct-97	0.228	<0.003	<0.0024	0.502	<0.0001	0.021 B	<0.0003	32.1	<0.0004	NA	<0.0011	0.0037 B	0.46	<0.001	9.45	0.0661	NA	<0.0013	0.897 B	9.53	NA	NA	<0.0026	0.0012 B	0.0212

Historical Water Quality Data - Towslee Landfill

MW-6A Total Metals (mg/l)

	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
8/1/97	59.1	0.0036 B	0.0476	1.79	0.0023 B	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	0.0013 B	<0.0026	0.0726	0.271
Oct-97	38.6	NA	0.0404	1.63	0.0017 B	0.32	0.0011 B	82.2	0.0705	NA	0.0463 B	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	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-6B Total Metals

	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
8/1/97	8.59	<0.003	0.009 B	0.521	0.0004 B	0.145	<0.0003	70.5	0.0092 B	--	0.0112 B	0.0116 B	10.6	0.0044	19	3.43	--	0.0144 B	4.08 B	38	--	--	<0.0026	0.0083 B	0.0894
Oct-97	0.642	<0.003	0.0084 B	0.48	0.0001 B	0.145	<0.0003	55.6	0.0017 B	--	0.0056 B	0.0051 B	3	<0.001	12.7	4.17	--	0.0059 B	2.72 B	31.4	--	--	<0.0026	0.0012 B	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	--	--	--	--	--
40624	--	--	--	--	--	--	<0.005	40.1	--	--	--	--	0.114	<0.003	10.8	0.0452	--	--	<5	14.1	--	--	--	--	--
40687	--	--	--	--	--	--	<0.005	43.3	--	--	--	--	0.235	<0.003	10.8	0.0213	--	--	<5	17	--	--	--	--	--
40806	--	--	--	--	--	--	<0.005	49.7	--	--	--	--	0.835	<0.003	11.7	0.166	--	--	<5	18.3	--	--	--	--	--

Historical Water Quality Data - Towslee Landfill

MW-7A Total Metals

	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
8/1/97	40	<0.003	0.0176	1.36	0.0015 B	0.332	0.00047 B	234	0.0556	--	0.0311	0.0637	65.9	0.0251	67	5.87	<0.0001	0.0783	10.4	118	0.0041 B	<0.0009	<0.0026	0.0487 B	0.2
Oct-97	88.4	<0.003	0.0459	1.99	0.0037 B	0.41	0.002 B	271	0.146	--	0.0791	0.129	174	0.0585	88.3	9.55	<0.0001	0.192	13.5	113	0.0047 B	<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	--	--	--	--	--
40624	--	--	--	--	--	--	<0.005	136	--	--	--	--	0.162	<0.003	35	4.33	--	--	<5	110	--	--	--	--	--
40687	--	--	--	--	--	--	<0.005	130	--	--	--	--	0.418	<0.003	34.4	3.8	--	--	<5	114	--	--	--	--	--
40806	--	--	--	--	--	--	0.258	173	--	--	--	--	4.66	0.00321	37.2	4.86	--	--	<5	114	--	--	--	--	--

Historical Water Quality Database - Towslee Landfill

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

	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chrom, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
No dissolved metals data to date																									

Historical Water Quality Database - Towslee Landfill

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

	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chrom, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	0.0198 B	<0.003	<0.0024	0.163 B	<0.0001	0.0199 B	<0.0003	40.7	<0.0004	--	<0.0011	0.0026 B	0.0238 B	--	9.65	0.168	--	<0.0013	0.911 B	5.5	--	--	--	--	0.0825
Oct-97	0.0442 B	<0.003	<0.0024	0.173 B	0.00067 B	0.0285 B	0.00063 B	39.5	<0.0012	--	<0.0011	0.0012 B	0.0394 B	--	8.3	0.148	--	<0.0013	0.951 B	5.29	--	--	--	--	0.0148 B
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)

	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chrom, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	0.0163 B	--	<0.0024	0.137 B	<0.0001	0.0631 B	<0.0003	67.6	<0.0004	--	<0.0011	0.0008 B	0.0348 B	0.0052	15.4	0.22	0.0014	<0.0013	10.6	59.3	--	--	<0.0026	<0.0012	0.12
Oct-97	0.0407 B	--	<0.0024	0.068 B	<0.0001	0.0561 B	<0.0003	40.3	<0.0004	--	<0.0011	<0.0007	0.0471 B	<0.001	8.69	0.174	<0.0001	<0.0013	4.92 B	27.1	--	--	<0.0026	<0.0012	0.0161 B
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	--	--	--	--	--

Historical Water Quality Database - Towslee Landfill

MW-1B - Dissolved Metals (all values in mg/l)

	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chrom, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	0.0146 B	<0.003	<0.0024	0.151 B	<0.0001	0.0195 B	<0.0003	24.8	0.0008 B	--	<0.0011	<0.0007	0.0172 B	--	6.62	0.141	--	<0.0013	1.63 B	7.53	--	--	--	--	0.0396
Oct-97	0.0209 B	<0.003	<0.0024	0.155 B	<0.0001	0.0162 B	<0.0003	24.5	0.00073 B	--	<0.0011	<0.0007	0.0141 B	--	5.88	0.134	--	<0.0013	0.514 B	6.59	--	--	--	--	0.0152 B
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)

	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chrom, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	<0.0083	--	0.0123	0.787	0.00017 B	1.21	0.00053 B	183	0.0035 B	--	0.0107 B	0.0162 B	5.4	<0.001	41	30.4	<0.0001	0.0179 B	17.5	121	--	--	0.003 B	<0.0012	0.117
Oct-97	0.0482 B	--	0.0139	0.786	0.0001 B	0.992	<0.0003	183	0.0057 B	--	0.0095 B	<0.0007	11.5	0.0011 B	38.5	30.9	<0.0001	0.0162 B	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)

	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chrom, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	0.0179 B	<0.003	0.0036 B	1.55	<0.0001	0.334	<0.0003	281	0.0009 B	--	0.0067 B	0.0022 B	0.582	--	61.7	8.07	--	0.0093 B	2.8 B	62.5	--	--	--	--	0.0635
Oct-97	0.0154 B	<0.003	<0.0024	1.45	<0.0001	0.321	<0.0003	274	0.0014 B	--	0.0061 B	<0.0007	0.595	--	55	8	--	0.0097 B	2.34 B	62.8	--	--	--	--	0.023

Historical Water Quality Database - Towslee Landfill

MW-3A - Dissolved Metals (all values in mg/l)

	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chrom, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	<0.0083	0.0038 B	<0.0024	0.242	<0.0001	0.0324 B	<0.0003	57.9	<0.0004	--	<0.0011	0.0024 B	0.0061 B	--	12.9	0.123	--	<0.0013	2.75 B	10.2	--	--	--	--	0.0249
Oct-97	0.0158	<0.003	<0.0024	0.276	<0.0001	0.0275 B	<0.0003	54.6	<0.0004	--	<0.0011	0.00083 B	0.0114 B	--	10.9	0.0941	--	0.0017 B	1.42 B	7.98	--	--	--	--	0.0387
3/22/06	--	--	--	--	--	--	<0.005	44.3	--	--	--	--	0.168	<0.005	8.7	0.0963	--	--	0.803	4.83	--	--	--	--	--

Historical Water Quality Database - Towslee Landfill

MW-3B - Dissolved Metals (all values in mg/l)

	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chrom, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	0.016 B	<0.003	<0.0024	0.257	0.0001 B	0.0531 B	<0.0003	73.2	<0.0004	--	<0.0011	0.0024 B	0.0091 B	--	23	0.0617	--	<0.0013	1.62 B	11.1	--	--	--	--	0.0375
Oct-97	0.0273 B	<0.003	<0.0024	0.271	<0.0001	0.0559 B	<0.0003	71.9	<0.0004	--	<0.0011	0.0007 B	0.0191 B	--	20.9	0.0553	--	0.0014 B	1.27 B	10.2	--	--	--	--	0.0155 B

Historical Water Quality Database - Towslee Landfill

MW-4A - Dissolved Metals (all values in mg/l)

	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chrom, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	0.0173 B	<0.003	<0.0024	0.686	0.0001 B	0.073 B	<0.0003	112	<0.0004	--	0.0024 B	0.0069 B	0.005 B	--	25.2	1.08	--	0.0021 B	1.71 B	13.5	--	--	--	--	0.0393
Oct-97	0.0228 B	<0.003	<0.0024	1.06	<0.0001	0.12	<0.0003	129	<0.0004	--	0.0022 B	0.0011 B	0.0372 B	--	26.1	2.08	--	0.0051 B	1.93 B	16.1	--	--	--	--	0.0166 B

Historical Water Quality Database - Towslee Landfill

MW-5A - Dissolved Metals (all values in mg/l)

	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chrom, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	<0.0083	0.0059 B	<0.0024	0.267	<0.0001	0.028 B	<0.0003	41.2	<0.0004	--	0.0014 B	0.0057 B	0.0081 B	--	12.6	0.0951	--	<0.0013	1.19 B	31.9	--	--	--	--	0.0262
Oct-97	0.019 B	<0.003	<0.0024	0.396	<0.0001	0.0218 B	<0.0003	34.1	0.0004 B	--	<0.0011	<0.0007	0.0117 B	--	10.2	0.0433	--	<0.0013	0.84 B	10.3	--	--	--	--	0.0182 B

Historical Water Quality Database - Towslee Landfill

MW-6A - Dissolved Metals (all values in mg/l)

	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chrom, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	0.0142 B	--	0.0198	0.847	0.0001 B	0.284	<0.0003	104	0.0019 B	--	0.0063 B	0.0014 B	7.81	<0.001	21	14.1	--	0.0096 B	7.64	55.4	--	--	<0.0026	<0.0012	0.047
Oct-97	0.0382 B	--	0.0189	0.88	--	0.333	<0.0003	88.7	0.0027 B	--	0.006 B	0.00077 B	8.07	<0.001	17.3	12.9	--	0.0108 B	7.4	55	--	--	<0.0026	<0.0012	0.0219

Historical Water Quality Database - Towslee Landfill

MW-6B - Dissolved Metals (all values in mg/l)

	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chrom, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	<0.0083	<0.003	0.0048 B	0.396	<0.0001	0.125	<0.0003	67.7	<0.0004	--	0.0052 B	0.0011 B	0.346	--	17.3	3.3	--	0.0046 B	2.97 B	38.2	--	--	--	--	0.0651
Oct-97	0.0132 B	<0.003	0.0073 B	0.478	<0.0001	0.14	<0.0003	56.3	0.00087 B	--	0.0041 B	<0.0007	1.42	--	12.9	3.99	--	0.0048 B	2.77 B	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)

	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chrom, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	<0.0083	--	<0.0024	0.822	0.0001 B	0.331	0.0003 B	220	0.0008 B	--	0.0017 B	0.0086 B	0.009 B	<0.001	56.2	4.53	<0.0001	0.0129 B	5.28	120	--	--	<0.0026	<0.0012	0.0455
Oct-97	0.0755 B	--	<0.0024	0.887	<0.0001	0.396	<0.0003	255	0.0011 B	--	0.0031 B	<0.0007	0.753	<0.001	59.9	7.12	<0.0001	0.0196 B	3.98 B	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	--	--	--	--	--

Historical Water Quality Database - Towslee Landfill

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

Well CD-1 - Overburden

	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
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

Historical Water Quality Database - Towslee Landfill

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

Well CD-1RA - Bedrock

	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
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

Historical Water Quality Database - Towslee Landfill

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

Well MW-1A - Overburden

	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
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

Historical Water Quality Database - Towslee Landfill

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

Well MW-1B - Bedrock

	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
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

Historical Water Quality Database - Towslee Landfill

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

Well MW-2A - Overburden

	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
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

Historical Water Quality Database - Towslee Landfill

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

Well MW-2B - Bedrock

	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
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

Historical Water Quality Database - Towslee Landfill

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

Well MW-3A - Bedrock

	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
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

Historical Water Quality Database - Towslee Landfill

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

Well MW-3B - Bedrock

	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
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

Historical Water Quality Database - Towslee Landfill

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

Well MW-4A - Bedrock

	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
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

Historical Water Quality Database - Towslee Landfill

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

Well MW-5A - Bedrock

	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
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

Historical Water Quality Database - Towslee Landfill

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

Well MW-6A - Overburden

	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
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

Historical Water Quality Database - Towslee Landfill

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

Well MW-6B - Bedrock

	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
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

Historical Water Quality Database - Towslee Landfill

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

Well MW-7A - Overburden

	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
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

Appendix C

Landfill Gas Testing Results

Cortland County Towslee Landfill

Cortland County Gas Monitoring

Date: 9/23/2011

LOCATION	%O2	LEL (ppm)
~~AA-1~~	~~20.9~~	~~0~~
~~AA-2~~	~~20.8~~	~~0~~
~~AA-3~~	~~20.9~~	~~0~~
~~AA-4~~	~~20.9~~	~~0~~
~~AA-5~~	~~20.9~~	~~0~~
~~AA-6A~~	~~20.9~~	~~0~~
~~AA-7A~~	~~20.9~~	~~0~~
~~AA-8~~	~~20.9~~	~~0~~
~~AA-9~~	~~20.7~~	~~0~~
~~AA-10~~	~~20.6~~	~~0~~
~~AA-11~~	~~20.6~~	~~0~~
~~AA-12~~	~~20.8~~	~~0~~
~~AA-13~~	~~20.9~~	~~0~~
~~AA-14~~	~~20.9~~	~~0~~
~~AA-15~~	~~20.9~~	~~0~~
~~AA-16~~	~~20.8~~	~~0~~
~~AA-17~~	~~20.6~~	~~0~~
~~AA-6B~~	~~20.9~~	~~0~~
~~AA-7B~~	~~20.9~~	~~0~~
~~GW-1~~	~~20.7~~	~~0~~
~~GFD-1~~	~~20.8~~	~~0~~
~~GFD-2~~	~~20.7~~	~~0~~
~~GFLD-1~~	~~20.7~~	~~0~~
~~GFLD-2~~	~~20.7~~	~~0~~
~~GFLD-3~~	~~20.7~~	~~0~~
~~AA @ Basement Door~~	~~20.7~~	~~0~~
~~AA @ Basement Grate~~	~~20.6~~	~~0~~
AAMW-1A	20.9	0
AAMW-1B	20.9	0
AAMW-2A	20.7	0
AAMW-2B	20.7	0
AAMW-3A	20.8	0
AAMW-3B	20.9	0
AAMW-4A	20.9	0
AAMW-5A	20.6	0
AAMW-6A	20.9	0
AAMW-6B	20.8	0
AAMW-7A	20.7	0
AACD-1	20.7	0
AACD-1RA	20.8	0

Measured By: Dan Aumell
Meter: V-RAE multi-gas meter