Environmental Monitoring Report
2008 Quarters 3 and 4
and Annual Summary

Cortland County Towslee Landfill

Town Line Road
Cortland County, New York

NYSDEC Region 7

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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 Quarters 3 and 4 of 2008, and serves as an annual report for the Towslee Landfill.

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.

In a letter dated November 7, 2005, NYSDEC outlined minimum sampling requirements for the Towslee landfill. As a result, Cortland County initiated quarterly monitoring in 2006 at seven groundwater monitoring wells. Proposed monitoring locations were identified by Cortland County Soil and Water Conservation District, and submitted to NYSDEC for review in a letter dated February 17, 2006.

Upstate Laboratories, Inc. (herein referred to as Upstate Labs) conducted all sample collection activities, and performed all laboratory analyses for Quarters 3 and 4. Water quality analyses were conducted in accordance with 1998 Part 360 regulations. SWCD performed data management and analysis, and prepared this report.

2.0 Site History

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:	Baseline	February 1, 2008
Second Quarter:	Routine	April 16, 2008
Third Quarter:	Routine	July 23, 2008
Fourth Quarter:	Routine	October 24, 2008

3.2 Groundwater Monitoring Locations

Seven downgradient wells were sampled as part of the Towslee monitoring program. Well locations are shown on Figure 1. Four of the wells are finished in bedrock, and three are finished in overburden, as described below:

Bedrock	Overburden
MW-1B	MW-1A
MW-2B	MW-2A
MW-3A	MW-7A
MW-6B	

4.0 Assessment of Monitoring Results

This section provides an evaluation of groundwater monitoring results for all four Quarters of 2008. 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 the Quarter 4 laboratory analytical report.
- Appendix C contains tables of historical water quality data through the latest monitoring round.

Note that Quarter 1 and Quarter 2 laboratory reports were presented in a previous report.

4.1 Contraventions of Water Quality Standards

This subsection compares 2008 groundwater quality data to NYS water quality standards.

Tables 1, 2 and 3 summarize water quality results for Quarter 1.
Tables 4 and 5 summarize water quality results for Quarter 2.
Tables 6 and 7 summarize water quality results for Quarter 3.
Tables 8 and 9 summarize water quality results for Quarter 4.

Available NYS water quality standards are included in these tables, and contraventions of standards are highlighted.

Concentrations for most parameters in all four quarters of 2008 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.

Color – The color standard is 15 standard units. Color was only measured for the Baseline round of Quarter 1. The color standard was exceeded for a single well (MW-2A @ 40 standard units).

Turbidity – The NYS turbidity standard of 5 NTU was exceeded for nearly all wells during each Quarter of 2008.

Quarter 1 - All six wells sampled in Quarter 1 exceeded the standard, ranging from 7.83 to 39.3 NTU. Well MW-1A was not sampled because it was frozen.

Quarter 2 - All seven wells exceeded the standard, ranging from 11.6 to 44.4 NTU.

Quarter 3 - Six wells exceeded the standard, ranging from 11.6 to 49.2 NTU. Turbidity in Well MW-6B did not exceed the standard.

Quarter 4 - Six wells exceeded the standard, ranging from 5.24 to 42.7 NTU. Turbidity in Well MW-2B did not exceed the standard.

Based on separate monitoring conducted at the closed Pine Tree Landfill, and the active West Side Landfill, these exceedances appear to be related to natural groundwater conditions in this area.

Total Dissolved Solids (TDS) - The TDS standard of 500 mg/l was exceeded for the same two wells for all four Quarters in 2008.

TDS results for MW-2B are: Quarter 1 (840 mg/l); Quarter 2 (808 mg/l); Quarter 3 (720 mg/l); and Quarter 4 (864 mg/l)

TDS results for MW-7A are: Quarter 1 (800 mg/l); Quarter 2 (1,560 mg/l); Quarter 3 (868 mg/l); and Quarter 4 (728 mg/l).

Chloride - The chloride standard of 250 mg/l was exceeded at MW-7A (1,260 mg/l) in Quarter 2. No other contraventions of the chloride standard were observed in 2008.

Ammonia - The ammonia standard of 2 mg/l was exceeded at MW-2A for all four Quarters of 2008: Quarter 1 (8.78 mg/l); Quarter 2 (8.2 mg/l); Quarter 3 (11.9 mg/l); and Quarter 4 (10.8 mg/l).

Ammonia at MW-2A also exceeded the standard for all previous monitoring events.

Total Barium – The barium water quality standard of 1 mg/l was slightly exceeded for a single well in Quarter 1 (MW-2B at 1.18 mg/l).

Total Iron - The NYS standard for iron is 0.3 mg/l.

In Quarter 1, five wells exceeded the standard, ranging from 0.439 to 9.77 mg/l.
In Quarter 2, seven wells exceeded the standard, ranging from 0.33 to 4.1 mg/l.
In Quarter 3, three wells exceeded the standard, ranging from 0.342 to 10.6 mg/l.
In Quarter 4, three wells exceeded the standard, ranging from 0.429 to 9.51 mg/l.

The highest iron measurement was observed at MW-2A in all 4 Quarters. The iron standard has frequently been exceeded in past monitoring events for most wells.

Total Manganese - The NYS standard for manganese is 0.3 mg/l.

In Quarter 1, four wells exceeded the standard, ranging from 0.327 to 11.2 mg/l.
In Quarter 2, three wells exceeded the standard, ranging from 4.34 to 9.3 mg/l.
In Quarter 3, five wells exceeded the standard, ranging from 0.618 to 13.8 mg/l.
In Quarter 4, four wells exceeded the standard, ranging from 0.619 to 15.1 mg/l.

The highest manganese measurement was observed at MW-2A in all 4 Quarters. The manganese

standard has frequently been exceeded in past monitoring events.

Sodium – The NYS sodium standard is 20 mg/l. Contraventions in 2008 were as follows:

Quarter 1: MW-2B (50.6 mg/l) and MW-7A (104 mg/l).
Quarter 2: MW-2B (47.4 mg/l) and MW-7A (99.6 mg/l).
Quarter 3: MW-2A (25.6 mg/l), MW-2B (51.4 mg/l) and MW-7A (113 mg/l).
Quarter 4: MW-2A (25.9 mg/l), MW-2B (58.2 mg/l) and MW-7A (116 mg/l).

These results are consistent with past monitoring. Elevated sodium may be partially related to deicing activities on the road network within the landfill.

Volatile Organics (VOCs) – VOC testing was conducted during the Baseline round of Quarter 1.

Vinyl chloride was detected in MW-7A at 8.4 ug/l in Quarter 1. This is above the NYS drinking water standard of 2 ug/l.

Methylene chloride was detected in five wells, ranging from 11 to 13 ug/l. Methylene chloride was also detected in a laboratory blank, and Upstate Labs indicates these values should be considered a result of laboratory contamination.

Cis-1,2-dichloroethene was detected in Wells MW-2B (9.4 ug/l) and MW-7A (9.0 ug/l). Each of these results is above the drinking water MCL of 5 ug/l for cis-1,2-dichloroethene.

1,1-Dichloroethane was detected in MW-7A at 7.9 ug/l. This is above the drinking water MCL of 5 ug/l for 1,1-dichloroethane.

There were no other contraventions of NYS water quality standards in 2008.

4.2 Trends

The seven wells that are sampled as part of the current Towslee monitoring program were previously sampled twice in 1997, four times in 2006, four times in 2007, and four times in 2008. These results are compiled in a historical database included in Appendix C.

Previous environmental monitoring reports described a significant improvement in groundwater quality downgradient of the Towslee landfill between 1997 and 2006, which continued through 2007. The 2008 results indicate that overall groundwater quality remains improved compared to 1997 results.

4.2.1 Trends for Conventionals

B&L, in 1997, identified the following conventionals as indicative of mild landfill leachate contamination: alkalinity, chloride; hardness; ammonia; TKN; COD; and TOC.

- Alkalinity continues to be generally lower than 1997 levels.
- Chloride levels continue to be significantly lower than 1997 levels.
- Hardness levels continue to be much lower than in 1997.
- Well MW-2A continues to have elevated ammonia levels, but continues to show a decreasing trend over time. MW-2B ammonia levels were below the water quality standard for all four Quarters of 2008. For the remaining wells, all 2008 ammonia results were below the detection limit.
- TKN levels in 2008 continue to show an overall decreasing trend over time. TKN results for MW-2A are elevated, but show an overall decreasing trend.
- COD continues to show an overall decrease compared to 1997 levels.
- Total Organic Carbon (TOC) continues to show a decreasing trend for Wells MW-1A, MW-1B, MW-2A, MW-3A, and MW-6B. Increased TOC levels were observed in Quarters 1 and 2 for MW-2B and MW-7A. The Quarter 3 and 4 results for these two wells were significantly lower.
- For all other conventionals, the results for 2008 are lower than or similar to past results.

4.2.2 Trends for Total Metals

The metals identified by B&L in 1997 as indicative of mild landfill leachate contamination are:

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

All of these metals were analyzed under the Baseline round of Quarter 1 in 2008. For the Routine events (Quarters 2, 3 and 4), the only metals analyzed were: calcium, iron, lead, magnesium, manganese, potassium, and sodium.

- Aluminum levels have continued to show a significant decrease through 2008, compared to 1997.
- Arsenic was below the detection limit for five of the six wells sampled in 2008. Arsenic was detected at MW-2A, but was significantly lower than 1997 levels.
- Calcium levels have continued to show an overall decrease through 2008, compared to 1997 levels.
- Chromium levels in 2008 were similar to, or lower than, 1997 levels.
- Cobalt was below the detection limit for all wells sampled in 2008.
- Copper was below the detection limit for all wells sampled in 2008.
- Iron continues to show an overall decrease compared to 1997 levels.
- Lead levels are generally below the detection limit, and where detected, continue to show an overall decrease through 2008, compared to 1997.
- Magnesium continues to show an overall decrease compared to 1997 observations.
- Manganese continues to show an overall decrease compared to 1997 levels.
- Potassium levels continue to show an overall decrease through 2008, compared to 1997.
- Sodium levels have continued to show a general decrease through 2008.
- Vanadium was below the detection limit at all wells in 2008.
- Zinc levels have generally decreased over time, compared to 1997 levels.

4.2.3 Trends for Organics

VOCs were analyzed in Quarter 1 of 2008, Quarter 4 of 2007 and in Quarter 3 of 2006. Previously, organics had been tested twice in 1997. In 1997, 12 different organic chemicals were detected in one or more of the seven wells that are now monitored.

Most of the organics that were detected in 1997 were not detected in the three recent monitoring events. Low level organic contamination, however, continues to occur at a few wells.

Vinyl chloride continues to be detected at low levels at Well MW-7A. Vinyl chloride was detected for the first time in 2007 at Well MW-2B, but was not detected in 2008.

1,1-dichloroethane continues to be detected at low, but slightly increased, levels at Well MW-7A. This VOC had been detected at MW-2B in 1997, but has not been detected in the three recent monitoring events.

Cis-1,2-dichloroethene continues to be detected at low, but slightly increased, levels at Wells MW-2B and MW-7A.

Chloroethane had been detected at MW-2B several times in the past, including 2007, but was not detected in 2008. Chloroethane had been detected at Wells MW-2A and MW-7A in 1997, but has not been detected at these wells in the three recent monitoring events.

Chlorobenzene was detected at MW-2A in 2007, but was not detected in 2008. Chlorobenzene had been detected at MW-2B in 1997, but has not been detected in the three recent monitoring events.

5.0 Quality Control

Upstate Labs performed internal quality control procedures on the Quarter 3 and 4 analytical data. Summaries of the quality control procedures are included with the laboratory reports of Appendix A and B.

Internal data validation summaries for Quarters 1 and 2 were included in a previous report,

A summary of quality control for each Quarter of 2008 is presented below:

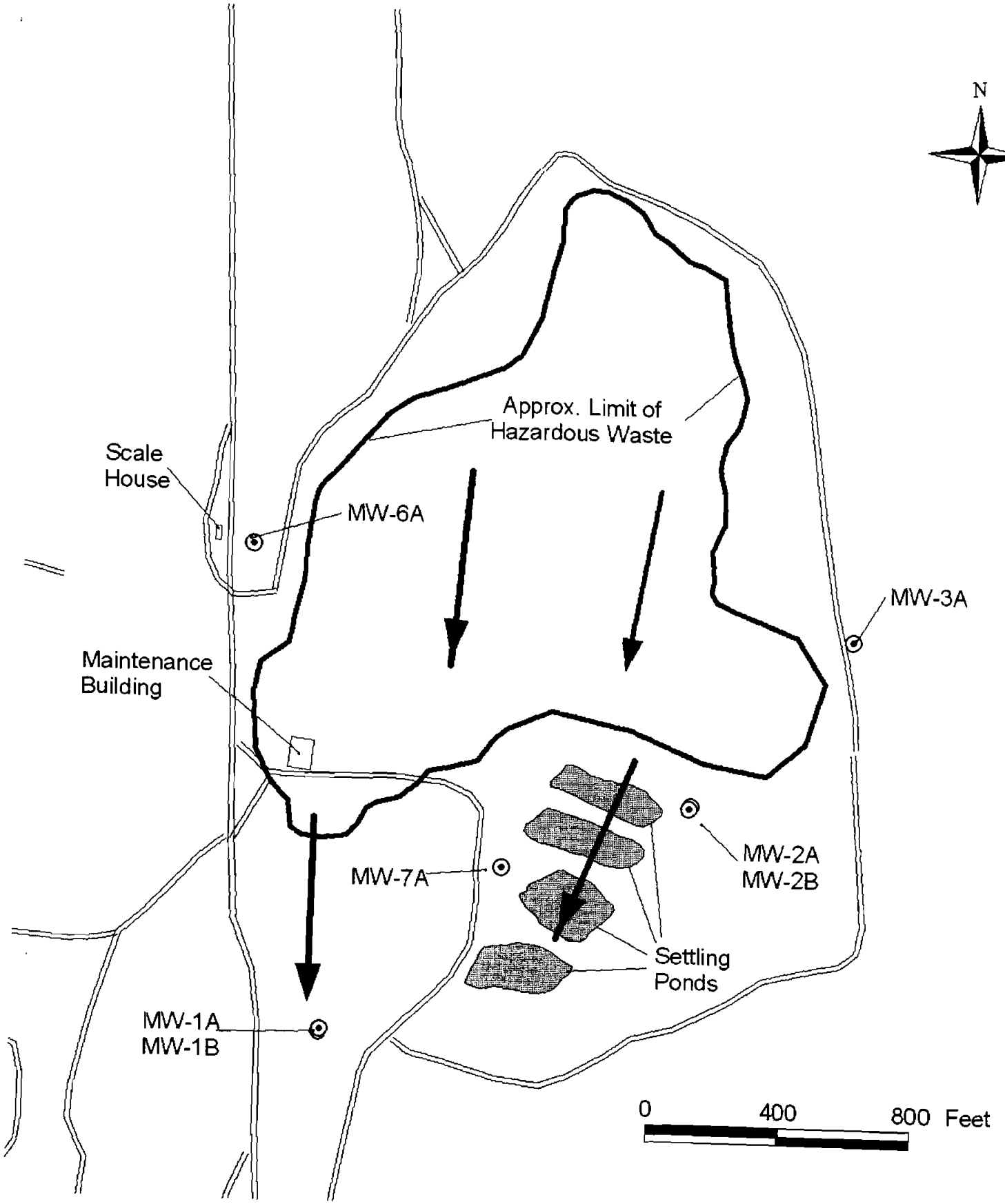
Quarter 1 – Quality control criteria were generally met. The final CRDL Standard recovery for selenium was below QC acceptance limits. Methylene chloride was detected in a laboratory blank, and methylene chloride detected in well samples has been attributed to laboratory contamination. The %RPD values for the MW-1B duplicate were generally below 20%, with the exception of aluminum, iron and manganese. This may have been the result of different turbidity levels in the split sample. No VOCs were detected in the holding blank and trip blank. Overall, we believe the

Quarter 1 2008 data are adequate to characterize groundwater quality downgradient of the Towslee landfill.

Quarter 2 – Quality control criteria were generally met. Calcium, magnesium, sodium, potassium, and chloride were detected above the PQL during the continuing calibration process. The continuing calibration recovery for TKN ammonia, TOC, and phenols were outside acceptance limits. Overall, we believe the Quarter 2 2008 data are adequate to characterize groundwater quality downgradient of the Towslee landfill.

Quarter 3 - All analytical data conformed with standard approved methodologies and quality control. The duplicate RPD for sodium for MW-3A was outside acceptance limits, but the concentration was less that 5 times the PQL, and the results are considered valid. Upstate Labs reports that all other criteria were satisfied. A Category A case narrative is included with the laboratory report in Appendix A. We believe the Quarter 3 data are adequate to characterize groundwater quality downgradient of the Towslee landfill.

Quarter 4 – All analytical data conformed with standard approved methodologies and quality control. The duplicate RPD for iron for MW-1B was outside acceptance limits, but the concentration was less that 5 times the PQL, and the results are considered valid. CCV4 recoveries were slightly above acceptance limits for cadmium and lead. Several parameters were re-analyzed (ammonia for MW-2B, TDS for MW-1A, and bromide for MW-3A and MW-6B). All other criteria were satisfied. The Category A Case Narrative for Quarter 4 results is included in Appendix B. We believe the Quarter 4 data are adequate to characterize groundwater quality downgradient of the Towslee landfill.



Approx. Goundwater
Flow Direction

Figure 1.
Monitoring Well Locations
Towslee Landfill

Table 1
Contraventions of NYS Water Quality Standards for Field and Inorganic Parameters
Towslee Landfill - Quarter 1 2008

Parameter	Units	NYS Water Quality Standard		Monitoring Well						
				Over-burden	Bedrock	Over-burden	Bedrock	Bedrock	Bedrock	Over-burden
				MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-6B	MW-7A
Temperature	(deg. F)	--		NS	1.7	3.1	3.2	3.4	3.7	2.0
Eh	(mV)	--		NS	196	42	40	174	121	245
pH	(Std Units)	6.5 - 8.5	a	NS	**8.66**	7.94	8.34	8.06	**8.55**	7.77
Specific Conductance	(uS/cm)	--		NS	1075	617	339	1074	199	561
Color	(Units)	15	a, b	NS	7	**40**	7	15	7	7
Turbidity	(NTU)	5	a	NS	**35.8**	**7.83**	**41.5**	**17**	**13.6**	**39.3**
Alkalinity, Total (As CaCO3)	(mg/l)	--		NS	100	360	640	110	140	570
Hardness (As CaCO3)	(mg/l)	--		NS	89.3	246	678	97.7	136	528
Total Dissolved Solids	(mg/l)	500	a	NS	152	410	**840**	115	198	**800**
Chloride	(mg/l)	250	a, b	NS	3.15	21	160	2.43	16.7	141
Sulfate	(mg/l)	250	a, b	NS	<5	<10	<5	<5	18.1	12.2
Bromide	(mg/l)	2	a	NS	<0.2	<2	<2	<2	<0.2	<2
Nitrogen, Nitrate (As N)	(mg/l)	10	a, b	NS	<0.2	<0.2	<0.2	0.338	<0.2	<0.2
Nitrogen, Ammonia (As N)	(mg/l)	2 *	a	NS	<0.5	**8.78**	0.785	<0.5	<0.5	<0.5
Nitrogen, Kjeldahl, Total	(mg/l)	--		NS	<0.5	10.7	1.33	<0.5	<0.5	0.522
Chemical Oxygen Demand	(mg/l)	--		NS	<20	23	24	23	<20	<20
Biochemical Oxygen Demand	(mg/l)	--		NS	<4	<4	<4	<4	<4	<4
Organic Carbon, Total	(mg/l)	--		NS	<3	21.8	82.6	<3	<3	69.9
Phenolics, Total Recoverable	(mg/l)	0.001	a	NS	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide	(mg/l)	0.2	a, b	NS	<10	<10	<10	<10	<10	<10

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.
NS - not sampled, frozen

Table 2
Contraventions of NYS Water Quality Standards for Metals
Towslee Landfill - Quarter 1 2008

Parameter	NYS Water Quality Standard		Total Metals						
			Over-burden	Bedrock	Over-burden	Bedrock	Bedrock	Bedrock	Over-burden
			MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-6B	MW-7A
Aluminum	--		NS	0.518	1.98	0.168	0.23	0.134	0.919
Antimony	0.003	a	NS	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Arsenic	0.025	a	NS	<0.01	0.0145	<0.01	<0.01	<0.01	<0.01
Barium	1	a	NS	0.199	0.377	**1.18**	0.441	0.337	0.68
Beryllium	0.004	b	NS	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Boron	1	a	NS	<0.5	<0.5	<0.5	<0.5	<0.5	0.588
Cadmium	0.005	a, b	NS	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	--		NS	25.1	70.3	201	30.2	39.2	148
Chromium	0.05	a	NS	<0.005	0.0177	0.0082	<0.005	<0.005	0.00667
Chrom, Hex	0.05	a	NS	<0.01	<0.05	<0.01	<0.01	<0.01	<0.05
Cobalt	--		NS	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Copper	0.2	a	NS	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Iron	0.3	a, b	NS	**1**	**9.77**	**0.439**	**0.451**	0.229	**1.68**
Lead	0.015	b	NS	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Magnesium	--		NS	6.44	17.1	42.8	5.42	9.37	38.4
Manganese	0.3	a, b	NS	0.26	**11.2**	**6.21**	0.0373	**0.327**	**4.17**
Mercury	0.0007	a	NS	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Nickel	0.1	a	NS	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Potassium	--		NS	<1	8.56	2.44	<1	<1	1.85
Sodium	20	a, b	NS	5.66	19.2	**50.6**	2.9	13.8	**104**
Selenium	0.01	a	NS	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Silver	0.05	a	NS	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thallium	0.002	b	NS	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Vanadium	--		NS	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Zinc	5	b	NS	0.0112	0.0101	<0.01	<0.01	0.0103	0.0102

all units are mg/l

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

b - Part 5 Drinking Water MCL

1.23 indicates contravention of standard.

N/A not analyzed

NS - not sampled, frozen

Table 3
Contraventions of NYS Water Quality Standards for Organics
Towslee Landfill - Quarter 1 2008

Parameter *	NYS Water Quality Standard		Organics						
			Over-burden	Bedrock	Over-burden	Bedrock	Bedrock	Bedrock	Over-burden
			MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-6B	MW-7A
Vinyl chloride	2	b	<5	<5	<5	<5	<5	<5	**8.2**
Chloroethane	5	b	<5	<5	<5	<5	<5	<5	<5
Acetone	50	b	<10	<10	<10	<10	<10	<10	<10
Methylene chloride	5	b	<5	**13 B**	**12 B**	**11 B**	**11 B**	**12 B**	<5
trans-1,2-Dichloroethene	5	b	<5	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene	5	b	<5	<5	<5	**9.4**	<5	<5	**9**
1,1-Dichloroethane	5	b	<5	<5	<5	<5	<5	<5	**7.9**
Benzene	1	a	<5	<5	<5	<5	<5	<5	<5
Toluene	5	b	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	5	b	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	5	b	<5	<5	<5	<5	<5	<5	<5
Xylenes, Total	5	b	<5	<5	<5	<5	<5	<5	<5
1,4-Dichlorobenzene	5	b	<5	<5	<5	<5	<5	<5	<5

all units are ug/l

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

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

b - Part 5 Drinking Water MCL

1.23 indicates contravention of standard.

J - Estimated, below detection limit

B - Compound also found in method blank, and likley an artifact of laboratory contamination

Table 4
Contraventions of NYS Water Quality Standards for Field and Inorganic Parameters
Towslee Landfill - Quarter 2 2008

Parameter	Units	NYS Water Quality Standard		Monitoring Well						
				Over-burden	Bedrock	Over-burden	Bedrock	Bedrock	Bedrock	Over-burden
				MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-6B	MW-7A
Temperature	(deg. F)	--		11.2	10.2	11.1	10.3	12.1	10.4	9.8
Eh	(mV)	--		-57	-78	-48	-46	-34	-71	-37
pH	(Std Units)	6.5 - 8.5	a	7.85	8.34	7.81	7.77	7.62	8.25	7.63
Specific Conductance	(uS/cm)	--		351	245	424	1205	261	360	1174
Color	(Units)	15	a, b	--	--	--	--	--	--	--
Turbidity	(NTU)	5	a	**16**	**14.6**	**26.8**	**13.5**	**17.7**	**11.6**	**44.4**
Alkalinity, Total (As CaCO3)	(mg/l)	--		120	100	290	620	170	140	560
Hardness (As CaCO3)	(mg/l)	--		151	103	203	654	123	142	506
Total Dissolved Solids	(mg/l)	500	a	195	130	357	**808**	188	225	**1560**
Chloride	(mg/l)	250	a, b	28	5.95	13.5	132	10.5	16.9	**1260**
Sulfate	(mg/l)	250	a, b	16.3	9.42	<5	<5	7.74	16.5	<20
Bromide	(mg/l)	2	a	<0.2	<0.2	<200	<20	<0.2	<0.2	<200
Nitrogen, Nitrate (As N)	(mg/l)	10	a, b	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.25
Nitrogen, Ammonia (As N)	(mg/l)	2 *	a	<0.5	<0.5	**8.2**	0.572	<0.5	<0.5	<0.5
Nitrogen, Kjeldahl, Total	(mg/l)	--		<0.5	<0.5	11.2	1.55	<0.5	<0.5	0.949
Chemical Oxygen Demand	(mg/l)	--		<20	<20	21	<20	<20	<20	36
Biochemical Oxygen Demand	(mg/l)	--		9	<4	5	5	7	<4	<4
Organic Carbon, Total	(mg/l)	--		<3	<3	5.2	23.2	<3	<3	17.8
Phenolics, Total Recoverable	(mg/l)	0.001	a	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide	(mg/l)	0.2	a, b	--	--	--	--	--	--	--

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 for Routine monitoring events

Table 5
Contraventions of NYS Water Quality Standards for Metals
Towslee Landfill - Quarter 2 2008

Parameter	NYS Water Quality Standard		Total Metals						
			Over-burden	Bedrock	Over-burden	Bedrock	Bedrock	Bedrock	Over-burden
			MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-6B	MW-7A
Aluminum	--		--	--	--	--	--	--	--
Antimony	0.003	a	--	--	--	--	--	--	--
Arsenic	0.025	a	--	--	--	--	--	--	--
Barium	1	a	--	--	--	--	--	--	--
Beryllium	0.004	b	--	--	--	--	--	--	--
Boron	1	a	--	--	--	--	--	--	--
Cadmium	0.005	a, b	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	--		43.2	28.6	57.5	192	37.6	39.5	139
Chromium	0.05	a	--	--	--	--	--	--	--
Chrom, Hex	0.05	a	--	--	--	--	--	--	--
Cobalt	--		--	--	--	--	--	--	--
Copper	0.2	a	--	--	--	--	--	--	--
Iron	0.3	a, b	1.17	1.38	4.1	0.56	0.574	0.33	1.99
Lead	0.015	b	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Magnesium	--		10.6	7.58	14.3	42.4	7.04	10.4	38.5
Manganese	0.3	a, b	0.157	0.198	9.3	5.96	0.141	0.102	4.34
Mercury	0.0007	a	--	--	--	--	--	--	--
Nickel	0.1	a	--	--	--	--	--	--	--
Potassium	--		1.65	<1	7.56	2.2	<1	<1	1.98
Sodium	20	a, b	12.5	6.73	16.5	47.4	3.52	12.7	99.6
Selenium	0.01	a	--	--	--	--	--	--	--
Silver	0.05	a	--	--	--	--	--	--	--
Thallium	0.002	b	--	--	--	--	--	--	--
Vanadium	--		--	--	--	--	--	--	--
Zinc	5	b	--	--	--	--	--	--	--

all units are mg/l

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

b - Part 5 Drinking Water MCL

1.23 indicates contravention of standard.

N/A not analyzed

-- not analyzed for Routine monitoring events

Table 6
Contraventions of NYS Water Quality Standards for Field and Inorganic Parameters
Towslee Landfill - Quarter 3 2008

Parameter	Units	NYS Water Quality Standard		Monitoring Well						
				Over-burden	Bedrock	Over-burden	Bedrock	Bedrock	Bedrock	Over-burden
				MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-6B	MW-7A
Temperature	(deg. F)	--		71.1	69.6	66.4	64.9	69.1	61.0	65.5
Eh	(mV)	--		-62	-78	-31	-38	-39	-81	-42
pH	(Std Units)	6.5 - 8.5	a	8.07	8.33	7.58	7.73	7.66	8.21	7.73
Specific Conductance	(uS/cm)	--		344	223	402	1132	1759	343	618
Color	(Units)	15	a, b	--	--	--	--	--	--	--
Turbidity	(NTU)	5	a	**11.6**	**12.3**	**49.2**	**15.4**	**17.9**	2.19	**41.6**
Alkalinity, Total (As CaCO3)	(mg/l)	--		120	100	380	640	91	110	600
Hardness (As CaCO3)	(mg/l)	--		159	107	303	728	76.7	137	538
Total Dissolved Solids	(mg/l)	500	a	116	80	320	**720**	60	116	**668**
Chloride	(mg/l)	250	a, b	25.9	5.61	20.2	148	1.1	31.1	136
Sulfate	(mg/l)	250	a, b	<5	<5	<20	7.62	19.9	26.8	21
Bromide	(mg/l)	2	a	<2	<0.2	<20	<2	<20	<0.2	<20
Nitrogen, Nitrate (As N)	(mg/l)	10	a, b	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrogen, Ammonia (As N)	(mg/l)	2 *	a	<0.5	<0.5	**11.9**	1.01	<0.5	<0.5	<0.5
Nitrogen, Kjeldahl, Total	(mg/l)	--		<0.5	<0.5	12.9	1.03	0.718	<0.5	<0.5
Chemical Oxygen Demand	(mg/l)	--		<20	<20	36	<20	34	<20	22
Biochemical Oxygen Demand	(mg/l)	--		<4	<4	7	<4	9	<4	<4
Organic Carbon, Total	(mg/l)	--		<3	<3	6.3	4.7	7.3	<3	5.2
Phenolics, Total Recoverable	(mg/l)	0.001	a	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide	(mg/l)	0.2	a, b	--	--	--	--	--	--	--

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.

Table 7
Contraventions of NYS Water Quality Standards for Metals
Towslee Landfill - Quarter 3 2008

Parameter	NYS Water Quality Standard		Total Metals						
			Over-burden	Bedrock	Over-burden	Bedrock	Bedrock	Bedrock	Over-burden
			MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-6B	MW-7A
Aluminum	--		--	--	--	--	--	--	--
Antimony	0.003	a	--	--	--	--	--	--	--
Arsenic	0.025	a	--	--	--	--	--	--	--
Barium	1	a	--	--	--	--	--	--	--
Beryllium	0.004	b	--	--	--	--	--	--	--
Boron	1	a	--	--	--	--	--	--	--
Cadmium	0.005	a, b	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	--		46.2	30.2	87.8	214	24.4	39	150
Chromium	0.05	a	--	--	--	--	--	--	--
Chrom, Hex	0.05	a	--	--	--	--	--	--	--
Cobalt	--		--	--	--	--	--	--	--
Copper	0.2	a	--	--	--	--	--	--	--
Iron	0.3	a, b	0.217	0.185	**10.6**	0.236	**0.508**	<0.06	**0.342**
Lead	0.015	b	<0.003	<0.003	0.0039	<0.003	<0.003	<0.003	<0.003
Magnesium	--		10.7	7.74	20.3	47.1	3.83	9.61	39.5
Manganese	0.3	a, b	0.135	0.169	**13.8**	**6.49**	**0.618**	**0.666**	**4.82**
Mercury	0.0007	a	--	--	--	--	--	--	--
Nickel	0.1	a	--	--	--	--	--	--	--
Potassium	--		1.51	<1	12.3	2.23	1.06	<1	1.82
Sodium	20	a, b	13.8	7.29	**25.6**	**51.4**	2.77	18.1	**113**
Selenium	0.01	a	--	--	--	--	--	--	--
Silver	0.05	a	--	--	--	--	--	--	--
Thallium	0.002	b	--	--	--	--	--	--	--
Vanadium	--		--	--	--	--	--	--	--
Zinc	5	b	--	--	--	--	--	--	--

all units are mg/l

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

b - Part 5 Drinking Water MCL

1.23 *indicates contravention of standard.*

N/A not analyzed

Table 8
Contraventions of NYS Water Quality Standards for Field and Inorganic Parameters
Towslee Landfill - Quarter 4 2008

Parameter	Units	NYS Water Quality Standard		Monitoring Well						
				Over-burden	Bedrock	Over-burden	Bedrock	Bedrock	Bedrock	Over-burden
				MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-6B	MW-7A
Temperature	(deg. F)	--		51.1	53.2	53.6	55.2	56.3	54.7	52.0
Eh	(mV)	--		-69	-78	-34	-33	-41	-54	-41
pH	(Std Units)	6.5 - 8.5	a	8.23	8.38	7.63	7.59	7.72	7.96	8.09
Specific Conductance	(uS/cm)	--		334	229	695	1137	204	355	214
Color	(Units)	15	a, b	--	--	--	--	--	--	--
Turbidity	(NTU)	5	a	**24.6**	**6.33**	**8.52**	3.14	**6.67**	**5.24**	**42.7**
Alkalinity, Total (As CaCO3)	(mg/l)	--		120	99	360	680	97	120	670
Hardness (As CaCO3)	(mg/l)	--		165	105	343	788	97.9	134	569
Total Dissolved Solids	(mg/l)	500	a	188 H	140	356	**864**	112	168	**728**
Chloride	(mg/l)	250	a, b	29.7	6.03	15.5	162	1.75	28.6	135
Sulfate	(mg/l)	250	a, b	11.6	<5	<10	<5	<5	17.2	16.1
Bromide	(mg/l)	2	a	<2	<0.2	<20	<0.2	<2	<2	<20
Nitrogen, Nitrate (As N)	(mg/l)	10	a, b	<0.2	<0.2	<0.2	<0.2	1.14	<0.2	<0.2
Nitrogen, Ammonia (As N)	(mg/l)	2 *	a	<0.5	<0.5	**10.8**	0.504	<0.5	<0.5	<0.5
Nitrogen, Kjeldahl, Total	(mg/l)	--		<0.5	<0.5	11.6	1.13	<0.5	<0.5	<0.5
Chemical Oxygen Demand	(mg/l)	--		<20	<20	32	<20	<20	<20	29
Biochemical Oxygen Demand	(mg/l)	--		<4	<4	<4	<4	<4	<4	<4
Organic Carbon, Total	(mg/l)	--		<3	<3	6	6.8	3.6	<3	6.1
Phenolics, Total Recoverable	(mg/l)	0.001	a	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide	(mg/l)	0.2	a, b	--	--	--	--	--	--	--

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.

Table 9
Contraventions of NYS Water Quality Standards for Metals
Towslee Landfill - Quarter 4 2008

Parameter	NYS Water Quality Standard		Total Metals						
			Over-burden	Bedrock	Over-burden	Bedrock	Bedrock	Bedrock	Over-burden
			MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-6B	MW-7A
Aluminum	--		--	--	--	--	--	--	--
Antimony	0.003	a	--	--	--	--	--	--	--
Arsenic	0.025	a	--	--	--	--	--	--	--
Barium	1	a	--	--	--	--	--	--	--
Beryllium	0.004	b	--	--	--	--	--	--	--
Boron	1	a	--	--	--	--	--	--	--
Cadmium	0.005	a, b	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	--		48.3	30	99	235	31.3	38.7	162
Chromium	0.05	a	--	--	--	--	--	--	--
Chrom, Hex	0.05	a	--	--	--	--	--	--	--
Cobalt	--		--	--	--	--	--	--	--
Copper	0.2	a	--	--	--	--	--	--	--
Iron	0.3	a, b	**0.429**	0.174	**9.51**	0.28	0.177	<0.06	**1.16**
Lead	0.015	b	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Magnesium	--		10.8	7.28	23.1	49.1	4.8	9.13	39.8
Manganese	0.3	a, b	0.151	0.153	**15.1**	**6.84**	0.0424	**0.619**	**4.57**
Mercury	0.0007	a	--	--	--	--	--	--	--
Nickel	0.1	a	--	--	--	--	--	--	--
Potassium	--		1.69	<1	15.1	3.13	<1	1.4	2.41
Sodium	20	a, b	13.2	6.81	**25.9**	**58.2**	2.69	17.6	**116**
Selenium	0.01	a	--	--	--	--	--	--	--
Silver	0.05	a	--	--	--	--	--	--	--
Thallium	0.002	b	--	--	--	--	--	--	--
Vanadium	--		--	--	--	--	--	--	--
Zinc	5	b	--	--	--	--	--	--	--

all units are mg/l

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

b - Part 5 Drinking Water MCL

1.23 indicates contravention of standard.

N/A not analyzed

Appendix A

Analytical Laboratory Results and Internal Quality Control Summary

Quarter 3 2008

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) 247-4313

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

August 22, 2008

RE: Towslee Landfill, Cortlandville, New York, Samples Collected July 23, 2008
Case Narrative for ULI SDG Number COR16, Workorder #U0807440

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
Ca,Cd,Fe,Pb,Mg,Mn,K,Na	R36227	The Duplicate %RPD for Sodium was outside QC acceptance limits for the Duplicate analysis performed on sample location MW-3A. The concentration of Sodium in sample location MW-3A was less than 5X the PQL; therefore, the data should be considered valid. All other criteria were satisfied.

Wet Chemistry

Test	Batch	Anomaly
BOD	R35466	Criteria were satisfied.
Nitrate-Nitrogen	R35493	Criteria were satisfied.
Alkalinity, Total	R35575	Criteria were satisfied.
Chloride	R35494	Criteria were satisfied.

The total number of pages in this Data Package is : 3 .

Wet Chemistry (continued)

Test	Batch	Anomaly
COD	R35548	Criteria were satisfied.
TKN	R35746	Criteria were satisfied.
Ammonia-Nitrogen	R35746	Criteria were satisfied.
	R35805	Criteria were satisfied.
Sulfate	R35653	Criteria were satisfied.
TDS	R35535	Criteria were satisfied.
TOC	R35905	Criteria were satisfied.
Phenols, Total	R35707	Criteria were satisfied.
	R35757	Criteria were satisfied.
Bromide	R35730	Criteria were satisfied.
	R35744	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

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	200.7	(1)
Magnesium	200.7	(1)
Manganese	200.7	(1)
Potassium	200.7	(1)
Sodium	200.7	(1)
BOD	405.1	(1)
Nitrate-Nitrogen	353.2	(1)
Alkalinity, Total	310.2	(1)
Chloride	325.2	(1)
COD	410.4	(1)
Ammonia-Nitrogen	350.1	(1)
Sulfate	375.4	(1)
TDS	160.1	(1)
TKN	351.2	(1)
TOC	415.1	(1)
Phenols	420.4	(1)
Bromide	300.1	(1)

Reference

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

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Aug-08*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-1A
Lab Order: U0807440
Collection Date: 7/23/2008 10:32:00 AM
Project: Towslee Landfill
Lab ID: U0807440-001
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FLD**		Analyst:
Conductivity	344	1.0		umhos/cm		7/23/2008 10:32:00 AM
Eh	-62	-300		mV		7/23/2008 10:32:00 AM
pH	8.07	6.5-8.5		SU		7/23/2008 10:32:00 AM
Temperature	21.7			degC		7/23/2008 10:32:00 AM
Turbidity	11.6	5.0		NTU		7/23/2008 10:32:00 AM
INORGANIC ANIONS BY IC FOR WATERS				**E300.1**		Analyst: **NJS**
Bromide	ND	2.0		mg/L	10	8/4/2008
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL ASP				**E200.7**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	8/21/2008 9:54:55 AM
Calcium	46200	1000		µg/L	1	8/21/2008 9:54:55 AM
Iron	217	60.0		µg/L	1	8/21/2008 9:54:55 AM
Lead	ND	3.00		µg/L	1	8/21/2008 9:54:55 AM
Magnesium	10700	1000		µg/L	1	8/21/2008 9:54:55 AM
Manganese	135	10.0		µg/L	1	8/21/2008 9:54:55 AM
Potassium	1510	1000		µg/L	1	8/21/2008 9:54:55 AM
Sodium	13800	1000		µg/L	1	8/21/2008 9:54:55 AM
Hardness, Total(CaCO3)	159000	7000		µg/L	1	8/21/2008 9:54:55 AM
RESIDUE, DISSOLVED (TDS)				**E160.1**		Analyst: **VAW**
Residue, Dissolved (TDS)	116	25.0		mg/L	1	7/25/2008
ALKALINITY ON AQUEOUS SAMPLES BY LACHAT				**E310.2**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	120	10		mg/LCaCO3	1	7/24/2008
CHLORIDE WATERS BY LACHAT				**E325.2**		Analyst: **BY**
Chloride	25.9	1.00		mg/L	1	7/24/2008
NITROGEN, AMMONIA (AS NH3 BY LACHAT)				**E350.1**		Analyst: **BS**
Nitrogen, Ammonia (As NH3)	ND	0.500		mg/L	1	8/4/2008
NITROGEN, TOTAL KJELDAHL (TKN) BY LACHAT				**E351.2**		Analyst: **BS**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	8/4/2008
NITROGEN, NITRATE (AS N)				**E353.2**		Analyst: **BY**
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	7/24/2008 10:33:00 AM
SULFATE				**E375.4**		Analyst: **MCD**
Sulfate	ND	5.00		mg/L	1	7/31/2008
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**

Approved By: RMH **Date:** 8-21-08

Qualifiers:

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Aug-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-1A
Lab Order:	U0807440	**Collection Date:**	7/23/2008 10:32:00 AM
Project:	Towslee Landfill		
Lab ID:	U0807440-001	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)			**E405.1**			Analyst: **VAW**
Biochemical Oxygen Demand	ND	4.00		mg/L	1	7/23/2008 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)			**E410.4**			Analyst: **KAM**
Chemical Oxygen Demand	ND	20		mg/L	1	7/28/2008
TOTAL ORGANIC CARBON (TOC)			**E415.1**			Analyst: **BS**
Organic Carbon, Total	ND	3.0		mg/L	1	8/10/2008
PHENOLICS, TOTAL REC. FOR WATERS			**E420.4**		**(E420.4)**	Analyst: **NJS**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	8/3/2008

Approved By: PMH **Date:** 8-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Aug-08*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-1B
Lab Order: U0807440
Collection Date: 7/23/2008 10:40:00 AM
Project: Towslee Landfill
Lab ID: U0807440-002
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FLD**		Analyst:
Conductivity	223	1.0		umhos/cm		7/23/2008 10:40:00 AM
Eh	-78	-300		mV		7/23/2008 10:40:00 AM
pH	8.33	6.5-8.5		SU		7/23/2008 10:40:00 AM
Temperature	20.9			degC		7/23/2008 10:40:00 AM
Turbidity	12.3	5.0		NTU		7/23/2008 10:40:00 AM
INORGANIC ANIONS BY IC FOR WATERS				**E300.1**		Analyst: **NJS**
Bromide	ND	0.20		mg/L	1	8/3/2008
ICP METALS, TOTAL ASP				**E200.7**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	8/21/2008 9:58:18 AM
Calcium	30200	1000		µg/L	1	8/21/2008 9:58:18 AM
Iron	185	60.0		µg/L	1	8/21/2008 9:58:18 AM
Lead	ND	3.00		µg/L	1	8/21/2008 9:58:18 AM
Magnesium	7740	1000		µg/L	1	8/21/2008 9:58:18 AM
Manganese	169	10.0		µg/L	1	8/21/2008 9:58:18 AM
Potassium	ND	1000		µg/L	1	8/21/2008 9:58:18 AM
Sodium	7290	1000		µg/L	1	8/21/2008 9:58:18 AM
Hardness, Total(CaCO3)	107000	7000		µg/L	1	8/21/2008 9:58:18 AM
RESIDUE, DISSOLVED (TDS)				**E160.1**		Analyst: **VAW**
Residue, Dissolved (TDS)	80.0	25.0		mg/L	1	7/25/2008
ALKALINITY ON AQUEOUS SAMPLES BY LACHAT				**E310.2**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	100	10		mg/LCaCO3	1	7/24/2008
CHLORIDE WATERS BY LACHAT				**E325.2**		Analyst: **BY**
Chloride	5.61	1.00		mg/L	1	7/24/2008
NITROGEN, AMMONIA (AS NH3 BY LACHAT)				**E350.1**		Analyst: **BS**
Nitrogen, Ammonia (As NH3)	ND	0.500		mg/L	1	8/4/2008
NITROGEN, TOTAL KJELDAHL (TKN) BY LACHAT				**E351.2**		Analyst: **BS**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	8/4/2008
NITROGEN, NITRATE (AS N)				**E353.2**		Analyst: **BY**
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	7/24/2008 10:33:00 AM
SULFATE				**E375.4**		Analyst: **MCD**
Sulfate	ND	5.00		mg/L	1	7/31/2008
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**
Biochemical Oxygen Demand	ND	4.00		mg/L	1	7/23/2008 8:00:00 AM

Approved By: PMH **Date:** 8-21-08

Qualifiers:

*	Low Level
B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
**	Value exceeds Maximum Contaminant Value
E	Value above quantitation range
J	Analyte detected below quantitation limits
S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Aug-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-1B
Lab Order:	U0807440	**Collection Date:**	7/23/2008 10:40:00 AM
Project:	Towslee Landfill		
Lab ID:	U0807440-002	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD)				**E410.4**		Analyst: **KAM**
Chemical Oxygen Demand	ND	20		mg/L	1	7/28/2008
TOTAL ORGANIC CARBON (TOC)				**E415.1**		Analyst: **BS**
Organic Carbon, Total	ND	3.0		mg/L	1	8/10/2008
PHENOLICS, TOTAL REC. FOR WATERS				**E420.4**	**(E420.4)**	Analyst: **NJS**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	8/3/2008

Approved By: PMH **Date:** 8-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Aug-08*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-2A
Lab Order: U0807440
Collection Date: 7/23/2008 11:16:00 AM
Project: Towslee Landfill
Lab ID: U0807440-003
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FLD**		Analyst:
Conductivity	402	1.0		umhos/cm		7/23/2008 11:16:00 AM
Eh	-31	-300		mV		7/23/2008 11:16:00 AM
pH	7.58	6.5-8.5		SU		7/23/2008 11:16:00 AM
Temperature	19.1			degC		7/23/2008 11:16:00 AM
Turbidity	49.2	5.0		NTU		7/23/2008 11:16:00 AM
INORGANIC ANIONS BY IC FOR WATERS				**E300.1**		Analyst: **NJS**
Bromide	ND	20		mg/L	100	8/3/2008
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL ASP				**E200.7**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	8/21/2008 10:02:16 AM
Calcium	87800	1000		µg/L	1	8/21/2008 10:02:16 AM
Iron	10600	60.0		µg/L	1	8/21/2008 10:02:16 AM
Lead	3.90	3.00		µg/L	1	8/21/2008 10:02:16 AM
Magnesium	20300	1000		µg/L	1	8/21/2008 10:02:16 AM
Manganese	13800	10.0		µg/L	1	8/21/2008 10:02:16 AM
Potassium	12300	1000		µg/L	1	8/21/2008 10:02:16 AM
Sodium	25600	1000		µg/L	1	8/21/2008 10:02:16 AM
Hardness, Total(CaCO3)	303000	7000		µg/L	1	8/21/2008 10:02:16 AM
RESIDUE, DISSOLVED (TDS)				**E160.1**		Analyst: **VAW**
Residue, Dissolved (TDS)	320	25.0		mg/L	1	7/25/2008
ALKALINITY ON AQUEOUS SAMPLES BY LACHAT				**E310.2**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	380	10		mg/LCaCO3	1	7/24/2008
CHLORIDE WATERS BY LACHAT				**E325.2**		Analyst: **BY**
Chloride	20.2	1.00		mg/L	1	7/24/2008
NITROGEN, AMMONIA (AS NH3 BY LACHAT)				**E350.1**		Analyst: **BS**
Nitrogen, Ammonia (As NH3)	11.9	0.500		mg/L	1	8/6/2008
NITROGEN, TOTAL KJELDAHL (TKN) BY LACHAT				**E351.2**		Analyst: **BS**
Nitrogen, Kjeldahl, Total	12.9	0.500		mg/L	1	8/4/2008
NITROGEN, NITRATE (AS N)				**E353.2**		Analyst: **BY**
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	7/24/2008 10:33:00 AM
SULFATE				**E375.4**		Analyst: **MCD**
Sulfate	ND	20.0		mg/L	4	7/31/2008

Approved By: JMH **Date:** 8-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Aug-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-2A
Lab Order:	U0807440	**Collection Date:**	7/23/2008 11:16:00 AM
Project:	Towslee Landfill		
Lab ID:	U0807440-003	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE				**E375.4**		Analyst: **MCD**
NOTES: The reporting limits were raised due to matrix interference.						
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**
Biochemical Oxygen Demand	7.00	4.00		mg/L	1	7/23/2008 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)				**E410.4**		Analyst: **KAM**
Chemical Oxygen Demand	36	20		mg/L	1	7/28/2008
TOTAL ORGANIC CARBON (TOC)				**E415.1**		Analyst: **BS**
Organic Carbon, Total	6.3	3.0		mg/L	1	8/10/2008
PHENOLICS, TOTAL REC. FOR WATERS				**E420.4**	**(E420.4)**	Analyst: **NJS**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	8/3/2008

Approved By: PMH **Date:** 8-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Aug-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-2B
Lab Order:	U0807440	**Collection Date:**	7/23/2008 11:21:00 AM
Project:	Towslee Landfill		
Lab ID:	U0807440-004	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FLD**		Analyst:
Conductivity	1132	1.0		umhos/cm		7/23/2008 11:21:00 AM
Eh	-38	-300		mV		7/23/2008 11:21:00 AM
pH	7.73	6.5-8.5		SU		7/23/2008 11:21:00 AM
Temperature	18.3			degC		7/23/2008 11:21:00 AM
Turbidity	15.4	5.0		NTU		7/23/2008 11:21:00 AM
INORGANIC ANIONS BY IC FOR WATERS				**E300.1**		Analyst: **NJS**
Bromide	ND	2.0		mg/L	10	8/4/2008
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL ASP				**E200.7**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	8/21/2008 10:05:27 AM
Calcium	214000	1000		µg/L	1	8/21/2008 10:05:27 AM
Iron	236	60.0		µg/L	1	8/21/2008 10:05:27 AM
Lead	ND	3.00		µg/L	1	8/21/2008 10:05:27 AM
Magnesium	47100	1000		µg/L	1	8/21/2008 10:05:27 AM
Manganese	6490	10.0		µg/L	1	8/21/2008 10:05:27 AM
Potassium	2230	1000		µg/L	1	8/21/2008 10:05:27 AM
Sodium	51400	1000		µg/L	1	8/21/2008 10:05:27 AM
Hardness, Total(CaCO3)	728000	7000		µg/L	1	8/21/2008 10:05:27 AM
RESIDUE, DISSOLVED (TDS)				**E160.1**		Analyst: **VAW**
Residue, Dissolved (TDS)	720	25.0		mg/L	1	7/25/2008
ALKALINITY ON AQUEOUS SAMPLES BY LACHAT				**E310.2**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	640	100		mg/LCaCO3	10	7/24/2008
CHLORIDE WATERS BY LACHAT				**E325.2**		Analyst: **BY**
Chloride	148	1.00		mg/L	1	7/24/2008
NITROGEN, AMMONIA (AS NH3 BY LACHAT)				**E350.1**		Analyst: **BS**
Nitrogen, Ammonia (As NH3)	1.01	0.500		mg/L	1	8/6/2008
NITROGEN, TOTAL KJELDAHL (TKN) BY LACHAT				**E351.2**		Analyst: **BS**
Nitrogen, Kjeldahl, Total	1.03	0.500		mg/L	1	8/4/2008
NITROGEN, NITRATE (AS N)				**E353.2**		Analyst: **BY**
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	7/24/2008 10:33:00 AM
SULFATE				**E375.4**		Analyst: **MCD**
Sulfate	7.62	5.00		mg/L	1	7/31/2008
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**

Approved By: PMH **Date:** 8-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Aug-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-2B
Lab Order:	U0807440	**Collection Date:**	7/23/2008 11:21:00 AM
Project:	Towslee Landfill		
Lab ID:	U0807440-004	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)			**E405.1**			Analyst: **VAW**
Biochemical Oxygen Demand	ND	4.00		mg/L	1	7/23/2008 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)			**E410.4**			Analyst: **KAM**
Chemical Oxygen Demand	ND	20		mg/L	1	7/28/2008
TOTAL ORGANIC CARBON (TOC)			**E415.1**			Analyst: **BS**
Organic Carbon, Total	4.7	3.0		mg/L	1	8/10/2008
PHENOLICS, TOTAL REC. FOR WATERS			**E420.4**		**(E420.4)**	Analyst: **NJS**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	8/5/2008

Approved By: PMH **Date:** 8-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Aug-08*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-3A
Lab Order: U0807440
Collection Date: 7/23/2008 10:01:00 AM
Project: Towslee Landfill
Lab ID: U0807440-005
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FLD**		Analyst:
Conductivity	1759	1.0		umhos/cm		7/23/2008 10:01:00 AM
Eh	-39	-300		mV		7/23/2008 10:01:00 AM
pH	7.66	6.5-8.5		SU		7/23/2008 10:01:00 AM
Temperature	20.6			degC		7/23/2008 10:01:00 AM
Turbidity	17.9	5.0		NTU		7/23/2008 10:01:00 AM
INORGANIC ANIONS BY IC FOR WATERS				**E300.1**		Analyst: **NJS**
Bromide	ND	20		mg/L	100	8/3/2008
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL ASP				**E200.7**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	8/21/2008 10:08:49 AM
Calcium	24400	1000		µg/L	1	8/21/2008 10:08:49 AM
Iron	508	60.0		µg/L	1	8/21/2008 10:08:49 AM
Lead	ND	3.00		µg/L	1	8/21/2008 10:08:49 AM
Magnesium	3830	1000		µg/L	1	8/21/2008 10:08:49 AM
Manganese	618	10.0		µg/L	1	8/21/2008 10:08:49 AM
Potassium	1060	1000		µg/L	1	8/21/2008 10:08:49 AM
Sodium	2770	1000		µg/L	1	8/21/2008 10:08:49 AM
Hardness, Total(CaCO3)	76700	7000		µg/L	1	8/21/2008 10:08:49 AM
RESIDUE, DISSOLVED (TDS)				**E160.1**		Analyst: **VAW**
Residue, Dissolved (TDS)	60.0	25.0		mg/L	1	7/25/2008
ALKALINITY ON AQUEOUS SAMPLES BY LACHAT				**E310.2**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	91	10		mg/LCaCO3	1	7/24/2008
CHLORIDE WATERS BY LACHAT				**E325.2**		Analyst: **BY**
Chloride	1.10	1.00		mg/L	1	7/24/2008
NITROGEN, AMMONIA (AS NH3 BY LACHAT)				**E350.1**		Analyst: **BS**
Nitrogen, Ammonia (As NH3)	ND	0.500		mg/L	1	8/6/2008
NITROGEN, TOTAL KJELDAHL (TKN) BY LACHAT				**E351.2**		Analyst: **BS**
Nitrogen, Kjeldahl, Total	0.718	0.500		mg/L	1	8/4/2008
NITROGEN, NITRATE (AS N)				**E353.2**		Analyst: **BY**
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	7/24/2008 10:33:00 AM
SULFATE				**E375.4**		Analyst: **MCD**
Sulfate	19.9	5.00		mg/L	1	7/31/2008
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**

Approved By: PMH
Date: 8-21-08

Qualifiers:

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Aug-08*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-3A
Lab Order: U0807440
Collection Date: 7/23/2008 10:01:00 AM
Project: Towslee Landfill
Lab ID: U0807440-005
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**
Biochemical Oxygen Demand	9.00	4.00		mg/L	1	7/23/2008 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)				**E410.4**		Analyst: **KAM**
Chemical Oxygen Demand	34	20		mg/L	1	7/28/2008
TOTAL ORGANIC CARBON (TOC)				**E415.1**		Analyst: **BS**
Organic Carbon, Total	7.3	3.0		mg/L	1	8/10/2008
PHENOLICS, TOTAL REC. FOR WATERS				**E420.4**	**(E420.4)**	Analyst: **NJS**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	8/3/2008

Approved By: PMH **Date:** 8-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Aug-08*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-6B
Lab Order: U0807440
Collection Date: 7/23/2008 11:35:00 AM
Project: Towslee Landfill
Lab ID: U0807440-006
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FLD**		Analyst:
Conductivity	343	1.0		umhos/cm		7/23/2008 11:35:00 AM
Eh	-81	-300		mV		7/23/2008 11:35:00 AM
pH	8.21	6.5-8.5		SU		7/23/2008 11:35:00 AM
Temperature	16.1			degC		7/23/2008 11:35:00 AM
Turbidity	2.19	5.0		NTU		7/23/2008 11:35:00 AM
INORGANIC ANIONS BY IC FOR WATERS				**E300.1**		Analyst: **NJS**
Bromide	ND	0.20		mg/L	1	8/3/2008
ICP METALS, TOTAL ASP				**E200.7**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	8/21/2008 10:18:41 AM
Calcium	39000	1000		µg/L	1	8/21/2008 10:18:41 AM
Iron	ND	60.0		µg/L	1	8/21/2008 10:18:41 AM
Lead	ND	3.00		µg/L	1	8/21/2008 10:18:41 AM
Magnesium	9610	1000		µg/L	1	8/21/2008 10:18:41 AM
Manganese	666	10.0		µg/L	1	8/21/2008 10:18:41 AM
Potassium	ND	1000		µg/L	1	8/21/2008 10:18:41 AM
Sodium	18100	1000		µg/L	1	8/21/2008 10:18:41 AM
Hardness, Total(CaCO3)	137000	7000		µg/L	1	8/21/2008 10:18:41 AM
RESIDUE, DISSOLVED (TDS)				**E160.1**		Analyst: **VAW**
Residue, Dissolved (TDS)	116	25.0		mg/L	1	7/25/2008
ALKALINITY ON AQUEOUS SAMPLES BY LACHAT				**E310.2**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	110	10		mg/LCaCO3	1	7/24/2008
CHLORIDE WATERS BY LACHAT				**E325.2**		Analyst: **BY**
Chloride	31.1	1.00		mg/L	1	7/24/2008
NITROGEN, AMMONIA (AS NH3 BY LACHAT)				**E350.1**		Analyst: **BS**
Nitrogen, Ammonia (As NH3)	ND	0.500		mg/L	1	8/4/2008
NITROGEN, TOTAL KJELDAHL (TKN) BY LACHAT				**E351.2**		Analyst: **BS**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	8/4/2008
NITROGEN, NITRATE (AS N)				**E353.2**		Analyst: **BY**
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	7/24/2008 10:33:00 AM
SULFATE				**E375.4**		Analyst: **MCD**
Sulfate	26.8	5.00		mg/L	1	7/31/2008
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**
Biochemical Oxygen Demand	ND	4.00		mg/L	1	7/23/2008 8:00:00 AM

Approved By: PMH **Date:** 8-21-08

Qualifiers:

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Aug-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-6B
Lab Order:	U0807440	**Collection Date:**	7/23/2008 11:35:00 AM
Project:	Towslee Landfill		
Lab ID:	U0807440-006	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD)				**E410.4**		Analyst: **KAM**
Chemical Oxygen Demand	ND	20		mg/L	1	7/28/2008
TOTAL ORGANIC CARBON (TOC)				**E415.1**		Analyst: **BS**
Organic Carbon, Total	ND	3.0		mg/L	1	8/10/2008
PHENOLICS, TOTAL REC. FOR WATERS				**E420.4**	**(E420.4)**	Analyst: **NJS**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	8/3/2008

Approved By: DMH **Date:** 8-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Aug-08*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-7A
Lab Order: U0807440
Collection Date: 7/23/2008 10:56:00 AM
Project: Towslee Landfill
Lab ID: U0807440-007
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FLD**		Analyst:
Conductivity	618	1.0		umhos/cm		7/23/2008 10:56:00 AM
Eh	-42	-300		mV		7/23/2008 10:56:00 AM
pH	7.73	6.5-8.5		SU		7/23/2008 10:56:00 AM
Temperature	18.6			degC		7/23/2008 10:56:00 AM
Turbidity	41.6	5.0		NTU		7/23/2008 10:56:00 AM
INORGANIC ANIONS BY IC FOR WATERS				**E300.1**		Analyst: **NJS**
Bromide	ND	20		mg/L	100	8/3/2008
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL ASP				**E200.7**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	8/21/2008 10:28:36 AM
Calcium	150000	1000		µg/L	1	8/21/2008 10:28:36 AM
Iron	342	60.0		µg/L	1	8/21/2008 10:28:36 AM
Lead	ND	3.00		µg/L	1	8/21/2008 10:28:36 AM
Magnesium	39500	1000		µg/L	1	8/21/2008 10:28:36 AM
Manganese	4820	10.0		µg/L	1	8/21/2008 10:28:36 AM
Potassium	1820	1000		µg/L	1	8/21/2008 10:28:36 AM
Sodium	113000	1000		µg/L	1	8/21/2008 10:28:36 AM
Hardness, Total(CaCO3)	538000	7000		µg/L	1	8/21/2008 10:28:36 AM
RESIDUE, DISSOLVED (TDS)				**E160.1**		Analyst: **VAW**
Residue, Dissolved (TDS)	668	25.0		mg/L	1	7/25/2008
ALKALINITY ON AQUEOUS SAMPLES BY LACHAT				**E310.2**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	600	100		mg/LCaCO3	10	7/24/2008
CHLORIDE WATERS BY LACHAT				**E325.2**		Analyst: **BY**
Chloride	136	1.00		mg/L	1	7/24/2008
NITROGEN, AMMONIA (AS NH3 BY LACHAT)				**E350.1**		Analyst: **BS**
Nitrogen, Ammonia (As NH3)	ND	0.500		mg/L	1	8/4/2008
NITROGEN, TOTAL KJELDAHL (TKN) BY LACHAT				**E351.2**		Analyst: **BS**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	8/4/2008
NITROGEN, NITRATE (AS N)				**E353.2**		Analyst: **BY**
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	7/24/2008 10:33:00 AM
SULFATE				**E375.4**		Analyst: **MCD**
Sulfate	21.0	20.0		mg/L	4	7/31/2008
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**

Approved By: RMH **Date:** 8-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Aug-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-7A
Lab Order:	U0807440	**Collection Date:**	7/23/2008 10:56:00 AM
Project:	Towslee Landfill		
Lab ID:	U0807440-007	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)			**E405.1**			Analyst: **VAW**
Biochemical Oxygen Demand	ND	4.00		mg/L	1	7/23/2008 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)			**E410.4**			Analyst: **KAM**
Chemical Oxygen Demand	22	20		mg/L	1	7/28/2008
TOTAL ORGANIC CARBON (TOC)			**E415.1**			Analyst: **BS**
Organic Carbon, Total	5.2	3.0		mg/L	1	8/10/2008
PHENOLICS, TOTAL REC. FOR WATERS			**E420.4**		**(E420.4)**	Analyst: **NJS**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	8/3/2008

Approved By: PMH **Date:** 8-21-08

Qualifiers:

*	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	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.: **MW-1A**

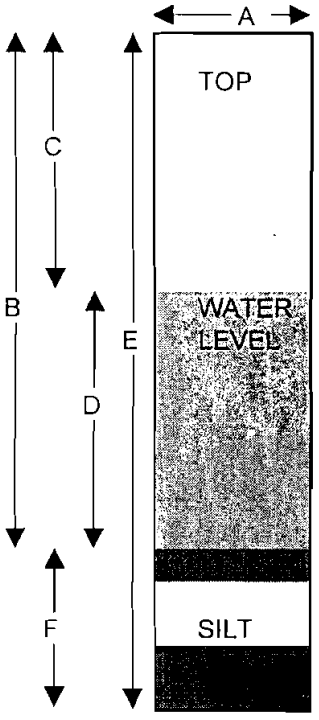
Condition of Well: Good

Locked: YES

Method of Evacuation: Dedicated Bailer

Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	33.7	feet
C.	Depth to Water	2.65	feet
D.	Length of Water Column (calculated)	31.05	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	4.968	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	14.904	gallons
	Actual Volume Evacuated	15	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	7/22/08	7/23/08
Time	1:42 pm	10:32
EH	-79	-62
Temperature	17.1°c	21.7°c
pH	8.38	8.07
Specific Cond.	1870	344
Turbidity	13.6	11.6
Dissolved Oxygen	N/A	N/A
Appearance	Sl. cloudy	Sl. cloudy
Weather:	65 rain/cloudy	65° cloudy
Observations:		

% Recharge:

Initial Depth to Water 2.65 feet

Recharge Depth to Water 2.38 feet

2nd water column height 111.3 %

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

Sampler: Justin Gibson

Signature: Justin Gibson

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)

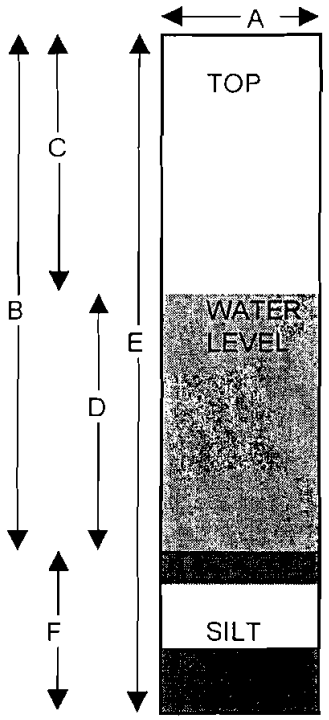
Condition of Well: Good

Locked: ~~NO~~ Yes

Method of Evacuation: Dedicated Bailer

Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	55.5	feet
C.	Depth to Water	2.61	feet
D.	Length of Water Column (calculated)	52.89	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	8.4624	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	25.3872	gallons
	Actual Volume Evacuated	25	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	7/22/08	7/23/08
Time	1:45 pm	10:40
EH	-81	-78
Temperature	19.8°C	20.9
pH	8.39	8.33
Specific Cond.	1990	223
Turbidity	5.43	12.3
Dissolved Oxygen	N/A	N/A
Appearance	Clear	Sl. Cloudy

% Recharge:

Initial Depth to Water 2.61 feet

Recharge Depth to Water 2.24 feet

2nd water column height 116.5 %

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° sun/cloudy 65° cloudy

Observations:

Sampler: Justin Gibson

Signature: Justin Gibson

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**

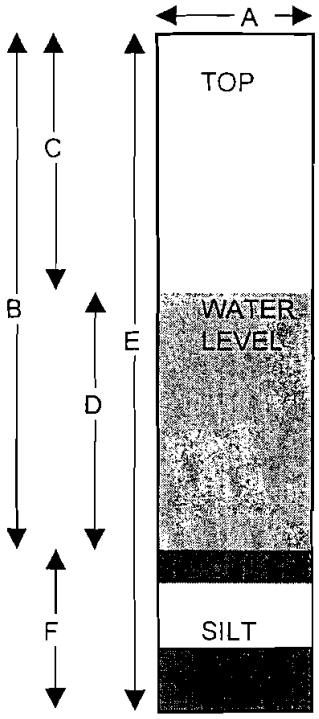
Condition of Well: Good

Locked: YES

Method of Evacuation: Dedicated Bailer

Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	12.8	feet
C.	Depth to Water	5.75	feet
D.	Length of Water Column (calculated)	7.05	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	1.128	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	3.384	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	7/22/08	7/23/08
Time	2:35	11:16
EH	-40	-31
Temperature	19.4°c	19.1°c
pH	7.72	7.58
Specific Cond.	718	402
Turbidity	69.7	49.2
Dissolved Oxygen	N/A	N/A
Appearance	Cloudy	Cloudy

Weather: 65° rain/cloudy 65° cloudy

Observations:

% Recharge:

Initial Depth to Water 5.75 feet

Recharge Depth to Water 4.71 feet

2nd water column height 122.0 % (~~122~~)

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

Sampler: Justin Gibson

Signature: Justin Gibson

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**

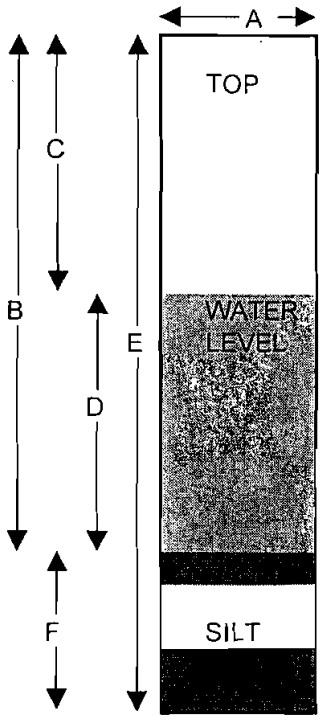
Condition of Well: Good

Locked: YES

Method of Evacuation: Dedicated Bailer

Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	33.5	feet
C.	Depth to Water	7.14	feet
D.	Length of Water Column (calculated)	26.36	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	4.2176	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	12.65 28	gallons
	Actual Volume Evacuated	12.5	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	7/22/08	7/23/08
Time	2:38 pm	11:21
EH	-42	-38
Temperature	15.1	18.3
pH	7.80	7.73
Specific Cond.	1215	1132
Turbidity	7.22	1561
Dissolved Oxygen	N/A	N/A
Appearance	Clear	Sl. Cloudy
Weather:	65 rain/ cloudy	65° cloudy
Observations:		

% Recharge:

Initial Depth to Water 7.14 feet

Recharge Depth to Water 6.78 feet

2nd water column height 105.3 %

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

Sampler:
Justin Gibson

Signature: Justin Gibson

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**

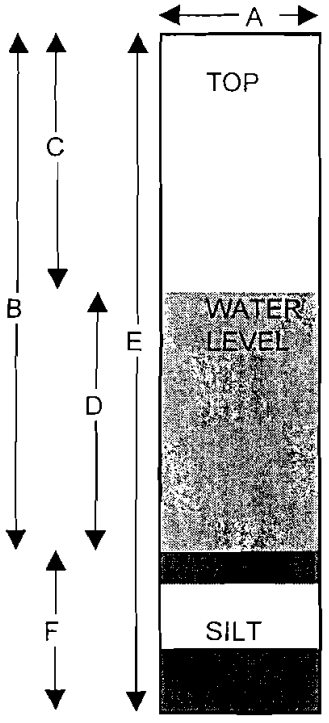
Condition of Well: Good

Locked: YES

Method of Evacuation: Dedicated Bailer

Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	22.40	feet
C.	Depth to Water	6.04	feet
D.	Length of Water Column (calculated)	16.36	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	2.6176	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	7.8528	gallons
	Actual Volume Evacuated	8	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	7/22/08	7/23/08
Time	115pm	10:01
EH	-50	-39
Temperature	15.4°C	20.6°C
pH	7.89	7.66
Specific Cond.	213	1759
Turbidity	4.36	17.9
Dissolved Oxygen	N/A	N/A
Appearance	Clear	Sl. Cloudy

% Recharge:

Initial Depth to Water 6.04 feet

Recharge Depth to Water 6.71 feet

2nd water column height 90.0 %

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: Rain / 65°F 65° cloudy

Observations: MSD

Sampler: Justin Gibson

Signature: Justin Gibson

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**

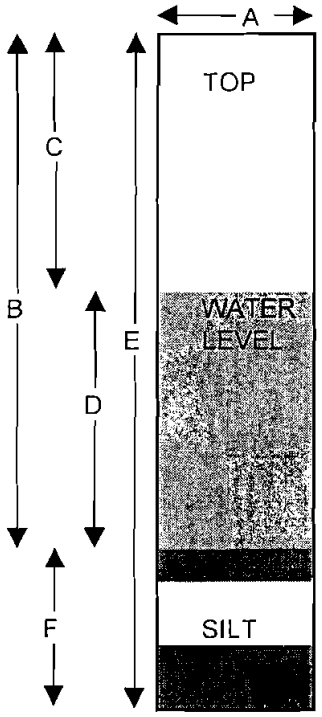
Condition of Well: Good

Locked: ~~NO~~ Yes

Method of Evacuation: Dedicated Bailer

Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	40.75	feet
C.	Depth to Water	14.42	feet
D.	Length of Water Column (calculated)	26.33	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	4.2128	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	12.6384	gallons
	Actual Volume Evacuated	12.5	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	7/22/08	7/23/08
Time	2:54 pm	11:35
EH	-62	-81
Temperature	17.8	16.1°c
pH	8.05	8.21
Specific Cond.	307	343
Turbidity	11.5	2.19
Dissolved Oxygen	N/A	N/A
Appearance	Sl. Cloudy	Clear
Weather:	65° rain/cloudy	65° cloudy
Observations:		

% Recharge:

Initial Depth to Water 14.42 feet

Recharge Depth to Water 13.91 feet

2nd water column height 103.6 %

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

Sampler: Justin Gibson

Signature: Justin Gibson

Upstate Laboratories, Inc. Ground water Field Log

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

Client: **Cortland County**

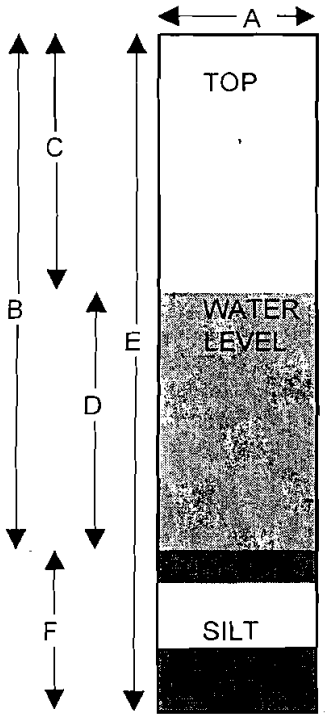
Project: **Towslee Landfill** ULI ID No. (enter by lab)

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

Condition of Well: Good Locked: YES

Method of Evacuation: Dedicated Bailer Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	22.20	feet
C.	Depth to Water	3.35	feet
D.	Length of Water Column (calculated)	18.85	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	3.016	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	9.048	gallons
	Actual Volume Evacuated	9	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	7/22/08	7/23/08
Time	2:14 pm	10:56
EH	-34	-42
Temperature	17.7°C	18.6°C
pH	7.65	7.73
Specific Cond.	1146	6.18
Turbidity	301	41.6
Dissolved Oxygen	N/A	N/A
Appearance	Grey/cloudy	Cloudy
Weather:	65° rain/cloudy	65° cloudy
Observations:		

% Recharge:

Initial Depth to Water 3.35 feet

Recharge Depth to Water 3.07 feet

2nd water column height 109.1 %

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

Sampler: Justin Gibson

Signature: Justin Gibson

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
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	Number of Containers	1	2	3	4	5	6	7	8	9	10	Remarks
					U0807440												93 REGS ASP-A
MW-1A	7/23/08	10:32am	WATER	GRAB	1	6	X	X	X	X	X	X	X				
MW-1B	7/23/08	10:40am	WATER	GRAB	2	6	X	X	X	X	X	X	X				
MW-2A	7/23/08	11:16am	WATER	GRAB	3	6	X	X	X	X	X	X	X				
MW-2B	7/23/08	11:21am	WATER	GRAB	4	6	X	X	X	X	X	X	X				
MW-3A	7/23/08	10:01am	WATER	GRAB	5	6	X	X	X	X	X	X	X				MSD
MW-6B	7/23/08	11:35am	WATER	GRAB	6	6	X	X	X	X	X	X	X				
MW-7A	7/23/08	10:56	WATER	GRAB	7	6	X	X	X	X	X	X	X				
DUPE			WATER	GRAB													

	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)	Name of Courier
Justin Gibson	
Company: ULI	

Relinquished by:(sign)	Date	Time	Received by: (sign)
Relinquished by:(sign)	Date	Time	Received by: (sign)
Relinquished by:(sign)	Date	Time	Rec'd for Lab by:
Justin Gibson	7/23/08	21.15 pm	

Syracuse Rochester Buffalo Albany Binghamton Fair Lawn (NJ)

Appendix B

Analytical Laboratory Results and Internal Quality Control Summary
Quarter 4 2008

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) 247-4313

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

November 21, 2008

RE: Towslee Landfill, Cortlandville, New York, Samples Collected October 24, 2008
Case Narrative for ULI SDG Number COR17, Workorder #U0810546

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
Ca,Cd,Fe,Pb,Mg,Mn,K,Na	R38363	The Duplicate %RPD for Iron was outside QC acceptance limits for the Duplicate analysis performed on sample location MW-1B. The concentration of Iron in sample location MW-1B was less than 5X the PQL; therefore, the data should be considered valid. The MS recovery for Iron was slightly below QC acceptance limits for the MS performed on sample location MW-1B. The CCV4 recoveries for Cadmium and Lead were slightly above QC acceptance limits. All other criteria were satisfied.

Wet Chemistry

Test	Batch	Anomaly
BOD	R37890	Criteria were satisfied.
Nitrate-Nitrogen	R37854	Criteria were satisfied.

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

Wet Chemistry (continued)

Test	Batch	Anomaly
COD	R37861	Criteria were satisfied.
Alkalinity, Total	R37858	Criteria were satisfied.
Chloride	R37793	Criteria were satisfied.
TKN	R38057	Criteria were satisfied.
Ammonia-Nitrogen	R38087	Sample location MW-2B was reanalyzed for Ammonia in analytical sequence R38141. All other criteria were satisfied.
	R38141	Sample location MW-2B was reanalyzed for Ammonia within ASP holding time. All other criteria were satisfied.
Sulfate	R38043	Criteria were satisfied.
TDS	R37902	Sample location MW-1A was reanalyzed for TDS in analytical sequence R38476. All other criteria were satisfied.
	R38476	Sample location MW-1A was reanalyzed for TDS over ASP holding time; however, the original analysis was performed within ASP holding time. All other criteria were satisfied.
TOC	R37870	Criteria were satisfied.
	R37908	Criteria were satisfied.
Phenols, Total	R38156	Criteria were satisfied.
Bromide	R37946	Sample locations MW-3A and MW-6B were reanalyzed for Bromide in analytical sequence R38004. All other criteria were satisfied.
	R38004	Sample locations MW-3A and MW-6B were reanalyzed for Bromide within ASP holding time. 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

COR17A

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	200.7	(1)
Magnesium	200.7	(1)
Manganese	200.7	(1)
Potassium	200.7	(1)
Sodium	200.7	(1)
BOD	405.1	(1)
Nitrate-Nitrogen	353.2	(1)
Alkalinity, Total	310.2	(1)
Chloride	325.2	(1)
COD	410.4	(1)
Ammonia-Nitrogen	350.1	(1)
Sulfate	375.4	(1)
TDS	160.1	(1)
TKN	351.2	(1)
TOC	415.1	(1)
Phenols	420.4	(1)
Bromide	300.1	(1)

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

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-1A
Lab Order:	U0810546	**Collection Date:**	10/24/2008 10:16:00 AM
Project:	Towslee Landfill		
Lab ID:	U0810546-001	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FLD**		Analyst:
Conductivity	334	1.0		umhos/cm		10/24/2008 10:16:00 AM
Eh	-69	-300		mV		10/24/2008 10:16:00 AM
pH	8.23	6.5-8.5		SU		10/24/2008 10:16:00 AM
Temperature	10.6			degC		10/24/2008 10:16:00 AM
Turbidity	24.6	5.0		NTU		10/24/2008 10:16:00 AM
INORGANIC ANIONS BY IC FOR WATERS				**E300.1**		Analyst: **NJS**
Bromide	ND	2.0		mg/L	10	10/29/2008
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL ASP				**E200.7**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	11/16/2008 1:54:01 PM
Calcium	48300	1000		µg/L	1	11/16/2008 1:54:01 PM
Iron	429	60.0		µg/L	1	11/16/2008 1:54:01 PM
Lead	ND	3.00		µg/L	1	11/16/2008 1:54:01 PM
Magnesium	10800	1000		µg/L	1	11/16/2008 1:54:01 PM
Manganese	151	10.0		µg/L	1	11/16/2008 1:54:01 PM
Potassium	1690	1000		µg/L	1	11/16/2008 1:54:01 PM
Sodium	13200	1000		µg/L	1	11/16/2008 1:54:01 PM
Hardness, Total(CaCO3)	165000	7000		µg/L	1	11/16/2008 1:54:01 PM
RESIDUE, DISSOLVED (TDS)				**E160.1**		Analyst: **DEY**
Residue, Dissolved (TDS)	188	25.0	H	mg/L	1	11/18/2008
NOTES: Sample reanalyzed over holding time. Original analysis within holding time.						
ALKALINITY ON AQUEOUS SAMPLES BY LACHAT				**E310.2**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	120	10		mg/LCaCO3	1	10/25/2008
CHLORIDE WATERS BY LACHAT				**E325.2**		Analyst: **BY**
Chloride	29.7	1.00		mg/L	1	10/25/2008
NITROGEN, AMMONIA (AS NH3 BY LACHAT)				**E350.1**		Analyst: **BS**
Nitrogen, Ammonia (As NH3)	ND	0.500		mg/L	1	11/5/2008
NITROGEN, TOTAL KJELDAHL (TKN) BY LACHAT				**E351.2**		Analyst: **BS**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	11/5/2008
NITROGEN, NITRATE (AS N)				**E353.2**		Analyst: **BY**
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	10/25/2008 9:45:00 AM
SULFATE				**E375.4**		Analyst: **KAF**

Approved By: PH **Date:** 11-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-1A
Lab Order:	U0810546	**Collection Date:**	10/24/2008 10:16:00 AM
Project:	Towslee Landfill		
Lab ID:	U0810546-001	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE				**E375.4**		Analyst: **KAF**
Sulfate	11.6	5.00		mg/L	1	11/4/2008
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**
Biochemical Oxygen Demand	ND	4.00		mg/L	1	10/24/2008 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)				**E410.4**		Analyst: **KAM**
Chemical Oxygen Demand	ND	20		mg/L	1	10/28/2008
TOTAL ORGANIC CARBON (TOC)				**E415.1**		Analyst: **NJS**
Organic Carbon, Total	ND	3.0		mg/L	1	10/28/2008
PHENOLICS, TOTAL REC. FOR WATERS				**E420.4**	**(E420.4)**	Analyst: **NJS**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	11/9/2008

Approved By: PH **Date:** 11-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-1B
Lab Order: U0810546
Collection Date: 10/24/2008 10:11:00 AM
Project: Towslee Landfill
Lab ID: U0810546-002
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FLD**		Analyst:
Conductivity	229	1.0		umhos/cm		10/24/2008 10:11:00 AM
Eh	-78	-300		mV		10/24/2008 10:11:00 AM
pH	8.38	6.5-8.5		SU		10/24/2008 10:11:00 AM
Temperature	11.8			degC		10/24/2008 10:11:00 AM
Turbidity	6.33	5.0		NTU		10/24/2008 10:11:00 AM
INORGANIC ANIONS BY IC FOR WATERS				**E300.1**		Analyst: **NJS**
Bromide	ND	0.20		mg/L	1	10/29/2008
ICP METALS, TOTAL ASP				**E200.7**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	11/16/2008 1:57:38 PM
Calcium	30000	1000		µg/L	1	11/16/2008 1:57:38 PM
Iron	174	60.0		µg/L	1	11/16/2008 1:57:38 PM
Lead	ND	3.00		µg/L	1	11/16/2008 1:57:38 PM
Magnesium	7280	1000		µg/L	1	11/16/2008 1:57:38 PM
Manganese	153	10.0		µg/L	1	11/16/2008 1:57:38 PM
Potassium	ND	1000		µg/L	1	11/16/2008 1:57:38 PM
Sodium	6810	1000		µg/L	1	11/16/2008 1:57:38 PM
Hardness, Total(CaCO3)	105000	7000		µg/L	1	11/16/2008 1:57:38 PM
RESIDUE, DISSOLVED (TDS)				**E160.1**		Analyst: **DEY**
Residue, Dissolved (TDS)	140	25.0		mg/L	1	10/28/2008
ALKALINITY ON AQUEOUS SAMPLES BY LACHAT				**E310.2**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	99	10		mg/LCaCO3	1	10/25/2008
CHLORIDE WATERS BY LACHAT				**E325.2**		Analyst: **BY**
Chloride	6.03	1.00		mg/L	1	10/25/2008
NITROGEN, AMMONIA (AS NH3 BY LACHAT)				**E350.1**		Analyst: **BS**
Nitrogen, Ammonia (As NH3)	ND	0.500		mg/L	1	11/5/2008
NITROGEN, TOTAL KJELDAHL (TKN) BY LACHAT				**E351.2**		Analyst: **BS**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	11/5/2008
NITROGEN, NITRATE (AS N)				**E353.2**		Analyst: **BY**
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	10/25/2008 9:45:00 AM
SULFATE				**E375.4**		Analyst: **KAF**
Sulfate	ND	5.00		mg/L	1	11/4/2008
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**
Biochemical Oxygen Demand	ND	4.00		mg/L	1	10/24/2008 8:00:00 AM

Approved By: PH **Date:** 11-21-08

Qualifiers:
- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- ** Value exeeeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Reeovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-1B
Lab Order:	U0810546	**Collection Date:**	10/24/2008 10:11:00 AM
Project:	Towslee Landfill		
Lab ID:	U0810546-002	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD)				**E410.4**		Analyst: **KAM**
Chemical Oxygen Demand	ND	20		mg/L	1	10/28/2008
TOTAL ORGANIC CARBON (TOC)				**E415.1**		Analyst: **NJS**
Organic Carbon, Total	ND	3.0		mg/L	1	10/28/2008
PHENOLICS, TOTAL REC. FOR WATERS				**E420.4**	**(E420.4)**	Analyst: **NJS**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	11/9/2008

Approved By: PH **Date:** 11-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-2A
Lab Order:	U0810546	**Collection Date:**	10/24/2008 11:00:00 AM
Project:	Towslee Landfill		
Lab ID:	U0810546-003	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FLD**		Analyst:
Conductivity	695	1.0		umhos/cm		10/24/2008 11:00:00 AM
Eh	-34	-300		mV		10/24/2008 11:00:00 AM
pH	7.63	6.5-8.5		SU		10/24/2008 11:00:00 AM
Temperature	12.0			degC		10/24/2008 11:00:00 AM
Turbidity	8.52	5.0		NTU		10/24/2008 11:00:00 AM
INORGANIC ANIONS BY IC FOR WATERS				**E300.1**		Analyst: **NJS**
Bromide	ND	20		mg/L	100	10/29/2008
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL ASP				**E200.7**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	11/16/2008 2:08:47 PM
Calcium	99000	1000		µg/L	1	11/16/2008 2:08:47 PM
Iron	9510	60.0		µg/L	1	11/16/2008 2:08:47 PM
Lead	ND	3.00		µg/L	1	11/16/2008 2:08:47 PM
Magnesium	23100	1000		µg/L	1	11/16/2008 2:08:47 PM
Manganese	15100	10.0		µg/L	1	11/16/2008 2:08:47 PM
Potassium	15100	1000		µg/L	1	11/16/2008 2:08:47 PM
Sodium	25900	1000		µg/L	1	11/16/2008 2:08:47 PM
Hardness, Total(CaCO3)	343000	7000		µg/L	1	11/16/2008 2:08:47 PM
RESIDUE, DISSOLVED (TDS)				**E160.1**		Analyst: **DEY**
Residue, Dissolved (TDS)	356	25.0		mg/L	1	10/28/2008
ALKALINITY ON AQUEOUS SAMPLES BY LACHAT				**E310.2**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	360	10		mg/LCaCO3	1	10/25/2008
CHLORIDE WATERS BY LACHAT				**E325.2**		Analyst: **BY**
Chloride	15.5	1.00		mg/L	1	10/25/2008
NITROGEN, AMMONIA (AS NH3 BY LACHAT)				**E350.1**		Analyst: **BY**
Nitrogen, Ammonia (As NH3)	10.8	0.500		mg/L	1	11/6/2008
NITROGEN, TOTAL KJELDAHL (TKN) BY LACHAT				**E351.2**		Analyst: **BS**
Nitrogen, Kjeldahl, Total	11.6	0.500		mg/L	1	11/5/2008
NITROGEN, NITRATE (AS N)				**E353.2**		Analyst: **BY**
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	10/25/2008 9:45:00 AM
SULFATE				**E375.4**		Analyst: **KAF**
Sulfate	ND	10.0		mg/L	2	11/4/2008

Approved By: PH **Date:** 11-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-2A
Lab Order:	U0810546	**Collection Date:**	10/24/2008 11:00:00 AM
Project:	Towslee Landfill		
Lab ID:	U0810546-003	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
SULFATE				**E375.4**		Analyst: **KAF**
NOTES: The reporting limits were raised due to matrix interference.						
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**
Biochemical Oxygen Demand	ND	4.00		mg/L	1	10/24/2008 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)				**E410.4**		Analyst: **KAM**
Chemical Oxygen Demand	32	20		mg/L	1	10/28/2008
TOTAL ORGANIC CARBON (TOC)				**E415.1**		Analyst: **NJS**
Organic Carbon, Total	6.0	3.0		mg/L	1	10/28/2008
PHENOLICS, TOTAL REC. FOR WATERS				**E420.4**	**(E420.4)**	Analyst: **NJS**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	11/9/2008

Approved By: PH **Date:** 11-21-08

Qualifiers:			
	*	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	S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-2B
Lab Order:	U0810546	**Collection Date:**	10/24/2008 10:52:00 AM
Project:	Towslee Landfill		
Lab ID:	U0810546-004	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FLD**		Analyst:
Conductivity	1137	1.0		umhos/cm		10/24/2008 10:52:00 AM
Eh	-33	-300		mV		10/24/2008 10:52:00 AM
pH	7.59	6.5-8.5		SU		10/24/2008 10:52:00 AM
Temperature	12.9			degC		10/24/2008 10:52:00 AM
Turbidity	3.14	5.0		NTU		10/24/2008 10:52:00 AM
INORGANIC ANIONS BY IC FOR WATERS				**E300.1**		Analyst: **NJS**
Bromide	ND	0.20		mg/L	1	10/29/2008
ICP METALS, TOTAL ASP				**E200.7**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	11/16/2008 2:12:33 PM
Calcium	235000	1000		µg/L	1	11/16/2008 2:12:33 PM
Iron	280	60.0		µg/L	1	11/16/2008 2:12:33 PM
Lead	ND	3.00		µg/L	1	11/16/2008 2:12:33 PM
Magnesium	49100	1000		µg/L	1	11/16/2008 2:12:33 PM
Manganese	6840	10.0		µg/L	1	11/16/2008 2:12:33 PM
Potassium	3130	1000		µg/L	1	11/16/2008 2:12:33 PM
Sodium	58200	1000		µg/L	1	11/16/2008 2:12:33 PM
Hardness, Total(CaCO3)	788000	7000		µg/L	1	11/16/2008 2:12:33 PM
RESIDUE, DISSOLVED (TDS)				**E160.1**		Analyst: **DEY**
Residue, Dissolved (TDS)	864	25.0		mg/L	1	10/28/2008
ALKALINITY ON AQUEOUS SAMPLES BY LACHAT				**E310.2**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	680	100		mg/LCaCO3	10	10/25/2008
CHLORIDE WATERS BY LACHAT				**E325.2**		Analyst: **BY**
Chloride	162	1.00		mg/L	1	10/25/2008
NITROGEN, AMMONIA (AS NH3 BY LACHAT)				**E350.1**		Analyst: **BY**
Nitrogen, Ammonia (As NH3)	0.504	0.500		mg/L	1	11/8/2008
NITROGEN, TOTAL KJELDAHL (TKN) BY LACHAT				**E351.2**		Analyst: **BS**
Nitrogen, Kjeldahl, Total	1.13	0.500		mg/L	1	11/5/2008
NITROGEN, NITRATE (AS N)				**E353.2**		Analyst: **BY**
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	10/25/2008 9:45:00 AM
SULFATE				**E375.4**		Analyst: **KAF**
Sulfate	ND	5.00		mg/L	1	11/4/2008
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**
Biochemical Oxygen Demand	ND	4.00		mg/L	1	10/24/2008 8:00:00 AM

Approved By: PH **Date:** 11-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-2B
Lab Order:	U0810546	**Collection Date:**	10/24/2008 10:52:00 AM
Project:	Towslee Landfill		
Lab ID:	U0810546-004	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD)				**E410.4**		Analyst: **KAM**
Chemical Oxygen Demand	ND	20		mg/L	1	10/28/2008
TOTAL ORGANIC CARBON (TOC)				**E415.1**		Analyst: **NJS**
Organic Carbon, Total	6.8	3.0		mg/L	1	10/28/2008
PHENOLICS, TOTAL REC. FOR WATERS				**E420.4**	**(E420.4)**	Analyst: **NJS**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	11/9/2008

Approved By: PH **Date:** 11-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-3A
Lab Order:	U0810546	**Collection Date:**	10/24/2008 9:48:00 AM
Project:	Towslee Landfill		
Lab ID:	U0810546-005	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FLD**		Analyst:
Conductivity	204	1.0		umhos/cm		10/24/2008 9:48:00 AM
Eh	-41	-300		mV		10/24/2008 9:48:00 AM
pH	7.72	6.5-8.5		SU		10/24/2008 9:48:00 AM
Temperature	13.5			degC		10/24/2008 9:48:00 AM
Turbidity	6.67	5.0		NTU		10/24/2008 9:48:00 AM
INORGANIC ANIONS BY IC FOR WATERS				**E300.1**		Analyst: **NJS**
Bromide	ND	2.0		mg/L	10	11/3/2008
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL ASP				**E200.7**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	11/16/2008 2:16:11 PM
Calcium	31300	1000		µg/L	1	11/16/2008 2:16:11 PM
Iron	177	60.0		µg/L	1	11/16/2008 2:16:11 PM
Lead	ND	3.00		µg/L	1	11/16/2008 2:16:11 PM
Magnesium	4800	1000		µg/L	1	11/16/2008 2:16:11 PM
Manganese	42.4	10.0		µg/L	1	11/16/2008 2:16:11 PM
Potassium	ND	1000		µg/L	1	11/16/2008 2:16:11 PM
Sodium	2690	1000		µg/L	1	11/16/2008 2:16:11 PM
Hardness, Total(CaCO3)	97900	7000		µg/L	1	11/16/2008 2:16:11 PM
RESIDUE, DISSOLVED (TDS)				**E160.1**		Analyst: **DEY**
Residue, Dissolved (TDS)	112	25.0		mg/L	1	10/28/2008
ALKALINITY ON AQUEOUS SAMPLES BY LACHAT				**E310.2**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	97	10		mg/LCaCO3	1	10/25/2008
CHLORIDE WATERS BY LACHAT				**E325.2**		Analyst: **BY**
Chloride	1.75	1.00		mg/L	1	10/25/2008
NITROGEN, AMMONIA (AS NH3 BY LACHAT)				**E350.1**		Analyst: **BS**
Nitrogen, Ammonia (As NH3)	ND	0.500		mg/L	1	11/5/2008
NITROGEN, TOTAL KJELDAHL (TKN) BY LACHAT				**E351.2**		Analyst: **BS**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	11/5/2008
NITROGEN, NITRATE (AS N)				**E353.2**		Analyst: **BY**
Nitrogen, Nitrate (as N)	1.14	0.200		mg/L	1	10/25/2008 9:45:00 AM
SULFATE				**E375.4**		Analyst: **KAF**
Sulfate	ND	5.00		mg/L	1	11/4/2008
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**

Approved By: PH **Date:** 11-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-3A
Lab Order:	U0810546	**Collection Date:**	10/24/2008 9:48:00 AM
Project:	Towslee Landfill		
Lab ID:	U0810546-005	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**
Biochemical Oxygen Demand	ND	4.00		mg/L	1	10/24/2008 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)				**E410.4**		Analyst: **KAM**
Chemical Oxygen Demand	ND	20		mg/L	1	10/28/2008
TOTAL ORGANIC CARBON (TOC)				**E415.1**		Analyst: **NJS**
Organic Carbon, Total	3.6	3.0		mg/L	1	10/29/2008
PHENOLICS, TOTAL REC. FOR WATERS				**E420.4**	**(E420.4)**	Analyst: **NJS**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	11/9/2008

Approved By: PH **Date:** 11-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-6B
Lab Order: U0810546
Collection Date: 10/24/2008 11:18:00 AM
Project: Towslee Landfill
Lab ID: U0810546-006
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FLD**		Analyst:
Conductivity	355	1.0		umhos/cm		10/24/2008 11:18:00 AM
Eh	-54	-300		mV		10/24/2008 11:18:00 AM
pH	7.96	6.5-8.5		SU		10/24/2008 11:18:00 AM
Temperature	12.6			degC		10/24/2008 11:18:00 AM
Turbidity	5.24	5.0		NTU		10/24/2008 11:18:00 AM
INORGANIC ANIONS BY IC FOR WATERS				**E300.1**		Analyst: **NJS**
Bromide	ND	2.0		mg/L	10	11/3/2008
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL ASP				**E200.7**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	11/16/2008 2:19:49 PM
Calcium	38700	1000		µg/L	1	11/16/2008 2:19:49 PM
Iron	ND	60.0		µg/L	1	11/16/2008 2:19:49 PM
Lead	ND	3.00		µg/L	1	11/16/2008 2:19:49 PM
Magnesium	9130	1000		µg/L	1	11/16/2008 2:19:49 PM
Manganese	619	10.0		µg/L	1	11/16/2008 2:19:49 PM
Potassium	1400	1000		µg/L	1	11/16/2008 2:19:49 PM
Sodium	17600	1000		µg/L	1	11/16/2008 2:19:49 PM
Hardness, Total(CaCO3)	134000	7000		µg/L	1	11/16/2008 2:19:49 PM
RESIDUE, DISSOLVED (TDS)				**E160.1**		Analyst: **DEY**
Residue, Dissolved (TDS)	168	25.0		mg/L	1	10/28/2008
ALKALINITY ON AQUEOUS SAMPLES BY LACHAT				**E310.2**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	120	10		mg/LCaCO3	1	10/25/2008
CHLORIDE WATERS BY LACHAT				**E325.2**		Analyst: **BY**
Chloride	28.6	1.00		mg/L	1	10/25/2008
NITROGEN, AMMONIA (AS NH3 BY LACHAT)				**E350.1**		Analyst: **BS**
Nitrogen, Ammonia (As NH3)	ND	0.500		mg/L	1	11/5/2008
NITROGEN, TOTAL KJELDAHL (TKN) BY LACHAT				**E351.2**		Analyst: **BS**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	11/5/2008
NITROGEN, NITRATE (AS N)				**E353.2**		Analyst: **BY**
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	10/25/2008 9:45:00 AM
SULFATE				**E375.4**		Analyst: **KAF**
Sulfate	17.2	5.00		mg/L	1	11/4/2008
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**

Approved By: PH **Date:** 11-21-08

Qualifiers:
- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-6B
Lab Order: U0810546
Collection Date: 10/24/2008 11:18:00 AM
Project: Towslee Landfill
Lab ID: U0810546-006
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**
Biochemical Oxygen Demand	ND	4.00		mg/L	1	10/24/2008 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)				**E410.4**		Analyst: **KAM**
Chemical Oxygen Demand	ND	20		mg/L	1	10/28/2008
TOTAL ORGANIC CARBON (TOC)				**E415.1**		Analyst: **NJS**
Organic Carbon, Total	ND	3.0		mg/L	1	10/29/2008
PHENOLICS, TOTAL REC. FOR WATERS				**E420.4**	**(E420.4)**	Analyst: **NJS**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	11/9/2008

Approved By: PH **Date:** 11-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-7A
Lab Order: U0810546
Collection Date: 10/24/2008 10:35:00 AM
Project: Towslee Landfill
Lab ID: U0810546-007
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS				**FLD**		Analyst:
Conductivity	214	1.0		umhos/cm		10/24/2008 10:35:00 AM
Eh	-41	-300		mV		10/24/2008 10:35:00 AM
pH	8.09	6.5-8.5		SU		10/24/2008 10:35:00 AM
Temperature	11.1			degC		10/24/2008 10:35:00 AM
Turbidity	42.7	5.0		NTU		10/24/2008 10:35:00 AM
INORGANIC ANIONS BY IC FOR WATERS				**E300.1**		Analyst: **NJS**
Bromide	ND	20		mg/L	100	10/29/2008
NOTES: The reporting limits were raised due to matrix interference.						
ICP METALS, TOTAL ASP				**E200.7**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	11/16/2008 2:30:54 PM
Calcium	162000	1000		µg/L	1	11/16/2008 2:30:54 PM
Iron	1160	60.0		µg/L	1	11/16/2008 2:30:54 PM
Lead	ND	3.00		µg/L	1	11/16/2008 2:30:54 PM
Magnesium	39800	1000		µg/L	1	11/16/2008 2:30:54 PM
Manganese	4570	10.0		µg/L	1	11/16/2008 2:30:54 PM
Potassium	2410	1000		µg/L	1	11/16/2008 2:30:54 PM
Sodium	116000	1000		µg/L	1	11/16/2008 2:30:54 PM
Hardness, Total(CaCO3)	569000	7000		µg/L	1	11/16/2008 2:30:54 PM
RESIDUE, DISSOLVED (TDS)				**E160.1**		Analyst: **DEY**
Residue, Dissolved (TDS)	728	25.0		mg/L	1	10/28/2008
ALKALINITY ON AQUEOUS SAMPLES BY LACHAT				**E310.2**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	670	100		mg/LCaCO3	10	10/25/2008
CHLORIDE WATERS BY LACHAT				**E325.2**		Analyst: **BY**
Chloride	135	1.00		mg/L	1	10/25/2008
NITROGEN, AMMONIA (AS NH3 BY LACHAT)				**E350.1**		Analyst: **BS**
Nitrogen, Ammonia (As NH3)	ND	0.500		mg/L	1	11/5/2008
NITROGEN, TOTAL KJELDAHL (TKN) BY LACHAT				**E351.2**		Analyst: **BS**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	11/5/2008
NITROGEN, NITRATE (AS N)				**E353.2**		Analyst: **BY**
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	10/25/2008 9:45:00 AM
SULFATE				**E375.4**		Analyst: **KAF**
Sulfate	16.1	10.0		mg/L	2	11/4/2008
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**

Approved By: PH **Date:** 11-21-08

Qualifiers:

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte deteeted below quantitation limits
- S Spike Recovery outside accepted reeovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT: Cortland Co. Soil and Water Cons. Dist.
Client Sample ID: MW-7A
Lab Order: U0810546
Collection Date: 10/24/2008 10:35:00 AM
Project: Towslee Landfill
Lab ID: U0810546-007
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**
Biochemical Oxygen Demand	ND	4.00		mg/L	1	10/24/2008 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)				**E410.4**		Analyst: **KAM**
Chemical Oxygen Demand	29	20		mg/L	1	10/28/2008
TOTAL ORGANIC CARBON (TOC)				**E415.1**		Analyst: **NJS**
Organic Carbon, Total	6.1	3.0		mg/L	1	10/29/2008
PHENOLICS, TOTAL REC. FOR WATERS				**E420.4**	**(E420.4)**	Analyst: **NJS**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	11/9/2008

Approved By: PH **Date:** 11-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-6B Dupe
Lab Order:	U0810546	**Collection Date:**	10/24/2008 11:18:00 AM
Project:	Towslee Landfill		
Lab ID:	U0810546-008	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
INORGANIC ANIONS BY IC FOR WATERS				**E300.1**		Analyst: **NJS**
Bromide	ND	0.20		mg/L	1	10/29/2008
ICP METALS, TOTAL ASP				**E200.7**	**(E200.7)**	Analyst: **LJ**
Cadmium	ND	5.00		µg/L	1	11/16/2008 2:34:29 PM
Calcium	42600	1000		µg/L	1	11/16/2008 2:34:29 PM
Iron	72.6	60.0		µg/L	1	11/16/2008 2:34:29 PM
Lead	ND	3.00		µg/L	1	11/16/2008 2:34:29 PM
Magnesium	9950	1000		µg/L	1	11/16/2008 2:34:29 PM
Manganese	717	10.0		µg/L	1	11/16/2008 2:34:29 PM
Potassium	1190	1000		µg/L	1	11/16/2008 2:34:29 PM
Sodium	19200	1000		µg/L	1	11/16/2008 2:34:29 PM
Hardness, Total(CaCO3)	147000	7000		µg/L	1	11/16/2008 2:34:29 PM
RESIDUE, DISSOLVED (TDS)				**E160.1**		Analyst: **DEY**
Residue, Dissolved (TDS)	160	25.0		mg/L	1	10/28/2008
ALKALINITY ON AQUEOUS SAMPLES BY LACHAT				**E310.2**		Analyst: **BY**
Alkalinity, Total (As CaCO3)	130	10		mg/LCaCO3	1	10/25/2008
CHLORIDE WATERS BY LACHAT				**E325.2**		Analyst: **BY**
Chloride	25.3	1.00		mg/L	1	10/25/2008
NITROGEN, AMMONIA (AS NH3 BY LACHAT)				**E350.1**		Analyst: **BS**
Nitrogen, Ammonia (As NH3)	ND	0.500		mg/L	1	11/5/2008
NITROGEN, TOTAL KJELDAHL (TKN) BY LACHAT				**E351.2**		Analyst: **BS**
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	11/5/2008
NITROGEN, NITRATE (AS N)				**E353.2**		Analyst: **BY**
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	10/25/2008 9:45:00 AM
SULFATE				**E375.4**		Analyst: **KAF**
Sulfate	ND	10.0		mg/L	2	11/4/2008
NOTES:						
The reporting limits were raised due to matrix interference.						
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)				**E405.1**		Analyst: **VAW**
Biochemical Oxygen Demand	ND	4.00		mg/L	1	10/24/2008 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)				**E410.4**		Analyst: **KAM**
Chemical Oxygen Demand	ND	20		mg/L	1	10/28/2008
TOTAL ORGANIC CARBON (TOC)				**E415.1**		Analyst: **NJS**
Organic Carbon, Total	ND	3.0		mg/L	1	10/29/2008

Approved By: PH **Date:** 11-21-08

Qualifiers:

*	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	S	Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: *21-Nov-08*

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	**Client Sample ID:**	MW-6B Dupe
Lab Order:	U0810546	**Collection Date:**	10/24/2008 11:18:00 AM
Project:	Towslee Landfill		
Lab ID:	U0810546-008	**Matrix:**	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PHENOLICS, TOTAL REC. FOR WATERS				**E420.4**	**(E420.4)**	Analyst: **NJS**
Phenolics, Total Recoverable	ND	0.005		mg/L	1	11/9/2008

Approved By: PH **Date:** 11-21-08

Qualifiers:

*	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	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**

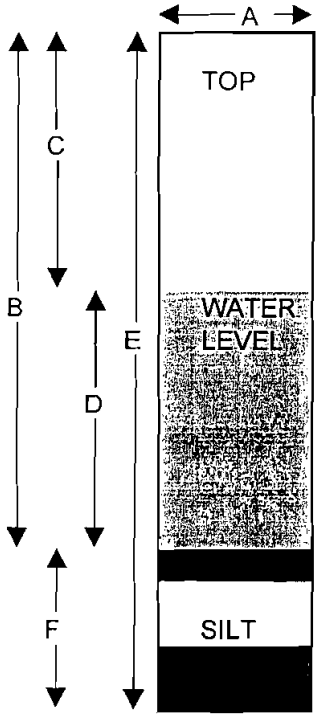
Project: **Towslee Landfill** ULI ID No. (enter by lab)

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

Condition of Well: Good Locked: YES

Method of Evacuation: Dedicated Bailer Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	33.7	feet
C.	Depth to Water	2.37	feet
D.	Length of Water Column (calculated)	31.33	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	5.0128	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	15.0384	gallons
	Actual Volume Evacuated	15.5	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	10/23/08	10/24/08
Time	10:58	10:16
EH	-65	-69
Temperature	13.4°c	10.6°c
pH	8.16	8.23
Specific Cond.	343	334
Turbidity	10.7	24.6
Dissolved Oxygen	N/A	N/A
Appearance	clear	SL Cloudy

% Recharge:

Initial Depth to Water 2.37 feet

Recharge Depth to Water 1.91 feet

2nd water column height 124.0 %

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: 45° sunny

Observations:

Sampler: Justin Gibson

Signature: Justin Gibson

Upstate Laboratories, Inc. Ground water Field Log

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

Client: **Cortland County**

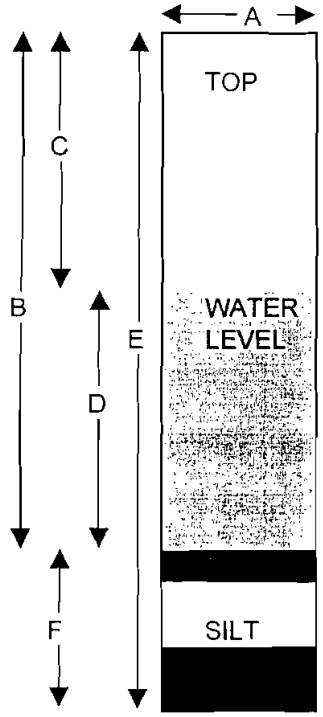
Project: **Towslee Landfill** ULI ID No. (enter by lab)

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

Condition of Well: Good Locked: NO

Method of Evacuation: Dedicated Bailer Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	55.5	feet
C.	Depth to Water	~~3~~ 3.35	feet
D.	Length of Water Column (calculated)	52.15	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	8.344	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	25.032	gallons
	Actual Volume Evacuated	25.5	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	10/23/08	10/24/08
Time	10:15	10:11
EH	-74	-78
Temperature	12.1°c	11.8°c
pH	8.34	8.38
Specific Cond.	1181	229
Turbidity	.74	6.33
Dissolved Oxygen	N/A	N/A
Appearance	clear	clear

% Recharge:

Initial Depth to Water 3.35 feet

Recharge Depth to Water 2.09 feet

2nd water column height 160.2 %

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: 45 sunny 45 sunny

Observations: MSD

Sampler: Justin Gibson

Signature: Justin Gibson

Upstate Laboratories, Inc. Ground water Field Log

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

Client: **Cortland County**

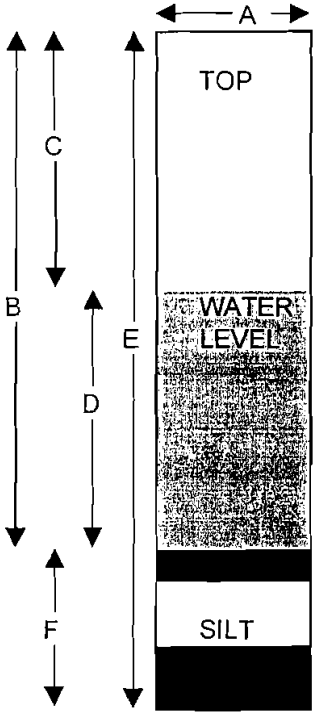
Project: **Towslee Landfill** ULI ID No. (enter by lab)

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

Condition of Well: Good Locked: YES

Method of Evacuation: Dedicated Bailer Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	12.8	feet
C.	Depth to Water	6.63	feet
D.	Length of Water Column (calculated)	6.17	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	.9872	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	2.9616	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	10/23/08	10/24/08
Time	11:17am	11:00am
EH	-25	-34
Temperature	12.2°c	12.0°c
pH	7.45	7.63
Specific Cond.	765	695
Turbidity	32.7	8.52
Dissolved Oxygen	N/A	N/A
Appearance	Cloudy	Clear

% Recharge:

Initial Depth to Water 6.63 feet

Recharge Depth to Water 6.84 feet

2nd water column height 96.9 %

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: 45° sunny 45° sunny

Observations:

Sampler: Justin Gibson

Signature: Justin Gibson

Upstate Laboratories, Inc. Ground water Field Log

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

Client: **Cortland County**

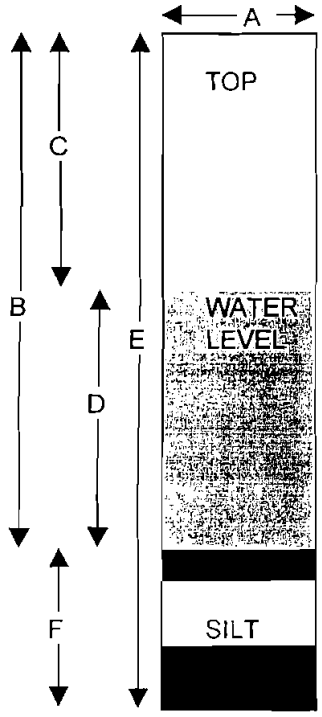
Project: **Towslee Landfill** ULI ID No. (enter by lab)

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

Condition of Well: Good Locked: YES

Method of Evacuation: Dedicated Bailer Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	33.5	feet
C.	Depth to Water	6.70	feet
D.	Length of Water Column (calculated)	26.80	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	4.288	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	12.864	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	10/23/08	10/24/08
Time	11:19am	10:52am
EH	-34	-33
Temperature	12.7°c	12.9°c
pH	7.61	7.59
Specific Cond.	1042	1137
Turbidity	5.81	3.14
Dissolved Oxygen	N/A	N/A
Appearance	clear	clear

% Recharge:

Initial Depth to Water 6.70 feet

Recharge Depth to Water 7.60 feet

2nd water column height 88.1 %

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: 45° sunny 45 sunny

Observations:

Sampler: Justin Gibson

Signature: Justin Gibson

Upstate Laboratories, Inc. Ground water Field Log

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

Client: **Cortland County**

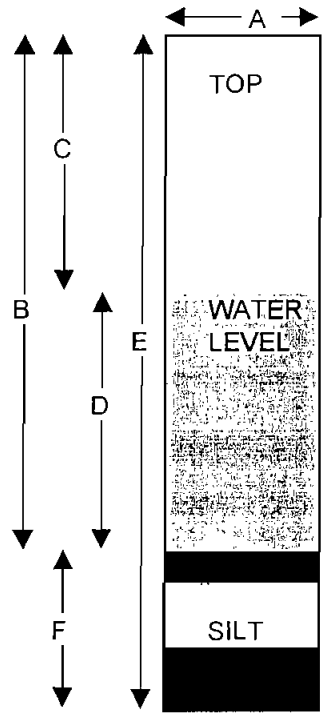
Project: **Towslee Landfill** ULI ID No. (enter by lab)

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

Condition of Well: Good Locked: YES

Method of Evacuation: Dedicated Bailer Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	22.40	feet
C.	Depth to Water	8.07	feet
D.	Length of Water Column (calculated)	14.33	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	2.2928	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	6.8784	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	10/23/08	10/24/08
Time	9:57	9:48 am
EH	-6	-41
Temperature	11.9°	13.5°
pH	7.11	7.72
Specific Cond.	413	204
Turbidity	1.99	6.67
Dissolved Oxygen	N/A	N/A
Appearance	Clear	Clear
Weather:	45° Sunny	45° partly cloudy
Observations:		

% Recharge:

Initial Depth to Water 8.07 feet

Recharge Depth to Water 8.15 feet

2nd water column height 99.0 %

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

Sampler: Justin Gibson

Signature: Justin Gibson

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**

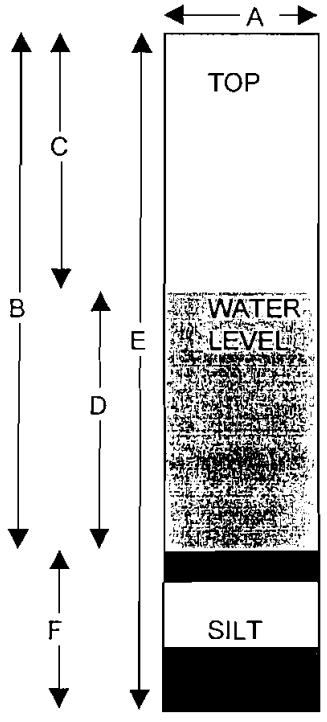
Condition of Well: Good

Locked: NO

Method of Evacuation: Dedicated Bailer

Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	40.75	feet
C.	Depth to Water	15.69	feet
D.	Length of Water Column (calculated)	25.06	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	4.0096	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	12.0288	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	10/23/08	10/24/08
Time	11:33am	11:18cm
EH	-64	-54
Temperature	12.2°c	12.6°c
pH	8.13	7.96
Specific Cond.	368	355
Turbidity	31.0	5.24
Dissolved Oxygen	N/A	N/A
Appearance	Cloudy	Clear
Weather:	45° sunny	45° sunny
Observations:		

% Recharge:

Initial Depth to Water 15.69 feet

Recharge Depth to Water 15.43 feet

2nd water column height 101.6 %

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

Sampler:
Justin Gibson

Signature: Justin Gibson

Upstate Laboratories, Inc. Ground water Field Log

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

Client: **Cortland County**

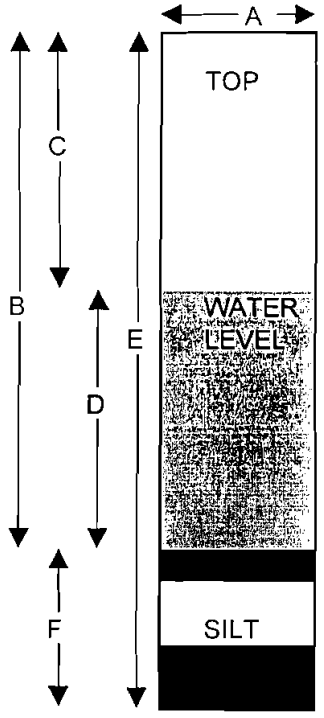
Project: **Towslee Landfill** ULI ID No. (enter by lab)

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

Condition of Well: Good Locked: YES

Method of Evacuation: Dedicated Bailer Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	22.20	feet
C.	Depth to Water	3.12	feet
D.	Length of Water Column (calculated)	19.08	feet
	Conversion Factor	X.16	------
	Well Volume (calculated)	3.0525	gallons
	No. of Volumes to be Evacuated	X3	------
	Total Volume to be Evacuated	9.1584	gallons
	Actual Volume Evacuated	9.5	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	10/23/08	10/24/08
Time	10:55 am	10:35 am
EH	126	-41
Temperature	12.5°c	11.1°c
pH	7.46	8.09
Specific Cond.	1047	214
Turbidity	63.3	42.7
Dissolved Oxygen	N/A	N/A
Appearance	cloudy	cloudy

Weather: 45° sunny 45° sunny

Observations:

% Recharge:

Initial Depth to Water 3.12 feet

Recharge Depth to Water 4.52 feet

2nd water column height 69.0 %

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

Sampler: Justin Gibson

Signature: Justin Gibson

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	Number of Containers	1	2	3	4	5	6	7	8	9	10	Remarks: 93 REGS ASP-A
MW-1A	10/24/08	10:16am	WATER	GRAB	L0810546 1	6	X	X	X	X	X	X	X				
MW-1B		10:11am	WATER	GRAB	2	6	X	X	X	X	X	X	X				MSD
MW-2A		11:00am	WATER	GRAB	3	6	X	X	X	X	X	X	X				
MW-2B		10:52am	WATER	GRAB	4	6	X	X	X	X	X	X	X				
MW-3A		9:48am	WATER	GRAB	5	6	X	X	X	X	X	X	X				
MW-6B		11:18am	WATER	GRAB	6	6	X	X	X	X	X	X	X				
MW-7A		10:35am	WATER	GRAB	7	6	X	X	X	X	X	X	X				
MW-6B DUPE		11:18am	WATER	GRAB	8	6		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	D-CD,CA,FE,PB*,MG,MN,K,NA,+CALC. HARDNESS	PLASTIC	500 ML	HNO3
9				
10				

Sampled by (Print): Justin Gibson

Company: ULI

Name of Courier:

Relinquished by:(sign)	Date	Time	Received by: (sign)
Relinquished by:(sign)	Date	Time	Received by: (sign)
Relinquished by:(sign) Justin Gibson	Date 10/24/08	Time 3:50pm	Rec'd for Lab by:

Syracuse Rochester Buffalo Albany Binghamton Fair Lawn (NJ)

Appendix C

Historical Analytical Data

Cortland County Towslee Landfill

Historical Data Page Index
Cortland County Towslee Landfill

Well	Field/ Inorganic Parameters	Total Metals	Dissolved Metals	Organics
MW-1A	2	9	16	23
MW-1B	3	10	17	24
MW-2A	4	11	18	25
MW-2B	5	12	19	26
MW-3A	6	13	20	27
MW-6B	7	14	21	28
MW-7A	8	15	22	29

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

Parameter	Units	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07	4/16/08	7/23/08	10/24/08
Temp	(deg C)	--	--	8.5	12.8	19.5	15.9	9.3	6.7	21.6	16	11.2	21.7	10.6
Eh	(mV)	--	--	700	105	190	170	59	-107	-111	-68	-57	-62	-69
pH	(Std Units)	--	--	7.8	7.7	7.52	7.69	8.29	7.93	7.83	8.01	7.85	8.07	8.23
Sp. Cond	(uS/cm)	--	--	306	355	353	369	204	221	241	658	351	344	334
Color	(Units)	5	20	--	--	<5	--	--	--	--	30	--	--	--
Turbidity	(NTU)	--	--	660	73	131	29	55.6	34.8	24.3	28.1	16	11.6	24.6
ALK as CaCO3	(mg/l)	160	145	127	139	122	132	140	120	120	130	120	120	120
HARD as CaCO3	(mg/l)	4000	240	167	140	148	148	134	153	148	146	151	159	165
TDS	(mg/l)	494	214	340	213	236	229	127	208	250	204	195	116	188 H
Chloride	(mg/l)	152	46	21.3	22.2	34.2	26.7	28.7	27	27	27.9	28	25.9	29.7
Sulfate	(mg/l)	20.6	14.6	27.3	12.3	16.5	14.9	8.79	14.2	48.6	11.2	16.3	<5	11.6
Bromide	(mg/l)	1.2	0.8	< 0.1	<0.1	<0.1	0.117	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<2
NO3 (As N)	(mg/l)	<0.1	<0.1	< 0.1	0.217	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
NH4 (As N)	(mg/l)	6	2.6	0.276	<0.02	0.161	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TKN (as N)	(mg/l)	18	3.8	23.3	0.529 H	0.366	<0.2	2.2	<0.5	5.66	<0.5	<0.5	<0.5	<0.5
COD	(mg/l)	305	64	< 10	<10	<10	<10	<20	<20	<20	<20	<20	<20	<20
BOD	(mg/l)	5	<2	< 3	<3	<3	<3	<4	<4	<4	<4	9	<4	<4
TOC	(mg/l)	4.2	1.6	4.76	2.61	<2	<2	<3	<3	<3	<3	<3	<3	<3
Phenolics, Tot	(mg/l)	0.003	0.0015	< 0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide	(mg/l)	<0.01	<0.01	--	--	<0.01	--	--	--	--	<0.01	--	--	--

H - exceeded hold time

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

Parameter	Units	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07	2/1/08	4/16/08	7/23/08	10/24/08
Temp	(deg C)	--	--	5	11.4	16.4	15.8	9.6	7.2	21.5	16.3	1.7	10.2	20.9	11.8
Eh	(mV)	--	--	385	45	155	115	84	-122	-143	-80	196	-78	-78	-78
pH	(Std Units)	--	--	7.7	7.8	7.69	7.9	8.47	8.24	8.03	8.28	8.66	8.34	8.33	8.38
Sp. Cond	(uS/cm)	--	--	157	257	244	200	156	141	1241	943	1075	245	223	229
Color	(Units)	<5	<5	--	--	<5	--	--	--	--	30	7	--	--	--
Turbidity	(NTU)	--	--	187	45	70	15.6	67.4	9.62	10.2	22.8	35.8	14.6	12.3	6.33
ALK as CaCO3	(mg/l)	94.8	93.6	92	94	91	89	99	96	100	100	100	100	100	99
HARD as CaCO3	(mg/l)	88	140	97.6	81.9	89	82	83.6	105	104	90.8	89.3	103	107	105
TDS	(mg/l)	143	86	120	111	142	120	62	162	130	104	152	130	80	140
Chloride	(mg/l)	<2	<2	2.55	2.28	3.47	0.611	3.24	4.45	3.16	6.44	3.15	5.95	5.61	6.03
Sulfate	(mg/l)	5.2	<5	4.72	5.51	5.33	3.76	7.09	6.31	28.8	5.26	<5	9.42	<5	<5
Bromide	(mg/l)	<0.5	<0.5	< 0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
NO3 (As N)	(mg/l)	0.2	<0.1	< 0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
NH4 (As N)	(mg/l)	<0.02	0.04	0.0938	<0.02	<0.02	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TKN (as N)	(mg/l)	<0.2	<0.2	0.54	0.755 H	0.497	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
COD	(mg/l)	<15	<15	< 10	<10	<10	<10	<20	<20	<20	<20	<20	<20	<20	<20
BOD	(mg/l)	<2	<2	< 3	<3	<3	<3	<4	<4	<4	<4	<4	<4	<4	<4
TOC	(mg/l)	9.3	<1	5.41	2.34	<2	<2	<3	<3	<3	<3	<3	<3	<3	<3
Phenolics, Tot	(mg/l)	<0.001	<0.001	< 0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide	(mg/l)	--	--	--	--	<0.01	--	--	--	--	<0.01	<10	--	--	--

H - exceeded hold time

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

Parameter	Units	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07	2/1/08	4/16/08	7/23/08	10/24/08
Temp	(deg C)	--	--	4.4	11.6	17.2	14.2	9.2	7.7	18	14.6	3.1	11.1	19.1	12
Eh	(mV)	--	--	140	-5	120	90	136	-62	-81	-25	42	-48	-31	-34
pH	(Std Units)	--	--	6.4	6.4	6.15	6.41	7.31	7.14	7.41	7.12	7.94	7.81	7.58	7.63
Sp. Cond	(uS/cm)	--	--	621	767	784	1100	364	450	395	574	617	424	402	695
Color	(Units)	30	60	--	--	33	--	--	--	--	210	40	--	--	--
Turbidity	(NTU)	--	--	18.6	18.3	195	27	48.9	30.7	15	5.07	7.83	26.8	49.2	8.52
ALK as CaCO3	(mg/l)	702	784	330	355	384	423	380	320	420	290	360	290	380	360
HARD as CaCO3	(mg/l)	1300	720	241	260	265	301	225	262	275	165	246	203	303	343
TDS	(mg/l)	1180	986	381	397	491	487	262	355	395	284	410	357	320	356
Chloride	(mg/l)	156	149	23.3	25.7	23.5	25.7	21.2	14.7	24.4	10.6	21	13.5	20.2	15.5
Sulfate	(mg/l)	<5	<5	4.22	5.5	3.43	3.18	<5	<5	<10	9.93	<10	<5	<20	<10
Bromide	(mg/l)	0.8	<0.5	0.189	0.18	0.237	0.261	<0.2	<0.2	<2	<2	<2	<200	<20	<20
NO3 (As N)	(mg/l)	<0.1	0.14	0.228	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
NH4 (As N)	(mg/l)	23	9.1	10.6	18.4	16	15.1	10.2	9.89	14.1	13.5	8.78	8.2	11.9	10.8
TKN (as N)	(mg/l)	31.5	21.2	10.6	14 H	16.5	15	132	12.5	16.1	12.6	10.7	11.2	12.9	11.6
COD	(mg/l)	127	136	< 10	13.8	27	15.6	<20	<20	46	22	23	21	36	32
BOD	(mg/l)	6	3	16	4.5	3.4	<3	6	7	7	<4	<4	5	7	<4
TOC	(mg/l)	42.5	24.1	10.1	7.18	5.67	5.68	6.7	4.8	7.3	6.3	21.8	5.2	6.3	6
Phenolics, Tot	(mg/l)	0.0071	0.0066	< 0.005	0.008	<0.005	<0.005	<0.005	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide	(mg/l)	<0.01	<0.01	--	--	<0.01	--	--	--	--	<0.01	<10	--	--	--

H - exceeded hold time

Historical Water Quality Database - Towslee Landfill
Field and Inorganic Parameters
Well MW-2B - Bedrock

Parameter	Units	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07	2/1/08	4/16/08	7/23/08	10/24/08
Temp	(deg C)	--	--	4.5	10.5	15.9	14.5	9.1	8.3	16.5	15.8	3.2	10.3	18.3	12.9
Eh	(mV)	--	--	175	110	125	115	136	-73	-77	-34	40	-46	-38	-33
pH	(Std Units)	--	--	6.4	6.4	6.35	6.52	7.14	7.35	7.37	7.35	8.34	7.77	7.73	7.59
Sp. Cond	(uS/cm)	--	--	1350	1560	1420	1540	701	682	500	329	339	1205	1132	1137
Color	(Units)	5	10	--	--	<5	--	--	--	--	15	7	--	--	--
Turbidity	(NTU)	--	--	17.3	19.8	18.7	28	14.2	11	9.48	37	41.5	13.5	15.4	3.14
ALK as CaCO3	(mg/l)	577	673	652	670	612	646	650	480	600	640	640	620	640	680
HARD as CaCO3	(mg/l)	960	900	697	726	686	675	723	575	716	652	678	654	728	788
TDS	(mg/l)	1640	1230	982	1020	1040	980	825	823	935	868	840	808	720	864
Chloride	(mg/l)	267	238	145	154	122	121	167	131	163	161	160	132	148	162
Sulfate	(mg/l)	<5	<5	1.18	2.96	<1	<1	<5	<5	10	<5	<5	<5	7.62	<5
Bromide	(mg/l)	1.1	0.9	0.878	1.01	0.902	0.912	0.95	<2	<2	0.92	<2	<20	<2	<0.2
NO3 (As N)	(mg/l)	<0.1	<0.1	< 0.1	0.216	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
NH4 (As N)	(mg/l)	0.95	1.3	0.389	0.824	0.786	0.282	0.921	0.844	1.31	1.22	0.785	0.572	1.01	0.504
TKN (as N)	(mg/l)	2.6	2	1.31	1.78 H	1.64	1.9	1.84	1.62	1.67	1.53	1.33	1.55	1.03	1.13
COD	(mg/l)	58	61	< 10	17.2	24.6	27	21	<20	<20	<20	24	<20	<20	<20
BOD	(mg/l)	2	2	9.3	5.1	3.7	13	<4	4	<4	<4	<4	5	<4	<4
TOC	(mg/l)	12.3	11.9	< 2	7.76	4.82	7.49	6.4	3	5.7	17.2	82.6	23.2	4.7	6.8
Phenolics, Tot	(mg/l)	0.0044	0.0039	< 0.005	<0.005	<0.005	0.1	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide	(mg/l)	--	--	--	--	0.024	--	--	--	--	<0.01	<10	--	--	--

H - exceeded hold time

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

Parameter	Units	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07	2/1/08	4/16/08	7/23/08	10/24/08
Temp	(deg C)	--	--	6.4	11.7	15.3	15.7	9.3	5.6	17.9	14.6	3.4	12.1	20.6	13.5
Eh	(mV)	--	--	215	45	115	220	-50	-94	-115	-76	174	-34	-39	-41
pH	(Std Units)	--	--	7.2	6.9	7.01	6.84	7.82	7.64	7.84	8.25	8.06	7.62	7.66	7.72
Sp. Cond	(uS/cm)	--	--	286	299	342	397	143	898	1757	939	1074	261	1759	204
Color	(Units)	<5	<5	--	--	<5	--	--	--	--	115	15	--	--	--
Turbidity	(NTU)	--	--	58	11.9	5.2	7.2	10.6	19.6	16.4	13.7	17	17.7	17.9	6.67
ALK as CaCO3	(mg/l)	145	146	162	170	140	152	82	59	170	130	110	170	91	97
HARD as CaCO3	(mg/l)	1250	200	153	179	191	158	74	58.1	150	86.2	97.7	123	76.7	97.9
TDS	(mg/l)	320	269	215	208	207	207	38	168	210	144	115	188	60	112
Chloride	(mg/l)	31.4	28.7	14	12.7	13.5	12.7	3.37	1.8	12	5.73	2.43	10.5	1.1	1.75
Sulfate	(mg/l)	16	13	9.14	11	9.98	8.01	<5	<5	20.5	<5	<5	7.74	19.9	<5
Bromide	(mg/l)	0.5	<0.5	< 0.1	<0.1	0.152	0.143	1.2	<2	<0.2	<2	<2	<0.2	<20	<2
NO3 (As N)	(mg/l)	<0.1	0.19	< 0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	0.338	<0.2	<0.2	1.14
NH4 (As N)	(mg/l)	<0.02	0.09	0.0969	<0.02	<0.02	<0.1	1.45	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TKN (as N)	(mg/l)	0.4	0.24	0.455	1.09 H	0.239	0.266	4.26	1.47	<0.5	<0.5	<0.5	<0.5	0.718	<0.5
COD	(mg/l)	19	<15	< 10	<10	13	<10	47	<20	<20	<20	23	<20	34	<20
BOD	(mg/l)	<2	<2	< 3	<3	<3	<3	<4	8	<4	<4	<4	7	9	<4
TOC	(mg/l)	4.5	1.9	5.58	<2	<2	<2	<3	<3	<3	3.7	<3	<3	7.3	3.6
Phenolics, Tot	(mg/l)	0.0027	<0.001	< 0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide	(mg/l)	--	--	--	--	<0.01	--	--	--	--	<0.01	<10	--	--	--

H - exceeded hold time

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

Parameter	Units	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07	2/1/08	4/16/08	7/23/08	10/24/08
Temp	(deg C)	--	--	7.9	10.5	12.2	14.3	9.7	7.4	15.6	14.8	3.7	10.4	16.1	12.6
Eh	(mV)	--	--	250	85	225	180	82	-92	-105	-57	121	-71	-81	-54
pH	(Std Units)	--	--	6.7	7.4	7.52	7.11	8.04	7.73	7.85	7.82	8.55	8.25	8.21	7.96
Sp. Cond	(uS/cm)	--	--	347	287	304	329	220	249	236	810	199	360	343	355
Color	(Units)	<5	20	--	--	<5	--	--	--	--	6	7	--	--	--
Turbidity	(NTU)	--	--	40	19.9	15.8	14.2	68.9	8.1	9.48	12.5	13.6	11.6	2.19	5.24
ALK as CaCO3	(mg/l)	240	224	131	148	154	153	180	160	150	140	140	140	110	120
HARD as CaCO3	(mg/l)	300	240	135	144	131	133	156	139	138	124	136	142	137	134
TDS	(mg/l)	98	280	209	175	190	187	127	105	220	208	198	225	116	168
Chloride	(mg/l)	38.2	35	21.1	2.33	2.32	3.39	11.6	6.99	13.8	25.9	16.7	16.9	31.1	28.6
Sulfate	(mg/l)	27.1	22.2	13.8	3.95	3.28	6.14	8.54	6.79	17.3	12.7	18.1	16.5	26.8	17.2
Bromide	(mg/l)	<0.5	<0.5	< 0.1	<0.1	0.122	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2
NO3 (As N)	(mg/l)	0.6	<0.1	< 0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
NH4 (As N)	(mg/l)	0.09	2.5	0.0549	<0.02	0.096	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TKN (as N)	(mg/l)	0.6	3.3	0.392	0.904 H	0.214	0.279	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
COD	(mg/l)	40	19	< 10	<10	11.6	<10	<20	<20	<20	<20	<20	<20	<20	<20
BOD	(mg/l)	<2	2	< 3	5.1	3.2	<3	<4	<4	<4	<4	<4	<4	<4	<4
TOC	(mg/l)	6	5.8	5.22	3.14	<2	<2	<3	<3	<3	<3	<3	<3	<3	<3
Phenolics, Tot	(mg/l)	0.0032	<0.001	< 0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide	(mg/l)	--	--	--	--	<0.01	--	--	--	--	<0.01	<10	--	--	--

H - exceeded hold time

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

Parameter	Units	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07	2/1/08	4/16/08	7/23/08	10/24/08
Temp	(deg C)	--	--	4.5	11.6	17.4	13.9	9.3	7.8	18.8	15.2	2	9.8	18.6	11.1
Eh	(mV)	--	--	215	120	245	190	77	-64	-69	-24	245	-37	-42	-41
pH	(Std Units)	--	--	6.5	6.4	6.34	6.62	7.04	7.12	7.2	7.11	7.77	7.63	7.73	8.09
Sp. Cond	(uS/cm)	--	--	1360	1520	1440	1480	893	765	514	972	561	1174	618	214
Color	(Units)	20	5	--	--	<5	--	--	--	--	85	7	--	--	--
Turbidity	(NTU)	--	--	214	18	13.6	42	45.3	54.3	40.9	48.1	39.3	44.4	41.6	42.7
ALK as CaCO3	(mg/l)	569	660	648	675	595	635	640	510	530	540	570	560	600	670
HARD as CaCO3	(mg/l)	1010	1150	627	599	531	526	529	499	481	459	528	506	538	569
TDS	(mg/l)	1220	1240	981	967	963	949	753	865	3000	752	800	1560	668	728
Chloride	(mg/l)	300	276	144	143	119	85	145	131	145	141	141	1260	136	135
Sulfate	(mg/l)	27.4	20.2	20.6	22.5	19.7	14.1	16.5	23.2	22.7	17.8	12.2	<20	21	16.1
Bromide	(mg/l)	0.6	<0.5	0.753	0.633	0.822	0.483	0.6	<0.2	<2	<2	<2	<200	<20	<20
NO3 (As N)	(mg/l)	<0.1	0.2	< 0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2	<0.2	0.25	<0.2	<0.2
NH4 (As N)	(mg/l)	0.93	0.89	0.34	<0.02	<0.02	<0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TKN (as N)	(mg/l)	1.1	1.4	1.5	1.68 H	0.75	1.11	1.47	3.6	0.784	0.591	0.522	0.949	<0.5	<0.5
COD	(mg/l)	43	112	21.2	16.5	26.4	20.5	27	<20	<20	<20	<20	36	22	29
BOD	(mg/l)	<2	2	< 3	<3	<3	<3	<4	<4	<4	<4	<4	<4	<4	<4
TOC	(mg/l)	10.1	12.6	12.8	8.19	6.12	7.46	8.1	6	7.2	11.5	69.9	17.8	5.2	6.1
Phenolics, Tot	(mg/l)	0.0051	0.0027	< 0.005	0.007	<0.005	<0.005	<0.005	0.006	0.007	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide	(mg/l)	<0.01	<0.01	--	--	<0.01	--	--	--	--	<0.01	<10	--	--	--

H - exceeded hold time

Historical Water Quality Data - Towslee Landfill
MW-1A Total Metals

Parameter	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07	4/16/08	7/23/08	10/24/08
Aluminum	724	16.9	--	--	2.96	--	--	--	--	2.07	--	--	--
Antimony	<0.003	<0.003	--	--	<0.05	--	--	--	--	<0.015	--	--	--
Arsenic	0.353	0.0134	--	--	<0.025	--	--	--	--	<0.01	--	--	--
Barium	8.11	0.258	--	--	0.104	--	--	--	--	0.0917	--	--	--
Beryllium	0.0287	0.00083 B	--	--	<0.005	--	--	--	--	<0.003	--	--	--
Boron	0.0873 B	0.0665 B	--	--	0.073	--	--	--	--	<0.5	--	--	--
Cadmium	<0.0003	<0.0003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	430	48.6	46.2	41.8	43.2	43.9	39.2	44.5	43.5	42.2	43.2	46.2	48.3
Chromium	1.04	0.0265	--	--	<0.005	--	--	--	--	<0.005	--	--	--
Chromium, Hex	--	--	--	--	<0.02	--	--	--	--	<0.01	--	--	--
Cobalt	0.59	0.0168 B	--	--	<0.015	--	--	--	--	<0.02	--	--	--
Copper	0.996	0.0254	--	--	0.022	--	--	--	--	<0.01	--	--	--
Iron	1550	35.7	19.4	2.99	6.03	2.11	1.67	2.14	1.21	3.49	1.17	0.217	0.429
Lead	0.454	0.0123	0.00716	0.007	<0.005	<0.005	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Magnesium	309	15.6	12.6	8.67	9.7	9.43	8.87	10.2	9.67	9.8	10.6	10.7	10.8
Manganese	24.6	0.783	0.534	0.194	0.38	0.306	0.19	0.193	0.206	0.203	0.157	0.135	0.151
Mercury	0.0014	<0.0001	--	--	<0.0004	--	--	--	--	<0.0002	--	--	--
Nickel	1.33	0.0364 B	--	--	<0.01	--	--	--	--	<0.03	--	--	--
Potassium	77.5	6.97	2.72	1.6	1.7	1.62	1.74	2.31	1.59	2.06	1.65	1.51	1.69
Sodium	37.3	26	17.1	13	13.6	13.5	12.2	12.5	13	11.8	12.5	13.8	13.2
Selenium	<0.028	<0.0028	--	--	<0.02	--	--	--	--	<0.005	--	--	--
Silver	<0.009	<0.0009	--	--	<0.015	--	--	--	--	<0.01	--	--	--
Thallium	<0.026	<0.0026	--	--	<0.03	--	--	--	--	<0.01	--	--	--
Vanadium	0.856	0.0243 B	--	--	<0.015	--	--	--	--	<0.03	--	--	--
Zinc	3.36	0.0874	--	--	0.106	--	--	--	--	0.0235	--	--	--

All units in mg/l

Historical Water Quality Data - Towslee Landfill
MW-1B Total Metals

Parameter	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07	2/1/08	4/16/08	7/23/08	10/24/08
Aluminum	0.662	0.134 B	--	--	1.09	--	--	--	--	0.537	0.518	--	--	--
Antimony	<0.003	<0.003	--	--	<0.05	--	--	--	--	<0.015	<0.015	--	--	--
Arsenic	<0.0024	<0.0024	--	--	<0.025	--	--	--	--	<0.01	<0.01	--	--	--
Barium	0.168 B	0.154 B	--	--	0.194	--	--	--	--	0.172	0.199	--	--	--
Beryllium	0.0001 B	<0.0001	--	--	<0.005	--	--	--	--	<0.003	<0.003	--	--	--
Boron	0.0197 B	0.0247 B	--	--	<0.05	--	--	--	--	<0.5	<0.5	--	--	--
Cadmium	<0.0003	<0.0003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	26.7	24.7	26.8	23.9	25.8	24.1	23.7	30	29.9	26	25.1	28.6	30.2	30
Chromium	0.002 B	<0.0004	--	--	<0.005	--	--	--	--	<0.005	<0.005	--	--	--
Chromium, Hex	--	--	--	--	<0.02	--	--	--	--	<0.01	<0.01	--	--	--
Cobalt	<0.0011	<0.0011	--	--	<0.015	--	--	--	--	<0.02	<0.02	--	--	--
Copper	0.004 B	0.0025 B	--	--	0.017	--	--	--	--	<0.01	<0.01	--	--	--
Iron	1.33	0.226	9.42	1.48	1.84	0.273	2.39	0.508	0.465	0.73	1	1.38	0.185	0.174
Lead	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	0.00431	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Magnesium	6.47	5.84	7.46	5.39	6.05	5.31	5.94	7.4	7.12	6.28	6.44	7.58	7.74	7.28
Manganese	0.195	0.146	2.28	0.191	0.251	0.126	0.521	0.169	0.19	0.176	0.26	0.198	0.169	0.153
Mercury	--	--	--	--	<0.0004	--	--	--	--	<0.0002	<0.0002	--	--	--
Nickel	<0.0013	<0.0013	--	--	<0.01	--	--	--	--	<0.03	<0.03	--	--	--
Potassium	1.56 B	0.529 B	0.973	0.468	0.523	0.374	<1	<1	<1	<1	<1	<1	<1	<1
Sodium	7.38	6.18	6.31	5.22	6.35	5.92	5.22	6.82	7.1	5.84	5.66	6.73	7.29	6.81
Selenium	--	--	--	--	<0.02	--	--	--	--	<0.005	<0.005	--	--	--
Silver	--	--	--	--	<0.015	--	--	--	--	<0.01	<0.01	--	--	--
Thallium	<0.0026	<0.0026	--	--	<0.03	--	--	--	--	<0.01	<0.01	--	--	--
Vanadium	<0.0012	<0.0012	--	--	<0.015	--	--	--	--	<0.03	<0.03	--	--	--
Zinc	0.0351	0.0163 B	--	--	0.052	--	--	--	--	0.0168	0.0112	--	--	--

All units in mg/l

Historical Water Quality Data - Towslee Landfill
MW-2A Total Metals

Parameter	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07	2/1/08	4/16/08	7/23/08	10/24/08
Aluminum	79.3	59.1	--	--	0.43	--	--	--	--	0.444	1.98	--	--	--
Antimony	0.0049 B	<0.003	--	--	<0.05	--	--	--	--	<0.015	<0.015	--	--	--
Arsenic	0.0631	0.0537	--	--	<0.025	--	--	--	--	<0.01	0.0145	--	--	--
Barium	1.75	1.49	--	--	0.502	--	--	--	--	0.265	0.377	--	--	--
Beryllium	0.0037 B	0.0025 B	--	--	<0.005	--	--	--	--	<0.003	<0.003	--	--	--
Boron	1.21	0.961	--	--	0.584	--	--	--	--	<0.5	<0.5	--	--	--
Cadmium	<0.0003	0.0016 B	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	186	172	69.1	74.1	77.3	88.5	64.2	75.3	80.4	47.9	70.3	57.5	87.8	99
Chromium	0.112	0.0967	--	--	<0.005	--	--	--	--	<0.005	0.0177	--	--	--
Chromium, Hex	--	--	--	--	<0.02	--	--	--	--	<0.02	<0.05	--	--	--
Cobalt	0.0719	0.0628	--	--	<0.015	--	--	--	--	<0.02	<0.02	--	--	--
Copper	0.104	0.0779	--	--	0.012	--	--	--	--	<0.01	<0.01	--	--	--
Iron	154	131	8.29	24	6.5	10.1	10.8	6.86	7.67	4.95	9.77	4.1	10.6	9.51
Lead	0.0561	0.0436	<0.005	0.019	<0.005	0.006	0.00524	<0.003	<0.003	<0.003	<0.003	<0.003	0.0039	<0.003
Magnesium	61.6	53.6	16.6	18.3	17.5	19.4	15.7	17.9	18	11	17.1	14.3	20.3	23.1
Manganese	35.7	31.6	12.2	11.5	12	13.6	9.93	11.7	12.7	7.05	11.2	9.3	13.8	15.1
Mercury	<0.0001	<0.0001	--	--	<0.0004	--	--	--	--	<0.0002	<0.0002	--	--	--
Nickel	0.151	0.132	--	--	<0.01	--	--	--	--	<0.03	<0.03	--	--	--
Potassium	23.4	17	9.29	11.2	12.3	12.7	9.02	10.8	13.3	2.14	8.56	7.56	12.3	15.1
Sodium	119	102	26.3	25.2	31.4	31.4	19.5	22.9	26.1	13.8	19.2	16.5	25.6	25.9
Selenium	<0.0028	<0.0028	--	--	<0.02	--	--	--	--	<0.005	<0.005	--	--	--
Silver	0.0024 B	0.0014 B	--	--	<0.015	--	--	--	--	<0.01	<0.01	--	--	--
Thallium	0.004 B	<0.0026	--	--	<0.03	--	--	--	--	<0.01	<0.01	--	--	--
Vanadium	0.102	0.0866	--	--	<0.015	--	--	--	--	<0.03	<0.03	--	--	--
Zinc	0.4	0.278	--	--	<0.01	--	--	--	--	<0.01	0.0101	--	--	--

All units in mg/l

Historical Water Quality Data - Towslee Landfill

MW-2B Total Metals

Parameter	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07	2/1/08	4/16/08	7/23/08	10/24/08
Aluminum	2.03	5.31	--	--	0.18	--	--	--	--	<0.1	0.168	--	--	--
Antimony	<0.003	<0.003	--	--	<0.05	--	--	--	--	<0.015	<0.015	--	--	--
Arsenic	0.007 B	0.0083 B	--	--	<0.025	--	--	--	--	<0.01	<0.01	--	--	--
Barium	1.59	1.36	--	--	1.22	--	--	--	--	1.09	1.18	--	--	--
Beryllium	0.00023 B	0.00037 B	--	--	<0.005	--	--	--	--	<0.003	<0.003	--	--	--
Boron	0.355	0.292	--	--	0.256	--	--	--	--	<0.5	<0.5	--	--	--
Cadmium	0.0003 B	<0.0003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	288	245	203	216 E	203 E	200	216	170	214	195	201	192	214	235
Chromium	0.004 B	0.0086 B	--	--	<0.005	--	--	--	--	<0.005	0.00816	--	--	--
Chromium, Hex	--	--	--	--	<0.02	--	--	--	--	<0.01	<0.01	--	--	--
Cobalt	0.0091 B	0.0141 B	--	--	<0.015	--	--	--	--	<0.02	<0.02	--	--	--
Copper	0.0069 B	0.0118 B	--	--	0.017	--	--	--	--	<0.01	<0.01	--	--	--
Iron	4.3	10.7	0.913	0.836	1.2	1.07	0.637	0.469	0.468	0.323	0.439	0.56	0.236	0.28
Lead	0.0044	0.0058	<0.005	0.009	<0.005	<0.005	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Magnesium	61.7	49.9	46.1	45.3	43.5	42.7	44.8	36.3	44.1	39.9	42.8	42.4	47.1	49.1
Manganese	8.24	7.43	6.98	6.8	6.63	6.46	6.42	4.93	6.6	5.7	6.21	5.96	6.49	6.84
Mercury	--	--	--	--	<0.0004	--	--	--	--	<0.0002	<0.0002	--	--	--
Nickel	0.0129 B	0.0188 B	--	--	<0.01	--	--	--	--	<0.03	<0.03	--	--	--
Potassium	3 B	2.9 B	2.42	2.25	2.28	2.38	2.74	2.14	2.44	<1	2.44	2.2	2.23	3.13
Sodium	64.1	53.9	53.8	49.7	51.1	51	50.9	40.8	52.3	48.2	50.6	47.4	51.4	58.2
Selenium	--	--	--	--	<0.02	--	--	--	--	<0.005	<0.005	--	--	--
Silver	--	--	--	--	<0.015	--	--	--	--	<0.01	<0.01	--	--	--
Thallium	0.0037 B	<0.0026	--	--	<0.03	--	--	--	--	<0.01	<0.01	--	--	--
Vanadium	0.0029 B	0.0075 B	--	--	<0.015	--	--	--	--	<0.03	<0.03	--	--	--
Zinc	0.103	0.0484	--	--	<0.01	--	--	--	--	0.0469	<0.01	--	--	--

All units in mg/l

Historical Water Quality Data - Towslee Landfill

MW-3A Total Metals

Parameter	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07	2/1/08	4/16/08	7/23/08	10/24/08
Aluminum	21.7	2.39	--	--	0.078	--	--	--	--	0.33	0.23	--	--	--
Antimony	<0.003	0.0034 B	--	--	<0.05	--	--	--	--	<0.015	<0.015	--	--	--
Arsenic	0.0127	<0.0024	--	--	<0.025	--	--	--	--	<0.01	<0.01	--	--	--
Barium	0.567	0.343	--	--	0.41	--	--	--	--	0.332	0.441	--	--	--
Beryllium	0.001 B	0.00013 B	--	--	<0.005	--	--	--	--	<0.003	<0.003	--	--	--
Boron	<0.0709	0.0286 B	--	--	0.063	--	--	--	--	<0.5	<0.5	--	--	--
Cadmium	<0.0003	<0.0003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	57.8	53.7	46.3	55.3	57.9	48.3	23	18.1	45.1	27.5	30.2	37.6	24.4	31.3
Chromium	0.0249	0.0022 B	--	--	<0.005	--	--	--	--	<0.005	<0.005	--	--	--
Chromium, Hex	--	--	--	--	<0.02	--	--	--	--	<0.01	<0.01	--	--	--
Cobalt	0.0121 B	0.0019 B	--	--	<0.015	--	--	--	--	<0.02	<0.02	--	--	--
Copper	0.0315	0.0076 B	--	--	0.023	--	--	--	--	<0.01	<0.01	--	--	--
Iron	26.6	3.58	1.88	0.626	0.104	0.283	1.18	0.599	0.231	0.537	0.451	0.574	0.508	0.177
Lead	0.0077	<0.001	<0.005	0.005	0.005	<0.005	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Magnesium	17	11	9.13	10	11.2	9.2	4.04	3.1	9.15	4.26	5.42	7.04	3.83	4.8
Manganese	0.732	0.174	0.208	0.175	0.416	0.176	0.415	0.501	0.116	0.287	0.0373	0.141	0.618	0.0424
Mercury	--	--	--	--	<0.0004	--	--	--	--	<0.0002	<0.0002	--	--	--
Nickel	0.0248 B	0.0038 B	--	--	<0.01	--	--	--	--	<0.03	<0.03	--	--	--
Potassium	7.43	1.87 B	0.938	0.829	1.09	0.937	<1	<1	<1	<1	<1	<1	1.06	<1
Sodium	10.4	6.54	5.66	6.4	8.92	6.03	2.11	1.14	5.1	2.64	2.9	3.52	2.77	2.69
Selenium	--	--	--	--	<0.02	--	--	--	--	<0.005	<0.005	--	--	--
Silver	--	--	--	--	<0.015	--	--	--	--	<0.01	<0.01	--	--	--
Thallium	<0.0026	<0.0026	--	--	<0.03	--	--	--	--	<0.01	<0.01	--	--	--
Vanadium	0.0296 B	0.0039 B	--	--	<0.015	--	--	--	--	<0.03	<0.03	--	--	--
Zinc	0.112	0.0265	--	--	0.025	--	--	--	--	0.0106	<0.01	--	--	--

All units in mg/l

Historical Water Quality Data - Towslee Landfill
MW-6B Total Metals

Parameter	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07	2/1/08	4/16/08	7/23/08	10/24/08
Aluminum	8.59	0.642	--	--	0.115	--	--	--	--	0.102	0.134	--	--	--
Antimony	<0.003	<0.003	--	--	<0.05	--	--	--	--	<0.015	<0.015	--	--	--
Arsenic	0.009 B	0.0084 B	--	--	<0.025	--	--	--	--	<0.01	<0.01	--	--	--
Barium	0.521	0.48	--	--	0.313	--	--	--	--	0.301	0.337	--	--	--
Beryllium	0.0004 B	0.0001 B	--	--	<0.005	--	--	--	--	<0.003	<0.003	--	--	--
Boron	0.145	0.145	--	--	<0.05	--	--	--	--	<0.5	<0.5	--	--	--
Cadmium	<0.0003	<0.0003	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	70.5	55.6	39.3	39.6	36.1	37.4	45.6	39.9	40.2	36.7	39.2	39.5	39	38.7
Chromium	0.0092 B	0.0017 B	--	--	<0.005	--	--	--	--	<0.005	<0.005	--	--	--
Chromium, Hex	--	--	--	--	<0.02	--	--	--	--	<0.01	<0.01	--	--	--
Cobalt	0.0112 B	0.0056 B	--	--	<0.015	--	--	--	--	<0.02	<0.02	--	--	--
Copper	0.0116 B	0.0051 B	--	--	0.016	--	--	--	--	<0.01	<0.01	--	--	--
Iron	10.6	3	1.09	0.511	0.306	0.195	1.87	0.486	0.163	0.216	0.229	0.33	<0.06	<0.06
Lead	0.0044	<0.001	<0.005	<0.005	<0.005	<0.005	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Magnesium	19	12.7	8.94	10.9	9.86	9.71	10.2	9.68	9.12	7.81	9.37	10.4	9.61	9.13
Manganese	3.43	4.17	0.559	0.12	0.297	0.185	0.331	0.0908	0.671	0.712	0.327	0.102	0.666	0.619
Mercury	--	--	--	--	<0.0004	--	--	--	--	<0.0002	<0.0002	--	--	--
Nickel	0.0144 B	0.0059 B	--	--	<0.01	--	--	--	--	<0.03	<0.03	--	--	--
Potassium	4.08 B	2.72 B	1.15	0.825	0.634	0.69	1.05	<1	<1	<1	<1	<1	<1	1.4
Sodium	38	31.4	14.9	9.93	10.1	10.7	11.2	10.2	15	14.7	13.8	12.7	18.1	17.6
Selenium	--	--	--	--	<0.02	--	--	--	--	<0.005	<0.005	--	--	--
Silver	--	--	--	--	<0.015	--	--	--	--	<0.01	<0.01	--	--	--
Thallium	<0.0026	<0.0026	--	--	<0.03	--	--	--	--	<0.01	<0.01	--	--	--
Vanadium	0.0083 B	0.0012 B	--	--	<0.015	--	--	--	--	<0.03	<0.03	--	--	--
Zinc	0.0894	0.0248	--	--	0.014	--	--	--	--	0.0213	0.0103	--	--	--

All units in mg/l

Historical Water Quality Data - Towslee Landfill

MW-7A Total Metals

Parameter	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07	2/1/08	4/16/08	7/23/08	10/24/08
Aluminum	40	88.4	--	--	0.415	--	--	--	--	2.43	0.919	--	--	--
Antimony	<0.003	<0.003	--	--	<0.05	--	--	--	--	<0.015	<0.015	--	--	--
Arsenic	0.0176	0.0459	--	--	<0.025	--	--	--	--	<0.01	<0.01	--	--	--
Barium	1.36	1.99	--	--	0.684	--	--	--	--	0.576	0.68	--	--	--
Beryllium	0.0015 B	0.0037 B	--	--	<0.005	--	--	--	--	<0.003	<0.003	--	--	--
Boron	0.332	0.41	--	--	0.55	--	--	--	--	0.65	0.588	--	--	--
Cadmium	0.00047 B	0.002 B	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium	234	271	171	165	150	148	149	140	135	131	148	139	150	162
Chromium	0.0556	0.146	--	--	<0.005	--	--	--	--	<0.005	0.00667	--	--	--
Chromium, Hex	--	--	--	--	<0.02	--	--	--	--	<0.01	<0.05	--	--	--
Cobalt	0.0311	0.0791	--	--	<0.015	--	--	--	--	<0.02	<0.02	--	--	--
Copper	0.0637	0.129	--	--	0.013	--	--	--	--	<0.01	<0.01	--	--	--
Iron	65.9	174	14.5	1.33	0.722	2.78	1.68	1.52	9.97	3.65	1.68	1.99	0.342	1.16
Lead	0.0251	0.0585	0.0175	0.009	0.006	<0.005	<0.003	<0.003	0.00656	<0.003	<0.003	<0.003	<0.003	<0.003
Magnesium	67	88.3	48.6	45.5	38	38	38.4	36.4	35	32.1	38.4	38.5	39.5	39.8
Manganese	5.87	9.55	6.08	5.69	4.4	4.85	4.51	4.18	3.98	3.47	4.17	4.34	4.82	4.57
Mercury	<0.0001	<0.0001	--	--	<0.0004	--	--	--	--	<0.0002	<0.0002	--	--	--
Nickel	0.0783	0.192	--	--	0.013	--	--	--	--	<0.03	<0.03	--	--	--
Potassium	10.4	13.5	3.06	1.91	1.81	2.03	2.03	1.95	2.87	<1	1.85	1.98	1.82	2.41
Sodium	118	113	134	129	124	128	112	104	95.8	95.2	104	99.6	113	116
Selenium	0.0041 B	0.0047 B	--	--	<0.02	--	--	--	--	<0.005	<0.005	--	--	--
Silver	<0.0009	<0.0009	--	--	<0.015	--	--	--	--	<0.01	<0.01	--	--	--
Thallium	<0.0026	<0.0026	--	--	<0.03	--	--	--	--	<0.01	<0.01	--	--	--
Vanadium	0.0487 B	0.127	--	--	<0.015	--	--	--	--	<0.03	<0.03	--	--	--
Zinc	0.2	0.408	--	--	<0.01	--	--	--	--	0.0263	0.0102	--	--	--

All units in mg/l

Historical Water Quality Database - Towslee Landfill

MW-1A Dissolved Metals

Parameter	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	3/20/07
Aluminum	0.0163 B	0.0407 B	--	--	0.066	--
Antimony	--	--	--	--	<0.05	--
Arsenic	<0.0024	<0.0024	--	--	<0.025	--
Barium	0.137 B	0.068 B	--	--	0.066	--
Beryllium	<0.0001	<0.0001	--	--	<0.005	--
Boron	0.0631 B	0.0561 B	--	--	<0.07	--
Cadmium	<0.0003	<0.0003	<0.005	<0.005	<0.005	<0.005
Calcium	67.6	40.3	40.7	38.9	38.6	40.3
Chromium	<0.0004	<0.0004	--	--	<0.005	--
Chrom, Hex	--	--	--	--	--	--
Cobalt	<0.0011	<0.0011	--	--	<0.015	--
Copper	0.0008 B	<0.0007	--	--	0.013	--
Iron	0.0348 B	0.0471 B	13.5	0.315	0.125	<0.06
Lead	0.0052	<0.001	<0.005	0.005	<0.005	<0.003
Magnesium	15.4	8.69	10.4	8.12	8.18	8.83
Manganese	0.22	0.174	0.238	0.127	0.248	<0.01
Mercury	0.0014	<0.0001	--	--	<0.0004	--
Nickel	<0.0013	<0.0013	--	--	<0.01	--
Potassium	10.6	4.92 B	2.52	1.38	1.31	1.72
Sodium	59.3	27.1	14.7	12.3	13	12.3
Selenium	--	--	--	--	<0.02	--
Silver	--	--	--	--	<0.015	--
Thallium	<0.0026	<0.0026	--	--	<0.03	--
Vanadium	<0.0012	<0.0012	--	--	<0.015	--
Zinc	0.12	0.0161 B	--	--	0.033	--

All units are mg/l

Historical Water Quality Database - Towslee Landfill

MW-1B Dissolved Metals

Parameter	Aug-97	Oct-97	3/22/06	8/9/06	3/20/07
Aluminum	0.0146 B	0.0209 B	--	0.195	--
Antimony	<0.003	<0.003	--	<0.05	--
Arsenic	<0.0024	<0.0024	--	<0.025	--
Barium	0.151 B	0.155 B	--	0.162	--
Beryllium	<0.0001	<0.0001	--	<0.005	--
Boron	0.0195 B	0.0162 B	--	<0.07	--
Cadmium	<0.0003	<0.0003	<0.005	<0.005	<0.005
Calcium	24.8	24.5	22.8	24.4	24.5
Chromium	0.0008 B	0.00073 B	--	<0.005	--
Chrom, Hex	--	--	--	--	--
Cobalt	<0.0011	<0.0011	--	<0.015	--
Copper	<0.0007	<0.0007	--	0.013	--
Iron	0.0172 B	0.0141 B	0.339	0.339	<0.06
Lead	--	--	<0.005	<0.005	<0.003
Magnesium	6.62	5.88	5.15	5.54	5.88
Manganese	0.141	0.134	0.0136	0.135	<0.01
Mercury	--	--	--	<0.0004	--
Nickel	<0.0013	<0.0013	--	<0.01	--
Potassium	1.63 B	0.514 B	0.487	0.403	<1
Sodium	7.53	6.59	4.75	5.31	5.73
Selenium	--	--	--	<0.02	--
Silver	--	--	--	<0.015	--
Thallium	--	--	--	<0.03	--
Vanadium	--	--	--	<0.015	--
Zinc	0.0396	0.0152 B	--	0.029	--

All units are mg/l

Historical Water Quality Database - Towslee Landfill
MW-2A Dissolved Metals

Parameter	Aug-97	Oct-97	8/9/06
Aluminum	<0.0083	0.0482 B	0.044
Antimony	--	--	<0.05
Arsenic	0.0123	0.0139	<0.025
Barium	0.787	0.786	0.427
Beryllium	0.00017 B	0.0001 B	<0.005
Boron	1.21	0.992	0.562
Cadmium	0.00053 B	<0.0003	<0.005
Calcium	183	183	77.6
Chromium	0.0035 B	0.0057 B	<0.005
Chrom, Hex	--	--	--
Cobalt	0.0107 B	0.0095 B	<0.015
Copper	0.0162 B	<0.0007	0.015
Iron	5.4	11.5	0.204
Lead	<0.001	0.0011 B	<0.005
Magnesium	41	38.5	17.1
Manganese	30.4	30.9	12.1
Mercury	<0.0001	<0.0001	<0.0004
Nickel	0.0179 B	0.0162 B	<0.01
Potassium	17.5	14.2	12.5
Sodium	121	115	29.6
Selenium	--	--	<0.02
Silver	--	--	<0.015
Thallium	0.003 B	<0.0026	<0.03
Vanadium	<0.0012	<0.0012	<0.015
Zinc	0.117	0.0207	0.013

All units are mg/l

Historical Water Quality Database - Towslee Landfill

MW-2B Dissolved Metals

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

All units are mg/l

Historical Water Quality Database - Towslee Landfill
MW-3A Dissolved Metals

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

All units are mg/l

Historical Water Quality Database - Towslee Landfill

MW-6B Dissolved Metals

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

All units are mg/l

Historical Water Quality Database - Towslee Landfill
MW-7A Dissolved Metals

Parameter	Aug-97	Oct-97	3/22/06
Aluminum	<0.0083	0.0755 B	--
Antimony	--	--	--
Arsenic	<0.0024	<0.0024	--
Barium	0.822	0.887	--
Beryllium	0.0001 B	<0.0001	--
Boron	0.331	0.396	--
Cadmium	0.0003 B	<0.0003	<0.005
Calcium	220	255	158
Chromium	0.0008 B	0.0011 B	--
Chrom, Hex	--	--	--
Cobalt	0.0017 B	0.0031 B	--
Copper	0.0086 B	<0.0007	--
Iron	0.009 B	0.753	0.0637
Lead	<0.001	<0.001	<0.005
Magnesium	56.2	59.9	43.6
Manganese	4.53	7.12	5.35
Mercury	<0.0001	<0.0001	--
Nickel	0.0129 B	0.0196 B	--
Potassium	5.28	3.98 B	1.9
Sodium	120	129	126
Selenium	--	--	--
Silver	--	--	--
Thallium	<0.0026	<0.0026	--
Vanadium	<0.0012	<0.0012	--
Zinc	0.0455	0.0186	--

All units are mg/l

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

Parameter	TYPE	Aug-97	Oct-97	8/9/06	10/9/07
Vinyl Chloride	VOC	<10	<10	<5	<5
Chloroethane	VOC	<10	<10	<5	<5
Acetone	VOC	10	<10	<25	<10
Methylene Chloride	VOC	<10	<10	<5	<5
trans-1,2-Dichloroethene (1)	VOC	<10	<10	<5	<5
cis-1,2-Dichloroethene (1)	VOC	<10	<10	<5	<5
1,1-Dichloroethane	VOC	<10	<10	<5	<5
Benzene	VOC	<10	<10	<5	<5
Toluene	VOC	<10	<10	<5	<5
Chlorobenzene	VOC	<10	<10	<5	<5
Ethylbenzene	VOC	<10	<10	<5	<5
Xylenes(total)	VOC	<10	<10	<10	<5
1,4-Dichlorobenzene	SVOC	<10	<10	<5	<5
Diethylphthalate	SVOC	<10	<10	NA	NA
bis(2-Ethylhexyl)phthalate	SVOC	<10	<10	NA	NA

All units are ug/l
J - estimated
B - analyte also detected in blank
(1) 1997 results are for total 1,2-DCE - total has been applied to each compound
NA - not analyzed

Historical Water Quality Database - Towslee Landfill
Organics (includes only compounds detected)
Well MW-1B - Bedrock

Parameter	TYPE	Aug-97	Oct-97	8/9/06	10/9/07	2/1/08
Vinyl Chloride	VOC	<10	<10	<5	<5	<5
Chloroethane	VOC	<10	<10	<5	<5	<5
Acetone	VOC	<10	<10	<25	<10	<10
Methylene Chloride	VOC	<10	<10	<5	<5	13 B
trans-1,2-Dichloroethene (1)	VOC	<10	<10	<5	<5	<5
cis-1,2-Dichloroethene (1)	VOC	<10	<10	<5	<5	<5
1,1-Dichloroethane	VOC	<10	<10	<5	<5	<5
Benzene	VOC	<10	<10	<5	<5	<5
Toluene	VOC	<10	<10	<5	<5	<5
Chlorobenzene	VOC	<10	<10	<5	<5	<5
Ethylbenzene	VOC	<10	<10	<5	<5	<5
Xylenes(total)	VOC	<10	<10	<10	<5	<5
1,4-Dichlorobenzene	SVOC	<10	<10	<5	<5	<5
Diethylphthalate	SVOC	<10	<10	NA	NA	NA
bis(2-Ethylhexyl)phthalate	SVOC	<10	<10	NA	NA	NA

All units are ug/l
J - estimated
B - analyte also detected in blank
(1) 1997 results are for total 1,2-DCE - total has been applied to each compound
NA - not analyzed

Historical Water Quality Database - Towslee Landfill
Organics (includes only compounds detected)
Well MW-2A - Overburden

Parameter	TYPE	Aug-97	Oct-97	8/9/06	10/9/07	2/1/08
Vinyl Chloride	VOC	<10	<10	<5	<5	<5
Chloroethane	VOC	5 J	4 J	<5	<5	<5
Acetone	VOC	<10	<10	<25	<10	<10
Methylene Chloride	VOC	1 JB	<10	<5	<5	12 B
trans-1,2-Dichloroethene (1)	VOC	<10	<10	<5	<5	<5
cis-1,2-Dichloroethene (1)	VOC	<10	<10	<5	<5	<5
1,1-Dichloroethane	VOC	<10	<10	<5	<5	<5
Benzene	VOC	5 J	6 J	<5	<5	<5
Toluene	VOC	1 J	<10	<5	<5	<5
Chlorobenzene	VOC	5 J	<10	<5	4 J	<5
Ethylbenzene	VOC	2 J	<10	<5	<5	<5
Xylenes(total)	VOC	5 J	<10	<10	<5	<5
1,4-Dichlorobenzene	SVOC	1 J	2 J	<5	<5	<5
Diethylphthalate	SVOC	<10	1 J	NA	NA	NA
bis(2-Ethylhexyl)phthalate	SVOC	<10	<10	NA	NA	NA

All units are ug/l
J - estimated
B - analyte also detected in blank
(1) 1997 results are for total 1,2-DCE - total has been applied to each compound
NA - not analyzed

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

Parameter	TYPE	Aug-97	Oct-97	8/9/06	10/9/07	2/1/08
Vinyl Chloride	VOC	<10	<10	<5	5.8	<5
Chloroethane	VOC	4 J	3 J	<5	4 J	<5
Acetone	VOC	<10	<10	<25	<10	<10
Methylene Chloride	VOC	1 JB	<10	<5	<5	11 B
trans-1,2-Dichloroethene (1)	VOC	1 J	<10	<5	<5	<5
cis-1,2-Dichloroethene (1)	VOC	1 J	<10	6.2	9.2	9.4
1,1-Dichloroethane	VOC	1 J	1 J	<5	<5	<5
Benzene	VOC	<10	2 J	<5	<5	<5
Toluene	VOC	<10	<10	<5	<5	<5
Chlorobenzene	VOC	<10	1 J	<5	<5	<5
Ethylbenzene	VOC	<10	<10	<5	<5	<5
Xylenes(total)	VOC	<10	<10	<10	<5	<5
1,4-Dichlorobenzene	SVOC	<10	<10	<5	<5	<5
Diethylphthalate	SVOC	<10	<10	NA	NA	NA
bis(2-Ethylhexyl)phthalate	SVOC	<10	1 JB	NA	NA	NA

All units are ug/l
J - estimated
B - analyte also detected in blank
(1) 1997 results are for total 1,2-DCE - total has been applied to each compound
NA - not analyzed

Historical Water Quality Database - Towslee Landfill
Organics (includes only compounds detected)
Well MW-3A - Bedrock

Parameter	TYPE	Aug-97	Oct-97	8/9/06	10/9/07	2/1/08
Vinyl Chloride	VOC	<10	<10	<5	<5	<5
Chloroethane	VOC	<10	<10	<5	<5	<5
Acetone	VOC	2 J	<10	<25	<10	<10
Methylene Chloride	VOC	5 JB	<10	<5	<5	11 B
trans-1,2-Dichloroethene (1)	VOC	<10	<10	<5	<5	<5
cis-1,2-Dichloroethene (1)	VOC	<10	<10	<5	<5	<5
1,1-Dichloroethane	VOC	<10	<10	<5	<5	<5
Benzene	VOC	<10	<10	<5	<5	<5
Toluene	VOC	<10	<10	<5	<5	<5
Chlorobenzene	VOC	<10	<10	<5	<5	<5
Ethylbenzene	VOC	<10	<10	<5	<5	<5
Xylenes(total)	VOC	<10	<10	<10	<5	<5
1,4-Dichlorobenzene	SVOC	<10	<10	<5	<5	<5
Diethylphthalate	SVOC	<10	<10	NA	NA	NA
bis(2-Ethylhexyl)phthalate	SVOC	<10	<10	NA	NA	NA

All units are ug/l
J - estimated
B - analyte also detected in blank
(1) 1997 results are for total 1,2-DCE - total has been applied to each compound
NA - not analyzed

Historical Water Quality Database - Towslee Landfill
Organics (includes only compounds detected)
Well MW-6B - Bedrock

Parameter	TYPE	Aug-97	Oct-97	8/9/06	10/9/07	2/1/08
Vinyl Chloride	VOC	<10	<10	<5	<5	<5
Chloroethane	VOC	<10	<10	<5	<5	<5
Acetone	VOC	<10	<10	<25	<10	<10
Methylene Chloride	VOC	<10	<10	<5	<5	12 B
trans-1,2-Dichloroethene (1)	VOC	<10	<10	<5	<5	<5
cis-1,2-Dichloroethene (1)	VOC	<10	<10	<5	<5	<5
1,1-Dichloroethane	VOC	<10	<10	<5	<5	<5
Benzene	VOC	<10	<10	<5	<5	<5
Toluene	VOC	<10	<10	<5	<5	<5
Chlorobenzene	VOC	<10	<10	<5	<5	<5
Ethylbenzene	VOC	<10	<10	<5	<5	<5
Xylenes(total)	VOC	<10	<10	<10	<5	<5
1,4-Dichlorobenzene	SVOC	<10	<10	<5	<5	<5
Diethylphthalate	SVOC	<10	<10	NA	NA	NA
bis(2-Ethylhexyl)phthalate	SVOC	<10	<10	NA	NA	NA

All units are ug/l
J - estimated
B - analyte also detected in blank
(1) 1997 results are for total 1,2-DCE - total has been applied to each compound
NA - not analyzed

Historical Water Quality Database - Towslee Landfill
Organics (includes only compounds detected)
Well MW-7A - Overburden

Parameter	TYPE	Aug-97	Oct-97	8/9/06	10/9/07	2/1/08
Vinyl Chloride	VOC	2 J	5 J	<5	4 J	8.2
Chloroethane	VOC	<10	1 J	<5	<5	<5
Acetone	VOC	<10	<10	<25	<10	<10
Methylene Chloride	VOC	1 JB	<10	<5	<5	<5
trans-1,2-Dichloroethene (1)	VOC	1 J	2 J	<5	<5	<5
cis-1,2-Dichloroethene (1)	VOC	1 J	2 J	7.1	6.1	9
1,1-Dichloroethane	VOC	3 J	4 J	6.1	5 J	7.9
Benzene	VOC	<10	<10	<5	<5	<5
Toluene	VOC	<10	<10	<5	<5	<5
Chlorobenzene	VOC	<10	<10	<5	<5	<5
Ethylbenzene	VOC	<10	<10	<5	<5	<5
Xylenes(total)	VOC	<10	<10	<10	<5	<5
1,4-Dichlorobenzene	SVOC	<10	<10	<5	<5	<5
Diethylphthalate	SVOC	<10	<10	NA	NA	NA
bis(2-Ethylhexyl)phthalate	SVOC	<10	<10	NA	NA	NA

All units are ug/l
J - estimated
B - analyte also detected in blank
(1) 1997 results are for total 1,2-DCE - total has been applied to each compound
NA - not analyzed