



## Cortland County Soil and Water Conservation District

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

September 13, 2012

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

Dear Mr. Jankauskas:

Enclosed is a report summarizing monitoring activities for Quarter 2 of 2012 at the Towslee Landfill in Cortland County. Cortland County Soil and Water Conservation District prepared this report for Don Chambers, Superintendent of Cortland County Highway Department.

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

Sincerely,

Patrick Reidy  
Water Quality Specialist

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

# Environmental Monitoring Report

## 2012 Quarter 2

Cortland County Towslee Landfill  
Town Line Road  
Cortland County, New York

NYSDEC Region 7

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

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



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## 1.0 Introduction

Cortland County is the current owner of the inactive Towslee Landfill located at the county's solid waste disposal site in the Towns of Cortlandville and Solon, near the center of the county. The Towslee Landfill has previously been called the Old County Landfill, and the Town Line Landfill. It is referred to as the Towslee Landfill in this report. This report summarizes groundwater quality monitoring activities at the Towslee Landfill for Quarter 2 of 2012.

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 implement 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.

Towslee Landfill monitoring follows the sampling and analysis plan prepared by B&L in 2006. Upstate Laboratories, Inc. (herein referred to as Upstate Labs) conducted all sample collection activities, and performed all laboratory analyses for Quarter 2 of 2012. 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 the approximate limits of hazardous waste. Figure 1 also shows the surface water sampling locations that are tested as part of the monitoring of the active West Side Landfill, located adjacent to Towslee Landfill.

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

<u>Quarter</u>	<u>Analyses</u>	<u>Date Sampled</u>
First Quarter:	Routine	March 19-21, 2012
Second Quarter:	Routine	May 22-23, 2012
Third Quarter:	Routine	to be completed
Fourth Quarter:	Baseline	to be completed

### 3.2 Groundwater Monitoring Locations

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

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

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

## 4.0 Groundwater Monitoring Results

This section provides an evaluation of groundwater monitoring results for Quarter 2 of 2012. 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 2 laboratory analytical report.
- Appendix B contains tables of historical water quality data for each monitoring well.

### 4.1 Contraventions of Groundwater Quality Standards

This subsection compares 2012 groundwater quality data to NYS water quality standards. Tables 1 and 2 summarize groundwater quality results for Quarter 2 for the Towslee wells. Available NYS water quality standards are included in these tables, and contraventions of standards are highlighted.

Results for most parameters in Quarter 2 of 2012 were below available water quality standards at all wells, although there continues to be evidence of mild landfill leachate contamination. Contraventions of standards are described below for the Towslee monitoring wells.

#### 4.1.1 Conventional and Field Parameters

pH - The acceptable range for pH is between 6.5 and 8.5. In Quarter 2, pH was slightly below this range for MW-2B (6.12) and MW-7A (6.36).

Turbidity – Turbidity exceeded the NYS standard of 5 NTU for the two upgradient wells and 9 of the 10 sampled downgradient wells in Quarter 2, with results ranging from about 5 to over 1,000 NTU. Based on separate monitoring conducted at the closed Pine Tree Landfill, and the active West Side Landfill, natural groundwater in this area appears to have elevated turbidity.

Total Dissolved Solids (TDS) - The TDS standard of 500 mg/l has been consistently exceeded for the same two wells, and this trend continued in Quarter 2. TDS was 890 mg/l at MW-2B, and 630 mg/l at MW-7A.

Ammonia - The ammonia standard of 2 mg/l was exceeded at MW-2A (5.9 mg/l) in Quarter 2, and was exceeded in all previous monitoring events at this well, with a slowly decreasing trend in concentration over time.

#### 4.1.2 Metals

Total Iron - The NYS standard for iron is 0.3 mg/l. The standard was exceeded for both upgradient wells and 8 of the 10 sampled downgradient wells in Quarter 2, ranging from about 0.34 to 7.4 mg/l. Iron has frequently exceeded the standard in past monitoring at Towslee. The elevated iron levels are believed to be due at least in part to particulate in the unfiltered samples.

Total Manganese - The NYS standard for manganese is 0.3 mg/l. The manganese standard was exceeded for one upgradient well and 7 of 10 downgradient wells in Quarter 2, ranging from about 0.8 to 8.5 mg/l. As with iron, the manganese standard has frequently been exceeded in past monitoring, and may be due to particulate in unfiltered samples.

Sodium – Of the several NYS sodium standards, the lowest is 20 mg/l, and applies to people on severely restricted sodium diets. Contraventions in Quarter 2 were observed at MW-2B (47.4 mg/l) and MW-7A (91 mg/l). These results are consistent with past monitoring. Elevated sodium may be at least partially related to deicing activities on the road network within the landfill.

#### 4.1.3 Volatile Organic Compounds (VOCs)

VOC analyses was not required in Quarter 2.

There were no other contraventions of NYS water quality standards in Quarter 2 of 2012.

### 4.2 Groundwater Quality Trends

Groundwater monitoring at Towslee Landfill occurred twice in 1997, and quarterly monitoring was resumed for seven wells in 2006. Monitoring was resumed for an additional six wells in Quarter 3 of 2012.

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

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

#### 4.2.1 Upgradient Wells

Wells CD-1 and CD-1RA are upgradient of the landfill. The 2012 Quarter 2 testing continues to show that water quality in upgradient well CD-1RA has not changed significantly over time. The water quality for CD-1 is generally similar to CD-1RA.

## 4.2.2 Trend for Downgradient Wells

### ***Trends for Conventionals***

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

- Alkalinity continues to be generally lower than 1997 levels for all wells with elevated alkalinity in 1997, and fairly stable over the past 6 years. There is a general downward trend over the past few years for the wells with the highest initial alkalinity levels, except for MW-4A.
- Chloride levels continue to be significantly lower than 1997 levels. The strongest downward trends occur for the wells with the highest initial chloride levels.
- Hardness levels are generally lower than in 1997, especially for the wells with high levels in 1997. Hardness has been fairly stable for the past 6 years.
- Ammonia – For most wells, ammonia has consistently been below the detection level in recent years. Well MW-2A continues to have elevated ammonia levels, but continues to show an overall decreasing trend over time. MW-2B is the only other well at which ammonia was detected in the past several years.
- TKN levels in general show an overall decreasing trend over time, with several wells consistently below the detection limit in recent years. TKN results for MW-2A are elevated, but show an overall decreasing trend. Results for MW-2B have remained generally stable for the past several years. TKN results for MW-3A and MW-7A fluctuate more than at other wells, with no clear trend either up or down.
- COD continues to show an overall decrease compared to 1997 levels. Results for most wells have been below the detection limit in recent quarters. Results for MW-7A have been relatively stable.
- Total Organic Carbon (TOC) - TOC levels are generally lower than those measured in 1997, and have been relatively stable in recent years, except for a moderate increase in the past two quarters at MW-2B.
- For all other conventionals, the results for 2012 are lower than or similar to past results.

**Trends for Total Metals**

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

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

Of these, metals noted with an asterisk (\*) were analyzed during the Routine monitoring conducted in Quarter 2.

- Calcium levels continue to show an overall decrease through Quarter 2 of 2012, compared to 1997 levels, and have been relatively stable in recent monitoring. There has generally been a significant decrease in calcium concentrations for the wells with the highest levels in 1997.
- Iron continues to show an overall decrease compared to 1997 levels. Variability in total iron levels in recent years is likely due to varying amounts of particulate in samples.
- Magnesium levels continue to show an overall decrease compared to 1997 observations, and have been fairly stable over the past few years.
- Manganese continues to show an overall decrease compared to 1997 levels.
- Potassium levels continue to show an overall decrease through Quarter 2 of 2012, compared to 1997, and are below the detection limit at most wells in recent years.
- Sodium levels have continued to show a general decrease through Quarter 2 of 2012, or have remained fairly stable.

**Trends for Organics**

Analysis of VOCs was not required in Quarter 2 of 2012.

## 5.0 Surface Water Monitoring

There is no surface water monitoring conducted specifically for the Towslee Landfill, but there are three surface water locations (SW-1, SW-2, and SW-3) that are sampled as part of monitoring of the active West Side Landfill. These locations are downgradient of the Towslee Landfill and shown on Figure 1.

Tables 3 and 4 summarize the surface water quality results. Available NYS water quality standards are included in these tables, and contraventions of standards are highlighted.

The only surface water contraventions in Quarter 2 were for iron and manganese. Contraventions

were observed at all three locations for iron, ranging from about 0.3 to 1.9 mg/l. The manganese standard of 0.3 mg/l was exceeded at SW-1 (0.711 mg/l). Elevated turbidity levels at these locations may have contributed to the contraventions.

## 6.0 Landfill Gas Testing

Landfill gas measurements were taken at 10 of 13 monitoring wells, and at two locations at the scale house. Measurements were inadvertently not taken from Wells MW-7A, CD-1, and CD-1RA.

Explosive gas (methane) was detected at 1% of the Lower Explosive Limit (LEL) at both MW-1A and MW-1B. No gas was detected at the other locations.

## 7.0 Quality Control

Quality control samples and data validation are discussed below. Based on a review of this information, we believe the Quarter 2 data are adequate to characterize groundwater quality in the vicinity of the Towslee Landfill.

### 7.1 Quality Control Samples

Duplicate samples were collected for MW-1B in Quarter 2 of 2012. Relative Percent Differences (RPDs) were calculated if results for both the sample and the duplicate were above the detection limit.

RPDs should be less than 20 if the sample result exceeds five times the Practical Quantitation Limit (PQL). Of the six RPDs that fell into this category, three were above 20: iron (167), manganese (66), and TDS (62). Varying amounts of particulate in unfiltered split sample may have contributed to the elevated RPDs.

If the result is less than five times the PQL, the duplicate result should not differ by more than the PQL from the initial result. Six results fell into this category, and none of the duplicate results varied from the initial result by more than the criteria.

### 7.2 Data Validation

Independent data validation was not required for the Quarter 2 monitoring in 2012. Internal validation was conducted by Upstate Labs, and indicates that the results generally meet acceptance criteria. A summary of the internal validation is included in Appendix B.

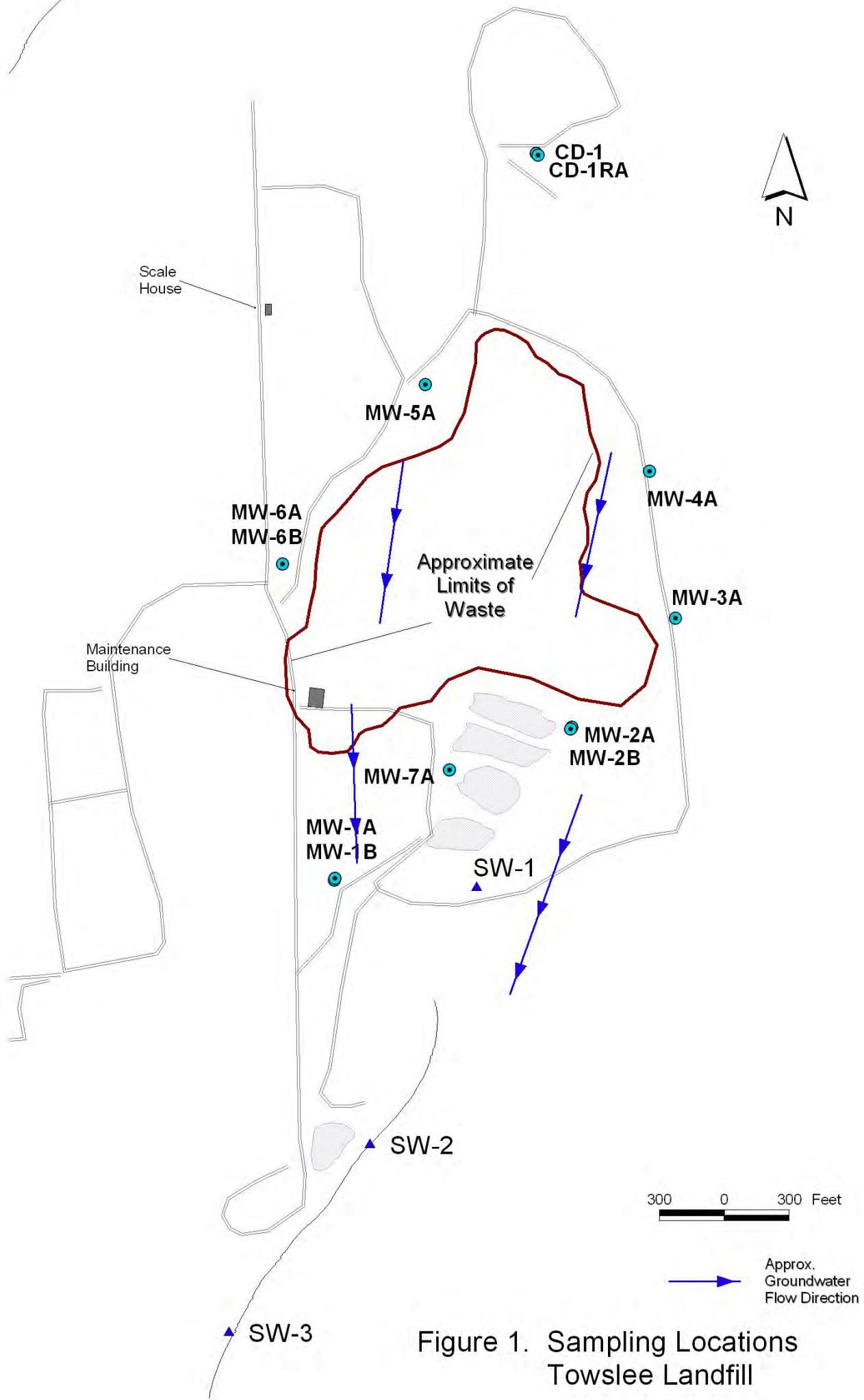


Figure 1. Sampling Locations  
Towslee Landfill

**Table1. Contraventions of NYS Water Quality Standards  
for Field and Inorganic Parameters**  
Towslee Landfill - Quarter 2 2012

Parameter	Units	NYS Water Quality Standard	Upgradient				Downgradient												OB		OB						
			OB		BR		OB			BR			BR			BR			OB			OB					
			CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A												
Temperature	(deg. C)	--	19.0	185.0	20.3	21.2	18.9	18.2	20.0	18.3	15.8	NS	18.9	17.7	15.8												
Eh	(mV)	--	137	142	163	155	133	161	153	170	160	NS	133	139	184												
pH	log	6.5 - 8.5	a	7.53	7.45	6.94	7.19	6.72	6.12	7.07	6.61	6.83	NS	7.35	7.29	6.36											
Specific Conduct.	(uS/cm)	--	257	295	376	243	515	1378	340	479	714	NS	408	363	1085												
Color	(Units)	15	a, b	--	--	--	--	--	--	--	--	NS	--	--	--												
Turbidity	(NTU)	5	a	40.9	8.26	26.5	16.1	27.5	5.44	41.7	2.51	7.45	NS	241	17.1	>1000 E											
Alkalinity (as CaCO <sub>3</sub> )	(mg/l)	--	120	140	140	100	250	790	160	210	350	NS	130	190	520												
Hardness (as CaCO <sub>3</sub> )	(mg/l)	--	146	155	175	111	207	643	146	259	384	NS	169	150	449												
Total Diss. Solids	(mg/l)	500	a	380	310	450	340	290	890	240	300	490	NS	310	240	630											
Chloride	(mg/l)	250	a, b	1.2	1.46	33.1	2.47	11.6	124	1.59	23.4	22.3	NS	20	10.1	99.5											
Sulfate	(mg/l)	250	a, b	12.2	15.9	12.2	<5	8.79	<5	<5	7.7	6.5	NS	13.6	17.9	20											
Bromide	(mg/l)	2	a	<8	<0.8	<8	<0.8	<80	<8	<8	<0.8	<8	NS	<8	<80	<80											
Nitrate (As N)	(mg/l)	10	a, b	0.068	<0.05	<0.05	0.075	0.076	<0.05	<0.05	0.07	<0.05	NS	0.09	0.081	<0.05											
Ammonia (As N)	(mg/l)	2	a	<0.5	<0.5	<0.5	<0.5	5.9	0.76	<0.5	<0.5	<0.5	NS	<0.5	<0.5	<0.5											
TKN	(mg/l)	--		<0.5	<0.5	<0.5	<0.5	6.56	0.811	<0.5	<0.5	<0.5	NS	1.89	<0.5	<0.5											
COD	(mg/l)	--		<20	<20	<20	<20	36	<20	<20	<20	<20	NS	<20	<20	22											
BOD	(mg/l)	--		<4	<4	<4	<4	<4	<4	<4	<4	<4	NS	<4	<4	<4											
TOC	(mg/l)	--		<3	<3	<3	<3	5.5	14.4	<3	<3	<3	NS	<3	<3	7.3											
Phenolics, Total	(mg/l)	0.001	a	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NS	<0.005	<0.005	<0.005											
Cyanide	(mg/l)	0.2	a, b	--	--	--	--	--	--	--	--	--	NS	--	--	--											

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

b - Part 5 Drinking Water MCL

**1.23** indicates contravention of standard.

-- not analyzed

NS - not sampled

E - estimated value

OB = overburden well

BR = Bedrock well

**Table 2. Contraventions of NYS Water Quality Standards  
for Metals (units are mg/l)**  
Towslee Landfill - Quarter 2 2012

Parameter	NYS Water Quality Standard	Total Metals														Dissolved Metals	
		Upgradient		Downgradient												Dwngrd	Dwngrd
		OB CD-1	BR CD-1RA	OB MW-1A	BR MW-1B	OB MW-2A	BR MW-2B	BR MW-3A	BR MW-3B	BR MW-4A	BR MW-5A	OB MW-6A	BR MW-6B	OB MW-7A	BR MW-6A	OB MW-7A	
Aluminum	--	--	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Antimony	0.003	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Arsenic	0.025	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Barium	1	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Beryllium	0.004	b	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Boron	1	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Cadmium	0.005	a, b	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NS	<0.005	<0.005	<0.005	<0.005	
Calcium	--		41.2	43.1	49.4	30.4	59.2	184	43.6	66.6	110	NS	50.9	39.8	123	45.4	
Chromium	0.05	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Chrom, Hex	0.05	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Cobalt	--		--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Copper	0.2	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Iron	0.3	a, b	2.34	0.509	1.65	3.2	3.15	0.337	0.451	0.0945	0.146	NS	0.98	7.38	2.9	0.149	
Lead	0.015	b	<0.003	<0.003	<0.003	0.0042	<0.003	<0.003	<0.003	<0.003	<0.003	NS	<0.003	<0.015	0.00328	<0.003	
Magnesium	--		10.5	11.5	12.6	8.66	14.4	44.9	9.02	22.4	26.5	NS	10.3	12.4	34.8	9.33	
Manganese	0.3	a, b	1.3	0.23	0.121	0.232	8.49	6.4	0.926	0.1	1.44	NS	2.16	0.781	3.27	0.213	
Mercury	0.0007	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Nickel	0.1	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Potassium	--		<5	<5	<5	<5	<5	8.15	<5	<5	<5	NS	<5	<5	<5	<5	
Sodium	20	a, b	<5	5.26	12.6	7.92	11.9	47.4	<5	10.4	14.2	NS	14.8	14.6	91	14	
Selenium	0.01	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Silver	0.05	a	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Thallium	0.002	b	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Vanadium	--		--	--	--	--	--	--	--	--	--	NS	--	--	--	--	
Zinc	5	b	--	--	--	--	--	--	--	--	--	NS	--	--	--	--	

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

b - Part 5 Drinking Water MCL

-- not analyzed

NS - not sampled

OB = overburden well

BR = Bedrock well

**1.23** indicates contravention of standard.

**Table 3**  
**Contraventions of Surface Water Quality Standards**  
**Field/ Inorganic Parameters - Quarter 2 2012**  
*(No Contraventions)*

Parameter	Units	NYS Water Quality Standard	Surface Water Sample Locations		
			SW-1	SW-2	SW-3
Temperature	(deg. C)	--	23	23	21.3
EH	(mV)	--	97	155	156
pH	(Std Units)	6.5 - 8.5 <sup>a</sup>	8.48	6.92	7.04
Specific Conductance	(uS/cm)	--	329	290	288
Oxygen, Dissolved	mg/l	5 <sup>a</sup>	--	--	--
Color	(Units)	15 <sup>b</sup>	--	--	--
Turbidity	(NTU)	--	49	5.4	5.36
Alkalinity (as CaCO <sub>3</sub> )	(mg/l)	--	120	110	140
Hardness (as CaCO <sub>3</sub> )	(mg/l)	--	108	100	132
Total Dissolved Solids	(mg/l)	500 <sup>a</sup>	200	200	140
Chloride	(mg/l)	250 <sup>a, b</sup>	20.5	18.1	1
Sulfate	(mg/l)	250 <sup>a, b</sup>	<5	5.82	5.82
Bromide	(mg/l)	--	<8	<8	<8
Boron, tot	(mg/l)	10 <sup>a</sup>	--	--	--
Nitrate (As N)	(mg/l)	10 <sup>a, b</sup>	0.281	0.241	0.055
Ammonia (As N)	(mg/l)	2 <sup>a</sup>	<0.5	<0.5	<0.5
TKN (as N)	(mg/l)	--	<0.5	<0.5	<0.5
COD	(mg/l)	--	<20	<20	<20
BOD	(mg/l)	--	<4	<4	<4
TOC	(mg/l)	--	<3	<3	<3
Phenolics, Total	(mg/l)	0.001 <sup>a</sup>	<0.005	<0.005	<0.005
Cyanide	(mg/l)	0.0052 <sup>a</sup>	--	--	--

-- not analyzed

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

b - Part 5 Drinking Water MCL

**1.23** indicates value exceeded standard

**Table 4**  
**Contraventions of Surface Water Quality Standards**  
**Metals - Quarter 2 2012**

Parameter	Units	NYS Water Quality Standard	Surface Water Sample Locations		
			SW-1	SW-2	SW-3
Al	(mg/l)	0.1	a	--	--
Sb	(mg/l)	0.003	a	--	--
As	(mg/l)	0.05	a, b	--	--
Ba	(mg/l)	1	a	--	--
Be *	(mg/l)	0.004	a	--	--
Cd *	(mg/l)	0.0021	a	<0.005	<0.005
Ca	(mg/l)	--		28	29.9
Cr *	(mg/l)	0.05	a, b	--	--
Cr+6	(mg/l)	0.011	a	--	--
Co	(mg/l)	0.005	a	--	--
Cu *	(mg/l)	0.009	a	--	--
Fe	(mg/l)	0.3		<b>1.87</b>	<b>0.302</b>
Pb *	(mg/l)	0.004	a	<0.003	<0.003
Mg	(mg/l)	35	a	9.17	6.24
Mn	(mg/l)	0.3		<b>0.711</b>	0.156
Hg	(mg/l)	0.0007	a	--	--
Ni *	(mg/l)	0.052	a	--	--
K	(mg/l)	--		<5	<5
Na	(mg/l)	20	b	16.6	12.3
Se	(mg/l)	0.0046	a	--	--
Ag	(mg/l)	0.0001	a	--	--
Tl	(mg/l)	0.002	b	--	--
V	(mg/l)	0.014	a	--	--
Zn *	(mg/l)	0.083	a	--	--

-- not analyzed

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

b - Part 5 Drinking Water MCL

\* assumes hardness = 100 mg/l

**1.23** indicates value exceeded standard

# Appendix A

## Analytical Laboratory Results

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) 239-4413 \* Buffalo (716) 972-0371

Rochester (866) 437-0255 \* New Jersey (908) 581-4285

Mr. Patrick Reidy  
Cortland Co. Soil and Water Cons. Dist.  
100 Grange Place  
Room 202  
Cortland, NY 13045  
(607) 756-5991

Tuesday, June 26, 2012

RE: Analytical Report:  
Towslee Landfill

Order No.: U1205636

Dear Mr. Patrick Reidy:

Upstate Laboratories, Inc. received 14 sample(s) on 5/30/2012 for the analyses presented in the following report.

All analytical results relate to the samples as received by the laboratory.

All analytical data conforms with standard approved methodologies and quality control. Our quality control narrative will be included should any anomalies occur.

We have included the Chain of Custody Record as part of your report. The NYS DOH requires that all samples received by the laboratory must have a Collection Date and Time, and a Relinquished By signature. You may need to reference this form for a more detailed explanation of your samples. Samples will be disposed of approximately one month from final report date.

Should you have any questions regarding these tests, please feel free to give us a call.

Thank you for your patronage.

Sincerely,

UPSTATE LABORATORIES, INC.

*Anthony J. Scala*  
Anthony J. Scala  
President/CEO

CC:

Encls: (ASP-A, rept, f.data on disk), invoice

Confidentiality Statement: This report is meant for the use of the intended recipient. It may contain confidential information, which is legally privileged or otherwise protected by law. If you have received this report in error, you are strictly prohibited from reviewing, using, disseminating, distributing or copying the information.

# 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) 239-4413 \* Buffalo (716) 972-0371  
Rochester (866) 437-0255 \* New Jersey (908) 581-4285

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

July 3, 2012

RE: Towslee Landfill, Cortlandville, New York,  
Samples Collected May 22, 23 and 30, 2012  
Case Narrative for ULI SDG Number COR62, Workorder #U1205636

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*

<u>Test</u>	<u>Batch</u>	<u>Anomaly</u>
Cd,Ca,Fe,Mg,Mn,K,Na	R73104	Criteria were satisfied.
Pb	R72506	Criteria were satisfied.

### *Wet Chemistry*

<u>Test</u>	<u>Batch</u>	<u>Anomaly</u>
BOD	R72438	Criteria were satisfied.
	R72449	Criteria were satisfied.
	R72652	MB-72652 exhibited over 0.2 DO uptake. All other criteria were satisfied.
TDS	R72365	Criteria were satisfied.
	R72402	Criteria were satisfied.
	R72625	Criteria were satisfied.
COD	R72328	The ICV and several CCV recoveries for COD were above QC acceptance limits. All other criteria were satisfied.
	R72674	Criteria were satisfied.
	R72798	Criteria were satisfied.
	R72837	Criteria were satisfied.

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

Mr. Patrick Reidy  
July 3, 2012  
Page 2

***Wet Chemistry***

<u>Test</u>	<u>Batch</u>	<u>Anomaly</u>
Nitrate-Nitrogen	R72346 R72348 R72539	Criteria were satisfied. Criteria were satisfied. Several CCV recoveries for Nitrate were slightly below QC acceptance limits. All other criteria were satisfied.
TKN	R72685 R72812 R72905	Criteria were satisfied. Criteria were satisfied. The CCV11 recovery for TKN was below QC acceptance limits. All other criteria were satisfied.
Alkalinity, Total	R72506 R72650	Criteria were satisfied. Total Alkalinity was detected at concentrations above the CRDL in several CCBs. All other criteria were satisfied.
Chloride	R72505 R72647	Criteria were satisfied. The ICV and several CCVs recoveries for Chloride were above QC acceptance limits. All other criteria were satisfied.
Ammonia-Nitrogen	R72685 R72753 R72815 R72905	Criteria were satisfied. Criteria were satisfied. Criteria were satisfied. Criteria were satisfied.
Phenols, Total	R72490 R72523 R72580	Criteria were satisfied. Criteria were satisfied. The CCV6 recovery for Total Phenols was below QC acceptance limits. All other criteria were satisfied.
Bromide	R72605 R72648  R72927	Criteria were satisfied. The MS recovery for Bromide was below QC acceptance limits for the MS performed on sample location Scale House. The ICV recovery for Bromide was above QC acceptance limits. The CRI2 and CRI4 recoveries for Bromide were below QC acceptance limits. All other criteria were satisfied. The CRI2, CRI3 and CRI4 recoveries for Bromide were outside QC acceptance limits. All other criteria were satisfied.

Mr. Patrick Reidy  
July 3, 2012  
Page 3

***Wet Chemistry***

<u>Test</u>	<u>Batch</u>	<u>Anomaly</u>
Sulfate	R72343	Criteria were satisfied.
	R72500	Criteria were satisfied.
	R72597	The CCV3 recovery for Sulfate was slightly below QC acceptance limits. All other criteria were satisfied.
TOC	R72509	Criteria were satisfied.
	R72579	Criteria were satisfied.
	R72724	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*  
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	200.8	(1)
Magnesium	200.7	(1)
Manganese	200.7	(1)
Potassium	200.7	(1)
Sodium	200.7	(1)
BOD	SM 5210B	(1)
Nitrate-Nitrogen	10-107-04-1C	(1)
Alkalinity, Total	310.2	(1)
Chloride	10-117-07-1A	(1)
COD	410.4	(1)
Ammonia-Nitrogen	10-107-06-1B	(1)
Sulfate	D516-90	(1)
TDS	SM 2540C	(1)
TKN	10-107-06-2	(1)
TOC	SM 5310B	(1)
Phenols	10-210-00-1A	(1)
Bromide	SM 4110B	(1)

**Reference**

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

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U1205636  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-001

**Client Sample ID:** CD-1  
**Collection Date:** 5/22/2012 10:05:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
----------	--------	-------	------	-------	----	---------------

**FIELD PARAMETERS**

			Lab Code: FIELD	Analyst:
Conductivity	257	1.0	umhos/cm	5/22/2012 10:05:00 AM
Eh	137	-300	mV	5/22/2012 10:05:00 AM
pH	7.53	2-12.5	SU	5/22/2012 10:05:00 AM
Temperature	19		°C	5/22/2012 10:05:00 AM
Turbidity	40.9	5.0	NTU	5/22/2012 10:05:00 AM

**BROMIDE BY SM 18-21 4110B (00)**

			Lab Code: BROMIDE_W	Analyst: MGP	
Bromide	ND	8.0	mg/L	10	6/1/2012

**NOTES:**

The reporting limits were raised due to matrix interference.

**ICP METALS, TOTAL BY NYSDEC ASP 2005**

[AqPrep Total Metals- EPA 3005A	Prep Code: 200.7TPRASP	Prep Date: 6/8/2012 3:22:04 PM	Prep By: ARO]	Lab Code: 200.7WTASP	Analyst: LET
Cadmium	ND	5.00	µg/L	1	6/19/2012 3:21:59 PM
Calcium	41200	5000	µg/L	1	6/19/2012 3:21:59 PM
Iron	2340	60.0	µg/L	1	6/19/2012 3:21:59 PM
Magnesium	10500	5000	µg/L	1	6/19/2012 3:21:59 PM
Manganese	1300	10.0	µg/L	1	6/19/2012 3:21:59 PM
Potassium	ND	5000	µg/L	1	6/19/2012 3:21:59 PM
Sodium	ND	5000	µg/L	1	6/19/2012 3:21:59 PM
Hardness, Total(CaCO <sub>3</sub> )	146000	7000	µg/L	1	6/19/2012 3:21:59 PM

**ASP TOTAL METALS BY ICP-MS**

[AqPrep ASP Total Metals: - EPA 3005A	Prep Code: 200.8TPRASP	Prep Date: 6/8/2012 3:22:41 PM	Prep By: ARO]	Lab Code: 200.8ASP	Analyst: LET
Lead	ND	3.00	µg/L	1	6/14/2012 12:15:43 PM

**ALKALINITY BY EPA 310.2**

			Lab Code: ALK_W_AUTO	Analyst: CAS	
Alkalinity, Total (As CaCO <sub>3</sub> )	120	10	mg/L	1	5/30/2012

**BOD, 5 DAY BY SM 18-20 5210B (01)**

			Lab Code: BOD	Analyst: DEB	
Biochemical Oxygen Demand	ND	4.0	mg/L	1	5/23/2012 7:08:00 AM

Approved By: DH

Date: 6-26-12

Page 1 of 31

**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist. **Client Sample ID:** CD-1  
**Lab Order:** U1205636 **Collection Date:** 5/22/2012 10:05:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-001 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>CHLORIDE WATERS BY LACHAT 10-117-07-1 A</b>				Lab Code: CL_W_AUTO		Analyst: CAS
Chloride	1.20	1.00		mg/L	1	5/30/2012
<b>COD BY EPA 410.4 REV. 2.0</b>				Lab Code: COD		Analyst: KLS
Chemical Oxygen Demand	ND	20		mg/L	1	5/23/2012
<b>NH3 BY LACHAT 10-107-06-1-J</b> [NH3 Prep for Waters by SM 18 4500-NH3 B Prep Code: NH3_WPR Nitrogen, Ammonia (As N) ND 0.500 mg/L]				Lab Code: NH3_W_AUTO		Analyst: GWL
				Prep Date: 6/5/2012 11:00:00 AM	Prep By: GWL	
				6/5/2012		
<b>NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C</b>				Lab Code: NO3_W		Analyst: SAB
Nitrogen, Nitrate (as N)	0.068	0.050		mg/L	1	5/23/2012 9:33:00 AM
<b>PHENOLICS, TOTAL BY LACHAT 10-210-00-1A</b> [Prep for Phenol in Waters Prep Code: PHENOL_WPR Prep Date: 5/24/2012 Prep By: KLS] Phenolics, Total Recoverable ND 0.005 mg/L				Lab Code: PHENOL_W		Analyst: KLS
				1	5/30/2012 1:46:00 PM	
<b>SULFATE BY ASTM D516-90, 02 &amp; 07</b>				Lab Code: SULFATE_W		Analyst: MGP
Sulfate	12.2	5.00		mg/L	1	5/24/2012
<b>TDS BY SM 18-21 2540C (97)</b>				Lab Code: TDS		Analyst: NKA
Residue, Dissolved (TDS)	380	25		mg/L	1	5/23/2012
<b>TKN BY LACHAT 10-107-06-2</b> [TKN Prep for Waters by SM 18 4500-NH3 E Prep Code: TKN_WPR Nitrogen, Kjeldahl, Total ND 0.500 mg/L]				Lab Code: TKN_W_AUTO		Analyst: GWL
				Prep Date: 6/5/2012 11:00:00 AM	Prep By: GWL	
				6/5/2012		
<b>TOC BY SM 18-21 5310B (00)</b>				Lab Code: TOC_W		Analyst: DEB
Organic Carbon, Total	ND	3.0		mg/L	1	5/30/2012

Approved By: DH

Date: 6-26-12

Page 2 of 31

**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* Low Level  
B Analytic detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

<b>CLIENT:</b>	Cortland Co. Soil and Water Cons. Dist.	<b>Client Sample ID:</b>	CD-1RA
<b>Lab Order:</b>	U1205636	<b>Collection Date:</b>	5/22/2012 10:02:00 AM
<b>Project:</b>	Towslee Landfill		
<b>Lab ID:</b>	U1205636-002	<b>Matrix:</b>	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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<b>FIELD PARAMETERS</b>		Lab Code: <b>FIELD</b>			Analyst:	
Conductivity	295	1.0	umhos/cm		5/22/2012 10:02:00 AM	
Eh	142	-300	mV		5/22/2012 10:02:00 AM	
pH	7.45	2-12.5	SU		5/22/2012 10:02:00 AM	
Temperature	185		°C		5/22/2012 10:02:00 AM	
Turbidity	8.26	5.0	NTU		5/22/2012 10:02:00 AM	

<b>BROMIDE BY SM 18-21 4110B (00)</b>		Lab Code: <b>BROMIDE_W</b>			Analyst: <b>MGP</b>	
Bromide	ND	0.8	mg/L	1	6/1/2012	

<b>ICP METALS, TOTAL BY NYSDEC ASP 2005</b>		Lab Code: <b>200.7WTASP</b>			Analyst: <b>LET</b>	
[AqPrep Total Metals- EPA 3005A	Prep Code: 200.7TPRASP	Prep Date: 6/8/2012 3:22:04 PM	Prep By: ARO]			
Cadmium	ND	5.00	µg/L	1	6/19/2012 3:26:50 PM	
Calcium	43100	5000	µg/L	1	6/19/2012 3:26:50 PM	
Iron	509	60.0	µg/L	1	6/19/2012 3:26:50 PM	
Magnesium	11500	5000	µg/L	1	6/19/2012 3:26:50 PM	
Manganese	230	10.0	µg/L	1	6/19/2012 3:26:50 PM	
Potassium	ND	5000	µg/L	1	6/19/2012 3:26:50 PM	
Sodium	5260	5000	µg/L	1	6/19/2012 3:26:50 PM	
Hardness, Total(CaCO <sub>3</sub> )	155000	7000	µg/L	1	6/19/2012 3:26:50 PM	

<b>ASP TOTAL METALS BY ICP-MS</b>		Lab Code: <b>200.8ASP</b>			Analyst: <b>LET</b>	
[AqPrep ASP Total Metals: - EPA 3005A	Prep Code: 200.8TPRASP	Prep Date: 6/8/2012 3:22:41 PM	Prep By: ARO]			
Lead	ND	3.00	µg/L	1	6/14/2012 12:15:43 PM	

<b>ALKALINITY BY EPA 310.2</b>		Lab Code: <b>ALK_W_AUTO</b>			Analyst: <b>CAS</b>	
Alkalinity, Total (As CaCO <sub>3</sub> )	140	10	mg/L	1	5/30/2012	

<b>BOD, 5 DAY BY SM 18-20 5210B (01)</b>		Lab Code: <b>BOD</b>			Analyst: <b>DEB</b>	
Biochemical Oxygen Demand	ND	4.0	mg/L	1	5/23/2012 7:08:00 AM	

<b>CHLORIDE WATERS BY LACHAT 10-117-07-1 A</b>		Lab Code: <b>CL_W_AUTO</b>			Analyst: <b>CAS</b>	
--	--	----------------------------	--	--	---------------------	--

Approved By: PH

Date: 6-26-12

Page 3 of 31

Qualifiers: # Accreditation not offered by NYS DOH for this parameter  
 \*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 Q Outlying QC recoveries were associated with this parameter

\* 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  
 S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.      **Client Sample ID:** CD-1RA  
**Lab Order:** U1205636      **Collection Date:** 5/22/2012 10:02:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-002      **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>CHLORIDE WATERS BY LACHAT 10-117-07-1 A</b>						
Chloride	1.46	1.00		mg/L	1	5/30/2012
<b>COD BY EPA 410.4 REV. 2.0</b>						
Chemical Oxygen Demand	ND	20		mg/L	1	5/23/2012
<b>NH3 BY LACHAT 10-107-06-1-J</b>						
[NH3 Prep for Waters by SM 18 4500-NH3 B Nitrogen, Ammonia (As N)]	ND	0.500		mg/L	1	6/5/2012
<b>NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C</b>						
Nitrogen, Nitrate (as N)	ND	0.050		mg/L	1	5/23/2012 9:33:00 AM
<b>PHENOLICS, TOTAL BY LACHAT 10-210-00-1A</b>						
[Prep for Phenol in Waters Phenolics, Total Recoverable]	ND	0.005		mg/L	1	5/30/2012 1:46:00 PM
<b>SULFATE BY ASTM D516-90, 02 &amp; 07</b>						
Sulfate	15.9	5.00		mg/L	1	5/24/2012
<b>TDS BY SM 18-21 2540C (97)</b>						
Residue, Dissolved (TDS)	310	25		mg/L	1	5/23/2012
<b>TKN BY LACHAT 10-107-06-2</b>						
[TKN Prep for Waters by SM 18 4500-NH3 E Nitrogen, Kjeldahl, Total]	ND	0.500		mg/L	1	6/5/2012
<b>TOC BY SM 18-21 5310B (00)</b>						
Organic Carbon, Total	ND	3.0		mg/L	1	5/30/2012

Approved By: PH

Date: 6-26-12

Page 4 of 31

**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

<b>CLIENT:</b>	Cortland Co. Soil and Water Cons. Dist.	<b>Client Sample ID:</b>	MW-1A
<b>Lab Order:</b>	U1205636	<b>Collection Date:</b>	5/22/2012 11:10:00 AM
<b>Project:</b>	Towslee Landfill		
<b>Lab ID:</b>	U1205636-003	<b>Matrix:</b>	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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<b>FIELD PARAMETERS</b>		Lab Code: FIELD			Analyst:	
Conductivity	376	1.0	umhos/cm		5/22/2012 11:10:00 AM	
Eh	163	-300	mV		5/22/2012 11:10:00 AM	
pH	6.94	2-12.5	SU		5/22/2012 11:10:00 AM	
Temperature	20.3		°C		5/22/2012 11:10:00 AM	
Turbidity	26.5	5.0	NTU		5/22/2012 11:10:00 AM	

<b>BROMIDE BY SM 18-21 4110B (00)</b>		Lab Code: BROMIDE_W			Analyst: MGP	
Bromide	ND	8.0	mg/L	10	6/1/2012	

**NOTES:**

The reporting limits were raised due to matrix interference.

<b>ICP METALS, TOTAL BY NYSDEC ASP 2005</b>		Lab Code: 200.7WTASP			Analyst: LET	
[AqPrep Total Metals- EPA 3005A	Prep Code: 200.7TPRASP	Prep Date: 6/8/2012 3:22:04 PM	Prep By: ARO]			
Cadmium	ND	5.00	µg/L	1	6/19/2012 3:31:44 PM	
Calcium	49400	5000	µg/L	1	6/19/2012 3:31:44 PM	
Iron	1650	60.0	µg/L	1	6/19/2012 3:31:44 PM	
Magnesium	12600	5000	µg/L	1	6/19/2012 3:31:44 PM	
Manganese	121	10.0	µg/L	1	6/19/2012 3:31:44 PM	
Potassium	ND	5000	µg/L	1	6/19/2012 3:31:44 PM	
Sodium	12600	5000	µg/L	1	6/19/2012 3:31:44 PM	
Hardness, Total(CaCO <sub>3</sub> )	175000	7000	µg/L	1	6/19/2012 3:31:44 PM	

<b>ASP TOTAL METALS BY ICP-MS</b>		Lab Code: 200.8ASP			Analyst: LET	
[AqPrep ASP Total Metals: - EPA 3005A	Prep Code: 200.8TPRASP	Prep Date: 6/8/2012 3:22:41 PM	Prep By: ARO]			
Lead	ND	3.00	µg/L	1	6/14/2012 12:15:43 PM	

<b>ALKALINITY BY EPA 310.2</b>		Lab Code: ALK_W_AUTO			Analyst: CAS	
Alkalinity, Total (As CaCO <sub>3</sub> )	140	10	mg/L	1	5/30/2012	

<b>BOD, 5 DAY BY SM 18-20 5210B (01)</b>		Lab Code: BOD			Analyst: DEB	
Biochemical Oxygen Demand	ND	4.0	mg/L	1	5/23/2012 7:08:00 AM	

Approved By: PH

Date: 6-26-12

Page 5 of 31

Qualifiers: # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist. **Client Sample ID:** MW-1A  
**Lab Order:** U1205636 **Collection Date:** 5/22/2012 11:10:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-003 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>CHLORIDE WATERS BY LACHAT 10-117-07-1 A</b>						
Chloride	33.1	1.00		mg/L	1	5/30/2012
<b>COD BY EPA 410.4 REV. 2.0</b>						
Chemical Oxygen Demand	ND	20		mg/L	1	5/23/2012
<b>NH3 BY LACHAT 10-107-06-1-J</b>						
[NH3 Prep for Waters by SM 18 4500-NH3 B Nitrogen, Ammonia (As N)]	ND	0.500		mg/L	1	Prep By: GWL 6/5/2012
<b>NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C</b>						
Nitrogen, Nitrate (as N)	ND	0.050		mg/L	1	5/23/2012 9:33:00 AM
<b>PHENOLICS, TOTAL BY LACHAT 10-210-00-1A</b>						
[Prep for Phenol in Waters Phenolics, Total Recoverable]	ND	0.005		mg/L	1	Prep Date: 5/24/2012 11:00:00 AM Prep By: KLS] 5/30/2012 1:46:00 PM
<b>SULFATE BY ASTM D516-90, 02 &amp; 07</b>						
Sulfate	12.2	5.00		mg/L	1	5/24/2012
<b>TDS BY SM 18-21 2540C (97)</b>						
Residue, Dissolved (TDS)	450	25		mg/L	1	5/23/2012
<b>TKN BY LACHAT 10-107-06-2</b>						
[TKN Prep for Waters by SM 18 4500-NH3 E Nitrogen, Kjeldahl, Total]	ND	0.500		mg/L	1	Prep Date: 6/5/2012 11:00:00 AM Prep By: GWL 6/5/2012
<b>TOC BY SM 18-21 5310B (00)</b>						
Organic Carbon, Total	ND	3.0		mg/L	1	5/30/2012

Approved By: PH

Date: 6-26-12

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**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.      **Client Sample ID:** MW-1B  
**Lab Order:** U1205636      **Collection Date:** 5/22/2012 11:14:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-004      **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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**FIELD PARAMETERS**

			Lab Code: FIELD	Analyst:
Conductivity	243	1.0	umhos/cm	5/22/2012 11:14:00 AM
Eh	155	-300	mV	5/22/2012 11:14:00 AM
pH	7.19	2-12.5	SU	5/22/2012 11:14:00 AM
Temperature	21.2		°C	5/22/2012 11:14:00 AM
Turbidity	16.1	5.0	NTU	5/22/2012 11:14:00 AM

**BROMIDE BY SM 18-21 4110B (00)**

			Lab Code: BROMIDE_W	Analyst: MGP
Bromide	ND	0.8	mg/L	1      6/1/2012

**ICP METALS, TOTAL BY NYSDEC ASP 2005**

[AqPrep Total Metals- EPA 3005A	Prep Code: 200.7TPRASP	Prep Date: 6/8/2012 3:22:04 PM	Prep By: ARO]	Lab Code: 200.7WTASP	Analyst: LET
Cadmium	ND	5.00	µg/L	1      6/19/2012 3:36:35 PM	
Calcium	30400	5000	µg/L	1      6/19/2012 3:36:35 PM	
Iron	3200	60.0	µg/L	1      6/19/2012 3:36:35 PM	
Magnesium	8660	5000	µg/L	1      6/19/2012 3:36:35 PM	
Manganese	232	10.0	µg/L	1      6/19/2012 3:36:35 PM	
Potassium	ND	5000	µg/L	1      6/19/2012 3:36:35 PM	
Sodium	7920	5000	µg/L	1      6/19/2012 3:36:35 PM	
Hardness, Total(CaCO <sub>3</sub> )	111000	7000	µg/L	1      6/19/2012 3:36:35 PM	

**ASP TOTAL METALS BY ICP-MS**

[AqPrep ASP Total Metals: - EPA 3005A	Prep Code: 200.8TPRASP	Prep Date: 6/8/2012 3:22:41 PM	Prep By: ARO]	Lab Code: 200.8ASP	Analyst: LET
Lead	4.23	3.00	µg/L	1      6/14/2012 12:15:43 PM	

**ALKALINITY BY EPA 310.2**

			Lab Code: ALK_W_AUTO	Analyst: CAS
Alkalinity, Total (As CaCO <sub>3</sub> )	100	10	mg/L	1      5/30/2012

**BOD, 5 DAY BY SM 18-20 5210B (01)**

			Lab Code: BOD	Analyst: DEB
Biochemical Oxygen Demand	ND	4.0	mg/L	1      5/23/2012 7:08:00 AM

**CHLORIDE WATERS BY LACHAT 10-117-07-1 A**

			Lab Code: CL_W_AUTO	Analyst: CAS
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Approved By: PH

Date: 6-26-12

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**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.      **Client Sample ID:** MW-1B  
**Lab Order:** U1205636      **Collection Date:** 5/22/2012 11:14:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-004      **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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**CHLORIDE WATERS BY LACHAT 10-117-07-1 A**      Lab Code: CL\_W\_AUTO      Analyst: CAS

Chloride      2.47      1.00      mg/L      1      5/30/2012

**COD BY EPA 410.4 REV. 2.0**      Lab Code: COD      Analyst: KLS

Chemical Oxygen Demand      ND      20      mg/L      1      5/23/2012

**NH3 BY LACHAT 10-107-06-1-J**      Lab Code: NH3\_W\_AUTO      Analyst: GWL  
 [NH3 Prep for Waters by SM 18 4500-NH3 B      Prep Code: NH3\_WPR      Prep Date: 6/5/2012 11:00:00 AM      Prep By: GWL]  
 Nitrogen, Ammonia (As N)      ND      0.500      mg/L      1      6/5/2012

**NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C**      Lab Code: NO3\_W      Analyst: SAB

Nitrogen, Nitrate (as N)      0.075      0.050      mg/L      1      5/23/2012 9:33:00 AM

**PHENOLICS, TOTAL BY LACHAT 10-210-00-1A**      Lab Code: PHENOL\_W      Analyst: KLS  
 [Prep for Phenol in Waters      Prep Code: PHENOL\_WPR      Prep Date: 5/24/2012      Prep By: KLS]  
 Phenolics, Total Recoverable      ND      0.005      mg/L      1      5/30/2012 1:46:00 PM

**SULFATE BY ASTM D516-90, 02 & 07**      Lab Code: SULFATE\_W      Analyst: MGP

Sulfate      ND      5.00      mg/L      1      5/24/2012

**TDS BY SM 18-21 2540C (97)**      Lab Code: TDS      Analyst: NKA

Residue, Dissolved (TDS)      340      25      mg/L      1      5/23/2012

**TKN BY LACHAT 10-107-06-2**      Lab Code: TKN\_W\_AUTO      Analyst: GWL  
 [TKN Prep for Waters by SM 18 4500-NH3 E      Prep Code: TKN\_WPR      Prep Date: 6/5/2012 11:00:00 AM      Prep By: GWL]  
 Nitrogen, Kjeldahl, Total      ND      0.500      mg/L      1      6/5/2012

**TOC BY SM 18-21 5310B (00)**      Lab Code: TOC\_W      Analyst: DEB

Organic Carbon, Total      ND      3.0      mg/L      1      5/30/2012

Approved By: PH

Date: 6-26-12

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**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
 \*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 Q Outlying QC recoveries were associated with this parameter

\* 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  
 S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.      **Client Sample ID:** MW-3A  
**Lab Order:** U1205636      **Collection Date:** 5/22/2012 10:54:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-005      **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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FIELD PARAMETERS			Lab Code: FIELD	Analyst:
Conductivity	340	1.0	umhos/cm	5/22/2012 10:54:00 AM
Eh	153	-300	mV	5/22/2012 10:54:00 AM
pH	7.07	2-12.5	SU	5/22/2012 10:54:00 AM
Temperature	20		°C	5/22/2012 10:54:00 AM
Turbidity	41.7	5.0	NTU	5/22/2012 10:54:00 AM

**BROMIDE BY SM 18-21 4110B (00)**      Lab Code: BROMIDE\_W      Analyst: MGP

Bromide	ND	8.0	mg/L	10	6/1/2012
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**NOTES:**

The reporting limits were raised due to matrix interference.

**ICP METALS, TOTAL BY NYSDEC ASP 2005**      Lab Code: 200.7WTASP      Analyst: LET

[AqPrep Total Metals- EPA 3005A	Prep Code: 200.7TPRASP	Prep Date: 6/8/2012 3:22:04 PM	Prep By: ARO]		
Cadmium	ND	5.00	µg/L	1	6/19/2012 3:41:27 PM
Calcium	43600	5000	µg/L	1	6/19/2012 3:41:27 PM
Iron	451	60.0	µg/L	1	6/19/2012 3:41:27 PM
Magnesium	9020	5000	µg/L	1	6/19/2012 3:41:27 PM
Manganese	926	10.0	µg/L	1	6/19/2012 3:41:27 PM
Potassium	ND	5000	µg/L	1	6/19/2012 3:41:27 PM
Sodium	ND	5000	µg/L	1	6/19/2012 3:41:27 PM
Hardness, Total(CaCO <sub>3</sub> )	146000	7000	µg/L	1	6/19/2012 3:41:27 PM

**ASP TOTAL METALS BY ICP-MS**      Lab Code: 200.8ASP      Analyst: LET

[AqPrep ASP Total Metals: - EPA 3005A	Prep Code: 200.8TPRASP	Prep Date: 6/8/2012 3:22:41 PM	Prep By: ARO]		
Lead	ND	3.00	µg/L	1	6/14/2012 12:15:43 PM

**ALKALINITY BY EPA 310.2**      Lab Code: ALK\_W\_AUTO      Analyst: CAS

Alkalinity, Total (As CaCO <sub>3</sub> )	160	10	mg/L	1	5/30/2012
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**BOD, 5 DAY BY SM 18-20 5210B (01)**      Lab Code: BOD      Analyst: DEB

Biochemical Oxygen Demand	ND	4.0	mg/L	1	5/23/2012 7:08:00 AM
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Approved By: PH

Date: 6-26-12

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Qualifiers: # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* Low Level  
B Analytic detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.      **Client Sample ID:** MW-3A  
**Lab Order:** U1205636      **Collection Date:** 5/22/2012 10:54:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-005      **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>CHLORIDE WATERS BY LACHAT 10-117-07-1 A</b>						
Chloride	1.59	1.00		mg/L	1	5/30/2012
<b>COD BY EPA 410.4 REV. 2.0</b>						
Chemical Oxygen Demand	ND	20		mg/L	1	5/23/2012
<b>NH3 BY LACHAT 10-107-06-1-J</b>						
[NH3 Prep for Waters by SM 18 4500-NH3 B Nitrogen, Ammonia (As N)]	ND	0.500		mg/L	1	Prep By: GWL 6/5/2012
<b>NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C</b>						
Nitrogen, Nitrate (as N)	ND	0.050		mg/L	1	5/23/2012 9:33:00 AM
<b>PHENOLICS, TOTAL BY LACHAT 10-210-00-1A</b>						
[Prep for Phenol in Waters Phenolics, Total Recoverable]	ND	0.005		mg/L	1	Prep Date: 5/26/2012 11:00:00 AM Prep By: KLS 5/30/2012 10:46:00 AM
<b>SULFATE BY ASTM D516-90, 02 &amp; 07</b>						
Sulfate	ND	5.00		mg/L	1	5/24/2012
<b>TDS BY SM 18-21 2540C (97)</b>						
Residue, Dissolved (TDS)	240	25		mg/L	1	5/23/2012
<b>TKN BY LACHAT 10-107-06-2</b>						
[TKN Prep for Waters by SM 18 4500-NH3 E Nitrogen, Kjeldahl, Total]	ND	0.500		mg/L	1	Prep Date: 6/5/2012 11:00:00 AM Prep By: GWL 6/5/2012
<b>TOC BY SM 18-21 5310B (00)</b>						
Organic Carbon, Total	ND	3.0		mg/L	1	5/30/2012

Approved By: PH

Date: 6-26-12

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**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

<b>CLIENT:</b>	Cortland Co. Soil and Water Cons. Dist.	<b>Client Sample ID:</b>	MW-3B
<b>Lab Order:</b>	U1205636	<b>Collection Date:</b>	5/22/2012 10:57:00 AM
<b>Project:</b>	Towslee Landfill		
<b>Lab ID:</b>	U1205636-006	<b>Matrix:</b>	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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<b>FIELD PARAMETERS</b>		Lab Code: <b>FIELD</b>		Analyst:	
Conductivity	479	1.0	umhos/cm	5/22/2012 10:57:00 AM	
Eh	170	-300	mV	5/22/2012 10:57:00 AM	
pH	6.61	2-12.5	SU	5/22/2012 10:57:00 AM	
Temperature	18.3		°C	5/22/2012 10:57:00 AM	
Turbidity	2.51	5.0	NTU	5/22/2012 10:57:00 AM	

<b>BROMIDE BY SM 18-21 4110B (00)</b>		Lab Code: <b>BROMIDE_W</b>		Analyst: <b>MGP</b>	
Bromide	ND	0.8	mg/L	1	6/1/2012

<b>ICP METALS, TOTAL BY NYSDEC ASP 2005</b>		Lab Code: <b>200.7WTASP</b>		Analyst: <b>LET</b>	
[AqPrep Total Metals- EPA 3005A	Prep Code: 200.7TPRASP	Prep Date: 6/8/2012 3:22:04 PM	Prep By: ARO]		
Cadmium	ND	5.00	µg/L	1	6/19/2012 3:58:48 PM
Calcium	66600	5000	µg/L	1	6/19/2012 3:58:48 PM
Iron	94.5	60.0	µg/L	1	6/19/2012 3:58:48 PM
Magnesium	22400	5000	µg/L	1	6/19/2012 3:58:48 PM
Manganese	100	10.0	µg/L	1	6/19/2012 3:58:48 PM
Potassium	ND	5000	µg/L	1	6/19/2012 3:58:48 PM
Sodium	10400	5000	µg/L	1	6/19/2012 3:58:48 PM
Hardness, Total(CaCO <sub>3</sub> )	259000	7000	µg/L	1	6/19/2012 3:58:48 PM

<b>ASP TOTAL METALS BY ICP-MS</b>		Lab Code: <b>200.8ASP</b>		Analyst: <b>LET</b>	
[AqPrep ASP Total Metals- - EPA 3005A	Prep Code: 200.8TPRASP	Prep Date: 6/8/2012 3:22:41 PM	Prep By: ARO]		
Lead	ND	3.00	µg/L	1	6/14/2012 12:15:43 PM

<b>ALKALINITY BY EPA 310.2</b>		Lab Code: <b>ALK_W_AUTO</b>		Analyst: <b>CAS</b>	
Alkalinity, Total (As CaCO <sub>3</sub> )	210	10	mg/L	1	5/30/2012

<b>BOD, 5 DAY BY SM 18-20 5210B (01)</b>		Lab Code: <b>BOD</b>		Analyst: <b>DEB</b>	
Biochemical Oxygen Demand	ND	4.0	mg/L	1	5/23/2012 7:08:00 AM

<b>CHLORIDE WATERS BY LACHAT 10-117-07-1 A</b>		Lab Code: <b>CL_W_AUTO</b>		Analyst: <b>CAS</b>	
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Approved By: PH

Date: 6-26-12

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Qualifiers: # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.      **Client Sample ID:** MW-3B  
**Lab Order:** U1205636      **Collection Date:** 5/22/2012 10:57:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-006      **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>CHLORIDE WATERS BY LACHAT 10-117-07-1 A</b>						
Chloride	23.4	1.00		mg/L	1	5/30/2012
<b>COD BY EPA 410.4 REV. 2.0</b>						
Chemical Oxygen Demand	ND	20		mg/L	1	5/23/2012
<b>NH3 BY LACHAT 10-107-06-1-J</b>						
[NH3 Prep for Waters by SM 18 4500-NH3 B Nitrogen, Ammonia (As N)]	ND	0.500		mg/L	1	6/5/2012
<b>NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C</b>						
Nitrogen, Nitrate (as N)	0.070	0.050		mg/L	1	5/23/2012 9:33:00 AM
<b>PHENOLICS, TOTAL BY LACHAT 10-210-00-1A</b>						
[Prep for Phenol in Waters Phenolics, Total Recoverable]	ND	0.005		mg/L	1	5/30/2012 10:46:00 AM
<b>SULFATE BY ASTM D516-90, 02 &amp; 07</b>						
Sulfate	7.70	5.00		mg/L	1	5/24/2012
<b>TDS BY SM 18-21 2540C (97)</b>						
Residue, Dissolved (TDS)	300	25		mg/L	1	5/23/2012
<b>TKN BY LACHAT 10-107-06-2</b>						
[TKN Prep for Waters by SM 18 4500-NH3 E Nitrogen, Kjeldahl, Total]	ND	0.500		mg/L	1	6/5/2012
<b>TOC BY SM 18-21 5310B (00)</b>						
Organic Carbon, Total	ND	3.0		mg/L	1	5/30/2012

Approved By: PH

Date: 6-26-12

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**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

<b>CLIENT:</b>	Cortland Co. Soil and Water Cons. Dist.	<b>Client Sample ID:</b>	MW-4A
<b>Lab Order:</b>	U1205636	<b>Collection Date:</b>	5/22/2012 10:31:00 AM
<b>Project:</b>	Towslee Landfill		
<b>Lab ID:</b>	U1205636-007	<b>Matrix:</b>	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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FIELD PARAMETERS		Lab Code: FIELD			Analyst:	
Conductivity	714	1.0	umhos/cm		5/22/2012 10:31:00 AM	
Eh	160	-300	mV		5/22/2012 10:31:00 AM	
pH	6.83	2-12.5	SU		5/22/2012 10:31:00 AM	
Temperature	15.8		°C		5/22/2012 10:31:00 AM	
Turbidity	7.45	5.0	NTU		5/22/2012 10:31:00 AM	

BROMIDE BY SM 18-21 4110B (00)		Lab Code: BROMIDE_W			Analyst: MGP	
Bromide	ND	8.0	mg/L	10	6/1/2012	

**NOTES:**

The reporting limits were raised due to matrix interference.

ICP METALS, TOTAL BY NYSDEC ASP 2005		Lab Code: 200.7WTASP			Analyst: LET	
[AqPrep Total Metals- EPA 3005A	Prep Code: 200.7TPRASP	Prep Date: 6/8/2012 3:22:04 PM	Prep By: ARO]			
Cadmium	ND	5.00	µg/L	1	6/19/2012 4:05:41 PM	
Calcium	110000	5000	µg/L	1	6/19/2012 4:05:41 PM	
Iron	146	60.0	µg/L	1	6/19/2012 4:05:41 PM	
Magnesium	26500	5000	µg/L	1	6/19/2012 4:05:41 PM	
Manganese	1440	10.0	µg/L	1	6/19/2012 4:05:41 PM	
Potassium	ND	5000	µg/L	1	6/19/2012 4:05:41 PM	
Sodium	14200	5000	µg/L	1	6/19/2012 4:05:41 PM	
Hardness, Total(CaCO <sub>3</sub> )	384000	7000	µg/L	1	6/19/2012 4:05:41 PM	

ASP TOTAL METALS BY ICP-MS		Lab Code: 200.8ASP			Analyst: LET	
[AqPrep ASP Total Metals: - EPA 3005A	Prep Code: 200.8TPRASP	Prep Date: 6/8/2012 3:22:41 PM	Prep By: ARO]			
Lead	ND	3.00	µg/L	1	6/14/2012 12:15:43 PM	

ALKALINITY BY EPA 310.2		Lab Code: ALK_W_AUTO			Analyst: CAS	
Alkalinity, Total (As CaCO <sub>3</sub> )	350	10	mg/L	1	5/30/2012	

BOD, 5 DAY BY SM 18-20 5210B (01)		Lab Code: BOD			Analyst: DEB	
Biochemical Oxygen Demand	ND	4.0	mg/L	1	5/23/2012 7:08:00 AM	

Approved By: PH

Date: 6-26-12

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Qualifiers: # Accreditation not offered by NYS DOH for this parameter  
 \*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 Q Outlying QC recoveries were associated with this parameter

\* 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  
 S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.      **Client Sample ID:** MW-4A  
**Lab Order:** U1205636      **Collection Date:** 5/22/2012 10:31:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-007      **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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**CHLORIDE WATERS BY LACHAT 10-117-07-1 A**      Lab Code: CL\_W\_AUTO      Analyst: CAS

Chloride	22.3	1.00	mg/L	1	5/30/2012
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**COD BY EPA 410.4 REV. 2.0**      Lab Code: COD      Analyst: KLS

Chemical Oxygen Demand	ND	20	mg/L	1	5/23/2012
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**NH3 BY LACHAT 10-107-06-1-J**      Lab Code: NH3\_W\_AUTO      Analyst: GWL  
 [NH3 Prep for Waters by SM 18 4500-NH3 B Prep Code: NH3\_WPR Prep Date: 6/5/2012 11:00:00 AM Prep By: GWL]  
 Nitrogen, Ammonia (As N)      ND      0.500      mg/L      1      6/5/2012

**NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C**      Lab Code: NO3\_W      Analyst: SAB

Nitrogen, Nitrate (as N)	ND	0.050	mg/L	1	5/23/2012 9:33:00 AM
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**PHENOLICS, TOTAL BY LACHAT 10-210-00-1A**      Lab Code: PHENOL\_W      Analyst: KLS  
 [Prep for Phenol in Waters Prep Code: PHENOL\_WPR Prep Date: 5/26/2012 Prep By: KLS]  
 Phenolics, Total Recoverable      ND      0.005      mg/L      1      5/30/2012 10:46:00 AM

**SULFATE BY ASTM D516-90, 02 & 07**      Lab Code: SULFATE\_W      Analyst: MGP

Sulfate	6.50	5.00	mg/L	1	5/24/2012
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**TDS BY SM 18-21 2540C (97)**      Lab Code: TDS      Analyst: NKA

Residue, Dissolved (TDS)	490	25	mg/L	1	5/23/2012
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**TKN BY LACHAT 10-107-06-2**      Lab Code: TKN\_W\_AUTO      Analyst: GWL  
 [TKN Prep for Waters by SM 18 4500-NH3 E Prep Code: TKN\_WPR Prep Date: 6/5/2012 11:00:00 AM Prep By: GWL]  
 Nitrogen, Kjeldahl, Total      ND      0.500      mg/L      1      6/5/2012

**TOC BY SM 18-21 5310B (00)**      Lab Code: TOC\_W      Analyst: DEB

Organic Carbon, Total	ND	3.0	mg/L	1	5/30/2012
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Approved By: PH

Date: 6-26-12

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**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
 \*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 Q Outlying QC recoveries were associated with this parameter

\* 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  
 S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U1205636  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-008

**Client Sample ID:** MW-6A  
**Collection Date:** 5/22/2012 9:39:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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FIELD PARAMETERS		Lab Code: FIELD		Analyst:	
Conductivity	408	1.0	umhos/cm	5/22/2012 9:39:00 AM	
Eh	133	-300	mV	5/22/2012 9:39:00 AM	
pH	7.36	2-12.5	SU	5/22/2012 9:39:00 AM	
Temperature	18.9		°C	5/22/2012 9:39:00 AM	
Turbidity	241	5.0	NTU	5/22/2012 9:39:00 AM	

BROMIDE BY SM 18-21 4110B (00)		Lab Code: BROMIDE_W		Analyst: MGP	
Bromide	ND	8.0	mg/L	10	6/1/2012

**NOTES:**

The reporting limits were raised due to matrix interference.

ICP METALS, TOTAL BY NYSDEC ASP 2005		Lab Code: 200.7WTASP		Analyst: LET	
[AqPrep Total Metals- EPA 3005A	Prep Code: 200.7TPRASP	Prep Date: 6/8/2012 3:22:04 PM	Prep By: ARO]		
Cadmium	ND	5.00	µg/L	1	6/19/2012 4:12:35 PM
Calcium	50900	5000	µg/L	1	6/19/2012 4:12:35 PM
Iron	980	60.0	µg/L	1	6/19/2012 4:12:35 PM
Magnesium	10300	5000	µg/L	1	6/19/2012 4:12:35 PM
Manganese	2160	10.0	µg/L	1	6/19/2012 4:12:35 PM
Potassium	ND	5000	µg/L	1	6/19/2012 4:12:35 PM
Sodium	14800	5000	µg/L	1	6/19/2012 4:12:35 PM
Hardness, Total(CaCO <sub>3</sub> )	169000	7000	µg/L	1	6/19/2012 4:12:35 PM

ASP TOTAL METALS BY ICP-MS		Lab Code: 200.8ASP		Analyst: LET	
[AqPrep ASP Total Metals: - EPA 3005A	Prep Code: 200.8TPRASP	Prep Date: 6/8/2012 3:22:41 PM	Prep By: ARO]		
Lead	ND	3.00	µg/L	1	6/14/2012 12:15:43 PM

ICP METALS, DISSOLVED BY NYSDEC ASP 2005		Lab Code: 200.7WDASP		Analyst: LET	
[AqPrep Dissolved Metals- EPA 3005A	Prep Code: 200.7DPRASP	Prep Date: 6/8/2012 3:53:11 PM	Prep By: ARO]		
Cadmium	ND	5.00	µg/L	1	6/19/2012 2:53:12 PM
Calcium	45400	5000	µg/L	1	6/19/2012 2:53:12 PM
Iron	149	60.0	µg/L	1	6/19/2012 2:53:12 PM
Magnesium	9330	5000	µg/L	1	6/19/2012 2:53:12 PM
Manganese	213	10.0	µg/L	1	6/19/2012 2:53:12 PM
Potassium	ND	5000	µg/L	1	6/19/2012 2:53:12 PM

Approved By: *PH*

Date: *6-26-12*

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**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

<b>CLIENT:</b>	Cortland Co. Soil and Water Cons. Dist.	<b>Client Sample ID:</b>	MW-6A
<b>Lab Order:</b>	U1205636	<b>Collection Date:</b>	5/22/2012 9:39:00 AM
<b>Project:</b>	Towslee Landfill		
<b>Lab ID:</b>	U1205636-008	<b>Matrix:</b>	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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### ICP METALS, DISSOLVED BY NYSDEC ASP 2005

[AqPrep Dissolved Metals- EPA 3005A Prep Code: 200.7DPRASP Prep Date: 6/8/2012 3:53:11 PM Prep By: ARO]  
Sodium 14000 5000 µg/L 1 6/19/2012 2:53:12 PM

#### NOTES:

Dissolved Metals filtered in Laboratory on 6/8/12 at 2:30pm.

### ICPMS METALS, DISSOLVED BY NYSDEC ASP 2005

[AqPrep ASP Dissolved Metals- - EPA 3005A Prep Code: 200.8DPRASP Prep Date: 6/8/2012 3:53:38 PM Prep By: ARO]  
Lead ND 3.00 µg/L 1 6/14/2012 12:15:43 PM

### ALKALINITY BY EPA 310.2

Lab Code: ALK\_W\_AUTO Analyst: CAS

Alkalinity, Total (As CaCO<sub>3</sub>) 130 10 mg/L 1 5/30/2012

### BOD, 5 DAY BY SM 18-20 5210B (01)

Lab Code: BOD Analyst: DEB

Biochemical Oxygen Demand ND 4.0 mg/L 1 5/23/2012 7:08:00 AM

### CHLORIDE WATERS BY LACHAT 10-117-07-1 A

Lab Code: CL\_W\_AUTO Analyst: CAS

Chloride 20.0 1.00 mg/L 1 5/30/2012

### COD BY EPA 410.4 REV. 2.0

Lab Code: COD Analyst: KLS

Chemical Oxygen Demand ND 20 mg/L 1 5/23/2012

### NH3 BY LACHAT 10-107-06-1-J

Lab Code: NH3\_W\_AUTO Analyst: GWL

[NH3 Prep for Waters by SM 18 4500-NH3 B Prep Code: NH3\_WPR Prep Date: 6/6/2012 1:30:00 PM Prep By: GWL]  
Nitrogen, Ammonia (As N) ND 0.500 mg/L 1 6/7/2012

### NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C

Lab Code: NO3\_W Analyst: SAB

Nitrogen, Nitrate (as N) 0.090 0.050 mg/L 1 5/23/2012 9:33:00 AM

### PHENOLICS, TOTAL BY LACHAT 10-210-00-1A

Lab Code: PHENOL\_W Analyst: KLS

[Prep for Phenol in Waters Prep Code: PHENOL\_WPR Prep Date: 5/26/2012 Prep By: KLS]

Approved By: PH

Date: 6-26-12

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Qualifiers: # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U1205636  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-008

**Client Sample ID:** MW-6A  
**Collection Date:** 5/22/2012 9:39:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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<b>PHENOLICS, TOTAL BY LACHAT 10-210-00-1A</b>				<b>Lab Code: PHENOL_W</b>		<b>Analyst: KLS</b>
[Prep for Phenol in Waters Prep Code: PHENOL_WPR Prep Date: 5/26/2012 Prep By: KLS]						
Phenolics, Total Recoverable	ND	0.005	mg/L	1	5/30/2012 10:46:00 AM	
<b>SULFATE BY ASTM D516-90, 02 &amp; 07</b>				<b>Lab Code: SULFATE_W</b>		<b>Analyst: MGP</b>
Sulfate	13.6	5.00	mg/L	1	5/24/2012	
<b>TDS BY SM 18-21 2540C (97)</b>				<b>Lab Code: TDS</b>		<b>Analyst: NKA</b>
Residue, Dissolved (TDS)	310	25	mg/L	1	5/23/2012	
<b>TKN BY LACHAT 10-107-06-2</b>				<b>Lab Code: TKN_W_AUTO</b>		<b>Analyst: GWL</b>
[TKN Prep for Waters by SM 18 4500-NH3 E Prep Code: TKN_WPR Prep Date: 6/5/2012 11:00:00 AM Prep By: GWL]	1.89	0.500	mg/L	1	6/5/2012	
Nitrogen, Kjeldahl, Total						
<b>TOC BY SM 18-21 5310B (00)</b>				<b>Lab Code: TOC_W</b>		<b>Analyst: DEB</b>
Organic Carbon, Total	ND	3.0	mg/L	1	5/30/2012	

Approved By: PH

Date: 6-26-12

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**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

<b>CLIENT:</b>	Cortland Co. Soil and Water Cons. Dist.	<b>Client Sample ID:</b>	MW-6B
<b>Lab Order:</b>	U1205636	<b>Collection Date:</b>	5/22/2012 9:42:00 AM
<b>Project:</b>	Towslee Landfill		
<b>Lab ID:</b>	U1205636-009	<b>Matrix:</b>	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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<b>FIELD PARAMETERS</b>		<b>Lab Code:</b>	<b>FIELD</b>	<b>Analyst:</b>
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Conductivity	363	1.0	umhos/cm	5/22/2012 9:42:00 AM
Eh	139	-300	mV	5/22/2012 9:42:00 AM
pH	7.29	2-12.5	SU	5/22/2012 9:42:00 AM
Temperature	17.7		°C	5/22/2012 9:42:00 AM
Turbidity	17.1	5.0	NTU	5/22/2012 9:42:00 AM

<b>BROMIDE BY SM 18-21 4110B (00)</b>		<b>Lab Code:</b>	<b>BROMIDE_W</b>	<b>Analyst:</b>	<b>MGP</b>
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Bromide	ND	80	mg/L	100	6/1/2012
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**NOTES:**

The reporting limits were raised due to matrix interference.

<b>ICP METALS, TOTAL BY NYSDEC ASP 2005</b>		<b>Lab Code:</b>	<b>200.7WTASP</b>	<b>Analyst:</b>	<b>LET</b>
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[AqPrep Total Metals- EPA 3005A Prep Code: 200.7TPRASP		Prep Date: 6/8/2012 3:22:04 PM	Prep By: ARO]		
Cadmium	ND	5.00	µg/L	1	6/19/2012 4:20:03 PM
Calcium	39800	5000	µg/L	1	6/19/2012 4:20:03 PM
Iron	7380	60.0	µg/L	1	6/19/2012 4:20:03 PM
Magnesium	12400	5000	µg/L	1	6/19/2012 4:20:03 PM
Manganese	781	10.0	µg/L	1	6/19/2012 4:20:03 PM
Potassium	ND	5000	µg/L	1	6/19/2012 4:20:03 PM
Sodium	14600	5000	µg/L	1	6/19/2012 4:20:03 PM
Hardness, Total(CaCO <sub>3</sub> )	150000	7000	µg/L	1	6/19/2012 4:20:03 PM

<b>ASP TOTAL METALS BY ICP-MS</b>		<b>Lab Code:</b>	<b>200.8ASP</b>	<b>Analyst:</b>	<b>LET</b>
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[AqPrep ASP Total Metals: - EPA 3005A Prep Code: 200.8TPRASP		Prep Date: 6/8/2012 3:22:41 PM	Prep By: ARO]		
Lead	ND	15.0	µg/L	5	6/14/2012 12:15:43 PM

**NOTES:**

The reporting limits were raised due to matrix interference.

<b>ALKALINITY BY EPA 310.2</b>		<b>Lab Code:</b>	<b>ALK_W_AUTO</b>	<b>Analyst:</b>	<b>CAS</b>
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Alkalinity, Total (As CaCO <sub>3</sub> )	190	10	mg/L	1	5/30/2012
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<b>BOD, 5 DAY BY SM 18-20 5210B (01)</b>		<b>Lab Code:</b>	<b>BOD</b>	<b>Analyst:</b>	<b>DEB</b>
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Approved By: PH

Date: 6-26-12

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Qualifiers: # Accreditation not offered by NYS DOH for this parameter  
 \*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 Q Outlying QC recoveries were associated with this parameter

\* 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  
 S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist. **Client Sample ID:** MW-6B  
**Lab Order:** U1205636 **Collection Date:** 5/22/2012 9:42:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-009 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>BOD, 5 DAY BY SM 18-20 5210B (01)</b>				Lab Code: BOD		Analyst: DEB
Biochemical Oxygen Demand	ND	4.0		mg/L	1	5/23/2012 7:08:00 AM
<b>CHLORIDE WATERS BY LACHAT 10-117-07-1 A</b>				Lab Code: CL_W_AUTO		Analyst: CAS
Chloride	10.1	1.00		mg/L	1	5/30/2012
<b>COD BY EPA 410.4 REV. 2.0</b>				Lab Code: COD		Analyst: KLS
Chemical Oxygen Demand	ND	20		mg/L	1	5/23/2012
<b>NH3 BY LACHAT 10-107-06-1-J</b>				Lab Code: NH3_W_AUTO		Analyst: GWL
[NH3 Prep for Waters by SM 18 4500-NH3 B Nitrogen, Ammonia (As N)]	ND	0.500		Prep Date: 6/5/2012 11:00:00 AM mg/L	1	Prep By: GWL 6/5/2012
<b>NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C</b>				Lab Code: NO3_W		Analyst: SAB
Nitrogen, Nitrate (as N)	0.081	0.050		mg/L	1	5/23/2012 9:33:00 AM
<b>PHENOLICS, TOTAL BY LACHAT 10-210-00-1A</b>				Lab Code: PHENOL_W		Analyst: KLS
[Prep for Phenol in Waters Prep Code: PHENOL_WPR Phenolics, Total Recoverable]	ND	0.005		Prep Date: 5/26/2012 11:00:00 AM mg/L	1	Prep By: KLS 5/30/2012 10:46:00 AM
<b>SULFATE BY ASTM D516-90, 02 &amp; 07</b>				Lab Code: SULFATE_W		Analyst: MGP
Sulfate	17.9	5.00		mg/L	1	5/24/2012
<b>TDS BY SM 18-21 2540C (97)</b>				Lab Code: TDS		Analyst: NKA
Residue, Dissolved (TDS)	240	25		mg/L	1	5/23/2012
<b>TKN BY LACHAT 10-107-06-2</b>				Lab Code: TKN_W_AUTO		Analyst: GWL
[TKN Prep for Waters by SM 18 4500-NH3 E Nitrogen, Kjeldahl, Total]	ND	0.500		Prep Date: 6/5/2012 11:00:00 AM mg/L	1	Prep By: GWL 6/5/2012

Approved By: PH

Date: 6-26-12

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**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

CLIENT: Cortland Co. Soil and Water Cons. Dist.  
Lab Order: U1205636  
Project: Towslee Landfill  
Lab ID: U1205636-009

Client Sample ID: MW-6B  
Collection Date: 5/22/2012 9:42:00 AM  
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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TOC BY SM 18-21 5310B (00) Lab Code: TOC\_W Analyst: DEB

Organic Carbon, Total	ND	3.0	mg/L	1	5/30/2012
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Approved By: PH

Date: 6-26-12

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Qualifiers: # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.      **Client Sample ID:** MW-7A  
**Lab Order:** U1205636      **Collection Date:** 5/22/2012 11:32:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-010      **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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**FIELD PARAMETERS**

			Lab Code: FIELD	Analyst:
Conductivity	1085	1.0	umhos/cm	5/22/2012 11:32:00 AM
Eh	184	-300	mV	5/22/2012 11:32:00 AM
pH	6.36	2-12.5	SU	5/22/2012 11:32:00 AM
Temperature	15.8		°C	5/22/2012 11:32:00 AM
Turbidity	>1000	5.0	NTU	5/22/2012 11:32:00 AM

**BROMIDE BY SM 18-21 4110B (00)**

		Lab Code: BROMIDE_W	Analyst: MGP
Bromide	ND	80 mg/L	100 6/1/2012

**NOTES:**

The reporting limits were raised due to matrix interference.

**ICP METALS, TOTAL BY NYSDEC ASP 2005**

[AqPrep Total Metals- EPA 3005A	Prep Code: 200.7TPRASP	Prep Date: 6/8/2012 3:22:04 PM	Prep By: ARO]	Lab Code: 200.7WTASP	Analyst: LET
Cadmium	ND	5.00	µg/L	1	6/19/2012 4:26:58 PM
Calcium	123000	5000	µg/L	1	6/19/2012 4:26:58 PM
Iron	2900	60.0	µg/L	1	6/19/2012 4:26:58 PM
Magnesium	34800	5000	µg/L	1	6/19/2012 4:26:58 PM
Manganese	3270	10.0	µg/L	1	6/19/2012 4:26:58 PM
Potassium	ND	5000	µg/L	1	6/19/2012 4:26:58 PM
Sodium	91000	5000	µg/L	1	6/19/2012 4:26:58 PM
Hardness, Total(CaCO <sub>3</sub> )	449000	7000	µg/L	1	6/19/2012 4:26:58 PM

**ASP TOTAL METALS BY ICP-MS**

[AqPrep ASP Total Metals: - EPA 3005A	Prep Code: 200.8TPRASP	Prep Date: 6/8/2012 3:22:41 PM	Prep By: ARO]	Lab Code: 200.8ASP	Analyst: LET
Lead	3.28	3.00	µg/L	1	6/14/2012 12:15:43 PM

**ICP METALS, DISSOLVED BY NYSDEC ASP 2005**

[AqPrep Dissolved Metals- EPA 3005A	Prep Code: 200.7DPRASP	Prep Date: 6/8/2012 3:53:11 PM	Prep By: ARO]	Lab Code: 200.7WDASP	Analyst: LET
Cadmium	ND	5.00	µg/L	1	6/19/2012 2:58:00 PM
Calcium	115000	5000	µg/L	1	6/19/2012 2:58:00 PM
Iron	ND	60.0	µg/L	1	6/19/2012 2:58:00 PM
Magnesium	32100	5000	µg/L	1	6/19/2012 2:58:00 PM
Manganese	2640	10.0	µg/L	1	6/19/2012 2:58:00 PM
Potassium	ND	5000	µg/L	1	6/19/2012 2:58:00 PM

Approved By: PH

Date: 6-26-12

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**Qualifiers:**

- # Accreditation not offered by NYS DOH for this parameter
- \*\* Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- \* 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
- S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	Client Sample ID:	MW-7A
Lab Order:	U1205636	Collection Date:	5/22/2012 11:32:00 AM
Project:	Towslee Landfill		
Lab ID:	U1205636-010	Matrix:	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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**ICP METALS, DISSOLVED BY NYSDEC ASP 2005** Lab Code: 200.7WDASP Analyst: LET  
[AqPrep Dissolved Metals- EPA 3005A Prep Code: 200.7DPRASP Prep Date: 6/8/2012 3:53:11 PM Prep By: ARO]  
Sodium 81600 5000 µg/L 1 6/19/2012 2:58:00 PM

**NOTES:**

Dissolved Metals filtered in Laboratory on 6/8/12 at 2:30pm.

**ICPMS METALS, DISSOLVED BY NYSDEC ASP 2005** Lab Code: 200.8\_D\_ASP Analyst: LET  
[AqPrep ASP Dissolved Metals- EPA 3005A Prep Code: 200.8DPRASP Prep Date: 6/8/2012 3:53:38 PM Prep By: ARO]  
Lead ND 3.00 µg/L 1 6/14/2012 12:15:43 PM

**ALKALINITY BY EPA 310.2** Lab Code: ALK\_W\_AUTO Analyst: CAS  
Alkalinity, Total (As CaCO<sub>3</sub>) 520 10 mg/L 1 5/30/2012

**BOD, 5 DAY BY SM 18-20 5210B (01)** Lab Code: BOD Analyst: DEB  
Biochemical Oxygen Demand ND 4.0 mg/L 1 5/23/2012 7:08:00 AM

**CHLORIDE WATERS BY LACHAT 10-117-07-1 A** Lab Code: CL\_W\_AUTO Analyst: CAS  
Chloride 99.5 1.00 mg/L 1 5/30/2012

**COD BY EPA 410.4 REV. 2.0** Lab Code: COD Analyst: KLS  
Chemical Oxygen Demand 22 20 mg/L 1 5/23/2012

**NH3 BY LACHAT 10-107-06-1-J** Lab Code: NH3\_W\_AUTO Analyst: GWL  
[NH3 Prep for Waters by SM 18 4500-NH3 B Prep Code: NH3\_WPR Prep Date: 6/5/2012 11:00:00 AM Prep By: GWL]  
Nitrogen, Ammonia (As N) ND 0.500 mg/L 1 6/5/2012

**NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C** Lab Code: NO3\_W Analyst: SAB  
Nitrogen, Nitrate (as N) ND 0.050 mg/L 1 5/23/2012 9:33:00 AM

**PHENOLICS, TOTAL BY LACHAT 10-210-00-1A** Lab Code: PHENOL\_W Analyst: KLS  
[Prep for Phenol in Waters Prep Code: PHENOL\_WPR Prep Date: 5/26/2012 Prep By: KLS]

Approved By: PH

Date: 6-26-12

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Qualifiers: # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.      **Client Sample ID:** MW-7A  
**Lab Order:** U1205636      **Collection Date:** 5/22/2012 11:32:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-010      **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>PHENOLICS, TOTAL BY LACHAT 10-210-00-1A</b>						
[Prep for Phenol in Waters Prep Code: PHENOL_WPR Prep Date: 5/26/2012 Prep By: KLS] Phenolics, Total Recoverable	ND	0.005	mg/L	1		5/30/2012 10:46:00 AM
<b>SULFATE BY ASTM D516-90, 02 &amp; 07</b>						
Sulfate	20.0	5.00	mg/L	1		5/24/2012
<b>TDS BY SM 18-21 2540C (97)</b>						
Residue, Dissolved (TDS)	630	25	mg/L	1		5/23/2012
<b>TKN BY LACHAT 10-107-06-2</b>						
[TKN Prep for Waters by SM 18 4500-NH3 E Prep Code: TKN_WPR Prep Date: 6/5/2012 11:00:00 AM Prep By: GWL] Nitrogen, Kjeldahl, Total	ND	0.500	mg/L	1		6/5/2012
<b>TOC BY SM 18-21 5310B (00)</b>						
Organic Carbon, Total	7.3	3.0	mg/L	1		5/30/2012

Approved By: *PH*

Date: 6-26-12

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**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.      **Client Sample ID:** Dupe MW-1B  
**Lab Order:** U1205636      **Collection Date:** 5/22/2012 11:14:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-011      **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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**BROMIDE BY SM 18-21 4110B (00)**      Lab Code: **BROMIDE\_W**      Analyst: **MGP**

Bromide      ND      8.0      mg/L      10      6/1/2012

**NOTES:**

The reporting limits were raised due to matrix interference.

**ICP METALS, TOTAL BY NYSDEC ASP 2005**      Lab Code: **200.7WTASP**      Analyst: **LET**

[AqPrep Total Metals- EPA 3005A Prep Code: 200.7TPRASP]	Prep Date: 6/8/2012 3:22:04 PM	Prep By: ARO]
Cadmium      ND      5.00      µg/L      1      6/19/2012 4:33:56 PM		
Calcium      29900      5000      µg/L      1      6/19/2012 4:33:56 PM		
Iron      289      60.0      µg/L      1      6/19/2012 4:33:56 PM		
Magnesium      8260      5000      µg/L      1      6/19/2012 4:33:56 PM		
Manganese      117      10.0      µg/L      1      6/19/2012 4:33:56 PM		
Potassium      ND      5000      µg/L      1      6/19/2012 4:33:56 PM		
Sodium      7950      5000      µg/L      1      6/19/2012 4:33:56 PM		
Hardness, Total(CaCO <sub>3</sub> )      109000      7000      µg/L      1      6/19/2012 4:33:56 PM		

**ASP TOTAL METALS BY ICP-MS**      Lab Code: **200.8ASP**      Analyst: **LET**

[AqPrep ASP Total Metals: - EPA 3005A Prep Code: 200.8TPRASP]	Prep Date: 6/8/2012 3:22:41 PM	Prep By: ARO]
Lead      ND      3.00      µg/L      1      6/14/2012 12:15:43 PM		

**ALKALINITY BY EPA 310.2**      Lab Code: **ALK\_W\_AUTO**      Analyst: **CAS**

Alkalinity, Total (As CaCO<sub>3</sub>)      91      10      mg/L      1      5/30/2012

**BOD, 5 DAY BY SM 18-20 5210B (01)**      Lab Code: **BOD**      Analyst: **DEB**

Biochemical Oxygen Demand      ND      4.0      mg/L      1      5/23/2012 7:08:00 AM

**CHLORIDE WATERS BY LACHAT 10-117-07-1 A**      Lab Code: **CL\_W\_AUTO**      Analyst: **CAS**

Chloride      2.73      1.00      mg/L      1      5/30/2012

**COD BY EPA 410.4 REV. 2.0**      Lab Code: **COD**      Analyst: **KLS**

Chemical Oxygen Demand      ND      20      mg/L      1      5/23/2012

Approved By: PH

Date: 6-26-12

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**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

<b>CLIENT:</b>	Cortland Co. Soil and Water Cons. Dist.	<b>Client Sample ID:</b>	Dupe MW-1B
<b>Lab Order:</b>	U1205636	<b>Collection Date:</b>	5/22/2012 11:14:00 AM
<b>Project:</b>	Towslee Landfill		
<b>Lab ID:</b>	U1205636-011	<b>Matrix:</b>	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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**NH3 BY LACHAT 10-107-06-1-J** Lab Code: NH3\_W\_AUTO Analyst: GWL  
 [NH3 Prep for Waters by SM 18 4500-NH3 B Prep Code: NH3\_WPR Prep Date: 6/5/2012 11:00:00 AM Prep By: GWL]  
 Nitrogen, Ammonia (As N) ND 0.500 mg/L 1 6/5/2012

**NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C** Lab Code: NO3\_W Analyst: SAB  
 Nitrogen, Nitrate (as N) ND 0.050 mg/L 1 5/23/2012 9:33:00 AM

**PHENOLICS, TOTAL BY LACHAT 10-210-00-1A** Lab Code: PHENOL\_W Analyst: KLS  
 [Prep for Phenol in Waters Prep Code: PHENOL\_WPR Prep Date: 5/26/2012 Prep By: KLS]  
 Phenolics, Total Recoverable ND 0.005 mg/L 1 5/30/2012 10:46:00 AM

**SULFATE BY ASTM D516-90, 02 & 07** Lab Code: SULFATE\_W Analyst: MGP  
 Sulfate 6.40 5.00 mg/L 1 5/24/2012

**TDS BY SM 18-21 2540C (97)** Lab Code: TDS Analyst: NKA  
 Residue, Dissolved (TDS) 180 25 mg/L 1 5/23/2012

**TKN BY LACHAT 10-107-06-2** Lab Code: TKN\_W\_AUTO Analyst: GWL  
 [TKN Prep for Waters by SM 18 4500-NH3 E Prep Code: TKN\_WPR Prep Date: 6/5/2012 11:00:00 AM Prep By: GWL]  
 Nitrogen, Kjeldahl, Total ND 0.500 mg/L 1 6/5/2012

**TOC BY SM 18-21 5310B (00)** Lab Code: TOC\_W Analyst: DEB  
 Organic Carbon, Total ND 3.0 mg/L 1 5/30/2012

Approved By: PH

Date: 6-26-12

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**Qualifiers:**

- # Accreditation not offered by NYS DOH for this parameter
- \*\* Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- \* 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
- S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U1205636  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-012

**Client Sample ID:** MW-2A  
**Collection Date:** 5/23/2012 10:00:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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### FIELD PARAMETERS

Conductivity	515	1.0	umhos/cm	5/23/2012 10:00:00 AM
Eh	133	-300	mV	5/23/2012 10:00:00 AM
pH	6.72	2-12.5	SU	5/23/2012 10:00:00 AM
Temperature	18.9		°C	5/23/2012 10:00:00 AM
Turbidity	27.5	5.0	NTU	5/23/2012 10:00:00 AM

### BROMIDE BY SM 18-21 4110B (00)

Lab Code: **BROMIDE\_W** Analyst: **MGP**

Bromide	ND	80	mg/L	100	6/4/2012
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**NOTES:**

The reporting limits were raised due to matrix interference.

### ICP METALS, TOTAL BY NYSDEC ASP 2005

[AqPrep Total Metals- EPA 3005A	Prep Code: 200.7TPRASP	Prep Date: 6/8/2012 3:22:04 PM	Prep By: ARO]	Lab Code: 200.7WTASP	Analyst: LET
Cadmium	ND	5.00	µg/L	1	6/19/2012 4:38:52 PM
Calcium	59200	5000	µg/L	1	6/19/2012 4:38:52 PM
Iron	3150	60.0	µg/L	1	6/19/2012 4:38:52 PM
Magnesium	14400	5000	µg/L	1	6/19/2012 4:38:52 PM
Manganese	8490	10.0	µg/L	1	6/19/2012 4:38:52 PM
Potassium	8150	5000	µg/L	1	6/19/2012 4:38:52 PM
Sodium	11900	5000	µg/L	1	6/19/2012 4:38:52 PM
Hardness, Total(CaCO <sub>3</sub> )	207000	7000	µg/L	1	6/19/2012 4:38:52 PM

### ASP TOTAL METALS BY ICP-MS

[AqPrep ASP Total Metals: - EPA 3005A	Prep Code: 200.8TPRASP	Prep Date: 6/8/2012 3:22:41 PM	Prep By: ARO]	Lab Code: 200.8ASP	Analyst: LET
Lead	ND	3.00	µg/L	1	6/14/2012 12:15:43 PM

### ALKALINITY BY EPA 310.2

Lab Code: **ALK\_W\_AUTO** Analyst: **CAS**

Alkalinity, Total (As CaCO <sub>3</sub> )	250	10	mg/L	1	5/30/2012
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### BOD, 5 DAY BY SM 18-20 5210B (01)

Lab Code: **BOD** Analyst: **JTT**

Biochemical Oxygen Demand	ND	4.0	mg/L	1	5/24/2012 7:10:00 AM
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Approved By: DH

Date: 6-26-12

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Qualifiers: # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U1205636  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-012

**Client Sample ID:** MW-2A  
**Collection Date:** 5/23/2012 10:00:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>CHLORIDE WATERS BY LACHAT 10-117-07-1 A</b>						
Chloride	11.6	1.00		mg/L	1	5/30/2012
<b>COD BY EPA 410.4 REV. 2.0</b>						
Chemical Oxygen Demand	36	20		mg/L	1	6/5/2012
<b>NH3 BY LACHAT 10-107-06-1-J</b>						
[NH3 Prep for Waters by SM 18 4500-NH3 B Nitrogen, Ammonia (As N)]	5.90	0.500		mg/L	1	6/10/2012
<b>NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C</b>						
Nitrogen, Nitrate (as N)	0.076	0.050		mg/L	1	5/23/2012 3:51:00 PM
<b>PHENOLICS, TOTAL BY LACHAT 10-210-00-1A</b>						
[Prep for Phenol in Waters Phenolics, Total Recoverable]	ND	0.005		mg/L	1	5/30/2012 10:46:00 AM
<b>SULFATE BY ASTM D516-90, 02 &amp; 07</b>						
Sulfate	8.79	5.00		mg/L	1	5/30/2012
<b>TDS BY SM 18-21 2540C (97)</b>						
Residue, Dissolved (TDS)	290	25		mg/L	1	5/24/2012
<b>TKN BY LACHAT 10-107-06-2</b>						
[TKN Prep for Waters by SM 18 4500-NH3 E Nitrogen, Kjeldahl, Total]	6.56	0.500		mg/L	1	6/7/2012
<b>TOC BY SM 18-21 5310B (00)</b>						
Organic Carbon, Total	5.5	3.0		mg/L	1	5/31/2012

Approved By: PH

Date: 6-26-12

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**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.      **Client Sample ID:** MW-2B  
**Lab Order:** U1205636      **Collection Date:** 5/23/2012 10:03:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-013      **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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FIELD PARAMETERS		Lab Code: FIELD		Analyst:	
Conductivity	1378	1.0	umhos/cm	5/23/2012 10:03:00 AM	
Eh	161	-300	mV	5/23/2012 10:03:00 AM	
pH	6.12	2-12.5	SU	5/23/2012 10:03:00 AM	
Temperature	18.2		°C	5/23/2012 10:03:00 AM	
Turbidity	5.44	5.0	NTU	5/23/2012 10:03:00 AM	

BROMIDE BY SM 18-21 4110B (00)		Lab Code: BROMIDE_W		Analyst: BY	
Bromide	ND	8.0	mg/L	10	6/12/2012

**NOTES:**

The reporting limits were raised due to matrix interference.

ICP METALS, TOTAL BY NYSDEC ASP 2005		Lab Code: 200.7WTASP		Analyst: LET	
[AqPrep Total Metals- EPA 3005A	Prep Code: 200.7TPRASP	Prep Date: 6/8/2012 3:22:04 PM	Prep By: ARO]		
Cadmium	ND	5.00	µg/L	1	6/19/2012 4:45:58 PM
Calcium	184000	5000	µg/L	1	6/19/2012 4:45:58 PM
Iron	337	60.0	µg/L	1	6/19/2012 4:45:58 PM
Magnesium	44900	5000	µg/L	1	6/19/2012 4:45:58 PM
Manganese	6400	10.0	µg/L	1	6/19/2012 4:45:58 PM
Potassium	ND	5000	µg/L	1	6/19/2012 4:45:58 PM
Sodium	47400	5000	µg/L	1	6/19/2012 4:45:58 PM
Hardness, Total(CaCO <sub>3</sub> )	643000	7000	µg/L	1	6/19/2012 4:45:58 PM

ASP TOTAL METALS BY ICP-MS		Lab Code: 200.8ASP		Analyst: LET	
[AqPrep ASP Total Metals: - EPA 3005A	Prep Code: 200.8TPRASP	Prep Date: 6/8/2012 3:22:41 PM	Prep By: ARO]		
Lead	ND	3.00	µg/L	1	6/14/2012 12:15:43 PM

ALKALINITY BY EPA 310.2		Lab Code: ALK_W_AUTO		Analyst: CAS	
Alkalinity, Total (As CaCO <sub>3</sub> )	790	100	mg/L	10	5/30/2012

BOD, 5 DAY BY SM 18-20 5210B (01)		Lab Code: BOD		Analyst: JTT	
Biochemical Oxygen Demand	ND	4.0	mg/L	1	5/24/2012 7:10:00 AM

Approved By: PH

Date: 6-26-12

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**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.      **Client Sample ID:** MW-2B  
**Lab Order:** U1205636      **Collection Date:** 5/23/2012 10:03:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-013      **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>CHLORIDE WATERS BY LACHAT 10-117-07-1 A</b>						
Chloride	124	1.00		mg/L	1	5/30/2012
<b>COD BY EPA 410.4 REV. 2.0</b>						
Chemical Oxygen Demand	ND	20		mg/L	1	6/8/2012
<b>NH3 BY LACHAT 10-107-06-1-J</b>						
[NH3 Prep for Waters by SM 18 4500-NH3 B Nitrogen, Ammonia (As N)]	0.760	0.500		mg/L	1	6/10/2012
<b>NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C</b>						
Nitrogen, Nitrate (as N)	ND	0.050		mg/L	1	5/23/2012 3:51:00 PM
<b>PHENOLICS, TOTAL BY LACHAT 10-210-00-1A</b>						
[Prep for Phenol in Waters Phenolics, Total Recoverable]	ND	0.005		mg/L	1	5/30/2012 10:46:00 AM
<b>SULFATE BY ASTM D516-90, 02 &amp; 07</b>						
Sulfate	ND	5.00		mg/L	1	5/30/2012
<b>TDS BY SM 18-21 2540C (97)</b>						
Residue, Dissolved (TDS)	890	25		mg/L	1	5/24/2012
<b>TKN BY LACHAT 10-107-06-2</b>						
[TKN Prep for Waters by SM 18 4500-NH3 E Nitrogen, Kjeldahl, Total]	0.811	0.500		mg/L	1	6/7/2012
<b>TOC BY SM 18-21 5310B (00)</b>						
Organic Carbon, Total	14.4	3.0		mg/L	1	5/31/2012

Approved By: *PH*

Date: 6-26-12

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**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.      **Client Sample ID:** Scale House  
**Lab Order:** U1205636      **Collection Date:** 5/30/2012 2:00:00 PM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-014      **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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### FIELD PARAMETERS

Conductivity	359	1.0	umhos/cm	5/30/2012 2:00:00 PM
Eh	96	-300	mV	5/30/2012 2:00:00 PM
pH	7.96	2-12.5	SU	5/30/2012 2:00:00 PM
Temperature	19.0		°C	5/30/2012 2:00:00 PM
Turbidity	3.211	5.0	NTU	5/30/2012 2:00:00 PM

### BROMIDE BY SM 18-21 4110B (00)

Bromide	ND	0.8	mg/L	1	6/4/2012
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### ICP METALS, TOTAL BY NYSDEC ASP 2005

[AqPrep Total Metals- EPA 3005A	Prep Code: 200.7TPRASP	Prep Date: 6/8/2012 3:22:04 PM	Prep By: ARO]	Analyst: LET
Cadmium	ND	5.00	µg/L	6/19/2012 5:19:23 PM
Calcium	40000	5000	µg/L	6/19/2012 5:19:23 PM
Iron	345	60.0	µg/L	6/19/2012 5:19:23 PM
Magnesium	10300	5000	µg/L	6/19/2012 5:19:23 PM
Manganese	88.8	10.0	µg/L	6/19/2012 5:19:23 PM
Potassium	ND	5000	µg/L	6/19/2012 5:19:23 PM
Sodium	7250	5000	µg/L	6/19/2012 5:19:23 PM
Hardness, Total(CaCO <sub>3</sub> )	142000	7000	µg/L	6/19/2012 5:19:23 PM

### ASP TOTAL METALS BY ICP-MS

[AqPrep ASP Total Metals: - EPA 3005A	Prep Code: 200.8TPRASP	Prep Date: 6/8/2012 3:22:41 PM	Prep By: ARO]	Analyst: LET
Lead	10.8	3.00	µg/L	6/14/2012 12:15:43 PM

### ALKALINITY BY EPA 310.2

Alkalinity, Total (As CaCO <sub>3</sub> )	120	10	mg/L	1	6/4/2012
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### BOD, 5 DAY BY SM 18-20 5210B (01)

Biochemical Oxygen Demand	ND	4.0	mg/L	1	5/30/2012 3:30:00 PM
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### CHLORIDE WATERS BY LACHAT 10-117-07-1 A

Lab Code: CL_W_AUTO	Analyst: CAS
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Approved By: PH

Date: 6-26-12 Page 30 of 31

**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

## Analytical Report

Date: 26-Jun-12

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.      **Client Sample ID:** Scale House  
**Lab Order:** U1205636      **Collection Date:** 5/30/2012 2:00:00 PM  
**Project:** Towslee Landfill  
**Lab ID:** U1205636-014      **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>CHLORIDE WATERS BY LACHAT 10-117-07-1 A</b>						
Chloride	13.3	1.00		mg/L	1	6/4/2012
<b>COD BY EPA 410.4 REV. 2.0</b>						
Chemical Oxygen Demand	48	20		mg/L	1	6/11/2012
<b>NH3 BY LACHAT 10-107-06-1-J</b>						
[NH3 Prep for Waters by SM 18 4500-NH3 B Nitrogen, Ammonia (As N)]	ND	0.500		mg/L	1	6/12/2012
<b>NITROGEN, NITRATE (AS N) BY LACHAT 10-107-04-1C</b>						
Nitrogen, Nitrate (as N)	0.075	0.050		mg/L	1	5/31/2012 9:27:00 AM
<b>PHENOLICS, TOTAL BY LACHAT 10-210-00-1A</b>						
[Prep for Phenol in Waters Phenolics, Total Recoverable]	ND	0.005		mg/L	1	6/1/2012 9:51:00 AM
<b>SULFATE BY ASTM D516-90, 02 &amp; 07</b>						
Sulfate	29.9	5.00		mg/L	1	6/1/2012
<b>TDS BY SM 18-21 2540C (97)</b>						
Residue, Dissolved (TDS)	220	25		mg/L	1	6/1/2012
<b>TKN BY LACHAT 10-107-06-2</b>						
[TKN Prep for Waters by SM 18 4500-NH3 E Nitrogen, Kjeldahl, Total]	ND	0.500		mg/L	1	6/12/2012
<b>TOC BY SM 18-21 5310B (00)</b>						
Organic Carbon, Total	ND	3.0		mg/L	1	6/6/2012

Approved By: PH

Date: 6-26-12

Page 31 of 31

**Qualifiers:** # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
Q Outlying QC recoveries were associated with this parameter

\* 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  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc. Ground water Field Log

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

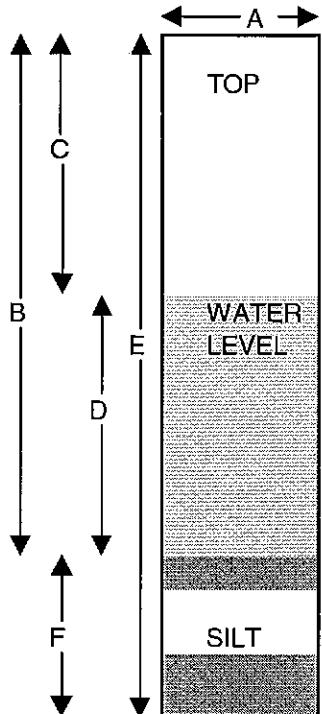
Client: Cortland County  
 Project: Towslee Landfill  
 Well ID.: CD-1

ULI ID No. (enter by lab)

Condition of Well: Good Locked: No Lock

Method of Evacuation: Dedicated Bailer Lock ID: 3900

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	<u>2"</u>	inches
B.	Well Depth Measured	<u>24.70</u>	feet
C.	Depth to Water	<u>7.02</u>	feet
D.	Length of Water Column (calculated)	<u>17.68</u>	feet
	Conversion Factor	<u>X.16</u>	-----
	Well Volume (calculated)	<u>2.83</u>	gallons
	No. of Volumes to be Evacuated	<u>X3</u>	-----
	Total Volume to be Evacuated	<u>8.49</u>	gallons
	Actual Volume Evacuated	<u>8.5</u>	gallons
E.	Installed Well Depth (if known)	<u>N/A</u>	feet
F.	Depth of Silt (calculated)	<u>N/A</u>	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	<u>5/21/2012</u>	<u>5/22/2012</u>
Time	<u>10:10 AM</u>	<u>10:05 AM</u>
EH	<u>125</u>	<u>137</u>
Temperature	<u>21.7</u>	<u>19</u>
pH	<u>8.15</u>	<u>7.53</u>
Specific Cond.	<u>101</u>	<u>257</u>
Turbidity	<u>7.83</u>	<u>40.9</u>
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>
Appearance	<u>clear</u>	<u>cloudy</u>
Weather:	<u>73 F Sun</u>	<u>70 F cloudy</u>
Observations:		

% Recharge:		
Initial Depth to Water	<u>7.02</u>	feet
Recharge Depth to Water	<u>7.12</u>	feet
2nd water column height	<u>98.6</u>	%
1st water column height		
Elevation(Top of Casing)	<u>N/A</u>	feet
G.W. Elevation=	<u>N/A</u>	feet
G.W.Elevation =Top of Case Elev-Total Depth		
Sampler:	<u>Dan Amyl</u>	
Signature:	<u>DM Curell</u>	

## Upstate Laboratories, Inc. Ground water Field Log

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

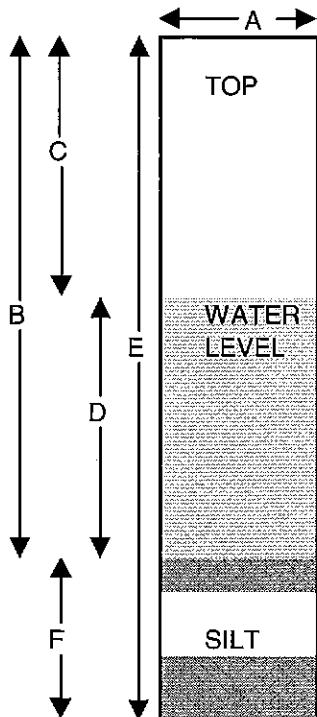
Client: Cortland County

Project: Towslee Landfill

ULI ID No. (enter by lab)

Well ID.: CD-1RA

Condition of Well:	Good	Locked:	No Lock
Method of Evacuation:	Dedicated Bailer	Lock ID:	3900
Method of Sampling:	Dedicated Bailer		



A. Diameter of Well	2"	inches
B. Well Depth Measured	50.60	feet
C. Depth to Water	2.21	feet
D. Length of Water Column (calculated)	48.39	feet
Conversion Factor	X.16	-----
Well Volume (calculated)	7.74	gallons
No. of Volumes to be Evacuated	X3	-----
Total Volume to be Evacuated	23.23	gallons
Actual Volume Evacuated	23.5	gallons
E. Installed Well Depth (if known)	N/A	feet
F. Depth of Silt (calculated)	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling	% Recharge:
Date	5/21/2012	5/22/2012	Initial Depth to Water 2.21 feet
Time	10:07 AM	10:02 AM	Recharge Depth to Water 4.35 feet
EH	139	142	2nd water column height 50.8 %
Temperature	19.7	18.5	1st water column height
pH	7.71	7.45	Elevation(Top of Casing) N/A feet
Specific Cond.	268	295	G.W. Elevation= N/A feet
Turbidity	1.68	8.26	G.W.Elevation =Top of Case Elev-Total Depth
Dissolved Oxygen	N/A	N/A	Sampler: Dan Amell
Appearance	clear	clear	Signature: Dan Amell
Weather:	73 F Sun	70 F cloudy	
Observations:			

# Upstate Laboratories, Inc. Ground water Field Log

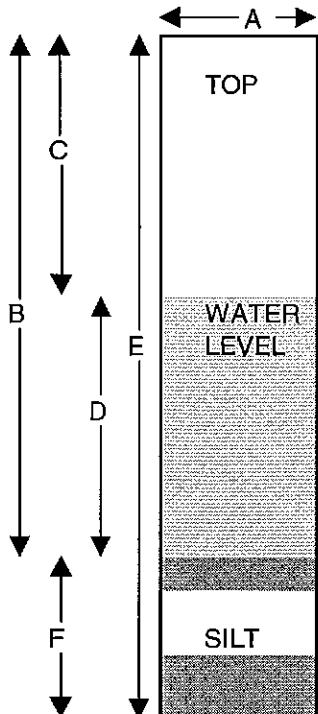
File: TS-30-01

Revised: 2/10/2001

Client: Cortland County  
 Project: Towslee Landfill  
 Well ID.: MW-1A

ULI ID No. (enter by lab)

Condition of Well:	<u>Good</u>	Locked:	<u>No Lock</u>
Method of Evacuation:	<u>Dedicated Bailer</u>	Lock ID:	<u>3900</u>
Method of Sampling:	<u>Dedicated Bailer</u>		



A. Diameter of Well	<u>2"</u>	inches
B. Well Depth Measured	<u>33.7</u>	feet
C. Depth to Water	<u>0</u>	feet
D. Length of Water Column (calculated)	<u>33.7</u>	feet
Conversion Factor	<u>X.16</u>	-----
Well Volume (calculated)	<u>5.39</u>	gallons
No. of Volumes to be Evacuated	<u>X3</u>	-----
Total Volume to be Evacuated	<u>16.18</u>	gallons
Actual Volume Evacuated	<u>7</u>	gallons
E. Installed Well Depth (if known)	<u>N/A</u>	feet
F. Depth of Silt (calculated)	<u>N/A</u>	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	<u>5/21/2012</u>	<u>5/22/2012</u>
Time	<u>1:33 PM</u>	<u>11:10 AM</u>
EH	<u>146</u>	<u>163</u>
Temperature	<u>19</u>	<u>20.3</u>
pH	<u>7.72</u>	<u>6.94</u>
Specific Cond.	<u>374</u>	<u>376</u>
Turbidity	<u>8.32</u>	<u>26.5</u>
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>
Appearance	<u>clear</u>	<u>cloudy</u>
Weather:	<u>63 F rain</u>	<u>70 F cloudy</u>
Observations:	<u></u>	

% Recharge:		
Initial Depth to Water	<u>0</u>	feet
Recharge Depth to Water	<u>0</u>	feet
2nd water column height	<u>100</u>	%
1st water column height		
Elevation(Top of Casing)	<u>N/A</u>	feet
G.W. Elevation=	<u>N/A</u>	feet
G.W. Elevation =Top of Case Elev-Total Depth		
Sampler:	<u>Dan Agnew</u>	
Signature:	<u>John Agnew</u>	

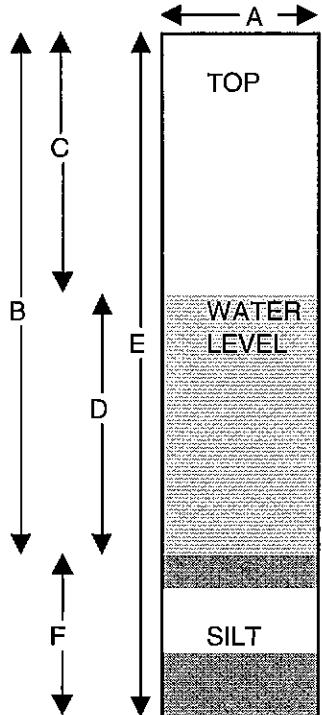
# Upstate Laboratories, Inc. Ground water Field Log

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:	<u>Good</u>	Locked:	<u>No Lock</u>
Method of Evacuation:	<u>Dedicated Bailer</u>	Lock ID:	<u>3900</u>
Method of Sampling:	<u>Dedicated Bailer</u>		



A.	Diameter of Well	<u>2"</u>	inches
B.	Well Depth Measured	<u>55.5</u>	feet
C.	Depth to Water	<u>0</u>	feet
D.	Length of Water Column (calculated)	<u>55.5</u>	feet
	Conversion Factor	<u>X.16</u>	-----
	Well Volume (calculated)	<u>8.88</u>	gallons
	No. of Volumes to be Evacuated	<u>X3</u>	-----
	Total Volume to be Evacuated	<u>26.64</u>	gallons
	Actual Volume Evacuated	<u>27</u>	gallons
E.	Installed Well Depth (if known)	<u>N/A</u>	feet
F.	Depth of Silt (calculated)	<u>N/A</u>	feet

Field Measurements	Initial Evacuation	Final Sampling	% Recharge:
Date	<u>5/21/2012</u>	<u>5/22/2012</u>	Initial Depth to Water <u>0</u> feet
Time	<u>1:35 PM</u>	<u>11:14 AM</u>	Recharge Depth to Water <u>0</u> feet
EH	<u>139</u>	<u>155</u>	2nd water column height <u>100</u> %
Temperature	<u>18.5</u>	<u>21.2</u>	1st water column height
pH	<u>7.82</u>	<u>7.19</u>	Elevation(Top of Casing) <u>N/A</u> feet
Specific Cond.	<u>200</u>	<u>243</u>	G.W. Elevation= <u>N/A</u> feet
Turbidity	<u>1.16</u>	<u>16.1</u>	G.W.Elevation =Top of Case Elev-Total Depth
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>	Sampler: <u>Don Arnell</u>
Appearance	<u>clear</u>	<u>sl cloudy</u>	Signature: <u>Don Arnell</u>
Weather:	<u>63 F cloudy</u>	<u>70 F cloudy</u>	
Observations:		<u>Dupe</u>	

# Upstate Laboratories, Inc. Ground water Field Log

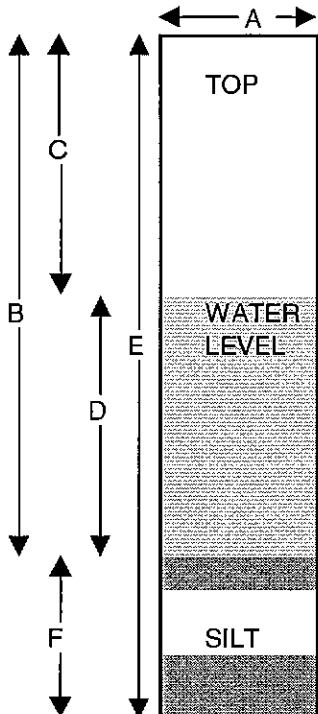
File: TS-30-01

Revised: 2/10/2001

Client: Cortland County  
 Project: Towslee Landfill  
 Well ID.: MW-3A

ULI ID No. (enter by lab)

Condition of Well:	<u>Good</u>	Locked:	<u>No Lock</u>
Method of Evacuation:	<u>Dedicated Bailer</u>	Lock ID:	<u>3900</u>
Method of Sampling:	<u>Dedicated Bailer</u>		



A.	Diameter of Well	<u>2"</u>	inches
B.	Well Depth Measured	<u>22.40</u>	feet
C.	Depth to Water	<u>7.41</u>	feet
D.	Length of Water Column (calculated)	<u>14.99</u>	feet
	Conversion Factor	<u>X.16</u>	-----
	Well Volume (calculated)	<u>2.40</u>	gallons
	No. of Volumes to be Evacuated	<u>X3</u>	-----
	Total Volume to be Evacuated	<u>7.20</u>	gallons
	Actual Volume Evacuated	<u>3.5</u>	gallons
E.	Installed Well Depth (if known)	<u>N/A</u>	feet
F.	Depth of Silt (calculated)	<u>N/A</u>	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	<u>5/21/2012</u>	<u>5/22/2012</u>
Time	<u>11:45 AM</u>	<u>10:54 AM</u>
EH	<u>62</u>	<u>153</u>
Temperature	<u>17.9</u>	<u>20</u>
pH	<u>6.43</u>	<u>7.07</u>
Specific Cond.	<u>318</u>	<u>340</u>
Turbidity	<u>15.6</u>	<u>41.7</u>
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>
Appearance	<u>sl cloudy</u>	<u>cloudy</u>
Weather:	<u>73 F Sun</u>	<u>70 F cloudy</u>
Observations:	<u></u>	

% Recharge:		
Initial Depth to Water	<u>7.41</u>	feet
Recharge Depth to Water	<u>7.84</u>	feet
2nd water column height	<u>94.52</u>	%
1st water column height		
Elevation(Top of Casing)	<u>N/A</u>	feet
G.W. Elevation=	<u>N/A</u>	feet
G.W. Elevation =Top of Case Elev-Total Depth		
Sampler:	<u>Dan Aumell</u>	
Signature:	<u>John Howell</u>	

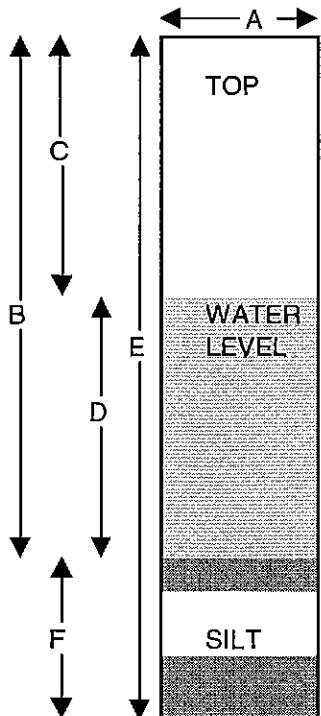
# Upstate Laboratories, Inc. Ground water Field Log

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

Client: Cortland County  
 Project: Towslee Landfill  
 Well ID.: MW-3B

ULI ID No. (enter by lab)

Condition of Well:	<u>Good</u>	Locked:	<u>No Lock</u>
Method of Evacuation:	<u>Dedicated Bailer</u>	Lock ID:	<u>3900</u>
Method of Sampling:	<u>Dedicated Bailer</u>		



A. Diameter of Well	<u>2"</u>	inches
B. Well Depth Measured	<u>44.4</u>	feet
C. Depth to Water	<u>14.06</u>	feet
D. Length of Water Column (calculated)	<u>30.34</u>	feet
Conversion Factor	<u>X.16</u>	-----
Well Volume (calculated)	<u>4.85</u>	gallons
No. of Volumes to be Evacuated	<u>X3</u>	-----
Total Volume to be Evacuated	<u>14.56</u>	gallons
Actual Volume Evacuated	<u>7.5</u>	gallons
E. Installed Well Depth (if known)	<u>N/A</u>	feet
F. Depth of Silt (calculated)	<u>N/A</u>	feet

Field Measurements	Initial Evacuation	Final Sampling	% Recharge:
Date	<u>5/21/2012</u>	<u>5/22/2012</u>	Initial Depth to Water <u>14.06</u> feet
Time	<u>11:47 AM</u>	<u>10:57 AM</u>	Recharge Depth to Water <u>13.93</u> feet
EH	<u>75</u>	<u>170</u>	2nd water column height <u>100.93</u> %
Temperature	<u>14.5</u>	<u>18.3</u>	1st water column height
pH	<u>6.41</u>	<u>6.61</u>	Elevation(Top of Casing) <u>N/A</u> feet
Specific Cond.	<u>478</u>	<u>479</u>	G.W. Elevation= <u>N/A</u> feet
Turbidity	<u>2.88</u>	<u>2.51</u>	G.W. Elevation =Top of Case Elev-Total Depth
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>	Sampler: <u>Dan Aymer</u>
Appearance	<u>clear</u>	<u>clear</u>	Signature: <u>John Aymer</u>
Weather:	<u>73 F Sun</u>	<u>70 F cloudy</u>	
Observations:			

## Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01

Revised: 2/10/2001

Client: Cortland County

Project: Towslee Landfill

Well ID.: MW-4A

ULI ID No. (enter by lab)

Condition of Well:

Good

Locked:

No Lock

Method of Evacuation:

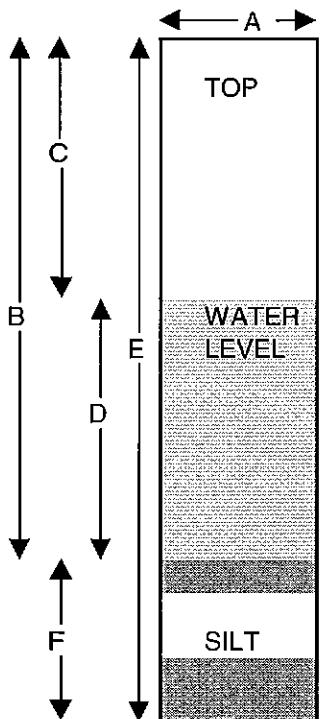
Dedicated Bailer

Lock ID:

3900

Method of Sampling:

Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	32.40	feet
C.	Depth to Water	7.45	feet
D.	Length of Water Column (calculated)	24.95	feet
	Conversion Factor	X.16	-----
	Well Volume (calculated)	3.99	gallons
	No. of Volumes to be Evacuated	X3	-----
	Total Volume to be Evacuated	11.98	gallons
	Actual Volume Evacuated	6	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated)	N/A	feet

Field Measurements

Initial  
EvacuationFinal  
Sampling

Date

5/21/2012

5/22/2012

Time

11:33 AM

10:31 AM

EH

170

160

Temperature

15.5

15.8

pH

6.78

6.83

Specific Cond.

655

714

Turbidity

4.93

7.45

Dissolved Oxygen

N/A

N/A

Appearance

clear

clear

Weather: 73 F Sun

70 F cloudy

Observations:

% Recharge:

Initial Depth to Water 7.45 feet

Recharge Depth to Water 7.43 feet

2nd water column height 100.27 %

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:

Dan Aunell

Signature:

Dan Aunell

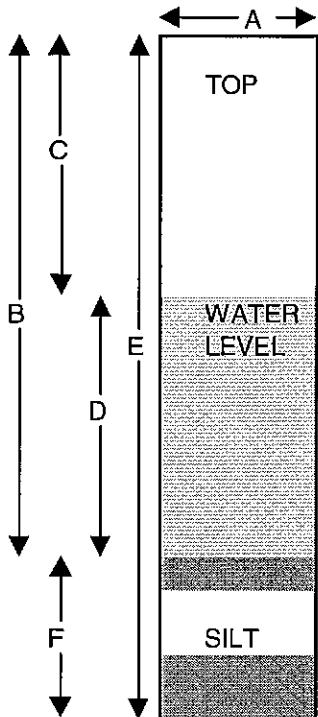
# Upstate Laboratories, Inc. Ground water Field Log

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

Client: Cortland County  
 Project: Towslee Landfill  
 Well ID.: MW-5A

ULI ID No. (enter by lab)

Condition of Well: Good Locked: No Lock  
 Method of Evacuation: Dedicated Bailer Lock ID: 3900  
 Method of Sampling: Dedicated Bailer



A.	Diameter of Well	<u>2"</u>	inches
B.	Well Depth Measured	<u>32.30</u>	feet
C.	Depth to Water	<u>6.31</u>	feet
D.	Length of Water Column (calculated)	<u></u>	feet
	Conversion Factor	<u>X.16</u>	-----
	Well Volume (calculated)	<u></u>	gallons
	No. of Volumes to be Evacuated	<u>X3</u>	-----
	Total Volume to be Evacuated	<u></u>	gallons
	Actual Volume Evacuated	<u></u>	gallons
E.	Installed Well Depth (if known)	<u>N/A</u>	feet
F.	Depth of Silt (calculated)	<u>N/A</u>	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	<u>5/21/2012</u>	
Time	<u>1:27 PM</u>	
EH		
Temperature		
pH		
Specific Cond.		
Turbidity		
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>
Appearance		
Weather:	<u>73 F cloudy</u>	
Observations:	<u>Can't be sampled, well pipe bent.</u>	

% Recharge:	
Initial Depth to Water	<u></u> feet
Recharge Depth to Water	<u></u> feet
2nd water column height	<u></u> %
1st water column height	<u></u>
Elevation(Top of Casing)	<u>N/A</u> feet
G.W. Elevation=	<u>N/A</u> feet
G.W.Elevation =Top of Case Elev-Total Depth	
Sampler:	<u>Don Auneff</u>
Signature:	<u>Don Auneff</u>

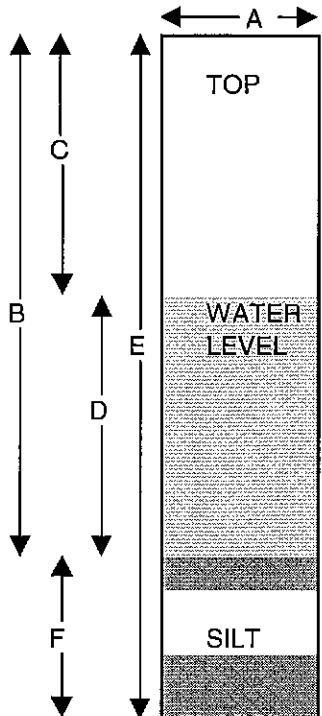
# Upstate Laboratories, Inc. Ground water Field Log

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

Client: Cortland County  
 Project: Towslee Landfill  
 Well ID.: MW-6A

ULI ID No. (enter by lab)

Condition of Well:	<u>Good</u>	Locked:	<u>No Lock</u>
Method of Evacuation:	<u>Dedicated Bailer</u>	Lock ID:	<u>3900</u>
Method of Sampling:	<u>Dedicated Bailer</u>		



A.	Diameter of Well	<u>2"</u>	inches
B.	Well Depth Measured	<u>19.10</u>	feet
C.	Depth to Water	<u>12.3</u>	feet
D.	Length of Water Column (calculated)	<u>6.8</u>	feet
	Conversion Factor	<u>X.16</u>	-----
	Well Volume (calculated)	<u>1.09</u>	gallons
	No. of Volumes to be Evacuated	<u>X3</u>	-----
	Total Volume to be Evacuated	<u>3.26</u>	gallons
	Actual Volume Evacuated	<u>5</u>	gallons
E.	Installed Well Depth (if known)	<u>N/A</u>	feet
F.	Depth of Silt (calculated)	<u>N/A</u>	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	<u>5/21/2012</u>	<u>5/22/2012</u>
Time	<u>9:42 AM</u>	<u>9:39 AM</u>
EH	<u>144</u>	<u>133</u>
Temperature	<u>22.1</u>	<u>18.9</u>
pH	<u>6.59</u>	<u>7.35</u>
Specific Cond.	<u>427</u>	<u>408</u>
Turbidity	<u>7.42</u>	<u>241</u>
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>
Appearance	<u>clear</u>	<u>very cloudy</u>
Weather:	<u>72 F Sun</u>	<u>70 F cloudy</u>
Observations:	<u>D-metals taken</u>	

% Recharge:		
Initial Depth to Water	<u>12.3</u>	feet
Recharge Depth to Water	<u>12.54</u>	feet
2nd water column height	<u>98.09</u>	%
1st water column height		
Elevation(Top of Casing)	<u>N/A</u>	feet
G.W. Elevation=	<u>N/A</u>	feet
G.W. Elevation =Top of Case Elev-Total Depth		
Sampler:	<u>Don Amy</u>	
Signature:	<u>Don Amy</u>	

# Upstate Laboratories, Inc. Ground water Field Log

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

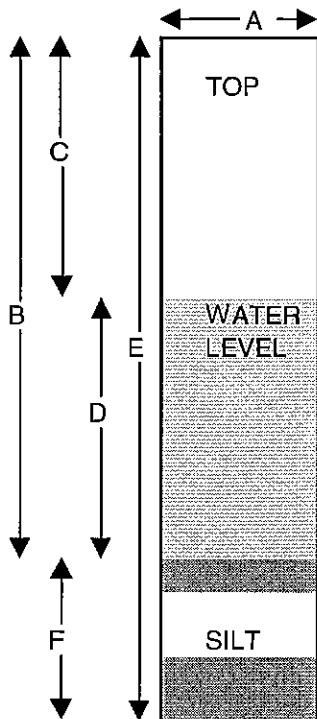
Client: Cortland County  
 Project: Towslee Landfill  
 Well ID.: MW-6B

ULI ID No. (enter by lab)

Condition of Well: Good Locked: No Lock

Method of Evacuation: Dedicated Bailer Lock ID: 3900

Method of Sampling: Dedicated Bailer



A. Diameter of Well	<u>2"</u>	inches
B. Well Depth Measured	<u>40.75</u>	feet
C. Depth to Water	<u>12.39</u>	feet
D. Length of Water Column (calculated)	<u>28.36</u>	feet
Conversion Factor	<u>X.16</u>	-----
Well Volume (calculated)	<u>4.54</u>	gallons
No. of Volumes to be Evacuated	<u>X3</u>	-----
Total Volume to be Evacuated	<u>13.61</u>	gallons
Actual Volume Evacuated	<u>6</u>	gallons
E. Installed Well Depth (if known)	<u>N/A</u>	feet
F. Depth of Silt (calculated)	<u>N/A</u>	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	<u>5/21/2012</u>	<u>5/22/2012</u>
Time	<u>9:46 AM</u>	<u>9:42 AM</u>
EH	<u>141</u>	<u>139</u>
Temperature	<u>19.4</u>	<u>17.7</u>
pH	<u>6.7</u>	<u>7.29</u>
Specific Cond.	<u>317</u>	<u>363</u>
Turbidity	<u>3.24</u>	<u>17.1</u>
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>
Appearance	<u>clear</u>	<u>sl cloudy</u>
Weather:	<u>72 F Sun</u>	<u>70 F cloudy</u>
Observations:	<u></u>	

% Recharge:	
Initial Depth to Water	<u>12.39</u> feet
Recharge Depth to Water	<u>12.63</u> feet
2nd water column height	<u>98.1</u> %
1st water column height	
Elevation(Top of Casing)	<u>N/A</u> feet
G.W. Elevation=	<u>N/A</u> feet
G.W.Elevation =Top of Case Elev-Total Depth	

Sampler: Dan Augell  
 Signature: Dan Augell

# Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01

Revised: 2/10/2001

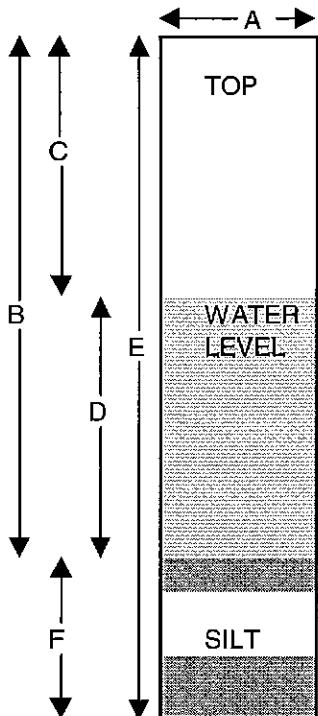
Client: Cortland County  
 Project: Towslee Landfill  
 Well ID.: MW-7A

ULI ID No. (enter by lab)

Condition of Well: Good Locked: Yes (well lid broken)

Method of Evacuation: Dedicated Bailer Lock ID: 3900

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	<u>2"</u>	inches
B.	Well Depth Measured	<u>22.20</u>	feet
C.	Depth to Water	<u>3.93</u>	feet
D.	Length of Water Column (calculated)	<u>18.27</u>	feet
	Conversion Factor	<u>X.16</u>	-----
	Well Volume (calculated)	<u>2.92</u>	gallons
	No. of Volumes to be Evacuated	<u>X3</u>	-----
	Total Volume to be Evacuated	<u>8.77</u>	gallons
	Actual Volume Evacuated	<u>9</u>	gallons
E.	Installed Well Depth (if known)	<u>N/A</u>	feet
F.	Depth of Silt (calculated)	<u>N/A</u>	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	<u>5/21/2012</u>	<u>5/22/2012</u>
Time	<u>2:27 PM</u>	<u>11:32 AM</u>
EH	<u>185</u>	<u>184</u>
Temperature	<u>15.8</u>	<u>15.8</u>
pH	<u>6.18</u>	<u>6.36</u>
Specific Cond.	<u>1214</u>	<u>1085</u>
Turbidity	<u>3.91</u>	<u>&gt;1000</u>
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>
Appearance	<u>clear</u>	<u>extremely cloudy gray</u>
Weather:	<u>66 F light rain</u>	<u>70 F cloudy</u>
Observations:	<u>D-Metals taken</u>	

% Recharge:		
Initial Depth to Water	<u>3.93</u>	feet
Recharge Depth to Water	<u>4.07</u>	feet
2nd water column height	<u>96.56</u>	%
1st water column height		
Elevation(Top of Casing)	<u>N/A</u>	feet
G.W. Elevation=	<u>N/A</u>	feet
G.W.Elevation =Top of Case Elev-Total Depth		
Sampler:	<u>Don Aune II</u>	
Signature:	<u>Don Aune II</u>	

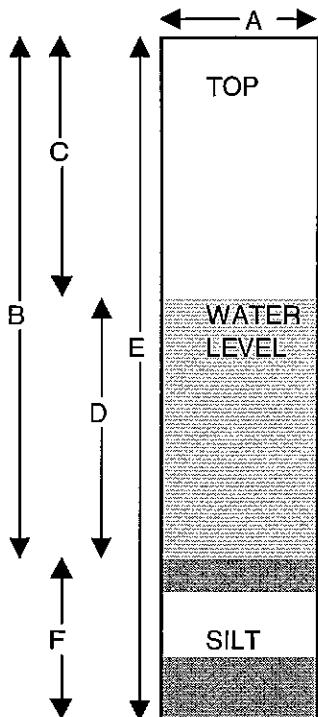
## Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01

Revised: 2/10/2001

Client: Cortland County  
 Project: Towslee Landfill  
 Well ID.: MW-2A

ULI ID No. (enter by lab)

Condition of Well: Good Locked: Lock brokenMethod of Evacuation: Dedicated Bailer Lock ID: 3900Method of Sampling: Dedicated Bailer

A.	Diameter of Well	<u>2"</u>	inches
B.	Well Depth Measured	<u>12.8</u>	feet
C.	Depth to Water	<u>5.7</u>	feet
D.	Length of Water Column (calculated)	<u>7.1</u>	feet
	Conversion Factor	<u>X.16</u>	-----
	Well Volume (calculated)	<u>1.14</u>	gallons
	No. of Volumes to be Evacuated	<u>X3</u>	-----
	Total Volume to be Evacuated	<u>3.41</u>	gallons
	Actual Volume Evacuated	<u>3</u>	gallons
E.	Installed Well Depth (if known)	<u>N/A</u>	feet
F.	Depth of Silt (calculated)	<u>N/A</u>	feet

Field Measurements	Initial Evacuation	Final Sampling	% Recharge:
Date	<u>(22)</u> <u>5/21/2012</u>	<u>(23)</u> <u>5/22/2012</u>	Initial Depth to Water <u>5.7</u> feet
Time	<u>12:49 AM</u>	<u>10:00 AM</u>	Recharge Depth to Water <u>5.73</u> feet
EH	<u>12</u>	<u>133</u>	2nd water column height <u>99.48</u> %
Temperature	<u>19.5</u>	<u>18.9</u>	1st water column height
pH	<u>6.71</u>	<u>6.72</u>	Elevation(Top of Casing) <u>N/A</u> feet
Specific Cond.	<u>486</u>	<u>515</u>	G.W. Elevation= <u>N/A</u> feet
Turbidity	<u>25.1</u>	<u>27.5</u>	G.W.Elevation =Top of Case Elev-Total Depth
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>	Sampler: <u>Doug Ayers</u>
Appearance	<u>cloudy</u>	<u>cloudy</u>	Observations: <u>Wells</u>
Weather:	<u>70 F cloudy</u>	<u>60 F cloudy</u>	
Observations:			

## Upstate Laboratories, Inc.

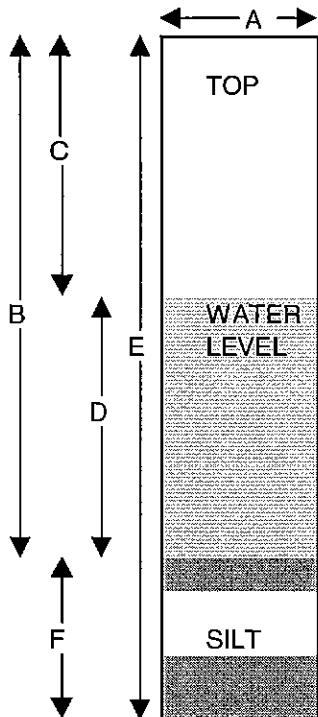
## Ground water Field Log

File: TS-30-01

Revised: 2/10/2001

Client: Cortland County  
 Project: Towslee Landfill  
 Well ID.: MW-2B

ULI ID No. (enter by lab)

Condition of Well: Good Locked: Yes (well lid broken)Method of Evacuation: Dedicated Bailer Lock ID: 3900Method of Sampling: Dedicated Bailer

A.	Diameter of Well	<u>2"</u>	inches
B.	Well Depth Measured	<u>33.5</u>	feet
C.	Depth to Water	<u>6.58</u>	feet
D.	Length of Water Column (calculated)	<u>26.92</u>	feet
	Conversion Factor	<u>X.16</u>	-----
	Well Volume (calculated)	<u>4.31</u>	gallons
	No. of Volumes to be Evacuated	<u>X3</u>	-----
	Total Volume to be Evacuated	<u>12.92</u>	gallons
	Actual Volume Evacuated	<u>7</u>	gallons
E.	Installed Well Depth (if known)	<u>N/A</u>	feet
F.	Depth of Silt (calculated)	<u>N/A</u>	feet

Field Measurements	Initial Evacuation	Final Sampling
Date	<u>5/21/2012</u>	<u>5/22/2012</u>
Time	<u>12:46 PM</u>	<u>10:03 AM</u>
EH	<u>23</u>	<u>161</u>
Temperature	<u>16</u>	<u>18.2</u>
pH	<u>6.39</u>	<u>6.12</u>
Specific Cond.	<u>1372</u>	<u>1378</u>
Turbidity	<u>5.27</u>	<u>5.44</u>
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>
Appearance	<u>clear</u>	<u>clear</u>
Weather:	<u>70 F cloudy</u>	<u>60 F cloudy</u>
Observations:		

% Recharge:		
Initial Depth to Water	<u>6.58</u>	feet
Recharge Depth to Water	<u>6.58</u>	feet
2nd water column height	<u>96.06</u>	%
1st water column height		
Elevation(Top of Casing)	<u>N/A</u>	feet
G.W. Elevation=	<u>N/A</u>	feet
G.W.Elevation =Top of Case Elev-Total Depth		
Sampler:	<u>Don Auneff</u>	
Signature:	<u>Don Auneff</u>	

## Upstate Laboratories, Inc.

## Tap Water / Surface Water / Wastewater Field Log

Client: Cortland County

Sampler (print): Dan Aumell

Project: West Side Extension

Signature:

Date: 5/30/2012

<b>Location</b>	PLT-1	TIME SAMPLED	1:19 PM	ULI ID. NO.
EH	-17 MV	WEATHER CONDITION:	78 F sun	
TEMPERATURE	19.5 c	APPEARANCE / OBSERVATIONS	Very cloudy Brown	
PH	6.1 STD.UNITS	DO	N/A	MG/L
SPEC. CON.	5428 UMHOS/CM	STAFF GAUGE	N/A	
TURB	206.00 NTU			
<b>Location</b>	PLT-2	TIME SAMPLED	1:01 PM	ULI ID. NO.
EH	-4 MV	WEATHER CONDITION:	78 F sun	
TEMPERATURE	17.3 c	APPEARANCE / OBSERVATIONS	cloudy	
PH	6.34 STD.UNITS	DO	N/A	MG/L
SPEC. CON.	1980 UMHOS/CM	STAFF GAUGE	N/A	
TURB	25.9 NTU			
<b>Location</b>	PGW	TIME SAMPLED	1:33 PM	ULI ID. NO.
EH	49 MV	WEATHER CONDITION:	78 F sun	
TEMPERATURE	19.6 c	APPEARANCE / OBSERVATIONS	Clear	
PH	7.04 STD.UNITS	DO	MG/L	
SPEC. CON.	1111 UMHOS/CM	STAFF GAUGE		
TURB	7.98 NTU			
<b>Location</b>	Scale House	TIME SAMPLED	2:00 PM	ULI ID. NO.
EH	96 MV	WEATHER CONDITION:	78 F sun	
TEMPERATURE	19.0 c	APPEARANCE / OBSERVATIONS	Clear	
PH	7.96 STD.UNITS	DO	N/A	MG/L
SPEC. CON.	359 UMHOS/CM	STAFF GAUGE	N/A	
TURB	3.211 NTU			
<b>Location</b>		TIME SAMPLED	ULI ID. NO.	
EH	MV	WEATHER CONDITION:		
TEMPERATURE	c	APPEARANCE / OBSERVATIONS		
PH	STD.UNITS	DO	MG/L	
SPEC. CON.	UMHOS/CM	STAFF GAUGE		
TURB	NTU			
<b>Location</b>		TIME SAMPLED	ULI ID. NO.	
EH	MV	WEATHER CONDITION:		
TEMPERATURE	c	APPEARANCE / OBSERVATIONS		
PH	STD.UNITS	DO	N/A	MG/L
SPEC. CON.	UMHOS/CM	STAFF GAUGE	N/A	
TURB	NTU			

Cortland County-West Side Extension

GAS MONITORING

Date:

LOCATION	%O2	LEL (ppm)
AA-1	19.9	0
AA-2	19.7	0
AA-3	19.8	0
AA-4	19.8	0
AA-5	19.7	0
AA-6A	19.8	0
AA-7A	19.8	0
AA-8	19.8	0
AA-9	19.9	0
AA-10	20.1	0
AA-11	20.0	0
AA-12	19.8	0
AA-13	19.8	0
AA-14	19.8	0
AA-15	19.6	0
AA-16	20.1	0
AA-17	19.8	0
AA-6B	19.8	0
AA-7B	19.8	0
GW-1	19.7	0
GFD-1	19.8	0
GFD-2	19.7	0
GFLD-1	19.8	0
GFLD-2	19.7	0
GFLD-3	19.8	0

Instrument used: GEM 2000

Measured By:



*Upstate Laboratories, Inc.*

6034 Corporate Drive E. Syracuse New York 13057

Fax (315) 437-1300

### Chain of Custody Record

# Upstate Laboratories, Inc.

## Chain of Custody Record

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

Project #/ Project Name  
Location (City/State) Address

CORTLAND COUNTY  
Client Contact:

PATRICK REIDY

Phone #  
607-753-0851

Date

Time

Matrix

Grab or  
Comp

ULI Internal Use Only

Number of Contaminants

1

2

3

4

5

6

7

8

9

10

ULI Computer Input Form

1993 PART 360 ROUTINE

ASP-A

Remarks



# Appendix B

## Historical Analytical Data

Cortland County Towslee Landfill

## Historical Data Page Index

### Cortland County Towslee Landfill

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

# Historical Water Quality Database - Towslee Landfill

## Field and Inorganic Parameters

### Well CD-1 - Bedrock

Analyte		Temp (°C)	pH	SU	(mV)	Eh	(µS/cm)	Sp. Conduct	(SU)	Color	(NTU)	Turbidity	(mg/l)	ALK as CaCO <sub>3</sub>	(mg/l)	HARD as CaCO <sub>3</sub>	(mg/l)	TDS	(mg/l)	Chloride	(mg/l)	Sulfate	(mg/l)	Bromide	(mg/l)	NO <sub>3</sub> (as N)	(mg/l)	NH <sub>4</sub> (as N)	(mg/l)	TKN (as N)	(mg/l)	COD	(mg/l)	BOD	(mg/l)	TOC	(mg/l)	Phenolics, Tot	(mg/l)	Cyanide	(mg/l)
Units																																									
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	--	2	--	10	2 *	--	--	--	--	--	--	--	--	--	--	--	--	--	0.001	0.2	--									
9/20/11	19.1	152	8.2	303	--	9.58	130	150	220	1.41	10.8	<8	0.054	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--										
12/13/11	7.7	164	7.91	282	6	10.2	140 J	145	210	6.88 J	16.9	<0.8	0.068	<0.5 J	<0.5	<20	<4	<3	<0.005	<0.01 J	--	--	--	--	--	--	--	--	--	--	--										
3/20/12	18.2	179	7.89	274	6	46.2	130 J	144	180	<1 J	15.6	<0.8 J	0.055	<0.5	<0.5 J	<20	<6 J	<3	<0.005 J	<0.01	--	--	--	--	--	--	--	--	--	--	--										
5/22/12	19	137	7.53	257	--	40.9	120	146	380	1.2	12.2	<8	0.068	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--										

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

Analyte		Temp (°C)	pH	Sp. Conduct (µS/cm)	Color (SU)	Turbidity (NTU)	ALK as CaCO <sub>3</sub> (mg/l)	HARD as CaCO <sub>3</sub> (mg/l)	TDS (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Bromide (mg/l)	NO <sub>3</sub> (as N) (mg/l)	NH <sub>4</sub> (as N) (mg/l)	TKN (as N) (mg/l)	COD (mg/l)	BOD (mg/l)	TOC (mg/l)	Phenolics, Tot (mg/l)	Cyanide (mg/l)
Units		(mV)	Eh	SU																
Water Quality Standard		6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2 *	--	--	--	--	0.001	0.2	
Aug-97	--	--	--	<5	--	134	160	163	<2	10.8	1	<0.1	0.04	0.2	<15	<2	2.1	<1	--	
Oct-97	--	--	--	--	20	--	132	160	150	2.5	15.3	1.2	<0.1	0.11	0.21	<15	<2	<1	<1	--
9/20/11	20.3	146	8.29	343	--	53	120	135	180	2.2	17.3	<8	0.054	<0.5	<0.5	<20	5	<3	<0.005	--
12/13/11	9.6	164	7.79	312	6	25.3	150 J	155	170	3.67 J	18.4	<0.8	0.058	<0.5 J	<0.5	<20	<4	<3	<0.005	<0.01 J
3/20/12	17.7	180	7.98	299	<5	20.3	140 J	164	150	1.43 J	15.8	<0.8 J	0.079	<0.5	<0.5 J	<20	<4 J	<3	<0.005 J	<0.01
5/22/12	185	142	7.45	295	--	8.26	140	155	310	1.46	15.9	<0.8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--

# Historical Water Quality Database - Towslee Landfill

## Field and Inorganic Parameters

### Well MW-1A - Overburden

Analyte	Temp (°C)	Eh (mV)	pH	SU	Sp. Conduct (µS/cm)	Color (SU)	Turbidity (NTU)	ALK as CaCO <sub>3</sub> (mg/l)	HARD as CaCO <sub>3</sub> (mg/l)	TDS (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Bromide (mg/l)	NO <sub>3</sub> (As N) (mg/l)	NH <sub>4</sub> (As N) (mg/l)	TKN (As N) (mg/l)	COD (mg/l)	BOD (mg/l)	TOC (mg/l)	Phenolics, Tot (mg/l)	Cyanide (mg/l)
Units																					
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2 *	--	--	--	--	0.001	0.2	
Aug-97	--	--	--	--	5	--	160	4000	494	152	20.6	1.2	<0.1	6	18	305	5	4.2	0.003	<0.01	
Oct-97	--	--	--	--	20	--	145	240	214	46	14.6	0.8	<0.1	2.6	3.8	64	<2	1.6	0.0015	<0.01	
3/22/06	8.5	700	7.8	306	--	660	127	167	340	21.3	27.3	<0.1	<0.1	0.276	23.3	<10	<3	4.76	<0.005	--	
5/31/06	12.8	105	7.7	355	--	73	139	140	213	22.2	12.3	<0.1	0.217	<0.02	0.529 H	<10	<3	2.61	<0.005	--	
8/9/06	19.5	190	7.52	353	<5	131	122	148	236	34.2	16.5	<0.1	<0.1	0.161	0.366	<10	<3	<2	<0.005	<0.01	
10/10/06	15.9	170	7.69	369	--	29	132	148	229	26.7	14.9	0.117	<0.1	<0.1	<0.2	<10	<3	<2	<0.005	--	
3/20/07	9.3	59	8.29	204	--	55.6	140	134	127	28.7	8.79	<0.2	<0.2	<0.5	2.2	<20	<4	<3	<0.005	--	
4/26/07	6.7	-107	7.93	221	--	34.8	120	153	208	27	14.2	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	0.005	--	
7/31/07	21.6	-111	7.83	241	--	24.3	120	148	250	27	48.6	<0.2	<0.2	<0.5	5.66	<20	<4	<3	<0.005	--	
10/10/07	16	-68	8.01	658	30	28.1	130	146	204	27.9	11.2	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<0.01	
4/16/08	11.2	-57	7.85	351	--	16	120	151	195	28	16.3	<0.2	<0.2	<0.5	<0.5	<20	9	<3	<0.005	--	
7/23/08	21.7	-62	8.07	344	--	11.6	120	159	116	25.9	<5	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	
10/24/08	10.6	-69	8.23	334	--	24.6	120	165	188 H	29.7	11.6	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	
3/12/09	3.6	-21	7.4	344	--	16.7	130	161	256	30.4	14	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	
6/17/09	19.6	143	8.09	199	18	23.4	100 H	163	180	30.7	14.3	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<0.01	
9/30/09	12.6	162	7.67	201	--	30.6	120 H	158	210	29.5	12.7	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	
12/1/09	6.6	107	8.35	862	--	47.4	120	161	190	30	6.3	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	
4/27/10	8.2	180	7.28	1580	--	22.7	140	161	270	31.7	9.43	<0.8	0.0721	<0.5	<0.5	<20	<4	<3	<0.005	--	
7/20/10	18.9	151	7.73	263	35	18.6	120	167	320	33	17.9	<1.6	0.066	<0.5	<0.5	<20	<4	<3	<0.005	<0.01	
10/26/10	15.6	110	7.95	345	--	37.7	120	169	170	31.4	14.8	<0.8	0.102	<0.5	0.897	<20	<4	<3	<0.005	--	
3/22/11	9.8	228	7.52	347	--	24.2	130	159	150	32	13.6	<8	0.102	<0.5	<0.5	<20	<4	<3	<0.005	--	
5/24/11	19.2	109	8.26	364	--	45.2	120	164	460	30.5	10.2	<0.8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--	
9/20/11	17.9	160	7.96	372	--	20.89	130	172	220	32.1	14.1	<8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--	
12/14/11	6.6	147	8.62	375	80	24	150 J	177	210 R	28.5 J	15.8	<0.8	0.075	<0.5 J	<0.5	<20	<4	<3	<0.005	<0.01 J	
3/21/12	19.8	116	7.91	401	6	572	130 J	225	190	33.9 J	11.4	<8 J	<0.05	<0.5 J	0.994 J	<20	<4 R	<3	<0.005 J	<0.01	
5/22/12	20.3	163	6.94	376	--	26.5	140	175	450	33.1	12.2	<8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--	

# Historical Water Quality Database - Towslee Landfill

## Field and Inorganic Parameters

### Well MW-1B - Bedrock

Analyte	Temp	Eh	pH	Sp. Conduct																																	
Units	(°C)	(mV)	SU	(µS/cm)	(SU)	Color	(NTU)	Turbidity	(mg/l)	ALK as CaCO <sub>3</sub>	(mg/l)	HARD as CaCO <sub>3</sub>	(mg/l)	TDS	(mg/l)	Chloride	(mg/l)	Sulfate	(mg/l)	Bromide	(mg/l)	NO <sub>3</sub> (As N)	(mg/l)	NH <sub>4</sub> (As N)	(mg/l)	TKN (As N)	(mg/l)	COD	(mg/l)	BOD	(mg/l)	TOC	(mg/l)	Phenolics, Tot	(mg/l)	Cyanide	(mg/l)
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2 *	--	--	--	--	--	--	--	--	0.001	0.2	--	--	--	--	--	--	--	--					
Aug-97	--	--	--	--	<5	--	94.8	88	143	<2	5.2	<0.5	0.2	<0.02	<0.2	<15	<2	9.3	<0.001	--	--	--	--	--	--	--	--	--	--	--	--						
Oct-97	--	--	--	--	<5	--	93.6	140	86	<2	<5	<0.5	0.1	0.04	<0.2	<15	<2	<1	<0.001	--	--	--	--	--	--	--	--	--	--	--	--						
3/22/06	5	385	7.7	157	--	187	92	97.6	120	2.55	4.72	<0.1	<0.1	0.0938	0.54	<10	<3	5.41	<0.005	--	--	--	--	--	--	--	--	--	--	--	--						
5/31/06	11.4	45	7.8	257	--	45	94	81.9	111	2.28	5.51	<0.1	<0.1	<0.02	0.755 H	<10	<3	2.34	<0.005	--	--	--	--	--	--	--	--	--	--	--	--						
8/9/06	16.4	155	7.69	244	<5	70	91	89	142	3.47	5.33	<0.1	<0.1	<0.02	0.497	<10	<3	<2	<0.005	<0.01	--	--	--	--	--	--	--	--	--	--	--	--					
10/10/06	15.8	115	7.9	200	--	15.6	89	82	120	0.611	3.76	<0.1	<0.1	<0.1	<0.2	<10	<3	<2	<0.005	--	--	--	--	--	--	--	--	--	--	--	--						
3/20/07	9.6	84	8.47	156	--	67.4	99	83.6	62	3.24	7.09	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--						
4/26/07	7.2	-122	8.24	141	--	9.62	96	105	162	4.45	6.31	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	0.006	--	--	--	--	--	--	--	--	--	--	--	--						
7/31/07	21.5	-143	8.03	1241	--	10.2	100	104	130	3.16	28.8	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--						
10/10/07	16.3	-80	8.28	943	30	22.8	100	90.8	104	6.44	5.26	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<0.01	--	--	--	--	--	--	--	--	--	--	--	--					
2/1/08	1.7	196	8.66	1075	7	35.8	100	89.3	152	3.15	<5	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<10	--	--	--	--	--	--	--	--	--	--	--	--					
4/16/08	10.2	-78	8.34	245	--	14.6	100	103	130	5.95	9.42	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--					
7/23/08	20.9	-78	8.33	223	--	12.3	100	107	80	5.61	<5	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--					
10/24/08	11.8	-78	8.38	229	--	6.33	99	105	140	6.03	<5	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--					
3/12/09	2.7	-44	7.8	205	--	2.47	92 H	97.1	160	2.86 H	6.37	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--					
6/17/09	18.7	139	8.13	124	9	8.2	100	111	110	4.74	5.19	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--				
9/30/09	12.1	155	7.76	1145	--	12.2	98	108	88	6.86	10.4	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--					
12/1/09	7.5	114	8.23	681	--	16.4	86	206	110	4.71	18.3	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--					
4/27/10	7.9	173	7.4	975	--	10.8	100	92.9	170	3.54	<5	<0.4	0.0512	<0.5	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--				
7/20/10	18.2	167	7.99	1221	15	17	91	106	130	3.63	7.05	<0.8	0.063	<0.5	<0.5	<20	<4	<3	<0.005	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--				
10/26/10	15.2	104	8.11	228	--	8.46	90	104	200	6.11	<5	<0.8	<0.05	<0.5	0.924	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--					
3/22/11	7.6	225	7.87	234	--	14.1	100	108	80	4.07	<5	<0.8	0.095	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--					
5/24/11	19.7	100	8.3	206	--	1.08	93	87.4	180	1.7	5.6	<0.8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--					
9/20/11	17.7	157	8.13	215	--	5.69	100	115	140	3.4	<5	<0.8	<0.05	<0.5	<0.5	<20	<4	<3	<0.05	--	--	--	--	--	--	--	--	--	--	--	--	--					
12/14/11	9.1	136	8.56	232	11	22.73	120 J	108	130	1.69 J	7.9	<0.8	0.054	<0.5 J	<0.5	<20	<4	<3	<0.005	<0.01 J	--	--	--	--	--	--	--	--	--	--	--	--	--				
3/21/12	22.8	115	7.93	279	<5	9.46	110 J	124	170	6.68 J	5.8	<0.8 J	<0.05	<0.5	<0.5 J	<20	<4 J	<3	<0.005 J	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--				
5/22/12	21.2	155	7.19	243	--	16.1	100	111	340	2.47	<5	<0.8	0.075	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--					

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

Analyte	Temp	Eh		Sp. Conduct		Turbidity		ALK as CaCO <sub>3</sub>	HARD as CaCO <sub>3</sub>	TDS	Chloride	Sulfate	Bromide	NO <sub>3</sub> (As N)	TKN (As N)	COD	BOD	TOC	Phenolics, Tot	Cyanide	
Units	(°C)	(mV)	SU	pH	(μS/cm)	(SU)	(NTU)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2 *	--	--	--	--	0.001	0.2	
Aug-97	--	--	--	--	30	--	702	1300	1180	156	<5	0.8	<0.1	23	31.5	127	6	42.5	0.0071	<0.01	
Oct-97	--	--	--	--	60	--	784	720	986	149	<5	<0.5	0.14	9.1	21.2	136	3	24.1	0.0066	<0.01	
3/22/06	4.4	140	6.4	621	--	18.6	330	241	381	23.3	4.22	0.189	0.228	10.6	10.6	< 10	16	10.1	< 0.005	--	
5/31/06	11.6	-5	6.4	767	--	18.3	355	260	397	25.7	5.5	0.18	<0.1	18.4	14 H	13.8	4.5	7.18	0.008	--	
8/9/06	17.2	120	6.15	784	33	195	384	265	491	23.5	3.43	0.237	<0.1	16	16.5	27	3.4	5.67	<0.005	<0.01	
10/10/06	14.2	90	6.41	1100	--	27	423	301	487	25.7	3.18	0.261	<0.1	15.1	15	15.6	<3	5.68	<0.005	--	
3/20/07	9.2	136	7.31	364	--	48.9	380	225	262	21.2	<5	<0.2	<0.2	10.2	132	<20	6	6.7	<0.005	--	
4/26/07	7.7	-62	7.14	450	--	30.7	320	262	355	14.7	<5	<0.2	<0.2	9.89	12.5	<20	7	4.8	0.01	--	
7/31/07	18	-81	7.41	395	--	15	420	275	395	24.4	<10	<2	<0.2	14.1	16.1	46	7	7.3	<0.005	--	
10/10/07	14.6	-25	7.12	574	210	5.07	290	165	284	10.6	9.93	<2	<0.2	13.5	12.6	22	<4	6.3	<0.005	<0.01	
2/1/08	3.1	42	7.94	617	40	7.83	360	246	410	21	<10	<2	<0.2	8.78	10.7	23	<4	21.8	<0.005	<10	
4/16/08	11.1	-48	7.81	424	--	26.8	290	203	357	13.5	<5	<200	<0.2	8.2	11.2	21	5	5.2	<0.005	--	
7/23/08	19.1	-31	7.58	402	--	49.2	380	303	320	20.2	<20	<20	<0.2	11.9	12.9	36	7	6.3	<0.005	--	
10/24/08	12	-34	7.63	695	--	8.52	360	343	356	15.5	<10	<20	<0.2	10.8	11.6	32	<4	6	<0.005	--	
3/12/09	3.1	-34	7.63	601	--	5.6	320	229	316	13.7	<5	<2	<0.2	8.43	10.3	<20	<4	4.8	<0.005	--	
6/17/09	16.5	239	6.44	413	65	40.9	360	295	220	20.5	<5	<2	<0.2	11.8	13.5	31	12	7.2	<0.005	< 0.01	
9/30/09	13	227	6.52	382	--	17.8	340	265	310	17.7	7.79	<2	<0.2	10.3	13.1	32	<4	5.9	<0.005	--	
12/1/09	6.4	143	7.78	1406	--	19.6	280	95	230	12.5	10.2	<2	<0.2	8.75	12.5	26	<4	6.5	<0.005	--	
1/28/10	4.4	148	7.53	1474	--	492	310	291	360	12.4	<5	<2	<0.2	8.45	11.6	41	8	5.2	<0.005	--	
4/27/10	6.6	256	5.94	294	--	41.5	300	235	350	14.5	<5	<2	<0.2	0.0809	8.06	11.9	23	<4	6.7	0.006	--
7/20/10	18.8	162	7.77	329	55	8.18	360	313	370	22.5	<5	<4	0.139	10.1	16.5	50	7	7.8	<0.005	<0.01	
11/12/10	14	17	7.06	613	--	38.1	310	260	300	17.1	<5	<20	0.08	6.9	9.84	20	<4	6	<0.005	--	
3/22/11	9.8	6	6.94	519	--	9.77	260	190	200	11.2	<5	<80	0.117	5.38	7.95	<20	<4	4.4	<0.005	--	
5/24/11	17.9	-43	7.31	482	--	20.7	250	167	240	8.33	<5	<8	0.073	7.03	8.21	24	<4	<3	<0.005	--	
9/20/11	18.4	-47	7.04	653	--	40.12	300	253	340	16.2	<5	<8	0.065	5.16	9.52	<20	9	5.1	<0.005	--	
12/14/11	8.2	25	7.62	501	70	24.16	270 J	199	260	10.2 J	<5	<8	0.074	5.24 J	6.86	<20	<4	3.4	<0.005	<0.01 J	
3/21/12	21.3	72	6.84	448	<5	25.9	260 J	170	250	8.96 J	<5	<8 J	<0.05	5.32 J	4.95 J	<20	<6 J	7.4	<0.005 J	<0.01	
5/23/12	18.9	133	6.72	515	--	27.5	250	207	290	11.6	8.79	<80	0.076	5.9	6.56	36	<4	5.5	<0.005	--	

# Historical Water Quality Database - Towslee Landfill

## Field and Inorganic Parameters

### Well MW-2B - Bedrock

Analyte	Temp (°C)	Sp. Conduct (µS/cm)	TDS (mg/l)	HARD as CaCO <sub>3</sub> (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Bromide (mg/l)	NO <sub>3</sub> (As N) (mg/l)	NH <sub>4</sub> (As N) (mg/l)	COD (mg/l)	BOD (mg/l)	TOC (mg/l)	Phenolics, Tot (mg/l)	Cyanide (mg/l)
Units	(mV)	(SU)	pH	(NTU)	ALK as CaCO <sub>3</sub> (mg/l)	TDS (mg/l)								
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	500	250	250	2	10	2 *	--
Aug-97	--	--	--	--	5	--	577	960	1640	267	<5	1.1	<0.1	0.95
Oct-97	--	--	--	--	10	--	673	900	1230	238	<5	0.9	<0.1	1.3
3/22/06	4.5	175	6.4	1350	--	17.3	652	697	982	145	1.18	0.878	<0.1	0.389
5/31/06	10.5	110	6.4	1560	--	19.8	670	726	1020	154	2.96	1.01	0.216	0.824
8/9/06	15.9	125	6.35	1420	<5	18.7	612	686	1040	122	<1	0.902	<0.1	0.786
10/10/06	14.5	115	6.52	1540	--	28	646	675	980	121	<1	0.912	<0.1	0.282
3/20/07	9.1	136	7.14	701	--	14.2	650	723	825	167	<5	0.95	<0.2	0.921
4/26/07	8.3	-73	7.35	682	--	11	480	575	823	131	<5	<2	<0.2	0.844
7/31/07	16.5	-77	7.37	500	--	9.48	600	716	935	163	10	<2	<0.2	1.31
10/10/07	15.8	-34	7.35	329	15	37	640	652	868	161	<5	0.92	<0.2	1.22
2/1/08	3.2	40	8.34	339	7	41.5	640	678	840	160	<5	<2	<0.2	0.785
4/16/08	10.3	-46	7.77	1205	--	13.5	620	654	808	132	<5	<20	<0.2	0.572
7/23/08	18.3	-38	7.73	1132	--	15.4	640	728	720	148	7.62	<2	<0.2	1.01
10/24/08	12.9	-33	7.59	1137	--	3.14	680	788	864	162	<5	<0.2	<0.2	0.504
3/12/09	4.9	-22	7.42	1135	--	11	650	678	872	118	<5	<0.2	<0.2	0.642
6/17/09	15.5	237	6.43	739	8	4.17	580	782	870	159	<5	<0.2	<0.2	0.665
9/30/09	13.2	229	6.47	670	--	5.88	650	755	860	150	<5	<0.2	<0.2	0.73
12/1/09	8.3	174	7.19	1978	--	14	610	608	680	140	<5	<0.2	<0.2	0.696
1/28/10	3.7	184	6.9	1880	--	12.7	600	609	820	112	7.9	<0.2	<0.2	0.69
4/27/10	6.9	249	6.03	567	--	12	610	681	860	130	<5	<0.4	<0.05	1.18
7/20/10	19	117	7.52	391	11	17.3	630	730	790	139	<5	<4	0.071	0.812
10/26/10	15.1	153	6.75	1228	--	14.1	600	693	860	127	<5	<0.8	<0.05	<0.5
3/22/11	9.8	6	6.94	519	--	9.77	260	190	200	11.2	<5	<80	0.117	5.38
5/24/11	17.9	-43	7.31	482	--	20.7	250	167	240	8.33	<5	<8	0.073	7.03
9/20/11	18	-2	6.93	1428	--	8.77	630	773	890	108	<5	<8	<0.05	<0.5
12/14/11	7.9	27	7.14	1363	12	18.6	570 J	713	770	102 J	<5 R	<0.8 R	0.064	<0.5 J
3/21/12	18	88	6.6	1377	<5	17.6	490 J	712	830	123 J	<5	<0.8 J	0.053	<0.5 J
5/23/12	18.2	161	6.12	1378	--	5.44	790	643	890	124	<5	<8	<0.05	0.76
													0.811	<20
														<4
														14.4
														<0.05
														--

# Historical Water Quality Database - Towslee Landfill

## Field and Inorganic Parameters

### Well MW-3A - Bedrock

Analyte	Temp	Eh	pH	Sp. Conduct (µS/cm)	Color (SLU)	Turbidity (NTU)	ALK as CaCO <sub>3</sub> (mg/l)	HARD as CaCO <sub>3</sub> (mg/l)	TDS (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Bromide (mg/l)	NO <sub>3</sub> (As N) (mg/l)	NH <sub>4</sub> (As N) (mg/l)	TKN (as N) (mg/l)	COD (mg/l)	BOD (mg/l)	TOC (mg/l)	Phenolics, Tot (mg/l)	Cyanide (mg/l)
Units	(°C)	(mV)																		
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2 *	--	--	--	--	0.001	0.2
Aug-97	--	--	--	--	<5	--	145	1250	320	31.4	16	0.5	<0.1	<0.02	0.4	19	<2	4.5	0.0027	--
Oct-97	--	--	--	--	<5	--	146	200	269	28.7	13	<0.5	0.19	0.09	0.24	<15	<2	1.9	<0.001	--
3/22/06	6.4	215	7.2	286	--	58	162	153	215	14	9.14	<0.1	<0.1	0.0969	0.455	<10	<3	5.58	<0.005	--
5/31/06	11.7	45	6.9	299	--	11.9	170	179	208	12.7	11	<0.1	<0.1	<0.02	1.09 H	<10	<3	<2	<0.005	--
8/9/06	15.3	115	7.01	342	<5	5.2	140	191	207	13.5	9.98	0.152	<0.1	<0.02	0.239	13	<3	<2	<0.005	<0.01
10/10/06	15.7	220	6.84	397	--	7.2	152	158	207	12.7	8.01	0.143	<0.1	<0.1	0.266	<10	<3	<2	<0.005	--
3/20/07	9.3	-50	7.82	143	--	10.6	82	74	38	3.37	<5	1.2	<0.2	1.45	4.26	47	<4	<3	<0.005	--
4/26/07	5.6	-94	7.64	898	--	19.6	59	58.1	168	1.8	<5	<2	<0.2	<0.5	1.47	<20	8	<3	<0.005	--
7/31/07	17.9	-115	7.84	1757	--	16.4	170	150	210	12	20.5	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
10/10/07	14.6	-76	8.25	939	115	13.7	130	86.2	144	5.73	<5	<2	<0.2	<0.5	<0.5	<20	<4	3.7	<0.005	<0.01
2/1/08	3.4	174	8.06	1074	15	17	110	97.7	115	2.43	<5	<2	0.338	<0.5	<0.5	23	<4	<3	<0.005	<10
4/16/08	12.1	-34	7.62	261	--	17.7	170	123	188	10.5	7.74	<0.2	<0.2	<0.5	<0.5	<20	7	<3	<0.005	--
7/23/08	20.6	-39	7.66	1759	--	17.9	91	76.7	60	1.1	19.9	<20	<0.2	<0.5	0.718	34	9	7.3	<0.005	--
10/24/08	13.5	-41	7.72	204	--	6.67	97	97.9	112	1.75	<5	<2	1.14	<0.5	<0.5	<20	<4	3.6	<0.005	--
3/12/09	4.2	-26	7.49	1069	--	10.9	18	38.1	88	1.85	7.53	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
6/17/09	14.8	359	8.16	187	7	4.55	160	196	120	9.25	11.2	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<0.01
9/30/09	14.2	219	6.69	658	--	20.2	50	37.8	100	<1	<5	<2	<0.2	<0.5	0.786	40	8	9.2	<0.005	--
12/1/09	9.9	172	7.32	673	--	22.4	79	65.4	120	<1	<5	<2	<0.2	<0.5	1.36	35	6	5.7	<0.005	--
1/28/10	6.1	101	8.41	646	--	11	180	93.2	160	14.8	<5	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--
4/27/10	7.4	263	5.83	706	--	11.8	93	58	75	1.31	<5	<0.8	<0.05	<0.5	1.14	30	10	9	0.006	--
7/20/10	17.9	173	7.8	943	35	13.9	160	194	230	7.44	12.6	<4	0.053	<0.5	1.26	27	<4	<3	<0.005	<0.01
10/26/11	15.6	74	6.9	1806	--	7.61	130	66.9	98	3.3	<5	<4	0.054	<0.5	1.83	29	7	6.6	<0.005	--
3/22/11	8.7	282	6.2	128	--	11.6	75	45.7	60	2.69	<5	<8	0.103	<0.5	<0.5	<20	<4	<3	<0.005	--
5/24/11	16.7	9	7.15	308	--	4.3	150	137	320	2.28	<5	<0.8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--
9/20/11	17.4	159	7.38	361	--	4.39	180	187	260	4.03	<5	<8	<0.05	<0.5	0.508	<20	<4	3.1	<0.005	--
12/13/11	7	171	7.71	257	6	10.69	140 J	122	160	3.44 J	6.3	<0.8	<0.05	<0.5 J	<0.5	<20	<4	<3	<0.005	<0.01 J
3/20/12	17.7	194	7.27	284	11	29.9	130 J	147	140	1.88 J	<5	<0.8 J	<0.05	<0.5	<0.5 J	<20	5 J	4.4	<0.005 J	<0.01
5/22/12	20	153	7.07	340	--	41.7	160	146	240	1.59	<5	<8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--

# Historical Water Quality Database - Towslee Landfill

## Field and Inorganic Parameters

### Well MW-3B - Bedrock

Analyte		Temp																																					
	Units	(°C)	(mV)	Eh	SU	pH	(µS/cm)	Sp. Conduct	(SU)	Color																													
Water Quality Standard		--	--	6.5 to 8.5	--	15	5	--	--	(NTU)	Turbidity	(mg/l)	ALK as CaCO <sub>3</sub>	(mg/l)	HARD as CaCO <sub>3</sub>	(mg/l)	TDS	(mg/l)	Chloride	(mg/l)	Sulfate	(mg/l)	Bromide	(mg/l)	NO <sub>3</sub> (As N)	(mg/l)	NH <sub>4</sub> (As N)	(mg/l)	TKN (As N)	(mg/l)	COD	(mg/l)	BOD	(mg/l)	TOC	(mg/l)	Phenolics, Tot	(mg/l)	Cyanide
Aug-97	--	--	--	--	<5	--	235	280	349	32	13.8	<0.5	<0.1	<0.02	0.3	22	<2	7.9	2.3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
Oct-97	--	--	--	--	<5	--	190	300	332	33.6	12.4	<0.5	<0.1	0.04	<0.2	<15	<2	3.7	1.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
9/20/11	17.1	158	7.68	494	--	25	240	274	310	23.7	7.9	<0.8	<0.05	<0.5	<0.5	<20	6	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
12/13/11	9.9	174	7.6	522	<5	7.59	240 J	264	260	27.7 J	11.5	<0.8	0.07	<0.5 J	<0.5	<20	<4	<3	<0.005	<0.01 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
3/20/12	15.8	203	7.04	482	<5	13.2	260 J	262	250	23.8 J	8.7	<0.8 J	<0.05	<0.5	<0.5 J	<20	<4 J	4.5	<0.005 J	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
5/22/12	18.3	170	6.61	479	--	2.51	210	259	300	23.4	7.7	<0.8	0.07	<0.5	<0.5	<20	<4	<3	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					

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

Analyte	Temp (°C)	Sp. Conduct (µS/cm)	ALK as CaCO <sub>3</sub> (mg/l)	TDS (mg/l)	Chloride (mg/l)	Bromide (mg/l)	TKN (as N) (mg/l)	COD (mg/l)	BOD (mg/l)	TOC (mg/l)	Phenolics, Tot (mg/l)	Cyanide (mg/l)
Units	(mV)	(SU)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	0.001	0.2
Water Quality Standard	--	6.5 to 8.5	--	500	250	250	10	2*	--	--	0.001	0.2
Aug-97	--	--	<5	253	308	550	79.1	9.8	<0.5	<0.1	<0.02	0.5
Oct-97	--	--	<5	355	464	493	74.6	11.5	<0.5	<0.1	0.2	0.4
9/20/11	17.5	174	7.36	410	496	490	23.6	10.5	<0.8	<0.05	<0.5	<0.5
12/13/11	8.6	174	7.48	400 J	430	430	25.5 J	11.1	<0.8	<0.05	<0.5 J	<0.5
3/20/12	14.6	193	7.1	444	460	21.5 J	7	<0.8 J	<0.05	<0.5	<0.5 J	<0.5
5/22/12	15.8	160	6.83	350	384	490	22.3	6.5	<8	<0.05	<0.5	<0.5

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

Analyte	Temp (°C)	Sp. Conduct (µS/cm)	Sp. Conduct (µS/cm)	Color (SU)	Turbidity (NTU)	ALK as CaCO <sub>3</sub> (mg/l)	HARD as CaCO <sub>3</sub> (mg/l)	TDS (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Bromide (mg/l)	NO <sub>3</sub> (As N) (mg/l)	NH <sub>4</sub> (As N) (mg/l)	TKN (as N) (mg/l)	COD (mg/l)	BOD (mg/l)	TOC (mg/l)	Phenolics, Tot (mg/l)	Cyanide (mg/l)	
Units	(mV)	Eh	SU	pH																
Water Quality Standard	-	-	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2 *	--	--	--	0.001	0.2	
Aug-97	--	--	--	--	20	--	130	250	116	44.5	22	<0.5	0.8	<0.02	0.4	16	<2	2.7	1.1	--
Oct-97	--	--	--	--	≤5	--	115	140	156	10.1	11.5	<0.5	<0.1	0.18	0.24	<15	<2	<1.0	<1.0	--

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

Analyte																				
Units	(°C)	Temp	(mV)	Eh	pH		(µS/cm)	Sp. Conduct												
Water Quality Standard	-	-	6.5 to 8.5	SU			(SU)	Color												
Aug-97	--	--	--	--	60	--	357	650	595	79.1	13.8	0.9	<0.1	1.6	1.5	94	3	14	3	<10
Oct-97	--	--	--	--	80	--	325	550	472	71.8	30.6	1	<0.1	0.02	<0.2	82	6	10.6	1.8	<10
9/20/11	17.8	125	7.04	446	--	33.14	200	208	270	21.4	10.6	<0.8	<0.05	<0.5	<0.5	<20	<4	<3	<0.005	--
12/13/11	9.8	156	7.87	425	200	8.52	210 J	194	280	13.9 J	16.1	<0.8	<0.05	<0.5 J	1.12	<20	<4	<3	<0.005	<0.01 J
3/20/12	23.8	193	7.38	415	<5	922	200 J	197	230	8.86 J	13.8	<8 J	0.094	<0.5 J	1.16 J	<20	<6 R	5.6	<0.005 J	<0.01
5/22/12	18.9	133	7.35	408	--	241	130	169	310	20	13.6	<8	0.09	<0.5	1.89	<20	<4	<3	<0.005	--

# Historical Water Quality Database - Towslee Landfill

## Field and Inorganic Parameters

### Well MW-6B - Bedrock

Analyte	Temp	Eh		pH	Sp. Conduct		Color	Turbidity	ALK as CaCO <sub>3</sub>	HARD as CaCO <sub>3</sub>	TDS	Chloride	Sulfate	Bromide	NO <sub>3</sub> (As N)	NH <sub>4</sub> (As N)	TKN (As N)	COD	BOD	TOC	Phenolics, Tot	Cyanide
Units	(°C)	(mV)	(mV)	(SU)	(µS/cm)	(SU)	(NTU)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Water Quality Standard	-	-	6.5 to 8.5	-	15	5	-	-	500	250	250	2	10	2 *	-	-	-	-	-	-	0.001	0.2
Aug-97	--	--	--	--	<5	--	240	300	98	38.2	27.1	<0.5	0.6	0.09	0.6	40	<2	6	0.0032	--	--	
Oct-97	--	--	--	--	20	--	224	240	280	35	22.2	<0.5	<0.1	2.5	3.3	19	2	5.8	<0.001	--	--	
3/22/06	7.9	250	6.7	347	--	40	131	135	209	21.1	13.8	< 0.1	< 0.1	0.0549	0.392	< 10	< 3	5.22	< 0.005	--	--	
5/31/06	10.5	85	7.4	287	--	19.9	148	144	175	2.33	3.95	<0.1	<0.1	<0.02	0.904 H	<10	5.1	3.14	<0.005	--	--	
8/9/06	12.2	225	7.52	304	<5	15.8	154	131	190	2.32	3.28	0.122	<0.1	0.096	0.214	11.6	3.2	<2	<0.005	<0.01	--	
10/10/06	14.3	180	7.11	329	--	14.2	153	133	187	3.39	6.14	<0.1	<0.1	<0.1	0.279	<10	<3	<2	<0.005	--	--	
3/20/07	9.7	82	8.04	220	--	68.9	180	156	127	11.6	8.54	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	
4/26/07	7.4	-92	7.73	249	--	8.1	160	139	105	6.99	6.79	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	
7/31/07	15.6	-105	7.85	236	--	9.48	150	138	220	13.8	17.3	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	
10/10/07	14.8	-57	7.82	810	6	12.5	140	124	208	25.9	12.7	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<0.01	--	
2/1/08	3.7	121	8.55	199	7	13.6	140	136	198	16.7	18.1	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<10	--	
4/16/08	10.4	-71	8.25	360	--	11.6	140	142	225	16.9	16.5	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	
7/23/08	16.1	-81	8.21	343	--	2.19	110	137	116	31.1	26.8	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	
10/24/08	12.6	-54	7.96	355	--	5.24	120	134	168	28.6	17.2	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	
3/12/09	6.5	-38	7.7	327	--	9.56	120	142	188	13.3	13.2	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	
6/17/09	14.1	186	7.32	187	11	3.62	140	154	190 H	19.4	14.2	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	<0.01	--	
9/30/09	12.7	190	7.2	1999	--	5.13	140	148	170	19.7	10.3	<0.2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	
12/1/09	9	180	7.09	1108	--	13.3	140	138	130	14.7	13.5	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	
1/28/10	4.7	102	8.35	922	--	12.5	150	163	240	13.2	13.4	<2	<0.2	<0.5	<0.5	<20	<4	<3	<0.005	--	--	
4/27/10	8.1	222	6.54	1673	--	43.6	150	147	220	12	7.57	<1	0.0804	<0.5	0.522	<20	<4	<3	<0.005	--	--	
7/20/10	18.2	144	7.66	249	35	4.71	140	144	200	14	11	<0.8	0.092	<0.5	<0.5	<20	<4	<3	<0.005	<0.01	--	
10/26/10	14.6	132	7.39	342	--	16	160	147	190	16	11.2	<1.6	0.051	<0.5	0.799	<20	<4	<3	<0.005	--	--	
3/22/11	9.8	102	7.41	372	--	10.8	130	145	160	11.9	15	<0.8	0.47	<0.5	<0.5	<20	<4	<3	<0.005	--	--	
5/24/11	15.7	88	7.75	399	--	7.65	150	153	250	16.4	19.2	<0.8	0.058	<0.5	<0.5	<20	<4	<3	<0.005	--	--	
9/20/11	16.7	133	7.34	355	--	6.94	160	172	230	12.7	18.7	<0.8	0.056	<0.5	<0.5	<20	<4	<3	<0.005	--	--	
12/13/11	10.6	153	8.25	387	5	4.1	180 J	166	200	19.4 J	18.6	<0.8	0.087	<0.5 J	0.546	<20	<4	<3	<0.005	<0.01 J	--	
3/20/12	18.5	190	7.3	344	<5	6.83	140 J	146	170	16.2 J	21.5	<0.8 J	0.073	<0.5	<0.5 J	<20	<4 J	<3	<0.005 J	<0.01	--	
5/22/12	17.7	139	7.29	363	--	17.1	190	150	240	10.1	17.9	<80	0.081	<0.5	<0.5	<20	<4	<3	<0.005	--	--	

# Historical Water Quality Database - Towslee Landfill

## Field and Inorganic Parameters

### Well MW-7A - Overburden

Analyte	Temp	Eh	pH	(µS/cm)	Sp. Conduct	Color	Turbidity	ALK as CaCO <sub>3</sub>	HARD as CaCO <sub>3</sub>	TDS	Chloride	Sulfate	Bromide	NO <sub>3</sub> (As N)	NH <sub>4</sub> (As N)	TKN (as N)	COD	BOD	TOC	Phenolics, Tot	Cyanide
Units	(°C)	(mV)	(SU)	(µS/cm)	(mS/cm)	(SU)	(NTU)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)	(mg/l)
Water Quality Standard	--	--	6.5 to 8.5	--	15	5	--	--	500	250	250	2	10	2 *	--	--	--	--	--	0.001	0.2
Aug-97	--	--	--	--	20	--	569	1010	1220	300	27.4	0.6	<0.1	0.93	1.1	43	<2	10.1	0.0051	<0.01	
10/1/97	--	--	--	--	5	--	660	1150	1240	276	20.2	<0.5	0.2	0.89	1.4	112	2	12.6	0.0027	<0.01	
3/22/06	4.5	215	6.5	1360	--	214	648	627	981	144	20.6	0.753	<0.1	0.34	1.5	21.2	<3	12.8	<0.005	--	
5/31/06	11.6	120	6.4	1520	--	18	675	599	967	143	22.5	0.633	<0.1	<0.02	1.68 H	16.5	<3	8.19	0.007	--	
8/9/06	17.4	245	6.34	1440	<5	13.6	595	531	963	119	19.7	0.822	<0.1	<0.02	0.75	26.4	<3	6.12	<0.005	<0.01	
10/10/06	13.9	190	6.62	1480	--	42	635	526	949	85	14.1	0.483	<0.1	<0.1	1.11	20.5	<3	7.46	<0.005	--	
3/20/07	9.3	77	7.04	893	--	45.3	640	529	753	145	16.5	0.6	<0.2	<0.5	1.47	27	<4	8.1	<0.005	--	
4/26/07	7.8	-64	7.12	765	--	54.3	510	499	865	131	23.2	<0.2	<0.2	<0.5	3.6	<20	<4	6	0.006	--	
7/31/07	18.8	-69	7.2	514	--	40.9	530	481	3000	145	22.7	<2	<0.2	<0.5	0.784	<20	<4	7.2	0.007	--	
10/10/07	15.2	-24	7.11	972	85	48.1	540	459	752	141	17.8	<2	<0.2	<0.5	0.591	<20	<4	11.5	<0.005	<0.01	
2/1/08	2	245	7.77	561	7	39.3	570	528	800	141	12.2	<2	<0.2	<0.5	0.522	<20	<4	69.9	<0.005	<10	
4/16/08	9.8	-37	7.63	1174	--	44.4	560	506	1560	1260	<20	<200	0.25	<0.5	0.949	36	<4	17.8	<0.005	--	
7/23/08	18.6	-42	7.73	618	--	41.6	600	538	668	136	21	<20	<0.2	<0.5	<0.5	22	<4	5.2	<0.005	--	
10/24/08	11.1	-41	8.09	214	--	42.7	670	569	728	135	16.1	<20	<0.2	<0.5	<0.5	29	<4	6.1	<0.005	--	
3/12/09	4.2	-19	7.35	1014	--	40.9	500	496	748	114	21	<0.2	<0.2	<0.5	1.92	<20	<4	5.1	<0.005	--	
6/17/09	16	219	6.77	622	80	375	500	534	720	128	22.3	<0.2	<0.2	<0.5	0.851	38	<4	5.7	<0.005	<0.01	
9/30/09	12.6	194	7.12	644	--	33.5	480	499	620	120	19.5	<2	<0.2	<0.5	0.927	37	<4	5	<0.005	--	
12/1/09	8.1	141	7.86	217	--	40.1	520	473	640	117	23.1	<2	<0.2	<0.5	0.599	21	<4	5.2	<0.005	--	
1/28/10	5.2	192	6.73	260	--	23.6	600	508	520	104	19.2	<2	<0.2	<0.5	1.02	33	<4	4.9	<0.005	--	
4/27/10	7.3	246	6.13	483	--	31.4	500	435	730	89.1	22.5	<1	<0.05	<0.5	1.4	28	<4	6.7	<0.005	--	
7/20/10	19	149	7.89	412	8	20.1	510	520	690	128	25.2	<4	0.059	<0.5	1.27	31	<4	6	<0.005	<0.01	
10/26/10	14.5	155	6.87	1133	--	328	520	507	710	115	23.9	<8	<0.05	<0.5	2.15	40	<4	6.1	<0.005	--	
3/22/11	9	260	6.78	1184	--	20.7	600	484	660	95.7	21.7	<80	0.103	<0.5	0.639	28	<4	5.1	<0.005	--	
5/24/11	18.3	135	7.02	1179	--	69.2	510	465	710	99	18.7	<8	<0.05	<0.5	<0.5	33	<4	4.8	<0.005	--	
9/20/11	18	166	6.92	1236	--	169	560	585	750	100	18.8	<8	0.081	<0.5	1.03	29	<4	6.1	<0.005	--	
12/13/11	8.6	185	7.26	1127	7	36.38	550 J	505	620	108 J	21.6	<8	0.063	<0.5 J	2.19	40	<4	4.1	<0.005	<0.01 J	
3/21/12	18	172	6.74	1172	6	24.6	500 J	524	1000	99.4 J	21.9	<80 J	<0.05	<0.5	<0.5 J	22	<4 J	15.1	<0.005 J	<0.01	
5/22/12	15.8	184	6.36	1085	--	>1000 E	520	449	630	99.5	20	<80	<0.05	<0.5	<0.5	22	<4	7.3	<0.005	--	

Historical Water Quality Data - Towslee Landfill

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
9/20/11	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
12/13/11	--	--	--	--	--	--	<0.005	45.2	--	--	--	--	0.126	<0.003	9.04	0.18	--	--	--	<5	--	--	--	--	
3/20/12	0.383	<0.005 J	<0.005 J	0.077	<0.003	<0.5	<0.005	41.6	<0.01	<0.01	<0.02	<0.01	0.688	<0.003 J	10.1	0.256	<0.0002	<0.03	<5	<5	<0.003 J	<0.01	<0.003 J	<0.03	<0.01
5/22/12	1.32	<0.005	<0.005	0.106	<0.003	<0.5	<0.005	40.7	<0.01	<0.01	<0.02	<0.01	2.04 J	<0.003	10.3	1.62	<0.0002	<0.03	<5	<5	<0.003	<0.01 J	<0.003	<0.03	0.0119

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5	
Aug-97	0.587	0.0035 B	0.0032 B	0.168 B	<0.0001	0.0227 B	<0.0003	41.5	0.0042 B	NA	<0.0011	0.004 B	1.01	0.0017 B	9.5	0.19	NA	<0.0013	1.01 B	5.41	NA	NA	<0.0026	<0.0012	0.024
Oct-97	5.24	0.0031 B	0.004 B	0.229	0.0011 B	0.0253 B	0.0011 B	45.7	0.0089 B	NA	0.0053 B	0.0085 B	10.3	0.0049	10.4	0.352	NA	0.0104 B	1.91 B	4.76 B	NA	NA	<0.0026	0.0086 B	0.0366
9/20/11	--	--	--	--	--	--	<0.005	41	--	--	--	--	0.662	<0.003	7.95	0.119	--	--	<5	<5	--	--	--	--	--
12/13/11	1.7	<0.005 J	<0.005 J	0.2	<0.003	<0.5	<0.005	44.1	<0.01	<0.01	<0.02	<0.01	2.75	<0.003 J	10.8	0.211	<0.0002	<0.03	<5	6.69	<0.003 J	<0.01	<0.003 J	<0.03	0.0146
3/20/12	0.145	<0.005	<0.005	0.243	<0.003	<0.5	<0.005	47.1	<0.01	<0.01	<0.02	<0.01	0.248 J	<0.003	11.4	0.188	<0.0002	<0.03	<5	6.24	<0.003	<0.01 J	<0.003	<0.03	<0.01
5/22/12	--	--	--	--	--	--	<0.005	43.1	--	--	--	--	0.509	<0.003	11.5	0.23	--	--	<5	5.26	--	--	--	--	--

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
--	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
Aug-97	724	<0.003	0.353	8.11	0.0287	0.0873 B	<0.0003	430	1.04	--	0.59	0.996	1550	0.454	309	24.6	0.0014	1.33	77.5	37.3	<0.028	<0.009	<0.026	0.856	3.36
Oct-97	16.9	<0.003	0.0134	0.258	0.00083 B	0.0665 B	<0.0003	48.6	0.0265	--	0.0168 B	0.0254	35.7	0.0123	15.6	0.783	<0.0001	0.0364 B	6.97	26	<0.0028	<0.0009	<0.0026	0.0243 B	0.0874
3/22/06	--	--	--	--	--	--	<0.005	46.2	--	--	--	--	19.4	0.00716	12.6	0.534	--	--	2.72	17.1	--	--	--	--	--
5/31/06	--	--	--	--	--	--	<0.005	41.8	--	--	--	--	2.99	0.007	8.67	0.194	--	--	1.6	13	--	--	--	--	--
8/9/06	2.96	<0.05	<0.025	0.104	<0.005	0.073	<0.005	43.2	<0.005	<0.02	<0.015	0.022	6.03	<0.005	9.7	0.38	<0.0004	<0.01	1.7	13.6	<0.02	<0.015	<0.03	<0.015	0.106
10/10/06	--	--	--	--	--	--	<0.005	43.9	--	--	--	--	2.11	<0.005	9.43	0.306	--	--	1.62	13.5	--	--	--	--	--
3/20/07	--	--	--	--	--	--	<0.005	39.2	--	--	--	--	1.67	<0.003	8.87	0.19	--	--	1.74	12.2	--	--	--	--	--
4/26/07	--	--	--	--	--	--	<0.005	44.5	--	--	--	--	2.14	<0.003	10.2	0.193	--	--	2.31	12.5	--	--	--	--	--
7/31/07	--	--	--	--	--	--	<0.005	43.5	--	--	--	--	1.21	<0.003	9.67	0.206	--	--	1.59	13	--	--	--	--	--
10/10/07	2.07	<0.015	<0.01	0.0917	<0.003	<0.5	<0.005	42.2	<0.005	<0.01	<0.02	<0.01	3.49	<0.003	9.8	0.203	<0.0002	<0.03	2.06	11.8	<0.005	<0.01	<0.01	<0.03	0.0235
4/16/08	--	--	--	--	--	--	<0.005	43.2	--	--	--	--	1.17	<0.003	10.6	0.157	--	--	1.65	12.5	--	--	--	--	--
7/23/08	--	--	--	--	--	--	<0.005	46.2	--	--	--	--	0.217	<0.003	10.7	0.135	--	--	1.51	13.8	--	--	--	--	--
10/24/08	--	--	--	--	--	--	<0.005	48.3	--	--	--	--	0.429	<0.003	10.8	0.151	--	--	1.69	13.2	--	--	--	--	--
3/12/09	--	--	--	--	--	--	<0.005	47.2	--	--	--	--	0.818	<0.003	10.6	0.0917	--	--	1.52	13.4	--	--	--	--	--
6/17/09	1.57	<0.015	<0.01	0.0732	<0.003	<0.5	<0.005	47	<0.005	<0.01	<0.02	<0.01	1.65	<0.003	11.1	0.169	<0.0002	<0.03	1.78	13.9	<0.005	<0.01	<0.01	<0.03	<0.01
9/30/09	--	--	--	--	--	--	<0.005	46.5	--	--	--	--	0.348	<0.003	10	0.155	--	--	<1	12.5	--	--	--	--	--
12/1/09	--	--	--	--	--	--	<0.005	45	--	--	--	--	6.19	<0.003	11.9	0.251	--	--	<5	12.6	--	--	--	--	--
4/27/10	--	--	--	--	--	--	<0.005	47	--	--	--	--	0.484	<0.003	10.5	0.118	--	--	<5	12.8	--	--	--	--	--
7/20/10	0.142	<0.005	<0.005	0.0757	<0.003	<0.5	<0.005	48.9	<0.01	<0.01	<0.02	<0.01	0.219	<0.003	10.8	0.156	<0.0002	<0.03	<5	13.2	<0.003	<0.01	<0.003	<0.03	<0.01
10/26/10	--	--	--	--	--	--	<0.005	49	--	--	--	--	1.99	<0.003	11.3	0.329	--	--	<5	15.3	--	--	--	--	--
3/22/11	--	--	--	--	--	--	<0.005	45.6	--	--	--	--	1.47	<0.003	11	0.236	--	--	<5	13.6	--	--	--	--	--
5/24/11	--	--	--	--	--	--	<0.005	46.9	--	--	--	--	3.13	<0.003	11.5	0.215	--	--	<5	13.1	--	--	--	--	--
9/20/11	--	--	--	--	--	--	<0.005	51.5	--	--	--	--	0.872	<0.003	10.5	0.139	--	--	<5	13.2	--	--	--	--	--
12/14/11	0.711	<0.005 J	<0.005 J	0.0774	<0.003	<0.5	<0.005	51	<0.01	<0.01	<0.02	<0.01	0.987	<0.003 J	12	0.119	<0.0002	<0.03	<5	14.9	<0.003 J	<0.01	<0.003 J	<0.03	<0.01
3/21/12	19.1	<0.005	0.0115 J	0.273	<0.003	<0.5	<0.005	58.2	0.0267	<0.01	<0.02	0.0218	33.7 J	0.0108	19.3	0.691	<0.0002	0.0409	<5	15.6	<0.003	<0.01 J	<0.003	<0.03	0.0792
5/22/12	--	--	--	--	--	--	<0.005	49.4	--	--	--	--	1.65	<0.003	12.6	0.121	--	--	<5	12.6	--	--	--	--	--

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
Oct-97	0.662	<0.003	<0.0024	0.168 B	0.0001 B	0.0197 B	<0.0003	26.7	0.002 B	--	<0.0011	0.004 B	1.33	<0.001	6.47	0.195	--	<0.0013	1.56 B	7.38	--	--	<0.0026	<0.0012	0.0351
3/22/06	0.134 B	<0.003	<0.0024	0.154 B	<0.0001	0.0247 B	<0.0003	24.7	<0.0004	--	<0.0011	0.0025 B	0.226	<0.001	5.84	0.146	--	<0.0013	0.529 B	6.18	--	--	<0.0026	<0.0012	0.0163 B
5/31/06	--	--	--	--	--	--	<0.005	26.8	--	--	--	--	9.42	<0.005	7.46	2.28	--	--	0.973	6.31	--	--	--	--	--
8/9/06	1.09	<0.05	<0.025	0.194	<0.005	<0.05	<0.005	25.8	<0.005	<0.02	<0.015	0.017	1.84	<0.005	6.05	0.251	<0.0004	<0.01	0.523	6.35	<0.02	<0.015	<0.03	<0.015	0.052
10/1/06	--	--	--	--	--	--	<0.005	24.1	--	--	--	--	0.273	<0.005	5.31	0.126	--	--	0.374	5.92	--	--	--	--	--
3/20/07	--	--	--	--	--	--	<0.005	23.7	--	--	--	--	2.39	0.00431	5.94	0.521	--	--	<1	5.22	--	--	--	--	--
4/26/07	--	--	--	--	--	--	<0.005	30	--	--	--	--	0.508	<0.003	7.4	0.169	--	--	<1	6.82	--	--	--	--	--
7/31/07	--	--	--	--	--	--	<0.005	29.9	--	--	--	--	0.465	<0.003	7.12	0.19	--	--	<1	7.1	--	--	--	--	--
10/10/07	0.537	<0.015	<0.01	0.172	<0.003	<0.5	<0.005	26	<0.005	<0.01	<0.02	<0.01	0.73	<0.003	6.28	0.176	<0.0002	<0.03	<1	5.84	<0.005	<0.01	<0.01	<0.03	0.0168
2/1/08	0.518	<0.015	<0.01	0.199	<0.003	<0.5	<0.005	25.1	<0.005	<0.01	<0.02	<0.01	1	<0.003	6.44	0.26	<0.0002	<0.03	<1	5.66	<0.005	<0.01	<0.01	<0.03	0.0112
4/16/08	--	--	--	--	--	--	<0.005	28.6	--	--	--	--	1.38	<0.003	7.58	0.198	--	--	<1	6.73	--	--	--	--	--
7/23/08	--	--	--	--	--	--	<0.005	30.2	--	--	--	--	0.185	<0.003	7.74	0.169	--	--	<1	7.29	--	--	--	--	--
10/24/08	--	--	--	--	--	--	<0.005	30	--	--	--	--	0.174	<0.003	7.28	0.153	--	--	<1	6.81	--	--	--	--	--
3/12/09	--	--	--	--	--	--	0.00542	27.7	--	--	--	--	2.92	<0.003	6.76	0.223	--	--	<1	6.37	--	--	--	--	--
6/17/09	0.255	<0.03	<0.01	0.232	<0.003	<0.5	<0.005	31.4	<0.01	<0.01	<0.02	<0.01	0.523	<0.003	7.83	0.25	<0.0002	<0.03	<1	8.15	<0.005	<0.01	<0.01	<0.03	<0.01
9/30/09	--	--	--	--	--	--	<0.005	31.1	--	--	--	--	0.115	<0.003	7.34	0.149	--	--	<1	7.32	--	--	--	--	--
12/1/09	--	--	--	--	--	--	<0.005	58.7	--	--	--	--	6.72	<0.003	14.4	9.34	--	--	8.56	14.9	--	--	--	--	--
4/27/10	--	--	--	--	--	--	<0.005	26.5	--	--	--	--	0.423	<0.003	6.49	0.13	--	--	<5	6.29	--	--	--	--	--
7/20/10	<0.1	<0.005	<0.005	0.204	<0.003	<0.5	<0.005	30.3	<0.01	<0.01	<0.02	<0.01	0.159	<0.003	7.27	0.188	<0.0002	<0.03	<5	7.12	<0.003	<0.01	<0.003	<0.03	<0.01
10/26/10	--	--	--	--	--	--	<0.005	29.7	--	--	--	--	1.02	<0.003	7.29	0.153	--	--	<5	8.95	--	--	--	--	--
3/22/11	--	--	--	--	--	--	<0.005	30.5	--	--	--	--	1.19	<0.003	7.75	0.269	--	--	<5	7.99	--	--	--	--	--
5/24/11	--	--	--	--	--	--	<0.005	24.9	--	--	--	--	<0.06	<0.003	6.14	0.24	--	--	<5	6.48	--	--	--	--	--
9/20/11	--	--	--	--	--	--	<0.005	34.3	--	--	--	--	0.121	<0.003	7.05	0.275	--	--	<5	27	--	--	--	--	--
12/14/11	0.305	<0.005 J	<0.005 J	0.185	<0.003	<0.5	<0.005	30.8	<0.01	<0.01	<0.02	<0.01	0.341	<0.003 J	7.66	0.0807	<0.0002	<0.03	<5	8.23	<0.003 J	<0.01	<0.003 J	<0.03	<0.01
3/21/12	0.141	<0.005	<0.005	0.222	<0.003	<0.5	<0.005	35	<0.01	<0.01	<0.02	<0.01	0.238 J	<0.003	8.85	0.223	<0.0002	<0.03	<5	9.91	<0.003	<0.01 J	<0.003	<0.03	<0.01
5/22/12	--	--	--	--	--	--	<0.005	30.4	--	--	--	--	3.2	0.00423	8.66	0.232	--	--	<5	7.92	--	--	--	--	--

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

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

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

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

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

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

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5	
Aug-97	2.01	<0.003	<0.0024	0.402	0.0001 B	0.0662 B	<0.0003	73.8	0.0032 B	NA	0.002 B	0.0051 B	3.04	0.0013 B	22.8	0.12	NA	0.0036 B	2.05 B	11.2	NA	NA	<0.0026	0.003 B	0.0621
Oct-97	0.184	<0.003	<0.0024	0.291	0.00013 B	0.0626 B	<0.0003	74.4	<0.0004	NA	0.0014 B	0.0018 B	0.372	<0.001	21.5	0.0697	NA	0.0018 B	1.2 B	9.78	NA	NA	<0.0026	<0.0012	0.0155 B
9/20/11	--	--	--	--	--	--	<0.005	75.8	--	--	--	--	0.578	<0.003	20.5	0.184	--	--	<5	11.1	--	--	--	--	--
12/13/11	0.253	<0.005 J	<0.005 J	0.294	<0.003	<0.5	<0.005	70	<0.01	<0.01	<0.02	<0.01	0.344	<0.003 J	21.6	0.125	<0.0002	<0.03	<5	12.5	<0.003 J	<0.01	<0.003 J	<0.03	0.0114
3/20/12	0.148	<0.005	<0.005	0.339	<0.003	<0.5	<0.005	69	<0.01	<0.01	<0.02	<0.01	0.386 J	<0.003	21.6	0.102	<0.0002	<0.03	<5	11.9	<0.003	<0.01 J	<0.003	<0.03	0.017
5/22/12	--	--	--	--	--	--	<0.005	66.6	--	--	--	--	0.0945	<0.003	22.4	0.1	--	--	<5	10.4	--	--	--	--	--

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc	
--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5	
Aug-97	1.61	<0.003	<0.0024	0.803	0.0001 B	0.0765 B	<0.0003	110	0.0015 B	NA	0.0036 B	0.0066 B	2.2	0.0031	24.3	1.14	NA	0.0044 B	2.01 B	13.3	NA	NA	<0.0026	0.0016 B	0.0501
Oct-97	1.32	<0.003	<0.0024	1.26	0.00013 B	0.124	0.0004 B	127	0.00093 B	NA	0.0035 B	0.0076 B	1.99	0.0024 B	26	2.15	NA	0.0063 B	2.02 B	15.7	NA	NA	<0.0026	0.0019 B	0.0238
9/20/11	--	--	--	--	--	--	<0.005	153	--	--	--	--	0.261	<0.003	27.3	1.91	--	--	^5	16.7	--	--	--	--	--
12/13/11	0.153	<0.005 J	<0.005 J	1.16	<0.003	<0.5	<0.005	128	<0.01	<0.01	<0.02	<0.01	0.174	<0.003 J	26.8	1.73	<0.0002	<0.03	^5	17.8	<0.003 J	<0.01	<0.003 J	<0.03	0.013
3/20/12	0.39	<0.005	<0.005	1.3	<0.003	<0.5	<0.005	131	<0.01	<0.01	<0.02	0.0224	0.427 J	<0.003	28.3	1.75	<0.0002	<0.03	^5	17.7	<0.003	<0.01 J	<0.003	<0.03	0.0154
5/22/12	--	--	--	--	--	--	<0.005	110	--	--	--	--	0.146	<0.003	26.5	1.44	--	--	^5	14.2	--	--	--	--	--

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Water Quality Stand.	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
Aug-97	10.1	0.0045 B	0.0061 B	1.58	0.00063 B	0.0348 B	0.0042 B	45.8	0.0092	NA	0.0105 B	0.0181 B	11.5	0.0114	14.8	0.485	NA	0.011 B	3.03 B	31.6	NA	NA	<0.0026	0.0102 B	0.105
Oct-97	0.228	<0.003	<0.0024	0.502	<0.0001	0.021 B	<0.0003	32.1	<0.0004	NA	<0.0011	0.0037 B	0.46	<0.001	9.45	0.0661	NA	<0.0013	0.897 B	9.53	NA	NA	<0.0026	0.0012 B	0.0212

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc	
-	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5	
Aug-97	59.1	0.0036 B	0.0476	1.79	0.0023 B	0.282	<0.0003	99.1	0.0859	NA	0.056	0.0973	111	0.0168	37.6	14.5	<0.0001	0.112	14.4	53.3	<0.0028	0.0013 B	<0.0026	0.0726	0.271
Oct-97	38.6	NA	0.0404	1.63	0.0017 B	0.32	0.0011 B	82.2	0.0705	NA	0.0463 B	0.0689	85.5	0.0113	28.8	12.7	<0.0001	0.0963	10.1	46.8	<0.0028	<0.0009	<0.0026	0.053	0.177
9/20/11	--	--	--	--	--	--	<0.005	66.6	--	--	--	0.835	<0.003	10.2	1.33	--	--	<5	19.5	--	--	--	--	--	
12/13/11	0.683	<0.005 J	<0.005 J	0.327	<0.003	<0.5	<0.005	59.7	<0.01	<0.01	<0.02	<0.01	1.32	<0.003 J	10.8	1.78	<0.0002	<0.03	<5	19.8	<0.003 J	<0.01	<0.003 J	<0.03	<0.01
3/20/12	3.91	<0.005	0.00689 BJ	0.343	<0.003	<0.5	<0.005	58.8	<0.01	<0.01	<0.02	<0.01	7.22 J	<0.003	12.2	1.63	<0.0002	<0.03	<5	19	<0.003	<0.01 J	<0.003	<0.03	0.0235
5/22/12	--	--	--	--	--	--	<0.005	50.9	--	--	--	--	0.98	<0.003	10.3	2.16	--	--	<5	14.8	--	--	--	--	--

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

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

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

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

Historical Water Quality Database - Towslee Landfill

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

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

No dissolved metals data to date

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
Aug-97	0.0198 B	<0.003	<0.0024	0.163 B	<0.0001	0.0199 B	<0.0003	40.7	<0.0004	--	<0.0011	0.0026 B	0.0238 B	--	9.65	0.168	--	<0.0013	0.911 B	5.5	--	--	--	--	0.0825
Oct-97	0.0442 B	<0.003	<0.0024	0.173 B	0.00067 B	0.0285 B	0.00063 B	39.5	<0.0012	--	<0.0011	0.0012 B	0.0394 B	--	8.3	0.148	--	<0.0013	0.951 B	5.29	--	--	--	--	0.0148 B
9/20/11	--	--	--	--	--	--	<0.005	41	--	--	--	--	0.0795	<0.003	7.56	0.0636	--	--	<5	5.23	--	--	--	--	--

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
Aug-97	0.0163 B	-- <0.0024	0.137 B <0.0001	0.0631 B <0.0003	67.6 <0.0004	-- <0.0011	0.0008 B	0.0348 B	0.0052	15.4	0.22	0.0014	<0.0013	10.6	59.3	--	--	<0.0026	<0.0012	0.12				
Oct-97	0.0407 B	-- <0.0024	0.068 B <0.0001	0.0561 B <0.0003	40.3 <0.0004	-- <0.0011	<0.0007	0.0471 B	<0.001	8.69	0.174	<0.0001	<0.0013	4.92 B	27.1	--	--	<0.0026	<0.0012	0.0161 B				
3/22/06	--	--	--	--	--	-- <0.005	40.7	--	--	--	13.5	<0.005	10.4	0.238	--	--	2.52	14.7	--	--	--	--	--	
5/31/06	--	--	--	--	--	-- <0.005	38.9	--	--	--	0.315	0.005	8.12	0.127	--	--	1.38	12.3	--	--	--	--	--	
8/9/06	0.066	<0.05	<0.025	0.066	<0.005	<0.07	<0.005	38.6 <0.005	-- <0.015	0.013	0.125	<0.005	8.18	0.248	<0.0004	<0.01	1.31	13	<0.02	<0.015	<0.03	<0.015	0.033	
3/20/07	--	--	--	--	--	-- <0.005	40.3	--	--	--	<0.06	<0.003	8.83	<0.01	--	--	1.72	12.3	--	--	--	--	--	
3/21/12	<0.1	<0.005	<0.005	0.0742	<0.003	-- <0.005	47.8 <0.01	-- <0.02	<0.01	0.102 J	<0.003	11.3	0.0327	<0.0002	<0.03	<5	14.3 <0.003	<0.01 J	<0.003	<0.03	0.0107			

Historical Water Quality Database - Towslee Landfill

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

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

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5	
Aug-97	<0.0083	--	0.0123	0.787	0.00017 B	1.21	0.00053 B	183	0.0035 B	--	0.0107 B	0.0162 B	5.4	<0.001	41	30.4	<0.0001	0.0179 B	17.5	121	--	--	0.003 B	<0.0012	0.117
Oct-97	0.0482 B	--	0.0139	0.786	0.0001 B	0.992	<0.0003	183	0.0057 B	--	0.0095 B	<0.0007	11.5	0.0011 B	38.5	30.9	<0.0001	0.0162 B	14.2	115	--	--	<0.0026	<0.0012	0.0207
8/9/06	0.044	<0.05	<0.025	0.427	<0.005	0.562	<0.005	77.6	<0.005	--	<0.015	0.015	0.204	<0.005	17.1	12.1	<0.0004	<0.01	12.5	29.6	<0.02	<0.015	<0.03	<0.015	0.013

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

Water Quality Stand.	Aluminum	Anthony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
Oct-97	0.0179 B	<0.003	0.0036 B	1.55	<0.0001	0.334	<0.0003	281	0.0009 B	--	0.0067 B	0.0022 B	0.582	--	61.7	8.07	--	0.0093 B	2.8 B	62.5	--	--	--	0.0635	
	0.0154 B	<0.003	<0.0024	1.45	<0.0001	0.321	<0.0003	274	0.0014 B	--	0.0061 B	<0.0007	0.595	--	55	8	--	0.0097 B	2.34 B	62.8	--	--	--	0.023	

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc				
--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5					
Aug-97	<0.0083	0.0038	B	<0.0024	0.242	<0.0001	0.0324	B	<0.0003	57.9	<0.0004	--	<0.0011	0.0024	B	0.0061	B	--	12.9	0.123	--	<0.0013	2.75	B	10.2	--	--	--	0.0249
Oct-97	0.0158	<0.003	<0.0024	0.276	<0.0001	0.0275	B	<0.0003	54.6	<0.0004	--	<0.0011	0.00083	B	0.0114	B	--	10.9	0.0941	--	0.0017	B	1.42	B	7.98	--	--	--	0.0387
3/22/06	--	--	--	--	--	--	<0.005	44.3	--	--	--	--	--	--	0.168	<0.005	8.7	0.0963	--	--	0.803	4.83	--	--	--	--	--	--	

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
Oct-97	0.016 B	<0.003	<0.0024	0.257	0.0001 B	0.0531 B	<0.0003	73.2	<0.0004	--	<0.0011	0.0024 B	0.0091 B	--	23	0.0617	--	<0.0013	1.62 B	11.1	--	--	--	0.0375	
	0.0273 B	<0.003	<0.0024	0.271	<0.0001	0.0559 B	<0.0003	71.9	<0.0004	--	<0.0011	0.0007 B	0.0191 B	--	20.9	0.0553	--	0.0014 B	1.27 B	10.2	--	--	--	0.0155 B	

Historical Water Quality Database - Towslee Landfill

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
Aug-97	0.0173 B	<0.003	<0.0024	0.686	0.0001 B	0.073 B	<0.0003	112	<0.0004	--	0.0024 B	0.0069 B	0.005 B	--	25.2	1.08	--	0.0021 B	1.71 B	13.5	--	--	--	0.0393	
Oct-97	0.0228 B	<0.003	<0.0024	1.06	<0.0001	0.12	<0.0003	129	<0.0004	--	0.0022 B	0.0011 B	0.0372 B	--	26.1	2.08	--	0.0051 B	1.93 B	16.1	--	--	--	0.0166 B	

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

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

Historical Water Quality Database - Towslee Landfill

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
Aug-97	0.0142 B	--	0.0198	0.847	<0.0001 B	0.284	<0.0003	104	0.0019 B	--	0.0063 B	0.0014 B	7.81	<0.001	21	14.1	--	0.0096 B	7.64	55.4	--	--	<0.0026	<0.0012	0.047
Oct-97	0.0382 B	--	0.0189	0.88	--	0.333	<0.0003	88.7	0.0027 B	--	0.006 B	0.00077 B	8.07	<0.001	17.3	12.9	--	0.0108 B	7.4	55	--	--	<0.0026	<0.0012	0.0219
3/20/12	<0.1	<0.005	<0.005	0.246	<0.003	--	<0.005	53.7	<0.01	--	<0.02	<0.01	<0.06 J	<0.003	9.95	0.836	<0.0002	<0.03	<5	18	<0.003	<0.01 J	<0.003	<0.03	0.0132
5/22/12	--	--	--	--	--	--	<0.005	45.4	--	--	--	0.149	<0.003	9.33	0.213	--	--	<5	14	--	--	--	--	--	--

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

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
Aug-97	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
Oct-97	<0.0083	<0.003	0.0048 B	0.396	<0.0001	0.125	<0.0003	67.7	<0.0004	--	0.0052 B	0.0011 B	0.346	--	17.3	3.3	--	0.0046 B	2.97 B	38.2	--	--	--	--	0.0651
3/20/07	0.0132 B	<0.003	0.0073 B	0.478	<0.0001	0.14	<0.0003	56.3	0.00087 B	--	0.0041 B	<0.0007	1.42	--	12.9	3.99	--	0.0048 B	2.77 B	33.3	--	--	--	--	0.0207
	--	--	--	--	--	--	<0.005	45.6	--	--	--	--	<0.06	<0.003	10.6	0.137	--	--	1.19	12.1	--	--	--	--	--

Historical Water Quality Database - Towslee Landfill

MW-7A - Dissolved Metals (all values in mg/l)

Water Quality Stand.	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Chromium, Hex	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Sodium	Selenium	Silver	Thallium	Vanadium	Zinc
	--	0.003	0.025	1	0.004	1	0.005	--	0.05	0.05	--	0.2	0.3	0.015	--	0.3	0.0007	0.1	--	20	0.01	0.05	0.002	--	5
Aug-97	<0.0083	--	<0.0024	0.822	0.0001 B	0.331	0.0003 B	220	0.0008 B	--	0.0017 B	0.0086 B	0.009 B	<0.001	56.2	4.53	<0.0001	0.0129 B	5.28	120	--	--	<0.0026	<0.0012	0.0455
Oct-97	0.0755 B	--	<0.0024	0.887	<0.0001	0.396	<0.0003	255	0.0011 B	--	0.0031 B	<0.0007	0.753	<0.001	59.9	7.12	<0.0001	0.0196 B	3.98 B	129	--	--	<0.0026	<0.0012	0.0186
3/22/06	--	--	--	--	--	--	<0.005	158	--	--	--	--	0.0637	<0.005	43.6	5.35	--	--	1.9	126	--	--	--	--	--
6/17/09	<0.1	<0.03	<0.01	0.599	<0.003	--	<0.005	140	<0.01	--	<0.02	<0.01	<0.06	<0.003	34.1	3.78	<0.0002	<0.03	1.82	97.2	<0.005	<0.01	<0.01	<0.03	0.0228
7/20/10	<0.1	<0.005	<0.005	0.477	<0.003	--	<0.005	129	<0.01	--	<0.02	<0.01	<0.06	<0.003	31.6	2.57	<0.0002	<0.03	<5	91.6	<0.003	<0.01	<0.003	<0.03	0.0102
10/26/10	--	--	--	--	--	--	<0.005	120	--	--	--	--	0.0978	<0.003	31.5	3.26	--	--	<5	105	--	--	--	--	--
5/24/11	--	--	--	--	--	--	<0.005	126	--	--	--	--	<0.06	<0.003	33.6	3.04	--	--	<5	113	--	--	--	--	--
9/20/11	--	--	--	--	--	--	<0.005	172	--	--	--	--	<0.06	<0.003	34.3	4.39	--	--	<5	104	--	--	--	--	--
5/22/12	--	--	--	--	--	--	<0.005	115	--	--	--	--	<0.06	<0.003	32.1	2.64	--	--	<5	81.6	--	--	--	--	--

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

Water Quality Standard	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
Aug-97	<10	<10	10	2JB	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
12/12/11	<5	<5	<10 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3/19/12	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

Historical Water Quality Database - Towslee Landfill  
 Organics (ug/l) (includes only detected compounds)  
 Well CD-1RA - Bedrock

Water Quality Standard	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
Aug-97	<10	<10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
12/12/11	<5	<5	<10 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3/19/12	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

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

Water Quality Standard	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
8/9/06	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5
10/9/07	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6/17/09	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
7/20/10	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
12/13/11	<5	<5	<10 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3/21/12	<5 J	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

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

Water Quality Standard	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
8/9/06	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5
10/9/07	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2/1/08	<5	<5	<10	13 B	<5	<5	<5	<5	<5	<5	<5	<5	<5
6/17/09	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
7/20/10	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
12/13/11	<5	<5	<10 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3/21/12	<5 J	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

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

Water Quality Standard		Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
		2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<b>5 J</b>	<10	<b>1 JB</b>	<10	<10	<10	<b>5 J</b>	<b>1 J</b>	<b>5 J</b>	<b>2 J</b>	<b>5 J</b>	<b>1 J</b>	
Oct-97	<10	<b>4 J</b>	<10	<10	<10	<10	<10	<b>6 J</b>	<10	<10	<10	<10	<10	<b>2 J</b>
8/9/06	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5
10/9/07	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	4 J	<5	<5	<5
2/1/08	<5	<5	<10	12 B	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
6/17/09	< 5	< 5	< 10	< 5	< 5	< 5	< 5	< 5	< 5	< 5	3 J	< 5	< 5	< 5
7/20/10	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	3 J	<5	<5	<5
12/13/11	<5	<5	<10 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3/21/12	<5 J	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

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

Water Quality Standard		Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
		2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<b>4 J</b>	<10	<b>1 JB</b>	<b>1 J</b>	<b>1 J</b>	<b>1 J</b>	<10	<10	<10	<10	<10	<10	<10
Oct-97	<10	<b>3 J</b>	<10	<10	<10	<10	<b>1 J</b>	<b>2 J</b>	<10	<b>1 J</b>	<10	<10	<10	<10
8/9/06	<5	<5	<25	<5	<5	<b>6.2</b>	<5	<5	<5	<5	<5	<5	<10	<5
10/9/07	5.8	4 J	<10	<5	<5	<b>9.2</b>	<5	<5	<5	<5	<5	<5	<5	<5
2/1/08	<5	<5	<10	11 B	<5	<b>9.4</b>	<5	<5	<5	<5	<5	<5	<5	<5
6/17/09	12	5.9	<10	<5	<5	<b>19</b>	<5	<5	<5	<5	<5	<5	<5	<5
7/20/10	13	7	<10	<5	<5	<b>19</b>	<5	<5	<5	<5	<5	<5	<5	<5
12/13/11	<5	3 J	<10 J	<5	<5	<b>16</b>	<5	<5	<5	<5	<5	<5	<5	<5
3/21/12	8 J	4 J	<10	<5	<5	<b>15</b>	<5	<5	<5	<5	<5	<5	<5	<5

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

Water Quality Standard	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<10	<b>2 J</b>	<b>5 JB</b>	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
8/9/06	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5
10/9/07	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2/1/08	<5	<5	<10	11 B	<5	<5	<5	<5	<5	<5	<5	<5	<5
6/17/09	<5	<5	24	<5	<5	<5	<5	<5	82	<5	<5	<5	<5
7/20/10	<5	<5	<10	<5	<5	<5	<5	<5	77 J	<5	<5	<5	<5
12/12/11	<5	<5	<10 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3/19/12	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

Historical Water Quality Database - Towslee Landfill  
 Organics (ug/l) (includes only detected compounds)  
 Well MW-3B - Bedrock

Water Quality Standard		Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
Aug-97		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-97		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
12/12/11		<5	<5	<10 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3/19/12		<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

Historical Water Quality Database - Towslee Landfill  
 Organics (ug/l) (includes only detected compounds)  
 Well MW-4A - Bedrock

Water Quality Standard	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
Aug-97	<10	<10	<10	6JB	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
12/12/11	<5	<5	<10 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3/19/12	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

Historical Water Quality Database - Towslee Landfill  
 Organics (ug/l) (includes only detected compounds)  
 Well MW-5A - Bedrock

Water Quality Standard	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
Aug-97	<10	<10	<10	7JB	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

Historical Water Quality Database - Towslee Landfill  
 Organics (ug/l) (includes only detected compounds)  
 Well MW-6A - Overburden

Water Quality Standard	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
Aug-97	<10	<10	<10	<10	<10	<10	1J	<10	<10	<10	<10	<10	<10
Oct-97	<10	1J	<10	<10	<10	<10	1J	<10	<10	<10	<10	<10	<10
12/12/11	<5	<5	<10 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3/19/12	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

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

Water Quality Standard	Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
	2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Oct-97	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
8/9/06	<5	<5	<25	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5
10/9/07	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2/1/08	<5	<5	<10	12 B	<5	<5	<5	<5	<5	<5	<5	<5	<5
6/17/09	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
7/20/10	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
12/12/11	<5	<5	<10 J	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3/19/12	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

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

Water Quality Standard		Vinyl Chloride	Chloroethane	Acetone	Methylene Chloride	trans-1,2-Dichloroethene	cis-1,2-Dichloroethene	1,1-Dichloroethane	Benzene	Toluene	Chlorobenzene	Ethylbenzene	Xylenes(total)	1,4-Dichlorobenzene
		2	5	50	5	5	5	5	1	5	5	5	5	5
Aug-97		<b>2 J</b>	<10	<10	<b>1 JB</b>	<b>1 J</b>	<b>1 J</b>	<b>3 J</b>	<10	<10	<10	<10	<10	<10
Oct-97		<b>5 J</b>	<b>1 J</b>	<10	<10	<b>2 J</b>	<b>2 J</b>	<b>4 J</b>	<10	<10	<10	<10	<10	<10
8/9/06		<5	<5	<25	<5	<5	<b>7.1</b>	<b>6.1</b>	<5	<5	<5	<5	<10	<5
10/9/07		4 J	<5	<10	<5	<5	<b>6.1</b>	<b>5 J</b>	<5	<5	<5	<5	<5	<5
2/1/08		8.2	<5	<10	<5	<5	<b>9</b>	<b>7.9</b>	<5	<5	<5	<5	<5	<5
6/17/09		5.7	< 5	< 10	< 5	< 5	<b>5.4</b>	<b>5 J</b>	< 5	< 5	< 5	< 5	< 5	< 5
7/20/10		4 J	<5	11	<5	<5	<b>5 J</b>	<b>4 J</b>	<5	<5	<5	<5	<5	<5
12/12/11		4 J	<5	<10 J	<5	<5	<b>5 J</b>	<b>4 J</b>	<5	<5	<5	<5	<5	<5
3/20/12		<5	<5	<10	<5	<5	<b>3 J</b>	<b>3 J</b>	<5	<5	<5	<5	<5	<5

## Appendix C

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

Cortland County Towslee Landfill

#### Conventionals

Alkalinity  
Hardness  
Chloride  
Ammonia  
TKN  
COD  
TOC

#### Metals

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

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

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

Analyte	Year/ Quarter	CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Alkalinity	1997_Q3	--	134	160	94.8	702	577	145	235	253	130	357	240	569
mg/L	1997_Q4	--	132	145	93.6	784	673	146	190	355	115	325	224	660
	2006_Q1	--	--	127	92	330	652	162	--	--	--	--	131	648
	2006_Q2	--	--	139	94	355	670	170	--	--	--	--	148	675
	2006_Q3	--	--	122	91	384	612	140	--	--	--	--	154	595
	2006_Q4	--	--	132	89	423	646	152	--	--	--	--	153	635
	2007_Q1	--	--	140	99	380	650	82	--	--	--	--	180	640
	2007_Q2	--	--	120	96	320	480	59	--	--	--	--	160	510
	2007_Q3	--	--	120	100	420	600	170	--	--	--	--	150	530
	2007_Q4	--	--	130	100	290	640	130	--	--	--	--	140	540
	2008_Q1	--	--	--	100	360	640	110	--	--	--	--	140	570
	2008_Q2	--	--	120	100	290	620	170	--	--	--	--	140	560
	2008_Q3	--	--	120	100	380	640	91	--	--	--	--	110	600
	2008_Q4	--	--	120	99	360	680	97	--	--	--	--	120	670
	2009_Q1	--	--	130	92	320	650	18	--	--	--	--	120	500
	2009_Q2	--	--	100	100	360	580	160	--	--	--	--	140	500
	2009_Q3	--	--	120	98	340	650	50	--	--	--	--	140	480
	2009_Q4	--	--	120	86	280	610	79	--	--	--	--	140	520
	2010_Q1	--	--	--	--	310	600	180	--	--	--	--	150	600
	2010_Q2	--	--	140	100	300	610	93	--	--	--	--	150	500
	2010_Q3	--	--	120	91	360	630	160	--	--	--	--	140	510
	2010_Q4	--	--	120	90	310	600	130	--	--	--	--	160	520
	2011_Q1	--	--	130	100	260	710	75	--	--	--	--	130	600
	2011_Q2	--	--	120	93	250	540	150	--	--	--	--	150	510
	2011_Q3	130	120	130	100	300	630	180	240	410	--	200	160	560
	2011_Q4	140	150	150	120	270	570	140	240	400	--	210	180	550
	2012_Q1	130	140	130	110	260	490	130	260	460	--	200	140	500
	2012_Q2	120	140	140	100	250	790	160	210	350	--	130	190	520

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

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

Analyte	Year/ Quarter	CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Hardness mg/L	1997_Q3	--	160	4000	88	1300	960	1250	280	308	250	650	300	1010
	1997_Q4	--	160	240	140	720	900	200	300	464	140	550	240	1150
	2006_Q1	--	--	167	97.6	241	697	153	--	--	--	--	135	627
	2006_Q2	--	--	140	81.9	260	726	179	--	--	--	--	144	599
	2006_Q3	--	--	148	89	265	686	191	--	--	--	--	131	531
	2006_Q4	--	--	148	82	301	675	158	--	--	--	--	133	526
	2007_Q1	--	--	134	83.6	225	723	74	--	--	--	--	156	529
	2007_Q2	--	--	153	105	262	575	58.1	--	--	--	--	139	499
	2007_Q3	--	--	148	104	275	716	150	--	--	--	--	138	481
	2007_Q4	--	--	146	90.8	165	652	86.2	--	--	--	--	124	459
	2008_Q1	--	--	--	89.3	246	678	97.7	--	--	--	--	136	528
	2008_Q2	--	--	151	103	203	654	123	--	--	--	--	142	506
	2008_Q3	--	--	159	107	303	728	76.7	--	--	--	--	137	538
	2008_Q4	--	--	165	105	343	788	97.9	--	--	--	--	134	569
	2009_Q1	--	--	161	97.1	229	678	38.1	--	--	--	--	142	496
	2009_Q2	--	--	163	111	295	782	196	--	--	--	--	154	534
	2009_Q3	--	--	158	108	265	755	37.8	--	--	--	--	148	499
	2009_Q4	--	--	161	206	95	608	65.4	--	--	--	--	138	473
	2010_Q1	--	--	--	--	291	609	93.2	--	--	--	--	163	508
	2010_Q2	--	--	161	92.9	235	681	58	--	--	--	--	147	435
	2010_Q3	--	--	167	106	313	730	194	--	--	--	--	144	520
	2010_Q4	--	--	169	104	260	693	66.9	--	--	--	--	147	507
	2011_Q1	--	--	159	108	190	677	45.7	--	--	--	--	145	484
	2011_Q2	--	--	164	87.4	167	589	137	--	--	--	--	153	465
	2011_Q3	150	135	172	115	253	773	187	274	496	--	208	172	585
	2011_Q4	145	155	177	108	199	713	122	264	430	--	194	166	505
	2012_Q1	144	164	225	124	170	712	147	262	444	--	197	146	524
	2012_Q2	146	155	175	111	207	643	146	259	384	--	169	150	449

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

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

Analyte	Year/ Quarter	CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Chloride mg/L	1997_Q3	--	<2	152	<2	156	267	31.4	32	79.1	44.5	79.1	38.2	300
	1997_Q4	--	2.5	46	<2	149	238	28.7	33.6	74.6	10.1	71.8	35	276
	2006_Q1	--	--	21.3	2.55	23.3	145	14	--	--	--	--	21.1	144
	2006_Q2	--	--	22.2	2.28	25.7	154	12.7	--	--	--	--	2.33	143
	2006_Q3	--	--	34.2	3.47	23.5	122	13.5	--	--	--	--	2.32	119
	2006_Q4	--	--	26.7	0.611	25.7	121	12.7	--	--	--	--	3.39	85
	2007_Q1	--	--	28.7	3.24	21.2	167	3.37	--	--	--	--	11.6	145
	2007_Q2	--	--	27	4.45	14.7	131	1.8	--	--	--	--	6.99	131
	2007_Q3	--	--	27	3.16	24.4	163	12	--	--	--	--	13.8	145
	2007_Q4	--	--	27.9	6.44	10.6	161	5.73	--	--	--	--	25.9	141
	2008_Q1	--	--	--	3.15	21	160	2.43	--	--	--	--	16.7	141
	2008_Q2	--	--	28	5.95	13.5	132	10.5	--	--	--	--	16.9	1260
	2008_Q3	--	--	25.9	5.61	20.2	148	1.1	--	--	--	--	31.1	136
	2008_Q4	--	--	29.7	6.03	15.5	162	1.75	--	--	--	--	28.6	135
	2009_Q1	--	--	30.4	2.86	13.7	118	1.85	--	--	--	--	13.3	114
	2009_Q2	--	--	30.7	4.74	20.5	159	9.25	--	--	--	--	19.4	128
	2009_Q3	--	--	29.5	6.86	17.7	150	<1	--	--	--	--	19.7	120
	2009_Q4	--	--	30	4.71	12.5	140	<1	--	--	--	--	14.7	117
	2010_Q1	--	--	--	--	12.4	112	14.8	--	--	--	--	13.2	104
	2010_Q2	--	--	31.7	3.54	14.5	130	1.31	--	--	--	--	12	89.1
	2010_Q3	--	--	33	3.63	22.5	139	7.44	--	--	--	--	14	128
	2010_Q4	--	--	31.4	6.11	17.1	127	3.3	--	--	--	--	16	115
	2011_Q1	--	--	32	4.07	11.2	124	2.69	--	--	--	--	11.9	95.7
	2011_Q2	--	--	30.5	1.7	8.33	104	2.28	--	--	--	--	16.4	99
	2011_Q3	1.41	2.2	32.1	3.4	16.2	108	4.03	23.7	23.6	--	21.4	12.7	100
	2011_Q4	6.88	3.67	28.5	1.69	10.2	102	3.44	27.7	25.5	--	13.9	19.4	108
	2012_Q1	<1	1.43	33.9	6.68	8.96	123	1.88	23.8	21.5	--	8.86	16.2	99.4
	2012_Q2	1.2	1.46	33.1	2.47	11.6	124	1.59	23.4	22.3	--	20	10.1	99.5

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

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

Analyte	Year/ Quarter	CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Ammonia mg/L	1997_Q3	--	0.04	6	<0.02	23	0.95	<0.02	<0.02	<0.02	<0.02	1.6	0.09	0.93
	1997_Q4	--	0.11	2.6	0.04	9.1	1.3	0.09	0.04	0.2	0.18	0.02	2.5	0.89
	2006_Q1	--	--	0.276	0.0938	10.6	0.389	0.0969	--	--	--	--	0.0549	0.34
	2006_Q2	--	--	<0.02	<0.02	18.4	0.824	<0.02	--	--	--	--	<0.02	<0.02
	2006_Q3	--	--	0.161	<0.02	16	0.786	<0.02	--	--	--	--	0.096	<0.02
	2006_Q4	--	--	<0.1	<0.1	15.1	0.282	<0.1	--	--	--	--	<0.1	<0.1
	2007_Q1	--	--	<0.5	<0.5	10.2	0.921	1.45	--	--	--	--	<0.5	<0.5
	2007_Q2	--	--	<0.5	<0.5	9.89	0.844	<0.5	--	--	--	--	<0.5	<0.5
	2007_Q3	--	--	<0.5	<0.5	14.1	1.31	<0.5	--	--	--	--	<0.5	<0.5
	2007_Q4	--	--	<0.5	<0.5	13.5	1.22	<0.5	--	--	--	--	<0.5	<0.5
	2008_Q1	--	--	--	<0.5	8.78	0.785	<0.5	--	--	--	--	<0.5	<0.5
	2008_Q2	--	--	<0.5	<0.5	8.2	0.572	<0.5	--	--	--	--	<0.5	<0.5
	2008_Q3	--	--	<0.5	<0.5	11.9	1.01	<0.5	--	--	--	--	<0.5	<0.5
	2008_Q4	--	--	<0.5	<0.5	10.8	0.504	<0.5	--	--	--	--	<0.5	<0.5
	2009_Q1	--	--	<0.5	<0.5	8.43	0.642	<0.5	--	--	--	--	<0.5	<0.5
	2009_Q2	--	--	<0.5	<0.5	11.8	0.665	<0.5	--	--	--	--	<0.5	<0.5
	2009_Q3	--	--	<0.5	<0.5	10.3	0.73	<0.5	--	--	--	--	<0.5	<0.5
	2009_Q4	--	--	<0.5	<0.5	8.75	0.696	<0.5	--	--	--	--	<0.5	<0.5
	2010_Q1	--	--	--	--	8.45	0.69	<0.5	--	--	--	--	<0.5	<0.5
	2010_Q2	--	--	<0.5	<0.5	8.06	1.18	<0.5	--	--	--	--	<0.5	<0.5
	2010_Q3	--	--	<0.5	<0.5	10.1	0.812	<0.5	--	--	--	--	<0.5	<0.5
	2010_Q4	--	--	<0.5	<0.5	6.9	<0.5	<0.5	--	--	--	--	<0.5	<0.5
	2011_Q1	--	--	<0.5	<0.5	5.38	0.593	<0.5	--	--	--	--	<0.5	<0.5
	2011_Q2	--	--	<0.5	<0.5	7.03	0.752	<0.5	--	--	--	--	<0.5	<0.5
	2011_Q3	<0.5	<0.5	<0.5	<0.5	5.16	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5
	2011_Q4	<0.5	<0.5	<0.5	<0.5	5.24	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5
	2012_Q1	<0.5	<0.5	<0.5	<0.5	5.32	<0.5	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5
	2012_Q2	<0.5	<0.5	<0.5	<0.5	5.9	0.76	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5

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

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

Analyte	Year/ Quarter	CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
TKN	1997_Q3	--	0.2	18	<0.2	31.5	2.6	0.4	0.3	0.5	0.4	1.5	0.6	1.1
mg/L	1997_Q4	--	0.21	3.8	<0.2	21.2	2	0.24	<0.2	0.4	0.24	<0.2	3.3	1.4
	2006_Q1	--	--	23.3	0.54	10.6	1.31	0.455	--	--	--	--	0.392	1.5
	2006_Q2	--	--	0.529	0.755	14	1.78	1.09	--	--	--	--	0.904	1.68
	2006_Q3	--	--	0.366	0.497	16.5	1.64	0.239	--	--	--	--	0.214	0.75
	2006_Q4	--	--	<0.2	<0.2	15	1.9	0.266	--	--	--	--	0.279	1.11
	2007_Q1	--	--	2.2	<0.5	132	1.84	4.26	--	--	--	--	<0.5	1.47
	2007_Q2	--	--	<0.5	<0.5	12.5	1.62	1.47	--	--	--	--	<0.5	3.6
	2007_Q3	--	--	5.66	<0.5	16.1	1.67	<0.5	--	--	--	--	<0.5	0.784
	2007_Q4	--	--	<0.5	<0.5	12.6	1.53	<0.5	--	--	--	--	<0.5	0.591
	2008_Q1	--	--	--	<0.5	10.7	1.33	<0.5	--	--	--	--	<0.5	0.522
	2008_Q2	--	--	<0.5	<0.5	11.2	1.55	<0.5	--	--	--	--	<0.5	0.949
	2008_Q3	--	--	<0.5	<0.5	12.9	1.03	0.718	--	--	--	--	<0.5	<0.5
	2008_Q4	--	--	<0.5	<0.5	11.6	1.13	<0.5	--	--	--	--	<0.5	<0.5
	2009_Q1	--	--	<0.5	<0.5	10.3	1.22	<0.5	--	--	--	--	<0.5	1.92
	2009_Q2	--	--	<0.5	<0.5	13.5	1.19	<0.5	--	--	--	--	<0.5	0.851
	2009_Q3	--	--	<0.5	<0.5	13.1	1.07	0.786	--	--	--	--	<0.5	0.927
	2009_Q4	--	--	<0.5	<0.5	12.5	1.12	1.36	--	--	--	--	<0.5	0.599
	2010_Q1	--	--	--	--	11.6	1.28	<0.5	--	--	--	--	<0.5	1.02
	2010_Q2	--	--	<0.5	<0.5	11.9	1.55	1.14	--	--	--	--	0.522	1.4
	2010_Q3	--	--	<0.5	<0.5	16.5	1.37	1.26	--	--	--	--	<0.5	1.27
	2010_Q4	--	--	0.897	0.924	9.84	2.45	1.83	--	--	--	--	0.799	2.15
	2011_Q1	--	--	<0.5	<0.5	7.95	1.14	<0.5	--	--	--	--	<0.5	0.639
	2011_Q2	--	--	<0.5	<0.5	8.21	0.948	<0.5	--	--	--	--	<0.5	<0.5
	2011_Q3	<0.5	<0.5	<0.5	<0.5	9.52	1.95	0.508	<0.5	<0.5	--	<0.5	<0.5	1.03
	2011_Q4	<0.5	<0.5	<0.5	<0.5	6.86	1.46	<0.5	<0.5	<0.5	--	1.12	0.546	2.19
	2012_Q1	<0.5	<0.5	0.994	<0.5	4.95	<0.5	<0.5	<0.5	<0.5	--	1.16	<0.5	<0.5
	2012_Q2	<0.5	<0.5	<0.5	<0.5	6.56	0.811	<0.5	<0.5	<0.5	--	1.89	<0.5	<0.5

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

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

Analyte	Year/ Quarter	CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
COD	1997_Q3	--	<15	305	<15	127	58	19	22	37	16	94	40	43
mg/L	1997_Q4	--	<15	64	<15	136	61	<15	<15	22	<15	82	19	112
	2006_Q1	--	--	<10	<10	<10	<10	<10	--	--	--	--	<10	21.2
	2006_Q2	--	--	<10	<10	13.8	17.2	<10	--	--	--	--	<10	16.5
	2006_Q3	--	--	<10	<10	27	24.6	13	--	--	--	--	11.6	26.4
	2006_Q4	--	--	<10	<10	15.6	27	<10	--	--	--	--	<10	20.5
	2007_Q1	--	--	<20	<20	<20	21	47	--	--	--	--	<20	27
	2007_Q2	--	--	<20	<20	<20	<20	<20	--	--	--	--	<20	<20
	2007_Q3	--	--	<20	<20	46	<20	<20	--	--	--	--	<20	<20
	2007_Q4	--	--	<20	<20	22	<20	<20	--	--	--	--	<20	<20
	2008_Q1	--	--	--	<20	23	24	23	--	--	--	--	<20	<20
	2008_Q2	--	--	<20	<20	21	<20	<20	--	--	--	--	<20	36
	2008_Q3	--	--	<20	<20	36	<20	34	--	--	--	--	<20	22
	2008_Q4	--	--	<20	<20	32	<20	<20	--	--	--	--	<20	29
	2009_Q1	--	--	<20	<20	<20	<20	<20	--	--	--	--	<20	<20
	2009_Q2	--	--	<20	<20	31	23	<20	--	--	--	--	<20	38
	2009_Q3	--	--	<20	<20	32	26	40	--	--	--	--	<20	37
	2009_Q4	--	--	<20	<20	26	<20	35	--	--	--	--	<20	21
	2010_Q1	--	--	--	--	41	22	<20	--	--	--	--	<20	33
	2010_Q2	--	--	<20	<20	23	<20	30	--	--	--	--	<20	28
	2010_Q3	--	--	<20	<20	50	<20	27	--	--	--	--	<20	31
	2010_Q4	--	--	<20	<20	20	25	29	--	--	--	--	<20	40
	2011_Q1	--	--	<20	<20	<20	<20	<20	--	--	--	--	<20	28
	2011_Q2	--	--	<20	<20	24	<20	<20	--	--	--	--	<20	33
	2011_Q3	<20	<20	<20	<20	<20	<20	<20	<20	<20	--	<20	<20	29
	2011_Q4	<20	<20	<20	<20	<20	25	<20	<20	<20	--	<20	<20	40
	2012_Q1	<20	<20	<20	<20	<20	<20	<20	<20	<20	--	<20	<20	22
	2012_Q2	<20	<20	<20	<20	36	<20	<20	<20	<20	--	<20	<20	22

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

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

Analyte	Year/ Quarter	CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
TOC	1997_Q3	--	2.1	4.2	9.3	42.5	12.3	4.5	7.9	7.7	2.7	14	6	10.1
mg/L	1997_Q4	--	<1	1.6	<1	24.1	11.9	1.9	3.7	5.6	<1	10.6	5.8	12.6
	2006_Q1	--	--	4.76	5.41	10.1	<2	5.58	--	--	--	--	5.22	12.8
	2006_Q2	--	--	2.61	2.34	7.18	7.76	<2	--	--	--	--	3.14	8.19
	2006_Q3	--	--	<2	<2	5.67	4.82	<2	--	--	--	--	<2	6.12
	2006_Q4	--	--	<2	<2	5.68	7.49	<2	--	--	--	--	<2	7.46
	2007_Q1	--	--	<3	<3	6.7	6.4	<3	--	--	--	--	<3	8.1
	2007_Q2	--	--	<3	<3	4.8	3	<3	--	--	--	--	<3	6
	2007_Q3	--	--	<3	<3	7.3	5.7	<3	--	--	--	--	<3	7.2
	2007_Q4	--	--	<3	<3	6.3	17.2	3.7	--	--	--	--	<3	11.5
	2008_Q1	--	--	--	<3	21.8	82.6	<3	--	--	--	--	<3	69.9
	2008_Q2	--	--	<3	<3	5.2	23.2	<3	--	--	--	--	<3	17.8
	2008_Q3	--	--	<3	<3	6.3	4.7	7.3	--	--	--	--	<3	5.2
	2008_Q4	--	--	<3	<3	6	6.8	3.6	--	--	--	--	<3	6.1
	2009_Q1	--	--	<3	<3	4.8	4.5	<3	--	--	--	--	<3	5.1
	2009_Q2	--	--	<3	<3	7.2	5.5	<3	--	--	--	--	<3	5.7
	2009_Q3	--	--	<3	<3	5.9	4.6	9.2	--	--	--	--	<3	5
	2009_Q4	--	--	<3	<3	6.5	4.6	5.7	--	--	--	--	<3	5.2
	2010_Q1	--	--	--	--	5.2	3.5	<3	--	--	--	--	<3	4.9
	2010_Q2	--	--	<3	<3	6.7	5.8	9	--	--	--	--	<3	6.7
	2010_Q3	--	--	<3	<3	7.8	5.7	<3	--	--	--	--	<3	6
	2010_Q4	--	--	<3	<3	6	5.4	6.6	--	--	--	--	<3	6.1
	2011_Q1	--	--	<3	<3	4.4	4.2	<3	--	--	--	--	<3	5.1
	2011_Q2	--	--	<3	<3	<3	3.6	<3	--	--	--	--	<3	4.8
	2011_Q3	<3	<3	<3	<3	5.1	5.4	3.1	<3	4	--	<3	<3	6.1
	2011_Q4	<3	<3	<3	<3	3.4	3.4	<3	<3	<3	--	<3	<3	4.1
	2012_Q1	<3	<3	<3	<3	7.4	20.7	4.4	4.5	8.4	--	5.6	<3	15.1
	2012_Q2	<3	<3	<3	<3	5.5	14.4	<3	<3	<3	--	<3	<3	7.3

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

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

Analyte	Year/ Quarter	CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Aluminum	1997_Q3	--	0.587	724	0.662	79.3	2.03	21.7	2.01	1.61	10.1	59.1	8.59	40
	1997_Q4	--	5.24	16.9	0.134	59.1	5.31	2.39	0.184	1.32	0.228	38.6	0.642	88.4
	2006_Q3	--	--	2.96	1.09	0.43	0.18	0.078	--	--	--	--	0.115	0.415
	2007_Q4	--	--	2.07	0.537	0.444	<0.1	0.33	--	--	--	--	0.102	2.43
	2008_Q1	--	--	--	0.518	1.98	0.168	0.23	--	--	--	--	0.134	0.919
	2009_Q2	--	--	1.57	0.255	<0.1	0.235	<0.1	--	--	--	--	<0.1	9.56
	2010_Q3	--	--	0.142	<0.1	3.37	<0.1	5.32	--	--	--	--	<0.1	1.52
	2011_Q4	0.383	1.7	0.711	0.305	0.317	0.175	0.107	0.253	0.153	--	0.683	<0.1	2.12
	2012_Q1	1.32	0.145	19.1	0.141	0.323	0.536	1.33	0.148	0.39	--	3.91	<0.1	0.709
Arsenic	1997_Q3	--	0.0032	0.353	<0.0024	0.0631	0.007	0.0127	<0.0024	<0.0024	0.0061	0.0476	0.009	0.0176
	1997_Q4	--	0.004	0.0134	<0.0024	0.0537	0.0083	<0.0024	<0.0024	<0.0024	<0.0024	0.0404	0.0084	0.0459
	2006_Q3	--	--	<0.025	<0.025	<0.025	<0.025	<0.025	--	--	--	--	<0.025	<0.025
	2007_Q4	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2008_Q1	--	--	--	<0.01	0.0145	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2009_Q2	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2010_Q3	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	<0.005	<0.005
	2011_Q4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.005
	2012_Q1	<0.005	<0.005	0.0115	<0.005	0.00679	<0.005	<0.005	<0.005	<0.005	--	0.00689	<0.005	0.00582
Calcium	1997_Q3	--	41.5	430	26.7	186	288	57.8	73.8	110	45.8	99.1	70.5	234
	1997_Q4	--	45.7	48.6	24.7	172	245	53.7	74.4	127	32.1	82.2	55.6	271
	2006_Q1	--	--	46.2	26.8	69.1	203	46.3	--	--	--	--	39.3	171
	2006_Q2	--	--	41.8	23.9	74.1	216	55.3	--	--	--	--	39.6	165
	2006_Q3	--	--	43.2	25.8	77.3	203	57.9	--	--	--	--	36.1	150
	2006_Q4	--	--	43.9	24.1	88.5	200	48.3	--	--	--	--	37.4	148
	2007_Q1	--	--	39.2	23.7	64.2	216	23	--	--	--	--	45.6	149
	2007_Q2	--	--	44.5	30	75.3	170	18.1	--	--	--	--	39.9	140
	2007_Q3	--	--	43.5	29.9	80.4	214	45.1	--	--	--	--	40.2	135
	2007_Q4	--	--	42.2	26	47.9	195	27.5	--	--	--	--	36.7	131
	2008_Q1	--	--	--	25.1	70.3	201	30.2	--	--	--	--	39.2	148
	2008_Q2	--	--	43.2	28.6	57.5	192	37.6	--	--	--	--	39.5	139
	2008_Q3	--	--	46.2	30.2	87.8	214	24.4	--	--	--	--	39	150
	2008_Q4	--	--	48.3	30	99	235	31.3	--	--	--	--	38.7	162
	2009_Q1	--	--	47.2	27.7	66.7	201	12.3	--	--	--	--	39.6	140
	2009_Q2	--	--	47	31.4	87.1	237	59.5	--	--	--	--	42.9	150
	2009_Q3	--	--	46.5	31.1	78.6	227	15.2	--	--	--	--	42	144
	2009_Q4	--	--	45	58.7	26.5	178	26.2	--	--	--	--	38.2	131
	2010_Q1	--	--	--	--	71.1	177	28.8	--	--	--	--	45	139
	2010_Q2	--	--	47	26.5	68.7	202	23.2	--	--	--	--	40.6	122
	2010_Q3	--	--	48.9	30.3	91.2	216	57.3	--	--	--	--	39.9	147
	2010_Q4	--	--	49	29.7	74.6	207	26.8	--	--	--	--	40.9	143
	2011_Q1	--	--	45.6	30.5	54.9	200	18.3	--	--	--	--	40.1	136
	2011_Q2	--	--	46.9	24.9	48.7	172	42.9	--	--	--	--	43.3	130
	2011_Q3	45.2	41	51.5	34.3	76.9	237	58.9	75.8	153	--	66.6	49.7	173
	2011_Q4	41.6	44.1	51	30.8	58.1	212	38.6	70	128	--	59.7	48.1	146
	2012_Q1	40.7	47.1	58.2	35	49.6	208	44.9	69	131	--	58.8	40.8	149
	2012_Q2	41.2	43.1	49.4	30.4	59.2	184	43.6	66.6	110	--	50.9	39.8	123
Chromium	1997_Q3	--	0.0042	1.04	0.002	0.112	0.004	0.0249	0.0032	0.0015	0.0092	0.0859	0.0092	0.0556
	1997_Q4	--	0.0089	0.0265	<0.0004	0.0967	0.0086	0.0022	<0.0004	0.00093	<0.0004	0.0705	0.0017	0.146
	2006_Q3	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	<0.005	<0.005
	2007_Q4	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	<0.005	<0.005
	2008_Q1	--	--	--	<0.005	0.0177	0.00816	<0.005	--	--	--	--	<0.005	0.00667
	2009_Q2	--	--	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	<0.01	<0.01
	2010_Q3	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	<0.01	<0.01
	2011_Q4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01
	2012_Q1	<0.01	<0.01	0.0267	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01

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

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

Analyte	Year/ Quarter	CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Cobalt	1997_Q3	--	<0.0011	0.59	<0.0011	0.0719	0.0091	0.0121	0.002	0.0036	0.0105	0.056	0.0112	0.0311
	1997_Q4	--	0.0053	0.0168	<0.0011	0.0628	0.0141	0.0019	0.0014	0.0035	<0.0011	0.0463	0.0056	0.0791
	2006_Q3	--	--	<0.015	<0.015	<0.015	<0.015	<0.015	--	--	--	--	<0.015	<0.015
	2007_Q4	--	--	<0.02	<0.02	<0.02	<0.02	<0.02	--	--	--	--	<0.02	<0.02
	2008_Q1	--	--	--	<0.02	<0.02	<0.02	<0.02	--	--	--	--	<0.02	<0.02
	2009_Q2	--	--	<0.02	<0.02	<0.02	<0.02	<0.02	--	--	--	--	<0.02	<0.02
	2010_Q3	--	--	<0.02	<0.02	<0.02	<0.02	<0.02	--	--	--	--	<0.02	<0.02
	2011_Q4	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02
	2012_Q1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02
Copper	1997_Q3	--	0.004	0.996	0.004	0.104	0.0069	0.0315	0.0051	0.0066	0.0181	0.0973	0.0116	0.0637
	1997_Q4	--	0.0085	0.0254	0.0025	0.0779	0.0118	0.0076	0.0018	0.0076	0.0037	0.0689	0.0051	0.129
	2006_Q3	--	--	0.022	0.017	0.012	0.017	0.023	--	--	--	--	0.016	0.013
	2007_Q4	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2008_Q1	--	--	--	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2009_Q2	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2010_Q3	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	<0.01
	2011_Q4	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01
	2012_Q1	<0.01	<0.01	0.0218	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0224	--	<0.01	<0.01
Iron	1997_Q3	--	1.01	1550	1.33	154	4.3	26.6	3.04	2.2	11.5	111	10.6	65.9
	1997_Q4	--	10.3	35.7	0.226	131	10.7	3.58	0.372	1.99	0.46	85.5	3	174
	2006_Q1	--	--	19.4	9.42	8.29	0.913	1.88	--	--	--	--	1.09	14.5
	2006_Q2	--	--	2.99	1.48	24	0.836	0.626	--	--	--	--	0.511	1.33
	2006_Q3	--	--	6.03	1.84	6.5	1.2	0.104	--	--	--	--	0.306	0.722
	2006_Q4	--	--	2.11	0.273	10.1	1.07	0.283	--	--	--	--	0.195	2.78
	2007_Q1	--	--	1.67	2.39	10.8	0.637	1.18	--	--	--	--	1.87	1.68
	2007_Q2	--	--	2.14	0.508	6.86	0.469	0.599	--	--	--	--	0.486	1.52
	2007_Q3	--	--	1.21	0.465	7.67	0.468	0.231	--	--	--	--	0.163	9.97
	2007_Q4	--	--	3.49	0.73	4.95	0.323	0.537	--	--	--	--	0.216	3.65
	2008_Q1	--	--	--	1	9.77	0.439	0.451	--	--	--	--	0.229	1.68
	2008_Q2	--	--	1.17	1.38	4.1	0.56	0.574	--	--	--	--	0.33	1.99
	2008_Q3	--	--	0.217	0.185	10.6	0.236	0.508	--	--	--	--	<0.06	0.342
	2008_Q4	--	--	0.429	0.174	9.51	0.28	0.177	--	--	--	--	<0.06	1.16
	2009_Q1	--	--	0.818	2.92	7.77	0.466	0.6	--	--	--	--	0.268	0.322
	2009_Q2	--	--	1.65	0.523	8.28	0.464	0.155	--	--	--	--	0.104	10.1
	2009_Q3	--	--	0.348	0.115	5.21	0.222	0.534	--	--	--	--	0.0703	0.108
	2009_Q4	--	--	6.19	6.72	0.827	0.235	1.44	--	--	--	--	0.417	1.19
	2010_Q1	--	--	--	--	64.2	0.451	0.366	--	--	--	--	0.448	3.95
	2010_Q2	--	--	0.484	0.423	6.1	0.329	0.291	--	--	--	--	0.226	0.469
	2010_Q3	--	--	0.219	0.159	13	0.149	6.97	--	--	--	--	<0.06	1.71
	2010_Q4	--	--	1.99	1.02	9.73	0.273	2.42	--	--	--	--	0.337	3.06
	2011_Q1	--	--	1.47	1.19	4.73	0.345	0.232	--	--	--	--	0.114	0.162
	2011_Q2	--	--	3.13	<0.06	4.27	0.312	0.121	--	--	--	--	0.235	0.418
	2011_Q3	0.126	0.662	0.872	0.121	5.34	0.276	0.121	0.578	0.261	--	0.835	0.835	4.66
	2011_Q4	0.688	2.75	0.987	0.341	5.42	0.333	0.345	0.344	0.174	--	1.32	0.0989	3.03
	2012_Q1	2.04	0.248	33.7	0.238	2.9	1.11	1.77	0.386	0.427	--	7.22	1.05	0.931
	2012_Q2	2.34	0.509	1.65	3.2	3.15	0.337	0.451	0.0945	0.146	--	0.98	7.38	2.9

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

**Total Metals** (all values in mg/l)  
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Analyte	Year/ Quarter	CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A	
Lead	1997_Q3	--	0.0017	0.454	<0.001	0.0561	0.0044	0.0077	0.0013	0.0031	0.0114	0.0168	0.0044	0.0251	
	1997_Q4	--	0.0049	0.0123	<0.001	0.0436	0.0058	<0.001	<0.001	0.0024	<0.001	0.0113	<0.001	0.0585	
	2006_Q1	--	--	0.00716	<0.005	<0.005	<0.005	<0.005	--	--	--	--	<0.005	0.0175	
	2006_Q2	--	--	0.007	<0.005	0.019	0.009	0.005	--	--	--	--	<0.005	0.009	
	2006_Q3	--	--	<0.005	<0.005	<0.005	<0.005	0.005	--	--	--	--	<0.005	0.006	
	2006_Q4	--	--	<0.005	<0.005	0.006	<0.005	<0.005	--	--	--	--	<0.005	<0.005	
	2007_Q1	--	--	<0.003	0.00431	0.00524	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2007_Q2	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2007_Q3	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	0.00656	
	2007_Q4	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2008_Q1	--	--	--	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2008_Q2	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2008_Q3	--	--	<0.003	<0.003	0.0039	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2008_Q4	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2009_Q1	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2009_Q2	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2009_Q3	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2009_Q4	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2010_Q1	--	--	--	--	0.0187	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2010_Q2	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2010_Q3	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2010_Q4	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2011_Q1	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2011_Q2	--	--	<0.003	<0.003	<0.003	<0.003	<0.003	--	--	--	--	<0.003	<0.003	
	2011_Q3	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	--	<0.003	<0.003	0.00321
	2011_Q4	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	--	<0.003	<0.003	<0.003
	2012_Q1	<0.003	<0.003	0.0108	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	--	<0.003	<0.003	<0.003
	2012_Q2	<0.003	<0.003	<0.003	0.00423	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	--	<0.003	<0.015	0.00328
Magnesium	1997_Q3	--	9.5	309	6.47	61.6	61.7	17	22.8	24.3	14.8	37.6	19	67	
	1997_Q4	--	10.4	15.6	5.84	53.6	49.9	11	21.5	26	9.45	28.8	12.7	88.3	
	2006_Q1	--	--	12.6	7.46	16.6	46.1	9.13	--	--	--	--	8.94	48.6	
	2006_Q2	--	--	8.67	5.39	18.3	45.3	10	--	--	--	--	10.9	45.5	
	2006_Q3	--	--	9.7	6.05	17.5	43.5	11.2	--	--	--	--	9.86	38	
	2006_Q4	--	--	9.43	5.31	19.4	42.7	9.2	--	--	--	--	9.71	38	
	2007_Q1	--	--	8.87	5.94	15.7	44.8	4.04	--	--	--	--	10.2	38.4	
	2007_Q2	--	--	10.2	7.4	17.9	36.3	3.1	--	--	--	--	9.68	36.4	
	2007_Q3	--	--	9.67	7.12	18	44.1	9.15	--	--	--	--	9.12	35	
	2007_Q4	--	--	9.8	6.28	11	39.9	4.26	--	--	--	--	7.81	32.1	
	2008_Q1	--	--	--	6.44	17.1	42.8	5.42	--	--	--	--	9.37	38.4	
	2008_Q2	--	--	10.6	7.58	14.3	42.4	7.04	--	--	--	--	10.4	38.5	
	2008_Q3	--	--	10.7	7.74	20.3	47.1	3.83	--	--	--	--	9.61	39.5	
	2008_Q4	--	--	10.8	7.28	23.1	49.1	4.8	--	--	--	--	9.13	39.8	
	2009_Q1	--	--	10.6	6.76	15.1	42.9	1.82	--	--	--	--	10.5	35.8	
	2009_Q2	--	--	11.1	7.83	18.8	45.9	11.6	--	--	--	--	11.4	38.7	
	2009_Q3	--	--	10	7.34	16.8	45.6	<1	--	--	--	--	10.4	34	
	2009_Q4	--	--	11.9	14.4	7.01	39.7	<5	--	--	--	--	10.4	35.3	
	2010_Q1	--	--	--	--	27.6	40.4	5.17	--	--	--	--	12.3	38.8	
	2010_Q2	--	--	10.5	6.49	15.4	43.1	<5	--	--	--	--	11	31.4	
	2010_Q3	--	--	10.8	7.27	20.6	46.2	12.5	--	--	--	--	10.7	36.9	
	2010_Q4	--	--	11.3	7.29	17.9	43	<5	--	--	--	--	10.9	36.4	
	2011_Q1	--	--	11	7.75	12.9	42.8	<5	--	--	--	--	10.8	35	
	2011_Q2	--	--	11.5	6.14	11	38.8	7.25	--	--	--	--	10.8	34.4	
	2011_Q3	9.04	7.95	10.5	7.05	14.8	43.9	9.72	20.5	27.3	--	10.2	11.7	37.2	
	2011_Q4	10.1	10.8	12	7.66	13.1	44.7	6.31	21.6	26.8	--	10.8	11.3	33.9	
	2012_Q1	10.3	11.4	19.3	8.85	11.2	46.6	8.39	21.6	28.3	--	12.2	10.8	36.8	
	2012_Q2	10.5	11.5	12.6	8.66	14.4	44.9	9.02	22.4	26.5	--	10.3	12.4	34.8	

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Analyte	Year/ Quarter	CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Manganese	1997_Q3	--	0.19	24.6	0.195	35.7	8.24	0.732	0.12	1.14	0.485	14.5	3.43	5.87
	1997_Q4	--	0.352	0.783	0.146	31.6	7.43	0.174	0.0697	2.15	0.0661	12.7	4.17	9.55
	2006_Q1	--	--	0.534	2.28	12.2	6.98	0.208	--	--	--	--	0.559	6.08
	2006_Q2	--	--	0.194	0.191	11.5	6.8	0.175	--	--	--	--	0.12	5.69
	2006_Q3	--	--	0.38	0.251	12	6.63	0.416	--	--	--	--	0.297	4.4
	2006_Q4	--	--	0.306	0.126	13.6	6.46	0.176	--	--	--	--	0.185	4.85
	2007_Q1	--	--	0.19	0.521	9.93	6.42	0.415	--	--	--	--	0.331	4.51
	2007_Q2	--	--	0.193	0.169	11.7	4.93	0.501	--	--	--	--	0.0908	4.18
	2007_Q3	--	--	0.206	0.19	12.7	6.6	0.116	--	--	--	--	0.671	3.98
	2007_Q4	--	--	0.203	0.176	7.05	5.7	0.287	--	--	--	--	0.712	3.47
	2008_Q1	--	--	--	0.26	11.2	6.21	0.0373	--	--	--	--	0.327	4.17
	2008_Q2	--	--	0.157	0.198	9.3	5.96	0.141	--	--	--	--	0.102	4.34
	2008_Q3	--	--	0.135	0.169	13.8	6.49	0.618	--	--	--	--	0.666	4.82
	2008_Q4	--	--	0.151	0.153	15.1	6.84	0.0424	--	--	--	--	0.619	4.57
	2009_Q1	--	--	0.0917	0.223	10.7	6.5	0.294	--	--	--	--	0.0257	4.31
	2009_Q2	--	--	0.169	0.25	12.8	6.63	0.164	--	--	--	--	0.0585	4.21
	2009_Q3	--	--	0.155	0.149	11.4	6.31	0.331	--	--	--	--	0.255	3.8
	2009_Q4	--	--	0.251	9.34	0.144	5.63	0.597	--	--	--	--	0.167	3.68
	2010_Q1	--	--	--	--	11.6	5.48	0.568	--	--	--	--	0.0606	3.87
	2010_Q2	--	--	0.118	0.13	9.79	6.2	0.218	--	--	--	--	0.027	3.85
	2010_Q3	--	--	0.156	0.188	12.2	6.35	0.282	--	--	--	--	0.087	3.82
	2010_Q4	--	--	0.329	0.153	11.1	6.82	0.471	--	--	--	--	0.242	4.5
	2011_Q1	--	--	0.236	0.269	8.18	6.23	0.575	--	--	--	--	0.0452	4.33
	2011_Q2	--	--	0.215	0.24	7.05	5.23	0.704	--	--	--	--	0.0213	3.8
	2011_Q3	0.18	0.119	0.139	0.275	9.08	5.99	0.635	0.184	1.91	--	1.33	0.166	4.86
	2011_Q4	0.256	0.211	0.119	0.0807	7.78	5.93	0.726	0.125	1.73	--	1.78	0.231	3.57
	2012_Q1	1.62	0.188	0.691	0.223	6.81	6.23	0.802	0.102	1.75	--	1.63	0.0335	1.62
	2012_Q2	1.3	0.23	0.121	0.232	8.49	6.4	0.926	0.1	1.44	--	2.16	0.781	3.27
Potassium	1997_Q3	--	1.01	77.5	1.56	23.4	3	7.43	2.05	2.01	3.03	14.4	4.08	10.4
	1997_Q4	--	1.91	6.97	0.529	17	2.9	1.87	1.2	2.02	0.897	10.1	2.72	13.5
	2006_Q1	--	--	2.72	0.973	9.29	2.42	0.938	--	--	--	--	1.15	3.06
	2006_Q2	--	--	1.6	0.468	11.2	2.25	0.829	--	--	--	--	0.825	1.91
	2006_Q3	--	--	1.7	0.523	12.3	2.28	1.09	--	--	--	--	0.634	1.81
	2006_Q4	--	--	1.62	0.374	12.7	2.38	0.937	--	--	--	--	0.69	2.03
	2007_Q1	--	--	1.74	<1	9.02	2.74	<1	--	--	--	--	1.05	2.03
	2007_Q2	--	--	2.31	<1	10.8	2.14	<1	--	--	--	--	<1	1.95
	2007_Q3	--	--	1.59	<1	13.3	2.44	<1	--	--	--	--	<1	2.87
	2007_Q4	--	--	2.06	<1	2.14	<1	<1	--	--	--	--	<1	<1
	2008_Q1	--	--	--	<1	8.56	2.44	<1	--	--	--	--	<1	1.85
	2008_Q2	--	--	1.65	<1	7.56	2.2	<1	--	--	--	--	<1	1.98
	2008_Q3	--	--	1.51	<1	12.3	2.23	1.06	--	--	--	--	<1	1.82
	2008_Q4	--	--	1.69	<1	15.1	3.13	<1	--	--	--	--	1.4	2.41
	2009_Q1	--	--	1.52	<1	7.48	2.44	<1	--	--	--	--	1.01	1.62
	2009_Q2	--	--	1.78	<1	12.4	2.71	<1	--	--	--	--	1.03	3.58
	2009_Q3	--	--	<1	<1	13.6	<1	<1	--	--	--	--	<1	<1
	2009_Q4	--	--	<5	8.56	<5	<5	<5	--	--	--	--	<5	<5
	2010_Q1	--	--	--	--	12.8	<5	<5	--	--	--	--	<5	<5
	2010_Q2	--	--	<5	<5	9.42	<5	<5	--	--	--	--	<5	<5
	2010_Q3	--	--	<5	<5	14.3	<5	<5	--	--	--	--	<5	<5
	2010_Q4	--	--	<5	<5	11.9	<5	<5	--	--	--	--	<5	<5
	2011_Q1	--	--	<5	<5	7.2	<5	<5	--	--	--	--	<5	<5
	2011_Q2	--	--	<5	<5	7.47	<5	<5	--	--	--	--	<5	<5
	2011_Q3	<5	<5	<5	<5	11.4	<5	<5	<5	<5	<5	<5	<5	<5
	2011_Q4	<5	<5	<5	<5	7.62	<5	<5	<5	<5	<5	<5	<5	<5
	2012_Q1	<5	<5	<5	<5	6.33	<5	<5	<5	<5	<5	<5	<5	<5
	2012_Q2	<5	<5	<5	<5	8.15	<5	<5	<5	<5	<5	<5	<5	<5

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

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

Analyte	Year/ Quarter	CD-1	CD-1RA	MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4A	MW-5A	MW-6A	MW-6B	MW-7A
Sodium	1997_Q3	--	5.41	37.3	7.38	119	64.1	10.4	11.2	13.3	31.6	53.3	38	118
	1997_Q4	--	4.76	26	6.18	102	53.9	6.54	9.78	15.7	9.53	46.8	31.4	113
	2006_Q1	--	--	17.1	6.31	26.3	53.8	5.66	--	--	--	--	14.9	134
	2006_Q2	--	--	13	5.22	25.2	49.7	6.4	--	--	--	--	9.93	129
	2006_Q3	--	--	13.6	6.35	31.4	51.1	8.92	--	--	--	--	10.1	124
	2006_Q4	--	--	13.5	5.92	31.4	51	6.03	--	--	--	--	10.7	128
	2007_Q1	--	--	12.2	5.22	19.5	50.9	2.11	--	--	--	--	11.2	112
	2007_Q2	--	--	12.5	6.82	22.9	40.8	1.14	--	--	--	--	10.2	104
	2007_Q3	--	--	13	7.1	26.1	52.3	5.1	--	--	--	--	15	95.8
	2007_Q4	--	--	11.8	5.84	13.8	48.2	2.64	--	--	--	--	14.7	95.2
	2008_Q1	--	--	--	5.66	19.2	50.6	2.9	--	--	--	--	13.8	104
	2008_Q2	--	--	12.5	6.73	16.5	47.4	3.52	--	--	--	--	12.7	99.6
	2008_Q3	--	--	13.8	7.29	25.6	51.4	2.77	--	--	--	--	18.1	113
	2008_Q4	--	--	13.2	6.81	25.9	58.2	2.69	--	--	--	--	17.6	116
	2009_Q1	--	--	13.4	6.37	17.8	49.3	<1	--	--	--	--	13.1	97
	2009_Q2	--	--	13.9	8.15	23.8	55.4	6.81	--	--	--	--	17.9	103
	2009_Q3	--	--	12.5	7.32	21.1	58.6	<1	--	--	--	--	18.5	110
	2009_Q4	--	--	12.6	14.9	6.59	49	<5	--	--	--	--	15.8	105
	2010_Q1	--	--	--	--	15.5	48.9	<5	--	--	--	--	16.8	112
	2010_Q2	--	--	12.8	6.29	16.3	53.1	<5	--	--	--	--	14.2	109
	2010_Q3	--	--	13.2	7.12	21.9	56.9	6.53	--	--	--	--	15	110
	2010_Q4	--	--	15.3	8.95	19	65.4	<5	--	--	--	--	17.8	127
	2011_Q1	--	--	13.6	7.99	13.5	56.7	<5	--	--	--	--	14.1	110
	2011_Q2	--	--	13.1	6.48	12.5	51	<5	--	--	--	--	17	114
	2011_Q3	<5	<5	13.2	27	22.1	55.3	5.9	11.1	16.7	--	19.5	18.3	114
	2011_Q4	<5	6.69	14.9	8.23	13.6	57.7	<5	12.5	17.8	--	19.8	21.7	104
	2012_Q1	<5	6.24	15.6	9.91	11	58.5	<5	11.9	17.7	--	19	16.5	108
	2012_Q2	<5	5.26	12.6	7.92	11.9	47.4	<5	10.4	14.2	--	14.8	14.6	91
Vanadium	1997_Q3	--	<0.0012	0.856	<0.0012	0.102	0.0029	0.0296	0.003	0.0016	0.0102	0.0726	0.0083	0.0487
	1997_Q4	--	0.0086	0.0243	<0.0012	0.0866	0.0075	0.0039	<0.0012	0.0019	0.0012	0.053	0.0012	0.127
	2006_Q3	--	--	<0.015	<0.015	<0.015	<0.015	<0.015	--	--	--	--	<0.015	<0.015
	2007_Q4	--	--	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	--	--	--	<0.03	<0.03
	2008_Q1	--	--	--	<0.03	<0.03	<0.03	<0.03	<0.03	--	--	--	<0.03	<0.03
	2009_Q2	--	--	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	--	--	--	<0.03	<0.03
	2010_Q3	--	--	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	--	--	--	<0.03	<0.03
	2011_Q4	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	--	<0.03	<0.03
	2012_Q1	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	--	<0.03	<0.03
Zinc	1997_Q3	--	0.024	3.36	0.0351	0.4	0.103	0.112	0.0621	0.0501	0.105	0.271	0.0894	0.2
	1997_Q4	--	0.0366	0.0874	0.0163	0.278	0.0484	0.0265	0.0155	0.0238	0.0212	0.177	0.0248	0.408
	2006_Q3	--	--	0.106	0.052	<0.01	<0.01	0.025	--	--	--	--	0.014	<0.01
	2007_Q4	--	--	0.0235	0.0168	<0.01	0.0469	0.0106	--	--	--	--	0.0213	0.0263
	2008_Q1	--	--	--	0.0112	0.0101	<0.01	<0.01	--	--	--	--	0.0103	0.0102
	2009_Q2	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	--	<0.01	0.0297
	2010_Q3	--	--	<0.01	<0.01	0.0269	<0.01	0.0285	--	--	--	--	<0.01	<0.01
	2011_Q4	<0.01	0.0146	<0.01	<0.01	<0.01	0.0118	<0.01	0.0114	0.013	--	<0.01	0.0159	0.0156
	2012_Q1	0.0119	<0.01	0.0792	<0.01	<0.01	0.0177	0.0106	0.017	0.0154	--	0.0235	<0.01	<0.01

# Appendix D

## Landfill Gas Testing Results

Cortland County Towslee Landfill

Cortland County-West Side Extension

GAS MONITORING

Date: 5/29/2012

LOCATION	%O2	LEL (ppm)
AA-1	19.9	0
AA-2	19.7	0
AA-3	19.8	0
AA-4	19.8	0
AA-5	19.7	0
AA-6A	19.8	0
AA-7A	19.8	0
AA-8	19.8	0
AA-9	19.9	0
AA-10	20.1	0
AA-11	20.0	0
AA-12	19.8	0
AA-13	19.8	0
AA-14	19.8	0
AA-15	19.6	0
AA-16	20.1	0
AA-17	19.8	0
AA-6B	19.8	0
AA-7B	19.8	0
GW-1	19.7	0
GFD-1	19.8	0
GFD-2	19.7	0
GFLD-1	19.8	0
GFLD-2	19.7	0
GFLD-3	19.8	0
SH-At Door	20.1	0
SH-At Grate	20.3	0
MW-6A	19.9	0
MW-6B	19.9	0
MW-5A	20.0	0
MW-4A	19.7	0
MW-3A	19.7	0
MW-3B	19.7	0
MW-1A	19.9	1.0
MW-1B	19.9	1.0
MW-2A	19.8	0
MW-2B	19.8	0

Meter: GEM 2000

Recorded by: Dan Aumell

