

# **Environmental Monitoring Report**

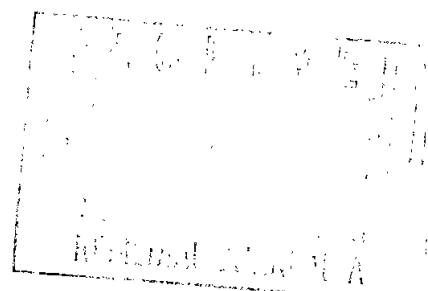
## **2007 Quarters 3 and 4**

## **and Annual Summary**

### **Cortland County Towslee Landfill**

Town Line Road  
Cortland County, New York

NYSDEC Region 7

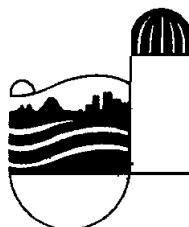


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## 1.0 Introduction

Cortland County is the current owner of the inactive Towslee landfill located at the county's solid waste disposal site in the Towns of Cortlandville and Solon, near the center of the county. The Towslee landfill has previously been called the Old County Landfill, and the Town Line Landfill. It is referred to as the Towslee landfill in this report. This report summarizes groundwater quality monitoring activities at the Towslee Landfill for Quarters 3 and 4 of 2007, and serves as an annual report for the Towslee landfill.

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

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

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

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

## 2.0 Site History

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

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

## 4.0 Assessment of Monitoring Results

This section provides an evaluation of groundwater monitoring results for all four Quarters of 2007. Groundwater quality data are compared to NYS water quality standards to assess current conditions. Recent data are also compared to past data to evaluate trends.

- Appendix A contains the Quarter 3 laboratory analytical report.
- Appendix B contains the Quarter 4 laboratory analytical report.
- Appendix C contains tables of historical water quality data through the latest monitoring round.

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

### 4.1 Contraventions of Water Quality Standards

This subsection compares 2007 groundwater quality data to NYS water quality standards.

Tables 1 and 2 summarize water quality results for Quarter 1.

Tables 3 and 4 summarize water quality results for Quarter 2.

Tables 5 and 6 summarize water quality results for Quarter 3.

Tables 7, 8 and 9 summarize water quality results for Quarter 4.

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

Concentrations for most parameters in all four quarters of 2007 were below available water quality standards at all wells, although there continues to be evidence of mild landfill leachate contamination. Contraventions of standards are described below.

Color – The color standard is 15 standard units. Color was only measured for the Baseline round of Quarter 4. The color standard was exceeded for 5 of 7 wells, ranging from 30 – 210 standard units.

Turbidity – Turbidity for all seven wells exceeded the NYS standard of 5 NTU for all four Quarters of 2007.

Quarter 1 results ranged from 10.6 to 68.9 NTU.  
Quarter 2 results ranged from 8.1 to 54.3 NTU.  
Quarter 3 results ranged from 9.48 to 40.9 NTU.  
Quarter 4 results ranged from 5.07 to 48.1 NTU.

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

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

In Quarter 1, six of seven wells exceeded the standard, ranging from 0.331 to 9.93 mg/l.

In Quarter 2, four of seven wells exceeded the standard, ranging from 0.501 to 11.7 mg/l.

In Quarter 3, four of seven wells exceeded the standard, ranging from 0.671 to 12.7 mg/l.

In Quarter 4, four of seven wells exceeded the standard, ranging from 0.712 to 7.05 mg/l.

The manganese standard was also frequently exceeded in past monitoring events.

Dissolved metals testing was conducted at three wells in Quarter 1. Dissolved manganese levels were below the detection limit of 0.01 mg/l at two wells (MW-1A and MW-1B), and was 0.137 mg/l at MW-6B. The elevated total manganese levels appears to be due at least in part to high turbidity levels.

Sodium – The NYS sodium standard is 20 mg/l. Contraventions in 2007 were as follows:

Quarter 1: MW-2B (50.9 mg/l) and MW-7A (112 mg/l).

Quarter 2: MW-2A (22.9 mg/l), MW-2B (40.8 mg/l) and MW-7A (104 mg/l).

Quarter 3: MW-2A (26.1 mg/l), MW-2B (52.3 mg/l) and MW-7A (95.8 mg/l).

Quarter 4: MW-2B (48.2 mg/l) and MW-7A (95.2 mg/l).

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

Volatile Organics (VOCs) – VOC testing was conducted during the Baseline round of Quarter 4.

Vinyl chloride was detected in two wells in Quarter 4: MW-2B (5.8 ug/l) and MW-7A (4 ug/l). The value for MW-7A was estimated because it was below the practical quantitation limit (PQL). Each of these results was above the drinking water MCL of 2 ug/l for vinyl chloride. Note that a quality control check for vinyl chloride did not meet acceptance criteria, as described in Appendix 2, and the results may be suspect.

Cis-1,2-dichloroethene was also detected in Wells MW-2B (9.2 ug/l) and MW-7A (6.1 ug/l). Each of these results are above the drinking water MCL of 5 ug/l for cis-1,2-dichloroethene.

There were no other contraventions of NYS water quality standards during the four monitoring rounds conducted in 2007.

#### 4.2.2 Trends for Total Metals

The metals identified by B&L in 1997 as indicative of mild landfill leachate contamination are: aluminum, arsenic, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, potassium, sodium, vanadium, and zinc. All of these metals were analyzed under the Baseline round of Quarter 4. For the Routine events (Quarters 1, 2 and 3), the only metals analyzed were: calcium, iron, lead, magnesium, manganese, potassium, and sodium.

- Aluminum levels have continued to show a significant decrease through 2007, compared to 1997.
- Arsenic was below the detection limit at all wells in 2007.
- Calcium levels have continued to generally decrease through the 2007 monitoring.
- Chromium was below the detection limit at all wells in 2007.
- Cobalt was below the detection limit at all wells in 2007.
- Copper was below the detection limit at all wells in 2007.
- Iron levels continue to decrease through 2007.
- Lead levels are generally below the detection limit, and where detected, continue to show an overall decrease through 2007, compared to 1997.
- Magnesium levels continue to show an overall decrease over time, particularly for the wells with elevated levels in 1997.
- Manganese levels have continued to decrease through 2007.
- Potassium levels continue to show an overall decrease through 2007, compared to 1997.
- Sodium levels have continued to show a general decrease through 2007.
- Vanadium was below the detection limit at all wells in 2007.
- Zinc levels have generally decreased over time, compared to 1997 levels.

Quarter 3 - All analytical data conformed with standard approved methodologies and quality control. Quality control criteria were generally satisfied. A Category A case narrative is included with the laboratory report in Appendix A. We believe the Quarter 3 data are adequate to characterize groundwater quality downgradient of the Towslee landfill.

Quarter 4 – The Case Narrative for Quarter 4 results is included in Appendix B. Quality control criteria were generally satisfied. We believe the Quarter 4 data are adequate to characterize groundwater quality downgradient of the Towslee landfill.

**Table 1**  
**Contraventions of NYS Water Quality Standards**  
**for Field and Inorganic Parameters**  
**Towslee Landfill - Quarter 1 2007**

Parameter	Units	NYS Water Quality Standard	Monitoring Well						
			Over-burden	Bedrock	Over-burden	Bedrock	Bedrock	Bedrock	Over-burden
			MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-6B	MW-7A
Temperature	(deg. F)	--	48.7	49.3	48.6	48.4	48.7	49.5	48.7
Eh	(mV)	--	59	84	136	136	-50	82	77
pH	(Std Units)	6.5 - 8.5 a	8.29	8.47	7.31	7.14	7.82	8.04	7.04
Specific Conductance	( $\mu\text{S}/\text{cm}$ )	--	204	156	364	701	143	220	893
Color	(Units)	15 a, b	--	--	--	--	--	--	--
Turbidity	(NTU)	5 a	<b>55.6</b>	<b>67.4</b>	<b>48.9</b>	<b>14.2</b>	<b>10.6</b>	<b>68.9</b>	<b>45.3</b>
Alkalinity, Total (As CaCO <sub>3</sub> )	(mg/l)	--	140	99	380	650	82	180	640
Hardness (As CaCO <sub>3</sub> )	(mg/l)	--	134	83.6	225	723	74	156	529
Total Dissolved Solids	(mg/l)	500 a	127	62	262	<b>825</b>	38	127	<b>753</b>
Chloride	(mg/l)	250 a, b	28.7	3.24	21.2	167	3.37	11.6	145
Sulfate	(mg/l)	250 a, b	8.79	7.09	<5	<5	<5	8.54	16.5
Bromide	(mg/l)	2 a	<0.2	<0.2	<0.2	0.95	1.2	<0.2	0.6
Nitrogen, Nitrate (As N)	(mg/l)	10 a, b	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrogen, Ammonia (As N)	(mg/l)	2 * a	<0.5	<0.5	<b>10.2</b>	0.921	1.45	<0.5	<0.5
Nitrogen, Kjeldahl, Total	(mg/l)	--	2.2	<0.5	132	1.84	4.26	<0.5	1.47
Chemical Oxygen Demand	(mg/l)	--	<20	<20	<20	21	47	<20	27
Biochemical Oxygen Demand	(mg/l)	--	<4	<4	6	<4	<4	<4	<4
Organic Carbon, Total	(mg/l)	--	<3	<3	6.7	6.4	<3	<3	8.1
Phenolics, Total Recoverable	(mg/l)	0.001 a	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide	(mg/l)	0.2 a, b	--	--	--	--	--	--	--

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

b - Part 5 Drinking Water MCL

\* Standard is for NH<sub>4</sub><sup>+</sup> and NH<sub>3</sub> combined, as is the laboratory analysis

**1.23** indicates contravention of standard.

**Table 3**  
**Contraventions of NYS Water Quality Standards**  
**for Field and Inorganic Parameters**  
**Towslee Landfill - Quarter 2 2007**

Parameter	Units	NYS Water Quality Standard	Monitoring Well							
			Over-burden	Bedrock	Over-burden	Bedrock	Bedrock	Bedrock	Over-burden	
			MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-6B	MW-7A	
Temperature	(deg. F)	--	44.1	45	45.9	46.9	42.1	45.3	46	
Eh	(mV)	--	-107	-122	-62	-73	-94	-92	-64	
pH	(Std Units)	6.5 - 8.5	a	7.93	8.24	7.14	7.35	7.64	7.73	7.12
Specific Conductance	(µS/cm)	--	221	141	450	682	898	249	765	
Color	(Units)	15	a, b	--	--	--	--	--	--	
Turbidity	(NTU)	5	a	<b>34.8</b>	<b>9.62</b>	<b>30.7</b>	<b>11</b>	<b>19.6</b>	<b>8.1</b>	<b>54.3</b>
Alkalinity, Total (As CaCO <sub>3</sub> )	(mg/l)	--	120	96	320	480	59	160	510	
Hardness (As CaCO <sub>3</sub> )	(mg/l)	--	153	105	262	575	58.1	139	499	
Total Dissolved Solids	(mg/l)	500	a	208	162	355	<b>823</b>	168	105	<b>865</b>
Chloride	(mg/l)	250	a, b	27	4.45	14.7	131	1.8	6.99	131
Sulfate	(mg/l)	250	a, b	14.2	6.31	<5	<5	<5	6.79	23.2
Bromide	(mg/l)	2	a	<0.2	<0.2	<0.2	<2	<2	<0.2	<0.2
Nitrogen, Nitrate (As N)	(mg/l)	10	a, b	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrogen, Ammonia (As N)	(mg/l)	2 *	a	<0.5	<0.5	<b>9.89</b>	0.844	<0.5	<0.5	<0.5
Nitrogen, Kjeldahl, Total	(mg/l)	--	--	<0.5	<0.5	12.5	1.62	1.47	<0.5	3.6
Chemical Oxygen Demand	(mg/l)	--	--	<20	<20	<20	<20	<20	<20	<20
Biochemical Oxygen Demand	(mg/l)	--	--	<4	<4	7	4	8	<4	<4
Organic Carbon, Total	(mg/l)	--	--	<3	<3	4.8	3	<3	<3	6
Phenolics, Total Recoverable	(mg/l)	0.001	a	<b>0.005</b>	<b>0.006</b>	<b>0.01</b>	<b>0.006</b>	<0.005	<0.005	<b>0.006</b>
Cyanide	(mg/l)	0.2	a, b	--	--	--	--	--	--	--

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

b - Part 5 Drinking Water MCL

\* Standard is for NH<sub>4</sub><sup>+</sup> and NH<sub>3</sub> combined, as is the laboratory analysis

**1.23** indicates contravention of standard.

**Table 5**  
**Contraventions of NYS Water Quality Standards**  
**for Field and Inorganic Parameters**  
**Towslee Landfill - Quarter 3 2007**

Parameter	Units	NYS Water Quality Standard	Monitoring Well						
			Over-burden	Bedrock	Over-burden	Bedrock	Bedrock	Bedrock	Over-burden
			MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-6B	MW-7A
Temperature	(deg. F)	--	21.6	21.5	18.0	16.5	17.9	15.6	18.8
Eh	(mV)	--	-111	-143	-81	-77	-115	-105	-69
pH	(Std Units)	6.5 - 8.5	a	7.83	8.03	7.41	7.37	7.84	7.85
Specific Conductance	(µS/cm)	--	241	1241	395	500	1757	236	514
Color	(Units)	15	a, b	--	--	--	--	--	--
Turbidity	(NTU)	5	a	<b>24.3</b>	<b>10.2</b>	<b>15</b>	<b>9.48</b>	<b>16.4</b>	<b>9.48</b>
Alkalinity, Total (As CaCO <sub>3</sub> )	(mg/l)	--	120	100	420	600	170	150	530
Hardness (As CaCO <sub>3</sub> )	(mg/l)	--	148	104	275	716	150	138	481
Total Dissolved Solids	(mg/l)	500	a	250	130	395	<b>935</b>	210	220
Chloride	(mg/l)	250	a, b	27	3.16	24.4	163	12	13.8
Sulfate	(mg/l)	250	a, b	48.6	28.8	<10	10	20.5	17.3
Bromide	(mg/l)	2	a	<0.2	<0.2	<2	<2	<0.2	<2
Nitrogen, Nitrate (As N)	(mg/l)	10	a, b	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrogen, Ammonia (As N)	(mg/l)	2 *	a	<0.5	<0.5	<b>14.1</b>	1.31	<0.5	<0.5
Nitrogen, Kjeldahl, Total	(mg/l)	--		5.66	<0.5	16.1	1.67	<0.5	<0.5
Chemical Oxygen Demand	(mg/l)	--		<20	<20	46	<20	<20	<20
Biochemical Oxygen Demand	(mg/l)	--		<4	<4	7	<4	<4	<4
Organic Carbon, Total	(mg/l)	--		<3	<3	7.3	5.7	<3	<3
Phenolics, Total Recoverable	(mg/l)	0.001	a	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.007</b>
Cyanide	(mg/l)	0.2	a, b	--	--	--	--	--	--

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

b - Part 5 Drinking Water MCL

\* Standard is for NH<sub>4</sub><sup>+</sup> and NH<sub>3</sub> combined, as is the laboratory analysis

**1.23** indicates contravention of standard.

**Table 7**  
**Contraventions of NYS Water Quality Standards**  
**for Field and Inorganic Parameters**  
**Towslee Landfill - Quarter 4 2007**

Parameter	Units	NYS Water Quality Standard	Monitoring Well							
			Over-burden	Bedrock	Over-burden	Bedrock	Bedrock	Bedrock	Over-burden	
			MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-6B	MW-7A	
Temperature	(deg. F)	--	16.0	16.3	14.6	15.8	14.6	14.8	15.2	
Eh	(mV)	--	-68	-80	-25	-34	-76	-57	-24	
pH	(Std Units)	6.5 - 8.5	a	8.01	8.28	7.12	7.35	8.25	7.82	7.11
Specific Conductance	( $\mu\text{S}/\text{cm}$ )	--	658	943	574	329	939	810	972	
Color	(Units)	15	a, b	<b>30</b>	<b>30</b>	<b>210</b>	15	<b>115</b>	6	<b>85</b>
Turbidity	(NTU)	5	a	<b>28.1</b>	<b>22.8</b>	<b>5.07</b>	<b>37</b>	<b>13.7</b>	<b>12.5</b>	<b>48.1</b>
Alkalinity, Total (As CaCO <sub>3</sub> )	(mg/l)	--	130	100	290	640	130	140	540	
Hardness (As CaCO <sub>3</sub> )	(mg/l)	--	146	90.8	165	652	86.2	124	459	
Total Dissolved Solids	(mg/l)	500	a	204	104	284	<b>868</b>	144	208	<b>752</b>
Chloride	(mg/l)	250	a, b	27.9	6.44	10.6	161	5.73	25.9	141
Sulfate	(mg/l)	250	a, b	11.2	5.26	9.93	<5	<5	12.7	17.8
Bromide	(mg/l)	2	a	<0.2	<0.2	<2	0.92	<2	<0.2	<2
Nitrogen, Nitrate (As N)	(mg/l)	10	a, b	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrogen, Ammonia (As N)	(mg/l)	2 *	a	<0.5	<0.5	<b>13.5</b>	1.22	<0.5	<0.5	<0.5
Nitrogen, Kjeldahl, Total	(mg/l)	--		<0.5	<0.5	12.6	1.53	<0.5	<0.5	0.591
Chemical Oxygen Demand	(mg/l)	--		<20	<20	22	<20	<20	<20	<20
Biochemical Oxygen Demand	(mg/l)	--		<4	<4	<4	<4	<4	<4	<4
Organic Carbon, Total	(mg/l)	--		<3	<3	6.3	17.2	3.7	<3	11.5
Phenolics, Total Recoverable	(mg/l)	0.001	a	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide	(mg/l)	0.2	a, b	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

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

b - Part 5 Drinking Water MCL

\* Standard is for NH<sub>4</sub><sup>+</sup> and NH<sub>3</sub> combined, as is the laboratory analysis

**1.23** indicates contravention of standard.

Table 9  
 Contraventions of NYS Water Quality Standards  
 for Organics

Towslee Landfill - Quarter 4 2007

Parameter *	NYS Water Quality Standard	Organics						
		Over-burden	Bedrock	Over-burden	Bedrock	Bedrock	Bedrock	Over-burden
		MW-1A	MW-1B	MW-2A	MW-2B	MW-3A	MW-6B	MW-7A
Vinyl chloride	2 b	<5	<5	<5	<b>5.8</b>	<5	<5	<b>4 J</b>
Chloroethane	5 b	<5	<5	<5	4 J	<5	<5	<5
Acetone	50 b	<10	<10	<10	<10	<10	<10	<10
Methylene chloride	5 b	<5	<5	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene	5 b	<5	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene	5 b	<5	<5	<5	<b>9.2</b>	<5	<5	<b>6.1</b>
1,1-Dichloroethane	5 b	<5	<5	<5	<5	<5	<5	5 J
Benzene	1 a	<5	<5	<5	<5	<5	<5	<5
Toluene	5 b	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	5 b	<5	<5	4 J	<5	<5	<5	<5
Ethylbenzene	5 b	<5	<5	<5	<5	<5	<5	<5
Xylenes, Total	5 b	<5	<5	<5	<5	<5	<5	<5
1,4-Dichlorobenzene	5 b	<5	<5	<5	<5	<5	<5	<5

all units are ug/l

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

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

b - Part 5 Drinking Water MCL

**1.23** indicates contravention of standard.

J - Estimated, below detection limit

## **Appendix A**

# **Analytical Laboratory Results and Internal Quality Control Summary Quarter 3 2007**

**Cortland County Towslee Landfill**

# Upstate Laboratories, Inc.

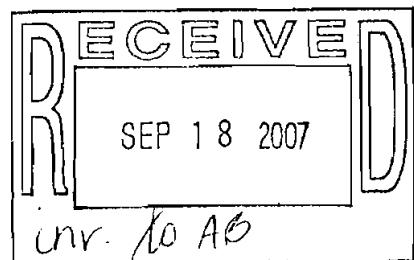
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Room 202  
Cortland, NY 13045

August 24, 2007

RE: Towslee Landfill

Order No.: U0707386

Dear Mr. Reidy:

Upstate Laboratories, Inc. received 8 samples on 7/31/07 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. 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, 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

Enclosures: ASP-A Narrative, report

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) 724-0478 \* Buffalo (716) 649-2533

Rochester (866) 437-0255 \* New Jersey (908) 892-1807

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

September 14, 2007

RE: Towslee Landfill, Cortlandville, New York, Samples Collected July 31, 2007  
Case Narrative for ULI SDG Number COR05, Workorder #U0707386

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>
Ca,Cd,Fe,Pb,Mg,Mn,K,Na	R27146	Criteria were satisfied.

### Wet Chemistry

<u>Test</u>	<u>Batch</u>	<u>Anomaly</u>
BOD	R27141	Criteria were satisfied.
Nitrate-Nitrogen	R27251	Criteria were satisfied.
Alkalinity, Total	R27292	Criteria were satisfied.
Chloride	R27290	Criteria were satisfied.
COD	R27120	Criteria were satisfied.
	R27154	Criteria were satisfied.
TKN	R27426	TKN was detected above the PQL in CCB13. The associated sample locations were not bracketed by CCB13, no corrective action was taken. All other criteria were satisfied.

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

Mr. Patrick Reidy  
September 14, 2007  
Page 2

***Wet Chemistry (continued)***

<u>Test</u>	<u>Batch</u>	<u>Anomaly</u>
Ammonia-Nitrogen	R27434	Criteria were satisfied.
Sulfate	R27135	Criteria were satisfied.
TDS	R27110	Criteria were satisfied.
TOC	R27412	Criteria were satisfied.
Phenols	R27279	Criteria were satisfied.
Bromide	R27313 R27455	Criteria were satisfied. 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. Seala*  
Anthony J. Seala  
Director

**Table 1**  
**Methodologies**

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

Parameter	Method	Reference
Cadmium	200.7	(1)
Calcium	200.7	(1)
Iron	200.7	(1)
Lead	200.7	(1)
Magnesium	200.7	(1)
Manganese	200.7	(1)
Potassium	200.7	(1)
Sodium	200.7	(1)
BOD	405.1	(1)
Nitrate-Nitrogen	353.1	(1)
Alkalinity, Total	310.2	(1)
Chloride	325.2	(1)
COD	410.4	(1)
Ammonia-Nitrogen	350.1	(1)
Sulfate	375.4	(1)
TDS	160.1	(1)
TKN	351.3	(1)
TOC	415.1	(1)
Phenols	420.4	(1)
Bromide	300.1	(1)

Reference

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

# Upstate Laboratories, Inc.

Date: 24-Aug-07

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	Client Sample ID:	MW-1A
Lab Order:	U0707386	Collection Date:	7/31/2007 9:55:00 AM
Project:	Towslee Landfill		
Lab ID:	U0707386-001	Matrix:	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>						
Conductivity	241	1.0		umhos/cm		Analyst: 7/31/2007 9:55:00 AM
Eh	-111	-300		mV		7/31/2007 9:55:00 AM
pH	7.83	6.5-8.5		SU		7/31/2007 9:55:00 AM
Temperature	21.6			degC		7/31/2007 9:55:00 AM
Turbidity	24.3	5.0		NTU		7/31/2007 9:55:00 AM
<b>ICP METALS, TOTAL ASP</b>						
Cadmium	ND	5.00		µg/L	1	8/6/2007 12:27:31 PM
Calcium	43500	1000		µg/L	1	8/6/2007 12:27:31 PM
Iron	1210	60.0		µg/L	1	8/6/2007 12:27:31 PM
Lead	ND	3.00		µg/L	1	8/6/2007 12:27:31 PM
Magnesium	9670	1000		µg/L	1	8/6/2007 12:27:31 PM
Manganese	206	10.0		µg/L	1	8/6/2007 12:27:31 PM
Potassium	1590	1000		µg/L	1	8/6/2007 12:27:31 PM
Sodium	13000	1000		µg/L	1	8/6/2007 12:27:31 PM
Hardness, Total(CaCO <sub>3</sub> )	148000	7000		µg/L	1	8/6/2007 12:27:31 PM
<b>INORGANIC ANIONS BY IC FOR WATERS</b>						
Bromide	ND	0.20		mg/L	1	Analyst: BY 8/4/2007
<b>RESIDUE, DISSOLVED (TDS)</b>						
Residue, Dissolved (TDS)	250	25		mg/L	1	Analyst: DEY 8/1/2007
<b>ALKALINITY ON AQUEOUS SAMPLES BY LACHA</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	120	10		mg/LCaCO <sub>3</sub>	1	Analyst: SAR 8/7/2007
<b>CHLORIDE WATERS BY LACHAT</b>						
Chloride	27.0	1.00		mg/L	1	Analyst: SAR 8/7/2007
<b>NITROGEN, AMMONIA (AS NH<sub>3</sub> BY LACHAT)</b>						
Nitrogen, Ammonia (As NH <sub>3</sub> )	ND	0.500		mg/L	1	Analyst: BY 8/17/2007
<b>TKN FOR WATERS</b>						
Nitrogen, Kjeldahl, Total	5.66	5.00		mg/L	10	Analyst: BY 8/16/2007
<b>NITROGEN, NITRATE (AS N)</b>						
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	Analyst: BY 7/31/2007 5:28:00 PM
<b>SULFATE</b>						
Sulfate	48.6	20.0		mg/L	4	Analyst: LMK 8/2/2007 10:30:00 AM
<b>BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)</b>						
Biochemical Oxygen Demand	ND	4		mg/L	1	Analyst: DEY 8/1/2007 8:00:00 AM

Approved By: PF

Date: 8-24-07

Page 1 of 15

Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 24-Aug-07

CLIENT: Cortland Co. Soil and Water Cons. Dist.

Client Sample ID: MW-1A

Lab Order: U0707386

Collection Date: 7/31/2007 9:55:00 AM

Project: Towslee Landfill

Lab ID: U0707386-001

Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD) Chemical Oxygen Demand	ND	E410.4 20		mg/L	1	Analyst: NMS 8/2/2007
TOTAL ORGANIC CARBON (TOC) Organic Carbon, Total	ND	E415.1 3.0		mg/L	1	Analyst: BS 8/16/2007
PHENOLICS, TOTAL REC. FOR WATERS Phenolics, Total Recoverable	ND	E420.4 0.005		(E420.4) mg/L	1	Analyst: MB 8/9/2007

Approved By: PFDate: 8-24-07

Page 2 of 15

Qualifiers: \* Low Level

\*\* Value exceeds Maximum Contaminant Value

B Analyte detected in the associated Method Blank

E Value above quantitation range

H Holding times for preparation or analysis exceeded

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 24-Aug-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist. **Client Sample ID:** MW-1B  
**Lab Order:** U0707386 **Collection Date:** 7/31/2007 10:05:00 AM  
**Project:** Towslee Landfill  
**Lab ID:** U0707386-002 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>						
Conductivity	1,241	1.0		umhos/cm		Analyst: 7/31/2007 10:05:00 AM
Eh	-143	-300		mV		7/31/2007 10:05:00 AM
pH	8.03	6.5-8.5		SU		7/31/2007 10:05:00 AM
Temperature	21.5			degC		7/31/2007 10:05:00 AM
Turbidity	10.2	5.0		NTU		7/31/2007 10:05:00 AM
<b>ICP METALS, TOTAL ASP</b>						
Cadmium	ND	5.00		µg/L	1	Analyst: EA 8/6/2007 12:30:59 PM
Calcium	29900	1000		µg/L	1	8/6/2007 12:30:59 PM
Iron	465	60.0		µg/L	1	8/6/2007 12:30:59 PM
Lead	ND	3.00		µg/L	1	8/6/2007 12:30:59 PM
Magnesium	7120	1000		µg/L	1	8/6/2007 12:30:59 PM
Manganese	190	10.0		µg/L	1	8/6/2007 12:30:59 PM
Potassium	ND	1000		µg/L	1	8/6/2007 12:30:59 PM
Sodium	7100	1000		µg/L	1	8/6/2007 12:30:59 PM
Hardness, Total(CaCO <sub>3</sub> )	104000	7000		µg/L	1	8/6/2007 12:30:59 PM
<b>INORGANIC ANIONS BY IC FOR WATERS</b>						
Bromide	ND	0.20		mg/L	1	Analyst: BY 8/4/2007
<b>RESIDUE, DISSOLVED (TDS)</b>						
Residue, Dissolved (TDS)	130	25		mg/L	1	Analyst: DEY 8/1/2007
<b>ALKALINITY ON AQUEOUS SAMPLES BY LACHA</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	100	10		mg/LCaCO <sub>3</sub>	1	Analyst: SAR 8/7/2007
<b>CHLORIDE WATERS BY LACHAT</b>						
Chloride	3.16	1.00		mg/L	1	Analyst: SAR 8/7/2007
<b>NITROGEN, AMMONIA (AS NH<sub>3</sub> BY LACHAT)</b>						
Nitrogen, Ammonia (As NH <sub>3</sub> )	ND	0.500		mg/L	1	Analyst: BY 8/16/2007
<b>TKN FOR WATERS</b>						
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	Analyst: BY 8/16/2007
<b>NITROGEN, NITRATE (AS N)</b>						
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	Analyst: BY 7/31/2007 5:28:00 PM
<b>SULFATE</b>						
Sulfate	28.8	20.0		mg/L	4	Analyst: LMK 8/2/2007 10:30:00 AM
<b>BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)</b>						
Biochemical Oxygen Demand	ND	4		mg/L	1	Analyst: DEY 8/1/2007 8:00:00 AM

Approved By: PF

Date: 8-24-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 24-Aug-07

CLIENT: Cortland Co. Soil and Water Cons. Dist.  
Lab Order: U0707386  
Project: Towslee Landfill  
Lab ID: U0707386-002

Client Sample ID: MW-1B  
Collection Date: 7/31/2007 10:05:00 AM

**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD) Chemical Oxygen Demand	ND	E410.4 20		mg/L	1	Analyst: NMS 8/2/2007
TOTAL ORGANIC CARBON (TOC) Organic Carbon, Total	ND	E415.1 3.0		mg/L	1	Analyst: BS 8/16/2007
PHENOLICS, TOTAL REC. FOR WATERS Phenolics, Total Recoverable	ND	E420.4 0.005	(E420.4)	mg/L	1	Analyst: MB 8/9/2007

Approved By: PFDate: 8-24-07

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Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 24-Aug-07

CLIENT:	Cortland Co. Soil and Water Cons. Dist.	Client Sample ID:	MW-2A
Lab Order:	U0707386	Collection Date:	7/31/2007 10:25:00 AM
Project:	Towslee Landfill		
Lab ID:	U0707386-003	Matrix:	WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>						
Conductivity	395	1.0		umhos/cm		7/31/2007 10:25:00 AM
Eh	-81	-300		mV		7/31/2007 10:25:00 AM
pH	7.41	6.5-8.5		SU		7/31/2007 10:25:00 AM
Temperature	18			degC		7/31/2007 10:25:00 AM
Turbidity	15	5.0		NTU		7/31/2007 10:25:00 AM
<b>ICP METALS, TOTAL ASP</b>						
		E200.7		(E200.7)		Analyst: EA
Cadmium	ND	5.00		µg/L	1	8/6/2007 12:34:49 PM
Calcium	80400	1000		µg/L	1	8/6/2007 12:34:49 PM
Iron	7670	60.0		µg/L	1	8/6/2007 12:34:49 PM
Lead	ND	3.00		µg/L	1	8/6/2007 12:34:49 PM
Magnesium	18000	1000		µg/L	1	8/6/2007 12:34:49 PM
Manganese	12700	10.0		µg/L	1	8/6/2007 12:34:49 PM
Potassium	13300	1000		µg/L	1	8/6/2007 12:34:49 PM
Sodium	26100	1000		µg/L	1	8/6/2007 12:34:49 PM
Hardness, Total(CaCO <sub>3</sub> )	275000	7000		µg/L	1	8/6/2007 12:34:49 PM
<b>INORGANIC ANIONS BY IC FOR WATERS</b>						
		E300.1				Analyst: BY
Bromide	ND	2.0		mg/L	10	8/4/2007
NOTES: The reporting limits were raised due to matrix interference.						
<b>RESIDUE, DISSOLVED (TDS)</b>						
Residue, Dissolved (TDS)	395	25		mg/L	1	8/1/2007
<b>ALKALINITY ON AQUEOUS SAMPLES BY LACHA</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	420	10		mg/LCaCO <sub>3</sub>	1	8/7/2007
<b>CHLORIDE WATERS BY LACHAT</b>						
Chloride	24.4	1.00		mg/L	1	8/7/2007
<b>NITROGEN, AMMONIA (AS NH<sub>3</sub> BY LACHAT)</b>						
Nitrogen, Ammonia (As NH <sub>3</sub> )	14.1	0.500		mg/L	1	8/17/2007
<b>TKN FOR WATERS</b>						
Nitrogen, Kjeldahl, Total	16.1	0.500		mg/L	1	8/16/2007
<b>NITROGEN, NITRATE (AS N)</b>						
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	7/31/2007 5:28:00 PM
<b>SULFATE</b>						
Sulfate	ND	10.0		mg/L	2	8/2/2007 10:30:00 AM
<b>BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)</b>						
		E405.1				Analyst: DEY

Approved By: PF

Date: 8-24-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 24-Aug-07

CLIENT: Cortland Co. Soil and Water Cons. Dist.  
Lab Order: U0707386  
Project: Towslee Landfill  
Lab ID: U0707386-003

Client Sample ID: MW-2A  
Collection Date: 7/31/2007 10:25:00 AM

Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)		E405.1				Analyst: DEY
Biochemical Oxygen Demand	7	4		mg/L	1	8/1/2007 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)		E410.4				Analyst: NMS
Chemical Oxygen Demand	46	20		mg/L	1	8/2/2007
TOTAL ORGANIC CARBON (TOC)		E415.1				Analyst: BS
Organic Carbon, Total	7.3	3.0		mg/L	1	8/16/2007
PHENOLICS, TOTAL REC. FOR WATERS		E420.4	(E420.4)			Analyst: MB
Phenolics, Total Recoverable	ND	0.005		mg/L	1	8/9/2007

Approved By: PF

Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

Date: 8-24-07 Page 6 of 15

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 24-Aug-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0707386  
**Project:** Towslee Landfill  
**Lab ID:** U0707386-004

**Client Sample ID:** MW-2B  
**Collection Date:** 7/31/2007 10:35:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>						
Conductivity	500	1.0		umhos/cm		Analyst: 7/31/2007 10:35:00 AM
Eh	-77	-300		mV		7/31/2007 10:35:00 AM
pH	7.37	6.5-8.5		SU		7/31/2007 10:35:00 AM
Temperature	16.5			degC		7/31/2007 10:35:00 AM
Turbidity	9.48	5.0		NTU		7/31/2007 10:35:00 AM
<b>ICP METALS, TOTAL ASP</b>						
Cadmium	ND	5.00		µg/L	1	Analyst: EA 8/6/2007 12:38:35 PM
Calcium	214000	1000		µg/L	1	8/6/2007 12:38:35 PM
Iron	468	60.0		µg/L	1	8/6/2007 12:38:35 PM
Lead	ND	3.00		µg/L	1	8/6/2007 12:38:35 PM
Magnesium	44100	1000		µg/L	1	8/6/2007 12:38:35 PM
Manganese	6600	10.0		µg/L	1	8/6/2007 12:38:35 PM
Potassium	2440	1000		µg/L	1	8/6/2007 12:38:35 PM
Sodium	52300	1000		µg/L	1	8/6/2007 12:38:35 PM
Hardness, Total(CaCO <sub>3</sub> )	716000	7000		µg/L	1	8/6/2007 12:38:35 PM
<b>INORGANIC ANIONS BY IC FOR WATERS</b>						
Bromide	ND	2.0		mg/L	10	Analyst: BY 8/14/2007
<b>NOTES:</b>						
The reporting limits were raised due to matrix interference.						
<b>RESIDUE, DISSOLVED (TDS)</b>						
Residue, Dissolved (TDS)	935	25		mg/L	1	Analyst: DEY 8/1/2007
<b>ALKALINITY ON AQUEOUS SAMPLES BY LACHA</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	600	100		mg/LCaCO <sub>3</sub>	10	Analyst: SAR 8/7/2007
<b>CHLORIDE WATERS BY LACHAT</b>						
Chloride	163	1.00		mg/L	1	Analyst: SAR 8/7/2007
<b>NITROGEN, AMMONIA (AS NH<sub>3</sub> BY LACHAT)</b>						
Nitrogen, Ammonia (As NH <sub>3</sub> )	1.31	0.500		mg/L	1	Analyst: BY 8/17/2007
<b>TKN FOR WATERS</b>						
Nitrogen, Kjeldahl, Total	1.67	0.500		mg/L	1	Analyst: BY 8/16/2007
<b>NITROGEN, NITRATE (AS N)</b>						
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	Analyst: BY 7/31/2007 5:28:00 PM
<b>SULFATE</b>						
Sulfate	ND	10.0		mg/L	2	Analyst: LMK 8/2/2007 10:30:00 AM
<b>BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)</b>						
						Analyst: DEY

Approved By: PF

Date: 8-24-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 24-Aug-07

CLIENT: Cortland Co. Soil and Water Cons. Dist.  
Lab Order: U0707386  
Project: Towslee Landfill  
Lab ID: U0707386-004

Client Sample ID: MW-2B  
Collection Date: 7/31/2007 10:35:00 AM  
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD) Biochemical Oxygen Demand	ND	E405.1 4		mg/L	1	Analyst: DEY 8/1/2007 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD) Chemical Oxygen Demand	ND	E410.4 20		mg/L	1	Analyst: NMS 8/7/2007
TOTAL ORGANIC CARBON (TOC) Organic Carbon, Total	5.7	E415.1 3.0		mg/L	1	Analyst: BS 8/16/2007
PHENOLICS, TOTAL REC. FOR WATERS Phenolics, Total Recoverable	ND	E420.4 0.005	(E420.4)	mg/L	1	Analyst: MB 8/9/2007

Approved By: PFDate: 8-24-07 Page 8 of 15

Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 24-Aug-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0707386  
**Project:** Towslee Landfill  
**Lab ID:** U0707386-005

**Client Sample ID:** MW-3A  
**Collection Date:** 7/31/2007 9:40:00 AM

**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>						
Conductivity	1,757	1.0		umhos/cm		7/31/2007 9:40:00 AM
Eh	-115	-300		mV		7/31/2007 9:40:00 AM
pH	7.84	6.5-8.5		SU		7/31/2007 9:40:00 AM
Temperature	17.9			degC		7/31/2007 9:40:00 AM
Turbidity	16.4	5.0		NTU		7/31/2007 9:40:00 AM
<b>ICP METALS, TOTAL ASP</b>						
Cadmium	ND	5.00		µg/L	1	8/6/2007 12:42:04 PM
Calcium	45100	1000		µg/L	1	8/6/2007 12:42:04 PM
Iron	231	60.0		µg/L	1	8/6/2007 12:42:04 PM
Lead	ND	3.00		µg/L	1	8/6/2007 12:42:04 PM
Magnesium	9150	1000		µg/L	1	8/6/2007 12:42:04 PM
Manganese	116	10.0		µg/L	1	8/6/2007 12:42:04 PM
Potassium	ND	1000		µg/L	1	8/6/2007 12:42:04 PM
Sodium	5100	1000		µg/L	1	8/6/2007 12:42:04 PM
Hardness, Total(CaCO <sub>3</sub> )	150000	7000		µg/L	1	8/6/2007 12:42:04 PM
<b>INORGANIC ANIONS BY IC FOR WATERS</b>						
Bromide	ND	0.20		mg/L	1	8/4/2007
<b>RESIDUE, DISSOLVED (TDS)</b>						
Residue, Dissolved (TDS)	210	25		mg/L	1	8/1/2007
<b>ALKALINITY ON AQUEOUS SAMPLES BY LACHA</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	170	10		mg/LCaCO <sub>3</sub>	1	8/7/2007
<b>CHLORIDE WATERS BY LACHAT</b>						
Chloride	12.0	1.00		mg/L	1	8/7/2007
<b>NITROGEN, AMMONIA (AS NH<sub>3</sub> BY LACHAT)</b>						
Nitrogen, Ammonia (As NH <sub>3</sub> )	ND	0.500		mg/L	1	8/16/2007
<b>TKN FOR WATERS</b>						
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	8/16/2007
<b>NITROGEN, NITRATE (AS N)</b>						
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	7/31/2007 5:28:00 PM
<b>SULFATE</b>						
Sulfate	20.5	10.0		mg/L	2	8/2/2007 10:30:00 AM
<b>BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)</b>						
Biochemical Oxygen Demand	ND	4		mg/L	1	8/1/2007 8:00:00 AM

Approved By: PF

Date: 8-24-07

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Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 24-Aug-07

CLIENT: Cortland Co. Soil and Water Cons. Dist.  
Lab Order: U0707386  
Project: Towslee Landfill  
Lab ID: U0707386-005

Client Sample ID: MW-3A  
Collection Date: 7/31/2007 9:40:00 AM

Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD) Chemical Oxygen Demand	ND	E410.4 20		mg/L	1	Analyst: NMS 8/7/2007
TOTAL ORGANIC CARBON (TOC) Organic Carbon, Total	ND	E415.1 3.0		mg/L	1	Analyst: BS 8/16/2007
PHENOLICS, TOTAL REC. FOR WATERS Phenolics, Total Recoverable	ND	E420.4 0 005	(E420.4)	mg/L	1	Analyst: MB 8/9/2007

Approved By: PFDate: 8-24-07

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Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 24-Aug-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0707386  
**Project:** Towslee Landfill  
**Lab ID:** U0707386-007

**Client Sample ID:** 1B Dupe  
**Collection Date:** 7/31/2007 10:05:00 AM

**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL ASP		E200.7	(E200.7)			Analyst: EA
Cadmium	ND	5.00	µg/L		1	8/6/2007 12:52:28 PM
Calcium	30700	1000	µg/L		1	8/6/2007 12:52:28 PM
Iron	367	60.0	µg/L		1	8/6/2007 12:52:28 PM
Lead	ND	3.00	µg/L		1	8/6/2007 12:52:28 PM
Magnesium	7390	1000	µg/L		1	8/6/2007 12:52:28 PM
Manganese	198	10.0	µg/L		1	8/6/2007 12:52:28 PM
Potassium	ND	1000	µg/L		1	8/6/2007 12:52:28 PM
Sodium	7420	1000	µg/L		1	8/6/2007 12:52:28 PM
Hardness, Total(CaCO <sub>3</sub> )	107000	7000	µg/L		1	8/6/2007 12:52:28 PM
INORGANIC ANIONS BY IC FOR WATERS		E300.1				Analyst: BY
Bromide	ND	0.20	mg/L		1	8/4/2007
RESIDUE, DISSOLVED (TDS)		E160.1				Analyst: DEY
Residue, Dissolved (TDS)	145	25	mg/L		1	8/1/2007
ALKALINITY ON AQUEOUS SAMPLES BY LACHA		E310.2				Analyst: SAR
Alkalinity, Total (As CaCO <sub>3</sub> )	100	10	mg/LCaCO <sub>3</sub>		1	8/7/2007
CHLORIDE WATERS BY LACHAT		E325.2				Analyst: SAR
Chloride	4.66	1.00	mg/L		1	8/7/2007
NITROGEN, AMMONIA (AS NH <sub>3</sub> BY LACHAT)		E350.1				Analyst: BY
Nitrogen, Ammonia (As NH <sub>3</sub> )	ND	0.500	mg/L		1	8/16/2007
TKN FOR WATERS		E351.3				Analyst: BY
Nitrogen, Kjeldahl, Total	ND	0.500	mg/L		1	8/16/2007
NITROGEN, NITRATE (AS N)		E353.2				Analyst: BY
Nitrogen, Nitrate (as N)	ND	0.200	mg/L		1	7/31/2007 5:28:00 PM
SULFATE		E375.4				Analyst: LMK
Sulfate	24.3	10.0	mg/L		2	8/2/2007 10:30:00 AM
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)		E405.1				Analyst: DEY
Biochemical Oxygen Demand	ND	4	mg/L		1	8/1/2007 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)		E410.4				Analyst: NMS
Chemical Oxygen Demand	ND	20	mg/L		1	8/7/2007
TOTAL ORGANIC CARBON (TOC)		E415.1				Analyst: BS
Organic Carbon, Total	ND	3.0	mg/L		1	8/16/2007
PHENOLICS, TOTAL REC. FOR WATERS		E420.4	(E420.4)			Analyst: MB
Phenolics, Total Recoverable	ND	0.005	mg/L		1	8/9/2007

Approved By: PF

Date: 8-24-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 24-Aug-07

<b>CLIENT:</b>	Cortland Co. Soil and Water Cons. Dist.			<b>Client Sample ID:</b>	MW-6B	
<b>Lab Order:</b>	U0707386			<b>Collection Date:</b>	7/31/2007 10:45:00 AM	
<b>Project:</b>	Towslee Landfill					
<b>Lab ID:</b>	U0707386-008			<b>Matrix:</b>	WATER	
Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>			FLD			Analyst:
Conductivity	236	1.0		umhos/cm		7/31/2007 10:45:00 AM
Eh	-105	-300		mV		7/31/2007 10:45:00 AM
pH	7.85	6.5-8.5		SU		7/31/2007 10:45:00 AM
Temperature	15.6			degC		7/31/2007 10:45:00 AM
Turbidity	9.48	5.0		NTU		7/31/2007 10:45:00 AM
<b>ICP METALS, TOTAL ASP</b>		E200.7		(E200.7)		Analyst: EA
Cadmium	ND	5.00		µg/L	1	8/6/2007 12:55:59 PM
Calcium	40200	1000		µg/L	1	8/6/2007 12:55:59 PM
Iron	163	60.0		µg/L	1	8/6/2007 12:55:59 PM
Lead	ND	3.00		µg/L	1	8/6/2007 12:55:59 PM
Magnesium	9120	1000		µg/L	1	8/6/2007 12:55:59 PM
Manganese	671	10.0		µg/L	1	8/6/2007 12:55:59 PM
Potassium	ND	1000		µg/L	1	8/6/2007 12:55:59 PM
Sodium	15000	1000		µg/L	1	8/6/2007 12:55:59 PM
Hardness, Total(CaCO <sub>3</sub> )	138000	7000		µg/L	1	8/6/2007 12:55:59 PM
<b>INORGANIC ANIONS BY IC FOR WATERS</b>		E300.1				Analyst: BY
Bromide	ND	0.20		mg/L	1	8/4/2007
<b>RESIDUE, DISSOLVED (TDS)</b>		E160.1				Analyst: DEY
Residue, Dissolved (TDS)	220	25		mg/L	1	8/1/2007
<b>ALKALINITY ON AQUEOUS SAMPLES BY LACHA</b>		E310.2				Analyst: SAR
Alkalinity, Total (As CaCO <sub>3</sub> )	150	10		mg/LCaCO <sub>3</sub>	1	8/7/2007
<b>CHLORIDE WATERS BY LACHAT</b>		E325.2				Analyst: SAR
Chloride	13.8	1.00		mg/L	1	8/7/2007
<b>NITROGEN, AMMONIA (AS NH<sub>3</sub> BY LACHAT)</b>		E350.1				Analyst: BY
Nitrogen, Ammonia (As NH <sub>3</sub> )	ND	0.500		mg/L	1	8/16/2007
<b>TKN FOR WATERS</b>		E351.3				Analyst: BY
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	8/16/2007
<b>NITROGEN, NITRATE (AS N)</b>		E353.2				Analyst: BY
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	7/31/2007 5:28:00 PM
<b>SULFATE</b>		E375.4				Analyst: LMK
Sulfate	17.3	5.00		mg/L	1	8/2/2007 10:30:00 AM
<b>BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)</b>		E405.1				Analyst: DEY
Biochemical Oxygen Demand	ND	4		mg/L	1	8/1/2007 8:00:00 AM

Approved By: PF

Date: 8-24-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 24-Aug-07

CLIENT: Cortland Co. Soil and Water Cons. Dist.  
Lab Order: U0707386  
Project: Towslee Landfill  
Lab ID: U0707386-008

Client Sample ID: MW-6B  
Collection Date: 7/31/2007 10:45:00 AM  
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CHEMICAL OXYGEN DEMAND (COD) Chemical Oxygen Demand	ND	E410.4 20		mg/L	1	Analyst: NMS 8/7/2007
TOTAL ORGANIC CARBON (TOC) Organic Carbon, Total	ND	E415.1 3.0		mg/L	1	Analyst: BS 8/16/2007
PHENOLICS, TOTAL REC. FOR WATERS Phenolics, Total Recoverable	ND	E420.4 0.005	(E420.4)	mg/L	1	Analyst: MB 8/9/2007

Approved By: PFDate: 8-24-07

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Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

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E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 24-Aug-07

CLIENT: Cortland Co. Soil and Water Cons. Dist.  
 Lab Order: U0707386  
 Project: Towslee Landfill  
 Lab ID: U0707386-009

Client Sample ID: MW-7A  
 Collection Date: 7/31/2007 10:15:00 AM

Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>						
Conductivity	514	1.0		umhos/cm		7/31/2007 10:15:00 AM
Eh	-69	-300		mV		7/31/2007 10:15:00 AM
pH	7.2	6.5-8.5		SU		7/31/2007 10:15:00 AM
Temperature	18.8			degC		7/31/2007 10:15:00 AM
Turbidity	40.9	5.0		NTU		7/31/2007 10:15:00 AM
<b>ICP METALS, TOTAL ASP</b>						
Cadmium	ND	5.00		µg/L	1	8/6/2007 12:59:33 PM
Calcium	135000	1000		µg/L	1	8/6/2007 12:59:33 PM
Iron	9970	60.0		µg/L	1	8/6/2007 12:59:33 PM
Lead	6.56	3.00		µg/L	1	8/6/2007 12:59:33 PM
Magnesium	35000	1000		µg/L	1	8/6/2007 12:59:33 PM
Manganese	3980	10.0		µg/L	1	8/6/2007 12:59:33 PM
Potassium	2870	1000		µg/L	1	8/6/2007 12:59:33 PM
Sodium	95800	1000		µg/L	1	8/6/2007 12:59:33 PM
Hardness, Total(CaCO <sub>3</sub> )	481000	7000		µg/L	1	8/6/2007 12:59:33 PM
<b>INORGANIC ANIONS BY IC FOR WATERS</b>						
Bromide	ND	2.0		mg/L	10	8/4/2007
<b>NOTES:</b>						
The reporting limits were raised due to matrix interference.						
<b>RESIDUE, DISSOLVED (TDS)</b>						
Residue, Dissolved (TDS)	3000	25		mg/L	1	8/1/2007
<b>ALKALINITY ON AQUEOUS SAMPLES BY LACHA</b>						
Alkalinity, Total (As CaCO <sub>3</sub> )	530	100		mg/LCaCO <sub>3</sub>	10	8/7/2007
<b>CHLORIDE WATERS BY LACHAT</b>						
Chloride	145	1.00		mg/L	1	8/7/2007
<b>NITROGEN, AMMONIA (AS NH<sub>3</sub> BY LACHAT)</b>						
Nitrogen, Ammonia (As NH <sub>3</sub> )	ND	0.500		mg/L	1	8/17/2007
<b>TKN FOR WATERS</b>						
Nitrogen, Kjeldahl, Total	0.784	0.500		mg/L	1	8/16/2007
<b>NITROGEN, NITRATE (AS N)</b>						
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	7/31/2007 5:28:00 PM
<b>SULFATE</b>						
Sulfate	22.7	10.0		mg/L	2	8/2/2007 10:30:00 AM
<b>BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)</b>						
						Analyst: DEY

Approved By: PF

Date: 8-24-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.****Date:** 24-Aug-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0707386  
**Project:** Towslee Landfill  
**Lab ID:** U0707386-009

**Client Sample ID:** MW-7A  
**Collection Date:** 7/31/2007 10:15:00 AM

**Matrix:** WATER

<b>Analyses</b>	<b>Result</b>	<b>Limit</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
<b>BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)</b> Biochemical Oxygen Demand	ND	E405.1 4		mg/L	1	Analyst: DEY 8/1/2007 8:00:00 AM
<b>CHEMICAL OXYGEN DEMAND (COD)</b> Chemical Oxygen Demand	ND	E410.4 20		mg/L	1	Analyst: NMS 8/7/2007
<b>TOTAL ORGANIC CARBON (TOC)</b> Organic Carbon, Total	7.2	E415.1 3.0		mg/L	1	Analyst: BS 8/16/2007
<b>PHENOLICS, TOTAL REC. FOR WATERS</b> Phenolics, Total Recoverable	0.007	E420.4 0.005		(E420.4) mg/L	1	Analyst: MB 8/9/2007

Approved By: PF

Date: 8-24-07 Page 15 of 15

Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

## Upstate Laboratories, Inc.

## Ground water Field Log

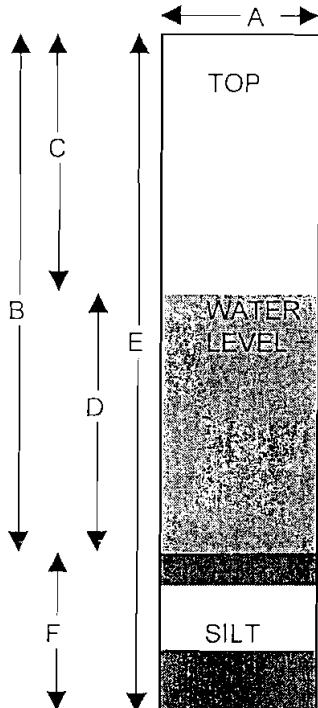
File: TS-30-01

Revised: 2/10/2001

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

ULI ID. No. (enter by lab):

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



A.	Diameter of Well	<u>2"</u>	inches
B.	Well Depth Measured	<u>33.7</u>	feet
C.	Depth to Water	<u>4.37</u>	feet
D.	Length of Water Column (calculated)	<u>29.33</u>	feet
Conversion Factor		<u>X.16</u>	-----
Well Volume (calculated)		<u>4.69</u>	gallons
No. of Volumes to be Evacuated		<u>X3</u>	-----
Total Volume to be Evacuated		<u>14.08</u>	gallons
Actual Volume Evacuated		<u>15</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>7/30/2007</u>	<u>7/31/2007</u>	Initial Depth to Water <u>4.37</u> feet
Time	<u>11:00 AM</u>	<u>9:55 AM</u>	Recharge Depth to Water <u>4.43</u> feet
EH	<u>-137</u>	<u>-111</u>	2nd water column height <u>99.7954</u> %
Temperature	<u>18.3 c</u>	<u>21.6 c</u>	1st water column height
pH	<u>8.48</u>	<u>7.83</u>	Elevation(Top of Casing) <u>N/A</u> feet
Specific Cond.	<u>236</u>	<u>241</u>	G.W. Elevation= <u>N/A</u> feet
Turbidity	<u>28.5</u>	<u>24.3</u>	G.W.Elevation = Top of Case Elev - Total Depth
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>	Sampler: <u>Justin Gibson</u>
Appearance	<u>sl. Cloudy</u>	<u>sl. Cloudy</u>	Signature: <u>Justin Gibson</u>
Weather:	<u>76 f sunny</u>	<u>74 f sunny</u>	
Observations:			

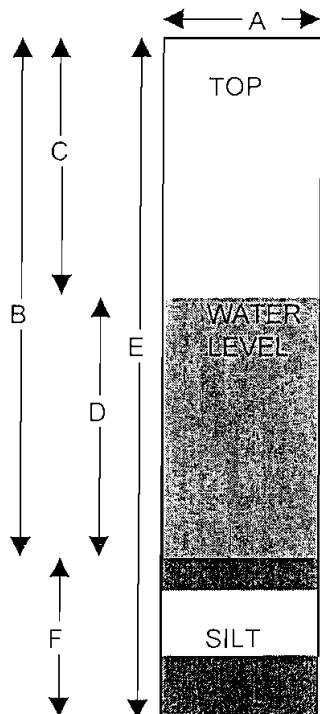
## Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01

Revised: 2/10/2001

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

ULR ID No. (enter by lab)

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

A.	Diameter of Well	<u>2"</u>	inches
B.	Well Depth Measured	<u>55.5</u>	feet
C.	Depth to Water	<u>4.73</u>	feet
D.	Length of Water Column (calculated)	<u>50.77</u>	feet
	Conversion Factor	<u>X.16</u>	-----
	Well Volume (calculated)	<u>8.12</u>	gallons
	No. of Volumes to be Evacuated	<u>X3</u>	-----
	Total Volume to be Evacuated	<u>24.37</u>	gallons
	Actual Volume Evacuated	<u>25</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>7/30/2007</u>	<u>7/31/2007</u>
Time	<u>11:10 AM</u>	<u>10:05 AM</u>
EH	<u>-190</u>	<u>-143</u>
Temperature	<u>13.4 c</u>	<u>21.5 c</u>
pH	<u>7.74</u>	<u>8.03</u>
Specific Cond.	<u>1351</u>	<u>1241</u>
Turbidity	<u>27.1</u>	<u>10.2</u>
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>
Appearance	<u>cloudy</u>	<u>clear</u>
Weather:	<u>76 f, sunny</u>	<u>74 f sunny</u>
Observations:		<u>dupe</u>

% Recharge:		
Initial Depth to Water	<u>4.73</u>	feet
Recharge Depth to Water	<u>4.78</u>	feet
2nd water column height	<u>99.9015</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:  
 Justin Gibson  
 Signature:  

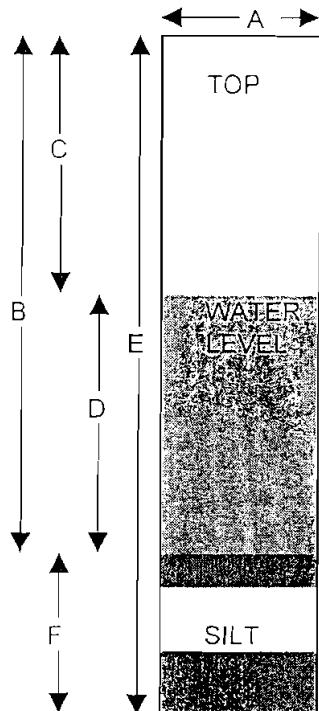

## Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01

Revised: 2/10/2001

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

ULI ID No. (enter by lab)

Condition of Well: Good Locked: YESMethod of Evacuation: Dedicated Bailer Lock ID:Method 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>6.86</u>	feet
D.	Length of Water Column (calculated)	<u>5.94</u>	feet
	Conversion Factor	<u>X.16</u>	-----
	Well Volume (calculated)	<u>0.95</u>	gallons
	No. of Volumes to be Evacuated	<u>X3</u>	-----
	Total Volume to be Evacuated	<u>2.85</u>	gallons
	Actual Volume Evacuated	<u>dry @ 1.5</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>7/30/2007</u>	<u>7/31/2007</u>
Time	<u>12:00 PM</u>	<u>10:25 AM</u>
EH	<u>-97</u>	<u>-81</u>
Temperature	<u>21.5 c</u>	<u>18 c</u>
pH	<u>7.75</u>	<u>7.41</u>
Specific Cond.	<u>354</u>	<u>395</u>
Turbidity	<u>44.6</u>	<u>15</u>
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>
Appearance	<u>cloudy</u>	<u>sl. Cloudy</u>
Weather:	<u>76 f, sun</u>	<u>74 f, sun</u>
Observations:		

% Recharge:		
Initial Depth to Water	<u>6.86</u>	feet
Recharge Depth to Water	<u>6.91</u>	feet
2nd water column height	<u>99.27</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:		
Justin Gibson		
Signature:		
<i>Justin Gibson</i>		

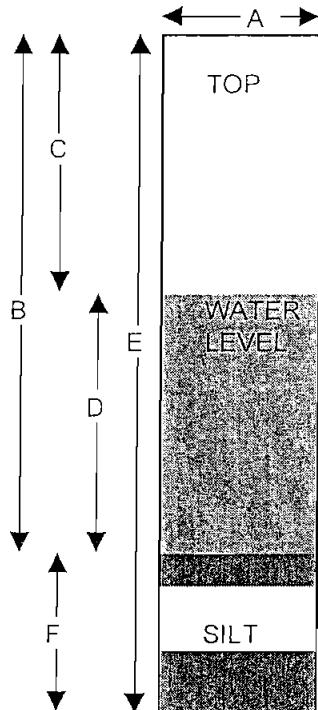
## Upstate Laboratories, Inc. Ground water Field Log

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: YESMethod of Evacuation: Dedicated Bailer Lock ID:Method 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>7.62</u>	feet
D.	Length of Water Column (calculated)	<u>25.88</u>	feet
	Conversion Factor	<u>X.16</u>	-----
	Well Volume (calculated)	<u>4.14</u>	gallons
	No. of Volumes to be Evacuated	<u>X3</u>	-----
	Total Volume to be Evacuated	<u>12.42</u>	gallons
	Actual Volume Evacuated	<u>13</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>7/30/2007</u>	<u>7/31/2007</u>
Time	<u>12:10 PM</u>	<u>10:35 AM</u>
EH	<u>-109</u>	<u>-77</u>
Temperature	<u>18.3 c</u>	<u>16.5 c</u>
pH	<u>7.95</u>	<u>7.37</u>
Specific Cond.	<u>387</u>	<u>500</u>
Turbidity	<u>13.3</u>	<u>9.48</u>
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>
Appearance	<u>clear</u>	<u>clear</u>
Weather:	<u>76 f, sun</u>	<u>74 f, sun</u>
Observations:	<u></u>	

% Recharge:		
Initial Depth to Water	<u>7.62</u>	feet
Recharge Depth to Water	<u>7.65</u>	feet
2nd water column height	<u>99.8841</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:		
Justin Gibson		
Signature:	<u>Justin Gibson</u>	

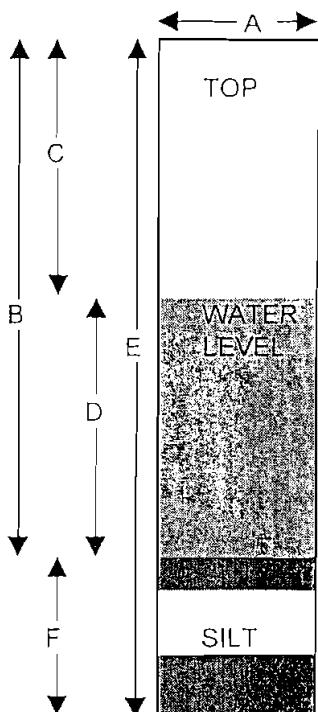
## Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01

Revised: 2/10/2001

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

ULID No. (enter by lab)

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

A.	Diameter of Well	<u>2"</u>	inches
B.	Well Depth Measured	<u>22.40</u>	feet
C.	Depth to Water	<u>8.89</u>	feet
D.	Length of Water Column (calculated)	<u>13.51</u>	feet
	Conversion Factor	<u>X.16</u>	-----
	Well Volume (calculated)	<u>2.16</u>	gallons
	No. of Volumes to be Evacuated	<u>X3</u>	-----
	Total Volume to be Evacuated	<u>6.48</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>7/30/2007</u>	<u>7/31/2007</u>
Time	<u>10:45 AM</u>	<u>9:40 AM</u>
EH	<u>-160</u>	<u>-115</u>
Temperature	<u>14.2 c</u>	<u>17.9 c</u>
pH	<u>8.9</u>	<u>7.84</u>
Specific Cond.	<u>1652</u>	<u>1757</u>
Turbidity	<u>7.84</u>	<u>16.4</u>
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>
Appearance	<u>clear</u>	<u>sl. Cloudy</u>
Weather:	<u>75 f, sun</u>	<u>75 f, sun</u>
Observations:	<u></u>	

## % Recharge:

Initial Depth to Water 8.89 feetRecharge Depth to Water 8.96 feet2nd water column height 99.4819 %1st water column height Elevation(Top of Casing) N/A feetG.W. Elevation= N/A feet

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

Sampler:  
Justin GibsonSignature: Justin Gibson

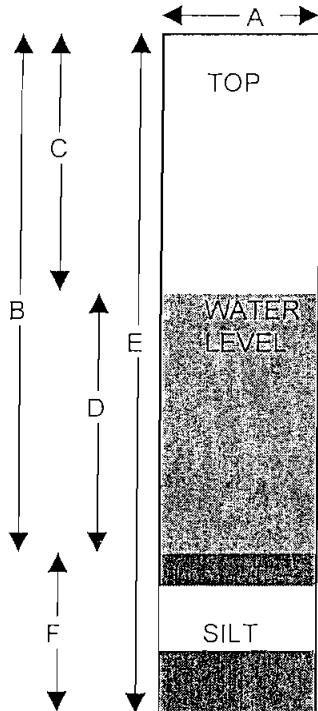
## Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01

Revised: 2/10/2001

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

Well ID No. (enter by lab)

Condition of Well: Good Locked: NOMethod of Evacuation: Dedicated Bailer Lock ID: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>14.76</u>	feet
D.	Length of Water Column (calculated)	<u>25.99</u>	feet
	Conversion Factor	<u>X.16</u>	-----
	Well Volume (calculated)	<u>4.16</u>	gallons
	No. of Volumes to be Evacuated	<u>X3</u>	-----
	Total Volume to be Evacuated	<u>12.48</u>	gallons
	Actual Volume Evacuated	<u>13</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>7/30/2007</u>	<u>7/31/2007</u>	Initial Depth to Water <u>14.76</u> feet
Time	<u>12:30 PM</u>	<u>10:45 AM</u>	Recharge Depth to Water <u>14.82</u> feet
EH	<u>-120</u>	<u>-105</u>	2nd water column height <u>99.7691 %</u>
Temperature	<u>12.8 c</u>	<u>15.6 c</u>	1st water column height
pH	<u>8.15</u>	<u>7.85</u>	Elevation(Top of Casing) <u>N/A</u> feet
Specific Cond.	<u>1792</u>	<u>236</u>	G.W. Elevation= <u>N/A</u> feet
Turbidity	<u>3.45</u>	<u>9.48</u>	G.W.Elevation =Top of Case Elev-Total Depth
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>	
Appearance	<u>clear</u>	<u>clear</u>	
Weather:	<u>76 f, sun</u>	<u>74 f, sun</u>	Sampler:
Observations:	<u>MSD</u>		Justin Gibson
			Signature: <u>Justin Gibson</u>

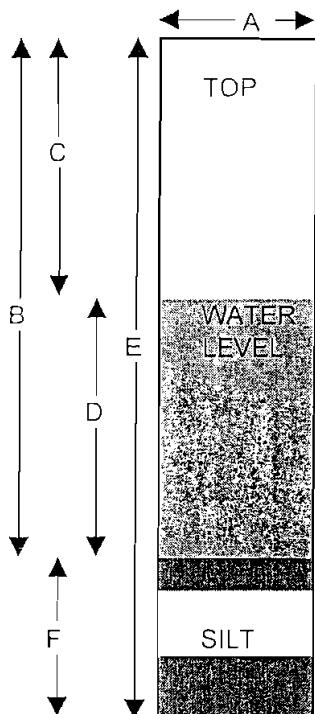
## Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01

Revised: 2/10/2001

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

ULID No. (enter by lab)

Condition of Well: Good Locked: YESMethod of Evacuation: Dedicated Bailer Lock ID: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>3.9</u>	feet
D.	Length of Water Column (calculated)	<u>18.30</u>	feet
	Conversion Factor	<u>X.16</u>	-----
	Well Volume (calculated)	<u>2.93</u>	gallons
	No. of Volumes to be Evacuated	<u>X3</u>	-----
	Total Volume to be Evacuated	<u>8.78</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	% Recharge:
Date	<u>7/30/2007</u>	<u>7/31/2007</u>	Initial Depth to Water <u>3.9</u> feet
Time	<u>11:40 AM</u>	<u>10:15 AM</u>	Recharge Depth to Water <u>3.95</u> feet
EH	<u>-118</u>	<u>-69</u>	2nd water column height <u>99.7268 %</u>
Temperature	<u>15.5 c</u>	<u>18.8 c</u>	1st water column height
pH	<u>8.13</u>	<u>7.2</u>	Elevation(Top of Casing) <u>N/A</u> feet
Specific Cond.	<u>434</u>	<u>514</u>	G.W. Elevation= <u>N/A</u> feet
Turbidity	<u>27.1</u>	<u>40.9</u>	G.W.Elevation = Top of Case Elev-Total Depth
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>	Sampler: <u>Justin Gibson</u>
Appearance	<u>cloudy</u>	<u>cloudy</u>	Signature: <u>Justin Gibson</u>
Weather:	<u>76 f, sun</u>	<u>76 f, sun</u>	
Observations:			

# Upstate Laboratories, Inc.

# Chain of Custody Record

6034 Corporate Drive E. Syracuse New York 13057

Phone (315) 437 0255

Fax (315) 437 1209

Client

Project #/ Project Name

CORTLAND COUNTY

TOWSLEE LANDFILL

Client Contact

PATRICK REIDY

Phone #

607-753-0851

Location (City/State) Address

CORTLANDVILLE, NY

Sample ID

Date

Time

Matrix

GRAB

ULI Internal Use Only  
OR COMP

11770738

Number of Containers

1

2

3

4

5

6

7

8

9

10

93 REGS ASP-A

MW-1A

7/31/07

9:55<sub>a</sub>

WATER

GRAB

MW-1B

7/31/07

10:05<sub>a</sub>

WATER

GRAB

MW-2A

7/31/07

10:25<sub>a</sub>

WATER

GRAB

MW-2B

7/31/07

10:35<sub>a</sub>

WATER

GRAB

MW-3A

7/31/07

9:40<sub>a</sub>

WATER

GRAB

MW-6B HSD

7/31/07

10:45<sub>a</sub>

WATER

GRAB

MW-7A

7/31/07

10:15<sub>a</sub>

WATER

GRAB

1B DUPE

7/31/07

10:45<sub>a</sub>

WATER

GRAB

Parameter and Method

Sample bottle:

Type

Size

Preservative

Sampled by (Print)

Justin G. B...  
Company: ULI

Name of Courier

1 FIELD PH,TEMP,EH,SPEC.COND.,TURBIDITY

N/A

2 BOD<sub>5</sub>,NO<sub>3</sub>,TDS,SO<sub>4</sub>,CL-,BROMIDE

PLASTIC

2000ML

NONE

3 TKN,NH<sub>3</sub>,COD

PLASTIC

500 ML

H<sub>2</sub>SO<sub>4</sub>

4 TOC

PLASTIC

120 ML

1:1 HCL

5 ALKALINITY

GLASS

250 ML

NONE

6 T-PHENOLS

AMBER

LITER

H<sub>2</sub>SO<sub>4</sub>

7 T-CD,CA,FE,PB\*,MG,MN,K,NA,+CALC. HARDNESS

PLASTIC

500 ML

HNO<sub>3</sub>

8 D-CD,CA,FE,PB\*,MG,MN,K,NA,+CALC. HARDNESS

PLASTIC

500 ML

HNO<sub>3</sub>

9

10

Relinquished by:(sign)

Justin G. B...  
Signature

Date

Time

7/31/07

4:00P

Rec'd for lab by:

K. L. Hump

Syracuse

Rochester

Buffalo

Albany

Binghamton

Fair Lawn (NJ)

ULI Computer Input Form

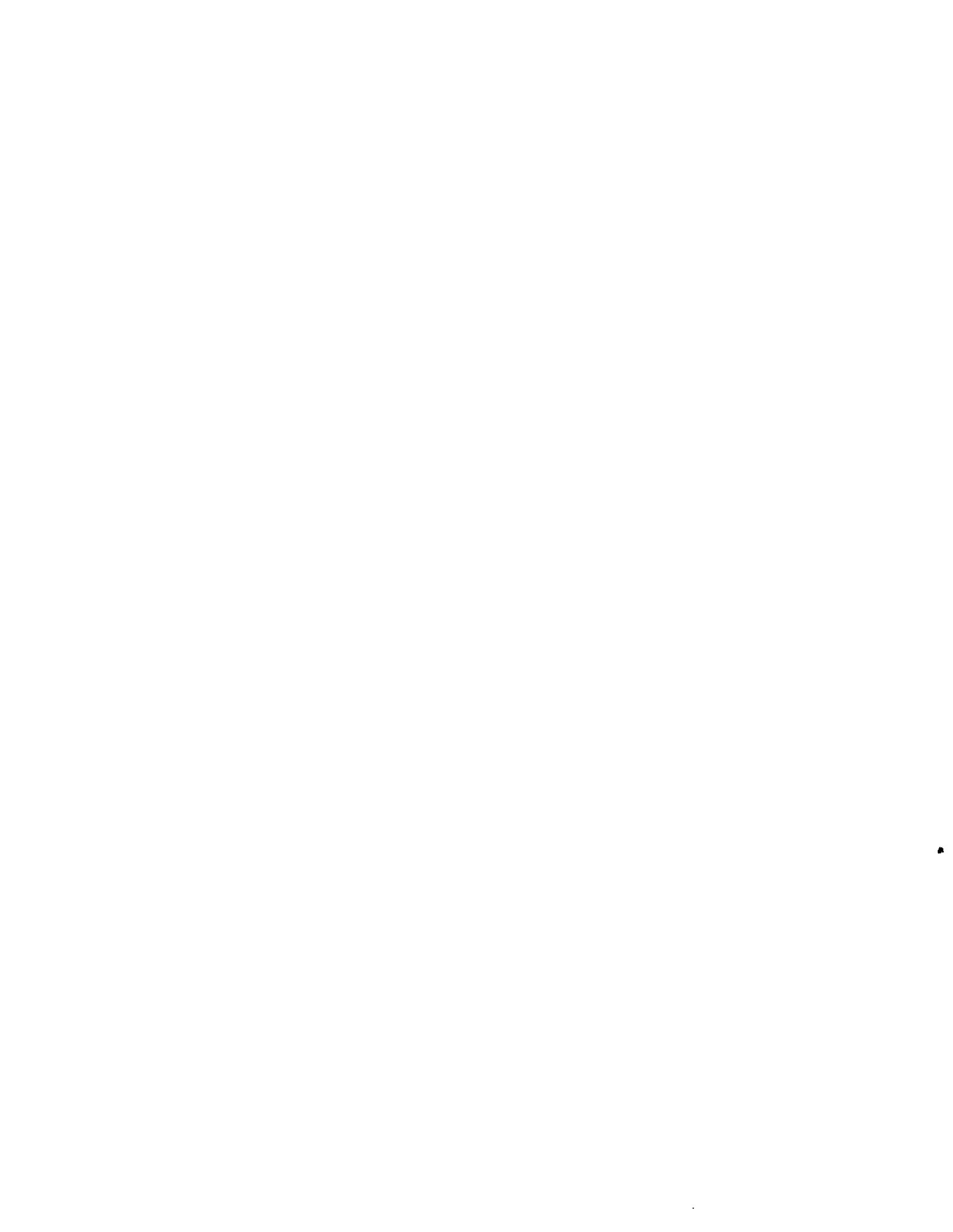
Remarks



## **Appendix B**

# **Analytical Laboratory Results and Internal Quality Control Summary Quarter 4 2007**

**Cortland County Towslee Landfill**



QUARTER 4 2007 TOWNSLEE LANDFILL  
CATE NARRATIVE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND  
ANALYTICAL REQUIREMENT SUMMARY

Upstate Laboratories, Inc  
6034 Corporate Drive  
East Syracuse, New York 13057

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# Narrative

## 1.0 Summary

This report presents the sample test results and quality control results for seven water sample locations for the Towslee Landfill, Cortlandville, New York. The samples were analyzed for the parameters listed in Section 3.0, below.

This report is divided into two packages and four volumes. The Sample Data Summary Package (Volume 1) presents a summary of the test results and quality control data. This abbreviated format is useful to engineers and environmental scientists. The Sample Data Package (Volumes 2-4) is a comprehensive report containing instrument raw data. It is formatted for validation by an independent third party.

## 2.0 Chain of Custody

The samples were collected by Upstate Laboratories, Inc. personnel on October 9 and 10, 2007, and were then delivered to Upstate Laboratories, Inc., Syracuse, New York. The Chain of Custody documentation is copied in Volumes 1 & 2.

## 3.0 Methodology

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:

<u>Parameter</u>	<u>Method</u>	<u>Reference</u>
Volatile Organics	8260	(1)
Aluminum	200.7	(1)
Antimony	200.7	(1)
Arsenic	200.7	(1)
Barium	200.7	(1)
Beryllium	200.7	(1)
Boron	200.7	(1)
Cadmium	200.7	(1)
Calcium	200.7	(1)
Chromium	200.7	(1)
Cobalt	200.7	(1)
Copper	200.7	(1)
Iron	200.7	(1)
Lead	200.7	(1)
Magnesium	200.7	(1)
Manganese	200.7	(1)
Mercury	245.2	(1)
Nickel	200.7	(1)
Potassium	200.7	(1)
Selenium	200.7	(1)
Silver	200.7	(1)
Sodium	200.7	(1)
Thallium	200.7	(1)
Vanadium	200.7	(1)
Zinc	200.7	(1)
Total Alkalinity	310.2	(1)
Ammonia-Nitrogen	350.1	(1)
BOD	405.1	(1)
Chloride	325.2	(1)
COD	410.4	(1)

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The total number of pages in this Data Package is: 1209

Color	110.2	(1)
Cyanide	335.2	(1)
Hexavalent Chromium	SM3500	(1)
Nitrate-Nitrogen	353.1	(1)
Phenols	420.4	(1)
Sulfate	375.4	(1)
TDS	160.1	(1)
TSS	160.2	(1)
TKN	351.3	(1)
TOC	415.1	(1)
Bromide	300.0	(1)

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

## 4.0 Quality Control

Quality control data includes method blanks, reference samples, matrix spikes, duplicates and surrogate recoveries. The association of QC data with sample data is made through the use of the "Run No." found on both the final report pages and the QC summary pages.

## 5.0 Internal Validation

The following observations are offered:

### Volatiles by GC/MS

Holding Time : Criteria were satisfied.

-195-

Calibration : The CC %D values for Vinyl Chloride, 1,1,1-Trichloroethane and Tetrachloroethene were outside QC acceptance limits for CC, lab file C19326.D. The CC %D value for Vinyl Acetate was outside QC acceptance limits for CC, lab files C19343.D and C19361.D. Several target compounds were manually integrated in the IC and CC. All other criteria were satisfied.

Method Blank : Criteria were satisfied.

MSB : Criteria were satisfied.

MS/MSD : Criteria were satisfied.

Surrogates : Criteria were satisfied.

Internal Stds : Criteria were satisfied.

### Trace Metals and Cyanide Data

Holding Time : Criteria were satisfied.

Calibration : The CCV2 recovery for Silver was greater than QC acceptance limits for analytical sequence R29132. The associated sample locations were non-detect for Silver; therefore, no corrective action was taken. All other criteria were satisfied.

Method Blanks : Criteria were satisfied.

Ref Samples : Criteria were satisfied.

Matrix Spikes : Criteria were satisfied.

Duplicates : The Duplicate %RPD value for Zinc was outside QC acceptance limits for the Duplicate analysis performed on sample location MW-6B. The concentration of Zinc in sample location MW-6B was less than 5X the CRDL; therefore the data was considered valid. A control limit of 20% for RPD is used for original and duplicate sample values greater than or equal to 5X the CRDL. All other criteria were satisfied.

## ***Wet Chemistry Data***

Holding Time : Criteria were satisfied.

Calibration : The CCV1 recovery for TOC was slightly below QC acceptance limits for analytical sequence R28902. All other criteria were satisfied.

Method Blanks : Criteria were satisfied.

Ref. Samples : Criteria were satisfied.

Matrix Spikes : The MS recovery for COD was outside QC acceptance limits for the MS performed on sample location MW-6B. The MS recovery for Total Phenol was greater than QC acceptance limits for the MS performed on sample location MW-6B. All other criteria were satisfied.

Duplicates : Criteria were satisfied.

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.

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Approved *Anthony J. Scala,*  
Anthony J. Scala, Director

# Upstate Laboratories, Inc.

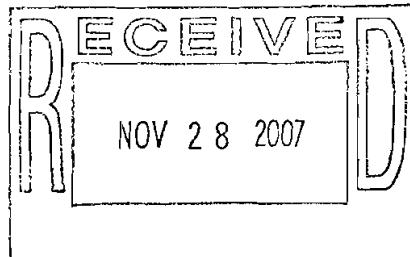
BASELINE

Shipping: 6034 Corporate Dr. \* E. Syracuse, NY 13057-1017 \* (315) 437-0255 \* Fax (315) 437-1209

Mailing: Box 169 \* Syracuse, NY 13206

Albany (518) 459-3134 \* Binghamton (607) 724-0478 \* Buffalo (716) 649-2533

Rochester (866) 437-0255 \* New Jersey (908) 892-1807



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

November 8, 2007

RE: Towslee Landfill

Order No.: U0710280

Dear Mr. Reidy:

8?

Upstate Laboratories, Inc. received 18 samples on 10/10/07 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. 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, 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

Enclosures: ASP-B Pkg., report, 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.**

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-001

**Client Sample ID:** MW-1A  
**Collection Date:** 10/9/2007 10:24:00 AM

**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOLS(BASELINE)</b>			<b>SW8260B</b>			<b>Analyst: MM</b>
Chloromethane	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Vinyl chloride	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Bromomethane	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Chloroethane	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Trichlorofluoromethane	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Acetone	ND	10	μg/L	1	10/16/2007 7:01:00 AM	
1,1-Dichloroethene	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Iodomethane	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Carbon disulfide	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Methylene chloride	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Acrylonitrile	ND	100	μg/L	1	10/16/2007 7:01:00 AM	
trans-1,2-Dichloroethene	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
1,1-Dichloroethane	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Vinyl acetate	ND	50	μg/L	1	10/16/2007 7:01:00 AM	
2-Butanone	ND	10	μg/L	1	10/16/2007 7:01:00 AM	
cis-1,2-Dichloroethene	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Chloroform	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Bromochloromethane	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
1,1,1-Trichloroethane	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Carbon tetrachloride	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Benzene	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
1,2-Dichloroethane	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Trichloroethene	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
1,2-Dichloropropane	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Bromodichloromethane	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Dibromomethane	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
4-Methyl-2-pentanone	ND	10	μg/L	1	10/16/2007 7:01:00 AM	
cis-1,3-Dichloropropene	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Toluene	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
trans-1,3-Dichloropropene	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
1,1,2-Trichloroethane	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
2-Hexanone	ND	10	μg/L	1	10/16/2007 7:01:00 AM	
Tetrachloroethene	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Dibromochloromethane	ND	5.0	μg/L	1	10/16/2007 7.01.00 AM	
1,2-Dibromoethane	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Chlorobenzene	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
1,1,1,2-Tetrachloroethane	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
Ethylbenzene	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	
m,p-Xylene	ND	5.0	μg/L	1	10/16/2007 7:01:00 AM	

Approved By: PF

Date: 11-8-07

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Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
F Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-001

**Client Sample ID:** MW-1A  
**Collection Date:** 10/9/2007 10:24:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOLs(BASELINE)</b>			<b>SW8260B</b>			<b>Analyst: MM</b>
o-Xylene	ND	5.0		µg/L	1	10/16/2007 7:01:00 AM
Styrene	ND	5.0		µg/L	1	10/16/2007 7:01:00 AM
Bromoform	ND	5.0		µg/L	1	10/16/2007 7:01:00 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/16/2007 7:01:00 AM
1,2,3-Trichloropropane	ND	5.0		µg/L	1	10/16/2007 7:01:00 AM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	10/16/2007 7:01:00 AM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	10/16/2007 7:01:00 AM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	10/16/2007 7:01:00 AM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	10/16/2007 7:01:00 AM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	1	10/16/2007 7:01:00 AM

**NOTES:**

TICS: No compounds were detected.

Approved By: PFDate: 11-8-07

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Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-002

**Client Sample ID:** MW-1B  
**Collection Date:** 10/9/2007 10:30:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOL(S.BASELINE)</b>	<b>SW8260B</b>					<b>Analyst: MM</b>
Chloromethane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Vinyl chloride	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Bromomethane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Chloroethane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Trichlorofluoromethane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Acetone	ND	10	μg/L		1	10/16/2007 7:39:00 AM
1,1-Dichloroethene	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Iodomethane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Carbon disulfide	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Methylene chloride	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Acrylonitrile	ND	100	μg/L		1	10/16/2007 7:39:00 AM
trans-1,2-Dichloroethene	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
1,1-Dichloroethane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Vinyl acetate	ND	50	μg/L		1	10/16/2007 7:39:00 AM
2-Butanone	ND	10	μg/L		1	10/16/2007 7:39:00 AM
cis-1,2-Dichloroethene	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Chloroform	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Bromochloromethane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
1,1,1-Trichloroethane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Carbon tetrachloride	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Benzene	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
1,2-Dichloroethane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Trichloroethene	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
1,2-Dichloropropane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Bromodichloromethane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Dibromomethane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
4-Methyl-2-pentanone	ND	10	μg/L		1	10/16/2007 7:39:00 AM
cis-1,3-Dichloropropene	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Toluene	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
trans-1,3-Dichloropropene	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
1,1,2-Trichloroethane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
2-Hexanone	ND	10	μg/L		1	10/16/2007 7:39:00 AM
Tetrachloroethene	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Dibromochloromethane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
1,2-Dibromoethane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Chlorobenzene	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
1,1,1,2-Tetrachloroethane	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
Ethylbenzene	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM
m,p-Xylene	ND	5.0	μg/L		1	10/16/2007 7:39:00 AM

Approved By: *PF*

Date: 11-8-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.****Date:** 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-002

**Client Sample ID:** MW-1B  
**Collection Date:** 10/9/2007 10:30:00 AM  
**Matrix:** WATER

<b>Analyses</b>	<b>Result</b>	<b>Limit</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
<b>ASP/CLP APPENDIX I WATER VOL(S.BASELINE)</b>			<b>SW8260B</b>			<b>Analyst: MM</b>
o-Xylene	ND	5.0		µg/L	1	10/16/2007 7:39:00 AM
Styrene	ND	5.0		µg/L	1	10/16/2007 7:39:00 AM
Bromoform	ND	5.0		µg/L	1	10/16/2007 7:39:00 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/16/2007 7:39:00 AM
1,2,3-Trichloropropane	ND	5.0		µg/L	1	10/16/2007 7:39:00 AM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	10/16/2007 7:39:00 AM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	10/16/2007 7:39:00 AM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	10/16/2007 7:39:00 AM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	10/16/2007 7:39:00 AM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	1	10/16/2007 7:39:00 AM

**NOTES:**

TICS: No compounds were detected.

Approved By: *PF*

Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

**Date:** 11-8-07

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\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 08-Nov-07

CLIENT: Cortland Co. Soil and Water Cons. Dist.  
 Lab Order: U0710280  
 Project: Towslee Landfill  
 Lab ID: U0710280-003

Client Sample ID: MW-2A  
 Collection Date: 10/9/2007 11:24:00 AM

Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOLs(BASELINE)</b>					<b>SW8260B</b>	<b>Analyst: MM</b>
Chloromethane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Vinyl chloride	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Bromomethane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Chloroethane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Trichlorofluoromethane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Acetone	ND	10		µg/L	1	10/16/2007 8:18:00 AM
1,1-Dichloroethene	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Iodomethane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Carbon disulfide	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Methylene chloride	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Acrylonitrile	ND	100		µg/L	1	10/16/2007 8:18:00 AM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
1,1-Dichloroethane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Vinyl acetate	ND	50		µg/L	1	10/16/2007 8:18:00 AM
2-Butanone	ND	10		µg/L	1	10/16/2007 8:18:00 AM
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Chloroform	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Bromochloromethane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Carbon tetrachloride	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Benzene	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
1,2-Dichloroethane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Trichloroethene	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
1,2-Dichloropropane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Bromodichloromethane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Dibromomethane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/16/2007 8:18:00 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Toluene	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
2-Hexanone	ND	10		µg/L	1	10/16/2007 8:18:00 AM
Tetrachloroethene	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Dibromochloromethane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
1,2-Dibromoethane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Chlorobenzene	4	5.0	J	µg/L	1	10/16/2007 8:18:00 AM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	1	10/16/2007 8.18:00 AM
Ethylbenzene	ND	5.0		µg/L	1	10/16/2007 8.18:00 AM
m,p-Xylene	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM

Approved By: *PF*

Date: *11-8-07*

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.****Date:** 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-003

**Client Sample ID:** MW-2A  
**Collection Date:** 10/9/2007 11:24:00 AM  
**Matrix:** WATER

<b>Analyses</b>	<b>Result</b>	<b>Limit</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
<b>ASP/CLP APPENDIX I WATER VOLs(BASELINE)</b>			<b>SW8260B</b>			<b>Analyst: MM</b>
o-Xylene	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Styrene	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
Bromoform	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
1,2,3-Trichloropropane	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	10/16/2007 8:18:00 AM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	10/16/2007 8:18:00 AM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	1	10/16/2007 8:18:00 AM

**NOTES:**

TICS: No compounds were detected.

Approved By: PFDate: 11-8-07

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Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-004

**Client Sample ID:** MW-2B  
**Collection Date:** 10/9/2007 11:23:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOLS(BASELINE)</b>		<b>SW8260B</b>				<b>Analyst: MM</b>
Chloromethane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Vinyl chloride	5.8	5.0		µg/L	1	10/17/2007 3:16:00 PM
Bromomethane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Chloroethane	4	5.0	J	µg/L	1	10/17/2007 3:16:00 PM
Trichlorofluoromethane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Acetone	ND	10		µg/L	1	10/17/2007 3:16:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Iodomethane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Carbon disulfide	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Methylene chloride	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Acrylonitrile	ND	100		µg/L	1	10/17/2007 3:16:00 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
1,1-Dichloroethane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Vinyl acetate	ND	50		µg/L	1	10/17/2007 3:16:00 PM
2-Butanone	ND	10		µg/L	1	10/17/2007 3:16:00 PM
cis-1,2-Dichloroethene	9.2	5.0		µg/L	1	10/17/2007 3:16:00 PM
Chloroform	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Bromochloromethane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Benzene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Trichloroethene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Dibromomethane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/17/2007 3:16:00 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Toluene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
2-Hexanone	ND	10		µg/L	1	10/17/2007 3:16:00 PM
Tetrachloroethene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
1,2-Dibromoethane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Chlorobenzene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Ethylbenzene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
m,p-Xylene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM

Approved By: *PF*

Date: 11-8-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-004

**Client Sample ID:** MW-2B  
**Collection Date:** 10/9/2007 11:23:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOLs(BASELINE)</b>				<b>SW8260B</b>		<b>Analyst: MM</b>
o-Xylene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Styrene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
Bromoform	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
1,2,3-Trichloropropane	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	10/17/2007 3:16:00 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 3:16:00 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	1	10/17/2007 3:16:00 PM
TIC: Ethyl ether	4.1	0		µg/L	1	10/17/2007 3:16:00 PM

Approved By: PFDate: 11-8-07

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Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-005

**Client Sample ID:** MW-3A  
**Collection Date:** 10/9/2007 10:10:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOLS(BASELINE)</b>		<b>SW8260B</b>				<b>Analyst: MM</b>
Chloromethane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Vinyl chloride	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Bromomethane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Chloroethane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Trichlorofluoromethane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Acetone	ND	10	µg/L		1	10/17/2007 3:55:00 PM
1,1-Dichloroethene	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Iodomethane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Carbon disulfide	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Methylene chloride	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Acrylonitrile	ND	100	µg/L		1	10/17/2007 3:55:00 PM
trans-1,2-Dichloroethene	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
1,1-Dichloroethane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Vinyl acetate	ND	50	µg/L		1	10/17/2007 3:55:00 PM
2-Butanone	ND	10	µg/L		1	10/17/2007 3:55:00 PM
cis-1,2-Dichloroethene	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Chloroform	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Bromochloromethane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
1,1,1-Trichloroethane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Carbon tetrachloride	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Benzene	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
1,2-Dichloroethane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Trichloroethene	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
1,2-Dichloropropane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Bromodichloromethane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Dibromomethane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
4-Methyl-2-pentanone	ND	10	µg/L		1	10/17/2007 3:55:00 PM
cis-1,3-Dichloropropene	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Toluene	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
trans-1,3-Dichloropropene	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
1,1,2-Trichloroethane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
2-Hexanone	ND	10	µg/L		1	10/17/2007 3:55:00 PM
Tetrachloroethene	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Dibromochloromethane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
1,2-Dibromoethane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Chlorobenzene	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
1,1,1,2-Tetrachloroethane	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
Ethylbenzene	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM
m,p-Xylene	ND	5.0	µg/L		1	10/17/2007 3:55:00 PM

Approved By: *PF*

Date: 11-8-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-005

**Client Sample ID:** MW-3A  
**Collection Date:** 10/9/2007 10:10:00 AM

**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOLs(BASELINE)</b>			<b>SW8260B</b>			<b>Analyst: MM</b>
o-Xylene	ND	5.0		µg/L	1	10/17/2007 3:55:00 PM
Styrene	ND	5.0		µg/L	1	10/17/2007 3:55:00 PM
Bromoform	ND	5.0		µg/L	1	10/17/2007 3:55:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/17/2007 3:55:00 PM
1,2,3-Trichloropropane	ND	5.0		µg/L	1	10/17/2007 3:55:00 PM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	10/17/2007 3:55:00 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 3:55:00 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 3:55:00 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 3:55:00 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	1	10/17/2007 3:55:00 PM

**NOTES:**

TICS: No compounds were detected.

Approved By: PF

Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

Date: 11-8-07

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\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-006

**Client Sample ID:** MW-6B  
**Collection Date:** 10/9/2007 11:45:00 AM

**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOLS(BASELINE)</b>	<b>SW8260B</b>					<b>Analyst: MM</b>
Chloromethane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Vinyl chloride	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Bromomethane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Chloroethane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Trichlorofluoromethane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Acetone	ND	10	μg/L		1	10/16/2007 6:22:00 AM
1,1-Dichloroethene	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Iodomethane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Carbon disulfide	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Methylene chloride	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Acrylonitrile	ND	100	μg/L		1	10/16/2007 6:22:00 AM
trans-1,2-Dichloroethene	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
1,1-Dichloroethane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Vinyl acetate	ND	50	μg/L		1	10/16/2007 6:22:00 AM
2-Butanone	ND	10	μg/L		1	10/16/2007 6:22:00 AM
cis-1,2-Dichloroethene	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Chloroform	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Bromochloromethane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
1,1,1-Trichloroethane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Carbon tetrachloride	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Benzene	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
1,2-Dichloroethane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Trichloroethene	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
1,2-Dichloropropane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Bromodichloromethane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Dibromomethane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
4-Methyl-2-pentanone	ND	10	μg/L		1	10/16/2007 6:22:00 AM
cis-1,3-Dichloropropene	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Toluene	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
trans-1,3-Dichloropropene	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
1,1,2-Trichloroethane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
2-Hexanone	ND	10	μg/L		1	10/16/2007 6:22:00 AM
Tetrachloroethene	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Dibromochloromethane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
1,2-Dibromoethane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Chlorobenzene	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
1,1,1,2-Tetrachloroethane	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
Ethylbenzene	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM
m,p-Xylene	ND	5.0	μg/L		1	10/16/2007 6:22:00 AM

Approved By: *PF*

Date: 11-8-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.****Date:** 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-006

**Client Sample ID:** MW-6B  
**Collection Date:** 10/9/2007 11:45:00 AM  
**Matrix:** WATER

<b>Analyses</b>	<b>Result</b>	<b>Limit</b>	<b>Qual</b>	<b>Units</b>	<b>DF</b>	<b>Date Analyzed</b>
<b>ASP/CLP APPENDIX I WATER VOL(S.BASELINE)</b>			<b>SW8260B</b>			<b>Analyst: MM</b>
o-Xylene	ND	5.0		µg/L	1	10/16/2007 6:22:00 AM
Styrene	ND	5.0		µg/L	1	10/16/2007 6:22:00 AM
Bromoform	ND	5.0		µg/L	1	10/16/2007 6:22:00 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/16/2007 6:22:00 AM
1,2,3-Trichloropropane	ND	5.0		µg/L	1	10/16/2007 6:22:00 AM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	10/16/2007 6:22:00 AM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	10/16/2007 6:22:00 AM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	10/16/2007 6:22:00 AM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	10/16/2007 6:22:00 AM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	1	10/16/2007 6:22:00 AM

**NOTES:**

TICS: No compounds were detected.

Approved By: *PF***Date:** *11-8-07*

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**Qualifiers:** \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-007

**Client Sample ID:** MW-7A  
**Collection Date:** 10/9/2007 11:04:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOLS(BASELINE)</b>				<b>SW8260B</b>		<b>Analyst: MM</b>
Chloromethane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Vinyl chloride	4	5.0	J	µg/L	1	10/17/2007 4:33:00 PM
Bromomethane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Chloroethane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Trichlorofluoromethane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Acetone	ND	10		µg/L	1	10/17/2007 4:33:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Iodomethane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Carbon disulfide	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Methylene chloride	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Acrylonitrile	ND	100		µg/L	1	10/17/2007 4:33:00 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
1,1-Dichloroethane	5	5.0	J	µg/L	1	10/17/2007 4:33:00 PM
Vinyl acetate	ND	50		µg/L	1	10/17/2007 4:33:00 PM
2-Butanone	ND	10		µg/L	1	10/17/2007 4:33:00 PM
cis-1,2-Dichloroethene	6.1	5.0		µg/L	1	10/17/2007 4:33:00 PM
Chloroform	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Bromochloromethane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Benzene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Trichloroethylene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Dibromomethane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/17/2007 4:33:00 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Toluene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
2-Hexanone	ND	10		µg/L	1	10/17/2007 4:33:00 PM
Tetrachloroethylene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
1,2-Dibromoethane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Chlorobenzene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Ethylbenzene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
m,p-Xylene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM

Approved By: PFDate: 11-8-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.****Date:** 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-007

**Client Sample ID:** MW-7A  
**Collection Date:** 10/9/2007 11:04:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOLs(BASELINE)</b>			<b>SW8260B</b>			<b>Analyst: MM</b>
o-Xylene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Styrene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
Bromoform	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
1,2,3-Trichloropropane	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	10/17/2007 4:33:00 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 4:33:00 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	1	10/17/2007 4:33:00 PM

**NOTES:**

TICS: No compounds were detected.

Approved By: PFDate: 11-8-07

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Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-008

**Client Sample ID:** MW-1B Dupe  
**Collection Date:** 10/9/2007 10:30:00 AM

**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOLS(BASELINE)</b>			<b>SW8260B</b>			<b>Analyst: MM</b>
Chloromethane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Vinyl chloride	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Bromomethane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Chloroethane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Trichlorofluoromethane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Acetone	ND	10	µg/L	1	10/17/2007 5:11:00 PM	
1,1-Dichloroethene	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Iodomethane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Carbon disulfide	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Methylene chloride	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Acrylonitrile	ND	100	µg/L	1	10/17/2007 5:11:00 PM	
trans-1,2-Dichloroethene	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
1,1-Dichloroethane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Vinyl acetate	ND	50	µg/L	1	10/17/2007 5:11:00 PM	
2-Butanone	ND	10	µg/L	1	10/17/2007 5:11:00 PM	
cis-1,2-Dichloroethene	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Chloroform	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Bromochloromethane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
1,1,1-Trichloroethane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Carbon tetrachloride	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Benzene	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
1,2-Dichloroethane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Trichloroethene	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
1,2-Dichloropropane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Bromodichloromethane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Dibromomethane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
4-Methyl-2-pentanone	ND	10	µg/L	1	10/17/2007 5:11:00 PM	
cis-1,3-Dichloropropene	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Toluene	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
trans-1,3-Dichloropropene	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
1,1,2-Trichloroethane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
2-Hexanone	ND	10	µg/L	1	10/17/2007 5:11:00 PM	
Tetrachloroethene	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Dibromochloromethane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
1,2-Dibromoethane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Chlorobenzene	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
1,1,1,2-Tetrachloroethane	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
Ethylbenzene	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	
m,p-Xylene	ND	5.0	µg/L	1	10/17/2007 5:11:00 PM	

Approved By: *PF*

Date: 11-8-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-008

**Client Sample ID:** MW-1B Dupe  
**Collection Date:** 10/9/2007 10:30:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOLs(BASELINE)</b>						
o-Xylene	ND	5.0		µg/L	1	10/17/2007 5:11:00 PM
Styrene	ND	5.0		µg/L	1	10/17/2007 5:11:00 PM
Bromoform	ND	5.0		µg/L	1	10/17/2007 5:11:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/17/2007 5:11:00 PM
1,2,3-Trichloropropane	ND	5.0		µg/L	1	10/17/2007 5:11:00 PM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	10/17/2007 5:11:00 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 5:11:00 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 5:11:00 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 5:11:00 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	1	10/17/2007 5:11:00 PM

**NOTES:**

TICS: No compounds were detected.

Approved By: PFDate: 11-8-07

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Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-009

**Client Sample ID:** ULI Trip Blank 20071001A  
**Collection Date:** 10/9/2007

**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOLS(BASELINE)</b>						
Chloromethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Vinyl chloride	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Bromomethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Chloroethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Trichlorofluoromethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Acetone	ND	10		µg/L	1	10/17/2007 5:49:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Iodomethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Carbon disulfide	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Methylene chloride	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Acrylonitrile	ND	100		µg/L	1	10/17/2007 5:49:00 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
1,1-Dichloroethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Vinyl acetate	ND	50		µg/L	1	10/17/2007 5:49:00 PM
2-Butanone	ND	10		µg/L	1	10/17/2007 5:49:00 PM
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Chloroform	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Bromochloromethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Benzene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Trichloroethene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Dibromomethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/17/2007 5:49:00 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Toluene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
2-Hexanone	ND	10		µg/L	1	10/17/2007 5:49:00 PM
Tetrachloroethene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
1,2-Dibromoethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Chlorobenzene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Ethylbenzene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
m,p-Xylene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM

Approved By: *PF*

Date: 11-8-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.****Date:** 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-009

**Client Sample ID:** ULI Trip Blank 20071001A  
**Collection Date:** 10/9/2007  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOLs(BASELINE)</b>						
o-Xylene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Styrene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
Bromoform	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
1,2,3-Trichloropropane	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	10/17/2007 5:49:00 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 5:49:00 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	1	10/17/2007 5:49:00 PM

**NOTES:**

TICS: No compounds were detected.

Approved By: PF**Date:** 11-8-07

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**Qualifiers:** \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-010

**Client Sample ID:** Holding Blank

**Collection Date:** 10/11/2007 7:00:00 PM

**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP APPENDIX I WATER VOL(S.BASELINE)</b>					<b>SW8260B</b>	
Chloromethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Vinyl chloride	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Bromomethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Chloroethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Trichlorofluoromethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Acetone	ND	10		µg/L	1	10/17/2007 6:28:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Iodomethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Carbon disulfide	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Methylene chloride	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Acrylonitrile	ND	100		µg/L	1	10/17/2007 6:28:00 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
1,1-Dichloroethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Vinyl acetate	ND	50		µg/L	1	10/17/2007 6:28:00 PM
2-Butanone	ND	10		µg/L	1	10/17/2007 6:28:00 PM
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Chloroform	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Bromochloromethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Benzene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Trichloroethene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Dibromomethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/17/2007 6:28:00 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Toluene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
2-Hexanone	ND	10		µg/L	1	10/17/2007 6:28:00 PM
Tetrachloroethene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
1,2-Dibromoethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Chlorobenzene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Ethylbenzene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
m,p-Xylene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM

Approved By: *PF*

Date: 11-8-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 08-Nov-07

CLIENT: Cortland Co. Soil and Water Cons. Dist.  
Lab Order: U0710280  
Project: Towslee Landfill  
Lab ID: U0710280-010

Client Sample ID: Holding Blank  
Collection Date: 10/11/2007 7:00:00 PM  
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP APPENDIX I WATER VOLs(BASELINE)		SW8260B				Analyst: MM
o-Xylene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Styrene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
Bromoform	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
1,2,3-Trichloropropane	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
trans-1,4-Dichloro-2-butene	ND	10		µg/L	1	10/17/2007 6:28:00 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	10/17/2007 6:28:00 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	1	10/17/2007 6:28:00 PM

**NOTES:**

TICS: No compounds were detected.

Approved By: PF

Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

Date: 11-8-07

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\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-011

**Client Sample ID:** MW-1A  
**Collection Date:** 10/10/2007 9:29:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>						
Conductivity	658	1.0		umhos/cm		10/10/2007 9:29:00 AM
Eh	-68	-300		mV		10/10/2007 9:29:00 AM
pH	8.01	6.5-8.5		SU		10/10/2007 9:29:00 AM
Temperature	16			degC		10/10/2007 9:29:00 AM
Turbidity	28.1	5.0		NTU		10/10/2007 9:29:00 AM
Water Level	3.56			ft		10/10/2007 9:29:00 AM
<b>ICP METALS, TOTAL ASP</b>						
		<b>E200.7</b>		<b>(E200.7)</b>		<b>Analyst: LJ</b>
Aluminum	2070	100		µg/L	1	10/24/2007 9:45:39 AM
Antimony	ND	15.0		µg/L	1	10/24/2007 11:41:44 AM
Arsenic	ND	10.0		µg/L	1	10/24/2007 9:45:39 AM
Barium	91.7	50.0		µg/L	1	10/24/2007 9:45:39 AM
Beryllium	ND	3.00		µg/L	1	10/24/2007 9:45:39 AM
Boron	ND	500		µg/L	1	10/23/2007 2:39:23 PM
Cadmium	ND	5.00		µg/L	1	10/24/2007 9:45:39 AM
Calcium	42200	1000		µg/L	1	10/24/2007 9:45:39 AM
Chromium	ND	5.00		µg/L	1	10/24/2007 9:45:39 AM
Cobalt	ND	20.0		µg/L	1	10/24/2007 9:45:39 AM
Copper	ND	10.0		µg/L	1	10/24/2007 9:45:39 AM
Iron	3490	60.0		µg/L	1	10/24/2007 9:45:39 AM
Lead	ND	3.00		µg/L	1	10/24/2007 9:45:39 AM
Magnesium	9800	1000		µg/L	1	10/24/2007 9:45:39 AM
Manganese	203	10.0		µg/L	1	10/24/2007 9:45:39 AM
Nickel	ND	30.0		µg/L	1	10/24/2007 9:45:39 AM
Potassium	2060	1000		µg/L	1	10/24/2007 9:45:39 AM
Selenium	ND	5.00		µg/L	1	11/8/2007 8:34:58 AM
Silver	ND	10.0		µg/L	1	10/24/2007 9:45:39 AM
Sodium	11800	1000		µg/L	1	10/24/2007 9:45:39 AM
Thallium	ND	10.0		µg/L	1	10/24/2007 11:41:44 AM
Vanadium	ND	30.0		µg/L	1	10/24/2007 9:45:39 AM
Zinc	23.5	10.0		µg/L	1	10/24/2007 9:45:39 AM
Hardness, Total(CaCO <sub>3</sub> )	146000	7000		µg/L	1	10/24/2007 9:45:39 AM
<b>TOTAL MERCURY WATERS ASP</b>						
Mercury	ND	0.200		µg/L	1	10/16/2007 12:56:37 PM
<b>INORGANIC ANIONS BY IC FOR WATERS</b>						
Bromide	ND	0.20		mg/L	1	10/23/2007
<b>COLOR</b>						
Color	30.0	10.0		UNITS	2	Analyst: KAM 10/11/2007 4:00:00 PM

Approved By: PF

Date: 11-8-07

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Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-011

**Client Sample ID:** MW-1A  
**Collection Date:** 10/10/2007 9:29:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
RESIDUE, DISSOLVED (TDS) Residue, Dissolved (TDS)	204	E160.1 25		mg/L	1	Analyst: DEY 10/14/2007
ALKALINITY ON AQUEOUS SAMPLES BY LACHA Alkalinity, Total (As CaCO <sub>3</sub> )	130	E310.2 10		mg/LCaCO <sub>3</sub>	1	Analyst: BY 10/18/2007
CHLORIDE WATERS BY LACHAT Chloride	27.9	E325.2 1.00		mg/L	1	Analyst: BY 10/18/2007
CYANIDE, TOTAL ASP Cyanide	ND	E335.2 10.0		(E335.2) μg/L	1	Analyst: BY 10/18/2007
NITROGEN, AMMONIA (AS NH <sub>3</sub> BY LACHAT) Nitrogen, Ammonia (As NH <sub>3</sub> )	ND	E350.1 0.500		mg/L	1	Analyst: BS 10/17/2007
TKN FOR WATERS Nitrogen, Kjeldahl, Total	ND	E351.3 0.500		mg/L	1	Analyst: BS 10/17/2007
NITROGEN, NITRATE (AS N) Nitrogen, Nitrate (as N)	ND	E353.2 0.200		mg/L	1	Analyst: BY 10/10/2007 4:13:00 PM
SULFATE Sulfate	11.2	E375.4 5.00		mg/L	1	Analyst: KAM 10/18/2007
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD) Biochemical Oxygen Demand	ND	E405.1 4		mg/L	1	Analyst: DEY 10/10/2007 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD) Chemical Oxygen Demand	ND	E410.4 20		mg/L	1	Analyst: NJS 10/17/2007
TOTAL ORGANIC CARBON (TOC) Organic Carbon, Total	ND	E415.1 3.0		mg/L	1	Analyst: NJS 10/15/2007
PHENOLICS, TOTAL REC. FOR WATERS Phenolics, Total Recoverable	ND	E420.4 0.005		(E420.4) mg/L	1	Analyst: MB 10/17/2007
HEXAVALENT CHROMIUM BY ASP 2005 Hexavalent chromium	ND	SM3500 0.010		mg/L	1	Analyst: DEY 10/10/2007 4:00:00 PM

Approved By: PF

Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

Date: 11-8-07

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

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# Upstate Laboratories, Inc.

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-012

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

**Collection Date:** 10/10/2007 9:36:00 AM

**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>						
Conductivity	943	1.0		umhos/cm		10/10/2007 9:36:00 AM
Eh	-80	-300		mV		10/10/2007 9:36:00 AM
pH	8.28	6.5-8.5		SU		10/10/2007 9:36:00 AM
Temperature	16.3			degC		10/10/2007 9:36:00 AM
Turbidity	22.8	5.0		NTU		10/10/2007 9:36:00 AM
Water Level	3.68			ft		10/10/2007 9:36:00 AM
<b>ICP METALS, TOTAL ASP</b>						
		E200.7	(E200.7)			Analyst: LJ
Aluminum	537	100		µg/L	1	10/24/2007 9:49:00 AM
Antimony	ND	15.0		µg/L	1	10/24/2007 11:45:04 AM
Arsenic	ND	10.0		µg/L	1	10/24/2007 9:49:00 AM
Barium	172	50.0		µg/L	1	10/24/2007 9:49:00 AM
Beryllium	ND	3.00		µg/L	1	10/24/2007 9:49:00 AM
Boron	ND	500		µg/L	1	10/23/2007 2:42:12 PM
Cadmium	ND	5.00		µg/L	1	10/24/2007 9:49:00 AM
Calcium	26000	1000		µg/L	1	10/24/2007 9:49:00 AM
Chromium	ND	5.00		µg/L	1	10/24/2007 9:49:00 AM
Cobalt	ND	20.0		µg/L	1	10/24/2007 9:49:00 AM
Copper	ND	10.0		µg/L	1	10/24/2007 9:49:00 AM
Iron	730	60.0		µg/L	1	10/24/2007 9:49:00 AM
Lead	ND	3.00		µg/L	1	10/24/2007 9:49:00 AM
Magnesium	6280	1000		µg/L	1	10/24/2007 9:49:00 AM
Manganese	176	10.0		µg/L	1	10/24/2007 9:49:00 AM
Nickel	ND	30.0		µg/L	1	10/24/2007 9:49:00 AM
Potassium	ND	1000		µg/L	1	10/24/2007 9:49:00 AM
Selenium	ND	5.00		µg/L	1	11/8/2007 8:38:21 AM
Silver	ND	10.0		µg/L	1	10/24/2007 9:49:00 AM
Sodium	5840	1000		µg/L	1	10/24/2007 9:49:00 AM
Thallium	ND	10.0		µg/L	1	10/24/2007 11:45:04 AM
Vanadium	ND	30.0		µg/L	1	10/24/2007 9:49:00 AM
Zinc	16.8	10.0		µg/L	1	10/24/2007 9:49:00 AM
Hardness, Total(CaCO <sub>3</sub> )	90800	7000		µg/L	1	10/24/2007 9:49:00 AM
<b>TOTAL MERCURY WATERS ASP</b>						
Mercury	ND	0.200		µg/L	1	10/16/2007 12:57:48 PM
<b>INORGANIC ANIONS BY IC FOR WATERS</b>						
Bromide	ND	0.20		mg/L	1	10/23/2007
<b>COLOR</b>						
Color	30.0	10.0		UNITS	2	10/11/2007 4:00:00 PM

Approved By: PF

Date: 11-8-07

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Qualifiers: \* Low Level

\*\* Value exceeds Maximum Contaminant Value

B Analyte detected in the associated Method Blank

E Value above quantitation range

H Holding times for preparation or analysis exceeded

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 08-Nov-07

CLIENT: Cortland Co. Soil and Water Cons. Dist.  
 Lab Order: U0710280  
 Project: Towslee Landfill  
 Lab ID: U0710280-012

Client Sample ID: MW-IB  
 Collection Date: 10/10/2007 9:36:00 AM

Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
RESIDUE, DISSOLVED (TDS) Residue, Dissolved (TDS)	104	E160.1 25		mg/L	1	Analyst: DEY 10/14/2007
ALKALINITY ON AQUEOUS SAMPLES BY LACHA Alkalinity, Total (As CaCO <sub>3</sub> )	100	E310.2 10		mg/LCaCO <sub>3</sub>	1	Analyst: BY 10/18/2007
CHLORIDE WATERS BY LACHAT Chloride	6.44	E325.2 1.00		mg/L	1	Analyst: BY 10/18/2007
CYANIDE, TOTAL ASP Cyanide	ND	E335.2 10.0		(E335.2) µg/L	1	Analyst: BY 10/18/2007
NITROGEN, AMMONIA (AS NH <sub>3</sub> BY LACHAT) Nitrogen, Ammonia (As NH <sub>3</sub> )	ND	E350.1 0.500		mg/L	1	Analyst: BS 10/17/2007
TKN FOR WATERS Nitrogen, Kjeldahl, Total	ND	E351.3 0.500		mg/L	1	Analyst: BS 10/17/2007
NITROGEN, NITRATE (AS N) Nitrogen, Nitrate (as N)	ND	E353.2 0.200		mg/L	1	Analyst: BY 10/10/2007 4:13:00 PM
SULFATE Sulfate	5.26	E375.4 5.00		mg/L	1	Analyst: KAM 10/18/2007
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD) Biochemical Oxygen Demand	ND	E405.1 4		mg/L	1	Analyst: DEY 10/10/2007 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD) Chemical Oxygen Demand	ND	E410.4 20		mg/L	1	Analyst: NJS 10/17/2007
TOTAL ORGANIC CARBON (TOC) Organic Carbon, Total	ND	E415.1 3.0		mg/L	1	Analyst: NJS 10/15/2007
PHENOLICS, TOTAL REC. FOR WATERS Phenolics, Total Recoverable	ND	E420.4 0.005		(E420.4) mg/L	1	Analyst: MB 10/17/2007
HEXAVALENT CHROMIUM BY ASP 2005 Hexavalent chromium	ND	SM3500 0.010		mg/L	1	Analyst: DEY 10/10/2007 4:00:00 PM

Approved By: PF

Date: 11-8-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-013

**Client Sample ID:** MW-2A  
**Collection Date:** 10/10/2007 10:19:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>						
Conductivity	574	1.0		umhos/cm		10/10/2007 10:19:00 AM
Eh	-25	-300		mV		10/10/2007 10:19:00 AM
pH	7.12	6.5-8.5		SU		10/10/2007 10:19:00 AM
Temperature	14.6			degC		10/10/2007 10:19:00 AM
Turbidity	5.07	5.0		NTU		10/10/2007 10:19:00 AM
Water Level	5.98			ft		10/10/2007 10:19:00 AM
<b>ICP METALS, TOTAL ASP</b>						
		E200.7		(E200.7)		Analyst: LJ
Aluminum	444	100		µg/L	1	10/24/2007 9:52:38 AM
Antimony	ND	15.0		µg/L	1	10/24/2007 11:48:41 AM
Arsenic	ND	10.0		µg/L	1	10/24/2007 9:52:38 AM
Barium	265	50.0		µg/L	1	10/24/2007 9:52:38 AM
Beryllium	ND	3.00		µg/L	1	10/24/2007 9:52:38 AM
Boron	ND	500		µg/L	1	10/23/2007 2:45:03 PM
Cadmium	ND	5.00		µg/L	1	10/24/2007 9:52:38 AM
Calcium	47900	1000		µg/L	1	10/24/2007 9:52:38 AM
Chromium	ND	5.00		µg/L	1	10/24/2007 9:52:38 AM
Cobalt	ND	20.0		µg/L	1	10/24/2007 9:52:38 AM
Copper	ND	10.0		µg/L	1	10/24/2007 9:52:38 AM
Iron	4950	60.0		µg/L	1	10/24/2007 9:52:38 AM
Lead	ND	3.00		µg/L	1	10/24/2007 9:52:38 AM
Magnesium	11000	1000		µg/L	1	10/24/2007 9:52:38 AM
Manganese	7050	10.0		µg/L	1	10/24/2007 9:52:38 AM
Nickel	ND	30.0		µg/L	1	10/24/2007 9:52:38 AM
Potassium	2140	1000		µg/L	1	10/24/2007 9:52:38 AM
Selenium	ND	5.00		µg/L	1	11/8/2007 8:41:45 AM
Silver	ND	10.0		µg/L	1	10/24/2007 9:52:38 AM
Sodium	13800	1000		µg/L	1	10/24/2007 9:52:38 AM
Thallium	ND	10.0		µg/L	1	10/24/2007 11:48:41 AM
Vanadium	ND	30.0		µg/L	1	10/24/2007 9:52:38 AM
Zinc	ND	10.0		µg/L	1	10/24/2007 9:52:38 AM
Hardness, Total(CaCO <sub>3</sub> )	165000	7000		µg/L	1	10/24/2007 9:52:38 AM
<b>TOTAL MERCURY WATERS ASP</b>						
Mercury	ND	0.200		µg/L	1	10/16/2007 12:58:56 PM
<b>INORGANIC ANIONS BY IC FOR WATERS</b>						
Bromide	ND	2.0		mg/L	10	10/23/2007

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

Approved By: PF

Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

Date: 11-8-07

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\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-013

**Client Sample ID:** MW-2A  
**Collection Date:** 10/10/2007 10:19:00 AM

**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
COLOR		E110.2				Analyst: KAM
Color	210	50.0	UNITS		10	10/11/2007 4:00:00 PM
RESIDUE, DISSOLVED (TDS)		E160.1				Analyst: DEY
Residue, Dissolved (TDS)	284	25	mg/L		1	10/14/2007
ALKALINITY ON AQUEOUS SAMPLES BY LACHA		E310.2				Analyst: BY
Alkalinity, Total (As CaCO <sub>3</sub> )	290	10	mg/LCaCO <sub>3</sub>		1	10/18/2007
CHLORIDE WATERS BY LACHAT		E325.2				Analyst: BY
Chloride	10.6	1.00	mg/L		1	10/18/2007
CYANIDE, TOTAL ASP		E335.2	(E335.2)			Analyst: BY
Cyanide	ND	10.0	µg/L		1	10/18/2007
NITROGEN, AMMONIA (AS NH <sub>3</sub> BY LACHAT)		E350.1				Analyst: BY
Nitrogen, Ammonia (As NH <sub>3</sub> )	13.5	0.500	mg/L		1	10/22/2007
TKN FOR WATERS		E351.3				Analyst: BS
Nitrogen, Kjeldahl, Total	12.6	0.500	mg/L		1	10/17/2007
NITROGEN, NITRATE (AS N)		E353.2				Analyst: BY
Nitrogen, Nitrate (as N)	ND	0.200	mg/L		1	10/10/2007 4:13:00 PM
SULFATE		E375.4				Analyst: KAM
Sulfate	9.93	5.00	mg/L		1	10/18/2007
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)		E405.1				Analyst: DEY
Biochemical Oxygen Demand	ND	4	mg/L		1	10/10/2007 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)		E410.4				Analyst: NJS
Chemical Oxygen Demand	22	20	mg/L		1	10/17/2007
TOTAL ORGANIC CARBON (TOC)		E415.1				Analyst: NJS
Organic Carbon, Total	6.3	3.0	mg/L		1	10/15/2007
PHENOLICS, TOTAL REC. FOR WATERS		E420.4	(E420.4)			Analyst: MB
Phenolics, Total Recoverable	ND	0.005	mg/L		1	10/17/2007
HEXAVALENT CHROMIUM BY ASP 2005		SM3500				Analyst: DEY
Hexavalent chromium	ND	0.020	mg/L		2	10/10/2007 4:00:00 PM

**NOTES:**

The reporting limits were raised due to matrix interference.

Approved By: *PF*Date: 11-8-07

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Qualifiers: \* Low Level

\*\* Value exceeds Maximum Contaminant Value

B Analyte detected in the associated Method Blank

E Value above quantitation range

H Holding times for preparation or analysis exceeded

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-014

**Client Sample ID:** MW-2B  
**Collection Date:** 10/10/2007 10:12:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>						
Conductivity	329	1.0		umhos/cm		10/10/2007 10:12:00 AM
Eh	-34	-300		mV		10/10/2007 10:12:00 AM
pH	7.35	6.5-8.5		SU		10/10/2007 10:12:00 AM
Temperature	15.8			degC		10/10/2007 10:12:00 AM
Turbidity	37	5.0		NTU		10/10/2007 10:12:00 AM
Water Level	7.14			ft		10/10/2007 10:12:00 AM
<b>ICP METALS, TOTAL ASP</b>						
		<b>E200.7</b>		<b>(E200.7)</b>		<b>Analyst: LJ</b>
Aluminum	ND	100		µg/L	1	10/24/2007 9:56:17 AM
Antimony	ND	15.0		µg/L	1	10/24/2007 11:52:16 AM
Arsenic	ND	10.0		µg/L	1	10/24/2007 9:56:17 AM
Barium	1090	50.0		µg/L	1	10/24/2007 9:56:17 AM
Beryllium	ND	3.00		µg/L	1	10/24/2007 9:56:17 AM
Boron	ND	500		µg/L	1	10/23/2007 2:47:52 PM
Cadmium	ND	5.00		µg/L	1	10/24/2007 9:56:17 AM
Calcium	195000	1000		µg/L	1	10/24/2007 9:56:17 AM
Chromium	ND	5.00		µg/L	1	10/24/2007 9:56:17 AM
Cobalt	ND	20.0		µg/L	1	10/24/2007 9:56:17 AM
Copper	ND	10.0		µg/L	1	10/24/2007 9:56:17 AM
Iron	323	60.0		µg/L	1	10/24/2007 9:56:17 AM
Lead	ND	3.00		µg/L	1	10/24/2007 9:56:17 AM
Magnesium	39900	1000		µg/L	1	10/24/2007 9:56:17 AM
Manganese	5700	10.0		µg/L	1	10/24/2007 9:56:17 AM
Nickel	ND	30.0		µg/L	1	10/24/2007 9:56:17 AM
Potassium	ND	1000		µg/L	1	10/24/2007 9:56:17 AM
Selenium	ND	5.00		µg/L	1	11/8/2007 8:45:09 AM
Silver	ND	10.0		µg/L	1	10/24/2007 9:56:17 AM
Sodium	48200	1000		µg/L	1	10/24/2007 9:56:17 AM
Thallium	ND	10.0		µg/L	1	10/24/2007 11:52:16 AM
Vanadium	ND	30.0		µg/L	1	10/24/2007 9:56:17 AM
Zinc	46.9	10.0		µg/L	1	10/24/2007 9:56:17 AM
Hardness, Total(CaCO <sub>3</sub> )	652000	7000		µg/L	1	10/24/2007 9:56:17 AM
<b>TOTAL MERCURY WATERS ASP</b>						
Mercury	ND	0.200		µg/L	1	10/16/2007 12:59:57 PM
<b>INORGANIC ANIONS BY IC FOR WATERS</b>						
Bromide	0.92	0.20		mg/L	1	10/25/2007
<b>COLOR</b>						
Color	15.0	5.00		UNITS	1	10/11/2007 4:00.00 PM

Approved By: PF

Date: 11-8-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-014

**Client Sample ID:** MW-2B  
**Collection Date:** 10/10/2007 10:12:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
RESIDUE, DISSOLVED (TDS)		E160.1				Analyst: DEY
Residue, Dissolved (TDS)	868	25		mg/L	1	10/14/2007
ALKALINITY ON AQUEOUS SAMPLES BY LACHA		E310.2				Analyst: BY
Alkalinity, Total (As CaCO <sub>3</sub> )	640	100		mg/LCaCO <sub>3</sub>	10	10/18/2007
CHLORIDE WATERS BY LACHAT		E325.2				Analyst: BY
Chloride	161	1.00		mg/L	1	10/18/2007
CYANIDE, TOTAL ASP		E335.2		(E335.2)		Analyst: BY
Cyanide	ND	10.0		µg/L	1	10/18/2007
NITROGEN, AMMONIA (AS NH <sub>3</sub> BY LACHAT)		E350.1				Analyst: BY
Nitrogen, Ammonia (As NH <sub>3</sub> )	1.22	0.500		mg/L	1	10/22/2007
TKN FOR WATERS		E351.3				Analyst: BS
Nitrogen, Kjeldahl, Total	1.53	0.500		mg/L	1	10/17/2007
NITROGEN, NITRATE (AS N)		E353.2				Analyst: BY
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	10/10/2007 4:13:00 PM
SULFATE		E375.4				Analyst: KAM
Sulfate	ND	5.00		mg/L	1	10/18/2007
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)		E405.1				Analyst: DEY
Biochemical Oxygen Demand	ND	4		mg/L	1	10/10/2007 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)		E410.4				Analyst: NJS
Chemical Oxygen Demand	ND	20		mg/L	1	10/17/2007
TOTAL ORGANIC CARBON (TOC)		E415.1				Analyst: NJS
Organic Carbon, Total	17.2	3.0		mg/L	1	10/15/2007
PHENOLICS, TOTAL REC. FOR WATERS		E420.4		(E420.4)		Analyst: MB
Phenolics, Total Recoverable	ND	0.005		mg/L	1	10/17/2007
HEXAVALENT CHROMIUM BY ASP 2005		SM3500				Analyst: DEY
Hexavalent chromium	ND	0.010		mg/L	1	10/10/2007 4:00:00 PM

Approved By: PFDate: 11-8-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-015

**Client Sample ID:** MW-3A  
**Collection Date:** 10/10/2007 9:15:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>						
Conductivity	939	1.0		umhos/cm		10/10/2007 9:15:00 AM
Eh	-76	-300		mV		10/10/2007 9:15:00 AM
pH	8.25	6.5-8.5		SU		10/10/2007 9:15:00 AM
Temperature	14.6			degC		10/10/2007 9:15:00 AM
Turbidity	13.7	5.0		NTU		10/10/2007 9:15:00 AM
Water Level	6.64			ft		10/10/2007 9:15:00 AM
<b>ICP METALS, TOTAL ASP</b>						
		<b>E200.7</b>		<b>(E200.7)</b>		<b>Analyst: LJ</b>
Aluminum	330	100		µg/L	1	10/24/2007 9:59:41 AM
Antimony	ND	15.0		µg/L	1	10/24/2007 11:55:37 AM
Arsenic	ND	10.0		µg/L	1	10/24/2007 9:59:41 AM
Barium	332	50.0		µg/L	1	10/24/2007 9:59:41 AM
Beryllium	ND	3.00		µg/L	1	10/24/2007 9:59:41 AM
Boron	ND	500		µg/L	1	10/23/2007 2:50:41 PM
Cadmium	ND	5.00		µg/L	1	10/24/2007 9:59:41 AM
Calcium	27500	1000		µg/L	1	10/24/2007 9:59:41 AM
Chromium	ND	5.00		µg/L	1	10/24/2007 9:59:41 AM
Cobalt	ND	20.0		µg/L	1	10/24/2007 9:59:41 AM
Copper	ND	10.0		µg/L	1	10/24/2007 9:59:41 AM
Iron	537	60.0		µg/L	1	10/24/2007 9:59:41 AM
Lead	ND	3.00		µg/L	1	10/24/2007 9:59:41 AM
Magnesium	4260	1000		µg/L	1	10/24/2007 9:59:41 AM
Manganese	287	10.0		µg/L	1	10/24/2007 9:59:41 AM
Nickel	ND	30.0		µg/L	1	10/24/2007 9:59:41 AM
Potassium	ND	1000		µg/L	1	10/24/2007 9:59:41 AM
Selenium	ND	5.00		µg/L	1	11/8/2007 8:48:34 AM
Silver	ND	10.0		µg/L	1	10/24/2007 9:59:41 AM
Sodium	2640	1000		µg/L	1	10/24/2007 9:59:41 AM
Thallium	ND	10.0		µg/L	1	10/24/2007 11:55:37 AM
Vanadium	ND	30.0		µg/L	1	10/24/2007 9:59:41 AM
Zinc	10.6	10.0		µg/L	1	10/24/2007 9:59:41 AM
Hardness, Total(CaCO <sub>3</sub> )	86200	7000		µg/L	1	10/24/2007 9:59:41 AM
<b>TOTAL MERCURY WATERS ASP</b>						
Mercury	ND	0.200		µg/L	1	10/16/2007 1:03:12 PM
<b>INORGANIC ANIONS BY IC FOR WATERS</b>						
Bromide	ND	2.0		mg/L	10	10/23/2007
<b>NOTES:</b>						
The reporting limits were raised due to matrix interference.						

Approved By: *PF*

Date: *11-8-07*

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-015

**Client Sample ID:** MW-3A  
**Collection Date:** 10/10/2007 9:15:00 AM

**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
COLOR		E110.2				Analyst: KAM
Color	115	25.0		UNITS	5	10/11/2007 4:00:00 PM
RESIDUE, DISSOLVED (TDS)		E160.1				Analyst: DEY
Residue, Dissolved (TDS)	144	25		mg/L	1	10/14/2007
ALKALINITY ON AQUEOUS SAMPLES BY LACHA		E310.2				Analyst: BY
Alkalinity, Total (As CaCO <sub>3</sub> )	130	10		mg/LCaCO <sub>3</sub>	1	10/18/2007
CHLORIDE WATERS BY LACHAT		E325.2				Analyst: BY
Chloride	5.73	1.00		mg/L	1	10/18/2007
CYANIDE, TOTAL ASP		E335.2		(E335.2)		Analyst: BY
Cyanide	ND	10.0		µg/L	1	10/18/2007
NITROGEN, AMMONIA (AS NH <sub>3</sub> BY LACHAT)		E350.1				Analyst: BS
Nitrogen, Ammonia (As NH <sub>3</sub> )	ND	0.500		mg/L	1	10/17/2007
TKN FOR WATERS		E351.3				Analyst: BS
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	10/17/2007
NITROGEN, NITRATE (AS N)		E353.2				Analyst: BY
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	10/10/2007 4:13:00 PM
SULFATE		E375.4				Analyst: KAM
Sulfate	ND	5.00		mg/L	1	10/18/2007
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)		E405.1				Analyst: DEY
Biochemical Oxygen Demand	ND	4		mg/L	1	10/10/2007 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)		E410.4				Analyst: NJS
Chemical Oxygen Demand	ND	20		mg/L	1	10/17/2007
TOTAL ORGANIC CARBON (TOC)		E415.1				Analyst: NJS
Organic Carbon, Total	3.7	3.0		mg/L	1	10/15/2007
PHENOLICS, TOTAL REC. FOR WATERS		E420.4		(E420.4)		Analyst: MB
Phenolics, Total Recoverable	ND	0.005		mg/L	1	10/17/2007
HEXAVALENT CHROMIUM BY ASP 2005		SM3500				Analyst: DEY
Hexavalent chromium	ND	0.010		mg/L	1	10/10/2007 4:00:00 PM

Approved By: *PF*Date: *11-8-07*

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-016

**Client Sample ID:** MW-6B  
**Collection Date:** 10/10/2007 10:40:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>						
Conductivity	810	1.0		umhos/cm		10/10/2007 10:40:00 AM
Eh	-57	-300		mV		10/10/2007 10:40:00 AM
pH	7.82	6.5-8.5		SU		10/10/2007 10:40:00 AM
Temperature	14.8			degC		10/10/2007 10:40:00 AM
Turbidity	12.5	5.0		NTU		10/10/2007 10:40:00 AM
Water Level	14.34			ft		10/10/2007 10:40:00 AM
<b>ICP METALS, TOTAL ASP</b>						
		<b>E200.7</b>		<b>(E200.7)</b>		<b>Analyst: LJ</b>
Aluminum	102	100		µg/L	1	10/24/2007 10:09:39 AM
Antimony	ND	15.0		µg/L	1	10/24/2007 12:05:20 PM
Arsenic	ND	10.0		µg/L	1	10/24/2007 10:09:39 AM
Barium	301	50.0		µg/L	1	10/24/2007 10:09:39 AM
Beryllium	ND	3.00		µg/L	1	10/24/2007 10:09:39 AM
Boron	ND	500		µg/L	1	10/23/2007 2:59:02 PM
Cadmium	ND	5.00		µg/L	1	10/24/2007 10:09:39 AM
Calcium	36700	1000		µg/L	1	10/24/2007 10:09:39 AM
Chromium	ND	5.00		µg/L	1	10/24/2007 10:09:39 AM
Cobalt	ND	20.0		µg/L	1	10/24/2007 10:09:39 AM
Copper	ND	10.0		µg/L	1	10/24/2007 10:09:39 AM
Iron	216	60.0		µg/L	1	10/24/2007 10:09:39 AM
Lead	ND	3.00		µg/L	1	10/24/2007 10:09:39 AM
Magnesium	7810	1000		µg/L	1	10/24/2007 10:09:39 AM
Manganese	712	10.0		µg/L	1	10/24/2007 10:09:39 AM
Nickel	ND	30.0		µg/L	1	10/24/2007 10:09:39 AM
Potassium	ND	1000		µg/L	1	10/24/2007 10:09:39 AM
Selenium	ND	5.00		µg/L	1	11/8/2007 8:52:01 AM
Silver	ND	10.0		µg/L	1	10/24/2007 10:09:39 AM
Sodium	14700	1000		µg/L	1	10/24/2007 10:09:39 AM
Thallium	ND	10.0		µg/L	1	10/24/2007 12:05:20 PM
Vanadium	ND	30.0		µg/L	1	10/24/2007 10:09:39 AM
Zinc	21.3	10.0		µg/L	1	10/24/2007 10:09:39 AM
Hardness, Total(CaCO <sub>3</sub> )	124000	7000		µg/L	1	10/24/2007 10:09:39 AM
<b>TOTAL MERCURY WATERS ASP</b>						
Mercury	ND	0.200		µg/L	1	10/16/2007 1:04:14 PM
<b>INORGANIC ANIONS BY IC FOR WATERS</b>						
Bromide	ND	0.20		mg/L	1	10/25/2007
<b>COLOR</b>						
Color	6.00	5.00		UNITS	1	10/11/2007 4:00:00 PM

Approved By: PF

Date: 11-8-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-016

**Client Sample ID:** MW-6B  
**Collection Date:** 10/10/2007 10:40:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
RESIDUE, DISSOLVED (TDS)		E160.1				Analyst: DEY
Residue, Dissolved (TDS)	208	25		mg/L	1	10/14/2007
ALKALINITY ON AQUEOUS SAMPLES BY LACHA		E310.2				Analyst: BY
Alkalinity, Total (As CaCO <sub>3</sub> )	140	10		mg/LCaCO <sub>3</sub>	1	10/18/2007
CHLORIDE WATERS BY LACHAT		E325.2				Analyst: BY
Chloride	25.9	1.00		mg/L	1	10/18/2007
CYANIDE, TOTAL ASP		E335.2		(E335.2)		Analyst: BY
Cyanide	ND	10.0		µg/L	1	10/18/2007
NITROGEN, AMMONIA (AS NH <sub>3</sub> BY LACHAT)		E350.1				Analyst: BS
Nitrogen, Ammonia (As NH <sub>3</sub> )	ND	0.500		mg/L	1	10/17/2007
TKN FOR WATERS		E351.3				Analyst: BS
Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	10/17/2007
NITROGEN, NITRATE (AS N)		E353.2				Analyst: BY
Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	10/10/2007 4:13:00 PM
SULFATE		E375.4				Analyst: KAM
Sulfate	12.7	5.00		mg/L	1	10/18/2007
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)		E405.1				Analyst: DEY
Biochemical Oxygen Demand	ND	4		mg/L	1	10/10/2007 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)		E410.4				Analyst: NJS
Chemical Oxygen Demand	ND	20		mg/L	1	10/17/2007
TOTAL ORGANIC CARBON (TOC)		E415.1				Analyst: NJS
Organic Carbon, Total	ND	3.0		mg/L	1	10/15/2007
PHENOLICS, TOTAL REC. FOR WATERS		E420.4		(E420.4)		Analyst: MB
Phenolics, Total Recoverable	ND	0.005		mg/L	1	10/17/2007
HEXAVALENT CHROMIUM BY ASP 2005		SM3500				Analyst: DEY
Hexavalent chromium	ND	0.010		mg/L	1	10/10/2007 4:00:00 PM

Approved By: PF

Date: 11-8-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-017

**Client Sample ID:** MW-7A  
**Collection Date:** 10/10/2007 9:52:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>FIELD PARAMETERS</b>						
Conductivity	972	1.0		umhos/cm		10/10/2007 9:52:00 AM
Eh	-24	-300		mV		10/10/2007 9:52:00 AM
pH	7.11	6.5-8.5		SU		10/10/2007 9:52:00 AM
Temperature	15.2			degC		10/10/2007 9:52:00 AM
Turbidity	48.1	5.0		NTU		10/10/2007 9:52:00 AM
Water Level	3.36			ft		10/10/2007 9:52:00 AM
<b>ICP METALS, TOTAL ASP</b>						
		<b>E200.7</b>		<b>(E200.7)</b>		<b>Analyst: LJ</b>
Aluminum	2430	100		µg/L	1	10/24/2007 10:19:41 AM
Antimony	ND	15.0		µg/L	1	10/24/2007 12:15:14 PM
Arsenic	ND	10.0		µg/L	1	10/24/2007 10:19:41 AM
Barium	576	50.0		µg/L	1	10/24/2007 10:19:41 AM
Beryllium	ND	3.00		µg/L	1	10/24/2007 10:19:41 AM
Boron	650	500		µg/L	1	10/23/2007 3:07:25 PM
Cadmium	ND	5.00		µg/L	1	10/24/2007 10:19:41 AM
Calcium	131000	1000		µg/L	1	10/24/2007 10:19:41 AM
Chromium	ND	5.00		µg/L	1	10/24/2007 10:19:41 AM
Cobalt	ND	20.0		µg/L	1	10/24/2007 10:19:41 AM
Copper	ND	10.0		µg/L	1	10/24/2007 10:19:41 AM
Iron	3650	60.0		µg/L	1	10/24/2007 10:19:41 AM
Lead	ND	3.00		µg/L	1	10/24/2007 10:19:41 AM
Magnesium	32100	1000		µg/L	1	10/24/2007 10:19:41 AM
Manganese	3470	10.0		µg/L	1	10/24/2007 10:19:41 AM
Nickel	ND	30.0		µg/L	1	10/24/2007 10:19:41 AM
Potassium	ND	1000		µg/L	1	10/24/2007 10:19:41 AM
Selenium	ND	5.00		µg/L	1	11/8/2007 9:01:39 AM
Silver	ND	10.0		µg/L	1	10/24/2007 10:19:41 AM
Sodium	95200	1000		µg/L	1	10/24/2007 10:19:41 AM
Thallium	ND	10.0		µg/L	1	10/24/2007 12:15:14 PM
Vanadium	ND	30.0		µg/L	1	10/24/2007 10:19:41 AM
Zinc	26.3	10.0		µg/L	1	10/24/2007 10:19:41 AM
Hardness, Total(CaCO <sub>3</sub> )	459000	7000		µg/L	1	10/24/2007 10:19:41 AM
<b>TOTAL MERCURY WATERS ASP</b>						
Mercury	ND	0.200		µg/L	1	10/16/2007 1:07:54 PM
<b>INORGANIC ANIONS BY IC FOR WATERS</b>						
Bromide	ND	2.0		mg/L	10	10/25/2007
<b>NOTES:</b>						
The reporting limits were raised due to matrix interference.						

Approved By: *PF*

Date: *11-8-07*

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
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 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-017

**Client Sample ID:** MW-7A  
**Collection Date:** 10/10/2007 9:52:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
COLOR		E110.2				Analyst: KAM
Color	85.0	25.0	UNITS		5	10/11/2007 4:00:00 PM
RESIDUE, DISSOLVED (TDS)		E160.1				Analyst: DEY
Residue, Dissolved (TDS)	752	25	mg/L		1	10/14/2007
ALKALINITY ON AQUEOUS SAMPLES BY LACHA		E310.2				Analyst: BY
Alkalinity, Total (As CaCO <sub>3</sub> )	540	100	mg/LCaCO <sub>3</sub>		10	10/18/2007
CHLORIDE WATERS BY LACHAT		E325.2				Analyst: BY
Chloride	141	1.00	mg/L		1	10/18/2007
CYANIDE, TOTAL ASP		E335.2	(E335.2)			Analyst: BY
Cyanide	ND	10.0	µg/L		1	10/18/2007
NITROGEN, AMMONIA (AS NH <sub>3</sub> BY LACHAT)		E350.1				Analyst: BY
Nitrogen, Ammonia (As NH <sub>3</sub> )	ND	0.500	mg/L		1	10/22/2007
TKN FOR WATERS		E351.3				Analyst: BS
Nitrogen, Kjeldahl, Total	0.591	0.500	mg/L		1	10/17/2007
NITROGEN, NITRATE (AS N)		E353.2				Analyst: BY
Nitrogen, Nitrate (as N)	ND	0.200	mg/L		1	10/10/2007 4:13:00 PM
SULFATE		E375.4				Analyst: KAM
Sulfate	17.8	5.00	mg/L		1	10/18/2007
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD)		E405.1				Analyst: DEY
Biochemical Oxygen Demand	ND	4	mg/L		1	10/10/2007 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD)		E410.4				Analyst: NJS
Chemical Oxygen Demand	ND	20	mg/L		1	10/17/2007
TOTAL ORGANIC CARBON (TOC)		E415.1				Analyst: NJS
Organic Carbon, Total	11.5	3.0	mg/L		1	10/15/2007
PHENOLICS, TOTAL REC. FOR WATERS		E420.4	(E420.4)			Analyst: MB
Phenolics, Total Recoverable	ND	0.005	mg/L		1	10/17/2007
HEXAVALENT CHROMIUM BY ASP 2005		SM3500				Analyst: DEY
Hexavalent chromium	ND	0.010	mg/L		1	10/10/2007 4:00:00 PM

Approved By: PFDate: 11-8-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

# Upstate Laboratories, Inc.

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-018

**Client Sample ID:** MW-1B Dupe  
**Collection Date:** 10/10/2007 9:36:00 AM  
**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL ASP		E200.7	(E200.7)			Analyst: LJ
Aluminum	409	100	µg/L	1	1	10/24/2007 10:26:30 AM
Antimony	ND	15.0	µg/L	1	1	10/24/2007 12:22:03 PM
Arsenic	ND	10.0	µg/L	1	1	10/24/2007 10:26:30 AM
Barium	181	50.0	µg/L	1	1	10/24/2007 10:26:30 AM
Beryllium	ND	3.00	µg/L	1	1	10/24/2007 10:26:30 AM
Boron	ND	500	µg/L	1	1	10/23/2007 3:13:09 PM
Cadmium	ND	5.00	µg/L	1	1	10/24/2007 10:26:30 AM
Calcium	28900	1000	µg/L	1	1	10/24/2007 10:26:30 AM
Chromium	ND	5.00	µg/L	1	1	10/24/2007 10:26:30 AM
Cobalt	ND	20.0	µg/L	1	1	10/24/2007 10:26:30 AM
Copper	ND	10.0	µg/L	1	1	10/24/2007 10:26:30 AM
Iron	606	60.0	µg/L	1	1	10/24/2007 10:26:30 AM
Lead	ND	3.00	µg/L	1	1	10/24/2007 10:26:30 AM
Magnesium	6820	1000	µg/L	1	1	10/24/2007 10:26:30 AM
Manganese	182	10.0	µg/L	1	1	10/24/2007 10:26:30 AM
Nickel	ND	30.0	µg/L	1	1	10/24/2007 10:26:30 AM
Potassium	ND	1000	µg/L	1	1	10/24/2007 10:26:30 AM
Selenium	ND	5.00	µg/L	1	1	11/8/2007 9:04:58 AM
Silver	ND	10.0	µg/L	1	1	10/24/2007 10:26:30 AM
Sodium	6650	1000	µg/L	1	1	10/24/2007 10:26:30 AM
Thallium	ND	10.0	µg/L	1	1	10/24/2007 12:22:03 PM
Vanadium	ND	30.0	µg/L	1	1	10/24/2007 10:26:30 AM
Zinc	22.5	10.0	µg/L	1	1	10/24/2007 10:26:30 AM
Hardness, Total(CaCO <sub>3</sub> )	100000	7000	µg/L	1	1	10/24/2007 10:26:30 AM
TOTAL MERCURY WATERS ASP		E245.2	(E245.2)			Analyst: DRP
Mercury	ND	0.200	µg/L	1	1	10/16/2007 1:08:53 PM
INORGANIC ANIONS BY IC FOR WATERS		E300.1				Analyst: NJS
Bromide	ND	0.20	mg/L	1	1	10/23/2007
COLOR		E110.2				Analyst: KAM
Color	30.0	10.0	UNITS	2	1	10/11/2007 4:00:00 PM
RESIDUE, DISSOLVED (TDS)		E160.1				Analyst: DEY
Residue, Dissolved (TDS)	140	25	mg/L	1	1	10/14/2007
ALKALINITY ON AQUEOUS SAMPLES BY LACHA		E310.2				Analyst: BY
Alkalinity, Total (As CaCO <sub>3</sub> )	120	10	mg/LCaCO <sub>3</sub>	1	1	10/18/2007
CHLORIDE WATERS BY LACHAT		E325.2				Analyst: BY
Chloride	9.98	1.00	mg/L	1	1	10/18/2007

Approved By: *PF*

Date: 11-8-07

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Qualifiers: \* Low Level  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Reporting Limit

\*\* Value exceeds Maximum Contaminant Value  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 S Spike Recovery outside accepted recovery limits

**Upstate Laboratories, Inc.**

Date: 08-Nov-07

**CLIENT:** Cortland Co. Soil and Water Cons. Dist.  
**Lab Order:** U0710280  
**Project:** Towslee Landfill  
**Lab ID:** U0710280-018

**Client Sample ID:** MW-1B Dupe  
**Collection Date:** 10/10/2007 9:36:00 AM

**Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
CYANIDE, TOTAL ASP Cyanide	ND	10.0		µg/L	1	Analyst: BY 10/18/2007
NITROGEN, AMMONIA (AS NH3 BY LACHAT) Nitrogen, Ammonia (As NH3)	ND	0.500		mg/L	1	Analyst: BS 10/17/2007
TKN FOR WATERS Nitrogen, Kjeldahl, Total	ND	0.500		mg/L	1	Analyst: BS 10/17/2007
NITROGEN, NITRATE (AS N) Nitrogen, Nitrate (as N)	ND	0.200		mg/L	1	Analyst: BY 10/10/2007 4:13:00 PM
SULFATE Sulfate	5.39	5.00		mg/L	1	Analyst: KAM 10/18/2007
BIOCHEMICAL OXYGEN DEMAND (5 DAY BOD) Biochemical Oxygen Demand	ND	4		mg/L	1	Analyst: DEY 10/10/2007 8:00:00 AM
CHEMICAL OXYGEN DEMAND (COD) Chemical Oxygen Demand	ND	20		mg/L	1	Analyst: NJS 10/17/2007
TOTAL ORGANIC CARBON (TOC) Organic Carbon, Total	ND	3.0		mg/L	1	Analyst: NJS 10/15/2007
PHENOLICS, TOTAL REC. FOR WATERS Phenolics, Total Recoverable	ND	0.005		mg/L	1	Analyst: MB 10/17/2007
HEXAVALENT CHROMIUM BY ASP 2005 Hexavalent chromium	ND	0.010		mg/L	1	Analyst: DEY 10/10/2007 4:00:00 PM

Approved By: *PF*

Qualifiers: \* Low Level  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit

Date: 11-8-07 Page 36 of 36

\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
J Analyte detected below quantitation limits  
S Spike Recovery outside accepted recovery limits

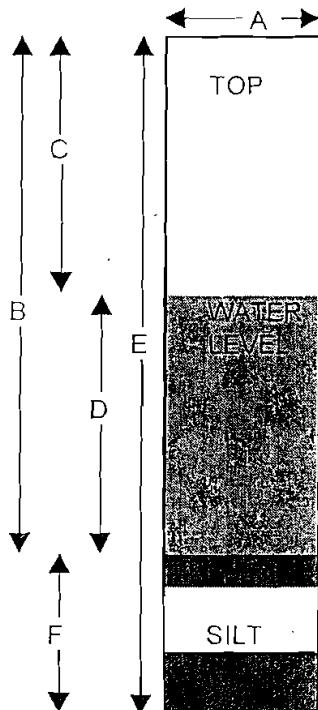
## Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01

Revised: 2/10/2001

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

UL ID No. (enter by lot)

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

- |  |              |         |
|--|--------------|---------|
| A. Diameter of Well                    | <u>2"</u>    | inches  |
| B. Well Depth Measured                 | <u>33.7</u>  | feet    |
| C. Depth to Water                      | <u>3.56</u>  | feet    |
| D. Length of Water Column (calculated) | <u>30.14</u> | feet    |
| Conversion Factor                      | <u>X.16</u>  | -----   |
| Well Volume (calculated)               | <u>4.82</u>  | gallons |
| No. of Volumes to be Evacuated         | <u>X3</u>    | -----   |
| Total Volume to be Evacuated           | <u>14.47</u> | gallons |
| Actual Volume Evacuated                | <u>15</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>10/9/2007</u>	<u>10/10/2007</u>	Initial Depth to Water <u>3.56</u> feet
Time	<u>10.24 AM</u>	<u>9:29 AM</u>	Recharge Depth to Water <u>3.61</u> feet
EH	<u>-125</u>	<u>-68</u>	2nd water column height <u>99.8341</u> %
Temperature	<u>14.8 c</u>	<u>16 c</u>	1st water column height
pH	<u>9.23</u>	<u>8.01</u>	Elevation(Top of Casing) <u>N/A</u> feet
Specific Cond.	<u>221</u>	<u>658</u>	G.W. Elevation= <u>N/A</u> feet
Turbidity	<u>8.84</u>	<u>28.1</u>	G.W.Elevation =Top of Case Elev-Total Depth
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>	Sampler: <u>Justin Gibson</u>
Appearance	<u>clear</u>	<u>sl. Cloudy</u>	Observations: <u>60 f foggy</u> <u>60 f sunny</u>
Weather:			
Observations:			

## Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01

Revised: 2/10/2001

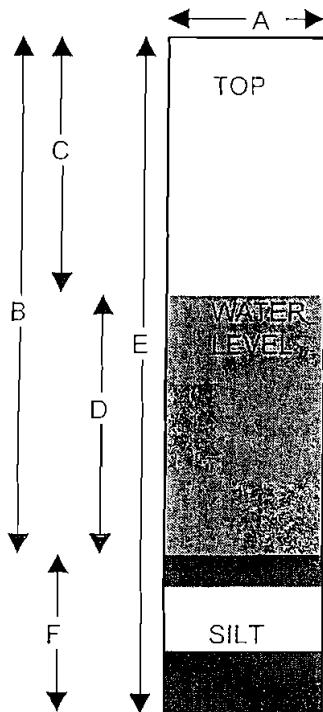
Client: Cortland County  
 Project: Towslee Landfill  
 Well ID.: MW-1B

ULI ID No. (Enter by lab)

Condition of Well: Good Locked: NO

Method of Evacuation: Dedicated Bailer Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	55.5	feet
C.	Depth to Water	3.68	feet
D.	Length of Water Column (calculated)	51.82	feet
	Conversion Factor	X.16	-----
	Well Volume (calculated)	8.29	gallons
	No. of Volumes to be Evacuated	X3	-----
	Total Volume to be Evacuated	24.87	gallons
	Actual Volume Evacuated	25	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated)	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling	% Recharge:
Date	10/9/2007	10/10/2007	Initial Depth to Water 3.68 feet
Time	10:30 AM	9:36 AM	Recharge Depth to Water 3.7 feet
EH	-126	-80	2nd water column height 99.9614 %
Temperature	14.4 c	16.3 c	1st water column height
pH	9.26	8.28	Elevation(Top of Casing) N/A feet
Specific Cond.	1368	943	G.W. Elevation= N/A feet
Turbidity	11.1	22.8	G.W. Elevation =Top of Case Elev-Total Depth
Dissolved Oxygen	N/A	N/A	Sampler: Justin Gibson
Appearance	slightly cloudy	clear	Signature: <i>Justin Gibson</i>
Weather:	60 f foggy	60 f sunny	
Observations:		Dupe	

## Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01

Revised: 2/10/2001

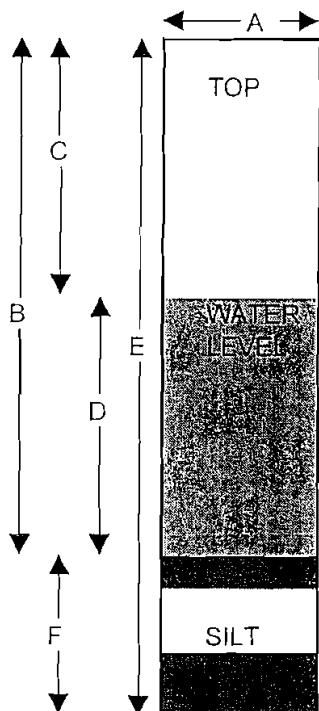
Client: Cortland County  
 Project: Towslee Landfill  
 Well ID.: MW-2A

Well ID No. (enter by lab)

Condition of Well: Good Locked: YES

Method of Evacuation: Dedicated Bailer Lock ID:

Method of Sampling: Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	12.8	feet
C.	Depth to Water	5.98	feet
D.	Length of Water Column (calculated)	6.82	feet
	Conversion Factor	X.16	-----
	Well Volume (calculated)	1.09	gallons
	No. of Volumes to be Evacuated	X3	-----
	Total Volume to be Evacuated	3.27	gallons
	Actual Volume Evacuated	3.5	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated)	N/A	feet

Field Measurements	Initial Evacuation	Final Sampling	% Recharge:
Date	10/9/2007	10/10/2007	Initial Depth to Water
Time	11:29 AM	10:19 AM	Recharge Depth to Water
EH	-31	-25	2nd water column height
Temperature	16.5 c	14.6 c	99.4302 %
pH	7.27	7.12	1st water column height
Specific Cond.	457	574	Elevation(Top of Casing)
Turbidity	16.6	5.07	G.W. Elevation=
Dissolved Oxygen	N/A	N/A	G.W.Elevation =Top of Case Elev-Total Depth
Appearance	slightly cloudy	clear	Sampler: Justin Gibson Signature: <i>Justin Gibson</i>
Weather:	63 cloudy	64 sunny	
Observations:			

## Upstate Laboratories, Inc.

## Ground water Field Log

File: TS-30-01

Revised: 2/10/2001

Client:

Cortland County

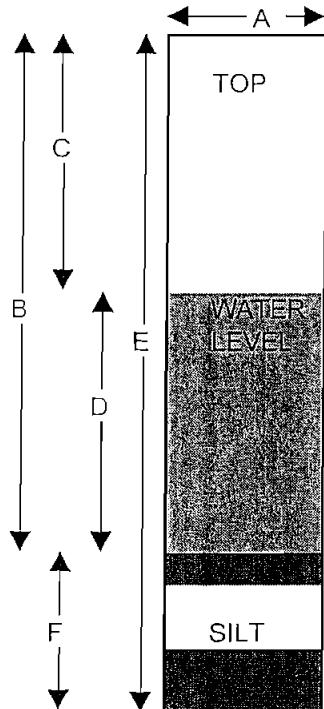
Project:

Towslee Landfill

Well ID.:

MW-2B

UL ID No. (enter by lab)

Condition of Well: Good Locked: YESMethod of Evacuation: Dedicated Bailer Lock ID: \_\_\_\_\_Method 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>7.14</u>	feet
D.	Length of Water Column (calculated)	<u>26.36</u>	feet
	Conversion Factor	<u>X.16</u>	-----
	Well Volume (calculated)	<u>4.22</u>	gallons
	No. of Volumes to be Evacuated	<u>X3</u>	-----
	Total Volume to be Evacuated	<u>12.65</u>	gallons
	Actual Volume Evacuated	<u>13</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>10/9/2007</u>	<u>10/10/2007</u>	Initial Depth to Water <u>7.14</u> feet
Time	<u>11:23 AM</u>	<u>10:12 AM</u>	Recharge Depth to Water <u>7.17</u> feet
EH	<u>-60</u>	<u>-34</u>	2nd water column height <u>99.8862 %</u>
Temperature	<u>15.6 c</u>	<u>15.8 c</u>	1st water column height
pH	<u>7.86</u>	<u>7.35</u>	Elevation(Top of Casing) <u>N/A</u> feet
Specific Cond.	<u>551</u>	<u>329</u>	G.W. Elevation= <u>N/A</u> feet
Turbidity	<u>8.74</u>	<u>37</u>	G.W.Elevation =Top of Case Elev-Total Depth
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>	
Appearance	<u>clear</u>	<u>cloudy</u>	
Weather:	<u>63 f cloudy</u>	<u>64 f sunny</u>	
Observations:			
			Sampler: Justin Gibson
			Signature: <i>Justin Gibson</i>

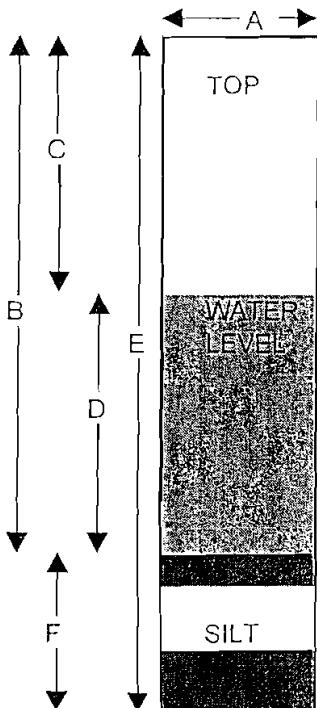
## Upstate Laboratories, Inc. Ground water Field Log

File: TS-30-01

Revised: 2/10/2001

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

ULID No. (enter by lab)

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

- |  |              |         |
|--|--------------|---------|
| A. Diameter of Well                    | <u>2"</u>    | inches  |
| B. Well Depth Measured                 | <u>22.40</u> | feet    |
| C. Depth to Water                      | <u>6.64</u>  | feet    |
| D. Length of Water Column (calculated) | <u>15.76</u> | feet    |
| Conversion Factor                      | <u>X.16</u>  | -----   |
| Well Volume (calculated)               | <u>2.52</u>  | gallons |
| No. of Volumes to be Evacuated         | <u>X3</u>    | -----   |
| Total Volume to be Evacuated           | <u>7.56</u>  | gallons |
| Actual Volume Evacuated                | <u>8</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>10/9/2007</u>	<u>10/10/2007</u>	
Time	<u>10:10 AM</u>	<u>9:15 AM</u>	Initial Depth to Water <u>6.64</u> feet
EH	<u>-166</u>	<u>-76</u>	Recharge Depth to Water <u>6.69</u> feet
Temperature	<u>15 c</u>	<u>14.6 c</u>	2nd water column height <u>99.6827 %</u>
pH	<u>9.31</u>	<u>8.25</u>	1st water column height
Specific Cond.	<u>1373</u>	<u>939</u>	
Turbidity	<u>14.2</u>	<u>13.7</u>	Elevation(Top of Casing) <u>N/A</u> feet
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>	G.W. Elevation= <u>N/A</u> feet
Appearance	<u>slightly cloudy</u>	<u>slightly cloudy</u>	G.W.Elevation =Top of Case Elev-Total Depth
Weather:	<u>60 f foggy</u>	<u>58 f sunny</u>	
Observations:			
			Sampler: Justin Gibson
			Signature: <u>Justin Gibson</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

WELL ID No. (enter by lab)

Condition of Well:

Good

Locked:

NO

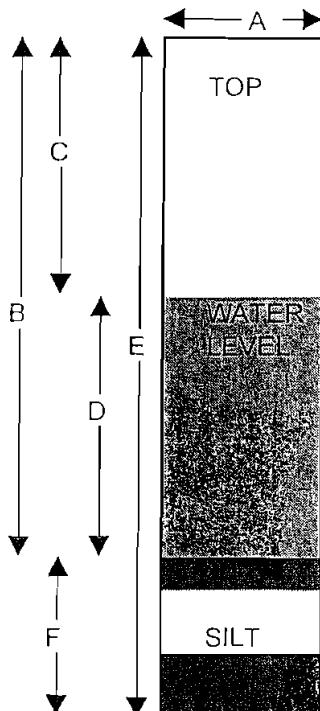
Method of Evacuation:

Dedicated Bailer

Lock ID:

Method of Sampling:

Dedicated Bailer



A.	Diameter of Well	2"	inches
B.	Well Depth Measured	40.75	feet
C.	Depth to Water	14.34	feet
D.	Length of Water Column (calculated)	26.41	feet
	Conversion Factor	X.16	-----
	Well Volume (calculated)	4.23	gallons
	No. of Volumes to be Evacuated	X3	-----
	Total Volume to be Evacuated	12.68	gallons
	Actual Volume Evacuated	13	gallons
E.	Installed Well Depth (if known)	N/A	feet
F.	Depth of Silt (calculated)	N/A	feet

## Field Measurements

Initial  
EvacuationFinal  
Sampling

## % Recharge:

Date

10/9/2007

10/10/2007

Initial Depth to Water

14.34 feet

Time

11:45 AM

10:40 AM

Recharge Depth to Water

14.45 feet

EH

-79

-57

2nd water column height

99.5835 %

Temperature

14 c

14.8 c

1st water column height

pH

8.3

7.82

Elevation(Top of Casing)

N/A feet

Specific Cond.

217

810

G.W. Elevation=

N/A feet

Turbidity

10.1

12.5

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

Dissolved Oxygen

N/A

N/A

Appearance

clear

clear

Weather:

63 f cloudy

64 f sunny

Observations:

MSD

Sampler:

Justin Gibson

Signature:

*Justin Gibson*

## Upstate Laboratories, Inc. Ground water Field Log

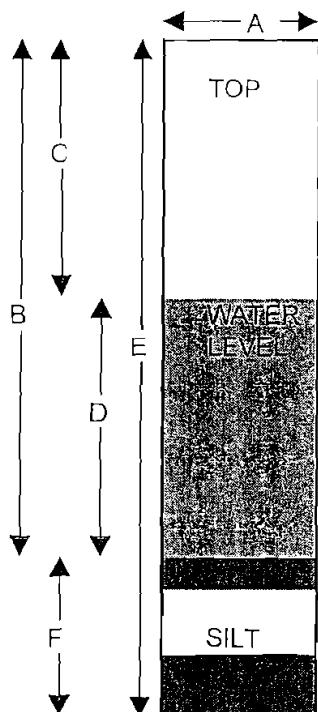
File: TS-30-01

Revised: 2/10/2001

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

Well ID No. (enter by lab)

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



A. Diameter of Well 2" inches  
 B. Well Depth Measured 22.20 feet  
 C. Depth to Water 3.36 feet  
 D. Length of Water Column (calculated) 18.84 feet  
 Conversion Factor X.16 -----  
 Well Volume (calculated) 3.01 gallons  
 No. of Volumes to be Evacuated X3 -----  
 Total Volume to be Evacuated 9.04 gallons  
 Actual Volume Evacuated 9.5 gallons  
 E. Installed Well Depth (if known) N/A feet  
 F. Depth of Silt (calculated) N/A feet

Field Measurements	Initial Evacuation	Final Sampling	% Recharge:
Date	<u>10/9/2007</u>	<u>10/10/2007</u>	Initial Depth to Water <u>3.36</u> feet
Time	<u>11:04 AM</u>	<u>9:52 AM</u>	Recharge Depth to Water <u>3.38</u> feet
EH	<u>-58</u>	<u>-24</u>	2nd water column height <u>99.8938</u> %
Temperature	<u>15.6 c</u>	<u>15.2 c</u>	1st water column height
pH	<u>7.85</u>	<u>7.11</u>	Elevation(Top of Casing) <u>N/A</u> feet
Specific Cond.	<u>567</u>	<u>972</u>	G.W. Elevation= <u>N/A</u> feet
Turbidity	<u>14.6</u>	<u>48.1</u>	G.W.Elevation =Top of Case Elev-Total Depth
Dissolved Oxygen	<u>N/A</u>	<u>N/A</u>	
Appearance	<u>slightly cloudy</u>	<u>cloudy</u>	
Weather:	<u>60 f cloudy</u>	<u>60 f sunny</u>	
Observations:			
			Sampler: Justin Gibson Signature: <i>Justin Gibson</i>

# Upstate Laboratories, Inc.

# Chain of Custody Record

6034 Corporate Drive E. Syracuse New York 13057

Phone (315) 437 0255

Fax (315) 437 1209

Client

CORTLAND COUNTY

Project #/Project Name

TOWSLEE LANDFILL

Client Contact:

PATRICK REIDY

Phone #

607-753-0851

Location (city/state) Address

CORTLANDVILLE, NY

Sample ID

Date

Time

Matrix

GRAB  
OR COMP

ULI Internal Use Only

U0710280

Number of Containers

1 2 3 4 5 6 7 8 9 10 93 REGS ASP-B

MW-1A

8/9/2007

10:24 am

WATER

GRAB

-1

2

X

MW-1B

8/9/2007

10:30 am

WATER

GRAB

-2

2

X

MW-2A

8/9/2007

11:24 am

WATER

GRAB

-3

2

X

MW-2B

8/9/2007

11:23 am

WATER

GRAB

-4

2

X

MW-3A

8/9/2007

10:10 am

WATER

GRAB

-5

2

X

MW-6B

8/9/2007

11:45 am

WATER

GRAB

-6

2

X

MW-7A

8/9/2007

11:04 am

WATER

GRAB

-7

2

X

MW-1B DUPE

8/9/2007

10:30 am

WATER

GRAB

-8

2

X

ULI TRIP BLANK (20071001A)

8/9/2007

8:00 am

WATER

GRAB

-9

1

X

MJD

ID-20071001A

(Holding Blank)

(10-400)

(1900)

(Water grab)

-10

1

(X)

Parameter and Method

Sample bottle:

Type

Size

Preservative

Sampled by (Print)

Name of Courier

1 EPA 8260 BASELINE LIST

GLASS

40 ML

1:1 HCL

Justin Gibson

Company: ULI

2

Relinquished by:(sign)

Date

Time

Received by: (sign)

3

Relinquished by:(sign)

Date

Time

Received by: (sign)

4

Relinquished by:(sign)

Date

Time

Received by: (sign)

5

Relinquished by:(sign)

Date

Time

Received by: (sign)

6

Relinquished by:(sign)

Date

Time

Received by: (sign)

7

Relinquished by:(sign)

Date

Time

Received by: (sign)

8

Relinquished by:(sign)

Date

Time

Rec'd for Lab by:

9

Relinquished by:(sign)

Date

Time

Karen Mump

10

Relinquished by:(sign)

Date

Time

Karen Mump

Syracuse

Rochester

Buffalo

Albany

Binghamton

Fair Lawn (NJ)

ULI Computer Input

Remarks

# *Upstate Laboratories, Inc.*

6034 Corporate Drive E. Syracuse New York 13057

(315) 437-0255

Fax 437 1209

## Chain of Custody Record

## 1st Computer Input Form

# Appendix C

## Historical Analytical Data

Cortland County Towslee Landfill



## Historical Data Page Index

### Cortland County Towslee Landfill

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



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

Parameter	Units	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07
Temp	(deg C)	--	--	8.5	12.8	19.5	15.9	9.3	6.7	21.6	16
Eh	(mV)	--	--	700	105	190	170	59	-107	-111	-68
pH	(Std Units)	--	--	7.8	7.7	7.52	7.69	8.29	7.93	7.83	8.01
Sp. Cond	(uS/cm)	--	--	306	355	353	369	204	221	241	658
Color	(Units)	5	20	--	--	<5	--	--	--	--	30
Turbidity	(NTU)	--	--	660	73	131	29	55.6	34.8	24.3	28.1
ALK as CaCO <sub>3</sub>	(mg/l)	160	145	127	139	122	132	140	120	120	130
HARD as CaCO <sub>3</sub>	(mg/l)	4000	240	167	140	148	148	134	153	148	146
TDS	(mg/l)	494	214	340	213	236	229	127	208	250	204
Chloride	(mg/l)	152	46	21.3	22.2	34.2	26.7	28.7	27	27	27.9
Sulfate	(mg/l)	20.6	14.6	27.3	12.3	16.5	14.9	8.79	14.2	48.6	11.2
Bromide	(mg/l)	1.2	0.8	< 0.1	<0.1	<0.1	0.117	<0.2	<0.2	<0.2	<0.2
NO <sub>3</sub> (As N)	(mg/l)	<0.1	<0.1	< 0.1	0.217	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2
NH <sub>4</sub> (As N)	(mg/l)	6	2.6	0.276	<0.02	0.161	<0.1	<0.5	<0.5	<0.5	<0.5
TKN (as N)	(mg/l)	18	3.8	23.3	0.529 H	0.366	<0.2	2.2	<0.5	5.66	<0.5
COD	(mg/l)	305	64	< 10	<10	<10	<10	<20	<20	<20	<20
BOD	(mg/l)	5	<2	< 3	<3	<3	<3	<4	<4	<4	<4
TOC	(mg/l)	4.2	1.6	4.76	2.61	<2	<2	<3	<3	<3	<3
Phenolics, Tot	(mg/l)	0.003	0.0015	< 0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005
Cyanide	(mg/l)	<0.01	<0.01	--	--	<0.01	--	--	--	--	<0.01

H - exceeded hold time

# Historical Water Quality Database - Towslee Landfill

## Field and Inorganic Parameters

### Well MW-1B - Bedrock

Parameter	Units	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07
Temp	(deg C)	--	--	5	11.4	16.4	15.8	9.6	7.2	21.5	16.3
Eh	(mV)	--	--	385	45	155	115	84	-122	-143	-80
pH	(Std Units)	--	--	7.7	7.8	7.69	7.9	8.47	8.24	8.03	8.28
Sp. Cond	( $\mu$ S/cm)	--	--	157	257	244	200	156	141	1241	943
Color	(Units)	<5	<5	--	--	<5	--	--	--	--	30
Turbidity	(NTU)	--	--	187	45	70	15.6	67.4	9.62	10.2	22.8
ALK as CaCO <sub>3</sub>	(mg/l)	94.8	93.6	92	94	91	89	99	96	100	100
HARD as CaCO <sub>3</sub>	(mg/l)	88	140	97.6	81.9	89	82	83.6	105	104	90.8
TDS	(mg/l)	143	86	120	111	142	120	62	162	130	104
Chloride	(mg/l)	<2	<2	2.55	2.28	3.47	0.611	3.24	4.45	3.16	6.44
Sulfate	(mg/l)	5.2	<5	4.72	5.51	5.33	3.76	7.09	6.31	28.8	5.26
Bromide	(mg/l)	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2
NO <sub>3</sub> (As N)	(mg/l)	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2
NH <sub>4</sub> (As N)	(mg/l)	<0.02	0.04	0.0938	<0.02	<0.02	<0.1	<0.5	<0.5	<0.5	<0.5
TKN (as N)	(mg/l)	<0.2	<0.2	0.54	0.755 H	0.497	<0.2	<0.5	<0.5	<0.5	<0.5
COD	(mg/l)	<15	<15	<10	<10	<10	<10	<20	<20	<20	<20
BOD	(mg/l)	<2	<2	<3	<3	<3	<3	<4	<4	<4	<4
TOC	(mg/l)	9.3	<1	5.41	2.34	<2	<2	<3	<3	<3	<3
Phenolics, Tot	(mg/l)	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005
Cyanide	(mg/l)	--	--	--	--	<0.01	--	--	--	--	<0.01

H - exceeded hold time

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

Parameter	Units	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07
Temp	(deg C)	--	--	4.4	11.6	17.2	14.2	9.2	7.7	18	14.6
Eh	(mV)	--	--	140	-5	120	90	136	-62	-81	-25
pH	(Std Units)	--	--	6.4	6.4	6.15	6.41	7.31	7.14	7.41	7.12
Sp. Cond	( $\mu$ S/cm)	--	--	621	767	784	1100	364	450	395	574
Color	(Units)	30	60	--	--	33	--	--	--	--	210
Turbidity	(NTU)	--	--	18.6	18.3	195	27	48.9	30.7	15	5.07
ALK as CaCO <sub>3</sub>	(mg/l)	702	784	330	355	384	423	380	320	420	290
HARD as CaCO <sub>3</sub>	(mg/l)	1300	720	241	260	265	301	225	262	275	165
TDS	(mg/l)	1180	986	381	397	491	487	262	355	395	284
Chloride	(mg/l)	156	149	23.3	25.7	23.5	25.7	21.2	14.7	24.4	10.6
Sulfate	(mg/l)	<5	<5	4.22	5.5	3.43	3.18	<5	<5	<10	9.93
Bromide	(mg/l)	0.8	<0.5	0.189	0.18	0.237	0.261	<0.2	<0.2	<2	<2
NO <sub>3</sub> (As N)	(mg/l)	<0.1	0.14	0.228	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2
NH <sub>4</sub> (As N)	(mg/l)	23	9.1	10.6	18.4	16	15.1	10.2	9.89	14.1	13.5
TKN (as N)	(mg/l)	31.5	21.2	10.6	14 H	16.5	15	132	12.5	16.1	12.6
COD	(mg/l)	127	136	< 10	13.8	27	15.6	<20	<20	46	22
BOD	(mg/l)	6	3	16	4.5	3.4	<3	6	7	7	<4
TOC	(mg/l)	42.5	24.1	10.1	7.18	5.67	5.68	6.7	4.8	7.3	6.3
Phenolics, Tot	(mg/l)	0.0071	0.0066	< 0.005	0.008	<0.005	<0.005	<0.005	0.01	<0.005	<0.005
Cyanide	(mg/l)	<0.01	<0.01	--	--	<0.01	--	--	--	--	<0.01

H - exceeded hold time

# Historical Water Quality Database - Towslee Landfill

## Field and Inorganic Parameters

### Well MW-2B - Bedrock

Parameter	Units	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07
Temp	(deg C)	--	--	4.5	10.5	15.9	14.5	9.1	8.3	16.5	15.8
Eh	(mV)	--	--	175	110	125	115	136	-73	-77	-34
pH	(Std Units)	--	--	6.4	6.4	6.35	6.52	7.14	7.35	7.37	7.35
Sp. Cond	( $\mu$ S/cm)	--	--	1350	1560	1420	1540	701	682	500	329
Color	(Units)	5	10	--	--	<5	--	--	--	--	15
Turbidity	(NTU)	--	--	17.3	19.8	18.7	28	14.2	11	9.48	37
ALK as CaCO <sub>3</sub>	(mg/l)	577	673	652	670	612	646	650	480	600	640
HARD as CaCO <sub>3</sub>	(mg/l)	960	900	697	726	686	675	723	575	716	652
TDS	(mg/l)	1640	1230	982	1020	1040	980	825	823	935	868
Chloride	(mg/l)	267	238	145	154	122	121	167	131	163	161
Sulfate	(mg/l)	<5	<5	1.18	2.96	<1	<1	<5	<5	10	<5
Bromide	(mg/l)	1.1	0.9	0.878	1.01	0.902	0.912	0.95	<2	<2	0.92
NO <sub>3</sub> (As N)	(mg/l)	<0.1	<0.1	< 0.1	0.216	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2
NH <sub>4</sub> (As N)	(mg/l)	0.95	1.3	0.389	0.824	0.786	0.282	0.921	0.844	1.31	1.22
TKN (as N)	(mg/l)	2.6	2	1.31	1.78 H	1.64	1.9	1.84	1.62	1.67	1.53
COD	(mg/l)	58	61	< 10	17.2	24.6	27	21	<20	<20	<20
BOD	(mg/l)	2	2	9.3	5.1	3.7	13	<4	4	<4	<4
TOC	(mg/l)	12.3	11.9	< 2	7.76	4.82	7.49	6.4	3	5.7	17.2
Phenolics, Tot	(mg/l)	0.0044	0.0039	< 0.005	<0.005	<0.005	0.1	<0.005	0.006	<0.005	<0.005
Cyanide	(mg/l)	--	--	--	--	0.024	--	--	--	--	<0.01

H - exceeded hold time

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

Parameter	Units	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07
Temp	(deg C)	--	--	6.4	11.7	15.3	15.7	9.3	5.6	17.9	14.6
Eh	(mV)	--	--	215	45	115	220	-50	-94	-115	-76
pH	(Std Units)	--	--	7.2	6.9	7.01	6.84	7.82	7.64	7.84	8.25
Sp. Cond	( $\mu$ S/cm)	--	--	286	299	342	397	143	898	1757	939
Color	(Units)	<5	<5	--	--	<5	--	--	--	--	115
Turbidity	(NTU)	--	--	58	11.9	5.2	7.2	10.6	19.6	16.4	13.7
ALK as CaCO <sub>3</sub>	(mg/l)	145	146	162	170	140	152	82	59	170	130
HARD as CaCO <sub>3</sub>	(mg/l)	1250	200	153	179	191	158	74	58.1	150	86.2
TDS	(mg/l)	320	269	215	208	207	207	38	168	210	144
Chloride	(mg/l)	31.4	28.7	14	12.7	13.5	12.7	3.37	1.8	12	5.73
Sulfate	(mg/l)	16	13	9.14	11	9.98	8.01	<5	<5	20.5	<5
Bromide	(mg/l)	0.5	<0.5	< 0.1	<0.1	0.152	0.143	1.2	<2	<0.2	<2
NO <sub>3</sub> (As N)	(mg/l)	<0.1	0.19	< 0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2
NH <sub>4</sub> (As N)	(mg/l)	<0.02	0.09	0.0969	<0.02	<0.02	<0.1	1.45	<0.5	<0.5	<0.5
TKN (as N)	(mg/l)	0.4	0.24	0.455	1.09 H	0.239	0.266	4.26	1.47	<0.5	<0.5
COD	(mg/l)	19	<15	< 10	<10	13	<10	47	<20	<20	<20
BOD	(mg/l)	<2	<2	< 3	<3	<3	<3	<4	8	<4	<4
TOC	(mg/l)	4.5	1.9	5.58	<2	<2	<2	<3	<3	<3	3.7
Phenolics, Tot	(mg/l)	0.0027	<0.001	< 0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide	(mg/l)	--	--	--	--	<0.01	--	--	--	--	<0.01

H - exceeded hold time

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

Parameter	Units	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07
Temp	(deg C)	--	--	7.9	10.5	12.2	14.3	9.7	7.4	15.6	14.8
Eh	(mV)	--	--	250	85	225	180	82	-92	-105	-57
pH	(Std Units)	--	--	6.7	7.4	7.52	7.11	8.04	7.73	7.85	7.82
Sp. Cond	( $\mu$ S/cm)	--	--	347	287	304	329	220	249	236	810
Color	(Units)	<5	20	--	--	<5	--	--	--	--	6
Turbidity	(NTU)	--	--	40	19.9	15.8	14.2	68.9	8.1	9.48	12.5
ALK as CaCO <sub>3</sub>	(mg/l)	240	224	131	148	154	153	180	160	150	140
HARD as CaCO <sub>3</sub>	(mg/l)	300	240	135	144	131	133	156	139	138	124
TDS	(mg/l)	98	280	209	175	190	187	127	105	220	208
Chloride	(mg/l)	38.2	35	21.1	2.33	2.32	3.39	11.6	6.99	13.8	25.9
Sulfate	(mg/l)	27.1	22.2	13.8	3.95	3.28	6.14	8.54	6.79	17.3	12.7
Bromide	(mg/l)	<0.5	<0.5	< 0.1	<0.1	0.122	<0.1	<0.2	<0.2	<0.2	<0.2
NO <sub>3</sub> (As N)	(mg/l)	0.6	<0.1	< 0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2
NH <sub>4</sub> (As N)	(mg/l)	0.09	2.5	0.0549	<0.02	0.096	<0.1	<0.5	<0.5	<0.5	<0.5
TKN (as N)	(mg/l)	0.6	3.3	0.392	0.904 H	0.214	0.279	<0.5	<0.5	<0.5	<0.5
COD	(mg/l)	40	19	< 10	<10	11.6	<10	<20	<20	<20	<20
BOD	(mg/l)	<2	2	< 3	5.1	3.2	<3	<4	<4	<4	<4
TOC	(mg/l)	6	5.8	5.22	3.14	<2	<2	<3	<3	<3	<3
Phenolics, Tot	(mg/l)	0.0032	<0.001	< 0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanide	(mg/l)	--	--	--	--	<0.01	--	--	--	--	<0.01

H - exceeded hold time

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

Parameter	Units	Aug-97	Oct-97	3/22/06	5/31/06	8/9/06	10/10/06	3/20/07	4/26/07	7/31/07	10/10/07
Temp	(deg C)	--	--	4.5	11.6	17.4	13.9	9.3	7.8	18.8	15.2
Eh	(mV)	--	--	215	120	245	190	77	-64	-69	-24
pH	(Std Units)	--	--	6.5	6.4	6.34	6.62	7.04	7.12	7.2	7.11
Sp. Cond	(uS/cm)	--	--	1360	1520	1440	1480	893	765	514	972
Color	(Units)	20	5	--	--	<5	--	--	--	--	85
Turbidity	(NTU)	--	--	214	18	13.6	42	45.3	54.3	40.9	48.1
ALK as CaCO <sub>3</sub>	(mg/l)	569	660	648	675	595	635	640	510	530	540
HARD as CaCO <sub>3</sub>	(mg/l)	1010	1150	627	599	531	526	529	499	481	459
TDS	(mg/l)	1220	1240	981	967	963	949	753	865	3000	752
Chloride	(mg/l)	300	276	144	143	119	85	145	131	145	141
Sulfate	(mg/l)	27.4	20.2	20.6	22.5	19.7	14.1	16.5	23.2	22.7	17.8
Bromide	(mg/l)	0.6	<0.5	0.753	0.633	0.822	0.483	0.6	<0.2	<2	<2
NO <sub>3</sub> (As N)	(mg/l)	<0.1	0.2	< 0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.2	<0.2
NH <sub>4</sub> (As N)	(mg/l)	0.93	0.89	0.34	<0.02	<0.02	<0.1	<0.5	<0.5	<0.5	<0.5
TKN (as N)	(mg/l)	1.1	1.4	1.5	1.68 H	0.75	1.11	1.47	3.6	0.784	0.591
COD	(mg/l)	43	112	21.2	16.5	26.4	20.5	27	<20	<20	<20
BOD	(mg/l)	<2	2	< 3	<3	<3	<3	<4	<4	<4	<4
TOC	(mg/l)	10.1	12.6	12.8	8.19	6.12	7.46	8.1	6	7.2	11.5
Phenolics, Tot	(mg/l)	0.0051	0.0027	< 0.005	0.007	<0.005	<0.005	<0.005	0.006	0.007	<0.005
Cyanide	(mg/l)	<0.01	<0.01	--	--	<0.01	--	--	--	--	<0.01

H - exceeded hold time

# Historical Water Quality Data - Towslee Landfill

## MW-1A Total Metals

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

All units in mg/l

# Historical Water Quality Data - Towslee Landfill

## MW-1B Total Metals

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

All units in mg/l

# Historical Water Quality Data - Towslee Landfill

MW-2A

Total Metals

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

All units in mg/l

Historical Water Quality Data - Towslee Landfill  
**MW-2B**      **Total Metals**

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

All units in mg/l

Historical Water Quality Data - Towslee Landfill  
 MW-3A                      Total Metals

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

All units in mg/l

# Historical Water Quality Data - Towslee Landfill

MW-6B

Total Metals

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

All units in mg/l

# Historical Water Quality Data - Towslee Landfill

MW-7A

Total Metals

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

All units in mg/l

Historical Water Quality Database - Towslee Landfill  
 MW-1A                      Dissolved Metals

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

All units are mg/l

Historical Water Quality Database - Towslee Landfill  
**MW-1B**      **Dissolved Metals**

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

All units are mg/l

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

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

All units are mg/l

## Historical Water Quality Database - Towslee Landfill

MW-2B

Dissolved Metals

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

All units are mg/l

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

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

All units are mg/l

## Historical Water Quality Database - Towslee Landfill

## MW-6B      Dissolved Metals

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

All units are mg/l

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

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

All units are mg/l

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

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

All units are ug/l

J - estimated

B - analyte also detected in blank

(1) 1997 results are for total 1,2-DCE - total has been applied to each compound

NA - not analyzed

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

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

All units are ug/l

J - estimated

B - analyte also detected in blank

(1) 1997 results are for total 1,2-DCE - total has been applied to each compound

NA - not analyzed

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

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

All units are ug/l

J - estimated

B - analyte also detected in blank

(1) 1997 results are for total 1,2-DCE - total has been applied to each compound

NA - not analyzed

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

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

All units are ug/l

J - estimated

B - analyte also detected in blank

(1) 1997 results are for total 1,2-DCE - total has been applied to each compound

NA - not analyzed

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

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

All units are ug/l

J - estimated

B - analyte also detected in blank

(1) 1997 results are for total 1,2-DCE - total has been applied to each compound

NA - not analyzed

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

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

All units are ug/l

J - estimated

B - analyte also detected in blank

(1) 1997 results are for total 1,2-DCE - total has been applied to each compound

NA - not analyzed

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

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

All units are ug/l

J - estimated

B - analyte also detected in blank

(1) 1997 results are for total 1,2-DCE - total has been applied to each compound

NA - not analyzed