

# Fall 2017 Routine Semi-Annual Monitoring Event Water Quality Monitoring Report

Location:

Ischua Landfill  
Olean, New York  
(NYSDEC Facility ID #05S20)

Prepared for:

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**Ischua Landfill  
Olean, New York  
(NYSDEC Facility ID #05S20)**

**Fall 2017  
Semi-Annual Monitoring Routine Event  
Water Quality Monitoring Report**

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## 1.0 INTRODUCTION

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LaBella Associates, D.P.C (LaBella) was retained by the City of Olean to provide sampling, analysis, and reporting services associated with water quality monitoring at the closed Ischua Landfill (site). Groundwater monitoring is conducted at the site in accordance with Order on Consent 89-92 issued by the New York State Department of Environmental Conservation (NYSDEC) and the December 1990 Sampling and Analysis Plan (SAP) with subsequent modifications in 1991 and 1995. These modifications, as well as other modifications to the SAP, are discussed in detail in Section 2.0.

This report presents the results of the Fall 2017 Routine Semi-Annual Monitoring Event conducted for twelve monitoring wells and two surface water points at the site. This report provides a brief discussion of the relevant background information, describes the sample collection procedures, presents the analytical results, and provides a summary and conclusions for the work conducted.

## 2.0 BACKGROUND INFORMATION

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The Ischua Landfill is located near the Olean municipal airport in the Town of Ischua, New York, as shown on Figure 1. The landfill consists of three parallel trenches approximately 15 feet deep and 50 feet wide that range from 800 feet to 1,300 feet in length (see Figure 2). The landfill operated from 1972 to 1975. When the landfill was closed, the landfill cover consisted of approximately six inches of topsoil. In an effort to control seeps, the landfill cover was improved with 18 inches of compacted clay and six inches of topsoil, as reported in January 1986. The improved cover reduced the seepage volume but did not completely eliminate the seeps.

In response to renewed concerns by the NYSDEC regarding the seeps, a hydrogeologic investigation program was performed at the site from November 1989 through March 1990. Subsequently, the City developed an appropriate course of action for controlling the seepage breakouts. As required by the NYSDEC, the City also initiated a program of quarterly monitoring at the site in September 1990. The samples were analyzed for the Title 6 New York Codes, Rules and Regulations (6NYCRR) Part 360-2.11(d)(6) Baseline Parameters plus volatile organic compounds (VOCs). Following submission of the Baseline Sampling Report, a SAP dated December 4, 1990 was issued for the continued quarterly groundwater monitoring at the landfill site. The SAP was approved by the NYSDEC in a letter dated December 12, 1990. The quarterly sampling at the site continued in accordance with the approved SAP from September 1990 to September 1991.

In the September 1991 Baseline Sampling Report, several modifications to the approved SAP were recommended. These proposed modifications were as follows:

- a. The site's contingency water quality monitoring requirements of quarterly analysis for VOCs was proposed to be removed from the SAP and replaced by the standard routine and baseline analysis program which would have required VOC analysis only during the annual baseline sampling event.
- b. Six sampling points were proposed to be removed from the SAP. These sampling points had primarily been either dry during previous sampling events or had not resulted in elevated levels of analytes of concern. These points were: MW-6B, MW-7C, MW-8A, MW-9A, MW-10A, and MW-11A.
- c. The tabular listing of current and past sampling results in the quarterly and the annual reports was proposed to be replaced with time/concentration plots of selected parameters.

Items b and c of the proposed modifications were later approved by the NYSDEC. With respect to Item a, the NYSDEC did not agree with elimination of the site's contingency water quality requirements but approved a reduction in the frequency of sampling for VOCs from quarterly to semi-annually.

After the submittal of the June 1994 Quarterly Report, it was requested that the current time/concentration plots of selected parameters be replaced with tabular historical data tables from each monitoring point. This request was approved by the NYSDEC.

Furthermore, it was requested in November 1995 that the sampling frequency for all parameters at the site be reduced from quarterly to semi-annually, based upon a statistical evaluation of the previous five years of groundwater monitoring data. The statistical evaluation of the site data revealed that total VOC concentrations for all sampling points had remained constant or decreased with time. The NYSDEC agreed with the request in 1996.

### **3.0 SAMPLE COLLECTION PROCEDURES**

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#### **3.1 General Discussion**

LaBella performed the Fall 2017 Monitoring Event sampling activities on October 17 and 18, 2017. All sampling activities were completed in general accordance with the approved SAP dated December 4, 1990 and subsequent NYSDEC-approved modifications. All samples collected from the site were analyzed for the 6NYCRR Part 360-2.11(d)(6) Routine Parameters plus Baseline VOCs. However, MW-6A and MW-6D were dry, precluding sample collection from these locations. Additionally, MW-9B, MW-11B, and MW-12A contained insufficient water volume for the full Parameter list, thus the parameters analyzed were limited to the following:

- MW-9B: Total organic carbon (TOC) and VOCs
- MW-11B: TOC
- MW-12A: TOC and VOCs

The sample locations for the monitoring wells and the surface water samples are shown on Figure 2. The following paragraphs describe the sample collection procedures and field documentation protocols that were followed.

#### **3.2 Groundwater Sample Collection Procedures**

Purging and sampling of the monitoring wells was performed utilizing dedicated disposable polyethylene bailers, and non-absorbent nylon rope was used to lower the bailers into the wells.

Prior to purging, the depth to water in the well was measured to the nearest 1/100<sup>th</sup> of a foot using an electronic water level indicator. As detailed in the approved SAP, purging is performed in an attempt to obtain a turbidity value of under 50 nephelometric turbidity units (NTUs) prior to sampling. If the turbidity value is greater than 50 NTUs, a filtered metals sample must be collected. The turbidity values recorded during this monitoring event were below 50 NTUs at the time of sample collection with the exception of MW-9B, MW-11B, MW-12A, and MW-12B. No metals samples were collected from MW-9B, MW-11B, and MW-12A. It should be noted that the metals sample from MW-12B was collected prior to the water utilized to measure the field parameters and that the turbidity measurement does not appear to accurately represent the turbidity of the metals sample.

The monitoring wells were purged a minimum of three well volumes or until dry. In general, purging was intended to be performed such that the water level in the well would not fall below the top of the sandpack. However, because the static water level in some of the wells was below the top of the sandpack, this criterion was not always achieved. Table 1 lists the depth of each monitoring well in addition to the elevation of groundwater in each well. Field Sampling Logs are presented in Appendix A.

After purging, groundwater samples were collected from each well (with the exception of the wells that were dry, as identified in Section 3.4) at the site and placed in laboratory-prepared sample containers. The sample containers were then placed in insulated coolers filled with ice and transported under proper chain-of-custody procedures by courier directly to the analytical laboratory, Pace Analytical Services (Pace), in Melville, New York.

### **3.3 Surface Water Sample Collection Procedures**

Two surface water samples (STREAM and SEEP), are typically collected during each semi-annual sampling event. These sample locations are shown on Figure 2. The SEEP and STREAM samples were collected by direct submersion of a dedicated unpreserved sample bottle into the surface water. A dedicated, unpreserved sampling bottle was used to collect the surface water samples from these locations in order to fill sample bottles containing preservatives. Care was taken to not disturb the sediment during sample collection. The filled sample bottles were transported to the laboratory under chain-of-custody using the procedures described in Section 3.6.

### **3.4 Field Parameter Measurements**

Field parameters including pH, specific conductance, oxidation reduction potential (ORP), temperature, and turbidity were measured for each sample point and the results were recorded on the field sampling logs presented in Appendix A. Due to insufficient water volume, field parameters were not measured for MW-6A or MW-6D (these locations were ultimately dry). A summary of the field parameters by sample point is included in Table 2.

### **3.5 Quality Assurance/Quality Control**

For quality assurance/quality control purposes, a blind field duplicate sample was collected and analyzed. The blind field duplicate was collected from the STREAM and analyzed for Routine Parameters plus Baseline VOCs. The blind field duplicate sample was designated as “DUP” on the chain-of-custody form and in the laboratory report from Pace.

### **3.6 Shipping and Chain-of-Custody**

Sample containers were labeled in the field, placed on ice, and shipped by courier using properly signed seals to Pace under chain-of-custody protocols. The samples were relinquished to the courier provided by Pace the day of sample collection. Appendix B presents the completed chain-of-custody records for this semi-annual monitoring event.

### **3.7 Health and Safety**

Sample personnel wore Level D personal protective equipment including nitrile gloves during well purging and sampling activities. No health and safety concerns were noted during sampling.

## 4.0 DATA VALIDATION

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### 4.1 Data Validation

Data validation consisted of an internal validation by Pace. The internal data validation performed by Pace focused on holding times, calibration criteria, method blanks, reference samples, matrix spike/matrix spike duplicate (MS/MSD) samples, and surrogate recoveries. The results of these efforts are presented in the Pace Analytical Report included in Appendix C. The internal validation showed that the analytical results generated during this semi-annual monitoring event are generally usable in all cases. Only minor QA/QC issues were identified and do not impact the usability of the data for the Fall 2017 Monitoring Event.

### 4.2 Quality Assurance/Quality Control

#### 4.2.1 Duplicate

The sample designated “DUP” is a duplicate of the STREAM sample. The duplicate results are consistent (within 1.5 times) with the sample results with a few minor exception as identified below:

- Ammonia-nitrogen was detected in the STREAM at a concentration 1.53 times the concentration detected in the DUP
- Total phenols was detected in the STREAM at a concentration 2.24 times the concentration detected in the DUP
- Aluminum was detected in the STREAM at a concentration 1.59 times the concentration detected in the DUP
- Iron was detected in the STREAM at a concentration 1.56 times the concentration detected in the DUP
- Lead was detected in the STREAM but was not detected in the DUP
- Manganese was detected in the STREAM at a concentration 1.66 times the concentration detected in the DUP

## 5.0 ANALYTICAL RESULTS

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### 5.1 General Discussion

Table 3 summarizes the results for each of the groundwater samples collected from the site. Results that are shaded in Table 3 are reported at or above regulatory levels for groundwater established in 6NYCRR Part 703.5 Water Quality Regulations for Groundwater (6NYCRR standards) as amended in April 1999. For parameters for which a standard was not adopted, the guidance values presented in the NYSDEC June 1998 Technical and Operations Guidance Series (TOGS) 1.1.1 were utilized. The following sections briefly describe this event’s analytical results with respect to the above-mentioned water quality standards.

Additionally, although the SEEP and STREAM data have also been compared to the 6NYCRR groundwater standards, the comparison was made for purpose of continuity only; the 6NYCRR groundwater standards are not technically applicable to these data. In addition, the duplicate sample is not discussed in the following section. Refer to Section 4.2.

## 5.2 Summary of Results

### 5.2.1 Volatile Organic Compound Results

The analytical results for the Fall 2017 Monitoring Event are summarized in Table 3. No VOCs were detected above the applicable water quality standards in the samples collected from MW-7A, MW-7C, MW-9B, MW-12A, MW-13, MW-14, and STREAM. The VOC concentrations that exceeded the applicable water quality standards are summarized below:

- *Benzene* was reported above the 6NYCRR standard of 1.0 µg/L in one sample (MW-12B) at a concentration of 10.5 µg/L.
- *Chlorobenzene* was reported above the 6NYCRR standard of 5.0 µg/L in two samples (MW-8B and MW-12B) at concentrations of 8.9 µg/L and 16.9 µg/L.
- *1,4-Dichlorobenzene* was reported above the 6NYCRR standard of 3.0 µg/L in one sample (MW-12B) at a concentration of 5.5 µg/L.
- *1,1-Dichloroethane* was reported above the 6NYCRR standard of 5.0 µg/L in two samples (MW-10B and MW-12B) at concentrations of 18.1 µg/L and 5.1 µg/L.
- *cis-1,2-Dichloroethene* was reported above the 6NYCRR standard of 5.0 µg/L in three samples (MW-8B, MW-10B, and SEEP) at concentrations of 17.3 µg/L, 62.3 µg/L and 11.7 µg/L, respectively.
- *Vinyl Chloride* was reported above the 6NYCRR standard of 2.0 µg/L in two samples (MW-8B and MW-10B) at concentrations of 7.3 µg/L and 8.8 µg/L.

Concentrations for these analytes were within historical ranges with the exception of *cis-1,2-dichloroethene* in MW-10B. *cis-1,2-dichloroethene* in MW-10B was detected at a concentration only minimally (less than 1.5 times) greater than the previous historical maximum concentration. The previous historical maximum was detected in the Fall of 2010. Review of historical data for *cis-1,2-dichloroethene* in MW-10B indicates parameter fluctuations since the previous historical maximum. LaBella will continue to evaluate this location during future sampling events.

### 5.2.2 Inorganic Parameters

The concentrations of inorganic analytes were reported below applicable regulatory values, with the exception of the results discussed below.

- *Arsenic* was reported above the 6NYCRR standard of 0.025 mg/L in one sample (MW-8B) at a concentration of 0.0283 mg/L.
- *Iron* was reported above the 6NYCRR standard of 0.3 mg/L in six samples (MW-7A, MW-8B, MW-10B, MW-12B, SEEP, and STREAM): exceedances ranged in concentration from 0.319 mg/L to 14.4 mg/L.
- *Manganese* was reported above the 6NYCRR standard of 0.3 mg/L in six samples (MW-7A, MW-7C, MW-8B, MW-10B, MW-12B, and SEEP): exceedances ranged in concentration from 2.16 mg/L to 9.25 mg/L.
- *Mercury* was reported above the 6NYCRR standard of 0.0007 mg/L in one sample (SEEP) at a concentration of 0.0033 mg/L.
- *Thallium* was reported above the 6NYCRR standard of 0.0005 mg/L in four samples (MW-7C, MW-10B, MW-12B, and SEEP): exceedances ranged in concentration from 0.0042 mg/L to 0.0052 mg/L.

Concentrations for these analytes were within historical ranges with the exception of mercury in the SEEP and thallium in MW-7C and MW-10B. These historical maximums represent the first

detections of mercury or thallium at the respective locations. LaBella will continue to monitor these locations during future sampling events for any indications of trends in these parameters.

### 5.2.3 Leachate Indicator Parameters

Leachate indicator parameters were reported below applicable 6NYCRR standards with the exception of the results discussed below.

- *Ammonia-Nitrogen* was reported above the 6NYCRR standard of 2.0 mg/L in three samples (MW-8B, MW-12B, and SEEP) at concentrations of 2.4 mg/L, 12.9 mg/L and 3.3 mg/L, respectively.
- *Total Phenols* was reported above the 6NYCRR standard of 0.001 mg/L in nine samples (MW-7A, MW-7C, MW-8B, MW-10B, MW-12B, MW-13, MW-14, SEEP and STREAM): exceedances ranges in concentration from 0.0011 mg/L to 0.0578 mg/L.

The concentrations for these analytes were all within historical ranges.

### 5.2.4 Comparison of Sampling Results

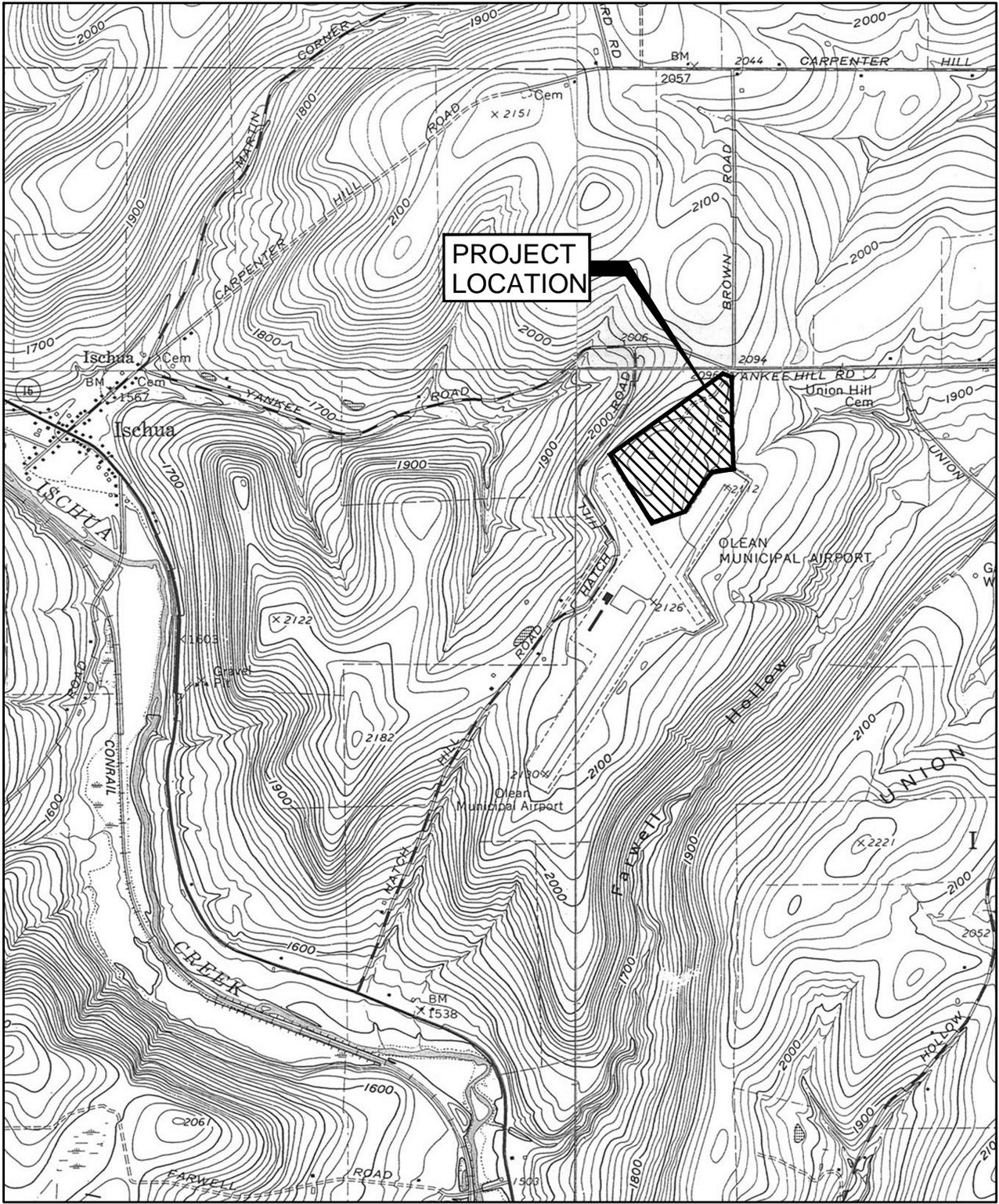
A tabular listing of the historical data associated with the permanent monitoring network is presented in Appendix D and includes historical data from September 1990 to the present for all monitoring points at the site. Included on each table is a mean concentration and current 6NYCRR groundwater standard for all analytes (both organic and inorganic) at each monitoring point. Historic exceedances of the water quality standards identified in the tables in Appendix D are related to the 6NYCRR standards in effect at the time of sampling, which may not be the standards currently in effect.

## 6.0 SUMMARY AND CONCLUSIONS

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The results of the Fall 2017 Monitoring Event appear generally consistent with the results from the previous sampling events at the site. The next semi-annual sampling event is scheduled for the Spring of 2018.

# FIGURES



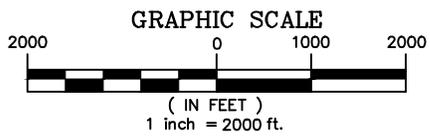
USGS QUADRANGLES – CUBA, FRANKLINVILLE,  
HINSDALE AND RAWSON, NEW YORK

ROAD CLASSIFICATION	
Heavy-duty	Light-duty
Medium-duty	Unimproved dirt
○ State Route	

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Associates, D.P.C.

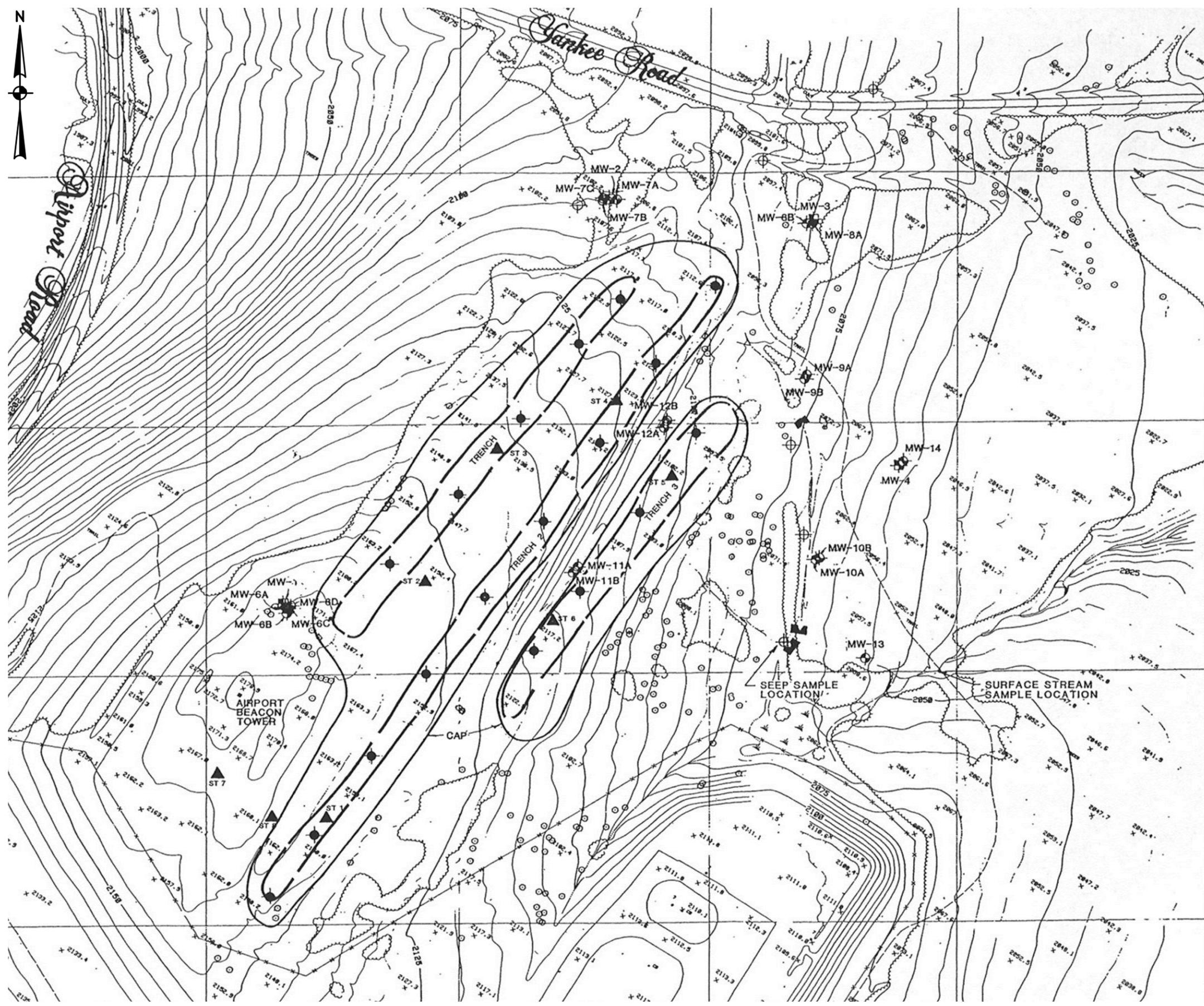
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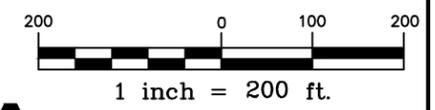


ISCHUA LANDFILL  
**FIGURE 1**  
SITE LOCATION MAP

File: I:\KHEDOS Architecture\2160147 - Ischua Landfill Fall Monitoring\Reports\Fall 2015\Figure 2 Site Map.DWG, Plot Date: 1/6/2016, By: BENKLEMAN, ANDREW, Plot Style: LABELLA.CTB



- LEGEND**
- ⊠ MONITORING WELL (URS)
  - ⊙ MONITORING WELL (EIL)
  - ⊕ SEEP
  - GAS WELL
  - CLAY CAP (APPROXIMATE)
  - TRENCH (APPROXIMATE)
  - ▲ SHELBY TUBE SOIL SAMPLE LOCATION
  - WEIR



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ISCHUA LANDFILL  
**FIGURE 2**  
 SITE BASE MAP AND  
 ENVIRONMENTAL MONITORING LOCATIONS

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# TABLES

Ischua Landfill  
Fall 2017  
Summary of Monitoring Well and  
Groundwater Depths

**TABLE 1**

Monitoring Well No.	Top of Casing Elevation	Depth to Well Bottom	Historical Elevations		Depth to Water	Elevation of Water	Compared to Last Event	Compared to Last Year
			Oct-16	Mar-17				
MW-6A	2173.1	17.19	NA	NA	NA	NA	NA	NA
MW-6D	2173.7	103.14	NA	2081.68	NA	NA	NA	NA
MW-7A	2109.3	11.64	2097.84	2105.19	8.60	2100.7	-4.49	2.86
MW-7C	2109.3	40.3	2071.63	2079.34	37.20	2072.10	-7.24	0.47
MW-8B	2089.6	28.65	2070.9	2075.65	16.00	2073.6	-2.05	2.70
MW-9B	2081.1	32.44	2049.20	2049.82	31.90	2049.20	-0.62	0.00
MW-10B	2066.2	33.63	2040.48	2045.67	24.70	2041.50	-4.17	1.02
MW-11B	2115.1	18.06	2098.2	2102.16	17.00	2098.1	-4.06	-0.10
MW-12A	2108.3	12.68	2095.75	2098.71	13.10	2095.2	-3.51	-0.55
MW-12B	2107.5	20.9	2088.45	2095.63	13.40	2094.1	-1.53	5.65
MW-13	2058.7	11.4	2054	2054.93	4.70	2054	-0.93	0.00
MW-14	2060.9	23.44	2042.2	2045.01	18.80	2042.1	-2.91	-0.10

Notes:

1. All measurements are in feet and the elevations are referenced to NAVD88 based on USGS "Ischua 1964".
2. The depth to the bottom of the monitoring well as well as the depth to water is measure from the from top of the riser pipe prior to purging the wells.



**Ischua Landfill  
Fall 2017  
Summary of Field Parameters**

**TABLE 2**

DOWN - GRADIENT MONITORING LOCATIONS																	
	Units	MW 6A	MW 6D	MW 7A	MW 7C	MW 8B	MW 9B	MW 10B	MW 11B*	MW 12A*	MW 12B	MW 13	MW 14	SEEP	STREAM	NYSDEC Part 703 Surface water and Groundwater Quality Standards	Units
Field Eh	mV	**	**	115.0	115.0	-60.0	-49.0	22.0	-11.0	-28.0	-9.0	8.0	-38.0	-100.0	-47.0		NA mV
Field pH	SU	**	**	7.22	7.22	6.74	7.04	7.12	7.16	7.20	7.02	7.11	6.83	7.06	7.07		6.5-8.5 SU
Field Specific Conductivity	mS/cm	**	**	0.453	0.534	0.270	0.368	0.439	0.200	0.449	0.757	0.356	0.315	0.434	0.265		NA mS/cm
Field Turbidity	NTU	**	**	41.0	5.86	35.0	229	15.6	107	219	87.2	17.7	25.0	28.5	46.0		5 NTU
Temperature	degC	**	**	11.89	11.55	17.24	13.7	18.7	11.7	11.8	13.38	16.58	16.12	17.96	15.38		NA degC
Dissolved Oxygen	mg/L	-	-	-	-	-	-	-	-	-	-	-	-	8.58	7.69		NA mg/L

.. = Indicates the parameter was not analyzed

\* = Indicates field parameter measurements were collected during purging due to insufficient water during sample collection

\*\* = Indicates field parameter measurements not collected due to insufficient water during sample collection

1.00 Value exceeds regulatory standard

**Ischua Landfill  
Fall 2017  
Groundwater and Surface Water Analysis Summary**

MONITORING LOCATIONS																			
CAS #	Units	MW 6A	MW 6D	MW 7A	MW 7C	MW 8B	MW 9B	MW 10B	MW 11B	MW 12A	MW 12B	MW 13	MW 14	SEEP 1	STREAM 1	Duplicate	NYSDEC Part 703 Surfacewater and Groundwater Quality Standards	Units	
Collection Date		10/18/2017	10/18/2017	10/18/2017	10/18/2017	10/18/2017	10/18/2017	10/18/2017	10/18/2017	10/18/2017	10/18/2017	10/18/2017	10/18/2017	10/18/2017	10/18/2017	10/18/2017			
18540-29-9	BOD5	mg/l	-	-	ND	1.0	3.5	-	2.4	-	-	6.0	1.0	1.0	15.1	1.0	1.0	NA mg/l	BOD5
	Color	Units	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15 Units	Color
	Hexavalent Chromium	mg/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.05 mg/l	Hexavalent Chromium
	Nitrate-Nitrogen	mg/l	-	-	0.580	0.044	0.062	-	0.042	-	-	1.40	0.067	0.550	ND	0.200	0.210	10 mg/l	Nitrate-Nitrogen
	Alkalinity	mg/CaCO3	-	-	243	292	241	-	392	-	-	483	191	282	231	134	120	NA mg/CaCO3	Alkalinity
	Chloride	mg/l	-	-	4.6	5.7	3.6	-	10.2	-	-	16.3	4.4	2.2	4.8	3.3	3.2	250 mg/l	Chloride
	COD	mg/l	-	-	111	18.2	39.4	-	35.2	-	-	73.3	11.9	24.6	33.0	14.0	14.0	NA mg/l	COD
	Ammonia-Nitrogen	mg/l	-	-	1.60	0.038	2.40	-	0.960	-	-	12.9	0.100	0.051	3.30	0.084	0.055	2 mg/l	Ammonia-Nitrogen
	Sulfate	mg/l	-	-	5.2	6.5	4.2	-	4.4	-	-	1.3	5.8	13.4	5.2	8.7	8.6	250 mg/l	Sulfate
	Total Cyanide	mg/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2 mg/l	Total Cyanide
7664-41-7	Total Dissolved Solids	mg/l	-	-	448	342	248	-	337	-	-	201	195	225	237	148	147	500 mg/l	Total Dissolved Solids
	Total Kjeldahl Nitrogen	mg/l	-	-	6.0	0.15	3.4	-	1.4	-	-	14.3	0.42	0.59	3.9	0.15	0.20	NA mg/l	Total Kjeldahl Nitrogen
	TOC	mg/l	-	-	5.5	1.6	5.9	5.8	3.9	14.6	24.9	19.5	3.4	4.5	5.9	4.9	4.7	NA mg/l	TOC
	Total Phenols	mg/l	-	-	0.0139	0.0011	0.0325	-	0.0065	-	-	0.0578	0.0016	0.0065	0.0172	0.0056	0.0025	0.001 mg/l	Total Phenols
	Aluminum	mg/l	-	-	0.853	ND	0.0473	-	ND	-	-	0.0282	ND	ND	0.056	0.233	0.147	NA mg/l	Aluminum
	Antimony by furnace method	mg/l	-	-	ND	ND	ND	-	ND	-	-	ND	ND	ND	ND	ND	ND	0.003 mg/l	Antimony by furnace method
	Arsenic by furnace method	mg/l	-	-	0.0095	ND	0.0283	-	0.0119	-	-	0.0095	ND	ND	0.020	ND	ND	0.025 mg/l	Arsenic by furnace method
	Barium	mg/l	-	-	0.614	0.239	0.111	-	0.0871	-	-	0.439	0.0166	0.0403	0.182	0.0153	0.0147	1 mg/l	Barium
	Beryllium	mg/l	-	-	ND	ND	ND	-	ND	-	-	ND	ND	ND	ND	ND	ND	0.003 mg/l	Beryllium
	7440-42-8	Boron	mg/l	-	-	0.0824	0.0187	0.0676	-	0.0530	-	-	0.1650	0.0600	0.0195	0.0811	0.0412	0.0411	1 mg/l
Cadmium		mg/l	-	-	ND	ND	ND	-	ND	-	-	ND	ND	ND	ND	ND	ND	0.005 mg/l	Cadmium
Calcium		mg/l	-	-	30.7	96.6	66.6	-	77.1	-	-	106	43.9	52.8	48.8	32.4	32.9	NA mg/l	Calcium
Chromium		mg/l	-	-	ND	ND	0.004	-	ND	-	-	0.0069	ND	ND	0.0036	ND	ND	0.05 mg/l	Chromium
Copper		mg/l	-	-	ND	ND	ND	-	ND	-	-	ND	ND	ND	ND	ND	ND	0.2 mg/l	Copper
Iron		mg/l	-	-	2.31	0.070	11.0	-	2.43	-	-	14.4	0.106	0.106	9.27	0.319	0.204	0.3 mg/l	Iron
Lead by furnace method		mg/l	-	-	0.0033	0.0036	0.0033	-	0.004	-	-	0.0035	ND	0.0013	ND	0.0014	ND	0.025 mg/l	Lead by furnace method
Magnesium		mg/l	-	-	6.07	15.3	9.89	-	23.9	-	-	20.8	11.9	13.0	14.7	9.45	9.62	35 mg/l	Magnesium
Manganese		mg/l	-	-	2.16	6.750	9.06	-	9.29	-	-	9.04	0.0609	0.0486	9.25	0.0819	0.0492	0.3 mg/l	Manganese
Mercury		mg/l	-	-	0.00016	0.00011	0.000073	-	0.000064	-	-	0.000064	0.000064	0.000066	0.00033	0.000066	0.000066	0.0007 mg/l	Mercury
7440-42-8	Nickel	mg/l	-	-	0.0052	0.0015	0.0057	-	0.0041	-	-	0.0063	0.0012	0.0012	0.000064	ND	ND	0.1 mg/l	Nickel
	Potassium	mg/l	-	-	21.6	2.57	5.7	-	3.56	-	-	7.42	1.04	2.18	4.4	2.47	2.48	NA mg/l	Potassium
	Selenium by furnace method	mg/l	-	-	ND	ND	ND	-	ND	-	-	ND	ND	ND	ND	ND	ND	0.01 mg/l	Selenium by furnace method
	Silver	mg/l	-	-	ND	ND	ND	-	ND	-	-	ND	ND	ND	ND	ND	ND	0.05 mg/l	Silver
	Sodium	mg/l	-	-	4.74	6.53	4.71	-	8.83	-	-	14.5	10.2	8.54	6.04	3.52	3.6	20 mg/l	Sodium
	Thallium by furnace method	mg/l	-	-	ND	0.0052	ND	-	0.0049	-	-	0.0044	ND	ND	0.0042	ND	ND	0.0005 mg/l	Thallium by furnace method
	Zinc	mg/l	-	-	0.0081	0.0495	0.021	-	0.0074	-	-	0.0087	0.0225	0.0075	0.0028	0.0027	0.0021	2 mg/l	Zinc
	Calculated Hardness	mg/l CaCO3	-	-	96	310	250	-	300	-	-	520	150	190	250	116	120	NA mg/l CaCO3	Calculated Hardness

"-" - Indicates the parameter was not analyzed

ND - Indicates the value is less than the method detection limit

1.00 Value exceeds regulatory standard

1. Regulatory values are from the 6NYCRR PART 703.5 Water Quality Regulations for Groundwater as amended in April 1999. For parameters for which a standard is not adopted, the guidance values presented in the NYSDEC June 1998 Technical and Operational Guidance Series (TOGS) 1.1.1 were utilized.

		MONITORING LOCATIONS																	
		Units	MW 6A	MW 6D	MW 7A	MW 7C	MW 8B	MW 9B	MW 10B	MW 11B	MW 12A	MW 12B	MW 13	MW 14	SEEP <sup>1</sup>	STREAM <sup>1</sup>	Duplicate	NYSDEC Part 703 Surfacewater and Groundwater Quality Standards	Units
Acetone	67-64-1	ug/l	-	-	ND	ND	ND	ND	ND	-	48.3	ND	ND	ND	ND	ND	ND	50.0 ug/l	Acetone
Acrylonitrile	107-13-1	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	Acrylonitrile
Benzene	71-43-2	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	10.5	ND	ND	ND	ND	ND	1.0 ug/l	Benzene
Bromobenzene	74-97-5	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	Bromobenzene
Bromochloromethane	75-27-4	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	Bromochloromethane
Bromodichloromethane	75-25-2	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	50.0 ug/l	Bromodichloromethane
Bromoform	75-15-0	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	50.0 ug/l	Bromoform
Bromomethane	56-23-5	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	Bromomethane
2-Butanone	108-90-7	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	50.0 ug/l	2-Butanone
n-Butylbenzene	75-00-3	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	n-Butylbenzene
sec-Butylbenzene	67-66-3	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	sec-Butylbenzene
tert-Butylbenzene	124-48-1	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	tert-Butylbenzene
Carbon disulfide	96-12-8	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	60.0 ug/l	Carbon disulfide
Carbon tetrachloride	106-96-4	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	Carbon tetrachloride
Chlorobenzene	95-50-1	ug/l	-	-	ND	ND	8.9	ND	ND	-	ND	16.9	ND	ND	ND	ND	ND	5.0 ug/l	Chlorobenzene
Chloroethane	106-45-	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	Chloroethane
Chloroform		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	7.0 ug/l	Chloroform
Chloromethane		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	Chloromethane
2-Chlorotoluene		ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	2-Chlorotoluene
4-Chlorotoluene		ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	4-Chlorotoluene
Dibromochloromethane		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	50.0 ug/l	Dibromochloromethane
1,2-Dibromo-3-chloropropane		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	0.04 ug/l	1,2-Dibromo-3-chloropropane
1,2-Dibromoethane		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	1,2-Dibromoethane
Dibromomethane		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	Dibromomethane
1,2-Dichlorobenzene		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	3.0 ug/l	1,2-Dichlorobenzene
1,3-Dichlorobenzene		ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.0 ug/l	1,3-Dichlorobenzene
1,4-Dichlorobenzene		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	5.5	ND	ND	ND	ND	ND	3.0 ug/l	1,4-Dichlorobenzene
trans-1,4-Dichloro-2-butene		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	trans-1,4-Dichloro-2-butene
Dichlorodifluoromethane		ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	Dichlorodifluoromethane
1,1-Dichloroethane	110-57-6	ug/l	-	-	ND	ND	ND	ND	18.1	-	ND	5.1	ND	ND	ND	ND	ND	5.0 ug/l	1,1-Dichloroethane
1,2-Dichloroethane	107-06-2	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	0.6 ug/l	1,2-Dichloroethane
1,1-Dichloroethene		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	1,1-Dichloroethene
cis-1,2-Dichloroethene		ug/l	-	-	ND	ND	17.3	ND	62.3	-	ND	ND	ND	ND	11.7	ND	ND	5.0 ug/l	cis-1,2-Dichloroethene
trans-1,2-Dichloroethene		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	trans-1,2-Dichloroethene
1,2-Dichloropropane		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	1.0 ug/l	1,2-Dichloropropane
1,3-Dichloropropane		ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	1,3-Dichloropropane
2,2-Dichloropropane		ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	2,2-Dichloropropane
1,1-Dichloropropene		ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	1,1-Dichloropropene
cis-1,3-Dichloropropene		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	0.4 ug/l	cis-1,3-Dichloropropene
trans-1,3-Dichloropropene	1006-01-5	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	0.4 ug/l	trans-1,3-Dichloropropene
Ethylbenzene	100-41-4	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	Ethylbenzene
2-Hexanone	591-78-6	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	50.0 ug/l	2-Hexanone
Hexachlorobutadiene	74-83-9	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5 ug/l	Hexachlorobutadiene
Iodomethane	74-87-3	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	Iodomethane
Isopropylbenzene	74-95-3	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	Isopropylbenzene
p-Isopropyltoluene	75-09-02	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	p-Isopropyltoluene
Methylene chloride	78-93-3	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	Methylene chloride
4-Methyl-2-pentanone	108-10-1	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	NA ug/l	4-Methyl-2-pentanone
Naphthalene		ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.0 ug/l	Naphthalene
n-Propylbenzene		ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	n-Propylbenzene
Styrene	100-42-5	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	Styrene
1,1,1,2-Tetrachloroethane	630-20-6	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	1,1,2,2-Tetrachloroethane
Tetrachloroethene	127-18-4	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	Tetrachloroethene
Toluene	108-88-3	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	Toluene
1,2,3-Trichlorobenzene	96-18-4	ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene		ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	1,2,4-Trichlorobenzene
1,1,1-Trichloroethane		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	1,1,1-Trichloroethane
1,1,2-Trichloroethane		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	1.0 ug/l	1,1,2-Trichloroethane
Trichloroethene		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	Trichloroethene
Trichlorofluoromethane		ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	Trichlorofluoromethane
1,2,3-Trichloropropane	96-18-4	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	0.04 ug/l	1,2,3-Trichloropropane
1,2,4-Trimethylbenzene		ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene		ug/l	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.0 ug/l	1,3,5-Trimethylbenzene
Vinyl acetate	108-05-4	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	NA ug/l	Vinyl acetate
Vinyl chloride	75-01-4	ug/l	-	-	ND	ND	7.3	ND	8.8	-	ND	ND	ND	ND	ND	ND	ND	2.0 ug/l	Vinyl chloride
o-Xylene	1330-20-7	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	o-Xylene
p-Xylene & m-Xylene	1330-20-7	ug/l	-	-	ND	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	5.0 ug/l	p-Xylene & m-Xylene

"-" - Indicates the parameter was not analyzed

ND - Indicates the value is less than the method detection limit

1.00 Value exceeds regulatory standard

# APPENDIX A

## Field Sampling Logs



# WELL DEVELOPMENT/ PURGE & SAMPLING LOG

WELL ID: **MW-6A**

Project Name: Ischua Landfill [City of Olean]  
Project Location: Airport Road, Town of Ischua, New York

Project No: 2160974  
Sampling Event: Fall 2017 - Routine  
Date: 10/17/2017

**Development / Purge Information:** [All measurements to Top of Well Riser; Riser I.D. (in): 2 [Volume Conversion = 0.16]

Visible Well Damage/Comments: NONE

Well Depth (ft): **17.19** Water Level (ft): **DRY** Height of Water Column (ft):

1 Well Volume [WV] (gal): 3 WV (gal): 5 WV (gal): [Not Applicable]

Method of Purging: **Dedicated Bailer X** / Other:

**Purge X** Field Parameters Start Time:

Vol (gal)/WV	Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	[Totalizer Start= gal] Characteristics
Initial / 0						
/ 1						
/ 2						
/ 3						

Total Volume Purged (gal): Complete Time: Water Level (ft):

**Sampling Information:** Date: 10/ /2017

Sample Time: Water Level(ft): Sample Analysis: **Routine Event / No. of Bottles:**

Sampling Method : **Dedicated Bailer- All** / **Manual grab w/-** Sample Containers **X** ; S/S Pitcher

### Sample Field Parameters

Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics

Other Comments: This well typically does not contain much water and may not be enough for a full bottle set.

**X** Purger's / **X** Sampler's Name(s) and Initials: JLD & SD



# WELL DEVELOPMENT/ PURGE & SAMPLING LOG

WELL ID: **MW-6D**

Project Name: Ischua Landfill [City of Olean]  
Project Location: Airport Road, Town of Ischua, New York

Project No: 2160974  
Sampling Event: Fall 2017 - Routine  
Date: 10/17/2017

**Development / Purge Information:** [All measurements to Top of Well Riser; Riser I.D. (in): 2 [Volume Conversion = 0.16]

Visible Well Damage/Comments: NONE \_\_\_\_\_

(Note: water measuring tape only goes to 101.2 feet)

Well Depth (ft): **103.14** Water Level (ft): dry Height of Water Column (ft): \_\_\_\_\_

1 Well Volume [WV] (gal): \_\_\_\_\_ 3 WV (gal): \_\_\_\_\_ 5 WV (gal): [Not Applicable]

Method of Purging: **Dedicated Bailer X** / Other: \_\_\_\_\_

**Purge X** Field Parameters Start Time: \_\_\_\_\_

Vol (gal)/WV	Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	[Totalizer Start= _____ gal] Characteristics
Initial / 0						
1		<u>DRY</u>				
/ 2						
/ 3						

Total Volume Purged (gal): \_\_\_\_\_ Complete Time: \_\_\_\_\_ Water Level (ft): \_\_\_\_\_

**Sampling Information:** Date: 10/17/2017

Sample Time: \_\_\_\_\_ Water Level(ft): \_\_\_\_\_ Sample Analysis: **Routine Event/No. of Bottles:**

Sampling Method : **Dedicated Bailer- All** / **Manual grab w/-** Sample Containers X ; S/S Pitcher \_\_\_\_\_

### Sample Field Parameters

Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics
		<u>DRY</u>			

Other Comments:

X Purger's / X Sampler's Name(s) and Initials: JLD & SD



# WELL DEVELOPMENT/ PURGE & SAMPLING LOG

WELL ID: **MW-7A**

Project Name: Ischua Landfill [City of Olean]  
Project Location: Airport Road, Town of Ischua, New York

Project No: 2160974  
Sampling Event: Fall 2017 - Routine  
Date: 10/17/2017

**Development / Purge Information:** [All measurements to Top of Well Riser; Riser I.D. (in): 2 [Volume Conversion = 0.16]

Visible Well Damage/Comments: NONE

Well Depth (ft): **11.64**      Water Level (ft): **8.60**      Height of Water Column (ft): **3.04**

1 Well Volume [WV] (gal): **0.486**      3 WV (gal): **1.459**      5 WV (gal): [Not Applicable]

Method of Purging: **Dedicated Bailer**  / Other: \_\_\_\_\_

**Purge**  **Field Parameters**      Start Time: **1130**

Vol (gal)/WV	Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	[Totalizer Start= _____ gal] Characteristics
Initial / 0	152	7.21	11.60	0.236	88.3	Turbid - orange tint
0.5 / 1	129	7.19	11.76	0.289	1000	Turbid
1/2						
1/3						

Total Volume Purged (gal): **0.6**      Complete Time: **1140**      Water Level (ft): **-**

**Sampling Information:** Date: 10/18/2017

Sample Time: **945**      Water Level(ft): **-**      Sample Analysis: **Routine Event/No. of Bottles: 9**

Sampling Method : **Dedicated Bailer- All** / **Manual grab w/-** Sample Containers  ; S/S Pitcher \_\_\_\_\_

### Sample Field Parameters

Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics
<b>115</b>	<b>7.22</b>	<b>11.89</b>	<b>0.453</b>	<b>41.0</b>	<b>Clear</b>

Other Comments:

Purger's /  Sampler's Name(s) and Initials: **JLD & SD**



# WELL DEVELOPMENT/ PURGE & SAMPLING LOG

WELL ID: **MW-7C**

Project Name: Ischua Landfill [City of Olean]  
Project Location: Airport Road, Town of Ischua, New York

Project No: 2160974  
Sampling Event: Fall 2017 - Routine  
Date: 10/17/2017

**Development / Purge Information:** [All measurements to Top of Well Riser; Riser I.D. (in): 2 [Volume Conversion = 0.16]

Visible Well Damage/Comments: NONE

Well Depth (ft): 40.30 Water Level (ft): 37.2 Height of Water Column (ft): 3.1

1 Well Volume [WV] (gal): 0.496 3 WV (gal): 1.48 5 WV (gal): [Not Applicable]

Method of Purging: Dedicated Bailer  / Other: \_\_\_\_\_

**Purge**  **Field Parameters** Start Time: 1100

Vol (gal)/WV	Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	[Totalizer Start= _____ gal] Characteristics
Initial / 0	217	7.29	8.77	0.590	19.6	clear
0.5 / 1	169	7.25	8.90	0.589	48.3	slightly turbid
1.0 / 2	143	7.24	8.94	0.585	47.1	" "
1.5 / 3	140	7.05	8.91	0.586	77.1	

Total Volume Purged (gal): 1.5 Complete Time: 1120 Water Level (ft): \_\_\_\_\_

**Sampling Information:** Date: 10/18/2017

Sample Time: 930 Water Level(ft): - Sample Analysis: **Routine Event/No. of Bottles:** 9

Sampling Method : **Dedicated Bailer-** All / **Manual grab w/-** Sample Containers X ; S/S Pitcher \_\_\_\_\_

### Sample Field Parameters

Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics
<u>115</u>	<u>7.22</u>	<u>11.55</u>	<u>0.534</u>	<u>5.86</u>	<u>clear</u>

Other Comments:  
Must be given time to recover. Wait well

Purger's /  Sampler's Name(s) and Initials: JLD & SD



# WELL DEVELOPMENT/ PURGE & SAMPLING LOG

WELL ID: **MW-8B**

Project Name: Ischua Landfill [City of Olean]  
Project Location: Airport Road, Town of Ischua, New York

Project No: 2160974  
Sampling Event: Fall 2017 - Routine  
Date: 10/17/2017

**Development / Purge Information:** [All measurements to Top of Well Riser; Riser I.D. (in): 2 [Volume Conversion = 0.16]

Visible Well Damage/Comments: NONE

Well Depth (ft): 25.65 Water Level (ft): 16.00 Height of Water Column (ft): 9.65

1 Well Volume [WV] (gal): 1.544 3 WV (gal): 4.632 5 WV (gal): [Not Applicable]

Method of Purging: **Dedicated Bailer**  / Other: \_\_\_\_\_

**Purge**  **Field Parameters** Start Time: 1444

Vol (gal)/WV	Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	[Totalizer Start= _____ gal] Characteristics
Initial / 0	0	7.06	13.31	.404	23.1	
1.54 1	-9	7.06	12.87	.460	144	
3.08 2	-10	7.09	12.04	.552	144	
4.62 3	-24	7.02	11.30	.561	76.3	

Total Volume Purged (gal): 4.632 Complete Time: 1500 Water Level (ft): -

**Sampling Information:** Date: 10/18/2017

Sample Time: 1430 Water Level(ft): - Sample Analysis: **Routine Event/No. of Bottles: 9**

Sampling Method : **Dedicated Bailer**- All / **Manual grab w/-** Sample Containers X ; S/S Pitcher \_\_\_\_\_

### Sample Field Parameters

Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics
-60	6.74	17.24	.270	35	

Other Comments:

Purger's /  Sampler's Name(s) and Initials: JLD & SD



# WELL DEVELOPMENT/ PURGE & SAMPLING LOG

WELL ID: **MW-9B**

Project Name: Ischua Landfill [City of Olean]  
Project Location: Airport Road, Town of Ischua, New York

Project No: 2160974  
Sampling Event: Fall 2017 - Routine  
Date: 10/17/2017

**Development / Purge Information:** [All measurements to Top of Well Riser; Riser I.D. (in): 2 [Volume Conversion = 0.16]

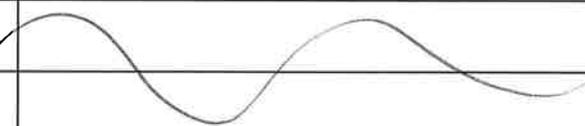
Visible Well Damage/Comments: NONE

Well Depth (ft): **32.43** Water Level (ft): **31.9** Height of Water Column (ft): **0.53**

1 Well Volume [WV] (gal): **0.085** 3 WV (gal): **0.254** 5 WV (gal): [Not Applicable]

Method of Purging: **Dedicated Bailer X** / Other: \_\_\_\_\_

**Purge X** Field Parameters Start Time: **1310**

Vol (gal)/WV	Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	[Totalizer Start= _____ gal] Characteristics
Initial / 0	20	6.37	13.8	0.295	390	Turbid
0.08/1	19	6.53	12.1	0.298	393	" "
12 13		DRY @		0.54 gal		

Total Volume Purged (gal): **0.54** Complete Time: **1325** Water Level (ft): **-**

**Sampling Information:** Date: 10/18/2017

Sample Time: **1110** Water Level(ft): **-** Sample Analysis: **Routine Event/No. of Bottles: 8**

Sampling Method : **Dedicated Bailer- All** / **Manual grab w/-** Sample Containers **X** ; S/S Pitcher \_\_\_\_\_

### Sample Field Parameters

Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics
<b>49</b>	<b>7.04</b>	<b>13.70</b>	<b>0.368</b>	<b>229</b>	

Other Comments: **only got - vocs  
TOLs**

Purger's /  Sampler's Name(s) and Initials: **JLD & SD**



# WELL DEVELOPMENT/ PURGE & SAMPLING LOG

WELL ID: **MW-10B**

Project Name: Ischua Landfill [City of Olean]  
Project Location: Airport Road, Town of Ischua, New York

Project No: 2160974  
Sampling Event: Fall 2017 - Routine  
Date: 10/17/2017

**Development / Purge Information:** [All measurements to Top of Well Riser; Riser I.D. (in): 2 [Volume Conversion = 0.16]

Visible Well Damage/Comments: NONE

Well Depth (ft): 33.69      Water Level (ft): 24.7      Height of Water Column (ft): 8.99

1 Well Volume [WV] (gal): 1.44      3 WV (gal): 4.315      5 WV (gal): [Not Applicable]

Method of Purging: **Dedicated Bailer**  / Other: \_\_\_\_\_

**Purge**  **Field Parameters**      Start Time: 1330

Vol (gal)/WV	Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	[Totalizer Start= _____ gal] Characteristics
Initial / 0	-36	7.23	12.81	0.498	133	Turbid - slightly
1.44/1	4	7.20	12.02	0.525	85.3	" "
2.88/2	-12	7.11	11.51	0.592	86.5	" "
4.32/3	-1	7.11	11.45	0.603	119	" "

Total Volume Purged (gal): 4.32      Complete Time: 1355      Water Level (ft): -

**Sampling Information:** Date: 10/18/2017

Sample Time: 1145      Water Level(ft): -      Sample Analysis: **Routine Event/No. of Bottles:** 27

Sampling Method : **Dedicated Bailer-**  **All** / **Manual grab w/-**  Sample Containers  ; S/S Pitcher

### Sample Field Parameters

Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics
<u>22</u>	<u>7.12</u>	<u>18.74</u>	<u>0.435</u>	<u>15.6</u>	

Other Comments: MS/MSD here

Purger's /  Sampler's Name(s) and Initials: JLD & SD



# WELL DEVELOPMENT/ PURGE & SAMPLING LOG

WELL ID: **MW-11B**

Project Name: Ischua Landfill [City of Olean]  
Project Location: Airport Road, Town of Ischua, New York

Project No: 2160974  
Sampling Event: Fall 2017 - Routine  
Date: 10/17/2017

**Development / Purge Information:** [All measurements to Top of Well Riser; Riser I.D. (in): 2 [Volume Conversion = 0.16]

Visible Well Damage/Comments: NONE

Well Depth (ft): 18.07 Water Level (ft): 17.0 Height of Water Column (ft): 1.07

1 Well Volume [WV] (gal): 0.171 3 WV (gal): 0.514 5 WV (gal): [Not Applicable]

Method of Purging: **Dedicated Bailer**  / Other: \_\_\_\_\_

**Purge**  **Field Parameters** Start Time: 1150

Vol (gal)/WV	Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	[Totalizer Start= _____ gal] Characteristics
Initial / 0	-11	7.16	11.65	0.200	107	Turbid
1 / 1						
1 / 2						
1 / 3						

Total Volume Purged (gal): 0.2 Complete Time: 1155 Water Level (ft): -

**Sampling Information:** Date: 10/18/2017

Sample Time: 1020 Water Level(ft): - Sample Analysis: **Routine Event/No. of Bottles: 2**

Sampling Method : **Dedicated Bailer-**  **All** / **Manual grab w/-** Sample Containers  ; S/S Pitcher \_\_\_\_\_

### Sample Field Parameters

Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics
<u>not enough volume for field parameters</u>					

Other Comments:  
Wait well. Should be Purged *well* before sampling. - only got TBCs

Purger's /  Sampler's Name(s) and Initials: JLD & SD



# WELL DEVELOPMENT/ PURGE & SAMPLING LOG

WELL ID: **MW-12A**

Project Name: Ischua Landfill [City of Olean]  
Project Location: Airport Road, Town of Ischua, New York

Project No: 2160974  
Sampling Event: Fall 2017 - Routine  
Date: 10/17/2017

**Development / Purge Information:** [All measurements to Top of Well Riser; Riser I.D. (in): 2 [Volume Conversion = 0.16]

Visible Well Damage/Comments: NONE

Well Depth (ft): <sup>13.6</sup>**12.68** Water Level (ft): **13.1** Height of Water Column (ft): **0.5**

1 Well Volume [WV] (gal): **0.08** 3 WV (gal): **0.24** 5 WV (gal): [Not Applicable]

Method of Purging: **Dedicated Bailer X** / Other: \_\_\_\_\_

**Purge X** Field Parameters Start Time: **1200**

Vol (gal)/WV	Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	[Totalizer Start= _____ gal] Characteristics
Initial / 0	-28	7.20	11.8	0.449	219	Turbid
11						
12						
13						

Total Volume Purged (gal): **0.6** Complete Time: **1210** Water Level (ft): **-**

**Sampling Information:** Date: 10/18/2017

Sample Time: **1035** Water Level(ft): **-** Sample Analysis: **Routine Event/No. of Bottles: 3**

Sampling Method : **Dedicated Bailer- All** / **Manual grab w/-** Sample Containers **X** ; S/S Pitcher \_\_\_\_\_

### Sample Field Parameters

Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics
<b>Not enough volume for field parameters</b>					

Other Comments:  
Wait well due to turbidity **only got - TOCs**  
**- 1 - use val**

Purger's /  Sampler's Name(s) and Initials: **JLD & SD**



# WELL DEVELOPMENT/ PURGE & SAMPLING LOG

WELL ID: **MW-12B**

Project Name: Ischua Landfill [City of Olean]  
Project Location: Airport Road, Town of Ischua, New York

Project No: 2160974  
Sampling Event: Fall 2017 - Routine  
Date: 10/17/2017

**Development / Purge Information:** [All measurements to Top of Well Riser; Riser I.D. (in): 2 [Volume Conversion = 0.16]

Visible Well Damage/Comments: NONE

Well Depth (ft): **20.90** Water Level (ft): **13.4** Height of Water Column (ft): **7.2**

1 Well Volume [WV] (gal): **1.152** 3 WV (gal): **3.45** 5 WV (gal): [Not Applicable]

Method of Purging: Dedicated Bailer  / Other:

**Purge**  **Field Parameters** Start Time: **1215**

Vol (gal)/WV	Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	[Totalizer Start= _____ gal] Characteristics
Initial / 0	-76	6.82	12.43	0.377	165	Turbid - orange tint
1.2/1	-54	7.13	12.17	0.899	175	" "
2.4/2	-85	6.93	12.21	0.820	139	" "
<b>3.45</b> / 3	-76	7.14	12.32	0.953	197	" "

Total Volume Purged (gal): **3.45** Complete Time: **1240** Water Level (ft): **-**

**Sampling Information:** Date: 10/18/2017

Sample Time: **1045** Water Level(ft): **-** Sample Analysis: **Routine Event/No. of Bottles: 9**

Sampling Method : **Dedicated Bailer- All** / **Manual grab w/-** Sample Containers  ; S/S Pitcher

### Sample Field Parameters

Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics
<b>-9</b>	<b>7.02</b>	<b>13.38</b>	<b>0.757</b>	<b>*87.2</b>	<b>Slightly turbid</b>

Other Comments:

**\* NOT representative of Metals samples**

Purger's /  Sampler's Name(s) and Initials: JLD & SD



# WELL DEVELOPMENT/ PURGE & SAMPLING LOG

WELL ID: **MW-13**

Project Name: Ischua Landfill [City of Olean]  
Project Location: Airport Road, Town of Ischua, New York

Project No: 2160974  
Sampling Event: Fall 2017 - Routine  
Date: **10/17/2017**

**Development / Purge Information:** [All measurements to Top of Well Riser; Riser I.D. (in): 2 [Volume Conversion = 0.16]

Visible Well Damage/Comments: NONE

Well Depth (ft): **11.44** Water Level (ft): **4.7** Height of Water Column (ft): **6.74**

1 Well Volume [WV] (gal): ~~6.58~~ **1.07** 3 WV (gal): ~~19.74~~ **8.23** 5 WV (gal): [Not Applicable]

Method of Purging: Dedicated Bailer  / Other: \_\_\_\_\_

**Purge**  **Field Parameters** Start Time: **1410**

Vol (gal)/WV	Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	[Totalizer Start=_____ gal] Characteristics
Initial / 0	0	7.08	12.37	.520	227	
1.07 / 1	44	7.08	14.35	.366	227	
2.14 / 2	31	6.97	13.44	.385	347	
3.23 / 3						

Total Volume Purged (gal): **2.15** Complete Time: **1430** Water Level (ft): **—**

**Sampling Information:** Date: **10/18/2017**

Sample Time: **1320** Water Level(ft): **—** Sample Analysis: **Routine Event/No. of Bottles: 9**

Sampling Method : **Dedicated Bailer- All** / **Manual grab w/-** Sample Containers  ; S/S Pitcher \_\_\_\_\_

### Sample Field Parameters

Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics
<b>8.00</b>	<b>7.11</b>	<b>16.58</b>	<b>0.356</b>	<b>17.7</b>	<b>Clear</b>

Other Comments:  
Requires some wait time after purging.

Purger's /  Sampler's Name(s) and Initials: **JLD & SD**



# WELL DEVELOPMENT/ PURGE & SAMPLING LOG

WELL ID: **MW-14**

Project Name: Ischua Landfill [City of Olean]  
Project Location: Airport Road, Town of Ischua, New York

Project No: 2160974  
Sampling Event: Fall 2017- Routine  
Date: **10/17/2017**

**Development / Purge Information:** [All measurements to Top of Well Riser; Riser I.D. (in): 2 [Volume Conversion = 0.16]

Visible Well Damage/Comments: NONE

Well Depth (ft): **23.45** Water Level (ft): **18.8** Height of Water Column (ft): **4.65**

1 Well Volume [WV] (gal): **0.744** 3 WV (gal): **2.232** 5 WV (gal): [Not Applicable]

Method of Purging: Dedicated Bailer  / Other: \_\_\_\_\_

**Purge**  **Field Parameters** Start Time: **14:30**

Vol (gal)/WV	Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	[Totalizer Start= _____ gal] Characteristics
Initial / 0	<b>32</b>	<b>6.92</b>	<b>14.33</b>	<b>0.320</b>	<b>0</b>	
/ 1		<b>dry @ 0.6</b>				
/ 2						
/ 3						

Total Volume Purged (gal): **0.6** Complete Time: **1440** Water Level (ft): **-**

**Sampling Information:** Date: **10/18/2017**

Sample Time: **1410** Water Level(ft): **-** Sample Analysis: **Routine Event/No. of Bottles: 9**

Sampling Method : **Dedicated Bailer- All** / **Manual grab w/-** Sample Containers  ; S/S Pitcher \_\_\_\_\_

### Sample Field Parameters

Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics
<b>-33</b>	<b>6.83</b>	<b>16.12</b>	<b>0.315</b>	<b>25</b>	<b>clear</b>

Other Comments:  
Wait well- very slow recharge rate. Must come back several times to obtain samples. Well casing is often full of bees.

Purger's /  Sampler's Name(s) and Initials: **JLD & SD**



# WELL DEVELOPMENT/ PURGE & SAMPLING LOG

WELL ID: **SEEP**

Project Name: Ischua Landfill [City of Olean]  
Project Location: Airport Road, Town of Ischua, New York

Project No: 2160974  
Sampling Event: Fall 2017 - Routine  
Date: 10/18/2017

Purge not required on this sample- Surface water

**Sampling Information:** Date: 10/18/2017

Sample Time: 1300 Water Level(ft): - Sample Analysis: **Baseline Event/No. of Bottles: 9**

Sampling Method : **Dedicated Bailer-** All / **Manual grab w/-** Sample Containers X ; S/S Pitcher     

### Sample Field Parameters

Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics [For SW & SEEP Only: D.O. = <u>8.58</u> mg/L]
<u>-100</u>	<u>7.06</u>	<u>17.96</u>	<u>0.434</u>	<u>28.5</u>	<u>clear</u>

Other Comments:

X Purger's / X Sampler's Name(s) and Initials: JLD & SD



# WELL DEVELOPMENT/ PURGE & SAMPLING LOG

WELL ID: **STREAM**

Project Name: Ischua Landfill [City of Olean]  
Project Location: Airport Road, Town of Ischua, New York

Project No: 2160974  
Sampling Event: Fall 2017 - Routine  
Date: 10/18/2017

Purge not required on this sample- Surface water

**Sampling Information:** Date: 10/18/2017

Sample Time: 1345 Water Level(ft): \_\_\_\_\_ Sample Analysis: **Routine Event/No. of Bottles:** \_\_\_\_\_

Sampling Method : **Dedicated Bailer-** All / **Manual grab w/-** Sample Containers X ; S/S Pitcher \_\_\_\_\_

### Sample Field Parameters

Eh (mV)	pH (SU)	Temp. (°C)	Cond. (mS/cm)	Turb. (NTU)	Characteristics [For SW & SEEP Only: D.O. = <u>7.69</u> mg/L]
<u>47</u>	<u>7.07</u>	<u>15.33</u>	<u>.208</u>	<u>46</u>	

Other Comments: DUP-TOC 1330

X Purger's / X Sampler's Name(s) and Initials: JLD & SD

# APPENDIX B

## Chain-of-Custody

WO#: 7033515



**CHAIN-OF-CUSTODY / Analytical Request Document**

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2  
 Attention: Same  
 Company Name: Same  
 Address: 2203018

REGULATORY AGENCY  
 NPDES  GROUND WATER  DRINKING WATER  
 UST  RCRA  OTHER

Section C  
 Invoice Information:  
 Report To: Andrew Benkman  
 Copy To: abenkman@labella.com  
 Project Name: Schua LF  
 Project Number: 2100974

Company: Labella Associates  
 Address: 300 Pearl Street  
Buffalo, NY 14202  
 Email To: jdombrowski@labella.com  
 Phone: 716-851-1116 / 716-851-6282  
 Fax: 716-851-6281  
 Requested Due Date/TA: 10/28/17

Section D  
 Required Client Information  
 Matrix Codes  
 MATRIX\_CODE  
 Drinking Water: DW  
 Water: WT  
 Waste Water: WW  
 Product: P  
 Soil/Solid: SL  
 CIL: OL  
 Wipe: WP  
 Air: AR  
 Tissue: TS  
 Other: OT

ITEM #	SAMPLE ID (A-Z, 0-9 / -)	Matrix Codes	MATRIX CODE	SAMPLE TYPE (see valid codes to left)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test ↑	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
					COMPOSITE	EMERGENCY							
1	MW-7C		G	G	10/17/17	980	9						001
2	MW-7A		G	G	10/17/17	945	9						002
3	MW-11B		G	G	10/17/17	1020	2						003
4	MW-12A		G	G	10/17/17	1045	3						004
5	MW-12B		G	G	10/17/17	1045	5						005
6	MW-9B		G	G	10/17/17	1110	5						006
7	TRIP Blank												007
8	MW-10B		G	G	10/17/17	1145	7						MS1400 hura
9	SEEP		G	G	10/17/17	1300	9						009
10	MW-13		G	G	10/17/17	1320	9						010
11	STREAM		G	G	10/17/17	1345	9						011
12	Dup		G	G	10/17/17	1320	9						012

RECEIVED BY / AFFILIATION: Jessica Dombrowski  
 DATE: 10/18/17  
 TIME: 9:10  
 SAMPLE CONDITIONS

TEMP IN °C: 27  
 Received on Ice (Y/N):  
 Custody Sealed Cooler (Y/N):  
 Samples Intact (Y/N):

SAMPLER NAME AND SIGNATURE  
 PRINT Name of SAMPLER: Jessica Dombrowski  
 SIGNATURE OF SAMPLER: Jessica Dombrowski  
 DATE Signed (MM/DD/YY): 10/18/17

ORIGINAL

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

**WO#: 7033515**

PM: JSA Due Date: 11/02/17  
 CLIENT: LBA-B

**CHAIN-OF-CUSTODY / Analytical Request Document**  
 The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section C  
 Invoice Information:

Report To: Andrew Benklevan  
 Copy To: abenklevan@labella.com  
 Purchase Order No.:  
 Project Name: Schwa LF  
 Project Number: 2160874

Company: Labella Associates  
 Address: 300 Pearl St  
 Buffalo, NY 14202  
 Email: T. Dombrowski@labella.com  
 Phone: 716-551-6281 Fax: 716-551-6282  
 Requested Due Date/TAT:

Attention: Same  
 Company Name:  
 Address:  
 Pace Quote Reference:  
 Pace Project Manager:  
 Pace Profile #:

REGULATORY AGENCY  
 NPDES  GROUND WATER  DRINKING WATER  
 UST  RCRA  OTHER

Site Location  
 STATE:

Page: 2 of 2  
 2203021

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	SAMPLE TYPE (G=GRAB C=COMP)		COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test ↑	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No. / Lab I.D.
			MATRIX / CODE	DATE	TIME	DATE							
1	MW-14	DW WT WW P SL OL WP AR TS OT	COMPOSITE START	DATE	TIME	DATE	TIME						013
2	MW-88	DW WT WW P SL OL WP AR TS OT	COMPOSITE END/GRAB	DATE	TIME	DATE	TIME						014
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													

ADDITIONAL COMMENTS: JESSICA DOMBROWSKI 10/18/17  
 Fed Ex

RELINQUISHED BY / AFFILIATION: Jessyca Dombrowski  
 DATE: 10/18/17  
 TIME: 940

ACCEPTED BY / AFFILIATION: Federico Danipper  
 DATE: 10/19/17  
 TIME: 940

Temp in °C: 2.7

Received on Ice (Y/N)  
 Custody Sealed Cooler (Y/N)  
 Samples Intact (Y/N)

DATE Signed (MM/DD/YY):  
 SIGNATURE OF SAMPLER:  
 PRINT Name of SAMPLER:  
 SAMPLER NAME AND SIGNATURE

\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

# APPENDIX C

## Analytical Laboratory Report

November 09, 2017

Andrew Benkleman  
LaBella Associates  
300 Pearl Street  
Suite 130  
Buffalo, NY 14201

RE: Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

Dear Andrew Benkleman:

Enclosed are the analytical results for sample(s) received by the laboratory on October 19, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jennifer Aracri  
jennifer.aracri@pacelabs.com  
(631)694-3040  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

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### Long Island Certification IDs

575 Broad Hollow Rd, Melville, NY 11747

New York Certification #: 10478 Primary Accrediting Body

New Jersey Certification #: NY158

Pennsylvania Certification #: 68-00350

Connecticut Certification #: PH-0435

Maryland Certification #: 208

Rhode Island Certification #: LAO00340

Massachusetts Certification #: M-NY026

New Hampshire Certification #: 2987

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## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** EPA 6010C

**Description:** 6010 MET ICP

**Client:** LaBella Associates

**Date:** November 09, 2017

### General Information:

10 samples were analyzed for EPA 6010C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 44690

B: Analyte was detected in the associated method blank.

- BLANK for HBN 44690 [MPRP/3520 (Lab ID: 209489)]
  - Aluminum
  - Iron
  - Zinc

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 44690

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7033515008

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 209492)
  - Manganese

### Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

### Additional Comments:

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** EPA 7470A

**Description:** 7470 Mercury

**Client:** LaBella Associates

**Date:** November 09, 2017

**General Information:**

10 samples were analyzed for EPA 7470A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

**Initial Calibrations (including MS Tune as applicable):**

All criteria were within method requirements with any exceptions noted below.

**Continuing Calibration:**

All criteria were within method requirements with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 44392

B: Analyte was detected in the associated method blank.

- BLANK for HBN 44392 [MERP/1566 (Lab ID: 208122)]
- Mercury

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** EPA 8260C/5030C

**Description:** 8260C Volatile Organics

**Client:** LaBella Associates

**Date:** November 09, 2017

### General Information:

13 samples were analyzed for EPA 8260C/5030C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

### Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

### Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

QC Batch: 43758

IH: This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.

- LCS (Lab ID: 204838)
  - Bromomethane
  - Trichlorofluoromethane

QC Batch: 43863

IH: This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.

- LCS (Lab ID: 205668)
  - Bromomethane
  - Trichlorofluoromethane
- MS (Lab ID: 205669)
  - Bromomethane
  - Trichlorofluoromethane
- MSD (Lab ID: 205670)
  - Bromomethane
  - Trichlorofluoromethane
- MW-10B (Lab ID: 7033515008)
  - Bromomethane

### Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

QC Batch: 43758

CL: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.

- BLANK (Lab ID: 204837)
  - 1,2-Dibromo-3-chloropropane
  - Chloroethane
  - Chloromethane
  - Vinyl chloride
- DUP (Lab ID: 7033515012)
  - 1,2-Dibromo-3-chloropropane
  - Chloroethane
  - Chloromethane

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** EPA 8260C/5030C

**Description:** 8260C Volatile Organics

**Client:** LaBella Associates

**Date:** November 09, 2017

QC Batch: 43758

CL: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.

- Vinyl chloride
- LCS (Lab ID: 204838)
  - 1,2-Dibromo-3-chloropropane
  - Chloroethane
  - Chloromethane
  - Vinyl chloride
- MW-12A (Lab ID: 7033515004)
  - 1,2-Dibromo-3-chloropropane
  - Chloroethane
  - Chloromethane
  - Vinyl chloride
- MW-12B (Lab ID: 7033515005)
  - 1,2-Dibromo-3-chloropropane
  - Chloroethane
  - Chloromethane
  - Vinyl chloride
- MW-13 (Lab ID: 7033515010)
  - 1,2-Dibromo-3-chloropropane
  - Chloroethane
  - Chloromethane
  - Vinyl chloride
- MW-14 (Lab ID: 7033515013)
  - 1,2-Dibromo-3-chloropropane
  - Chloroethane
  - Chloromethane
  - Vinyl chloride
- MW-7A (Lab ID: 7033515002)
  - 1,2-Dibromo-3-chloropropane
  - Chloroethane
  - Chloromethane
  - Vinyl chloride
- MW-7C (Lab ID: 7033515001)
  - 1,2-Dibromo-3-chloropropane
  - Chloroethane
  - Chloromethane
  - Vinyl chloride
- MW-8B (Lab ID: 7033515014)
  - 1,2-Dibromo-3-chloropropane
  - Chloroethane
  - Chloromethane
  - Vinyl chloride
- MW-9B (Lab ID: 7033515006)
  - 1,2-Dibromo-3-chloropropane
  - Chloroethane

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** EPA 8260C/5030C

**Description:** 8260C Volatile Organics

**Client:** LaBella Associates

**Date:** November 09, 2017

QC Batch: 43758

CL: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.

- Chloromethane
- Vinyl chloride
- SEEP (Lab ID: 7033515009)
  - 1,2-Dibromo-3-chloropropane
  - Chloroethane
  - Chloromethane
  - Vinyl chloride
- STREAM (Lab ID: 7033515011)
  - 1,2-Dibromo-3-chloropropane
  - Chloroethane
  - Chloromethane
  - Vinyl chloride
- TRIP BLANK (Lab ID: 7033515007)
  - 1,2-Dibromo-3-chloropropane
  - Chloroethane
  - Chloromethane
  - Vinyl chloride

QC Batch: 43863

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- LCS (Lab ID: 205668)
  - 1,1,1-Trichloroethane
  - Bromomethane
  - Dibromochloromethane
  - trans-1,4-Dichloro-2-butene
- MS (Lab ID: 205669)
  - 1,1,1-Trichloroethane
  - Bromomethane
  - Dibromochloromethane
  - trans-1,4-Dichloro-2-butene
- MSD (Lab ID: 205670)
  - 1,1,1-Trichloroethane
  - Bromomethane
  - Dibromochloromethane
  - trans-1,4-Dichloro-2-butene
- MW-10B (Lab ID: 7033515008)
  - Bromomethane

**Internal Standards:**

All internal standards were within QC limits with any exceptions noted below.

**Surrogates:**

All surrogates were within QC limits with any exceptions noted below.

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** EPA 8260C/5030C

**Description:** 8260C Volatile Organics

**Client:** LaBella Associates

**Date:** November 09, 2017

### Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

### Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 43758

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 204838)
  - 1,2-Dibromo-3-chloropropane

### Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 43863

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7033515008

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 205669)
  - 1,1,1-Trichloroethane
  - cis-1,2-Dichloroethene
- MSD (Lab ID: 205670)
  - 1,1,1,2-Tetrachloroethane
  - 1,1,1-Trichloroethane
  - 1,1,2-Trichloroethane
  - 1,1-Dichloroethene
  - 1,2-Dibromoethane (EDB)
  - 1,2-Dichlorobenzene
  - 1,2-Dichloroethane
  - 1,2-Dichloropropane
  - 1,4-Dichlorobenzene
  - Acrylonitrile
  - Benzene
  - Bromochloromethane
  - Bromodichloromethane
  - Carbon disulfide
  - Carbon tetrachloride
  - Chloroform
  - Dibromochloromethane
  - Ethylbenzene
  - Methylene Chloride
  - Styrene
  - Toluene
  - Trichloroethene
  - cis-1,2-Dichloroethene
  - cis-1,3-Dichloropropene

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** EPA 8260C/5030C

**Description:** 8260C Volatile Organics

**Client:** LaBella Associates

**Date:** November 09, 2017

QC Batch: 43863

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7033515008

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- trans-1,2-Dichloroethene
- trans-1,3-Dichloropropene
- trans-1,4-Dichloro-2-butene

R1: RPD value was outside control limits.

- MSD (Lab ID: 205670)
  - 1,1,1-Trichloroethane
  - 1,1,2,2-Tetrachloroethane
  - 1,1,2-Trichloroethane
  - 1,2,3-Trichloropropane
  - 1,2-Dichlorobenzene
  - 1,2-Dichloropropane
  - 1,4-Dichlorobenzene
  - Acrylonitrile
  - Benzene
  - Bromodichloromethane
  - Bromomethane
  - Carbon disulfide
  - Carbon tetrachloride
  - Ethylbenzene
  - Iodomethane
  - Tetrachloroethene
  - Toluene
  - Trichlorofluoromethane
  - Vinyl acetate
  - cis-1,3-Dichloropropene
  - trans-1,3-Dichloropropene
  - trans-1,4-Dichloro-2-butene

**Additional Comments:**

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** SM22 2320B

**Description:** 2320B Alkalinity

**Client:** LaBella Associates

**Date:** November 09, 2017

**General Information:**

10 samples were analyzed for SM22 2320B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 44473

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7033515008

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 208572)
- Alkalinity, Total as CaCO<sub>3</sub>

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** SM22 2340C

**Description:** 2340C Hardness, Total

**Client:** LaBella Associates

**Date:** November 09, 2017

**General Information:**

10 samples were analyzed for SM22 2340C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** SM22 2540C

**Description:** 2540C Total Dissolved Solids

**Client:** LaBella Associates

**Date:** November 09, 2017

**General Information:**

10 samples were analyzed for SM22 2540C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** EPA 410.4

**Description:** 410.4 COD

**Client:** LaBella Associates

**Date:** November 09, 2017

**General Information:**

10 samples were analyzed for EPA 410.4. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** SM22 5210B

**Description:** 5210B BOD, 5 day

**Client:** LaBella Associates

**Date:** November 09, 2017

**General Information:**

10 samples were analyzed for SM22 5210B. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with SM22 5210B with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** EPA 300.0

**Description:** 300.0 IC Anions 28 Days

**Client:** LaBella Associates

**Date:** November 09, 2017

**General Information:**

10 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

---

**Method:** EPA 351.2  
**Description:** 351.2 Total Kjeldahl Nitrogen  
**Client:** LaBella Associates  
**Date:** November 09, 2017

**General Information:**

10 samples were analyzed for EPA 351.2. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 351.2 with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** EPA 353.2

**Description:** 353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> pres.

**Client:** LaBella Associates

**Date:** November 09, 2017

**General Information:**

10 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** EPA 353.2

**Description:** 353.2 Nitrogen, NO<sub>2</sub>

**Client:** LaBella Associates

**Date:** November 09, 2017

**General Information:**

10 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** EPA 420.1

**Description:** Phenolics, Total Recoverable

**Client:** LaBella Associates

**Date:** November 09, 2017

**General Information:**

10 samples were analyzed for EPA 420.1. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Sample Preparation:**

The samples were prepared in accordance with EPA 420.1 with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 44191

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7033515008,7033515014

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 206986)
- Phenolics, Total Recoverable

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** SM22 4500 NH3 H

**Description:** 4500 Ammonia Water

**Client:** LaBella Associates

**Date:** November 09, 2017

**General Information:**

10 samples were analyzed for SM22 4500 NH3 H. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

---

**Method:** EPA 9060A

**Description:** 9060A TOC as NPOC

**Client:** LaBella Associates

**Date:** November 09, 2017

**General Information:**

13 samples were analyzed for EPA 9060A. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

**Hold Time:**

The samples were analyzed within the method required hold times with any exceptions noted below.

**Method Blank:**

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

**Laboratory Control Spike:**

All laboratory control spike compounds were within QC limits with any exceptions noted below.

**Matrix Spikes:**

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

**Duplicate Sample:**

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

**Additional Comments:**

This data package has been reviewed for quality and completeness and is approved for release.

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-7C	Lab ID: 7033515001	Collected: 10/18/17 09:30	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010C Preparation Method: EPA 3005A						
Aluminum	<200	ug/L	200	1	10/30/17 10:04	11/02/17 02:57	7429-90-5	
Antimony	<60.0	ug/L	60.0	1	10/30/17 10:04	11/02/17 02:57	7440-36-0	
Arsenic	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 02:57	7440-38-2	
Barium	239	ug/L	200	1	10/30/17 10:04	11/02/17 02:57	7440-39-3	
Beryllium	<5.0	ug/L	5.0	1	10/30/17 10:04	11/02/17 02:57	7440-41-7	
Boron	18.7J	ug/L	50.0	1	10/30/17 10:04	11/02/17 02:57	7440-42-8	
Cadmium	<2.5	ug/L	2.5	1	10/30/17 10:04	11/02/17 02:57	7440-43-9	
Calcium	96600	ug/L	200	1	10/30/17 10:04	11/02/17 02:57	7440-70-2	
Chromium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 02:57	7440-47-3	
Cobalt	<50.0	ug/L	50.0	1	10/30/17 10:04	11/02/17 02:57	7440-48-4	
Copper	<25.0	ug/L	25.0	1	10/30/17 10:04	11/02/17 02:57	7440-50-8	
Iron	70.0	ug/L	20.0	1	10/30/17 10:04	11/02/17 02:57	7439-89-6	B
Lead	3.6J	ug/L	5.0	1	10/30/17 10:04	11/02/17 02:57	7439-92-1	
Magnesium	15300	ug/L	200	1	10/30/17 10:04	11/02/17 02:57	7439-95-4	
Manganese	6750	ug/L	10.0	1	10/30/17 10:04	11/02/17 02:57	7439-96-5	
Nickel	1.5J	ug/L	40.0	1	10/30/17 10:04	11/02/17 02:57	7440-02-0	
Potassium	2570J	ug/L	5000	1	10/30/17 10:04	11/02/17 02:57	7440-09-7	
Selenium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 02:57	7782-49-2	
Silver	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 02:57	7440-22-4	
Sodium	6530	ug/L	5000	1	10/30/17 10:04	11/02/17 02:57	7440-23-5	
Thallium	5.2J	ug/L	10.0	1	10/30/17 10:04	11/02/17 02:57	7440-28-0	
Vanadium	<50.0	ug/L	50.0	1	10/30/17 10:04	11/02/17 02:57	7440-62-2	
Zinc	49.5	ug/L	20.0	1	10/30/17 10:04	11/02/17 02:57	7440-66-6	
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A						
Mercury	0.11J	ug/L	0.20	1	10/26/17 09:45	10/27/17 13:48	7439-97-6	B
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 17:48	630-20-6	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/20/17 17:48	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 17:48	79-34-5	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/20/17 17:48	79-00-5	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/20/17 17:48	75-34-3	
1,1-Dichloroethene	ND	ug/L	5.0	1		10/20/17 17:48	75-35-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		10/20/17 17:48	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/20/17 17:48	96-12-8	CL,L2
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		10/20/17 17:48	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 17:48	95-50-1	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/20/17 17:48	107-06-2	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/20/17 17:48	78-87-5	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 17:48	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	1		10/20/17 17:48	78-93-3	
2-Hexanone	ND	ug/L	5.0	1		10/20/17 17:48	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		10/20/17 17:48	108-10-1	
Acetone	ND	ug/L	5.0	1		10/20/17 17:48	67-64-1	
Acrylonitrile	ND	ug/L	5.0	1		10/20/17 17:48	107-13-1	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

<b>Sample: MW-7C</b>		<b>Lab ID: 7033515001</b>	Collected: 10/18/17 09:30	Received: 10/19/17 09:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
Benzene	ND	ug/L	5.0	1		10/20/17 17:48	71-43-2	
Bromochloromethane	ND	ug/L	5.0	1		10/20/17 17:48	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		10/20/17 17:48	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/20/17 17:48	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/20/17 17:48	74-83-9	
Carbon disulfide	ND	ug/L	5.0	1		10/20/17 17:48	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		10/20/17 17:48	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		10/20/17 17:48	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/20/17 17:48	75-00-3	CL
Chloroform	ND	ug/L	5.0	1		10/20/17 17:48	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/20/17 17:48	74-87-3	CL
Dibromochloromethane	ND	ug/L	5.0	1		10/20/17 17:48	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		10/20/17 17:48	74-95-3	
Ethylbenzene	ND	ug/L	5.0	1		10/20/17 17:48	100-41-4	
Iodomethane	ND	ug/L	5.0	1		10/20/17 17:48	74-88-4	
Methylene Chloride	ND	ug/L	5.0	1		10/20/17 17:48	75-09-2	
Styrene	ND	ug/L	5.0	1		10/20/17 17:48	100-42-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/20/17 17:48	127-18-4	
Toluene	ND	ug/L	5.0	1		10/20/17 17:48	108-88-3	
Trichloroethene	ND	ug/L	5.0	1		10/20/17 17:48	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/20/17 17:48	75-69-4	
Vinyl acetate	ND	ug/L	5.0	1		10/20/17 17:48	108-05-4	
Vinyl chloride	ND	ug/L	5.0	1		10/20/17 17:48	75-01-4	CL
Xylene (Total)	ND	ug/L	5.0	1		10/20/17 17:48	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 17:48	156-59-2	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 17:48	10061-01-5	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 17:48	156-60-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 17:48	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1		10/20/17 17:48	110-57-6	
<b>Surrogates</b>								
1,2-Dichloroethane-d4 (S)	107	%	68-153	1		10/20/17 17:48	17060-07-0	
4-Bromofluorobenzene (S)	100	%	79-124	1		10/20/17 17:48	460-00-4	
Toluene-d8 (S)	96	%	69-124	1		10/20/17 17:48	2037-26-5	
<b>2320B Alkalinity</b>		Analytical Method: SM22 2320B						
Alkalinity, Total as CaCO3	<b>292</b>	mg/L	1.0	1		10/27/17 11:40		
<b>2340C Hardness, Total</b>		Analytical Method: SM22 2340C						
Total Hardness	<b>310</b>	mg/L	5.0	1		10/27/17 13:50		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM22 2540C						
Total Dissolved Solids	<b>342</b>	mg/L	10.0	1		10/24/17 13:43		
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4						
Chemical Oxygen Demand	<b>18.2</b>	mg/L	10.0	1	10/24/17 11:17	10/24/17 13:40		

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

Sample: MW-7C	Lab ID: 7033515001	Collected: 10/18/17 09:30	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>5210B BOD, 5 day</b>								
Analytical Method: SM22 5210B Preparation Method: SM22 5210B								
BOD, 5 day	<b>1.0J</b>	mg/L	2.0	1	10/19/17 16:48	10/24/17 12:35		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0								
Bromide	<b>0.19J</b>	mg/L	0.50	1		10/30/17 20:55	24959-67-9	
Chloride	<b>5.7</b>	mg/L	2.0	1		10/30/17 20:55	16887-00-6	
Sulfate	<b>6.5</b>	mg/L	5.0	1		10/30/17 20:55	14808-79-8	
<b>351.2 Total Kjeldahl Nitrogen</b>								
Analytical Method: EPA 351.2 Preparation Method: EPA 351.2								
Nitrogen, Kjeldahl, Total	<b>0.15</b>	mg/L	0.10	1	10/31/17 06:07	10/31/17 12:59	7727-37-9	
<b>353.2 Nitrogen, NO2/NO3 pres.</b>								
Analytical Method: EPA 353.2								
Nitrate-Nitrite (as N)	<b>0.044J</b>	mg/L	0.050	1		10/19/17 23:23	7727-37-9	
<b>353.2 Nitrogen, NO2</b>								
Analytical Method: EPA 353.2								
Nitrite as N	<b>&lt;0.050</b>	mg/L	0.050	1		10/19/17 19:46	14797-65-0	
<b>Phenolics, Total Recoverable</b>								
Analytical Method: EPA 420.1 Preparation Method: EPA 420.1								
Phenolics, Total Recoverable	<b>1.1J</b>	ug/L	5.0	1	10/25/17 12:00	10/25/17 15:30		
<b>4500 Ammonia Water</b>								
Analytical Method: SM22 4500 NH3 H								
Nitrogen, Ammonia	<b>0.038J</b>	mg/L	0.10	1		10/26/17 12:56	7664-41-7	
<b>9060A TOC as NPOC</b>								
Analytical Method: EPA 9060A								
Total Organic Carbon	<b>1.8</b>	mg/L	1.0	1		10/24/17 18:52	7440-44-0	
Total Organic Carbon	<b>1.5</b>	mg/L	1.0	1		10/24/17 18:52	7440-44-0	
Total Organic Carbon	<b>1.5</b>	mg/L	1.0	1		10/24/17 18:52	7440-44-0	
Total Organic Carbon	<b>1.5</b>	mg/L	1.0	1		10/24/17 18:52	7440-44-0	
Mean Total Organic Carbon	<b>1.6</b>	mg/L	1.0	1		10/24/17 18:52	7440-44-0	

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-7A	Lab ID: 7033515002	Collected: 10/18/17 09:45	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010C Preparation Method: EPA 3005A						
Aluminum	853	ug/L	200	1	10/30/17 10:04	11/02/17 03:02	7429-90-5	
Antimony	<60.0	ug/L	60.0	1	10/30/17 10:04	11/02/17 03:02	7440-36-0	
Arsenic	9.5J	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:02	7440-38-2	
Barium	614	ug/L	200	1	10/30/17 10:04	11/02/17 03:02	7440-39-3	
Beryllium	<5.0	ug/L	5.0	1	10/30/17 10:04	11/02/17 03:02	7440-41-7	
Boron	82.4	ug/L	50.0	1	10/30/17 10:04	11/02/17 03:02	7440-42-8	
Cadmium	<2.5	ug/L	2.5	1	10/30/17 10:04	11/02/17 03:02	7440-43-9	
Calcium	30700	ug/L	200	1	10/30/17 10:04	11/02/17 03:02	7440-70-2	
Chromium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:02	7440-47-3	
Cobalt	1.2J	ug/L	50.0	1	10/30/17 10:04	11/02/17 03:02	7440-48-4	
Copper	<25.0	ug/L	25.0	1	10/30/17 10:04	11/02/17 03:02	7440-50-8	
Iron	2310	ug/L	20.0	1	10/30/17 10:04	11/02/17 03:02	7439-89-6	
Lead	3.3J	ug/L	5.0	1	10/30/17 10:04	11/02/17 03:02	7439-92-1	
Magnesium	6070	ug/L	200	1	10/30/17 10:04	11/02/17 03:02	7439-95-4	
Manganese	2160	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:02	7439-96-5	
Nickel	5.2J	ug/L	40.0	1	10/30/17 10:04	11/02/17 03:02	7440-02-0	
Potassium	21600	ug/L	5000	1	10/30/17 10:04	11/02/17 03:02	7440-09-7	
Selenium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:02	7782-49-2	
Silver	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:02	7440-22-4	
Sodium	4740J	ug/L	5000	1	10/30/17 10:04	11/02/17 03:02	7440-23-5	
Thallium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:02	7440-28-0	
Vanadium	<50.0	ug/L	50.0	1	10/30/17 10:04	11/02/17 03:02	7440-62-2	
Zinc	8.1J	ug/L	20.0	1	10/30/17 10:04	11/02/17 03:02	7440-66-6	B
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A						
Mercury	0.16J	ug/L	0.20	1	10/26/17 09:45	10/27/17 13:50	7439-97-6	B
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 18:34	630-20-6	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/20/17 18:34	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 18:34	79-34-5	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/20/17 18:34	79-00-5	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/20/17 18:34	75-34-3	
1,1-Dichloroethene	ND	ug/L	5.0	1		10/20/17 18:34	75-35-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		10/20/17 18:34	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/20/17 18:34	96-12-8	CL,L2
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		10/20/17 18:34	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 18:34	95-50-1	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/20/17 18:34	107-06-2	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/20/17 18:34	78-87-5	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 18:34	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	1		10/20/17 18:34	78-93-3	
2-Hexanone	ND	ug/L	5.0	1		10/20/17 18:34	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		10/20/17 18:34	108-10-1	
Acetone	ND	ug/L	5.0	1		10/20/17 18:34	67-64-1	
Acrylonitrile	ND	ug/L	5.0	1		10/20/17 18:34	107-13-1	

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-7A	Lab ID: 7033515002	Collected: 10/18/17 09:45	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
Benzene	ND	ug/L	5.0	1		10/20/17 18:34	71-43-2	
Bromochloromethane	ND	ug/L	5.0	1		10/20/17 18:34	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		10/20/17 18:34	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/20/17 18:34	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/20/17 18:34	74-83-9	
Carbon disulfide	ND	ug/L	5.0	1		10/20/17 18:34	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		10/20/17 18:34	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		10/20/17 18:34	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/20/17 18:34	75-00-3	CL
Chloroform	ND	ug/L	5.0	1		10/20/17 18:34	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/20/17 18:34	74-87-3	CL
Dibromochloromethane	ND	ug/L	5.0	1		10/20/17 18:34	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		10/20/17 18:34	74-95-3	
Ethylbenzene	ND	ug/L	5.0	1		10/20/17 18:34	100-41-4	
Iodomethane	ND	ug/L	5.0	1		10/20/17 18:34	74-88-4	
Methylene Chloride	ND	ug/L	5.0	1		10/20/17 18:34	75-09-2	
Styrene	ND	ug/L	5.0	1		10/20/17 18:34	100-42-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/20/17 18:34	127-18-4	
Toluene	ND	ug/L	5.0	1		10/20/17 18:34	108-88-3	
Trichloroethene	ND	ug/L	5.0	1		10/20/17 18:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/20/17 18:34	75-69-4	
Vinyl acetate	ND	ug/L	5.0	1		10/20/17 18:34	108-05-4	
Vinyl chloride	ND	ug/L	5.0	1		10/20/17 18:34	75-01-4	CL
Xylene (Total)	ND	ug/L	5.0	1		10/20/17 18:34	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 18:34	156-59-2	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 18:34	10061-01-5	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 18:34	156-60-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 18:34	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1		10/20/17 18:34	110-57-6	
<b>Surrogates</b>								
1,2-Dichloroethane-d4 (S)	109	%	68-153	1		10/20/17 18:34	17060-07-0	
4-Bromofluorobenzene (S)	103	%	79-124	1		10/20/17 18:34	460-00-4	
Toluene-d8 (S)	97	%	69-124	1		10/20/17 18:34	2037-26-5	
<b>2320B Alkalinity</b>		Analytical Method: SM22 2320B						
Alkalinity, Total as CaCO3	<b>243</b>	mg/L	1.0	1		10/27/17 11:47		
<b>2340C Hardness, Total</b>		Analytical Method: SM22 2340C						
Total Hardness	<b>96.0</b>	mg/L	5.0	1		10/27/17 13:51		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM22 2540C						
Total Dissolved Solids	<b>448</b>	mg/L	10.0	1		10/24/17 13:45		
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4						
Chemical Oxygen Demand	<b>111</b>	mg/L	10.0	1	10/24/17 11:17	10/24/17 13:40		

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-7A	Lab ID: 7033515002	Collected: 10/18/17 09:45	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>5210B BOD, 5 day</b>								
Analytical Method: SM22 5210B Preparation Method: SM22 5210B								
BOD, 5 day	<b>&lt;4.0</b>	mg/L	4.0	2	10/19/17 16:48	10/24/17 12:38		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0								
Bromide	<b>0.34J</b>	mg/L	0.50	1		10/30/17 21:08	24959-67-9	
Chloride	<b>4.6</b>	mg/L	2.0	1		10/30/17 21:08	16887-00-6	
Sulfate	<b>5.2</b>	mg/L	5.0	1		10/30/17 21:08	14808-79-8	
<b>351.2 Total Kjeldahl Nitrogen</b>								
Analytical Method: EPA 351.2 Preparation Method: EPA 351.2								
Nitrogen, Kjeldahl, Total	<b>6.0</b>	mg/L	0.50	1	10/31/17 06:07	10/31/17 13:02	7727-37-9	
<b>353.2 Nitrogen, NO2/NO3 pres.</b>								
Analytical Method: EPA 353.2								
Nitrate-Nitrite (as N)	<b>0.58</b>	mg/L	0.050	1		10/19/17 23:24	7727-37-9	
<b>353.2 Nitrogen, NO2</b>								
Analytical Method: EPA 353.2								
Nitrite as N	<b>&lt;0.050</b>	mg/L	0.050	1		10/19/17 19:47	14797-65-0	
<b>Phenolics, Total Recoverable</b>								
Analytical Method: EPA 420.1 Preparation Method: EPA 420.1								
Phenolics, Total Recoverable	<b>13.9</b>	ug/L	10.0	1	10/25/17 12:00	10/25/17 15:31		
<b>4500 Ammonia Water</b>								
Analytical Method: SM22 4500 NH3 H								
Nitrogen, Ammonia	<b>1.6</b>	mg/L	0.10	1		10/26/17 12:58	7664-41-7	
<b>9060A TOC as NPOC</b>								
Analytical Method: EPA 9060A								
Total Organic Carbon	<b>6.0</b>	mg/L	1.0	1		10/24/17 19:04	7440-44-0	
Total Organic Carbon	<b>5.4</b>	mg/L	1.0	1		10/24/17 19:04	7440-44-0	
Total Organic Carbon	<b>5.3</b>	mg/L	1.0	1		10/24/17 19:04	7440-44-0	
Total Organic Carbon	<b>5.3</b>	mg/L	1.0	1		10/24/17 19:04	7440-44-0	
Mean Total Organic Carbon	<b>5.5</b>	mg/L	1.0	1		10/24/17 19:04	7440-44-0	

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: MW-11B</b>		<b>Lab ID: 7033515003</b>		Collected: 10/18/17 10:20	Received: 10/19/17 09:40	Matrix: Water		
<b>9060A TOC as NPOC</b>		Analytical Method: EPA 9060A						
Total Organic Carbon	<b>15.1</b>	mg/L	1.0	1		10/24/17 19:16	7440-44-0	
Total Organic Carbon	<b>14.2</b>	mg/L	1.0	1		10/24/17 19:16	7440-44-0	
Total Organic Carbon	<b>14.8</b>	mg/L	1.0	1		10/24/17 19:16	7440-44-0	
Total Organic Carbon	<b>14.3</b>	mg/L	1.0	1		10/24/17 19:16	7440-44-0	
Mean Total Organic Carbon	<b>14.6</b>	mg/L	1.0	1		10/24/17 19:16	7440-44-0	

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-12A	Lab ID: 7033515004	Collected: 10/18/17 10:35	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 17:19	630-20-6	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/20/17 17:19	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 17:19	79-34-5	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/20/17 17:19	79-00-5	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/20/17 17:19	75-34-3	
1,1-Dichloroethene	ND	ug/L	5.0	1		10/20/17 17:19	75-35-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		10/20/17 17:19	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/20/17 17:19	96-12-8	CL,L2
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		10/20/17 17:19	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 17:19	95-50-1	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/20/17 17:19	107-06-2	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/20/17 17:19	78-87-5	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 17:19	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	1		10/20/17 17:19	78-93-3	
2-Hexanone	ND	ug/L	5.0	1		10/20/17 17:19	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		10/20/17 17:19	108-10-1	
Acetone	<b>48.3</b>	ug/L	5.0	1		10/20/17 17:19	67-64-1	
Acrylonitrile	ND	ug/L	5.0	1		10/20/17 17:19	107-13-1	
Benzene	ND	ug/L	5.0	1		10/20/17 17:19	71-43-2	
Bromochloromethane	ND	ug/L	5.0	1		10/20/17 17:19	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		10/20/17 17:19	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/20/17 17:19	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/20/17 17:19	74-83-9	
Carbon disulfide	ND	ug/L	5.0	1		10/20/17 17:19	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		10/20/17 17:19	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		10/20/17 17:19	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/20/17 17:19	75-00-3	CL
Chloroform	ND	ug/L	5.0	1		10/20/17 17:19	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/20/17 17:19	74-87-3	CL
Dibromochloromethane	ND	ug/L	5.0	1		10/20/17 17:19	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		10/20/17 17:19	74-95-3	
Ethylbenzene	ND	ug/L	5.0	1		10/20/17 17:19	100-41-4	
Iodomethane	ND	ug/L	5.0	1		10/20/17 17:19	74-88-4	
Methylene Chloride	ND	ug/L	5.0	1		10/20/17 17:19	75-09-2	
Styrene	ND	ug/L	5.0	1		10/20/17 17:19	100-42-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/20/17 17:19	127-18-4	
Toluene	ND	ug/L	5.0	1		10/20/17 17:19	108-88-3	
Trichloroethene	ND	ug/L	5.0	1		10/20/17 17:19	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/20/17 17:19	75-69-4	
Vinyl acetate	ND	ug/L	5.0	1		10/20/17 17:19	108-05-4	
Vinyl chloride	ND	ug/L	5.0	1		10/20/17 17:19	75-01-4	CL
Xylene (Total)	ND	ug/L	5.0	1		10/20/17 17:19	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 17:19	156-59-2	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 17:19	10061-01-5	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 17:19	156-60-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 17:19	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1		10/20/17 17:19	110-57-6	

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-12A	Lab ID: 7033515004	Collected: 10/18/17 10:35		Received: 10/19/17 09:40		Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
<b>Surrogates</b>								
1,2-Dichloroethane-d4 (S)	106	%	68-153	1		10/20/17 17:19	17060-07-0	
4-Bromofluorobenzene (S)	102	%	79-124	1		10/20/17 17:19	460-00-4	
Toluene-d8 (S)	97	%	69-124	1		10/20/17 17:19	2037-26-5	
<b>9060A TOC as NPOC</b>		Analytical Method: EPA 9060A						
Total Organic Carbon	<b>24.7</b>	mg/L	1.0	1		10/24/17 19:28	7440-44-0	
Total Organic Carbon	<b>24.5</b>	mg/L	1.0	1		10/24/17 19:28	7440-44-0	
Total Organic Carbon	<b>25.4</b>	mg/L	1.0	1		10/24/17 19:28	7440-44-0	
Total Organic Carbon	<b>25.1</b>	mg/L	1.0	1		10/24/17 19:28	7440-44-0	
Mean Total Organic Carbon	<b>24.9</b>	mg/L	1.0	1		10/24/17 19:28	7440-44-0	

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-12B		Lab ID: 7033515005		Collected: 10/18/17 10:45		Received: 10/19/17 09:40		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
<b>6010 MET ICP</b>		Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	<b>28.2J</b>	ug/L	200	1	10/30/17 10:04	11/02/17 03:07	7429-90-5	B	
Antimony	<b>&lt;60.0</b>	ug/L	60.0	1	10/30/17 10:04	11/02/17 03:07	7440-36-0		
Arsenic	<b>9.5J</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:07	7440-38-2		
Barium	<b>439</b>	ug/L	200	1	10/30/17 10:04	11/02/17 03:07	7440-39-3		
Beryllium	<b>&lt;5.0</b>	ug/L	5.0	1	10/30/17 10:04	11/02/17 03:07	7440-41-7		
Boron	<b>165</b>	ug/L	50.0	1	10/30/17 10:04	11/02/17 03:07	7440-42-8		
Cadmium	<b>&lt;2.5</b>	ug/L	2.5	1	10/30/17 10:04	11/02/17 03:07	7440-43-9		
Calcium	<b>106000</b>	ug/L	200	1	10/30/17 10:04	11/02/17 03:07	7440-70-2		
Chromium	<b>6.9J</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:07	7440-47-3		
Cobalt	<b>6.6J</b>	ug/L	50.0	1	10/30/17 10:04	11/02/17 03:07	7440-48-4		
Copper	<b>&lt;25.0</b>	ug/L	25.0	1	10/30/17 10:04	11/02/17 03:07	7440-50-8		
Iron	<b>14400</b>	ug/L	20.0	1	10/30/17 10:04	11/02/17 03:07	7439-89-6		
Lead	<b>3.5J</b>	ug/L	5.0	1	10/30/17 10:04	11/02/17 03:07	7439-92-1		
Magnesium	<b>20800</b>	ug/L	200	1	10/30/17 10:04	11/02/17 03:07	7439-95-4		
Manganese	<b>9040</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:07	7439-96-5		
Nickel	<b>6.3J</b>	ug/L	40.0	1	10/30/17 10:04	11/02/17 03:07	7440-02-0		
Potassium	<b>7420</b>	ug/L	5000	1	10/30/17 10:04	11/02/17 03:07	7440-09-7		
Selenium	<b>&lt;10.0</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:07	7782-49-2		
Silver	<b>&lt;10.0</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:07	7440-22-4		
Sodium	<b>14500</b>	ug/L	5000	1	10/30/17 10:04	11/02/17 03:07	7440-23-5		
Thallium	<b>4.4J</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:07	7440-28-0		
Vanadium	<b>&lt;50.0</b>	ug/L	50.0	1	10/30/17 10:04	11/02/17 03:07	7440-62-2		
Zinc	<b>8.7J</b>	ug/L	20.0	1	10/30/17 10:04	11/02/17 03:07	7440-66-6	B	
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	<b>0.064J</b>	ug/L	0.20	1	10/26/17 09:45	10/27/17 13:51	7439-97-6	B	
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C							
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 18:57	630-20-6		
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/20/17 18:57	71-55-6		
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 18:57	79-34-5		
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/20/17 18:57	79-00-5		
1,1-Dichloroethane	<b>5.1</b>	ug/L	5.0	1		10/20/17 18:57	75-34-3		
1,1-Dichloroethene	ND	ug/L	5.0	1		10/20/17 18:57	75-35-4		
1,2,3-Trichloropropane	ND	ug/L	5.0	1		10/20/17 18:57	96-18-4		
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/20/17 18:57	96-12-8	CL,L2	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		10/20/17 18:57	106-93-4		
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 18:57	95-50-1		
1,2-Dichloroethane	ND	ug/L	5.0	1		10/20/17 18:57	107-06-2		
1,2-Dichloropropane	ND	ug/L	5.0	1		10/20/17 18:57	78-87-5		
1,4-Dichlorobenzene	<b>5.5</b>	ug/L	5.0	1		10/20/17 18:57	106-46-7		
2-Butanone (MEK)	ND	ug/L	5.0	1		10/20/17 18:57	78-93-3		
2-Hexanone	ND	ug/L	5.0	1		10/20/17 18:57	591-78-6		
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		10/20/17 18:57	108-10-1		
Acetone	ND	ug/L	5.0	1		10/20/17 18:57	67-64-1		
Acrylonitrile	ND	ug/L	5.0	1		10/20/17 18:57	107-13-1		

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-12B	Lab ID: 7033515005	Collected: 10/18/17 10:45	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
Benzene	10.5	ug/L	5.0	1		10/20/17 18:57	71-43-2	
Bromochloromethane	ND	ug/L	5.0	1		10/20/17 18:57	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		10/20/17 18:57	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/20/17 18:57	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/20/17 18:57	74-83-9	
Carbon disulfide	ND	ug/L	5.0	1		10/20/17 18:57	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		10/20/17 18:57	56-23-5	
Chlorobenzene	16.9	ug/L	5.0	1		10/20/17 18:57	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/20/17 18:57	75-00-3	CL
Chloroform	ND	ug/L	5.0	1		10/20/17 18:57	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/20/17 18:57	74-87-3	CL
Dibromochloromethane	ND	ug/L	5.0	1		10/20/17 18:57	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		10/20/17 18:57	74-95-3	
Ethylbenzene	ND	ug/L	5.0	1		10/20/17 18:57	100-41-4	
Iodomethane	ND	ug/L	5.0	1		10/20/17 18:57	74-88-4	
Methylene Chloride	ND	ug/L	5.0	1		10/20/17 18:57	75-09-2	
Styrene	ND	ug/L	5.0	1		10/20/17 18:57	100-42-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/20/17 18:57	127-18-4	
Toluene	ND	ug/L	5.0	1		10/20/17 18:57	108-88-3	
Trichloroethene	ND	ug/L	5.0	1		10/20/17 18:57	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/20/17 18:57	75-69-4	
Vinyl acetate	ND	ug/L	5.0	1		10/20/17 18:57	108-05-4	
Vinyl chloride	ND	ug/L	5.0	1		10/20/17 18:57	75-01-4	CL
Xylene (Total)	ND	ug/L	5.0	1		10/20/17 18:57	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 18:57	156-59-2	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 18:57	10061-01-5	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 18:57	156-60-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 18:57	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1		10/20/17 18:57	110-57-6	
<b>Surrogates</b>								
1,2-Dichloroethane-d4 (S)	110	%	68-153	1		10/20/17 18:57	17060-07-0	
4-Bromofluorobenzene (S)	103	%	79-124	1		10/20/17 18:57	460-00-4	
Toluene-d8 (S)	96	%	69-124	1		10/20/17 18:57	2037-26-5	
<b>2320B Alkalinity</b>		Analytical Method: SM22 2320B						
Alkalinity, Total as CaCO3	483	mg/L	1.0	1		10/27/17 11:53		
<b>2340C Hardness, Total</b>		Analytical Method: SM22 2340C						
Total Hardness	520	mg/L	5.0	1		10/27/17 13:53		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM22 2540C						
Total Dissolved Solids	201	mg/L	10.0	1		10/24/17 13:46		
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4						
Chemical Oxygen Demand	73.3	mg/L	10.0	1	10/24/17 11:17	10/24/17 13:41		

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

Sample: MW-12B	Lab ID: 7033515005	Collected: 10/18/17 10:45	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>5210B BOD, 5 day</b>								
Analytical Method: SM22 5210B Preparation Method: SM22 5210B								
BOD, 5 day	<b>6.0</b>	mg/L	4.0	2	10/19/17 16:48	10/24/17 12:40		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0								
Bromide	<b>0.60</b>	mg/L	0.50	1		10/30/17 21:22	24959-67-9	
Chloride	<b>16.3</b>	mg/L	2.0	1		10/30/17 21:22	16887-00-6	
Sulfate	<b>1.3J</b>	mg/L	5.0	1		10/30/17 21:22	14808-79-8	
<b>351.2 Total Kjeldahl Nitrogen</b>								
Analytical Method: EPA 351.2 Preparation Method: EPA 351.2								
Nitrogen, Kjeldahl, Total	<b>14.3</b>	mg/L	1.0	10	10/31/17 06:07	10/31/17 13:44	7727-37-9	
<b>353.2 Nitrogen, NO2/NO3 pres.</b>								
Analytical Method: EPA 353.2								
Nitrate-Nitrite (as N)	<b>1.4</b>	mg/L	0.050	1		10/19/17 23:25	7727-37-9	
<b>353.2 Nitrogen, NO2</b>								
Analytical Method: EPA 353.2								
Nitrite as N	<b>&lt;0.050</b>	mg/L	0.050	1		10/19/17 19:48	14797-65-0	
<b>Phenolics, Total Recoverable</b>								
Analytical Method: EPA 420.1 Preparation Method: EPA 420.1								
Phenolics, Total Recoverable	<b>57.8</b>	ug/L	10.0	2	10/25/17 12:00	10/25/17 15:34		
<b>4500 Ammonia Water</b>								
Analytical Method: SM22 4500 NH3 H								
Nitrogen, Ammonia	<b>12.9</b>	mg/L	1.0	10		10/26/17 14:38	7664-41-7	
<b>9060A TOC as NPOC</b>								
Analytical Method: EPA 9060A								
Total Organic Carbon	<b>19.9</b>	mg/L	1.0	1		10/24/17 19:40	7440-44-0	
Total Organic Carbon	<b>19.6</b>	mg/L	1.0	1		10/24/17 19:40	7440-44-0	
Total Organic Carbon	<b>19.5</b>	mg/L	1.0	1		10/24/17 19:40	7440-44-0	
Total Organic Carbon	<b>19.2</b>	mg/L	1.0	1		10/24/17 19:40	7440-44-0	
Mean Total Organic Carbon	<b>19.5</b>	mg/L	1.0	1		10/24/17 19:40	7440-44-0	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-9B	Lab ID: 7033515006	Collected: 10/18/17 11:10	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 19:20	630-20-6	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/20/17 19:20	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 19:20	79-34-5	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/20/17 19:20	79-00-5	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/20/17 19:20	75-34-3	
1,1-Dichloroethene	ND	ug/L	5.0	1		10/20/17 19:20	75-35-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		10/20/17 19:20	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/20/17 19:20	96-12-8	CL,L2
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		10/20/17 19:20	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 19:20	95-50-1	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/20/17 19:20	107-06-2	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/20/17 19:20	78-87-5	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 19:20	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	1		10/20/17 19:20	78-93-3	
2-Hexanone	ND	ug/L	5.0	1		10/20/17 19:20	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		10/20/17 19:20	108-10-1	
Acetone	ND	ug/L	5.0	1		10/20/17 19:20	67-64-1	
Acrylonitrile	ND	ug/L	5.0	1		10/20/17 19:20	107-13-1	
Benzene	ND	ug/L	5.0	1		10/20/17 19:20	71-43-2	
Bromochloromethane	ND	ug/L	5.0	1		10/20/17 19:20	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		10/20/17 19:20	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/20/17 19:20	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/20/17 19:20	74-83-9	
Carbon disulfide	ND	ug/L	5.0	1		10/20/17 19:20	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		10/20/17 19:20	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		10/20/17 19:20	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/20/17 19:20	75-00-3	CL
Chloroform	ND	ug/L	5.0	1		10/20/17 19:20	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/20/17 19:20	74-87-3	CL
Dibromochloromethane	ND	ug/L	5.0	1		10/20/17 19:20	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		10/20/17 19:20	74-95-3	
Ethylbenzene	ND	ug/L	5.0	1		10/20/17 19:20	100-41-4	
Iodomethane	ND	ug/L	5.0	1		10/20/17 19:20	74-88-4	
Methylene Chloride	ND	ug/L	5.0	1		10/20/17 19:20	75-09-2	
Styrene	ND	ug/L	5.0	1		10/20/17 19:20	100-42-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/20/17 19:20	127-18-4	
Toluene	ND	ug/L	5.0	1		10/20/17 19:20	108-88-3	
Trichloroethene	ND	ug/L	5.0	1		10/20/17 19:20	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/20/17 19:20	75-69-4	
Vinyl acetate	ND	ug/L	5.0	1		10/20/17 19:20	108-05-4	
Vinyl chloride	ND	ug/L	5.0	1		10/20/17 19:20	75-01-4	CL
Xylene (Total)	ND	ug/L	5.0	1		10/20/17 19:20	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 19:20	156-59-2	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 19:20	10061-01-5	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 19:20	156-60-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 19:20	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1		10/20/17 19:20	110-57-6	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: <b>MW-9B</b>	Lab ID: <b>7033515006</b>	Collected: 10/18/17 11:10		Received: 10/19/17 09:40		Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
<b>Surrogates</b>								
1,2-Dichloroethane-d4 (S)	111	%	68-153	1		10/20/17 19:20	17060-07-0	
4-Bromofluorobenzene (S)	102	%	79-124	1		10/20/17 19:20	460-00-4	
Toluene-d8 (S)	94	%	69-124	1		10/20/17 19:20	2037-26-5	
<b>9060A TOC as NPOC</b>		Analytical Method: EPA 9060A						
Total Organic Carbon	<b>6.7</b>	mg/L	1.0	1		10/24/17 19:52	7440-44-0	
Total Organic Carbon	<b>5.3</b>	mg/L	1.0	1		10/24/17 19:52	7440-44-0	
Total Organic Carbon	<b>5.4</b>	mg/L	1.0	1		10/24/17 19:52	7440-44-0	
Total Organic Carbon	<b>5.8</b>	mg/L	1.0	1		10/24/17 19:52	7440-44-0	
Mean Total Organic Carbon	<b>5.8</b>	mg/L	1.0	1		10/24/17 19:52	7440-44-0	

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: TRIP BLANK	Lab ID: 7033515007	Collected: 10/18/17 00:00	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 19:43	630-20-6	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/20/17 19:43	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 19:43	79-34-5	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/20/17 19:43	79-00-5	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/20/17 19:43	75-34-3	
1,1-Dichloroethene	ND	ug/L	5.0	1		10/20/17 19:43	75-35-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		10/20/17 19:43	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/20/17 19:43	96-12-8	CL,L2
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		10/20/17 19:43	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 19:43	95-50-1	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/20/17 19:43	107-06-2	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/20/17 19:43	78-87-5	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 19:43	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	1		10/20/17 19:43	78-93-3	
2-Hexanone	ND	ug/L	5.0	1		10/20/17 19:43	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		10/20/17 19:43	108-10-1	
Acetone	ND	ug/L	5.0	1		10/20/17 19:43	67-64-1	
Acrylonitrile	ND	ug/L	5.0	1		10/20/17 19:43	107-13-1	
Benzene	ND	ug/L	5.0	1		10/20/17 19:43	71-43-2	
Bromochloromethane	ND	ug/L	5.0	1		10/20/17 19:43	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		10/20/17 19:43	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/20/17 19:43	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/20/17 19:43	74-83-9	
Carbon disulfide	ND	ug/L	5.0	1		10/20/17 19:43	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		10/20/17 19:43	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		10/20/17 19:43	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/20/17 19:43	75-00-3	CL
Chloroform	ND	ug/L	5.0	1		10/20/17 19:43	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/20/17 19:43	74-87-3	CL
Dibromochloromethane	ND	ug/L	5.0	1		10/20/17 19:43	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		10/20/17 19:43	74-95-3	
Ethylbenzene	ND	ug/L	5.0	1		10/20/17 19:43	100-41-4	
Iodomethane	ND	ug/L	5.0	1		10/20/17 19:43	74-88-4	
Methylene Chloride	ND	ug/L	5.0	1		10/20/17 19:43	75-09-2	
Styrene	ND	ug/L	5.0	1		10/20/17 19:43	100-42-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/20/17 19:43	127-18-4	
Toluene	ND	ug/L	5.0	1		10/20/17 19:43	108-88-3	
Trichloroethene	ND	ug/L	5.0	1		10/20/17 19:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/20/17 19:43	75-69-4	
Vinyl acetate	ND	ug/L	5.0	1		10/20/17 19:43	108-05-4	
Vinyl chloride	ND	ug/L	5.0	1		10/20/17 19:43	75-01-4	CL
Xylene (Total)	ND	ug/L	5.0	1		10/20/17 19:43	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 19:43	156-59-2	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 19:43	10061-01-5	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 19:43	156-60-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 19:43	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1		10/20/17 19:43	110-57-6	

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: <b>TRIP BLANK</b>	Lab ID: <b>7033515007</b>	Collected: 10/18/17 00:00	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
<b>Surrogates</b>								
1,2-Dichloroethane-d4 (S)	112	%	68-153	1		10/20/17 19:43	17060-07-0	
4-Bromofluorobenzene (S)	103	%	79-124	1		10/20/17 19:43	460-00-4	
Toluene-d8 (S)	95	%	69-124	1		10/20/17 19:43	2037-26-5	

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-10B		Lab ID: 7033515008		Collected: 10/18/17 11:45		Received: 10/19/17 09:40		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
<b>6010 MET ICP</b>		Analytical Method: EPA 6010C Preparation Method: EPA 3005A							
Aluminum	<200	ug/L	200	1	10/30/17 10:04	11/02/17 03:13	7429-90-5		
Antimony	<60.0	ug/L	60.0	1	10/30/17 10:04	11/02/17 03:13	7440-36-0		
Arsenic	11.9	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:13	7440-38-2		
Barium	87.1J	ug/L	200	1	10/30/17 10:04	11/02/17 03:13	7440-39-3		
Beryllium	<5.0	ug/L	5.0	1	10/30/17 10:04	11/02/17 03:13	7440-41-7		
Boron	53.0	ug/L	50.0	1	10/30/17 10:04	11/02/17 03:13	7440-42-8		
Cadmium	<2.5	ug/L	2.5	1	10/30/17 10:04	11/02/17 03:13	7440-43-9		
Calcium	77100	ug/L	200	1	10/30/17 10:04	11/02/17 03:13	7440-70-2		
Chromium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:13	7440-47-3		
Cobalt	5.3J	ug/L	50.0	1	10/30/17 10:04	11/02/17 03:13	7440-48-4		
Copper	<25.0	ug/L	25.0	1	10/30/17 10:04	11/02/17 03:13	7440-50-8		
Iron	2430	ug/L	20.0	1	10/30/17 10:04	11/02/17 03:13	7439-89-6		
Lead	4.0J	ug/L	5.0	1	10/30/17 10:04	11/02/17 03:13	7439-92-1		
Magnesium	23900	ug/L	200	1	10/30/17 10:04	11/02/17 03:13	7439-95-4		
Manganese	9290	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:13	7439-96-5	M1	
Nickel	4.1J	ug/L	40.0	1	10/30/17 10:04	11/02/17 03:13	7440-02-0		
Potassium	3560J	ug/L	5000	1	10/30/17 10:04	11/02/17 03:13	7440-09-7		
Selenium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:13	7782-49-2		
Silver	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:13	7440-22-4		
Sodium	8830	ug/L	5000	1	10/30/17 10:04	11/02/17 03:13	7440-23-5		
Thallium	4.9J	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:13	7440-28-0		
Vanadium	<50.0	ug/L	50.0	1	10/30/17 10:04	11/02/17 03:13	7440-62-2		
Zinc	7.4J	ug/L	20.0	1	10/30/17 10:04	11/02/17 03:13	7440-66-6	B	
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A							
Mercury	0.064J	ug/L	0.20	1	10/26/17 09:45	10/27/17 13:53	7439-97-6	B	
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C							
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		10/23/17 13:22	630-20-6	M1	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/23/17 13:22	71-55-6	M1,R1	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/23/17 13:22	79-34-5	R1	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/23/17 13:22	79-00-5	M1,R1	
1,1-Dichloroethane	18.1	ug/L	5.0	1		10/23/17 13:22	75-34-3		
1,1-Dichloroethene	ND	ug/L	5.0	1		10/23/17 13:22	75-35-4	M1	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		10/23/17 13:22	96-18-4	R1	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/23/17 13:22	96-12-8		
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		10/23/17 13:22	106-93-4	M1	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/23/17 13:22	95-50-1	M1,R1	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/23/17 13:22	107-06-2	M1	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/23/17 13:22	78-87-5	M1,R1	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/23/17 13:22	106-46-7	M1,R1	
2-Butanone (MEK)	ND	ug/L	5.0	1		10/23/17 13:22	78-93-3		
2-Hexanone	ND	ug/L	5.0	1		10/23/17 13:22	591-78-6		
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		10/23/17 13:22	108-10-1		
Acetone	ND	ug/L	5.0	1		10/23/17 13:22	67-64-1		
Acrylonitrile	ND	ug/L	5.0	1		10/23/17 13:22	107-13-1	M1,R1	

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-10B	Lab ID: 7033515008	Collected: 10/18/17 11:45	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
Benzene	ND	ug/L	5.0	1		10/23/17 13:22	71-43-2	M1,R1
Bromochloromethane	ND	ug/L	5.0	1		10/23/17 13:22	74-97-5	M1
Bromodichloromethane	ND	ug/L	5.0	1		10/23/17 13:22	75-27-4	M1,R1
Bromoform	ND	ug/L	5.0	1		10/23/17 13:22	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/23/17 13:22	74-83-9	CH,IH,R1
Carbon disulfide	ND	ug/L	5.0	1		10/23/17 13:22	75-15-0	M1,R1
Carbon tetrachloride	ND	ug/L	5.0	1		10/23/17 13:22	56-23-5	M1,R1
Chlorobenzene	ND	ug/L	5.0	1		10/23/17 13:22	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/23/17 13:22	75-00-3	
Chloroform	ND	ug/L	5.0	1		10/23/17 13:22	67-66-3	M1
Chloromethane	ND	ug/L	5.0	1		10/23/17 13:22	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	1		10/23/17 13:22	124-48-1	M1
Dibromomethane	ND	ug/L	5.0	1		10/23/17 13:22	74-95-3	
Ethylbenzene	ND	ug/L	5.0	1		10/23/17 13:22	100-41-4	M1,R1
Iodomethane	ND	ug/L	5.0	1		10/23/17 13:22	74-88-4	R1
Methylene Chloride	ND	ug/L	5.0	1		10/23/17 13:22	75-09-2	M1
Styrene	ND	ug/L	5.0	1		10/23/17 13:22	100-42-5	M1
Tetrachloroethene	ND	ug/L	5.0	1		10/23/17 13:22	127-18-4	R1
Toluene	ND	ug/L	5.0	1		10/23/17 13:22	108-88-3	M1,R1
Trichloroethene	ND	ug/L	5.0	1		10/23/17 13:22	79-01-6	M1
Trichlorofluoromethane	ND	ug/L	5.0	1		10/23/17 13:22	75-69-4	R1
Vinyl acetate	ND	ug/L	5.0	1		10/23/17 13:22	108-05-4	R1
Vinyl chloride	<b>8.8</b>	ug/L	5.0	1		10/23/17 13:22	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1		10/23/17 13:22	1330-20-7	MS,RS
cis-1,2-Dichloroethene	<b>62.3</b>	ug/L	5.0	1		10/23/17 13:22	156-59-2	M1
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/23/17 13:22	10061-01-5	M1,R1
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/23/17 13:22	156-60-5	M1
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/23/17 13:22	10061-02-6	M1,R1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1		10/23/17 13:22	110-57-6	M1,R1
<b>Surrogates</b>								
1,2-Dichloroethane-d4 (S)	113	%	68-153	1		10/23/17 13:22	17060-07-0	
4-Bromofluorobenzene (S)	103	%	79-124	1		10/23/17 13:22	460-00-4	
Toluene-d8 (S)	96	%	69-124	1		10/23/17 13:22	2037-26-5	
<b>2320B Alkalinity</b>		Analytical Method: SM22 2320B						
Alkalinity, Total as CaCO3	<b>392</b>	mg/L	1.0	1		10/27/17 11:59		M1
<b>2340C Hardness, Total</b>		Analytical Method: SM22 2340C						
Total Hardness	<b>300</b>	mg/L	5.0	1		10/27/17 13:55		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM22 2540C						
Total Dissolved Solids	<b>337</b>	mg/L	10.0	1		10/24/17 13:47		
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4						
Chemical Oxygen Demand	<b>35.2</b>	mg/L	10.0	1	10/24/17 11:17	10/24/17 13:41		

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

Sample: MW-10B	Lab ID: 7033515008	Collected: 10/18/17 11:45	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>5210B BOD, 5 day</b>								
Analytical Method: SM22 5210B Preparation Method: SM22 5210B								
BOD, 5 day	<b>2.4</b>	mg/L	2.0	1	10/19/17 16:48	10/24/17 12:42		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0								
Bromide	<b>0.23J</b>	mg/L	0.50	1		10/30/17 21:35	24959-67-9	
Chloride	<b>10.2</b>	mg/L	2.0	1		10/30/17 21:35	16887-00-6	
Sulfate	<b>4.4J</b>	mg/L	5.0	1		10/30/17 21:35	14808-79-8	
<b>351.2 Total Kjeldahl Nitrogen</b>								
Analytical Method: EPA 351.2 Preparation Method: EPA 351.2								
Nitrogen, Kjeldahl, Total	<b>1.4</b>	mg/L	0.10	1	10/31/17 06:07	10/31/17 13:04	7727-37-9	
<b>353.2 Nitrogen, NO2/NO3 pres.</b>								
Analytical Method: EPA 353.2								
Nitrate-Nitrite (as N)	<b>0.042J</b>	mg/L	0.050	1		10/19/17 23:26	7727-37-9	
<b>353.2 Nitrogen, NO2</b>								
Analytical Method: EPA 353.2								
Nitrite as N	<b>&lt;0.050</b>	mg/L	0.050	1		10/19/17 19:50	14797-65-0	
<b>Phenolics, Total Recoverable</b>								
Analytical Method: EPA 420.1 Preparation Method: EPA 420.1								
Phenolics, Total Recoverable	<b>6.5</b>	ug/L	5.0	1	10/25/17 12:00	10/25/17 15:32		
<b>4500 Ammonia Water</b>								
Analytical Method: SM22 4500 NH3 H								
Nitrogen, Ammonia	<b>0.96</b>	mg/L	0.10	1		10/26/17 13:00	7664-41-7	
<b>9060A TOC as NPOC</b>								
Analytical Method: EPA 9060A								
Total Organic Carbon	<b>3.8</b>	mg/L	1.0	1		10/24/17 20:03	7440-44-0	
Total Organic Carbon	<b>3.9</b>	mg/L	1.0	1		10/24/17 20:03	7440-44-0	
Total Organic Carbon	<b>3.9</b>	mg/L	1.0	1		10/24/17 20:03	7440-44-0	
Total Organic Carbon	<b>3.8</b>	mg/L	1.0	1		10/24/17 20:03	7440-44-0	
Mean Total Organic Carbon	<b>3.9</b>	mg/L	1.0	1		10/24/17 20:03	7440-44-0	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

<b>Sample: SEEP</b>		<b>Lab ID: 7033515009</b>		Collected: 10/18/17 13:00	Received: 10/19/17 09:40	Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010C Preparation Method: EPA 3005A						
Aluminum	<b>56.0J</b>	ug/L	200	1	10/30/17 10:04	11/02/17 03:50	7429-90-5	B
Antimony	<b>&lt;60.0</b>	ug/L	60.0	1	10/30/17 10:04	11/02/17 03:50	7440-36-0	
Arsenic	<b>20.0</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:50	7440-38-2	
Barium	<b>182J</b>	ug/L	200	1	10/30/17 10:04	11/02/17 03:50	7440-39-3	
Beryllium	<b>&lt;5.0</b>	ug/L	5.0	1	10/30/17 10:04	11/02/17 03:50	7440-41-7	
Boron	<b>81.1</b>	ug/L	50.0	1	10/30/17 10:04	11/02/17 03:50	7440-42-8	
Cadmium	<b>&lt;2.5</b>	ug/L	2.5	1	10/30/17 10:04	11/02/17 03:50	7440-43-9	
Calcium	<b>48800</b>	ug/L	200	1	10/30/17 10:04	11/02/17 03:50	7440-70-2	
Chromium	<b>3.6J</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:50	7440-47-3	
Cobalt	<b>7.9J</b>	ug/L	50.0	1	10/30/17 10:04	11/02/17 03:50	7440-48-4	
Copper	<b>&lt;25.0</b>	ug/L	25.0	1	10/30/17 10:04	11/02/17 03:50	7440-50-8	
Iron	<b>9270</b>	ug/L	20.0	1	10/30/17 10:04	11/02/17 03:50	7439-89-6	
Lead	<b>&lt;5.0</b>	ug/L	5.0	1	10/30/17 10:04	11/02/17 03:50	7439-92-1	
Magnesium	<b>14700</b>	ug/L	200	1	10/30/17 10:04	11/02/17 03:50	7439-95-4	
Manganese	<b>9250</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:50	7439-96-5	
Nickel	<b>3.3J</b>	ug/L	40.0	1	10/30/17 10:04	11/02/17 03:50	7440-02-0	
Potassium	<b>4390J</b>	ug/L	5000	1	10/30/17 10:04	11/02/17 03:50	7440-09-7	
Selenium	<b>&lt;10.0</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:50	7782-49-2	
Silver	<b>&lt;10.0</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:50	7440-22-4	
Sodium	<b>6040</b>	ug/L	5000	1	10/30/17 10:04	11/02/17 03:50	7440-23-5	
Thallium	<b>4.2J</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:50	7440-28-0	
Vanadium	<b>&lt;50.0</b>	ug/L	50.0	1	10/30/17 10:04	11/02/17 03:50	7440-62-2	
Zinc	<b>2.8J</b>	ug/L	20.0	1	10/30/17 10:04	11/02/17 03:50	7440-66-6	B
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A						
Mercury	<b>0.064J</b>	ug/L	0.20	1	10/26/17 09:45	10/27/17 13:58	7439-97-6	B
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 20:29	630-20-6	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/20/17 20:29	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 20:29	79-34-5	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/20/17 20:29	79-00-5	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/20/17 20:29	75-34-3	
1,1-Dichloroethene	ND	ug/L	5.0	1		10/20/17 20:29	75-35-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		10/20/17 20:29	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/20/17 20:29	96-12-8	CL,L2
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		10/20/17 20:29	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 20:29	95-50-1	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/20/17 20:29	107-06-2	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/20/17 20:29	78-87-5	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 20:29	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	1		10/20/17 20:29	78-93-3	
2-Hexanone	ND	ug/L	5.0	1		10/20/17 20:29	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		10/20/17 20:29	108-10-1	
Acetone	ND	ug/L	5.0	1		10/20/17 20:29	67-64-1	
Acrylonitrile	ND	ug/L	5.0	1		10/20/17 20:29	107-13-1	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

<b>Sample: SEEP</b>		<b>Lab ID: 7033515009</b>	Collected: 10/18/17 13:00	Received: 10/19/17 09:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
Benzene	ND	ug/L	5.0	1		10/20/17 20:29	71-43-2	
Bromochloromethane	ND	ug/L	5.0	1		10/20/17 20:29	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		10/20/17 20:29	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/20/17 20:29	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/20/17 20:29	74-83-9	
Carbon disulfide	ND	ug/L	5.0	1		10/20/17 20:29	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		10/20/17 20:29	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		10/20/17 20:29	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/20/17 20:29	75-00-3	CL
Chloroform	ND	ug/L	5.0	1		10/20/17 20:29	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/20/17 20:29	74-87-3	CL
Dibromochloromethane	ND	ug/L	5.0	1		10/20/17 20:29	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		10/20/17 20:29	74-95-3	
Ethylbenzene	ND	ug/L	5.0	1		10/20/17 20:29	100-41-4	
Iodomethane	ND	ug/L	5.0	1		10/20/17 20:29	74-88-4	
Methylene Chloride	ND	ug/L	5.0	1		10/20/17 20:29	75-09-2	
Styrene	ND	ug/L	5.0	1		10/20/17 20:29	100-42-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/20/17 20:29	127-18-4	
Toluene	ND	ug/L	5.0	1		10/20/17 20:29	108-88-3	
Trichloroethene	ND	ug/L	5.0	1		10/20/17 20:29	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/20/17 20:29	75-69-4	
Vinyl acetate	ND	ug/L	5.0	1		10/20/17 20:29	108-05-4	
Vinyl chloride	ND	ug/L	5.0	1		10/20/17 20:29	75-01-4	CL
Xylene (Total)	ND	ug/L	5.0	1		10/20/17 20:29	1330-20-7	
cis-1,2-Dichloroethene	11.7	ug/L	5.0	1		10/20/17 20:29	156-59-2	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 20:29	10061-01-5	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 20:29	156-60-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 20:29	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1		10/20/17 20:29	110-57-6	
<b>Surrogates</b>								
1,2-Dichloroethane-d4 (S)	113	%	68-153	1		10/20/17 20:29	17060-07-0	
4-Bromofluorobenzene (S)	105	%	79-124	1		10/20/17 20:29	460-00-4	
Toluene-d8 (S)	94	%	69-124	1		10/20/17 20:29	2037-26-5	
<b>2320B Alkalinity</b>		Analytical Method: SM22 2320B						
Alkalinity, Total as CaCO3	231	mg/L	1.0	1		10/27/17 12:28		
<b>2340C Hardness, Total</b>		Analytical Method: SM22 2340C						
Total Hardness	250	mg/L	5.0	1		10/27/17 13:58		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM22 2540C						
Total Dissolved Solids	237	mg/L	10.0	1		10/24/17 13:50		
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4						
Chemical Oxygen Demand	33.0	mg/L	10.0	1	10/24/17 11:17	10/24/17 13:43		

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

Sample: SEEP	Lab ID: 7033515009	Collected: 10/18/17 13:00	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>5210B BOD, 5 day</b>		Analytical Method: SM22 5210B Preparation Method: SM22 5210B						
BOD, 5 day	15.1	mg/L	4.0	2	10/19/17 16:48	10/24/17 13:04		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0						
Bromide	0.21J	mg/L	0.50	1		10/30/17 22:43	24959-67-9	
Chloride	4.8	mg/L	2.0	1		10/30/17 22:43	16887-00-6	
Sulfate	5.2	mg/L	5.0	1		10/30/17 22:43	14808-79-8	
<b>351.2 Total Kjeldahl Nitrogen</b>		Analytical Method: EPA 351.2 Preparation Method: EPA 351.2						
Nitrogen, Kjeldahl, Total	3.9	mg/L	0.10	1	10/31/17 06:07	10/31/17 13:06	7727-37-9	
<b>353.2 Nitrogen, NO2/NO3 pres.</b>		Analytical Method: EPA 353.2						
Nitrate-Nitrite (as N)	<0.050	mg/L	0.050	1		10/20/17 07:56	7727-37-9	
<b>353.2 Nitrogen, NO2</b>		Analytical Method: EPA 353.2						
Nitrite as N	<0.050	mg/L	0.050	1		10/19/17 19:53	14797-65-0	
<b>Phenolics, Total Recoverable</b>		Analytical Method: EPA 420.1 Preparation Method: EPA 420.1						
Phenolics, Total Recoverable	17.2	ug/L	5.0	1	10/25/17 12:00	10/25/17 15:43		
<b>4500 Ammonia Water</b>		Analytical Method: SM22 4500 NH3 H						
Nitrogen, Ammonia	3.3	mg/L	0.10	1		10/26/17 13:06	7664-41-7	
<b>9060A TOC as NPOC</b>		Analytical Method: EPA 9060A						
Total Organic Carbon	5.9	mg/L	1.0	1		10/24/17 20:59	7440-44-0	
Total Organic Carbon	6.0	mg/L	1.0	1		10/24/17 20:59	7440-44-0	
Total Organic Carbon	5.9	mg/L	1.0	1		10/24/17 20:59	7440-44-0	
Total Organic Carbon	5.9	mg/L	1.0	1		10/24/17 20:59	7440-44-0	
Mean Total Organic Carbon	5.9	mg/L	1.0	1		10/24/17 20:59	7440-44-0	

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-13	Lab ID: 7033515010	Collected: 10/18/17 13:20	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010C Preparation Method: EPA 3005A						
Aluminum	<200	ug/L	200	1	10/30/17 10:04	11/02/17 03:56	7429-90-5	
Antimony	<60.0	ug/L	60.0	1	10/30/17 10:04	11/02/17 03:56	7440-36-0	
Arsenic	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:56	7440-38-2	
Barium	16.6J	ug/L	200	1	10/30/17 10:04	11/02/17 03:56	7440-39-3	
Beryllium	<5.0	ug/L	5.0	1	10/30/17 10:04	11/02/17 03:56	7440-41-7	
Boron	60.0	ug/L	50.0	1	10/30/17 10:04	11/02/17 03:56	7440-42-8	
Cadmium	<2.5	ug/L	2.5	1	10/30/17 10:04	11/02/17 03:56	7440-43-9	
Calcium	43900	ug/L	200	1	10/30/17 10:04	11/02/17 03:56	7440-70-2	
Chromium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:56	7440-47-3	
Cobalt	<50.0	ug/L	50.0	1	10/30/17 10:04	11/02/17 03:56	7440-48-4	
Copper	<25.0	ug/L	25.0	1	10/30/17 10:04	11/02/17 03:56	7440-50-8	
Iron	106	ug/L	20.0	1	10/30/17 10:04	11/02/17 03:56	7439-89-6	B
Lead	<5.0	ug/L	5.0	1	10/30/17 10:04	11/02/17 03:56	7439-92-1	
Magnesium	11900	ug/L	200	1	10/30/17 10:04	11/02/17 03:56	7439-95-4	
Manganese	60.9	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:56	7439-96-5	
Nickel	1.2J	ug/L	40.0	1	10/30/17 10:04	11/02/17 03:56	7440-02-0	
Potassium	1040J	ug/L	5000	1	10/30/17 10:04	11/02/17 03:56	7440-09-7	
Selenium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:56	7782-49-2	
Silver	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:56	7440-22-4	
Sodium	10200	ug/L	5000	1	10/30/17 10:04	11/02/17 03:56	7440-23-5	
Thallium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 03:56	7440-28-0	
Vanadium	<50.0	ug/L	50.0	1	10/30/17 10:04	11/02/17 03:56	7440-62-2	
Zinc	22.5	ug/L	20.0	1	10/30/17 10:04	11/02/17 03:56	7440-66-6	B
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A						
Mercury	0.064J	ug/L	0.20	1	10/26/17 09:45	10/27/17 14:06	7439-97-6	B
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 20:51	630-20-6	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/20/17 20:51	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 20:51	79-34-5	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/20/17 20:51	79-00-5	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/20/17 20:51	75-34-3	
1,1-Dichloroethene	ND	ug/L	5.0	1		10/20/17 20:51	75-35-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		10/20/17 20:51	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/20/17 20:51	96-12-8	CL,L2
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		10/20/17 20:51	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 20:51	95-50-1	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/20/17 20:51	107-06-2	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/20/17 20:51	78-87-5	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 20:51	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	1		10/20/17 20:51	78-93-3	
2-Hexanone	ND	ug/L	5.0	1		10/20/17 20:51	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		10/20/17 20:51	108-10-1	
Acetone	ND	ug/L	5.0	1		10/20/17 20:51	67-64-1	
Acrylonitrile	ND	ug/L	5.0	1		10/20/17 20:51	107-13-1	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-13	Lab ID: 7033515010	Collected: 10/18/17 13:20	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
Benzene	ND	ug/L	5.0	1		10/20/17 20:51	71-43-2	
Bromochloromethane	ND	ug/L	5.0	1		10/20/17 20:51	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		10/20/17 20:51	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/20/17 20:51	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/20/17 20:51	74-83-9	
Carbon disulfide	ND	ug/L	5.0	1		10/20/17 20:51	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		10/20/17 20:51	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		10/20/17 20:51	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/20/17 20:51	75-00-3	CL
Chloroform	ND	ug/L	5.0	1		10/20/17 20:51	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/20/17 20:51	74-87-3	CL
Dibromochloromethane	ND	ug/L	5.0	1		10/20/17 20:51	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		10/20/17 20:51	74-95-3	
Ethylbenzene	ND	ug/L	5.0	1		10/20/17 20:51	100-41-4	
Iodomethane	ND	ug/L	5.0	1		10/20/17 20:51	74-88-4	
Methylene Chloride	ND	ug/L	5.0	1		10/20/17 20:51	75-09-2	
Styrene	ND	ug/L	5.0	1		10/20/17 20:51	100-42-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/20/17 20:51	127-18-4	
Toluene	ND	ug/L	5.0	1		10/20/17 20:51	108-88-3	
Trichloroethene	ND	ug/L	5.0	1		10/20/17 20:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/20/17 20:51	75-69-4	
Vinyl acetate	ND	ug/L	5.0	1		10/20/17 20:51	108-05-4	
Vinyl chloride	ND	ug/L	5.0	1		10/20/17 20:51	75-01-4	CL
Xylene (Total)	ND	ug/L	5.0	1		10/20/17 20:51	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 20:51	156-59-2	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 20:51	10061-01-5	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 20:51	156-60-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 20:51	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1		10/20/17 20:51	110-57-6	
<b>Surrogates</b>								
1,2-Dichloroethane-d4 (S)	112	%	68-153	1		10/20/17 20:51	17060-07-0	
4-Bromofluorobenzene (S)	102	%	79-124	1		10/20/17 20:51	460-00-4	
Toluene-d8 (S)	94	%	69-124	1		10/20/17 20:51	2037-26-5	
<b>2320B Alkalinity</b>		Analytical Method: SM22 2320B						
Alkalinity, Total as CaCO3	<b>191</b>	mg/L	1.0	1		10/27/17 12:34		
<b>2340C Hardness, Total</b>		Analytical Method: SM22 2340C						
Total Hardness	<b>150</b>	mg/L	5.0	1		10/27/17 14:00		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM22 2540C						
Total Dissolved Solids	<b>195</b>	mg/L	10.0	1		10/24/17 13:51		
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4						
Chemical Oxygen Demand	<b>11.9</b>	mg/L	10.0	1	10/24/17 11:17	10/24/17 13:44		

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

Sample: MW-13	Lab ID: 7033515010	Collected: 10/18/17 13:20	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>5210B BOD, 5 day</b>								
Analytical Method: SM22 5210B Preparation Method: SM22 5210B								
BOD, 5 day	<b>1.0J</b>	mg/L	2.0	1	10/19/17 16:48	10/24/17 13:06		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0								
Bromide	<b>0.21J</b>	mg/L	0.50	1		10/30/17 22:56	24959-67-9	
Chloride	<b>4.4</b>	mg/L	2.0	1		10/30/17 22:56	16887-00-6	
Sulfate	<b>5.8</b>	mg/L	5.0	1		10/30/17 22:56	14808-79-8	
<b>351.2 Total Kjeldahl Nitrogen</b>								
Analytical Method: EPA 351.2 Preparation Method: EPA 351.2								
Nitrogen, Kjeldahl, Total	<b>0.42</b>	mg/L	0.10	1	10/31/17 06:07	10/31/17 13:07	7727-37-9	
<b>353.2 Nitrogen, NO2/NO3 pres.</b>								
Analytical Method: EPA 353.2								
Nitrate-Nitrite (as N)	<b>0.067</b>	mg/L	0.050	1		10/20/17 07:57	7727-37-9	
<b>353.2 Nitrogen, NO2</b>								
Analytical Method: EPA 353.2								
Nitrite as N	<b>&lt;0.050</b>	mg/L	0.050	1		10/19/17 19:54	14797-65-0	
<b>Phenolics, Total Recoverable</b>								
Analytical Method: EPA 420.1 Preparation Method: EPA 420.1								
Phenolics, Total Recoverable	<b>1.6J</b>	ug/L	5.0	1	10/25/17 12:00	10/25/17 15:43		
<b>4500 Ammonia Water</b>								
Analytical Method: SM22 4500 NH3 H								
Nitrogen, Ammonia	<b>0.10</b>	mg/L	0.10	1		10/26/17 13:07	7664-41-7	
<b>9060A TOC as NPOC</b>								
Analytical Method: EPA 9060A								
Total Organic Carbon	<b>4.5</b>	mg/L	1.0	1		10/24/17 21:10	7440-44-0	
Total Organic Carbon	<b>3.1</b>	mg/L	1.0	1		10/24/17 21:10	7440-44-0	
Total Organic Carbon	<b>3.0</b>	mg/L	1.0	1		10/24/17 21:10	7440-44-0	
Total Organic Carbon	<b>3.0</b>	mg/L	1.0	1		10/24/17 21:10	7440-44-0	
Mean Total Organic Carbon	<b>3.4</b>	mg/L	1.0	1		10/24/17 21:10	7440-44-0	

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: <b>STREAM</b>		Lab ID: <b>7033515011</b>	Collected: 10/18/17 13:45	Received: 10/19/17 09:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010C Preparation Method: EPA 3005A						
Aluminum	<b>233</b>	ug/L	200	1	10/30/17 10:04	11/02/17 04:01	7429-90-5	B
Antimony	<b>&lt;60.0</b>	ug/L	60.0	1	10/30/17 10:04	11/02/17 04:01	7440-36-0	
Arsenic	<b>&lt;10.0</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:01	7440-38-2	
Barium	<b>15.3J</b>	ug/L	200	1	10/30/17 10:04	11/02/17 04:01	7440-39-3	
Beryllium	<b>&lt;5.0</b>	ug/L	5.0	1	10/30/17 10:04	11/02/17 04:01	7440-41-7	
Boron	<b>41.2J</b>	ug/L	50.0	1	10/30/17 10:04	11/02/17 04:01	7440-42-8	
Cadmium	<b>&lt;2.5</b>	ug/L	2.5	1	10/30/17 10:04	11/02/17 04:01	7440-43-9	
Calcium	<b>32400</b>	ug/L	200	1	10/30/17 10:04	11/02/17 04:01	7440-70-2	
Chromium	<b>&lt;10.0</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:01	7440-47-3	
Cobalt	<b>&lt;50.0</b>	ug/L	50.0	1	10/30/17 10:04	11/02/17 04:01	7440-48-4	
Copper	<b>&lt;25.0</b>	ug/L	25.0	1	10/30/17 10:04	11/02/17 04:01	7440-50-8	
Iron	<b>319</b>	ug/L	20.0	1	10/30/17 10:04	11/02/17 04:01	7439-89-6	
Lead	<b>1.4J</b>	ug/L	5.0	1	10/30/17 10:04	11/02/17 04:01	7439-92-1	
Magnesium	<b>9450</b>	ug/L	200	1	10/30/17 10:04	11/02/17 04:01	7439-95-4	
Manganese	<b>81.9</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:01	7439-96-5	
Nickel	<b>&lt;40.0</b>	ug/L	40.0	1	10/30/17 10:04	11/02/17 04:01	7440-02-0	
Potassium	<b>2470J</b>	ug/L	5000	1	10/30/17 10:04	11/02/17 04:01	7440-09-7	
Selenium	<b>&lt;10.0</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:01	7782-49-2	
Silver	<b>&lt;10.0</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:01	7440-22-4	
Sodium	<b>3520J</b>	ug/L	5000	1	10/30/17 10:04	11/02/17 04:01	7440-23-5	
Thallium	<b>&lt;10.0</b>	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:01	7440-28-0	
Vanadium	<b>&lt;50.0</b>	ug/L	50.0	1	10/30/17 10:04	11/02/17 04:01	7440-62-2	
Zinc	<b>2.7J</b>	ug/L	20.0	1	10/30/17 10:04	11/02/17 04:01	7440-66-6	B
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A						
Mercury	<b>0.066J</b>	ug/L	0.20	1	10/26/17 09:45	10/27/17 14:07	7439-97-6	B
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 21:14	630-20-6	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/20/17 21:14	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 21:14	79-34-5	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/20/17 21:14	79-00-5	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/20/17 21:14	75-34-3	
1,1-Dichloroethene	ND	ug/L	5.0	1		10/20/17 21:14	75-35-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		10/20/17 21:14	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/20/17 21:14	96-12-8	CL,L2
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		10/20/17 21:14	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 21:14	95-50-1	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/20/17 21:14	107-06-2	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/20/17 21:14	78-87-5	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 21:14	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	1		10/20/17 21:14	78-93-3	
2-Hexanone	ND	ug/L	5.0	1		10/20/17 21:14	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		10/20/17 21:14	108-10-1	
Acetone	ND	ug/L	5.0	1		10/20/17 21:14	67-64-1	
Acrylonitrile	ND	ug/L	5.0	1		10/20/17 21:14	107-13-1	

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: <b>STREAM</b>	Lab ID: <b>7033515011</b>	Collected: 10/18/17 13:45	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
Benzene	ND	ug/L	5.0	1		10/20/17 21:14	71-43-2	
Bromochloromethane	ND	ug/L	5.0	1		10/20/17 21:14	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		10/20/17 21:14	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/20/17 21:14	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/20/17 21:14	74-83-9	
Carbon disulfide	ND	ug/L	5.0	1		10/20/17 21:14	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		10/20/17 21:14	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		10/20/17 21:14	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/20/17 21:14	75-00-3	CL
Chloroform	ND	ug/L	5.0	1		10/20/17 21:14	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/20/17 21:14	74-87-3	CL
Dibromochloromethane	ND	ug/L	5.0	1		10/20/17 21:14	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		10/20/17 21:14	74-95-3	
Ethylbenzene	ND	ug/L	5.0	1		10/20/17 21:14	100-41-4	
Iodomethane	ND	ug/L	5.0	1		10/20/17 21:14	74-88-4	
Methylene Chloride	ND	ug/L	5.0	1		10/20/17 21:14	75-09-2	
Styrene	ND	ug/L	5.0	1		10/20/17 21:14	100-42-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/20/17 21:14	127-18-4	
Toluene	ND	ug/L	5.0	1		10/20/17 21:14	108-88-3	
Trichloroethene	ND	ug/L	5.0	1		10/20/17 21:14	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/20/17 21:14	75-69-4	
Vinyl acetate	ND	ug/L	5.0	1		10/20/17 21:14	108-05-4	
Vinyl chloride	ND	ug/L	5.0	1		10/20/17 21:14	75-01-4	CL
Xylene (Total)	ND	ug/L	5.0	1		10/20/17 21:14	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 21:14	156-59-2	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 21:14	10061-01-5	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 21:14	156-60-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 21:14	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1		10/20/17 21:14	110-57-6	
<b>Surrogates</b>								
1,2-Dichloroethane-d4 (S)	112	%	68-153	1		10/20/17 21:14	17060-07-0	
4-Bromofluorobenzene (S)	102	%	79-124	1		10/20/17 21:14	460-00-4	
Toluene-d8 (S)	95	%	69-124	1		10/20/17 21:14	2037-26-5	
<b>2320B Alkalinity</b>		Analytical Method: SM22 2320B						
Alkalinity, Total as CaCO3	<b>134</b>	mg/L	1.0	1		10/27/17 12:40		
<b>2340C Hardness, Total</b>		Analytical Method: SM22 2340C						
Total Hardness	<b>116</b>	mg/L	5.0	1		10/27/17 14:01		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM22 2540C						
Total Dissolved Solids	<b>148</b>	mg/L	10.0	1		10/24/17 13:52		
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4						
Chemical Oxygen Demand	<b>14.0</b>	mg/L	10.0	1	10/26/17 10:58	10/26/17 13:25		

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: <b>STREAM</b>	Lab ID: <b>7033515011</b>	Collected: 10/18/17 13:45	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>5210B BOD, 5 day</b>	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	<b>1.0J</b>	mg/L	2.0	1	10/19/17 16:48	10/24/17 13:08		
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0							
Bromide	<b>0.15J</b>	mg/L	0.50	1		10/30/17 23:10	24959-67-9	
Chloride	<b>3.3</b>	mg/L	2.0	1		10/30/17 23:10	16887-00-6	
Sulfate	<b>8.7</b>	mg/L	5.0	1		10/30/17 23:10	14808-79-8	
<b>351.2 Total Kjeldahl Nitrogen</b>	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	<b>0.15</b>	mg/L	0.10	1	10/31/17 06:07	10/31/17 13:08	7727-37-9	
<b>353.2 Nitrogen, NO2/NO3 pres.</b>	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	<b>0.20</b>	mg/L	0.050	1		10/20/17 08:01	7727-37-9	
<b>353.2 Nitrogen, NO2</b>	Analytical Method: EPA 353.2							
Nitrite as N	<b>&lt;0.050</b>	mg/L	0.050	1		10/19/17 19:58	14797-65-0	
<b>Phenolics, Total Recoverable</b>	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	<b>5.6</b>	ug/L	5.0	1	10/25/17 12:00	10/25/17 15:44		
<b>4500 Ammonia Water</b>	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	<b>0.084J</b>	mg/L	0.10	1		10/26/17 13:08	7664-41-7	
<b>9060A TOC as NPOC</b>	Analytical Method: EPA 9060A							
Total Organic Carbon	<b>4.8</b>	mg/L	1.0	1		10/24/17 21:45	7440-44-0	
Total Organic Carbon	<b>4.9</b>	mg/L	1.0	1		10/24/17 21:45	7440-44-0	
Total Organic Carbon	<b>4.9</b>	mg/L	1.0	1		10/24/17 21:45	7440-44-0	
Total Organic Carbon	<b>4.9</b>	mg/L	1.0	1		10/24/17 21:45	7440-44-0	
Mean Total Organic Carbon	<b>4.9</b>	mg/L	1.0	1		10/24/17 21:45	7440-44-0	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: DUP								
Lab ID: 7033515012		Collected: 10/18/17 13:30		Received: 10/19/17 09:40		Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b> Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Aluminum	147J	ug/L	200	1	10/30/17 10:04	11/02/17 04:07	7429-90-5	B
Antimony	<60.0	ug/L	60.0	1	10/30/17 10:04	11/02/17 04:07	7440-36-0	
Arsenic	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:07	7440-38-2	
Barium	14.7J	ug/L	200	1	10/30/17 10:04	11/02/17 04:07	7440-39-3	
Beryllium	<5.0	ug/L	5.0	1	10/30/17 10:04	11/02/17 04:07	7440-41-7	
Boron	41.1J	ug/L	50.0	1	10/30/17 10:04	11/02/17 04:07	7440-42-8	
Cadmium	<2.5	ug/L	2.5	1	10/30/17 10:04	11/02/17 04:07	7440-43-9	
Calcium	32900	ug/L	200	1	10/30/17 10:04	11/02/17 04:07	7440-70-2	
Chromium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:07	7440-47-3	
Cobalt	<50.0	ug/L	50.0	1	10/30/17 10:04	11/02/17 04:07	7440-48-4	
Copper	<25.0	ug/L	25.0	1	10/30/17 10:04	11/02/17 04:07	7440-50-8	
Iron	204	ug/L	20.0	1	10/30/17 10:04	11/02/17 04:07	7439-89-6	
Lead	<5.0	ug/L	5.0	1	10/30/17 10:04	11/02/17 04:07	7439-92-1	
Magnesium	9620	ug/L	200	1	10/30/17 10:04	11/02/17 04:07	7439-95-4	
Manganese	49.2	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:07	7439-96-5	
Nickel	<40.0	ug/L	40.0	1	10/30/17 10:04	11/02/17 04:07	7440-02-0	
Potassium	2480J	ug/L	5000	1	10/30/17 10:04	11/02/17 04:07	7440-09-7	
Selenium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:07	7782-49-2	
Silver	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:07	7440-22-4	
Sodium	3600J	ug/L	5000	1	10/30/17 10:04	11/02/17 04:07	7440-23-5	
Thallium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:07	7440-28-0	
Vanadium	<50.0	ug/L	50.0	1	10/30/17 10:04	11/02/17 04:07	7440-62-2	
Zinc	2.1J	ug/L	20.0	1	10/30/17 10:04	11/02/17 04:07	7440-66-6	B
<b>7470 Mercury</b> Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Mercury	0.066J	ug/L	0.20	1	10/26/17 09:45	10/27/17 14:09	7439-97-6	B
<b>8260C Volatile Organics</b> Analytical Method: EPA 8260C/5030C								
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 21:37	630-20-6	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/20/17 21:37	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 21:37	79-34-5	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/20/17 21:37	79-00-5	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/20/17 21:37	75-34-3	
1,1-Dichloroethene	ND	ug/L	5.0	1		10/20/17 21:37	75-35-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		10/20/17 21:37	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/20/17 21:37	96-12-8	CL,L2
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		10/20/17 21:37	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 21:37	95-50-1	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/20/17 21:37	107-06-2	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/20/17 21:37	78-87-5	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 21:37	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	1		10/20/17 21:37	78-93-3	
2-Hexanone	ND	ug/L	5.0	1		10/20/17 21:37	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		10/20/17 21:37	108-10-1	
Acetone	ND	ug/L	5.0	1		10/20/17 21:37	67-64-1	
Acrylonitrile	ND	ug/L	5.0	1		10/20/17 21:37	107-13-1	

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: DUP		Lab ID: 7033515012		Collected: 10/18/17 13:30	Received: 10/19/17 09:40	Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
Benzene	ND	ug/L	5.0	1		10/20/17 21:37	71-43-2	
Bromochloromethane	ND	ug/L	5.0	1		10/20/17 21:37	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		10/20/17 21:37	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/20/17 21:37	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/20/17 21:37	74-83-9	
Carbon disulfide	ND	ug/L	5.0	1		10/20/17 21:37	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		10/20/17 21:37	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		10/20/17 21:37	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/20/17 21:37	75-00-3	CL
Chloroform	ND	ug/L	5.0	1		10/20/17 21:37	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/20/17 21:37	74-87-3	CL
Dibromochloromethane	ND	ug/L	5.0	1		10/20/17 21:37	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		10/20/17 21:37	74-95-3	
Ethylbenzene	ND	ug/L	5.0	1		10/20/17 21:37	100-41-4	
Iodomethane	ND	ug/L	5.0	1		10/20/17 21:37	74-88-4	
Methylene Chloride	ND	ug/L	5.0	1		10/20/17 21:37	75-09-2	
Styrene	ND	ug/L	5.0	1		10/20/17 21:37	100-42-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/20/17 21:37	127-18-4	
Toluene	ND	ug/L	5.0	1		10/20/17 21:37	108-88-3	
Trichloroethene	ND	ug/L	5.0	1		10/20/17 21:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/20/17 21:37	75-69-4	
Vinyl acetate	ND	ug/L	5.0	1		10/20/17 21:37	108-05-4	
Vinyl chloride	ND	ug/L	5.0	1		10/20/17 21:37	75-01-4	CL
Xylene (Total)	ND	ug/L	5.0	1		10/20/17 21:37	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 21:37	156-59-2	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 21:37	10061-01-5	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 21:37	156-60-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 21:37	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1		10/20/17 21:37	110-57-6	
<b>Surrogates</b>								
1,2-Dichloroethane-d4 (S)	109	%	68-153	1		10/20/17 21:37	17060-07-0	
4-Bromofluorobenzene (S)	104	%	79-124	1		10/20/17 21:37	460-00-4	
Toluene-d8 (S)	96	%	69-124	1		10/20/17 21:37	2037-26-5	
<b>2320B Alkalinity</b>		Analytical Method: SM22 2320B						
Alkalinity, Total as CaCO3	<b>120</b>	mg/L		1.0	1		10/27/17 12:47	
<b>2340C Hardness, Total</b>		Analytical Method: SM22 2340C						
Total Hardness	<b>120</b>	mg/L		5.0	1		10/27/17 14:03	
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM22 2540C						
Total Dissolved Solids	<b>147</b>	mg/L		10.0	1		10/24/17 13:53	
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4						
Chemical Oxygen Demand	<b>14.0</b>	mg/L		10.0	1	10/26/17 10:58	10/26/17 13:26	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

Sample: DUP		Lab ID: 7033515012		Collected: 10/18/17 13:30	Received: 10/19/17 09:40	Matrix: Water		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>5210B BOD, 5 day</b>		Analytical Method: SM22 5210B Preparation Method: SM22 5210B						
BOD, 5 day	<b>1.0J</b>	mg/L	2.0	1	10/19/17 16:48	10/24/17 13:10		
<b>300.0 IC Anions 28 Days</b>		Analytical Method: EPA 300.0						
Bromide	<b>0.14J</b>	mg/L	0.50	1		10/30/17 23:23	24959-67-9	
Chloride	<b>3.2</b>	mg/L	2.0	1		10/30/17 23:23	16887-00-6	
Sulfate	<b>8.6</b>	mg/L	5.0	1		10/30/17 23:23	14808-79-8	
<b>351.2 Total Kjeldahl Nitrogen</b>		Analytical Method: EPA 351.2 Preparation Method: EPA 351.2						
Nitrogen, Kjeldahl, Total	<b>0.20</b>	mg/L	0.10	1	10/31/17 06:07	10/31/17 13:09	7727-37-9	
<b>353.2 Nitrogen, NO2/NO3 pres.</b>		Analytical Method: EPA 353.2						
Nitrate-Nitrite (as N)	<b>0.21</b>	mg/L	0.050	1		10/20/17 08:02	7727-37-9	
<b>353.2 Nitrogen, NO2</b>		Analytical Method: EPA 353.2						
Nitrite as N	<b>&lt;0.050</b>	mg/L	0.050	1		10/19/17 19:59	14797-65-0	
<b>Phenolics, Total Recoverable</b>		Analytical Method: EPA 420.1 Preparation Method: EPA 420.1						
Phenolics, Total Recoverable	<b>2.5J</b>	ug/L	5.0	1	10/25/17 12:00	10/25/17 15:44		
<b>4500 Ammonia Water</b>		Analytical Method: SM22 4500 NH3 H						
Nitrogen, Ammonia	<b>0.055J</b>	mg/L	0.10	1		10/26/17 13:10	7664-41-7	
<b>9060A TOC as NPOC</b>		Analytical Method: EPA 9060A						
Total Organic Carbon	<b>4.7</b>	mg/L	1.0	1		10/24/17 21:56	7440-44-0	
Total Organic Carbon	<b>4.8</b>	mg/L	1.0	1		10/24/17 21:56	7440-44-0	
Total Organic Carbon	<b>4.7</b>	mg/L	1.0	1		10/24/17 21:56	7440-44-0	
Total Organic Carbon	<b>4.7</b>	mg/L	1.0	1		10/24/17 21:56	7440-44-0	
Mean Total Organic Carbon	<b>4.7</b>	mg/L	1.0	1		10/24/17 21:56	7440-44-0	

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-14	Lab ID: 7033515013	Collected: 10/18/17 14:10	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010C Preparation Method: EPA 3005A						
Aluminum	<200	ug/L	200	1	10/30/17 10:04	11/02/17 04:12	7429-90-5	
Antimony	<60.0	ug/L	60.0	1	10/30/17 10:04	11/02/17 04:12	7440-36-0	
Arsenic	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:12	7440-38-2	
Barium	40.3J	ug/L	200	1	10/30/17 10:04	11/02/17 04:12	7440-39-3	
Beryllium	<5.0	ug/L	5.0	1	10/30/17 10:04	11/02/17 04:12	7440-41-7	
Boron	19.5J	ug/L	50.0	1	10/30/17 10:04	11/02/17 04:12	7440-42-8	
Cadmium	<2.5	ug/L	2.5	1	10/30/17 10:04	11/02/17 04:12	7440-43-9	
Calcium	52800	ug/L	200	1	10/30/17 10:04	11/02/17 04:12	7440-70-2	
Chromium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:12	7440-47-3	
Cobalt	<50.0	ug/L	50.0	1	10/30/17 10:04	11/02/17 04:12	7440-48-4	
Copper	<25.0	ug/L	25.0	1	10/30/17 10:04	11/02/17 04:12	7440-50-8	
Iron	53.0	ug/L	20.0	1	10/30/17 10:04	11/02/17 04:12	7439-89-6	B
Lead	1.3J	ug/L	5.0	1	10/30/17 10:04	11/02/17 04:12	7439-92-1	
Magnesium	13000	ug/L	200	1	10/30/17 10:04	11/02/17 04:12	7439-95-4	
Manganese	48.6	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:12	7439-96-5	
Nickel	1.2J	ug/L	40.0	1	10/30/17 10:04	11/02/17 04:12	7440-02-0	
Potassium	2180J	ug/L	5000	1	10/30/17 10:04	11/02/17 04:12	7440-09-7	
Selenium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:12	7782-49-2	
Silver	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:12	7440-22-4	
Sodium	8540	ug/L	5000	1	10/30/17 10:04	11/02/17 04:12	7440-23-5	
Thallium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:12	7440-28-0	
Vanadium	<50.0	ug/L	50.0	1	10/30/17 10:04	11/02/17 04:12	7440-62-2	
Zinc	7.5J	ug/L	20.0	1	10/30/17 10:04	11/02/17 04:12	7440-66-6	B
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A						
Mercury	0.066J	ug/L	0.20	1	10/26/17 09:45	10/27/17 14:11	7439-97-6	B
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 22:00	630-20-6	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/20/17 22:00	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 22:00	79-34-5	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/20/17 22:00	79-00-5	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/20/17 22:00	75-34-3	
1,1-Dichloroethene	ND	ug/L	5.0	1		10/20/17 22:00	75-35-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		10/20/17 22:00	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/20/17 22:00	96-12-8	CL,L2
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		10/20/17 22:00	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 22:00	95-50-1	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/20/17 22:00	107-06-2	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/20/17 22:00	78-87-5	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 22:00	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	1		10/20/17 22:00	78-93-3	
2-Hexanone	ND	ug/L	5.0	1		10/20/17 22:00	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		10/20/17 22:00	108-10-1	
Acetone	ND	ug/L	5.0	1		10/20/17 22:00	67-64-1	
Acrylonitrile	ND	ug/L	5.0	1		10/20/17 22:00	107-13-1	

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-14	Lab ID: 7033515013	Collected: 10/18/17 14:10	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
Benzene	ND	ug/L	5.0	1		10/20/17 22:00	71-43-2	
Bromochloromethane	ND	ug/L	5.0	1		10/20/17 22:00	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	1		10/20/17 22:00	75-27-4	
Bromoform	ND	ug/L	5.0	1		10/20/17 22:00	75-25-2	
Bromomethane	ND	ug/L	5.0	1		10/20/17 22:00	74-83-9	
Carbon disulfide	ND	ug/L	5.0	1		10/20/17 22:00	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	1		10/20/17 22:00	56-23-5	
Chlorobenzene	ND	ug/L	5.0	1		10/20/17 22:00	108-90-7	
Chloroethane	ND	ug/L	5.0	1		10/20/17 22:00	75-00-3	CL
Chloroform	ND	ug/L	5.0	1		10/20/17 22:00	67-66-3	
Chloromethane	ND	ug/L	5.0	1		10/20/17 22:00	74-87-3	CL
Dibromochloromethane	ND	ug/L	5.0	1		10/20/17 22:00	124-48-1	
Dibromomethane	ND	ug/L	5.0	1		10/20/17 22:00	74-95-3	
Ethylbenzene	ND	ug/L	5.0	1		10/20/17 22:00	100-41-4	
Iodomethane	ND	ug/L	5.0	1		10/20/17 22:00	74-88-4	
Methylene Chloride	ND	ug/L	5.0	1		10/20/17 22:00	75-09-2	
Styrene	ND	ug/L	5.0	1		10/20/17 22:00	100-42-5	
Tetrachloroethene	ND	ug/L	5.0	1		10/20/17 22:00	127-18-4	
Toluene	ND	ug/L	5.0	1		10/20/17 22:00	108-88-3	
Trichloroethene	ND	ug/L	5.0	1		10/20/17 22:00	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	1		10/20/17 22:00	75-69-4	
Vinyl acetate	ND	ug/L	5.0	1		10/20/17 22:00	108-05-4	
Vinyl chloride	ND	ug/L	5.0	1		10/20/17 22:00	75-01-4	CL
Xylene (Total)	ND	ug/L	5.0	1		10/20/17 22:00	1330-20-7	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 22:00	156-59-2	
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 22:00	10061-01-5	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 22:00	156-60-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 22:00	10061-02-6	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1		10/20/17 22:00	110-57-6	
<b>Surrogates</b>								
1,2-Dichloroethane-d4 (S)	115	%	68-153	1		10/20/17 22:00	17060-07-0	
4-Bromofluorobenzene (S)	105	%	79-124	1		10/20/17 22:00	460-00-4	
Toluene-d8 (S)	95	%	69-124	1		10/20/17 22:00	2037-26-5	
<b>2320B Alkalinity</b>		Analytical Method: SM22 2320B						
Alkalinity, Total as CaCO3	<b>282</b>	mg/L	1.0	1		10/27/17 12:54		
<b>2340C Hardness, Total</b>		Analytical Method: SM22 2340C						
Total Hardness	<b>190</b>	mg/L	5.0	1		10/27/17 14:05		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM22 2540C						
Total Dissolved Solids	<b>225</b>	mg/L	10.0	1		10/24/17 13:53		
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4						
Chemical Oxygen Demand	<b>24.6</b>	mg/L	10.0	1	10/26/17 10:58	10/26/17 13:26		

### REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

Sample: MW-14	Lab ID: 7033515013	Collected: 10/18/17 14:10	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>5210B BOD, 5 day</b>	Analytical Method: SM22 5210B Preparation Method: SM22 5210B							
BOD, 5 day	<b>1.0J</b>	mg/L	2.0	1	10/19/17 16:48	10/24/17 13:13		
<b>300.0 IC Anions 28 Days</b>	Analytical Method: EPA 300.0							
Bromide	<b>0.029J</b>	mg/L	0.50	1		10/30/17 23:37	24959-67-9	
Chloride	<b>2.2</b>	mg/L	2.0	1		10/30/17 23:37	16887-00-6	
Sulfate	<b>13.4</b>	mg/L	5.0	1		10/30/17 23:37	14808-79-8	
<b>351.2 Total Kjeldahl Nitrogen</b>	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2							
Nitrogen, Kjeldahl, Total	<b>0.59</b>	mg/L	0.10	1	10/31/17 06:07	10/31/17 13:09	7727-37-9	
<b>353.2 Nitrogen, NO2/NO3 pres.</b>	Analytical Method: EPA 353.2							
Nitrate-Nitrite (as N)	<b>0.55</b>	mg/L	0.050	1		10/20/17 08:03	7727-37-9	
<b>353.2 Nitrogen, NO2</b>	Analytical Method: EPA 353.2							
Nitrite as N	<b>&lt;0.050</b>	mg/L	0.050	1		10/19/17 20:00	14797-65-0	
<b>Phenolics, Total Recoverable</b>	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1							
Phenolics, Total Recoverable	<b>6.5</b>	ug/L	5.0	1	10/25/17 12:00	10/25/17 15:45		
<b>4500 Ammonia Water</b>	Analytical Method: SM22 4500 NH3 H							
Nitrogen, Ammonia	<b>0.051J</b>	mg/L	0.10	1		10/26/17 13:11	7664-41-7	
<b>9060A TOC as NPOC</b>	Analytical Method: EPA 9060A							
Total Organic Carbon	<b>4.7</b>	mg/L	1.0	1		10/24/17 22:19	7440-44-0	
Total Organic Carbon	<b>3.4</b>	mg/L	1.0	1		10/24/17 22:19	7440-44-0	
Total Organic Carbon	<b>3.8</b>	mg/L	1.0	1		10/24/17 22:19	7440-44-0	
Total Organic Carbon	<b>6.2</b>	mg/L	1.0	1		10/24/17 22:19	7440-44-0	
Mean Total Organic Carbon	<b>4.5</b>	mg/L	1.0	1		10/24/17 22:19	7440-44-0	

## REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-8B	Lab ID: 7033515014	Collected: 10/18/17 14:30	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>6010 MET ICP</b>		Analytical Method: EPA 6010C Preparation Method: EPA 3005A						
Aluminum	47.3J	ug/L	200	1	10/30/17 10:04	11/02/17 04:17	7429-90-5	B
Antimony	<60.0	ug/L	60.0	1	10/30/17 10:04	11/02/17 04:17	7440-36-0	
Arsenic	28.3	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:17	7440-38-2	
Barium	111J	ug/L	200	1	10/30/17 10:04	11/02/17 04:17	7440-39-3	
Beryllium	<5.0	ug/L	5.0	1	10/30/17 10:04	11/02/17 04:17	7440-41-7	
Boron	67.6	ug/L	50.0	1	10/30/17 10:04	11/02/17 04:17	7440-42-8	
Cadmium	<2.5	ug/L	2.5	1	10/30/17 10:04	11/02/17 04:17	7440-43-9	
Calcium	66600	ug/L	200	1	10/30/17 10:04	11/02/17 04:17	7440-70-2	
Chromium	4.0J	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:17	7440-47-3	
Cobalt	13.6J	ug/L	50.0	1	10/30/17 10:04	11/02/17 04:17	7440-48-4	
Copper	<25.0	ug/L	25.0	1	10/30/17 10:04	11/02/17 04:17	7440-50-8	
Iron	11000	ug/L	20.0	1	10/30/17 10:04	11/02/17 04:17	7439-89-6	
Lead	3.3J	ug/L	5.0	1	10/30/17 10:04	11/02/17 04:17	7439-92-1	
Magnesium	9890	ug/L	200	1	10/30/17 10:04	11/02/17 04:17	7439-95-4	
Manganese	9060	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:17	7439-96-5	
Nickel	5.7J	ug/L	40.0	1	10/30/17 10:04	11/02/17 04:17	7440-02-0	
Potassium	5700	ug/L	5000	1	10/30/17 10:04	11/02/17 04:17	7440-09-7	
Selenium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:17	7782-49-2	
Silver	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:17	7440-22-4	
Sodium	4710J	ug/L	5000	1	10/30/17 10:04	11/02/17 04:17	7440-23-5	
Thallium	<10.0	ug/L	10.0	1	10/30/17 10:04	11/02/17 04:17	7440-28-0	
Vanadium	<50.0	ug/L	50.0	1	10/30/17 10:04	11/02/17 04:17	7440-62-2	
Zinc	21.0	ug/L	20.0	1	10/30/17 10:04	11/02/17 04:17	7440-66-6	B
<b>7470 Mercury</b>		Analytical Method: EPA 7470A Preparation Method: EPA 7470A						
Mercury	0.073J	ug/L	0.20	1	10/26/17 09:45	10/27/17 14:12	7439-97-6	B
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C						
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 22:23	630-20-6	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		10/20/17 22:23	71-55-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	1		10/20/17 22:23	79-34-5	
1,1,2-Trichloroethane	ND	ug/L	5.0	1		10/20/17 22:23	79-00-5	
1,1-Dichloroethane	ND	ug/L	5.0	1		10/20/17 22:23	75-34-3	
1,1-Dichloroethene	ND	ug/L	5.0	1		10/20/17 22:23	75-35-4	
1,2,3-Trichloropropane	ND	ug/L	5.0	1		10/20/17 22:23	96-18-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	5.0	1		10/20/17 22:23	96-12-8	CL,L2
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	1		10/20/17 22:23	106-93-4	
1,2-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 22:23	95-50-1	
1,2-Dichloroethane	ND	ug/L	5.0	1		10/20/17 22:23	107-06-2	
1,2-Dichloropropane	ND	ug/L	5.0	1		10/20/17 22:23	78-87-5	
1,4-Dichlorobenzene	ND	ug/L	5.0	1		10/20/17 22:23	106-46-7	
2-Butanone (MEK)	ND	ug/L	5.0	1		10/20/17 22:23	78-93-3	
2-Hexanone	ND	ug/L	5.0	1		10/20/17 22:23	591-78-6	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	5.0	1		10/20/17 22:23	108-10-1	
Acetone	ND	ug/L	5.0	1		10/20/17 22:23	67-64-1	
Acrylonitrile	ND	ug/L	5.0	1		10/20/17 22:23	107-13-1	

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Sample: MW-8B		Lab ID: 7033515014		Collected: 10/18/17 14:30	Received: 10/19/17 09:40	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
<b>8260C Volatile Organics</b>		Analytical Method: EPA 8260C/5030C							
Benzene	ND	ug/L	5.0	1		10/20/17 22:23	71-43-2		
Bromochloromethane	ND	ug/L	5.0	1		10/20/17 22:23	74-97-5		
Bromodichloromethane	ND	ug/L	5.0	1		10/20/17 22:23	75-27-4		
Bromoform	ND	ug/L	5.0	1		10/20/17 22:23	75-25-2		
Bromomethane	ND	ug/L	5.0	1		10/20/17 22:23	74-83-9		
Carbon disulfide	ND	ug/L	5.0	1		10/20/17 22:23	75-15-0		
Carbon tetrachloride	ND	ug/L	5.0	1		10/20/17 22:23	56-23-5		
Chlorobenzene	<b>8.9</b>	ug/L	5.0	1		10/20/17 22:23	108-90-7		
Chloroethane	ND	ug/L	5.0	1		10/20/17 22:23	75-00-3	CL	
Chloroform	ND	ug/L	5.0	1		10/20/17 22:23	67-66-3		
Chloromethane	ND	ug/L	5.0	1		10/20/17 22:23	74-87-3	CL	
Dibromochloromethane	ND	ug/L	5.0	1		10/20/17 22:23	124-48-1		
Dibromomethane	ND	ug/L	5.0	1		10/20/17 22:23	74-95-3		
Ethylbenzene	ND	ug/L	5.0	1		10/20/17 22:23	100-41-4		
Iodomethane	ND	ug/L	5.0	1		10/20/17 22:23	74-88-4		
Methylene Chloride	ND	ug/L	5.0	1		10/20/17 22:23	75-09-2		
Styrene	ND	ug/L	5.0	1		10/20/17 22:23	100-42-5		
Tetrachloroethene	ND	ug/L	5.0	1		10/20/17 22:23	127-18-4		
Toluene	ND	ug/L	5.0	1		10/20/17 22:23	108-88-3		
Trichloroethene	ND	ug/L	5.0	1		10/20/17 22:23	79-01-6		
Trichlorofluoromethane	ND	ug/L	5.0	1		10/20/17 22:23	75-69-4		
Vinyl acetate	ND	ug/L	5.0	1		10/20/17 22:23	108-05-4		
Vinyl chloride	<b>7.3</b>	ug/L	5.0	1		10/20/17 22:23	75-01-4	CL	
Xylene (Total)	ND	ug/L	5.0	1		10/20/17 22:23	1330-20-7		
cis-1,2-Dichloroethene	<b>17.3</b>	ug/L	5.0	1		10/20/17 22:23	156-59-2		
cis-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 22:23	10061-01-5		
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		10/20/17 22:23	156-60-5		
trans-1,3-Dichloropropene	ND	ug/L	5.0	1		10/20/17 22:23	10061-02-6		
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1		10/20/17 22:23	110-57-6		
<b>Surrogates</b>									
1,2-Dichloroethane-d4 (S)	108	%	68-153	1		10/20/17 22:23	17060-07-0		
4-Bromofluorobenzene (S)	102	%	79-124	1		10/20/17 22:23	460-00-4		
Toluene-d8 (S)	95	%	69-124	1		10/20/17 22:23	2037-26-5		
<b>2320B Alkalinity</b>		Analytical Method: SM22 2320B							
Alkalinity, Total as CaCO3	<b>241</b>	mg/L		1.0	1		10/27/17 13:01		
<b>2340C Hardness, Total</b>		Analytical Method: SM22 2340C							
Total Hardness	<b>250</b>	mg/L		5.0	1		10/27/17 14:07		
<b>2540C Total Dissolved Solids</b>		Analytical Method: SM22 2540C							
Total Dissolved Solids	<b>248</b>	mg/L		10.0	1		10/24/17 13:54		
<b>410.4 COD</b>		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4							
Chemical Oxygen Demand	<b>39.4</b>	mg/L		10.0	1	10/26/17 10:58	10/26/17 13:26		

### REPORT OF LABORATORY ANALYSIS

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### ANALYTICAL RESULTS

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

Sample: MW-8B	Lab ID: 7033515014	Collected: 10/18/17 14:30	Received: 10/19/17 09:40	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>5210B BOD, 5 day</b>								
Analytical Method: SM22 5210B Preparation Method: SM22 5210B								
BOD, 5 day	3.5	mg/L	2.0	1	10/19/17 16:48	10/24/17 13:15		
<b>300.0 IC Anions 28 Days</b>								
Analytical Method: EPA 300.0								
Bromide	0.19J	mg/L	0.50	1		10/30/17 23:50	24959-67-9	
Chloride	3.6	mg/L	2.0	1		10/30/17 23:50	16887-00-6	
Sulfate	4.2J	mg/L	5.0	1		10/30/17 23:50	14808-79-8	
<b>351.2 Total Kjeldahl Nitrogen</b>								
Analytical Method: EPA 351.2 Preparation Method: EPA 351.2								
Nitrogen, Kjeldahl, Total	3.4	mg/L	0.10	1	10/31/17 06:07	10/31/17 13:12	7727-37-9	
<b>353.2 Nitrogen, NO2/NO3 pres.</b>								
Analytical Method: EPA 353.2								
Nitrate-Nitrite (as N)	0.062	mg/L	0.050	1		10/20/17 08:04	7727-37-9	
<b>353.2 Nitrogen, NO2</b>								
Analytical Method: EPA 353.2								
Nitrite as N	<0.050	mg/L	0.050	1		10/19/17 20:01	14797-65-0	
<b>Phenolics, Total Recoverable</b>								
Analytical Method: EPA 420.1 Preparation Method: EPA 420.1								
Phenolics, Total Recoverable	32.5	ug/L	5.0	1	10/25/17 12:00	10/25/17 15:45		M1
<b>4500 Ammonia Water</b>								
Analytical Method: SM22 4500 NH3 H								
Nitrogen, Ammonia	2.4	mg/L	0.10	1		10/26/17 13:12	7664-41-7	
<b>9060A TOC as NPOC</b>								
Analytical Method: EPA 9060A								
Total Organic Carbon	6.0	mg/L	1.0	1		10/24/17 22:31	7440-44-0	
Total Organic Carbon	6.0	mg/L	1.0	1		10/24/17 22:31	7440-44-0	
Total Organic Carbon	5.8	mg/L	1.0	1		10/24/17 22:31	7440-44-0	
Total Organic Carbon	5.9	mg/L	1.0	1		10/24/17 22:31	7440-44-0	
Mean Total Organic Carbon	5.9	mg/L	1.0	1		10/24/17 22:31	7440-44-0	

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

QC Batch: 44392

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

METHOD BLANK: 208122

Matrix: Water

Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	0.063J	0.20	10/27/17 13:43	

LABORATORY CONTROL SAMPLE: 208123

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	1.1	109	80-120	

MATRIX SPIKE SAMPLE: 208124

Parameter	Units	7033515008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	0.064J	1	1.1	102	75-125	

SAMPLE DUPLICATE: 208125

Parameter	Units	7033515008 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	0.064J	<0.20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

QC Batch: 44690 Analysis Method: EPA 6010C  
 QC Batch Method: EPA 3005A Analysis Description: 6010 MET Water  
 Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

METHOD BLANK: 209489 Matrix: Water  
 Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	48.7J	200	11/02/17 02:46	
Antimony	ug/L	<60.0	60.0	11/02/17 02:46	
Arsenic	ug/L	<10.0	10.0	11/02/17 02:46	
Barium	ug/L	<200	200	11/02/17 02:46	
Beryllium	ug/L	<5.0	5.0	11/02/17 02:46	
Boron	ug/L	<50.0	50.0	11/02/17 02:46	
Cadmium	ug/L	<2.5	2.5	11/02/17 02:46	
Calcium	ug/L	<200	200	11/02/17 02:46	
Chromium	ug/L	<10.0	10.0	11/02/17 02:46	
Cobalt	ug/L	<50.0	50.0	11/02/17 02:46	
Copper	ug/L	<25.0	25.0	11/02/17 02:46	
Iron	ug/L	19.4J	20.0	11/02/17 02:46	
Lead	ug/L	<5.0	5.0	11/02/17 02:46	
Magnesium	ug/L	<200	200	11/02/17 02:46	
Manganese	ug/L	1.1J	10.0	11/02/17 02:46	
Nickel	ug/L	<40.0	40.0	11/02/17 02:46	
Potassium	ug/L	<5000	5000	11/02/17 02:46	
Selenium	ug/L	<10.0	10.0	11/02/17 02:46	
Silver	ug/L	<10.0	10.0	11/02/17 02:46	
Sodium	ug/L	<5000	5000	11/02/17 02:46	
Thallium	ug/L	<10.0	10.0	11/02/17 02:46	
Vanadium	ug/L	0.94J	50.0	11/02/17 02:46	
Zinc	ug/L	3.2J	20.0	11/02/17 02:46	

LABORATORY CONTROL SAMPLE: 209490

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	4860	97	80-120	
Antimony	ug/L	750	711	95	80-120	
Arsenic	ug/L	500	464	93	80-120	
Barium	ug/L	500	492	98	80-120	
Beryllium	ug/L	50	47.4	95	80-120	
Boron	ug/L	2500	2340	94	80-120	
Cadmium	ug/L	50	47.2	94	80-120	
Calcium	ug/L	25000	24300	97	80-120	
Chromium	ug/L	250	235	94	80-120	
Cobalt	ug/L	500	479	96	80-120	
Copper	ug/L	250	236	95	80-120	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

LABORATORY CONTROL SAMPLE: 209490

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	2000	1920	96	80-120	
Lead	ug/L	500	477	95	80-120	
Magnesium	ug/L	25000	23700	95	80-120	
Manganese	ug/L	250	236	94	80-120	
Nickel	ug/L	250	239	96	80-120	
Potassium	ug/L	50000	48300	97	80-120	
Selenium	ug/L	750	700	93	80-120	
Silver	ug/L	250	227	91	80-120	
Sodium	ug/L	50000	48600	97	80-120	
Thallium	ug/L	750	715	95	80-120	
Vanadium	ug/L	500	468	94	80-120	
Zinc	ug/L	1000	950	95	80-120	

MATRIX SPIKE SAMPLE: 209492

Parameter	Units	7033515008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	<200	5000	4910	98	75-125	
Antimony	ug/L	<60.0	750	750	100	75-125	
Arsenic	ug/L	11.9	500	492	96	75-125	
Barium	ug/L	87.1J	500	576	98	75-125	
Beryllium	ug/L	<5.0	50	49.4	99	75-125	
Boron	ug/L	53.0	2500	2510	98	75-125	
Cadmium	ug/L	<2.5	50	48.8	98	75-125	
Calcium	ug/L	77100	25000	100000	93	75-125	
Chromium	ug/L	<10.0	250	248	99	75-125	
Cobalt	ug/L	5.3J	500	497	98	75-125	
Copper	ug/L	<25.0	250	242	97	75-125	
Iron	ug/L	2430	2000	4390	98	75-125	
Lead	ug/L	4.0J	500	492	98	75-125	
Magnesium	ug/L	23900	25000	47800	96	75-125	
Manganese	ug/L	9290	250	9450	64	75-125 M1	
Nickel	ug/L	4.1J	250	250	98	75-125	
Potassium	ug/L	3560J	50000	50000	93	75-125	
Selenium	ug/L	<10.0	750	723	96	75-125	
Silver	ug/L	<10.0	250	220	88	75-125	
Sodium	ug/L	8830	50000	57700	98	75-125	
Thallium	ug/L	4.9J	750	748	99	75-125	
Vanadium	ug/L	<50.0	500	490	98	75-125	
Zinc	ug/L	7.4J	1000	978	97	75-125	

SAMPLE DUPLICATE: 209491

Parameter	Units	7033515008 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	<200	<200		

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

SAMPLE DUPLICATE: 209491

Parameter	Units	7033515008 Result	Dup Result	RPD	Qualifiers
Antimony	ug/L	<60.0	<60.0		
Arsenic	ug/L	11.9	12.7	7	
Barium	ug/L	87.1J	86.5J		
Beryllium	ug/L	<5.0	<5.0		
Boron	ug/L	53.0	52.2	2	
Cadmium	ug/L	<2.5	<2.5		
Calcium	ug/L	77100	76700	1	
Chromium	ug/L	<10.0	<10.0		
Cobalt	ug/L	5.3J	5.0J		
Copper	ug/L	<25.0	<25.0		
Iron	ug/L	2430	2460	1	
Lead	ug/L	4.0J	<5.0		
Magnesium	ug/L	23900	23900	0	
Manganese	ug/L	9290	9210	1	
Nickel	ug/L	4.1J	3.8J		
Potassium	ug/L	3560J	3140J		
Selenium	ug/L	<10.0	<10.0		
Silver	ug/L	<10.0	<10.0		
Sodium	ug/L	8830	8840	0	
Thallium	ug/L	4.9J	4.3J		
Vanadium	ug/L	<50.0	<50.0		
Zinc	ug/L	7.4J	7.4J		

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

QC Batch: 43758 Analysis Method: EPA 8260C/5030C

QC Batch Method: EPA 8260C/5030C Analysis Description: 8260 MSV

Associated Lab Samples: 7033515001, 7033515002, 7033515004, 7033515005, 7033515006, 7033515007, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

METHOD BLANK: 204837 Matrix: Water

Associated Lab Samples: 7033515001, 7033515002, 7033515004, 7033515005, 7033515006, 7033515007, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	10/20/17 12:53	
1,1,1-Trichloroethane	ug/L	ND	5.0	10/20/17 12:53	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	10/20/17 12:53	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/20/17 12:53	
1,1-Dichloroethane	ug/L	ND	5.0	10/20/17 12:53	
1,1-Dichloroethene	ug/L	ND	5.0	10/20/17 12:53	
1,2,3-Trichloropropane	ug/L	ND	5.0	10/20/17 12:53	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	10/20/17 12:53	CL
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	10/20/17 12:53	
1,2-Dichlorobenzene	ug/L	ND	5.0	10/20/17 12:53	
1,2-Dichloroethane	ug/L	ND	5.0	10/20/17 12:53	
1,2-Dichloropropane	ug/L	ND	5.0	10/20/17 12:53	
1,4-Dichlorobenzene	ug/L	ND	5.0	10/20/17 12:53	
2-Butanone (MEK)	ug/L	ND	5.0	10/20/17 12:53	
2-Hexanone	ug/L	ND	5.0	10/20/17 12:53	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	10/20/17 12:53	
Acetone	ug/L	ND	5.0	10/20/17 12:53	
Acrylonitrile	ug/L	ND	5.0	10/20/17 12:53	
Benzene	ug/L	ND	5.0	10/20/17 12:53	
Bromochloromethane	ug/L	ND	5.0	10/20/17 12:53	
Bromodichloromethane	ug/L	ND	5.0	10/20/17 12:53	
Bromoform	ug/L	ND	5.0	10/20/17 12:53	
Bromomethane	ug/L	ND	5.0	10/20/17 12:53	
Carbon disulfide	ug/L	ND	5.0	10/20/17 12:53	
Carbon tetrachloride	ug/L	ND	5.0	10/20/17 12:53	
Chlorobenzene	ug/L	ND	5.0	10/20/17 12:53	
Chloroethane	ug/L	ND	5.0	10/20/17 12:53	CL
Chloroform	ug/L	ND	5.0	10/20/17 12:53	
Chloromethane	ug/L	ND	5.0	10/20/17 12:53	CL
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/20/17 12:53	
cis-1,3-Dichloropropene	ug/L	ND	5.0	10/20/17 12:53	
Dibromochloromethane	ug/L	ND	5.0	10/20/17 12:53	
Dibromomethane	ug/L	ND	5.0	10/20/17 12:53	
Ethylbenzene	ug/L	ND	5.0	10/20/17 12:53	
Iodomethane	ug/L	ND	5.0	10/20/17 12:53	
Methylene Chloride	ug/L	ND	5.0	10/20/17 12:53	
Styrene	ug/L	ND	5.0	10/20/17 12:53	
Tetrachloroethene	ug/L	ND	5.0	10/20/17 12:53	
Toluene	ug/L	ND	5.0	10/20/17 12:53	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/20/17 12:53	

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

METHOD BLANK: 204837

Matrix: Water

Associated Lab Samples: 7033515001, 7033515002, 7033515004, 7033515005, 7033515006, 7033515007, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,3-Dichloropropene	ug/L	ND	5.0	10/20/17 12:53	
trans-1,4-Dichloro-2-butene	ug/L	ND	5.0	10/20/17 12:53	
Trichloroethene	ug/L	ND	5.0	10/20/17 12:53	
Trichlorofluoromethane	ug/L	ND	5.0	10/20/17 12:53	
Vinyl acetate	ug/L	ND	5.0	10/20/17 12:53	
Vinyl chloride	ug/L	ND	5.0	10/20/17 12:53	CL
Xylene (Total)	ug/L	ND	5.0	10/20/17 12:53	
1,2-Dichloroethane-d4 (S)	%	103	68-153	10/20/17 12:53	
4-Bromofluorobenzene (S)	%	103	79-124	10/20/17 12:53	
Toluene-d8 (S)	%	97	69-124	10/20/17 12:53	

LABORATORY CONTROL SAMPLE: 204838

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	42.6	85	74-113	
1,1,1-Trichloroethane	ug/L	50	48.7	97	65-118	
1,1,2,2-Tetrachloroethane	ug/L	50	42.2	84	74-121	
1,1,2-Trichloroethane	ug/L	50	47.1	94	80-117	
1,1-Dichloroethane	ug/L	50	49.4	99	83-151	
1,1-Dichloroethene	ug/L	50	41.3	83	45-146	
1,2,3-Trichloropropane	ug/L	50	45.6	91	71-123	
1,2-Dibromo-3-chloropropane	ug/L	50	36.2	72	74-119	CL,L2
1,2-Dibromoethane (EDB)	ug/L	50	52.7	105	83-115	
1,2-Dichlorobenzene	ug/L	50	44.2	88	74-113	
1,2-Dichloroethane	ug/L	50	49.9	100	74-129	
1,2-Dichloropropane	ug/L	50	49.3	99	75-117	
1,4-Dichlorobenzene	ug/L	50	43.8	88	71-113	
2-Butanone (MEK)	ug/L	50	41.7	83	44-162	
2-Hexanone	ug/L	50	40.9	82	32-183	
4-Methyl-2-pentanone (MIBK)	ug/L	50	43.9	88	69-132	
Acetone	ug/L	50	38.3	77	23-188	
Acrylonitrile	ug/L	50	46.1	92	59-148	
Benzene	ug/L	50	47.1	94	73-119	
Bromochloromethane	ug/L	50	52.4	105	81-116	
Bromodichloromethane	ug/L	50	50.1	100	78-117	
Bromoform	ug/L	50	40.9	82	65-122	
Bromomethane	ug/L	50	48.1	96	52-147	IH
Carbon disulfide	ug/L	50	37.0	74	41-144	
Carbon tetrachloride	ug/L	50	41.2	82	59-120	
Chlorobenzene	ug/L	50	43.8	88	75-113	
Chloroethane	ug/L	50	36.0	72	49-151	CL
Chloroform	ug/L	50	50.9	102	72-122	
Chloromethane	ug/L	50	33.7	67	46-144	CL

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

LABORATORY CONTROL SAMPLE: 204838

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	50	50.7	101	72-121	
cis-1,3-Dichloropropene	ug/L	50	44.4	89	78-116	
Dibromochloromethane	ug/L	50	49.0	98	70-120	
Dibromomethane	ug/L	50	46.9	94	75-125	
Ethylbenzene	ug/L	50	42.2	84	70-113	
Iodomethane	ug/L	50	38.7	77	61-144	
Methylene Chloride	ug/L	50	43.3	87	61-142	
Styrene	ug/L	50	46.7	93	72-118	
Tetrachloroethene	ug/L	50	45.8	92	60-128	
Toluene	ug/L	50	44.0	88	72-119	
trans-1,2-Dichloroethene	ug/L	50	43.3	87	56-142	
trans-1,3-Dichloropropene	ug/L	50	44.7	89	79-116	
trans-1,4-Dichloro-2-butene	ug/L	50	45.0	90	71-121	
Trichloroethene	ug/L	50	45.0	90	69-117	
Trichlorofluoromethane	ug/L	50	41.7	83	27-173	IH
Vinyl acetate	ug/L	50	48.9	98	20-158	
Vinyl chloride	ug/L	50	31.3	63	43-143	CL
Xylene (Total)	ug/L	150	131	87	71-109	
1,2-Dichloroethane-d4 (S)	%			104	68-153	
4-Bromofluorobenzene (S)	%			104	79-124	
Toluene-d8 (S)	%			99	69-124	

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

QC Batch: 43863	Analysis Method: EPA 8260C/5030C
QC Batch Method: EPA 8260C/5030C	Analysis Description: 8260 MSV
Associated Lab Samples: 7033515008	

METHOD BLANK: 205667 Matrix: Water

Associated Lab Samples: 7033515008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	5.0	10/23/17 12:07	
1,1,1-Trichloroethane	ug/L	ND	5.0	10/23/17 12:07	
1,1,2,2-Tetrachloroethane	ug/L	ND	5.0	10/23/17 12:07	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/23/17 12:07	
1,1-Dichloroethane	ug/L	ND	5.0	10/23/17 12:07	
1,1-Dichloroethene	ug/L	ND	5.0	10/23/17 12:07	
1,2,3-Trichloropropane	ug/L	ND	5.0	10/23/17 12:07	
1,2-Dibromo-3-chloropropane	ug/L	ND	5.0	10/23/17 12:07	
1,2-Dibromoethane (EDB)	ug/L	ND	5.0	10/23/17 12:07	
1,2-Dichlorobenzene	ug/L	ND	5.0	10/23/17 12:07	
1,2-Dichloroethane	ug/L	ND	5.0	10/23/17 12:07	
1,2-Dichloropropane	ug/L	ND	5.0	10/23/17 12:07	
1,4-Dichlorobenzene	ug/L	ND	5.0	10/23/17 12:07	
2-Butanone (MEK)	ug/L	ND	5.0	10/23/17 12:07	
2-Hexanone	ug/L	ND	5.0	10/23/17 12:07	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	5.0	10/23/17 12:07	
Acetone	ug/L	ND	5.0	10/23/17 12:07	
Acrylonitrile	ug/L	ND	5.0	10/23/17 12:07	
Benzene	ug/L	ND	5.0	10/23/17 12:07	
Bromochloromethane	ug/L	ND	5.0	10/23/17 12:07	
Bromodichloromethane	ug/L	ND	5.0	10/23/17 12:07	
Bromoform	ug/L	ND	5.0	10/23/17 12:07	
Bromomethane	ug/L	ND	5.0	10/23/17 12:07	
Carbon disulfide	ug/L	ND	5.0	10/23/17 12:07	
Carbon tetrachloride	ug/L	ND	5.0	10/23/17 12:07	
Chlorobenzene	ug/L	ND	5.0	10/23/17 12:07	
Chloroethane	ug/L	ND	5.0	10/23/17 12:07	
Chloroform	ug/L	ND	5.0	10/23/17 12:07	
Chloromethane	ug/L	ND	5.0	10/23/17 12:07	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/23/17 12:07	
cis-1,3-Dichloropropene	ug/L	ND	5.0	10/23/17 12:07	
Dibromochloromethane	ug/L	ND	5.0	10/23/17 12:07	
Dibromomethane	ug/L	ND	5.0	10/23/17 12:07	
Ethylbenzene	ug/L	ND	5.0	10/23/17 12:07	
Iodomethane	ug/L	ND	5.0	10/23/17 12:07	
Methylene Chloride	ug/L	ND	5.0	10/23/17 12:07	
Styrene	ug/L	ND	5.0	10/23/17 12:07	
Tetrachloroethene	ug/L	ND	5.0	10/23/17 12:07	
Toluene	ug/L	ND	5.0	10/23/17 12:07	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/23/17 12:07	
trans-1,3-Dichloropropene	ug/L	ND	5.0	10/23/17 12:07	

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

METHOD BLANK: 205667

Matrix: Water

Associated Lab Samples: 7033515008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,4-Dichloro-2-butene	ug/L	ND	5.0	10/23/17 12:07	
Trichloroethene	ug/L	ND	5.0	10/23/17 12:07	
Trichlorofluoromethane	ug/L	ND	5.0	10/23/17 12:07	
Vinyl acetate	ug/L	ND	5.0	10/23/17 12:07	
Vinyl chloride	ug/L	ND	5.0	10/23/17 12:07	
Xylene (Total)	ug/L	ND	5.0	10/23/17 12:07	
1,2-Dichloroethane-d4 (S)	%	110	68-153	10/23/17 12:07	
4-Bromofluorobenzene (S)	%	101	79-124	10/23/17 12:07	
Toluene-d8 (S)	%	95	69-124	10/23/17 12:07	

LABORATORY CONTROL SAMPLE: 205668

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	48.4	97	74-113	
1,1,1-Trichloroethane	ug/L	50	56.6	113	65-118	CH
1,1,2,2-Tetrachloroethane	ug/L	50	44.0	88	74-121	
1,1,2-Trichloroethane	ug/L	50	47.8	96	80-117	
1,1-Dichloroethane	ug/L	50	52.6	105	83-151	
1,1-Dichloroethene	ug/L	50	47.9	96	45-146	
1,2,3-Trichloropropane	ug/L	50	46.0	92	71-123	
1,2-Dibromo-3-chloropropane	ug/L	50	40.0	80	74-119	
1,2-Dibromoethane (EDB)	ug/L	50	54.8	110	83-115	
1,2-Dichlorobenzene	ug/L	50	44.4	89	74-113	
1,2-Dichloroethane	ug/L	50	51.6	103	74-129	
1,2-Dichloropropane	ug/L	50	50.9	102	75-117	
1,4-Dichlorobenzene	ug/L	50	45.1	90	71-113	
2-Butanone (MEK)	ug/L	50	42.8	86	44-162	
2-Hexanone	ug/L	50	41.8	84	32-183	
4-Methyl-2-pentanone (MIBK)	ug/L	50	46.1	92	69-132	
Acetone	ug/L	50	40.6	81	23-188	
Acrylonitrile	ug/L	50	52.4	105	59-148	
Benzene	ug/L	50	50.0	100	73-119	
Bromochloromethane	ug/L	50	52.0	104	81-116	
Bromodichloromethane	ug/L	50	54.0	108	78-117	
Bromoform	ug/L	50	48.7	97	65-122	
Bromomethane	ug/L	50	57.8	116	52-147	CH,IH
Carbon disulfide	ug/L	50	44.9	90	41-144	
Carbon tetrachloride	ug/L	50	52.7	105	59-120	
Chlorobenzene	ug/L	50	44.7	89	75-113	
Chloroethane	ug/L	50	44.7	89	49-151	
Chloroform	ug/L	50	52.8	106	72-122	
Chloromethane	ug/L	50	51.3	103	46-144	
cis-1,2-Dichloroethene	ug/L	50	53.1	106	72-121	
cis-1,3-Dichloropropene	ug/L	50	48.3	97	78-116	

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

LABORATORY CONTROL SAMPLE: 205668

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dibromochloromethane	ug/L	50	56.1	112	70-120	CH
Dibromomethane	ug/L	50	47.3	95	75-125	
Ethylbenzene	ug/L	50	44.4	89	70-113	
Iodomethane	ug/L	50	41.5	83	61-144	
Methylene Chloride	ug/L	50	43.6	87	61-142	
Styrene	ug/L	50	48.1	96	72-118	
Tetrachloroethene	ug/L	50	43.6	87	60-128	
Toluene	ug/L	50	46.8	94	72-119	
trans-1,2-Dichloroethene	ug/L	50	59.1	118	56-142	
trans-1,3-Dichloropropene	ug/L	50	48.9	98	79-116	
trans-1,4-Dichloro-2-butene	ug/L	50	56.7	113	71-121	CH
Trichloroethene	ug/L	50	46.9	94	69-117	
Trichlorofluoromethane	ug/L	50	53.1	106	27-173	IH
Vinyl acetate	ug/L	50	49.9	100	20-158	
Vinyl chloride	ug/L	50	44.5	89	43-143	
Xylene (Total)	ug/L	150	136	91	71-109	
1,2-Dichloroethane-d4 (S)	%			103	68-153	
4-Bromofluorobenzene (S)	%			104	79-124	
Toluene-d8 (S)	%			97	69-124	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 205669 205670

Parameter	Units	7033515008		MS	MSD	MS		MSD		% Rec Limits	RPD	Qual
		Result	Conc.	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec			
1,1,1,2-Tetrachloroethane	ug/L	ND	50	50	50	48.1	58.0	96	116	74-113	19	M1
1,1,1-Trichloroethane	ug/L	ND	50	50	50	64.0	82.7	128	165	65-118	25	CH,M1,R1
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	50	43.7	54.6	87	109	74-121	22	R1
1,1,2-Trichloroethane	ug/L	ND	50	50	50	49.2	61.5	98	123	80-117	22	M1,R1
1,1-Dichloroethane	ug/L	18.1	50	50	50	81.3	93.6	127	151	83-151	14	
1,1-Dichloroethene	ug/L	ND	50	50	50	69.8	83.6	139	166	45-146	18	M1
1,2,3-Trichloropropane	ug/L	ND	50	50	50	43.9	56.7	88	113	71-123	25	R1
1,2-Dibromo-3-chloropropane	ug/L	ND	50	50	50	43.2	52.2	86	104	74-119	19	
1,2-Dibromoethane (EDB)	ug/L	ND	50	50	50	56.3	68.7	113	137	83-115	20	M1
1,2-Dichlorobenzene	ug/L	ND	50	50	50	44.9	56.9	90	114	74-113	24	M1,R1
1,2-Dichloroethane	ug/L	ND	50	50	50	55.5	66.5	111	133	74-129	18	M1
1,2-Dichloropropane	ug/L	ND	50	50	50	51.0	64.9	102	130	75-117	24	M1,R1
1,4-Dichlorobenzene	ug/L	ND	50	50	50	45.5	58.0	91	116	71-113	24	M1,R1
2-Butanone (MEK)	ug/L	ND	50	50	50	47.7	54.6	95	109	44-162	14	
2-Hexanone	ug/L	ND	50	50	50	46.4	54.5	93	109	32-183	16	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	50	48.4	59.0	97	118	69-132	20	
Acetone	ug/L	ND	50	50	50	58.9	68.8	118	138	23-188	16	
Acrylonitrile	ug/L	ND	50	50	50	60.5	74.7	121	149	59-148	21	M1,R1
Benzene	ug/L	ND	50	50	50	54.7	67.6	105	131	73-119	21	M1,R1
Bromochloromethane	ug/L	ND	50	50	50	54.2	63.2	108	126	81-116	15	M1
Bromodichloromethane	ug/L	ND	50	50	50	55.7	70.4	111	141	78-117	23	M1,R1

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Parameter	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 205669		205670								
	Units	7033515008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Bromoform	ug/L	ND	50	50	50.3	60.7	101	121	65-122	19	
Bromomethane	ug/L	ND	50	50	43.6	61.5	85	121	52-147	34	CH,IH,R1
Carbon disulfide	ug/L	ND	50	50	62.6	77.9	125	156	41-144	22	M1,R1
Carbon tetrachloride	ug/L	ND	50	50	59.6	75.4	119	151	59-120	23	M1,R1
Chlorobenzene	ug/L	ND	50	50	47.7	57.8	92	112	75-113	19	
Chloroethane	ug/L	ND	50	50	46.9	56.9	94	114	49-151	19	
Chloroform	ug/L	ND	50	50	58.4	70.5	117	141	72-122	19	M1
Chloromethane	ug/L	ND	50	50	44.2	52.4	88	105	46-144	17	
cis-1,2-Dichloroethene	ug/L	62.3	50	50	138	146	152	168	72-121	6	M1
cis-1,3-Dichloropropene	ug/L	ND	50	50	48.2	60.2	96	120	78-116	22	M1,R1
Dibromochloromethane	ug/L	ND	50	50	56.3	68.7	113	137	70-120	20	CH,M1
Dibromomethane	ug/L	ND	50	50	51.1	62.3	102	125	75-125	20	
Ethylbenzene	ug/L	ND	50	50	47.4	58.8	95	118	70-113	22	M1,R1
Iodomethane	ug/L	ND	50	50	50.0	70.4	100	141	61-144	34	R1
Methylene Chloride	ug/L	ND	50	50	58.7	71.4	117	143	61-142	20	M1
Styrene	ug/L	ND	50	50	48.8	59.8	98	120	72-118	20	M1
Tetrachloroethene	ug/L	ND	50	50	47.2	58.0	94	116	60-128	21	R1
Toluene	ug/L	ND	50	50	48.5	60.8	97	122	72-119	23	M1,R1
trans-1,2-Dichloroethene	ug/L	ND	50	50	68.7	82.8	135	163	56-142	19	M1
trans-1,3-Dichloropropene	ug/L	ND	50	50	48.9	60.8	98	122	79-116	22	M1,R1
trans-1,4-Dichloro-2-butene	ug/L	ND	50	50	50.5	66.1	101	132	71-121	27	CH,M1,R1
Trichloroethene	ug/L	ND	50	50	54.8	66.0	106	129	69-117	18	M1
Trichlorofluoromethane	ug/L	ND	50	50	57.1	70.8	114	142	27-173	22	IH,R1
Vinyl acetate	ug/L	ND	50	50	50.4	62.3	101	125	20-158	21	R1
Vinyl chloride	ug/L	8.8	50	50	55.8	65.8	94	114	43-143	16	
Xylene (Total)	ug/L	ND	150	150	142	175	95	117	71-109	21	MS,RS
1,2-Dichloroethane-d4 (S)	%						108	109	68-153		
4-Bromofluorobenzene (S)	%						107	107	79-124		
Toluene-d8 (S)	%						96	96	69-124		

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

QC Batch: 44473

Analysis Method: SM22 2320B

QC Batch Method: SM22 2320B

Analysis Description: 2320B Alkalinity

Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

METHOD BLANK: 208569

Matrix: Water

Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<1.0	1.0	10/27/17 10:49	

LABORATORY CONTROL SAMPLE: 208570

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	25	22.7	91	80-120	

MATRIX SPIKE SAMPLE: 208572

Parameter	Units	7033515008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	392	50	402	21	75-125	M1

SAMPLE DUPLICATE: 208571

Parameter	Units	7033515008 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	392	357	9	

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

QC Batch: 44540 Analysis Method: SM22 2340C  
QC Batch Method: SM22 2340C Analysis Description: 2340C Hardness, Total  
Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

METHOD BLANK: 208816 Matrix: Water  
Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Hardness	mg/L	<5.0	5.0	10/27/17 13:47	

LABORATORY CONTROL SAMPLE: 208817

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Hardness	mg/L	1000	1040	104	90-110	

MATRIX SPIKE SAMPLE: 208818

Parameter	Units	7033515008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Hardness	mg/L	300	2000	2400	105	75-125	

MATRIX SPIKE SAMPLE: 208845

Parameter	Units	7034025010 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Hardness	mg/L	74.0	200	276	101	75-125	

SAMPLE DUPLICATE: 208819

Parameter	Units	7033515008 Result	Dup Result	RPD	Qualifiers
Total Hardness	mg/L	300	320	6	

SAMPLE DUPLICATE: 208846

Parameter	Units	7034025010 Result	Dup Result	RPD	Qualifiers
Total Hardness	mg/L	74.0	76.0	3	

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

QC Batch: 44041 Analysis Method: SM22 2540C  
 QC Batch Method: SM22 2540C Analysis Description: 2540C Total Dissolved Solids  
 Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

METHOD BLANK: 206291 Matrix: Water  
 Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<10.0	10.0	10/24/17 13:40	

LABORATORY CONTROL SAMPLE: 206292

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	500	494	99	85-115	

MATRIX SPIKE SAMPLE: 206294

Parameter	Units	7033515008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	337	300	636	100	75-125	

MATRIX SPIKE SAMPLE: 206296

Parameter	Units	7033515014 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	248	300	512	88	75-125	

SAMPLE DUPLICATE: 206293

Parameter	Units	7033515008 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	337	338	0	

SAMPLE DUPLICATE: 206295

Parameter	Units	7033515014 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	248	228	8	

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

QC Batch: 44034

Analysis Method: EPA 410.4

QC Batch Method: EPA 410.4

Analysis Description: 410.4 COD

Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010

METHOD BLANK: 206246

Matrix: Water

Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	<10.0	10.0	10/24/17 13:34	

LABORATORY CONTROL SAMPLE: 206247

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	500	510	102	90-110	

MATRIX SPIKE SAMPLE: 206248

Parameter	Units	7033515008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	35.2	1000	1010	98	90-110	

SAMPLE DUPLICATE: 206249

Parameter	Units	7033515008 Result	Dup Result	RPD	Qualifiers
Chemical Oxygen Demand	mg/L	35.2	41.5	17	

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

QC Batch: 44335 Analysis Method: EPA 410.4  
QC Batch Method: EPA 410.4 Analysis Description: 410.4 COD  
Associated Lab Samples: 7033515011, 7033515012, 7033515013, 7033515014

METHOD BLANK: 207809 Matrix: Water  
Associated Lab Samples: 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	<10.0	10.0	10/26/17 13:19	

LABORATORY CONTROL SAMPLE: 207810

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	500	512	102	90-110	

LABORATORY CONTROL SAMPLE: 207962

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	500	524	105	90-110	

LABORATORY CONTROL SAMPLE: 207963

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	500	518	104	90-110	

LABORATORY CONTROL SAMPLE: 207964

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	500	510	102	90-110	

LABORATORY CONTROL SAMPLE: 207965

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	500	512	102	90-110	

MATRIX SPIKE SAMPLE: 207811

Parameter	Units	7033814001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	43.6	1000	1020	98	90-110	

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

SAMPLE DUPLICATE: 207812

Parameter	Units	7033814001 Result	Dup Result	RPD	Qualifiers
Chemical Oxygen Demand	mg/L	43.6	50.0	14	

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

QC Batch: 43655

Analysis Method: SM22 5210B

QC Batch Method: SM22 5210B

Analysis Description: 5210B BOD, 5 day

Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

METHOD BLANK: 204430

Matrix: Water

Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
BOD, 5 day	mg/L	<2.0	2.0	10/24/17 13:17	

LABORATORY CONTROL SAMPLE: 204431

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
BOD, 5 day	mg/L	198	180	91	84.5-115.4	

SAMPLE DUPLICATE: 204432

Parameter	Units	7033515008 Result	Dup Result	RPD	Qualifiers
BOD, 5 day	mg/L	2.4	2.5	5	

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

QC Batch: 44658

Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0

Analysis Description: 300.0 IC Anions

Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

METHOD BLANK: 209388

Matrix: Water

Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/L	<0.50	0.50	10/30/17 19:34	
Chloride	mg/L	<2.0	2.0	10/30/17 19:34	
Sulfate	mg/L	<5.0	5.0	10/30/17 19:34	

LABORATORY CONTROL SAMPLE: 209389

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	1	1.0	101	90-110	
Chloride	mg/L	10	9.8	98	90-110	
Sulfate	mg/L	10	9.3	93	90-110	

MATRIX SPIKE SAMPLE: 206977

Parameter	Units	7033754001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	<0.50	1	0.96	95	80-120	
Chloride	mg/L	11.7	10	21.8	101	80-120	
Sulfate	mg/L	<5.0	10	12.8	94	80-120	

MATRIX SPIKE SAMPLE: 209390

Parameter	Units	7033515008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	0.23J	1	1.1	86	80-120	
Chloride	mg/L	10.2	10	21.4	112	80-120	
Sulfate	mg/L	4.4J	10	13.9	95	80-120	

SAMPLE DUPLICATE: 206978

Parameter	Units	7033754001 Result	Dup Result	RPD	Qualifiers
Bromide	mg/L	<0.50	<0.50		
Chloride	mg/L	11.7	11.8	1	
Sulfate	mg/L	<5.0	3.4J		

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

SAMPLE DUPLICATE: 209391

Parameter	Units	7033515008 Result	Dup Result	RPD	Qualifiers
Bromide	mg/L	0.23J	0.32J		
Chloride	mg/L	10.2	10.3		1
Sulfate	mg/L	4.4J	4.5J		

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

QC Batch: 44745 Analysis Method: EPA 351.2  
QC Batch Method: EPA 351.2 Analysis Description: 351.2 TKN  
Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

METHOD BLANK: 209655 Matrix: Water  
Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	<0.10	0.10	10/31/17 12:49	

LABORATORY CONTROL SAMPLE: 209656

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	4	4.0	101	90-110	

MATRIX SPIKE SAMPLE: 209657

Parameter	Units	7034154001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	<0.10	4	4.0	101	90-110	

MATRIX SPIKE SAMPLE: 209659

Parameter	Units	7033515008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.4	4	5.6	104	90-110	

SAMPLE DUPLICATE: 209658

Parameter	Units	7034154001 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	<0.10	<0.10		

SAMPLE DUPLICATE: 209660

Parameter	Units	7033515008 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	1.4	1.4	0	

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

QC Batch: 43661

Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2

Analysis Description: 353.2 Nitrite, Unpres.

Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

METHOD BLANK: 204540

Matrix: Water

Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	<0.050	0.050	10/19/17 19:27	

LABORATORY CONTROL SAMPLE: 204541

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	1.0	101	90-110	

MATRIX SPIKE SAMPLE: 204542

Parameter	Units	7033515008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	.5	0.52	104	90-110	

MATRIX SPIKE SAMPLE: 204544

Parameter	Units	7033406001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	.5	0.51	102	90-110	

SAMPLE DUPLICATE: 204543

Parameter	Units	7033515008 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

SAMPLE DUPLICATE: 204545

Parameter	Units	7033406001 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

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### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

QC Batch: 43674 Analysis Method: EPA 353.2  
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved  
Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

METHOD BLANK: 204620 Matrix: Water  
Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate-Nitrite (as N)	mg/L	<0.050	0.050	10/19/17 23:18	

LABORATORY CONTROL SAMPLE: 204621

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	1	1.0	102	90-110	

MATRIX SPIKE SAMPLE: 204622

Parameter	Units	7033515008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.042J	.5	0.54	99	90-110	

MATRIX SPIKE SAMPLE: 204624

Parameter	Units	7033515010 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.067	.5	0.55	96	90-110	

SAMPLE DUPLICATE: 204623

Parameter	Units	7033515008 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.042J	0.042J		

SAMPLE DUPLICATE: 204625

Parameter	Units	7033515010 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.067	0.066	1	

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**QUALITY CONTROL DATA**

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

QC Batch: 44191 Analysis Method: EPA 420.1  
 QC Batch Method: EPA 420.1 Analysis Description: 420.1 Phenolics Macro  
 Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

METHOD BLANK: 206982 Matrix: Water  
 Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenolics, Total Recoverable	ug/L	<5.0	5.0	10/25/17 15:16	

LABORATORY CONTROL SAMPLE: 206983

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	ug/L	30	28.9	96	90-110	

MATRIX SPIKE SAMPLE: 206984

Parameter	Units	7033515008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	ug/L	6.5	20	21.7	76	75-125	

MATRIX SPIKE SAMPLE: 206986

Parameter	Units	7033515014 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	ug/L	32.5	20	47.0	73	75-125	M1

SAMPLE DUPLICATE: 206985

Parameter	Units	7033515008 Result	Dup Result	RPD	Qualifiers
Phenolics, Total Recoverable	ug/L	6.5	5.6	15	

SAMPLE DUPLICATE: 206987

Parameter	Units	7033515014 Result	Dup Result	RPD	Qualifiers
Phenolics, Total Recoverable	ug/L	32.5	28.9	12	

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**REPORT OF LABORATORY ANALYSIS**

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

QC Batch: 44342 Analysis Method: SM22 4500 NH3 H  
QC Batch Method: SM22 4500 NH3 H Analysis Description: 4500 Ammonia  
Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

METHOD BLANK: 207825 Matrix: Water  
Associated Lab Samples: 7033515001, 7033515002, 7033515005, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.10	0.10	10/26/17 12:49	

LABORATORY CONTROL SAMPLE: 207826

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	0.97	97	90-110	

MATRIX SPIKE SAMPLE: 207827

Parameter	Units	7033515008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.96	1	2.0	106	75-125	

SAMPLE DUPLICATE: 207828

Parameter	Units	7033515008 Result	Dup Result	RPD	Qualifiers
Nitrogen, Ammonia	mg/L	0.96	0.97	2	

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

QC Batch: 44074 Analysis Method: EPA 9060A  
 QC Batch Method: EPA 9060A Analysis Description: 9060 TOC  
 Associated Lab Samples: 7033515001, 7033515002, 7033515003, 7033515004, 7033515005, 7033515006, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

METHOD BLANK: 206454 Matrix: Water  
 Associated Lab Samples: 7033515001, 7033515002, 7033515003, 7033515004, 7033515005, 7033515006, 7033515008, 7033515009, 7033515010, 7033515011, 7033515012, 7033515013, 7033515014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mean Total Organic Carbon	mg/L	<1.0	1.0	10/24/17 18:18	
Total Organic Carbon	mg/L	<1.0	1.0	10/24/17 18:18	
Total Organic Carbon	mg/L	<1.0	1.0	10/24/17 18:18	
Total Organic Carbon	mg/L	<1.0	1.0	10/24/17 18:18	
Total Organic Carbon	mg/L	<1.0	1.0	10/24/17 18:18	

LABORATORY CONTROL SAMPLE: 206455

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	10	9.7	97	85-115	
Total Organic Carbon	mg/L	10	9.7	97	85-115	
Total Organic Carbon	mg/L	10	9.6	96	85-115	
Total Organic Carbon	mg/L	10	9.7	97	85-115	
Total Organic Carbon	mg/L	10	9.6	96	85-115	

MATRIX SPIKE SAMPLE: 206456

Parameter	Units	7033515008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	3.9	10	13.6	98	75-125	
Total Organic Carbon	mg/L	3.9	10	13.8	99	75-125	
Total Organic Carbon	mg/L	3.8	10	13.6	97	75-125	
Total Organic Carbon	mg/L	3.9	10	13.5	96	75-125	
Total Organic Carbon	mg/L	3.8	10	13.6	97	75-125	

MATRIX SPIKE SAMPLE: 206458

Parameter	Units	7033515014 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	5.9	10	16.7	108	75-125	
Total Organic Carbon	mg/L	6.0	10	17.0	110	75-125	
Total Organic Carbon	mg/L	5.8	10	16.5	107	75-125	
Total Organic Carbon	mg/L	5.9	10	16.1	103	75-125	
Total Organic Carbon	mg/L	6.0	10	17.0	111	75-125	

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### QUALITY CONTROL DATA

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

SAMPLE DUPLICATE: 206457

Parameter	Units	7033515008 Result	Dup Result	RPD	Qualifiers
Mean Total Organic Carbon	mg/L	3.9	3.3	16	
Total Organic Carbon	mg/L	3.8	3.3	15	
Total Organic Carbon	mg/L	3.9	3.4	15	
Total Organic Carbon	mg/L	3.9	3.3	17	
Total Organic Carbon	mg/L	3.8	3.3	16	

SAMPLE DUPLICATE: 206459

Parameter	Units	7033515014 Result	Dup Result	RPD	Qualifiers
Mean Total Organic Carbon	mg/L	5.9	5.5	8	
Total Organic Carbon	mg/L	6.0	5.6	6	
Total Organic Carbon	mg/L	6.0	5.4	11	
Total Organic Carbon	mg/L	5.8	5.5	6	
Total Organic Carbon	mg/L	5.9	5.3	9	

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## QUALIFIERS

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

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### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

CH The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

CL The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased low.

IH This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.

L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

MS Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.

R1 RPD value was outside control limits.

RS The RPD value in one of the constituent analytes was outside the control limits.

## REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7033515001	MW-7C	EPA 3005A	44690	EPA 6010C	44699
7033515002	MW-7A	EPA 3005A	44690	EPA 6010C	44699
7033515005	MW-12B	EPA 3005A	44690	EPA 6010C	44699
7033515008	MW-10B	EPA 3005A	44690	EPA 6010C	44699
7033515009	SEEP	EPA 3005A	44690	EPA 6010C	44699
7033515010	MW-13	EPA 3005A	44690	EPA 6010C	44699
7033515011	STREAM	EPA 3005A	44690	EPA 6010C	44699
7033515012	DUP	EPA 3005A	44690	EPA 6010C	44699
7033515013	MW-14	EPA 3005A	44690	EPA 6010C	44699
7033515014	MW-8B	EPA 3005A	44690	EPA 6010C	44699
7033515001	MW-7C	EPA 7470A	44392	EPA 7470A	44403
7033515002	MW-7A	EPA 7470A	44392	EPA 7470A	44403
7033515005	MW-12B	EPA 7470A	44392	EPA 7470A	44403
7033515008	MW-10B	EPA 7470A	44392	EPA 7470A	44403
7033515009	SEEP	EPA 7470A	44392	EPA 7470A	44403
7033515010	MW-13	EPA 7470A	44392	EPA 7470A	44403
7033515011	STREAM	EPA 7470A	44392	EPA 7470A	44403
7033515012	DUP	EPA 7470A	44392	EPA 7470A	44403
7033515013	MW-14	EPA 7470A	44392	EPA 7470A	44403
7033515014	MW-8B	EPA 7470A	44392	EPA 7470A	44403
7033515001	MW-7C	EPA 8260C/5030C	43758		
7033515002	MW-7A	EPA 8260C/5030C	43758		
7033515004	MW-12A	EPA 8260C/5030C	43758		
7033515005	MW-12B	EPA 8260C/5030C	43758		
7033515006	MW-9B	EPA 8260C/5030C	43758		
7033515007	TRIP BLANK	EPA 8260C/5030C	43758		
7033515008	MW-10B	EPA 8260C/5030C	43863		
7033515009	SEEP	EPA 8260C/5030C	43758		
7033515010	MW-13	EPA 8260C/5030C	43758		
7033515011	STREAM	EPA 8260C/5030C	43758		
7033515012	DUP	EPA 8260C/5030C	43758		
7033515013	MW-14	EPA 8260C/5030C	43758		
7033515014	MW-8B	EPA 8260C/5030C	43758		
7033515001	MW-7C	SM22 2320B	44473		
7033515002	MW-7A	SM22 2320B	44473		
7033515005	MW-12B	SM22 2320B	44473		
7033515008	MW-10B	SM22 2320B	44473		
7033515009	SEEP	SM22 2320B	44473		
7033515010	MW-13	SM22 2320B	44473		
7033515011	STREAM	SM22 2320B	44473		
7033515012	DUP	SM22 2320B	44473		
7033515013	MW-14	SM22 2320B	44473		
7033515014	MW-8B	SM22 2320B	44473		
7033515001	MW-7C	SM22 2340C	44540		
7033515002	MW-7A	SM22 2340C	44540		
7033515005	MW-12B	SM22 2340C	44540		

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**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7033515008	MW-10B	SM22 2340C	44540		
7033515009	SEEP	SM22 2340C	44540		
7033515010	MW-13	SM22 2340C	44540		
7033515011	STREAM	SM22 2340C	44540		
7033515012	DUP	SM22 2340C	44540		
7033515013	MW-14	SM22 2340C	44540		
7033515014	MW-8B	SM22 2340C	44540		
7033515001	MW-7C	SM22 2540C	44041		
7033515002	MW-7A	SM22 2540C	44041		
7033515005	MW-12B	SM22 2540C	44041		
7033515008	MW-10B	SM22 2540C	44041		
7033515009	SEEP	SM22 2540C	44041		
7033515010	MW-13	SM22 2540C	44041		
7033515011	STREAM	SM22 2540C	44041		
7033515012	DUP	SM22 2540C	44041		
7033515013	MW-14	SM22 2540C	44041		
7033515014	MW-8B	SM22 2540C	44041		
7033515001	MW-7C	EPA 410.4	44034	EPA 410.4	44071
7033515002	MW-7A	EPA 410.4	44034	EPA 410.4	44071
7033515005	MW-12B	EPA 410.4	44034	EPA 410.4	44071
7033515008	MW-10B	EPA 410.4	44034	EPA 410.4	44071
7033515009	SEEP	EPA 410.4	44034	EPA 410.4	44071
7033515010	MW-13	EPA 410.4	44034	EPA 410.4	44071
7033515011	STREAM	EPA 410.4	44335	EPA 410.4	44367
7033515012	DUP	EPA 410.4	44335	EPA 410.4	44367
7033515013	MW-14	EPA 410.4	44335	EPA 410.4	44367
7033515014	MW-8B	EPA 410.4	44335	EPA 410.4	44367
7033515001	MW-7C	SM22 5210B	43655	SM22 5210B	44268
7033515002	MW-7A	SM22 5210B	43655	SM22 5210B	44268
7033515005	MW-12B	SM22 5210B	43655	SM22 5210B	44268
7033515008	MW-10B	SM22 5210B	43655	SM22 5210B	44268
7033515009	SEEP	SM22 5210B	43655	SM22 5210B	44268
7033515010	MW-13	SM22 5210B	43655	SM22 5210B	44268
7033515011	STREAM	SM22 5210B	43655	SM22 5210B	44268
7033515012	DUP	SM22 5210B	43655	SM22 5210B	44268
7033515013	MW-14	SM22 5210B	43655	SM22 5210B	44268
7033515014	MW-8B	SM22 5210B	43655	SM22 5210B	44268
7033515001	MW-7C	EPA 300.0	44658		
7033515002	MW-7A	EPA 300.0	44658		
7033515005	MW-12B	EPA 300.0	44658		
7033515008	MW-10B	EPA 300.0	44658		
7033515009	SEEP	EPA 300.0	44658		
7033515010	MW-13	EPA 300.0	44658		
7033515011	STREAM	EPA 300.0	44658		
7033515012	DUP	EPA 300.0	44658		
7033515013	MW-14	EPA 300.0	44658		

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ischua Landfill-FALL 2017  
Pace Project No.: 7033515

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7033515014	MW-8B	EPA 300.0	44658		
7033515001	MW-7C	EPA 351.2	44745	EPA 351.2	44757
7033515002	MW-7A	EPA 351.2	44745	EPA 351.2	44757
7033515005	MW-12B	EPA 351.2	44745	EPA 351.2	44757
7033515008	MW-10B	EPA 351.2	44745	EPA 351.2	44757
7033515009	SEEP	EPA 351.2	44745	EPA 351.2	44757
7033515010	MW-13	EPA 351.2	44745	EPA 351.2	44757
7033515011	STREAM	EPA 351.2	44745	EPA 351.2	44757
7033515012	DUP	EPA 351.2	44745	EPA 351.2	44757
7033515013	MW-14	EPA 351.2	44745	EPA 351.2	44757
7033515014	MW-8B	EPA 351.2	44745	EPA 351.2	44757
7033515001	MW-7C	EPA 353.2	43674		
7033515002	MW-7A	EPA 353.2	43674		
7033515005	MW-12B	EPA 353.2	43674		
7033515008	MW-10B	EPA 353.2	43674		
7033515009	SEEP	EPA 353.2	43674		
7033515010	MW-13	EPA 353.2	43674		
7033515011	STREAM	EPA 353.2	43674		
7033515012	DUP	EPA 353.2	43674		
7033515013	MW-14	EPA 353.2	43674		
7033515014	MW-8B	EPA 353.2	43674		
7033515001	MW-7C	EPA 353.2	43661		
7033515002	MW-7A	EPA 353.2	43661		
7033515005	MW-12B	EPA 353.2	43661		
7033515008	MW-10B	EPA 353.2	43661		
7033515009	SEEP	EPA 353.2	43661		
7033515010	MW-13	EPA 353.2	43661		
7033515011	STREAM	EPA 353.2	43661		
7033515012	DUP	EPA 353.2	43661		
7033515013	MW-14	EPA 353.2	43661		
7033515014	MW-8B	EPA 353.2	43661		
7033515001	MW-7C	EPA 420.1	44191	EPA 420.1	44234
7033515002	MW-7A	EPA 420.1	44191	EPA 420.1	44234
7033515005	MW-12B	EPA 420.1	44191	EPA 420.1	44234
7033515008	MW-10B	EPA 420.1	44191	EPA 420.1	44234
7033515009	SEEP	EPA 420.1	44191	EPA 420.1	44234
7033515010	MW-13	EPA 420.1	44191	EPA 420.1	44234
7033515011	STREAM	EPA 420.1	44191	EPA 420.1	44234
7033515012	DUP	EPA 420.1	44191	EPA 420.1	44234
7033515013	MW-14	EPA 420.1	44191	EPA 420.1	44234
7033515014	MW-8B	EPA 420.1	44191	EPA 420.1	44234
7033515001	MW-7C	SM22 4500 NH3 H	44342		
7033515002	MW-7A	SM22 4500 NH3 H	44342		
7033515005	MW-12B	SM22 4500 NH3 H	44342		
7033515008	MW-10B	SM22 4500 NH3 H	44342		
7033515009	SEEP	SM22 4500 NH3 H	44342		

### REPORT OF LABORATORY ANALYSIS

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ischua Landfill-FALL 2017

Pace Project No.: 7033515

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
7033515010	MW-13	SM22 4500 NH3 H	44342		
7033515011	STREAM	SM22 4500 NH3 H	44342		
7033515012	DUP	SM22 4500 NH3 H	44342		
7033515013	MW-14	SM22 4500 NH3 H	44342		
7033515014	MW-8B	SM22 4500 NH3 H	44342		
7033515001	MW-7C	EPA 9060A	44074		
7033515002	MW-7A	EPA 9060A	44074		
7033515003	MW-11B	EPA 9060A	44074		
7033515004	MW-12A	EPA 9060A	44074		
7033515005	MW-12B	EPA 9060A	44074		
7033515006	MW-9B	EPA 9060A	44074		
7033515008	MW-10B	EPA 9060A	44074		
7033515009	SEEP	EPA 9060A	44074		
7033515010	MW-13	EPA 9060A	44074		
7033515011	STREAM	EPA 9060A	44074		
7033515012	DUP	EPA 9060A	44074		
7033515013	MW-14	EPA 9060A	44074		
7033515014	MW-8B	EPA 9060A	44074		

### REPORT OF LABORATORY ANALYSIS

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# Sample Condition Upon Receipt

Client Name: LaBella

Project **WO#: 7033515**  
 PM: JSA Due Date: 11/02/17  
 CLIENT: LBA-B

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace  Other

Tracking #: 7881 2909 2478

Custody Seal on Cooler/Box Present:  Yes  No

Seals intact:  Yes  No

Packing Material:  Bubble Wrap  Bubble Bags  Ziploc  None  Other

Type of Ice:  Wet  Blue  None

Thermometer Used: TH092

Correction Factor: +0.1

Samples on ice, cooling process has begun

Cooler Temperature (°C): 2.7

Cooler Temperature Corrected (°C): 2.8

Date/Time 5035A kits placed in freezer \_\_\_\_\_

Temp should be above freezing to 6.0°C

USDA Regulated Soil ( N/A, water sample)

Date and Initials of person examining contents: JB 10/19/17

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)?  YES  NO

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)?  Yes  No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

		COMMENTS:
Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: (Triple volume provided for MS/MSD):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Containers Intact:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	10. <u>Sample MW-13 received broken</u>
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.
-Includes date/time/ID/Analysis Matrix SL WT OIL		
All containers needing preservation have been checked:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13. <input type="checkbox"/> HNO <sub>3</sub> <input type="checkbox"/> H <sub>2</sub> SO <sub>4</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
pH paper Lot # <u>HCG01354</u>		Sample #
All containers needing preservation are found to be in compliance with EPA recommendation? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl, NaOH>9 Sulfide, NaOH>12 Cyanide) Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Initial when completed: _____ Lot # of added preservative: _____ Date/Time preservative added: _____
Samples checked for dechlorination:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14. Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #		
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Custody Seals Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if applicable): _____		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted:

Date/Time:

Comments/ Resolution: MW-14 lost volume in transit, 1L half full. DUP TOC sample received broken

\* PM (Project Manager) review is documented electronically in LIMS.

# APPENDIX D

## Historical Analytical Results Tables



MW-6A  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02				
<b>PARAMETER METALS (mg/L)</b>																																							
Aluminum																																							
Calcium																																							
Iron																																							
Magnesium																																							
Manganese																																							
Potassium																																							
Sodium																																							
<b>PARAMETER (mg/l) TOXIC METALS</b>																																							
Antimony																																							
Arsenic																																							
Barium																																							
Beryllium																																							
Cadmium																																							
Chromium (Total)																																							
Copper																																							
Lead																																							
Mercury																																							
Nickel																																							
Selenium																																							
Silver																																							
Thallium																																							
Zinc																																							
<b>METER (mg/l) LEACHATE INDICATORS</b>																																							
Alkalinity																																							
Biochemical Oxygen Demand																																							
Boron																																							
Chemical Oxygen Demand																																							
Chromium (Hexavalent)																																							
Chloride																																							
Color (PCU units)																																							
Nitrate-Nitrite																																							
Nitrogen-Ammonia																																							
Phenols																																							
Sulfate																																							
Total Organic Carbon (TOC)																																							
Total Dissolved Solids (TDS)																																						5.2	
Total Hardness																																							
Total Kjeldahl Nitrogen (TKN)																																							
Turbidity (NTU units)																																							
Cyanide																																							



MW-6A  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	6/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD
<b>PARAMETER METALS (mg/L)</b>																																	
Aluminum																		0				-	-	-	-	-	-	-	-	-	-	0	
Calcium										78.6								0				-	-	-	-	-	-	-	-	-	-	6.55	
Iron										11								0				-	-	-	-	-	-	-	-	-	-	0.917	0.3
Magnesium										23.3								0				-	-	-	-	-	-	-	-	-	-	1.942	35.0
Manganese										0.36								0				-	-	-	-	-	-	-	-	-	-	0.03	0.3
Potassium										4.6								0				-	-	-	-	-	-	-	-	-	-	0.383	
Sodium										4.9								0				-	-	-	-	-	-	-	-	-	-	0.408	20.0
<b>PARAMETER (mg/l) TOXIC METAL</b>																																	
Antimony																		0				-	-	-	-	-	-	-	-	-	-	0	0.003
Arsenic																		0				-	-	-	-	-	-	-	-	-	-	0	0.025
Barium																		0				-	-	-	-	-	-	-	-	-	-	0	1.0
Beryllium																		0				-	-	-	-	-	-	-	-	-	-	0	
Cadmium										ND								0				-	-	-	-	-	-	-	-	-	-	0	0.005
Chromium (Total)																		0				-	-	-	-	-	-	-	-	-	-	0	0.05
Copper																		0				-	-	-	-	-	-	-	-	-	-	0	0.2
Lead										0.015								0				-	-	-	-	-	-	-	-	-	-	0.001	0.025
Mercury																		0				-	-	-	-	-	-	-	-	-	-	0	0.0007
Nickel																		0				-	-	-	-	-	-	-	-	-	-	0	0.1
Selenium																		0				-	-	-	-	-	-	-	-	-	-	0	0.0
Silver																		0				-	-	-	-	-	-	-	-	-	-	0	0.05
Thallium																		0				-	-	-	-	-	-	-	-	-	-	0	0.0005
Zinc																		0				-	-	-	-	-	-	-	-	-	-	0	2.0
<b>PARAMETER (mg/l) LEACHATE INDICATOR</b>																																	
Alkalinity																		0				-	-	-	-	-	-	-	-	-	-	0	
Biochemical Oxygen Demand																		0				-	-	-	-	-	-	-	-	-	-	0	
Boron																		0				-	-	-	-	-	-	-	-	-	-	0	1.0
Chemical Oxygen Demand																		0				-	-	-	-	-	-	-	-	-	-	0	
Chromium (Hexavalent)																		0				-	-	-	-	-	-	-	-	-	-	0	0.05
Chloride																		0				-	-	-	-	-	-	-	-	-	-	0	250.0
Color (PCU units)																		0				-	-	-	-	-	-	-	-	-	-	0	15.0
Nitrate-Nitrite																		0				-	-	-	-	-	-	-	-	-	-	0	10.0
Nitrogen-Ammonia																		0				-	-	-	-	-	-	-	-	-	-	0	2.0
Phenols																		0				-	-	-	-	-	-	-	-	-	-	0	0.001
Sulfate																		0				-	-	-	-	-	-	-	-	-	-	0	250.0
Total Organic Carbon (TOC)		ND					ND	ND	2.3	1.5		1.4					0				-	-	-	-	-	-	-	-	-	-	0.578		
Total Dissolved Solids (TDS)																		0				-	-	-	-	-	-	-	-	-	-	0	500.0
Total Hardness																		0				-	-	-	-	-	-	-	-	-	-	0	
Total Kjeldahl Nitrogen (TKN)																		0				-	-	-	-	-	-	-	-	-	-	0	
Turbidity (NTU units)																		0				-	-	-	-	-	-	-	-	-	-	0	5.0
Cyanide																		0				-	-	-	-	-	-	-	-	-	-	0	0.2

(Shade) = Analyte reported at or above New York State standards (amended March and June 1998). These standards were used beginning with the 9/98 sampling event. Exceedances noted prior to this event reflect prior standards.

\* = Applies to the sum of cis and trans-1,3-dichloropropene.

\*\* = Guidance Value.

ND values are included in calculation of Mean and are considered equal to zero.

(Blank) or "-" = Not Analyzed.

ND = Not Detected.

<DL = Detected below method detection limit.

J = Estimated.

B = Analyte was detected in method blank.



MW-6D  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02		
<b>PARAMETER METALS (mg/L)</b>																																					
Aluminum	5.7								34.30																												
Calcium	86.5	88.5	65.7	102			66.40	70.20	99.00	75.40	78.80	72.6		119	128	69.4						73.10		80.7	91.6	94.7						88.1				90.9	
Iron	21	13.1	0.4	44.8			0.70	1.50	62.80	10.40	26.20	17.2		187	152	0.92						9.23		5.78	4.82	49.7					10.3				24.7		
Magnesium	7.8	19.1	17.7	27.5			17.70	19.40	28.60	20.80	22.10	19.9		49.7	48.5	19.4						19.30		21.0	23.6	30.0					23.7				25.6		
Manganese	0.32	0.32	0.2	0.73			0.03	0.08	1.23	0.23	0.459	0.361		3.34	3.11	0.03						0.19		0.288	0.359	0.976					0.235				0.689		
Potassium	5.4	4.8	2	9.7			2.80	8.00	11.30	4.48	8.78	5.22		21.8	17.9	3.96						4.28		4.60	5.76	10.3				7.12				6.46			
Sodium	8.7	4.7	7.1	7.5			5.10	6.20	4.87	4.98	16.16	8.23		6.24	8.57	5.62						4.65		5.13	6.48	6.33				5.77				5.24			
<b>PARAMETER (mg/l) TOXIC METALS</b>																																					
Antimony	<DL								0.028																												
Arsenic	ND								0.029																												
Barium	0.12	0.1	ND	0.23			0.06	0.07	0.296	0.100	0.17	0.124		0.661	0.565	0.05							0.09		0.082	0.072		0.273					0.092			0.162	
Beryllium									0.003																												
Cadmium		0	ND	ND			ND	ND	ND	ND	ND	ND			0.008	ND						ND		0.004	0.004	ND					ND				ND		
Chromium (Total)	<DL	0.01	<DL	0.04			ND	0.01	0.062		0.054	0.023		0.174	0.159	ND						0.03		0.016	0.020	0.062					0.038				0.02		
Copper	<DL								ND																												
Lead	0.011	0.010	0.002	0.022			ND	0.009	0.043	0.006	0.013	0.017		0.280	0.140	0.006						0.006		0.006	0.005	0.050					0.008				0.035		
Mercury	ND	<DL	ND	ND			ND	ND	ND	ND	ND	ND		ND	ND	ND						ND		ND	ND	ND					ND				ND		
Nickel	0.25								0.040																												
Selenium	0.028	<DL	<DL	ND			ND	ND	ND	ND	ND	ND		ND	ND	ND						ND		ND	ND	ND					ND				ND		
Silver	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND		ND	ND	ND						ND		ND	ND	ND					ND				ND		
Thallium	0.04								ND																												
Zinc	0.04								0.182																												
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																					
Alkalinity	531	237	243	241			286.0	268.0	278.0	240.0	252	239		239	250	255						246		273	271	266							318			266	
Biochemical Oxygen Demand	20								12.0																												
Boron	ND								ND																												
Chemical Oxygen Demand	190	24	<DL	ND			ND	31.0	124.0	126.0	84.6	47.3		101	21.6	24.1						ND		294	66.2	ND						73.9				ND	
Chromium (Hexavalent)	<DL								ND																												
Chloride	6	12	12	4			7.0	15.0	ND	6.4	7.26	9.72		7.1	6.5	8.43						6.10		5.89	6.02	13.2					6.91				4.28		
Color (PCU units)	15								10.0																												
Nitrate-Nitrite	<DL	<DL	<DL	0.68			ND	0.3	0.14	ND	0.277	0.087		0.331	ND	ND						ND		ND	ND	ND					0.098				ND		
Nitrogen-Ammonia	<DL	<DL	1.3	0.3			ND	0.2	0.08	0.01	0.176	0.055		0.52	0.086	0.01						0.072		0.103	0.110	ND					ND				ND		
Phenols	0.003	ND	ND	0.811			ND	ND	ND	ND	0.003	0.007		ND	0.008	ND						0.012		ND	0.002	0.002				0.014					0.0118		
Sulfate	29	39.8	25.4	32			29.0	36.0	17.0	42.0	37	39		37	35	34						30		32	ND	31				40				40			
Total Organic Carbon (TOC)	25	24	2.7	1			ND	45.0	6.5	16.0	14.8	6.8		8.7	3	4						5.4		9.7	6.0	4.4				12.0				3.9			
Total Dissolved Solids (TDS)	324	351	294	366			281.0	336.0	290.0	305.0	318	331		361	282	296						266		283	318	284				336				333			
Total Hardness	248	304	237	368			238.0	255.0	1070	308.0	981	360		840	654	310						262		288	326	360				318				332			
Total Kjeldahl Nitrogen (TKN)	7.7								ND																												
Turbidity (NTU units)	0.5	3150	195	910			83.0	400	650	1600	2000	1600		340	30	110						340		330	85	34				61				220			
Cyanide	0.004								ND																												

MW-6D  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

PARAMETER VOLATILES (ug/L)	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD
Acetone								ND	ND	2.3		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.12	50.0
Acrylonitrile								ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
Benzene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	1.0
Bromobenzene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
Bromochloromethane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
Bromodichloromethane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	50.0
Bromoform		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	50.0
Bromomethane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.01	5.0
2-Butanone								ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	50.0
n-Butylbenzene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
sec-Butylbenzene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
tert-Butylbenzene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
Carbon disulfide								ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	60.0
Carbon tetrachloride		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
Chlorobenzene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
Chloroethane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
Chloroform		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.01	7.0
Chloromethane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.21	5.0
2-Chlorotoluene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
4-Chlorotoluene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
Dibromochloromethane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	50.0
1,2-Dibromo-3-chloropropane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	0.04
1,2-Dibromoethane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
Dibromomethane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
1,2-Dichlorobenzene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	3.0
1,3-Dichlorobenzene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	3.0
1,4-Dichlorobenzene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	3.0
trans-1,4-Dichloro-2-butene								ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
Dichlorodifluoromethane		ND	ND	ND	0.34	ND		ND	ND	ND		0.37		0.4	0.38	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.39	5.0
1,1-Dichloroethane		ND	ND	ND	0.39	0.4		0.43	0.43	0.36		0.48		0.43	0.55	0.45		0.41	ND	ND		0.33	-	ND	ND	-	-	-	ND	-	0.15	5.0	
1,2-Dichloroethane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	0.6
1,1-Dichloroethene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
cis-1,2-Dichloroethene		ND	ND	ND	ND	ND		ND	0.39	ND		0.3		0.27	0.46	ND		ND	ND	ND		0.3	-	ND	ND	-	-	-	-	ND	-	0.06	5.0
trans-1,2-Dichloroethene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	0.35		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.01	5.0
1,2-Dichloropropane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	1.0
1,3-Dichloropropane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
2,2-Dichloropropane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
1,1-Dichloropropene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
cis-1,3-Dichloropropene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	0.4
trans-1,3-Dichloropropene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	0.34	-	-	-	-	ND	-	0.01	0.4
Ethylbenzene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
2-Hexanone								ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	50.0
Hexachlorobutadiene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	0.5
Iodomethane								ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
Isopropylbenzene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
p-Isopropyltoluene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
Methylene chloride		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.08	5.0
4-Methyl-2-pentanone								ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	
Naphthalene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	10.0
n-Propylbenzene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
Styrene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
1,1,1,2-Tetrachloroethane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
1,1,2,2-Tetrachloroethane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
Tetrachloroethene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	5.0
Toluene		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.21	5.0
1,2,3-Trichlorobenzene		ND	ND	ND	0.65	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.02	5.0
1,2,4-Trichlorobenzene		ND	ND	ND	1.8	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.05	5.0
1,1,1-Trichloroethane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.03	5.0
1,1,2-Trichloroethane		ND	ND	ND	ND	ND		ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	-	ND	-	0.00	1.0

MW-6D  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD		
<b>PARAMETER METALS (mg/L)</b>																																			
Aluminum			16.3		2.4				0.45			1.6		0.49				0.42				0.31	-	-	ND	-	-	-	-	-	0.367	-	3.46		
Calcium			98.8	95.6	118	139		90.9	87.3		95.6			101	92.9	94		101		96		82.9	-	87.8	ND	-	-	-	-	90.7	-	75.90			
Iron			31.6	0.35	3.9	4.1		0.49	0.56			1.7		0.403	0.128	0.178		0.29		0.57		0.34	-	0.39	ND	-	-	-	-	0.723	-	16.79	0.3		
Magnesium			27.8	23.6	24.5	26		23.9	23.6			25.1		26.5	24.5	24.8		26.8		26		22.9	-	24.6	ND	-	-	-	-	24.7	-	20.41	35.0		
Manganese			0.9	0.03	1.4	1.7		0.02	0.04			0.05		ND	ND	ND		ND		ND		0.02	-	0.02	ND	-	-	-	-	0.0242	-	0.42	0.3		
Potassium			6.58	2.72	3.4	3.2			2.6			2.8		3.04	2.71	2.29		2.4		2.4		2.5	-	2.3	ND	-	-	-	-	2.71	-	4.61			
Sodium			6.21	6.85	7.6	5.7		5.5	5.9			4.9		6	4.5	4.7		4.9		5.1		4.6	-	4.6	ND	-	-	-	-	3.81	-	5.08	20.0		
<b>PARAMETER (mg/l) TOXIC METALS</b>																																			
Antimony			ND		ND				ND			ND		ND				ND				ND	-	-	ND	-	-	-	-	-	ND	-	0.00	0.003	
Arsenic			ND		ND				ND			ND		ND				ND				ND	-	-	ND	-	-	-	-	ND	-	0.00	0.025		
Barium			0.23	0.07	0.16	0.26		0.06	0.06			0.06		0.055	0.047			0.051				0.05	-	0.061	-	-	-	-	0.0513	-	0.12	1.0			
Beryllium			ND		ND				ND			ND		ND				ND				0.0002	-	-	ND	-	-	-	ND	-	0.00				
Cadmium			ND	ND	ND	ND		ND	ND			ND		ND	ND	ND		ND				ND	-	ND	ND	-	-	-	-	ND	-	0.00	0.005		
Chromium (Total)			0.02	ND	ND	ND		ND	ND			ND		ND	ND	ND		ND				ND	-	-	0.001	-	-	-	ND	-	0.02	0.05			
Copper			0.02		0.02				ND			ND		ND	ND			ND				0.005	-	-	ND	-	-	-	0.003	-	0.00	0.2			
Lead			0.01	ND	0.03	0.03		ND	ND			ND		ND	ND	ND		ND			0.002	ND	-	ND	0.005	-	-	-	0.0027	-	0.02	0.025			
Mercury			ND	ND	ND	ND		ND	ND	ND		ND		ND	ND			ND				ND	-	-	ND	-	-	-	ND	-	0.00	0.0007			
Nickel			ND		ND				ND			ND		ND				ND				ND	-	-	0.004	-	-	-	0.0021	-	0.02	0.1			
Selenium			ND	ND	ND	ND		ND	ND	ND		ND		ND	ND			ND				ND	-	-	ND	-	-	-	ND	-	0.00	0.01			
Silver			ND	ND	ND	ND		ND	ND	ND		ND		ND	ND			ND				ND	-	-	ND	-	-	-	ND	-	0.00	0.05			
Thallium			ND		ND				ND			ND		ND	ND			ND				ND	-	-	ND	-	-	-	ND	-	0.00	0.0005			
Zinc			0.08		0.03				ND			ND		0.038				ND				0.047	-	-	0.069	-	-	-	0.0084	-	0.03	2.0			
<b>PARAMETER (mg/l) LEACHATE INDICATOR</b>																																			
Alkalinity			340	330	289	268		496	175	275		250		337	298	329		382	378	310		319	-	329	-	-	-	-	-	294	-	246			
Biochemical Oxygen Demand			ND		6.6				ND			ND		ND	ND			ND				ND	-	-	-	-	-	-	1	-	2				
Boron			ND		ND				ND			0.03		0.028				0.03				0.06	-	0.06	-	-	-	-	0.0303	-	0	1.0			
Chemical Oxygen Demand			ND	ND	92.1	ND		ND	ND	ND		ND		ND	ND	ND		ND				ND	-	ND	ND	-	-	-	50.5	-	31				
Chromium (Hexavalent)			ND		ND				ND			ND		ND				ND				ND	-	-	0.013	-	-	-	ND	-	0	0.05			
Chloride			3.8	3.7	3.3	3.1		3.2	3	3.2		2.3		2.2	2.79	2.5		2.7	2.2	2.26		3	-	2.5	2.1	-	-	-	4.1	-	4.6	250.0			
Color (PCU units)			5		160				20			15		ND				50				12	-	17	-	-	-	-	5	-	17	15.0			
Nitrate-Nitrite			0.07	0.03	ND	ND		ND	ND	ND		ND		0.088	0.58			ND	0.05	0.534		ND	-	ND	ND	-	-	-	0.09	-	0	10.0			
Nitrogen-Ammonia			ND	0.1	ND	0.14		ND	ND	ND		ND		ND	ND			ND	ND	ND		ND	-	ND	ND	-	-	-	0.026	-	0	2.0			
Phenols			ND		0.02	ND		ND	0.01	ND		ND		ND	ND	ND		ND		ND		ND	-	ND	ND	-	-	-	0.0041	-	0	0.001			
Sulfate			28	31	27.3	25.3		23.2	22.4	23.7		20.6		21	22.4	20.9		20.6	19.5	21		20.4	-	20.65	24.5	-	-	-	25.2	-	23.6	250			
Total Organic Carbon (TOC)			ND	1.2	1.3	28.4	ND	ND	ND	ND		ND		ND	1.5	ND		ND	ND	ND		ND	-	ND	ND	-	-	-	ND	-	5				
Total Dissolved Solids (TDS)			358		377	332		359	394	435		363		365	354	331		351		420		738	-	359	381	-	-	-	349	-	298	500			
Total Hardness			361	336	395	454		325	315	288		342		360	330	340		363		350		301	-	321	342	-	-	-	310	-	331				
Total Kjeldahl Nitrogen (TKN)			1.7		2.1				ND			ND		ND	ND			ND		ND		ND	-	ND	ND	-	-	-	0.35	-	1				
Turbidity (NTU units)			750	920	2390	3460		272	95	202		16.9		16	30	5		-		18.02		19.6	-	17.8	24.2	18.8	17.4	-	11.7	-	486	5.0			
Cyanide			ND		ND				ND			ND		ND	ND			ND		ND		ND	-	-	-	-	-	-	ND	-	0	0.2			

(Shade) = Analyte reported at or above New York State standards (amended March and June 1998). These standards

were used beginning with the 9/98 sampling event. Exceedances noted prior to this event reflect prior standards.

\* = Applies to the sum of cis and trans-1,3-dichloropropene.

\*\* = Guidance Value.

ND values are included in calculation of Mean and are considered equal to zero.

(Blank) or "-" = Not Analyzed.

ND = Not Detected.

<DL = Detected below method detection limit.

J = Estimated.

ß = Analyte was detected in method blank.

MW-7A  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

PARAMETER VOLATILES (ug/L)	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02					
Acetone																																								
Acrylonitrile																																								
Benzene	0.37	2.24	0.94	2.0	3.0	ND	2.0		33.0		ND		1		ND		1		0.8					1	0.8	0.5	0.6	1		0.9	1	1	0.7	1.0		2.08				
Bromobenzene	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND									
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND								
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND																					
Bromoform	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND																					
Bromomethane	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND							
2-Butanone																																								
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND							
sec-Butylbenzene	0.22	ND	<DL	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND							
tert-Butylbenzene	ND	0.50	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND							
Carbon disulfide																																								
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND							
Chlorobenzene	0.37	0.52	0.27	ND	ND	ND	ND		0.7		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND							
Chloroethane	ND	ND	1.52	ND	5.0	ND	2.0		ND		ND		ND		0.5		ND		ND					1	0.6	ND	ND	ND		ND	ND	0.9	ND	ND	ND	ND	ND	ND	ND	
Chloroform	ND	0.29	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND																					
Chloromethane	ND	ND	ND	ND	ND	ND	ND		43.0		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND							
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND	ND						
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND	ND						
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND																					
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND																					
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND																					
Dibromomethane	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND	ND						
1,2-Dichlorobenzene	<DL	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND	ND						
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND	ND						
1,4-Dichlorobenzene	0.23	0.43	0.22	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND	ND						
trans-1,4-Dichloro-2-butene																																								
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	0.5	ND	ND	ND	ND	ND	ND	ND	
1,1-Dichloroethane	1.41	4.64	3.97	6.0	8.0	1.0	7.0		3.0		1.0		4		2		3		2				4	3	1	3	ND		2	3	3	2	3	2	3	3	3	3	3	
1,2-Dichloroethane	<DL	0.53	0.16	6.0	1.0	ND	ND		ND		ND		ND		ND		ND		ND				ND	0.6	ND	ND	ND		ND	ND	ND	ND								
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	4		ND	ND	ND	ND							
cis-1,2-Dichloroethene	0.66	1.77	1.27	2.0	3.0	ND	2.0		1.0		ND		2		0.5		1		0.6				1	1	0.5	0.9	ND		ND	2	2	0.9	2	2	0.9	2	2	3.18		
trans-1,2-Dichloroethene	ND	ND	0.52	ND	ND	ND	ND		0.6		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND							
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND	ND						
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND	ND						
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND	ND						
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND	ND						
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND	ND						
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND	ND						
Ethylbenzene	0.46	0.38	0.61	ND	1.0	ND	ND		0.7		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND							
2-Hexanone																																								
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND	ND						
Iodomethane																																								
Isopropylbenzene	0.16	0.39	0.23	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND	0.99						
p-Isopropyltoluene	ND	0.40	<DL	ND	ND	ND	ND		ND		ND		ND		ND		ND		ND					ND	ND	ND	ND	ND		ND	ND	ND	ND	ND						
Methylene chloride	ND	<DL</																																						

MW-7A  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02	
<b>PARAMETER METALS (mg/L)</b>																																				
Aluminum	11.2				30.4				0.21				51.8				14.4							14.9		3.74				0.21						
Calcium	32.7	55.4	41.4	50.7	57.6	30.8	53.1	45.0	47.3	59.7	26.5	42.1	47.5	38.5	31.3	47.6	41.8	36.4	39.5	29.5		52.2	48.0	38.5	40.7	41	46.3		42.6	43.1	60.7		41.4		53.7	
Iron	50.8	79	9.9	19.2	62.6	6.19	33.6	36.7	24.0	68.7	68.3	49.3	104	21.6	15.3	52.5	40.6	19.5	27.9	16.1		15.9	22.0	32.6	19.9	7.98	20.6		4.9	8.38	20.2		9.86		10.5	
Magnesium	4.5	13.9	12.3	10.4	18.1	6.3	12.5	12.3	9.99	17.6	10.5	12.6	20.6	8.5	7.13	13.9	11.1	7.66	9.32	6.55		10.8	10.2	10.8	8.46	9.16	9.54		8.8	8.55	12.3		8.26		11.3	
Manganese	9.75	14.2	9.53	12.1	16.4	13.4	15.2	12.6	12.5	15.1	7.8	11.4	12.5	10.4	7.73	12.1	24.4	8.64	8.99	7.20		15.1	11.6	9.28	9.99	7.53	10.5		9.62	9.56	14		9.58		14	
Potassium	20.8	23.8	18.9	25.8	36.3	14.3	21.5	21.6	27.0	29.6	17.8	26.8	33.4	17.4	13.2	27.7	7	17.7	16.3	20.5		19.3	18.8	29.8	17.3	25.4	16.1		17.8	23	19.4		16		22.6	
Sodium	7.2	10.2	7.2	9.1	11.9	7.2	10.6	9.2	8.97	10.2	3.5	7.92	7.92	7.73	6.01	7.5	ND	7.59	6.07	5.16		8.56	6.86	8.40	6.32	9.11	6.22		6.76	7.1	9.05		6.49		8.85	
<b>PARAMETER (mg/l) TOXIC METALS</b>																																				
Antimony	0.008				0.060				0.028				ND				ND							ND		ND										
Arsenic	0.010				0.060				0.045				0.094				0.061							0.046		ND										0.02
Barium	0.97				1.53				0.79				1.47				0.81							0.860		0.78										0.72
Beryllium					ND				ND				0											ND		ND										ND
Cadmium		<DL	<DL		0.08	ND	0.002	ND		ND	0.010	ND	ND	ND	ND		ND	ND	ND		ND	ND	ND	ND												
Chromium (Total)	<DL				0.08				0.01				0.15				0.07							0.051		0.02										0.02
Copper	<DL				0.03				ND				0.06				0.02							ND		ND										ND
Lead	0.221	<DL	0.010	ND	0.014	ND	0.007	0.021	ND	0.012	0.009	0.015	0.032	0.008	0.002	0.004	0.010	ND	ND	0.001		ND	0.004	0.014	0.002	0	0		0	0	ND	ND		ND	0.001	
Mercury	ND				0.080				ND				ND				ND							ND		ND										ND
Nickel	ND				0.08				0.02				0.18				0.01							0.070		0.05										0.05
Selenium	0.05	0.05	0.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	ND	ND	ND
Silver	0.29	<DL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	ND	ND	ND
Thallium	<DL				0.12				ND				ND				ND							ND		ND										ND
Zinc	0.09				0.12				0.01				0.24				0.08							0.100		0.03										0.02
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																				
Alkalinity	207	562	195	276	296	187	287.0	299.0	221	206.0	119.0	197.0		192	154	210	194	180	172	168		251	199		191	132	233		199	226	265	164	196		245	
Biochemical Oxygen Demand	25				4.0				12								11																			14
Boron	0.05				0.17				0.01				ND				ND							0.136		0.1									0.1	
Chemical Oxygen Demand	39	26	18	17	ND	5.0	56.0	ND	32.2	59.7	54.8	49.0	31.9	33.8	10.9	12.3	74.5	16.4	20.6	43.4		63.2	72.7		ND	53.1	18.4		32.9	22.5	36.6	ND	32.5		16	
Chromium (Hexavalent)	<DL				16				ND				ND				ND																			ND
Chloride	9.4	12	11.7	13	16	8.0	14.0	16.0	11.5	7.1	4.73	8.41		6.03	4.82	5.02	7.97	8.4	5.81	ND		7.4	6.22		3.73	4.8	4.37		5.46	6.97	6.88		3.85		6.19	
Color (PCU units)	40				ND				125								10																			200
Nitrate-Nitrite	<DL	<DL	<DL	ND	3.5	ND	ND	0.1	1.74	0.7	ND	1.35	ND	0.31	ND	ND	ND	0.09	ND	0.275		ND	ND		ND	1.41	ND		ND	ND	ND		ND	ND	ND	
Nitrogen-Ammonia	3.3	1.1	0.6	0.2	3.5	1.1	2.7	9.9	3.23	0.9	1.52	2.0	0.57	2.2	1.83	2.41	2.96	2.23	1.84	ND		2.02	1.69		1.05	1.36	2.15		1.45	2.44	1.91	1.83	1.92		2.26	
Phenols	<DL	0.049	ND	ND	0.030	ND	ND	ND	0.015	ND	0.006	0.016	0.012	ND	0.017	ND	0.004	ND	ND	0.015		0.006	0.004		0.006	ND	ND		0.02	0.01	0.01		0.02		0.0147	
Sulfate	23	<DL	8.6	15	12	38.0	10.0	ND	19.0	24.0	13.0	27.0		18	17	16	15	16	15	24		17	15		14	16	12		30	14	11		20		8.74	
Total Organic Carbon (TOC)	12	16	7.8	11	12	3.0	9.0	28.0	25.4	12.3	5.5	9.2	36	10.8	5.7	6.8	7	6.2	8.6	7.8		9.8	8.8		4.8	6.1	5.3		4.7	7	6.9	4.4	ND		6.5	
Total Dissolved Solids (TDS)	276	266	237	304	369	291.0	305.0	448.0	279.0	203.0	142.0	272.0		234	181	192	274	214	196	216		280	212		205	215	227		227	257	327		228		303	
Total Hardness	100	195	154	169	219	103.0	183.0	163.0	226.0	157.0	231.0	177.0		188	169	169	274	122	137	101		175	162		136	140	155		146	143	202		137		181	
Total Kjeldahl Nitrogen (TKN)	4.6				4.6				3.67				4.12				11.3																		15.4	
Turbidity (NTU units)	20	400	803	810	1850	9.0	123.0	302.0	145.0	250.0	725.0	130.0		220	56	56	100	30	110	195		120	140		58	11	60		30	0.95	44		27		16	
Cyanide	0.13				ND				ND				ND				ND										ND									ND



MW-7A  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD
<b>PARAMETER METALS (mg/L)</b>																																	
Aluminum			0.14		1.1		ND		ND			ND		0.251				ND				0.04	-	-	ND	ND	-	ND	-	0.03	0.853	4.97	
Calcium	48.6	43.7	34.8	34.8	26.3	45.3	52.4	55.9	36.3			46		33.5	44	32.5		53.5	94.2	60		40.8	-	54.6	53.4	25.3	70.9	42.3	-	58.2	30.7	43.52	
Iron	27	16.4	16.6	17.2	6.8	1.1	20.8	25.7	21.8			3.8		10	16.8	8.98		7.8	0.12	28		8.15	-	10.1	20.2	11.8	4.68	18.4	-	11.9	2.31	22.72	0.3
Magnesium	10.2	8.23	6.52	6.8	5.1	9.1	10.5	11.3	7.5			9.4		6.67	8.78	6.5		10.9	15.3	12		8.8	-	11.7	11.1	5.2	12.6	7.48	-	11.7	6.07	9.71	35.0
Manganese	11.7	9.91	8.31	8.9	6	7.2	12.8	14.3	9.6			13.5		8.55	11.3	7.84		13.7	2	16		15.7	-	16.1	16.3	6.89	9.5	10.7	-	16.4	2.16	10.84	0.3
Potassium	18.3	20.3	15.7	21.8	14.1	23.9	19.7	23.8	18			20.6		19.1	22	15.7		18.4	1.8	18		19	-	19.8	16.6	11.6	13.3	17	-	21.6	21.6	19.20	
Sodium	6.68	8.28	5.35	5.9	3.6	6.5	5.3	5.9	3.9			5.1		4.4	4.6	3.8		5	6.4	5.3		4.3	-	4.7	4.8	2.6	5.9	ND	-	4.71	4.74	6.19	20.0
<b>PARAMETER (mg/l) TOXIC METALS</b>																																	
Antimony			ND		ND		ND		ND			ND		ND				ND				0	-	-	ND	ND	-	ND	-	ND	ND	0.00	0.003
Arsenic			ND		0.04		ND		0.043			ND		0.016				ND				0.007	-	-	0.026	0.026	-	0.026	-	0.01	0.0095	0.02	0.025
Barium			0.61		0.5		0.59		0.76			0.65		0.45				0.65				0.661	-	-	0.681	0.36	-	0.499	-	0.76	0.614	0.60	1.0
Beryllium			ND		ND		ND		ND			ND		ND				ND				2E-04	-	-	ND	ND	-	ND	ND	0.00			
Cadmium			ND		ND		ND		ND			ND		ND				ND				ND	-	ND	ND	ND	ND	-	8E-05	ND	0.00	0.005	
Chromium (Total)			ND		0.01		ND		ND			ND		ND				ND				0.003	-	-	0.003	0.001	-	0.011	-	0.006	ND	0.02	0.05
Copper			ND		ND		ND		ND			ND		ND				ND				ND	-	-	ND	ND	-	ND	-	0.003	ND	0.00	0.2
Lead	0.005	ND	ND	ND	ND	ND	ND	ND	ND			ND		ND	ND	ND		ND	ND	0.001		0.002	-	ND	0.002	ND	ND	0.003	-	0.003	0.0033	0.01	0.025
Mercury			ND		ND		ND		ND			ND		ND				ND				ND	-	-	ND	ND	-	ND	-	ND	0.0002	0.00	0.0007
Nickel			ND		ND		ND		ND			ND		ND				ND				0.012	-	-	0.011	0.005	-	ND	-	0.013	0.0052	0.02	0.1
Selenium			ND		ND		ND		ND			ND		ND	ND	ND		ND				0.007	-	-	0.006	0.008	-	ND	-	ND	ND	0.00	0.01
Silver			ND		ND		ND		ND			ND		ND	ND	ND		ND				ND	-	-	0.003	0.002	-	ND	-	ND	ND	0.01	0.05
Thallium			ND		ND		ND		ND			ND		ND				ND				ND	-	-	ND	ND	-	0.014	-	ND	ND	0.01	0.0005
Zinc			ND		ND		ND		0.039			0.02		0.032				0.038				0.063	-	-	0.036	0.015	-	ND	-	0.01	0.0081	0.04	2.0
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																	
Alkalinity		238	225	180	144	101	203	218	263	96.7		121		145	188	128		252	328	240		209	-	-	250	265	120	160	193	-	287	243	203.9
Biochemical Oxygen Demand			8		ND		ND		2.8			4.4		3.2				5.7		12		5	-	-	10.4	2.1	4.9	6	-	7.3	ND	5.5	
Boron			ND		0.07		0.08		0.073			0.05		0.057				0.057				0.08	-	-	0.06	0.07	-	ND	-	0.061	0.0824	0.0	1.0
Chemical Oxygen Demand		18.1	13	13	26.2	ND	18.8	17.9	20.1	16.6		19.2		ND	19.9	13.9		ND	10.5	24		14.8	-	18.1	20.8	10.3	19.1	-	50.5	111	25.0		
Chromium (Hexavalent)			ND		ND		ND		ND			ND		ND				ND				ND	-	-	ND	ND	-	-	-	ND	-	0.6	0.05
Chloride		4.17	4.6	3.7	2.7	1.4	5	3.5	3.8	3.3		2.7		2	2.39	1.83		4.3	9.1	4.26		2.9	-	3.1	3	ND	2.8	2.28	-	5	4.6	5.6	250.0
Color (PCU units)			20		50		100		250			25		60				200				130	-	-	280	120	-	10	-	15	-	69.4	15.0
Nitrate-Nitrite		ND	0.03	0.03	ND	0.47	ND	ND	ND	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	ND	ND	ND	ND	-	0.044	0.58	0.2	10.0	
Nitrogen-Ammonia		2.21	2.8	2.1	1.1	0.91	1.7	1.2	1.3	1.6		1.5		1.54	1.72			1.3	ND	2.38		1.49	-	1.3	2.11	1.72	1.86	2.22	-	1.8	1.6	1.8	2.0
Phenols		0.0116	0.002	ND	ND	ND	ND	ND	0.007	ND		ND		ND	ND	ND		ND	ND	ND		ND	-	0.005	0.011	ND	ND	0.006	-	0.007	0.0139	0.0	0.001
Sulfate		8.71	12	11	12	12.8	11	8.8	6.2	10		8.5		12	9.37	11.5		8	6.8	ND		6.9	-	6.6	5.9	7.7	7.7	6.37	-	5.9	5.2	12.2	250
Total Organic Carbon (TOC)	3.6	4.2	6.1	4	7.1	1.5	4.6	5	5.4	5.5		4.4	11.9	3.7	4.2	1.7		4.8	ND	7		5.4	-	6.3	7.2	4.6	5.4	4.8	-	7	5.5	7.4	
Total Dissolved Solids (TDS)		283	255	208	213	107	248	336	231	351		244		184	221	178		265	309	350		242	-	291	293	141	259	207	-	272	448	245.7	500
Total Hardness		163	143	114	115	86.7	150	174	186	122		154		110	150	110		179	298	200		138	-	185	179	84.6	235	140	-	220	96	155.4	
Total Kjeldahl Nitrogen (TKN)			3.6		2.9		2		1.8			1.7		1.76				2.2		2.23		2.1	-	-	2.51	1.81	-	2.27	-	2.4	6	3.0	
Turbidity (NTU units)		84	64	81	63.4	118	44.6	40.3	87	33.2		5.9		23	4	0	308	3	6.9	11		9.6	-	12.5	13.8	15.2	21.2	15.4	-	3	41	142.0	5.0
Cyanide			ND		ND		ND		ND			ND		ND				ND				ND	-	-	ND	ND	-	-	-	ND	-	0.0	0.2

(Shade) = Analyte reported at or above New York State standards (amended March and June 1998). These standards were used beginning with the 9/98 sampling event. Exceedances noted prior to this event reflect prior standards.  
 \* = Applies to the sum of cis and trans-1,3-dichloropropene.  
 \*\* = Guidance Value.  
 ND values are included in calculation of Mean and are considered equal to zero.  
 (Blank) or "-" = Not Analyzed.  
 ND = Not Detected.  
 <DL = Detected below method detection limit.  
 J = Estimated.  
 B = Analyte was detected in method blank.

MW-7C  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

PARAMETER VOLATILES (ug/L)	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02		
Acetone																																					
Acrylonitrile																																					
Benzene	ND			ND	ND																																
Bromobenzene	ND			ND	ND																																
Bromochloromethane	ND			ND	ND																																
Bromodichloromethane	0.40			ND	ND																																
Bromoform	ND			ND	ND																																
Bromomethane	ND			ND	ND																																
2-Butanone																																					
n-Butylbenzene	ND			ND	ND																																
sec-Butylbenzene	ND			ND	ND																																
tert-Butylbenzene	ND			ND	ND																																
Carbon disulfide																																					
Carbon tetrachloride	ND			ND	ND																																
Chlorobenzene	ND			ND	ND																																
Chloroethane	ND			ND	ND																																
Chloroform	0.91			ND	ND																																
Chloromethane	ND			ND	ND																																
2-Chlorotoluene	ND			ND	ND																																
4-Chlorotoluene	ND			ND	ND																																
Dibromochloromethane	ND			ND	ND																																
1,2-Dibromo-3-chloropropane	ND			ND	ND																																
1,2-Dibromoethane	ND			ND	ND																																
Dibromomethane	ND			ND	ND																																
1,2-Dichlorobenzene	ND			ND	ND																																
1,3-Dichlorobenzene	ND			ND	ND																																
1,4-Dichlorobenzene	ND			ND	ND																																
trans-1,4-Dichloro-2-butene																																					
Dichlorodifluoromethane	ND			ND	ND																																
1,1-Dichloroethane	1.11																																				
1,2-Dichloroethane	ND			ND	ND																																
1,1-Dichloroethene	ND			ND	ND																																
cis-1,2-Dichloroethene	ND			ND	ND																																
trans-1,2-Dichloroethene	ND			ND	ND																																
1,2-Dichloropropane	ND			ND	ND																																
1,3-Dichloropropane	ND			ND	ND																																
2,2-Dichloropropane	ND			ND	ND																																
1,1-Dichloropropene	ND			ND	ND																																
cis-1,3-Dichloropropene	ND			ND	ND																																
trans-1,3-Dichloropropene	ND			ND	ND																																
Ethylbenzene	ND			ND	ND																																
2-Hexanone																																					
Hexachlorobutadiene	ND			ND	ND																																
Iodomethane																																					
Isopropylbenzene	ND			ND	ND																																
p-Isopropyltoluene	ND			ND	ND																																
Methylene chloride	0.75			2.0	ND																																
4-Methyl-2-pentanone																																					
Naphthalene	ND			ND	ND																																
n-Propylbenzene	ND			ND	ND																																
Styrene	ND			ND	ND																																
1,1,1,2-Tetrachloroethane	ND			ND	ND																																
1,1,2,2-Tetrachloroethane	ND			ND	ND																																
Tetrachloroethene	ND			ND	ND																																
Toluene	ND			ND	ND																																
1,2,3-Trichlorobenzene	ND			ND	ND																																
1,2,4-Trichlorobenzene	ND			ND	ND																																
1,1,1-Trichloroethane	ND			ND	ND																																
1,1,2-Trichloroethane	ND			ND	ND																																
Trichloroethene	ND			ND	ND																																
Trichlorofluoromethane	ND			ND	ND																																
1,2,3-Trichloropropane	ND			ND	ND																																
1,2,4-Trimethylbenzene	ND			ND	ND																																
1,3,5-Trimethylbenzene				ND	ND																																
Vinyl acetate																																					
Vinyl chloride	ND			ND	ND																																
o-Xylene	ND																																				
p-Xylene & m-Xylene				ND	ND																																

MW-7C  
 HISTORICAL ANALYTICAL RESULTS  
 ISCHUA LANDFILL  
 OLEAN, NEW YORK

	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02		
<b>PARAMETER METALS (mg/L)</b>																																					
Aluminum	16.8				1.9																																
Calcium	139	117	102	109	93.8	88.2																															
Iron	34.6	0.66	0.32	0.47	2.8	0.68																															
Magnesium	23.7	16.4	17.4	17	15.6	14.2																															
Manganese	0.47	0.18	0.35	0.37	0.27	0.29																															
Potassium	5.3	1.7	3.4	1.5	2.2	1.6																															
Sodium	14.8	4	4.8	5.2	4.7	4.5																															
<b>PARAMETER (mg/l) TOXIC METALS</b>																																					
Antimony	ND				ND																																
Arsenic	ND				ND																																
Barium	0.21				0.1																																
Beryllium					ND																																
Cadmium		ND	<DL	ND	ND	ND																															
Chromium (Total)	<DL				ND																																
Copper	0.03				ND																																
Lead	0.06	ND	0.01	ND	ND	0.01																															
Mercury	0.01	<DL	ND	ND	ND																																
Nickel	0.39				ND																																
Selenium	0.05	ND	0.01	ND	ND	ND																															
Silver	ND				ND																																
Thallium	ND				ND																																
Zinc	0.08				0.1																																
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																					
Alkalinity	299	300	284	295	315	356																															
Biochemical Oxygen Demand	<DL				2.0																																
Boron	ND				ND																																
Chemical Oxygen Demand	15	20	<DL	ND	ND	ND																															
Chromium (Hexavalent)	<DL				ND																																
Chloride	42.3	40	39.1	30	21.0	30																															
Color (PCU units)	5				ND																																
Nitrate-Nitrite	<DL	<DL	<DL	ND	ND	ND																															
Nitrogen-Ammonia	<DL	<DL	<DL	0.2	0.2	0.1																															
Phenols	0.002	ND	ND	ND	0.01	ND																															
Sulfate	14	22	15.4	7	ND	21																															
Total Organic Carbon (TOC)	4.1	11	4	1	2.0	2																															
Total Dissolved Solids (TDS)	456	418	394	388	413	381																															
Total Hardness	444	357	326	342	298	279																															
Total Kjeldahl Nitrogen (TKN)	34				0.9																																
Turbidity (NTU units)	65	126	83	200	111	33																															
Cyanide	<DL				ND																																



MW-7C  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD	
<b>PARAMETER METALS (mg/L)</b>																																		
Aluminum							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	-	ND	ND	-	ND	ND	ND	ND	0.94			
Calcium							103.0	91.0	97.3	96.5	98.2	94.7	97.9	97.3	96.3	97	100	90.9	52.3	98	96	84.2	94.6	91.6	92.4	102	95.8	102	105	96.6	96.6	97.30		
Iron							ND	0.063	ND	ND	0.092	ND	0.081	0.177	ND	ND	0.184	ND	<b>2.3</b>	ND	ND	0.03	ND	0.17	0.08	ND	ND	ND	0.0147	0.07	1.38	0.3		
Magnesium							16.4	14.9	15.7	15.5	15.4	14.9	15.3	15.5	15.3	15.3	15.4	14.8	10.9	16	16	14	15.9	15.5	16.4	16.7	15.8	15	16.9	15.4	15.3	15.76	35.0	
Manganese							0.2	1.5	1.6	1.5	2.2	1.7	0.9	2.65	1.01	1.21	0.633	1.2	9.3	0.89	0.44	1.1	2.04	2.83	1.35	0.945	0.571	0.928	0.464	0.32	6.75	1.49	0.3	
Potassium							1.6	1.5	1.5	1.6	1.6	1.4	1.5	1.57	1.39	1.48	1.83	1.5	24.3	1.5	1.5	1.4	ND	ND	1.4	1.6	ND	ND	2.04	2.57	2.27			
Sodium							6.7	6.3	6.9	7.7	6.4	6.1	6.3	6.5	6.1	6	6.8	6	5.9	6.6	ND	5.8	6.4	6.5	6.3	6.4	6.9	6.62	7.44	8.48	6.53	6.31	20.0	
<b>PARAMETER (mg/l) TOXIC METALS</b>																																		
Antimony							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.003		
Arsenic							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.025		
Barium							0.12	0.1	0.16	0.14	0.186				0.101	0.11					ND	0.104	-	-	0.132	0.128	-	ND	ND	0.0904	0.239	0.10	1.0	
Beryllium							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00		
Cadmium							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00	0.005		
Chromium (Total)							ND	ND	ND	ND	ND	ND	0.006				0.005	ND	ND	ND	ND	0.0001	-	-	0.001	ND	-	ND	ND	ND	0.00	0.05		
Copper							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003	-	-	ND	ND	-	ND	ND	ND	0.00	0.2		
Lead							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.009	ND	ND	ND	0.002	ND	ND	ND	0.005	0.003	ND	0.0039	ND	0.0021	0.0036	0.00	0.025	
Mercury							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND	ND	-	ND	ND	ND	0.0001	0.00	0.0007	
Nickel							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND	ND	-	ND	ND	0.0016	0.0015	0.02	0.1	
Selenium							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	0.003	0.003	-	ND	ND	ND	0.00	0.0		
Silver							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND	ND	-	ND	ND	ND	0.00	0.005		
Thallium							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	-	ND	ND	-	ND	ND	ND	0.0052	0.00	0.0005		
Zinc							ND	ND	0.015	0.028	0.011	0.012				0.034	ND	ND				0.012	0.011	-	-	0.011	ND	-	0.0276	ND	0.0237	0.0495	0.02	2.0
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																		
Alkalinity							282.0	484	264	311	401	279	246	294	293	350	307	323	252	270	300	299	320	302	320	321	320	307	310	314	292	310.0		
Biochemical Oxygen Demand							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND	ND	ND	ND	ND	1	1	0.2		
Boron							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	0.021				ND	ND	-	-	0.03	0.05	-	ND	ND	0.0166	0.0187	0.0	1.0
Chemical Oxygen Demand							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18.7	ND	ND	11.4	6.3	ND	11.1	12.8	9.1	-	ND	15.1	18.2	4.4		
Chromium (Hexavalent)							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND	ND	-	ND	0.0033	-	0.0	0.05		
Chloride							14.7	14.3	13.2	12.2	12.3	10.5	11.9	12	12	10.2	9.72	10.3	4	9.18	7.69	7.9	7.6	6.8	6.3	7.7	6.1	5.82	7.1	7.5	5.7	14.0	250	
Color (PCU units)							13.0		15.0		50	5	ND	ND	ND	ND	17.5				ND	8	-	-	12	8	-	5	5	-	7.4	15.0		
Nitrate-Nitrite							ND	ND	ND	0.092	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.023	0.044	0.0	10.0		
Nitrogen-Ammonia							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	0.059	ND	ND	0.028	0.038	0.1	2.0		
Phenols							ND	ND	ND	0.01	ND	0.0098	ND	ND	ND	ND	ND	ND	ND	ND	0.252	ND	ND	0.0031	0.0011	0.0092	0.001							
Sulfate							8.0	7.3	6	8	8.2	5.5	6.7	6.8	6.82	7.41	6.1	7.9	7.9	6.2	ND	6.6	6.4	7.2	6.3	7.8	7.4	6.86	8.3	8.7	6.5	8.1	250	
Total Organic Carbon (TOC)							1.1	ND	ND	2	1.1	1.3	1.6	ND	2.3	ND	1.4	1.3	1.8	ND	ND	1.4	1.5	1.3	1.4	1.4	577	1.35	2.7	ND	1.6	20.2		
Total Dissolved Solids (TDS)							341.0	344	325	326	299	327	326	319	321	319	259	287	254	340	370	340	329	290	330	308	325	334	338	349	342	338.5	500	
Total Hardness							ND	288	308	305	308	298	307	310	300	310	310	288	176	310	300	268	302	293	298	324	318	340	310	280	310	297.0		
Total Kjeldahl Nitrogen (TKN)							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	0.24	0.28	-	0.13	ND	0.21	0.15	1.7		
Turbidity (NTU units)							62.2	4.2	5	11.3	15.5	2.4	4.9	1	0	1	12	1	8.2	3.4	15.3	2.2	1.8	10	3.9	17.2	8.1	3.8	5.8	24.7	5.86	27.4	5.0	
Cyanide							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND	ND	-	-	ND	ND	-	0.0	0.2	

(Shade) = Analyte reported at or above New York State standards (amended March and June 1998). These standards were used beginning with the 9/98 sampling event. Exceedances noted prior to this event reflect prior standards.  
\* = Applies to the sum of cis and trans-1,3-dichloropropene.  
\*\* = Guidance Value.  
ND values are included in calculation of Mean and are considered equal to zero.  
(Blank) or "-" = Not Analyzed.  
ND = Not Detected.  
J = Estimated.  
8 = Analyte was detected in method blank.  
<DL = Detected below method detection limit.



MW-8B  
 HISTORICAL ANALYTICAL RESULTS  
 ISCHUA LANDFILL  
 OLEAN, NEW YORK

	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02														
<b>PARAMETER METALS (mg/L)</b>																																																	
Aluminum	1.5				0.5				1.03				1.59				0.47				3.7			0.095		4.4		0.18		0.09		0.23		0.39															
Calcium	75.4	81.2	67.7	86.8	65.7	55.7	69.6	67.0	70.8	77	74.8	69.9	69.4	73.2	75.5	74.8	69.5	67.2	64.9	64.2	80.3	76.4	88.5	66.8	69.9	64.6	72.4	86.8	67.2	70.4	77.8	71.5	71.3	78.8	72.1														
Iron	16.1	14.1	8.8	7.3	10.0	7.56	14.6	7.9	16	20.5	17.9	13.1	23.3	13.4	18.9	18.8	13.8	11.4	10.0	9.99	64.9	15.1	20.3	8.11	11.1	14.4	11.9	57.2	5.96	31.2	15.8	11.7	10.2	46.4	9.15														
Magnesium	5.8	11.4	12.2	13.2	9.9	8.5	10.8	11.0	11.5	13.3	11.9	11.1	11.1	11.4	12.9	12.2	10.6	10.3	9.8	10.2	12.5	11.9	14.0	10.3	11.2	10.8	11.1	11.6	10.4	10.9	12.3	11.2	11	11.5	11.2														
Manganese	10.9	10.8	8.39	9.17	6.13	7.97	10	9.6	10.6	10.5	10.7	9.94	10.3	9.8	11.1	11.1	9.85	8.94	8.1	8.53	8.53	11	12.3	7.95	9.37	9	9.67	8.06	7.75	10.6	10.9	9.51	9.66	7.24	9.8														
Potassium	3.4	2.4	3.3	2.8	2.0	2.5	3.7	3.1	4.9	4.5	3.3	2.56	3.62	3.64	4.1	3.76	3.31	3.56	2.7	2.91	2.85	4.18	3.77	2.88	3.39	4.68	3.07	2.7	2.81	4.33	3.87	4.35	3.11	2.28	2.86														
Sodium	8.2	6.8	6.6	13.5	8.8	8.3	9.2	10.5	11.1	10.2	7.4	7.79	9.72	9.09	8.86	9.06	8.14	8.18	6.3	9.23	9.23	8.28	7.85	9.69	7.27	9.5	6.86	10.5	7.08	7.88	7.38	8.79	6.58	8.99	6.83														
<b>PARAMETER (mg/l) TOXIC METALS</b>																																																	
Antimony	0.01				ND				0.04				ND				ND					ND				ND																							
Arsenic	0.020				0.024				0.028				0.046				0.023				0.17			0.018		0.02		0.04		0.07		0.03		0.16															
Barium	0.04				0.35				0.23				0.27				0.21				0.712			0.211		0.22		0.77		0.25		0.2		0.47															
Beryllium					ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Cadmium		ND	<DL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002	0.004	0.01	ND	ND	ND	0.005	ND	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chromium (Total)	<DL				ND				0				0.01				ND				0.046			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Copper	<DL				ND				ND				0.01				ND				0.025			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Lead	0.583	ND	0.009	ND	ND	ND	0.060	ND	0.005	0.026	0.008	0.004	0.033	0.005	0.013	0.004	0.004	ND	ND	ND	0.036	ND	0.012	0.010	0.004	0.02	0.01	0.03	0.003	0.01	0.01	0.01	0.002	0.02	0.002														
Mercury	ND				ND				ND				ND				ND				0.0003			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Nickel	ND				ND				0.02				0.05				0.06				0.066			0.033		0.05		0.03		0.05		0.04		0.04		0.04													
Selenium	0.03	<DL	0.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Silver	0.03				ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Thallium	0.01				ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Zinc	0.03				0.01				0.02				0.07				0.03				0.129			ND		0.06		0.06		0.03		ND		0.03		ND		0.03		ND		0.03		ND		0.03		ND	
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																																	
Alkalinity	275	281	258	228	244	251	296	226.0	243	262	256	264	246	261	294	271	267	275	258	258	260	258	282	271	278	244	293	261	281	287	283	261	276	350	250														
Biochemical Oxygen Demand	28				ND				13				3				ND				17			4		ND		16		ND		5		18															
Boron	<DL				0.04				ND			0.072		0.07		0.08		0.11		0.08		ND																											
Chemical Oxygen Demand	30	33	20	ND	11.0	28.0	66.0	ND	51.9	51.3	79.6	37.1	28.5	28.1	26.4	61	27	13.1	16.5	69.4	57.3	37.6	36.3	16.0	18.2	16.2	28.9	205	23.1	31.1	37.3	19.2	24.4	33.3	ND														
Chromium (Hexavalent)	ND				ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
Chloride	18.5	18	17.6	29	22.0	15.0	22.0	80.0	18.2	17.7	14.5	18	19	15.7	15.8	15.2	17.1	12	11.4	18.3	20.7	13.6	12.5	17.8	9.18	13.8	8.56	20	12	12.9	9.57	14.2	9.45																
Color (PCU units)	45				ND				60.0				30				35				25			200		30		500		250		45		750															
Nitrate-Nitrite	2.1	<DL	<DL	ND	ND	0.04	ND	ND	1.97	1.08	ND	ND	0.4	0.37	ND	0.107	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
Nitrogen-Ammonia	2.2	<DL	0.7	ND	1.3	0.6	2.3	2.7	2.58	2.3	2.64	2.31	2.17	1.8	3.13	3.31	2.91	1.52	2.04	1.75	1.5	2.74	3.26	1.42	2.49	2.19	2.72	0.9	1.46	3.08	2.77	1.85	2.09	1.05	1.61														
Phenols	<DL	ND	<DL	ND	0.020	ND	ND	ND	0.035	0.029	0.046	0.042	0.038	ND	0.050	0.037	0.043	0.025	0.019	0.071	0.067	0.031	0.046	0.023	0.030	0.02	0.02	0.01	0.03	0.04	0.03	0.02	0.03	0.01	0.02														
Sulfate	16	4.9	9	16	9.0	17.0	6.0	ND	30.0	21.0	7.8	ND	13	18	6.6	6.6	5	9.1	9.1	9.3	12	9.4	15	8.2	7.2	7.4	8.1	14	13	7.8	9.2	8.2	13																
Total Organic Carbon (TOC)	13	14	9.3	6	4.0	8.0	9.0	5.6	17.6	13.9	6.2	8	12	8	8.7	7.8	7	7.3	10.9	5.1	5.9	10.3	9.8	6.2	9.5	1.7	6.9	21	5.7	9.4	8.7	8.2	5.5	2.9	5.8														
Total Dissolved Solids (TDS)	330	330	303	329	329	269	323	283	282	335	316	359	120	311	334	311	320	307	278	312	301	290	325	287	288	276	277	316	300	289	317	278	306	304	294														
Total Hardness	212	249	219	271	205	174	219	213	262	270	266	243	267	301	356	271	327	210	202	202	252	240	279	209	221	206	226	265	211	187	245	225	223	244	226														
Total Kjeldahl Nitrogen (TKN)	2.8				1.6				1.91				3.56				5.88				3.7			3.55		2.48		10.5		9.47		2.36																	
Turbidity (NTU units)	46	207	80	12	147	24	30.0	8.3	38.0	46.0	26	20	24	40	19	26	28	20	22	14	130	26	27	39	19	12	29	16	7.5	210	15	27	11	63	4.7														
Cyanide	ND				ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	



MW-8B  
 HISTORICAL ANALYTICAL RESULTS  
 ISCHUA LANDFILL  
 OLEAN, NEW YORK

	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD	
<b>PARAMETER METALS (mg/L)</b>																																		
Aluminum	ND		0.22		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		0.0473	0.44
Calcium	65.5	65.4	65.3	62.5	69.7	80.1	77.2	73.4	74.6	75.5	73.8	81.5	79.6	78.4	72.5	76.5	86.9	80	74.1	76	87	69.5	78.1	72.3	69	72.5	81.2	78.7	95.8	76.8	66.6	73.80		
Iron	7.05	6.61	8.1	8.49	6.9	6.2	21	9.5	7.9	7.7	0.86	6.4	12.4	9.23	9.06	5.09	5.5	4.8	11.4	4.4	6.3	3.49	7.45	3.44	11.5	3.39	4.52	4.19	3	4.17	11	12.54	0.3	
Magnesium	9.83	10.3	9.54	9.24	10.4	11.6	12.5	11.6	11.5	11.4	10.4	12.2	12.2	12.2	11.2	11.6	13	11.9	11.8	12	14	11.1	12.6	11.4	10.8	11.6	12.1	11.5	14	11.2	9.89	11.33	35.0	
Manganese	7.43	7.62	8.05	9.91	7.9	7.9	12	9.1	9	8.7	6.8	7.7	9.8	8.51	9.39	7.71	7.98	7	10.8	6.9	9.5	5.73	8.77	6.28	11.7	5.9	7.74	7.05	7.26	7.02	9.06	8.94	0.3	
Potassium	3.01	2.7	3.16	3.36	3.1	2.5	5.8	3.1	3.2	2.6	2.7	2.3	3.7	2.89	3.2	2.24	2.8	2.2	4.3	1.9	2.9	1.7	3.1	ND	3.5	1.9	2.7	ND	ND	3.51	5.7	3.07		
Sodium	7.18	6.69	5.48	5.67	6.5	6.4	6.8	6.6	7.1	5.9	9.5	7.1	7.8	7.1	6.3	6.2	11	6.6	6.2	6.7	ND	6.4	7	5.8	4.7	6.5	7.5	6.68	10.7	7.13	4.71	7.66	20.0	
<b>PARAMETER (mg/l) TOXIC METALS</b>																																		
Antimony	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		0.00	0.003
Arsenic	0.02		ND		0.01		0.03		0.02		0.02		0.021		0.02	0.017					ND	0.012	-	-	0.025	0.014	-	0.0174	0.0114	0.0144	0.0283	0.03	0.025	
Barium	0.19		0.17		0.17		0.14		0.14		0.23	0.16		0.161		0.184	0.14				ND	0.137	-	-	0.116	0.137	-	0.116	0.124	0.111	0.19	1.0		
Beryllium	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	0.0002	-	-	ND	ND	-	ND	ND	ND	0.00			
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00	0.005	
Chromium (Total)	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	-	-	0.002	ND	-	ND	ND	0.0017	0.004	0.00	0.05	
Copper	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	-	-	ND	ND	-	ND	ND	ND	0.00	0.2		
Lead	0.004	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001	ND	0.0008	ND	ND	0.002	0.002	ND	0.0064	ND	0.0017	0.0033	0.01	0.025							
Mercury	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	-	-	ND	ND	-	ND	ND	7E-05	0.00	0.0007		
Nickel	0.04		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	0.0006	-	-	0.007	0.005	-	ND	ND	0.0052	0.0057	0.02	0.1	
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	0.004	0.005	-	ND	ND	ND	ND	0.00	0.0	
Silver	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	-	-	0.002	0.002	-	ND	ND	ND	ND	0.00	0.05	
Thallium	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.0005	
Zinc	ND		ND		ND		ND		0.01		ND	0.02		0.013		0.01	0.015					0.023	0.11	-	-	0.002	0.009	-	ND	0.0209	ND	0.021	0.02	2.0
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																		
Alkalinity	219	270	250	210	205	225	254	248	269	249	274	178	256	281	247	292	272	296	268	250	280	270	310	270	272	255	270	248	287	266	241	262.59		
Biochemical Oxygen Demand	ND		4		15.6		ND		ND		ND		2.9	2.8		3.9		ND	ND	ND	ND	3.6	-	-	7	3.2	2.7	ND	ND	1.2	3.5	4.54		
Boron	0.08		0.05		0.06		0.1		0.07		0.054	0.047		0.059		0.052	0.052				ND	0.05	-	-	0.06	0.05	-	ND	ND	0.0428	0.0676	0.04	1.0	
Chemical Oxygen Demand	33.6	32.1	42	ND	50.2	10.1	21.6	23.3	16.8	18.2	26.3	13.8	18.4	ND	20.3	18.2	11.2	ND	20.3	ND	89	ND	16.9	7.3	9	ND	12.8	-	19.2	23.4	39.4	28.11		
Chromium (Hexavalent)	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	-	-	ND	ND	-	ND	ND	-	0.00	0.05		
Chloride	12.8	7.79	6.7	5.2	6	5.4	9.6	5.5	5.3	5.3	19.6	6.4	7.6	7.5	4.71	4.17	23.5	4	4.4	3.34	9.9	3.3	6.4	3.1	2.8	3.2	4.3	2.71	4.1	4.7	3.6	12.33	250.0	
Color (PCU units)			10		12		18		70		30	20		7.5		0	7.5		0	7.5	3.34	170	-	-	27	38	-	5	20	10	-	73.18	15.0	
Nitrate-Nitrite	0.13	ND	ND	0.24	ND	0.077	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.68	0.032	0.062	0.11	10.0								
Nitrogen-Ammonia	1.87	1.45	2.4	2.7	0.81	0.83	2.6	1.1	1.1	0.96	0.87	0.99	1.9	1.9	1.54	0.797	0.812	0.73	2.8	1.08	ND	0.804	1.3	0.595	2.46	1.03	1.23	1.22	1.1	0.86	2.4	1.69	2.0	
Phenols	0.01	0.01	ND	ND	0.01	ND	ND	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014	ND	ND	ND	0.0163	ND	0.0272	ND	ND	0.0148	0.0078	0.0021	0.0325	0.02	0.001	
Sulfate	8.76	8.22	8.2	7.6	8.8	8.4	7.7	7.3	6.9	8.8	10.6	6.2	5.1	6.9	6.24	7.91	7.69	8.8	5.6	ND	ND	6.9	6.8	6.7	4.8	6.1	6.9	6.36	8.5	7.9	4.2	8.72	250.0	
Total Organic Carbon (TOC)	2.9	2.5	10	4.4	20.8	3.6	8.2	3.5	5.6	3.5	3.8	4	7.4	5.4	4.4	2.2	5.3	2.8	2.6	ND	ND	3.2	4	2.9	6.2	3.8	3.5	2.59	4.6	4.8	5.9	6.72		
Total Dissolved Solids (TDS)		311	285	268	297	276	311	294	280	271	272	304	330	319	297	314	319	283	299	260	250	292	320	283	274	276	291	269	329	290	248	296.02	500.0	
Total Hardness	204	206	202	194	217	248	244	231	234	235	227	254	249	250	230	240	270	249	234	240	270	219	247	228	217	229	261	212	400	228	250	239.65		
Total Kjeldahl Nitrogen (TKN)	1.81		4.5		2.7		3.2		1.5		1.7	1.1		2.31		1.47	1.2		0.508	1.3	0.98	-	-	ND	1.14	-	1.23	0.88	1.6	3.4	2.43			
Turbidity (NTU units)		8	19	9	41.2	24.4	10.7	3.6	14	27.2	15.1	3.3	4.2	20	16	0	3	6	7	3.9	2.2	18.1	1.6	0	7.3	18.5	9.9	2	3.6	0.3	35	28.42	5.0	
Cyanide	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	-	-	ND	ND	-	ND	ND	-	0.00	0.2		

(Shade) = Analyte reported at or above New York State standards (amended March and June 1998). These standards were used beginning with the 9/98 sampling event. Exceedances noted prior to this event reflect prior standards.

\* = Applies to the sum of cis and trans-1,3-dichloropropene.

\*\* = Guidance Value.

ND values are included in calculation of Mean and are considered equal to zero.

(Blank) or "-" = Not Analyzed.

ND = Not Detected.

J = Estimated.

<DL = Detected below method detection limit. B = Analyte was detected in method blank.



MW-9B  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02			
<b>PARAMETER METALS (mg/L)</b>																																						
Aluminum	61.8				21.6												35.0																					
Calcium	82.6	103	47	49.1	51.9	41.9	37.6	79.3						44.7		48.2	55.6							53.1														
Iron	110	90.3	0.6	72.3	40.6	25.6	37.5	36.2						73.1		68.1	77.2							70.1														
Magnesium	14.4	19.5	13.3	16.3	11.9	8.6	10.2	15.3						16.4		16.2	16.9							16.9														
Manganese	1.24	1.48	0.66	0.95	0.7	0.33	1.07	0.48						0.84		1.03	1.6							1.06														
Potassium	10.5	8.7	5.8	12.8	6.9	5.7	6.1	8.1						11.9		10.5	8.9							9.44														
Sodium	3.4	2.2	3	4.5	4.1	3.3	3.7	6.3						3.7		3.24	4.0							3.51														
<b>PARAMETER (mg/l) TOXIC METALS</b>																																						
Antimony	<DL				ND												ND																					
Arsenic	ND				0.015												0.028																					
Barium	0.21				0.12												0.208																					
Beryllium					ND												0.002																					
Cadmium		ND	0	ND	ND	ND	ND	ND						ND		ND	ND							0.013														
Chromium (Total)	0.06	0.03	0.02	0.08	0.07	0.05	0.04	0.06						0.11			0.076							0.215														
Copper	0.12				0.05												0.065																					
Lead	0.015	<DL	0.010	0.013	0.008	0.007	0.014	0.015						0.031		0.026	0.018							0.014														
Mercury	<DL				ND												ND																					
Nickel	0.82				0.07												0.087																					
Selenium	0.08	0.03	0.01	ND	ND	ND	ND	ND						0		ND	ND							ND														
Silver	ND				ND												ND																					
Thallium	ND				ND												ND																					
Zinc	0.32				0.16												0.28																					
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																						
Alkalinity			402	140		158	143	147.0																														
Biochemical Oxygen Demand																																						
Boron					0.06												ND																					
Chemical Oxygen Demand		<DL	<DL	ND		ND	ND	ND						78.3																								
Chromium (Hexavalent)	<DL				ND												ND																					
Chloride			11	12		10.0	15.0	8.0																														
Color (PCU units)																																						
Nitrate-Nitrite		<DL	<DL	0.27		ND	ND	0.2																														
Nitrogen-Ammonia		<DL	<DL	0.4	0.2	ND	0.1	0.2						ND																								
Phenols		ND	0.078	ND		ND	ND	ND						0.031																								
Sulfate		22.3	11			42.0	15.0	7.0																														
Total Organic Carbon (TOC)		14	2	3	2.0	2.0	1.0	5.2						2.8																								
Total Dissolved Solids (TDS)		180	858			140	163.0	176.0																														
Total Hardness	265	340	172			156	135.0	261.0																														
Total Kjeldahl Nitrogen (TKN)					1.3												3.3																					
Turbidity (NTU units)			182	1110		130	4.0	1840																														
Cyanide																	ND																					

MW-9B  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

PARAMETER VOLATILES (ug/L)	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD
Acetone									2.8	ND	3.6	2.6	ND	1.8	ND	ND	ND	ND	ND	ND	ND	1.5	-	ND	-	ND	ND	ND	ND	ND	ND	0.53	50.0
Acrylonitrile									ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	5.0
Benzene		ND		ND					1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.04	1.0
Bromobenzene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	5.0
Bromochloromethane		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	5.0
Bromodichloromethane				ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	50.0
Bromoform				ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	50.0
Bromomethane		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	5.0
2-Butanone									ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	50.0
n-Butylbenzene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	5.0
sec-Butylbenzene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	5.0
tert-Butylbenzene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	5.0
Carbon disulfide									ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	60.0
Carbon tetrachloride		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	5.0
Chlorobenzene		ND		ND					0.39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.01	5.0
Chloroethane		ND		ND					0.57	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.02	5.0
Chloroform									ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.07	7.0
Chloromethane		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.06	5.0
2-Chlorotoluene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	5.0
4-Chlorotoluene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	5.0
Dibromochloromethane									ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	50.0
1,2-Dibromo-3-chloropropane									ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	0.04
1,2-Dibromoethane									ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	5.0
Dibromomethane		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	5.0
1,2-Dichlorobenzene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	3.0
1,3-Dichlorobenzene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	3.0
1,4-Dichlorobenzene		ND		ND					0.48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.01	3.0
trans-1,4-Dichloro-2-butene									ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	5.0
Dichlorodifluoromethane		ND		ND					1.9	ND	ND	0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.08	5.0
1,1-Dichloroethane		2.1		2.8					1.9	2.2	2.3	2.2	2.7	1.6	2.3	0.97	1.2	1.7	1.3	ND	ND	1.7	-	ND	-	1.5	ND	ND	ND	ND	ND	1.93	5.0
1,2-Dichloroethane		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.01	0.6
1,1-Dichloroethene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	5.0
cis-1,2-Dichloroethene		ND		ND					2.7	0.41	0.38	0.38	0.41	ND	0.43	ND	ND	ND	ND	ND	ND	0.37	-	ND	-	0.43	ND	ND	ND	ND	ND	0.21	5.0
trans-1,2-Dichloroethene		ND		ND					0.37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.05	5.0
1,2-Dichloropropane		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	1.0
1,3-Dichloropropane		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	5.0
2,2-Dichloropropane		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	5.0
1,1-Dichloropropene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	5.0
cis-1,3-Dichloropropene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	0.4
trans-1,3-Dichloropropene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	0.4
Ethylbenzene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	5.0
2-Hexanone									ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	50.0
Hexachlorobutadiene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	0.5
Iodomethane									ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	5.0
Isopropylbenzene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	5.0
p-Isopropyltoluene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	5.0
Methylene chloride		ND		ND					ND	ND	ND	ND	ND	ND	0.75	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.66	5.0
4-Methyl-2-pentanone									ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	
Naphthalene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	10.0
n-Propylbenzene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	5.0
Styrene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	5.0
1,1,1,2-Tetrachloroethane		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	5.0
1,1,1,2-Tetrachloroethane		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	5.0
Tetrachloroethane		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	5.0
Toluene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.06	5.0
1,2,3-Trichlorobenzene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	-	-	-	-	0.00	5.0
1,2,4-Trichlorobenzene		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	-	-	-	-	-	0.00	5.0
1,1,1-Trichloroethane		ND		ND					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	ND	ND	ND	0.00	5.0
1,1,2-Trichloroethane																																	

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	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD	
<b>PARAMETER METALS (mg/L)</b>																																		
Aluminum									2.3			ND		0.238			ND	0.59			0.12	ND	-	-	-	ND	-	ND	-	0.056	-	6.41		
Calcium									60.7	52.6		68	72.1	62	61.9	60.5	54.9	65.4	61.8	57	63	54.7	-	61.2	-	63.8	75.6	70.7	-	75.6	-	53.99		
Iron									2.8	0.31		0.28	2	1.11	0.451	0.46	0.472	1.2	0.86	0.33	1.3	0.3	-	1.44	-	0.65	1.22	0.462	-	0.135	-	21.10	0.3	
Magnesium									8.2	6.9		8.5	9.1	8.44	8.26	8.98	8.74	9.5	9.8	9.2	10	8.8	-	9.9	-	9.5	10.1	9.52	-	10.6	-	10.00	35.0	
Manganese									0.14	0.032		0.05	0.03	ND	ND	0.07	0.035	0.12	0.055	0.029	0.053	0.021	-	0.066	-	0.969	0.428	0.779	-	0.118	-	0.42	0.3	
Potassium									1.9	1		1.4	5	1.61	1.18	1.17	1.7	1.8	1.7	1	2.3	1.2	-	2.1	-	1.4	3.3	ND	-	2.04	-	4.03		
Sodium									4.2	3.5		4.9	5.7	4.8	4.3	4.1	4.7	4.6	4.7	4.1	ND	4.1	-	4.3	-	4.4	5.5	ND	-	5.89	-	3.49	20.0	
<b>PARAMETER (mg/l) TOXIC METALS</b>																																		
Antimony									ND			ND		ND			ND	ND			ND	ND	-	-	-	ND	-	ND	-	ND	-	0.00	0.003	
Arsenic									ND			ND		ND			ND	ND			ND	ND	-	-	-	ND	-	ND	-	ND	-	0.00	0.025	
Barium									0.04			0.02		0.019			0.019	0.029			ND	0.016	-	-	-	0.021	-	ND	-	0.02	-	0.04	1.0	
Beryllium									ND			ND		ND			ND	ND			ND	2E-04	-	-	-	ND	-	ND	-	ND	-	0.00		
Cadmium									ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	-	ND	ND	ND	-	ND	-	0.00	0.005	
Chromium (Total)									0.01			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	ND	ND	ND	-	ND	-	0.03	0.05	
Copper									ND			ND		ND			ND	ND			ND	ND	-	-	-	ND	-	ND	-	ND	-	0.01	0.2	
Lead									0.01	ND		ND	ND	ND	ND	ND	0.006	ND	0.001	ND	0.001	-	ND	-	ND	-	0.002	ND	0.005	-	ND	-	0.01	0.025
Mercury									ND			ND		ND			ND	ND			ND	ND	-	-	-	ND	-	ND	-	ND	-	0.00	0.0007	
Nickel									ND			ND		ND			ND	ND			ND	ND	-	-	-	0.002	-	ND	-	ND	-	0.001	0.1	
Selenium									ND	ND		ND	ND	ND	ND		ND	ND			ND	ND	-	-	-	0.004	-	ND	-	ND	-	0.00	0.0	
Silver									ND			ND		ND			ND	ND			ND	ND	-	-	-	ND	-	ND	-	ND	-	0.00	0.05	
Thallium									ND			ND		ND			ND	ND			ND	ND	-	-	-	ND	-	ND	-	ND	-	0.00	0.0005	
Zinc									0.03			0.15		0.054			0.143	0.15			0.17	0.059	-	-	-	0.255	-	0.204	-	0.006	-	0.10	2.0	
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																		
Alkalinity									158	155						1.860			226	220		180	-	-	-	-	-	-	200	-	106.5			
Biochemical Oxygen Demand									-											ND			-	-	-	-	-	-	1.2	-	0.1			
Boron									ND			ND		ND			ND	ND			ND		-	-	-	-	ND	-	0.01	-	0.0	1.0		
Chemical Oxygen Demand									14.9	23.4		19.2				ND	ND	ND	107	ND		6	-	30.3	-	-	-	ND	17.2	-	11.9			
Chromium (Hexavalent)									ND												ND		-	-	-	-	-	-	0.01	-	0.0	0.05		
Chloride									5.4	4.2						5.86	6.59			5.5	60.7		5	-	4.3	-	-	-	5.9	-	7.6	250.0		
Color (PCU units)									-												12		-	-	-	-	-	5	10	-	2.5	15.0		
Nitrate-Nitrite									0.05	0.15								ND	0.069		ND	-	ND	-	-	-	-	0.055	0.035	-	0.0	10.0		
Nitrogen-Ammonia									ND	ND		ND				ND	ND	ND	ND	ND	ND		ND	-	ND	-	-	-	ND	0.026	-	0.0	2.0	
Phenols									ND	0.0081			ND		ND	-	-	-	-	-	0.003	-	0.0	0.001										
Sulfate									8.2	10.1						9.52	8.13			8.8	8.5		8.3	-	7.9	-	-	-	9.6	-	8.4	250.0		
Total Organic Carbon (TOC)									-	1.5	5	2.4	2.3		ND	BD	ND	2.5	ND	ND		1.5	-	-	-	-	-	2.6	ND	5.8	2.9			
Total Dissolved Solids (TDS)									244	177											240		215	-	228	-	-	-	225	-	158.1	500.0		
Total Hardness									185	160		205									195		200	173	-	194	-	-	170	-	200	-	148.4	
Total Kjeldahl Nitrogen (TKN)									ND							ND	ND			ND	ND		ND	-	-	-	-	-	0.11	0.27	-	0.3		
Turbidity (NTU units)									-	5.2		18.5	19.1	48	3	12	14	4	22.8	11.4	27.5	17	-	9.2	28.3	31	23.8	14.4	3.5	14.8	229	141.6	5.0	
Cyanide									-														-	-	-	-	-	-	ND	-	0.0	0.2		

(Shade) = Analyte reported at or above New York State standards (amended March and June 1998). These standards were used beginning with the 9/98 sampling event. Exceedances noted prior to this event reflect prior standards.  
\* = Applies to the sum of cis and trans-1,3-dichloropropene.  
\*\* = Guidance Value.  
ND values are included in calculation of Mean and are considered equal to zero.  
(Blank) or "-" = Not Analyzed.  
J = Estimated.  
<DL = Detected below method detection limit. B = Analyte was detected in method blank.

MW-10B  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

PARAMETER VOLATILES (ug/L)	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02			
Acetone																																						
Acrylonitrile																																						
Benzene	1.36	3.78	4.0	5.0	2.0	4.0		4.0		3.0		4		3		3		3		3		3		3	3	2	2	3	3	2	3	2	2	2	2	2.74	2.29	
Bromobenzene	ND	ND	ND	ND	ND	ND		ND		ND		ND																										
Bromochloromethane	ND	ND	ND	ND	ND	ND		ND		ND		ND																										
Bromodichloromethane	ND	<DL	ND	ND	ND	ND		ND		ND		ND																										
Bromoform	ND	ND	ND	ND	ND	ND		ND		ND		ND																										
Bromomethane	ND	ND	ND	ND	ND	ND		ND		ND		ND																										
2-Butanone																																						
n-Butylbenzene	ND	ND	ND	ND	ND	ND		ND		ND		ND																										
sec-Butylbenzene	ND	ND	ND	ND	ND	ND		ND		ND		ND																										
tert-Butylbenzene	1.91	<DL	ND	ND	ND	ND		ND		ND		ND																										
Carbon disulfide																																						
Carbon tetrachloride	ND	ND	ND	ND	ND	ND		ND		ND		ND																										
Chlorobenzene	0.38	0.86	1.0	ND	ND	1.0		1.0		1.0		1		1		0.8		1		1		1		1	1	1	0.9	0.9	1	1	2	1	0.7	0.9	1.22	1.58		
Chloroethane	ND	1.0	ND	ND	ND	2.0		ND		ND		ND		ND		0.5		ND		ND		ND		ND	ND	0.6	ND											
Chloroform	1.73	<DL	ND	ND	ND	ND		ND		ND		ND																										
Chloromethane	ND	ND	ND	ND	ND	ND		ND		ND		ND																										
2-Chlorotoluene	ND	ND	ND	ND	ND	ND		ND		ND		ND																										
4-Chlorotoluene	ND	ND	ND	ND	ND	ND		ND		ND		ND																										
Dibromochloromethane	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND																									
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND																									
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND																									
Dibromomethane	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND																									
1,2-Dichlorobenzene	0.14	0.18	ND	ND	ND	ND		ND		ND		ND	ND																									
1,3-Dichlorobenzene	ND	<DL	ND	ND	ND	ND		ND		ND		ND	ND																									
1,4-Dichlorobenzene	0.82	0.66	ND	ND	1.0		0.7		0.6		0.6		0.7		ND		0.6		0.7		0.6		0.7		0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	
trans-1,4-Dichloro-2-butene																																						
Dichlorodifluoromethane	ND	16.8	4.0	ND	ND	ND		3.0		1.0		ND		ND		1		2		3		3		2	1	1	0.9	1	1	ND	0.7	1	ND	0.9	ND	ND		
1,1-Dichloroethane	26.9	22.4	30.0	26.0	30.0	34.0		26.0		22.0		25		18		25		22		22		19		19	20	18	20	22	23	20	19	16	19	17	14.7	17.8		
1,2-Dichloroethane	0.96	0.5	ND	1.0	1.0	ND		ND		ND		ND		ND		ND		0.6		ND		ND		ND	0.8	ND												
1,1-Dichloroethene	ND	0.15	ND	ND	ND	ND		ND		ND		ND																										
cis-1,2-Dichloroethene	34.8	21.4	26.0	9.0	6.0	24.0		17.0		10.0		8		15		13		18		11		15		15	15	15	13	19	19	14	17	15	17	20	21.7	13.6		
trans-1,2-Dichloroethene	2.86	1.5	2.0	1.0	ND	2.0		1.0		1.0		0.7		0.7		1		0.7		1		0.7		0.9	0.7	0.7	0.7	0.7	0.9	0.5	ND	0.6	ND	ND	1.42	ND		
1,2-Dichloropropane	ND	<DL	ND	ND	ND	ND		ND		ND		ND																										
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND																									
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND																									
1,1-Dichloropropene	ND	<DL	ND	ND	ND	ND		ND		ND		ND	ND																									
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND																									
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND																									
Ethylbenzene	0.16	1.66	4.0	4.0	ND	3.0		3.0		3.0		3		2		0.7		1		3		3		0.8	2	0.6	ND	0.95										
2-Hexanone																																						
Hexachlorobutadiene	ND	<DL	ND	ND	ND	ND		ND		ND		ND																										
Iodomethane																																						
Isopropylbenzene	0.21	ND	ND	ND	ND	ND		ND		ND		ND	0.88																									
p-Isopropyltoluene	1.91	ND	ND	ND	ND	ND		ND		ND		ND																										
Methylene chloride	6.87	<DL	2.0	1.0	2.0	3.0		ND		ND		ND																										
4-Methyl-2-pentanone																																						
Naphthalene	0.40	<DL	ND	ND	ND	ND		ND		ND		ND																										
n-Propylbenzene	0.32	ND	ND	ND	ND	ND		ND		ND		ND																										
Styrene	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND																									
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND		ND		ND		ND	ND																									
1,1,2,2-Tetrachloroethane	0.22	<DL	ND	ND	ND	ND		ND		ND		ND	ND																									
Tetrachloroethene	ND	0.31	ND	ND	ND	ND		ND		ND		ND	ND																									
Toluene	0.12	ND																																				

MW-10B  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02	
<b>PARAMETER METALS (mg/L)</b>																																				
Aluminum					12.6				6.27				1.33				ND				1.44				1.80		2.43		0.13		0.1		0.146		ND	
Calcium	72.2	59.4	64.6	65.0	51.8	58	62.8	73.5	66.7			61.6	62.1	55.6	57.5	66.2	ND	55	52.6	61.1	65.8	64.7	64.4	61.7	59.3	63.9	62.7	68.6	55.9	66.8	68.1	66.9	59.4	62.7	62.3	
Iron	16.8	12.4	8.96	23.9	0.73	11.8	7.1	21.3	22			12.1	7.31	5.55	8.9	38.8	ND	10.7	43.5	10.6	11.3	15.3	11.1	7.90	14.6	5.48	6.26	4.13	1.01	1.1	5.45	3.72	1.46	5	2.8	
Magnesium	22.7	21.4	20.1	22.7	15.6	19.4	20.6	25.6	24.1			20.1	20	19.2	20.5	27.3	0.13	18.2	22.1	19.7	21	21.9	21.4	20.2	20.4	20.8	19.8	20.3	18.9	20.3	22.3	21.4	18.7	21.1	20.2	
Manganese	12.8	11.9	12	13.1	9.75	11.6	12	14.7	12.5			11.9	11.9	10.9	10.3	12.5	ND	9.22	10.0	11.0	12.7	11.9	11.7	11.4	10.7	10.7	10.2	11.3	7.94	10.9	9.91	11.3	7.97	11.4	6.93	
Potassium	2.7	2.3	2.4	5.0	3.3	3.3	3.8	3.58	3.9			3.4	2.34	2.88	3.18	5.24	ND	3.56	5.9	3.12	2.49	3.49	2.89	3.00	3.18	3.84	4.28	3.24	2.97	2.58	5.54	3.46	2.77	2.54	4.53	
Sodium	9.9	11.6	10.2	11.3	10.1	10.7	10.7	12.2	10			8.86	10.6	10	10.7	3.02	11	10.5	7.6	10.7	10.3	10.7	9.45	10.9	9.83	10.6	9.76	8.96	9.39	9.86	10.4	9.82	9.62	9.84	10.3	
<b>PARAMETER (mg/l) TOXIC METALS</b>																																				
Antimony					ND				ND				ND		ND		ND		0.05		ND		ND													
Arsenic					0.021				0.028				0.016				0.013				0.02				0.030		0.01		0.01		0.01		0.013		0.03	
Barium					0.17				0.25				0.1				ND				0.13				0.124		0.13		0.09		0.09		0.105		0.11	
Beryllium					ND				ND				ND		ND		ND		ND		ND		ND													
Cadmium	<DL	ND			ND	ND	ND	0	ND	ND	ND	0.002	ND	0	ND	0.01	ND	ND	ND	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND							
Chromium (Total)					0.03				0.02				0.02				ND				0.35				0.026		0.03		ND		0.01		0.013		ND	
Copper					0.02				ND				ND				ND				ND				ND		ND		ND		ND		ND		ND	
Lead	0.020	<DL	0.022	0.029	ND	0.018	0.023	0.010	0.034	0.021	0.009	0.007	0.012	0.005	0.026	0.004	0.013	0.009	0.006	0.02	0.003	0.010	0.042	0.010	0.01	0	0.01	0	0	0.014	0	0.01	0.003			
Mercury					ND				ND				ND		ND		ND		ND		ND		ND													
Nickel					ND				0.04				0.06				ND				0.15				0.055		0.07		0.04		0.05		0.048		0.06	
Selenium	<DL				ND				ND				ND			ND					ND				ND		ND		ND		ND		ND		ND	
Silver					ND				ND				0.01				ND				ND				ND		ND		ND		ND		ND		ND	
Thallium					ND				ND				ND		ND		ND		ND		ND		ND													
Zinc					0.08				0.04				0.03				ND				ND				ND		0.03		ND		ND		ND		0.03	
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																				
Alkalinity		278	271	247	296	306	321	294.0	282	259	278	257	275	238	262	264	291	261	247	288	265	256	246	310	260	281	317	288	268	310	285	281	251	282	257	
Biochemical Oxygen Demand					3				ND				7				8				15			9		13		17		ND		9		14		
Boron					0.1				ND				0.02				ND				0.07				0.112		0.06		0.08		0.07		0.081		0.08	
Chemical Oxygen Demand		16	17	ND	8	6.0	ND	15.0	45.4	29.9	18.1	16.4	23.4	45.3	27.7	20.4	25.3	ND	25.1	45.4	36.6	ND	29.5	19.0	ND	22.4	39.1	26.3	25.4	ND	38.3	ND	23.2	ND	24.3	
Chromium (Hexavalent)					ND				ND				ND		ND		ND		ND		ND		ND													
Chloride		21	20.3	23	22	26.0	18.0	43.0	20.7	16.4	23.2	23	25.6	16.5	19.9	17.8	23.3	18.4	15	21.1	24.4	18.9	15.0	24.0	13.2	20.6	12.8	20.3	16.3	20.8	13.7	18	14.5	18.5	15.3	
Color (PCU units)					ND				30				20				40				30				60		20		35		50		20		15	
Nitrate-Nitrite	<DL	<DL	ND	ND	ND	ND	0.1	1.63	1.1	ND	ND	ND	0.86	ND	ND	0.48	0.76	ND	0.096	0.78	ND	ND	1.56	ND	0.58	ND	0.61	0.62	0.71	ND	1.12	0.1	0.21	ND		
Nitrogen-Ammonia	<DL	<DL	ND	0.3	0.8	1.2	4.6	1.76	1.9	1.99	1.2	2.05	0.51	1.3	3.74	1.39	1.3	2.02	2.92	1.5	1.7	0.890	1.24	1.54	1.26	1.45	1.66	0.88	1.14	1.32	1.52	0.76	1.68	0.684		
Phenols	ND	ND	ND	0.010	ND	ND	ND	0.010	ND	0.018	0.013	0.031	ND	0.020	0.015	0.017	0.008	0.010	0.040	0.05	0.013	0.01	0.014	0.005	0.01	0.01	0.01	0.01	0.02	0.01	0.020	0.012	0.02	0.01	0.0129	
Sulfate	0.5	4.5	ND	ND	ND	ND	ND	14	11	ND	ND	5	5.7	6.7	6.7	ND	ND	ND	ND	ND	8.7	6.4	ND	ND	12	7.1	ND	14	7.4	106	ND	11	6.37	7.15		
Total Organic Carbon (TOC)	13	5.4	6	6	6	5.0	14.0	8.9	6.3	7.2	5.6	7.8	4.7	7	4.9	8.9	4.8	9.5	8.9	6.4	6.1	7.0	6.4	4.6	ND	4.5	6.2	4.5	6	5.3	7	4.8	4.8	4.3		
Total Dissolved Solids (TDS)	290	311	336	360	149	306	332.0	228	376	347	338	305	283	284	288	336	282	269	330	319	290	282	326	290	319	271	368	292	306	308	290	305	336	297		
Total Hardness	272	237	294	256	194	225	242.0	320	304	368	277	299	295	422	284	352	212	222	234	251	252	249	237	232	245	199	255	217	250	262	255	225	243	239		
Total Kjeldahl Nitrogen (TKN)					1.9				1.62				2.88				3.28				2.35				5.01		ND		3.03		2.52		3.24		4.71	
Turbidity (NTU units)	3200	496	280	386	24.0	214	138.0	220	160	240	75	24	150	88	66	23	9	130	19	27	46	70	29	36	14	43	18	23	700	18	22	9	6.1	2.4		
Cyanide					ND				ND			ND		ND		ND		ND		ND		ND														



MW-10B  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD				
<b>PARAMETER METALS (mg/L)</b>																																					
Aluminum	ND		0.71		3.4		ND		ND		ND	ND		ND		ND	ND		ND	ND		ND	0.03	0	-	ND	ND	-	ND	ND	0.03	ND	0.92				
Calcium	69.3	57.4	61.2	71.6	66.7	73.1	66.8	64.2	68.9	63.7	74.9	67.7	69.1	63	71.1	67.5	75.5	75.1	70.7	72	79	66.8	74.7	74	70	74.5	66.4	72.9	83	72.4	77.1	65.30					
Iron	4.89	4.25	8.82	1.63	6.1	4	ND	0.44	0.61	1.7	0.48	0.24	0.52	0.337	0.268	0.599	3.48	0.5	0.54	2.6	1.6	1.8	1.62	1.04	0.66	1.42	ND	0.294	1.26	0.137	2.43	6.46	0.3				
Magnesium	21.6	19.2	21.3	21.4	21.3	22.6	20.6	19.4	22	20.6	23.1	21.8	21.8	19.9	22.6	21.6	24.5	24.1	23	25	26	23.3	25.4	24.9	23.8	24.4	20.9	20.7	26	22.4	23.9	21.36	35.0				
Manganese	11.2	8.8	10.1	8.81	9.5	9.7	2.3	4.3	5.4	6.6	10.6	5.7	8.3	5.02	3.06	4.38	11.3	5.9	6.1	9.7	11	9.02	10.5	5.78	6.57	7.54	2.74	3.71	10.8	2.16	9.29	9.08	0.3				
Potassium	3.02	2.87	2.71	2.65	3.4	2.6	2.3	2.2	2.5	2.3	2.4	2.5	2.5	1.76	2.08	2.07	2.42	2.4	2.2	2.3	2.3	2.2	2.5	2.4	2	2.4	2.2	ND	ND	2.59	3.56	2.84					
Sodium	9.64	8.99	9.91	10.6	8.8	9.2	9.7	8.8	9.3	8.6	9.4	9.9	9.5	9.2	9.8	9.4	9	8.9	9.5	8.7	ND	8.7	9.2	8.3	9.1	9.1	9.3	9.29	9.86	8.22	8.83	9.47	20.0				
<b>PARAMETER (mg/l) TOXIC METALS</b>																																					
Antimony	ND		ND		ND		ND		ND	ND		ND		ND		ND	ND		ND	ND		ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.003			
Arsenic	0.016		ND		ND		ND		ND	ND		ND		ND		0.013	ND					ND	0.005	-	-	ND	0.005	-	ND	ND	ND	0.0119	0.01	0.025			
Barium	0.105		0.1		0.16		0.14		0.08		0.093	0.08		0.085		0.094	0.074					ND	0.092	-	-	0.071	0.073	-	ND	ND	0.055	0.0871	0.08	1.0			
Beryllium	ND		ND		ND		ND		ND		ND		ND		ND		ND	ND					ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00			
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00	0.005			
Chromium (Total)	ND		0.01		0.01		ND		ND		ND		ND		ND		ND	ND					ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.02	0.05		
Copper	ND		ND		0.01		ND		ND		ND		ND		ND		ND	ND					ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.2		
Lead	0.007	0	ND	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001	ND	0.002	ND	ND	ND	ND	ND	0.004	ND	0.002	0.004	0.01	0.025				
Mercury	ND		ND		ND		ND		ND		ND	ND		ND		ND	ND						ND	ND	-	-	ND	ND	-	ND	ND	ND	6E-05	0.00	0.0007		
Nickel	0.046		ND		ND		ND		ND		ND	ND		ND		ND	ND						ND	0.005	-	-	0.005	0.005	-	ND	ND	0.004	0.0041	0.02	0.1		
Selenium	ND		ND		ND		ND		ND		ND	ND		ND		ND	ND						ND	0.006	-	-	ND	0.006	-	ND	ND	ND	ND	0.00	0.0		
Silver	ND		ND		ND		ND		ND		ND	ND		ND		ND	ND						ND	ND	-	-	ND	0.001	-	ND	ND	ND	ND	0.00	0.05		
Thallium	ND		ND		ND		ND		ND		ND	ND		ND		ND	ND						ND	ND	-	-	ND	ND	-	ND	ND	ND	0.0049	0.00	0.0005		
Zinc	0.029		0.01		ND		ND		ND		ND	0.01		ND			0.01	0.014					ND	0.004	-	-	0.014	ND	-	ND	ND	0.004	0.0074	0.01	2.0		
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																					
Alkalinity	286	276	335	270	274	267	272	280	242	268	349	134	321	314	261	257	340	331	325	290	330	310	330	311	319	303	260	268	315	267	392	284.1					
Biochemical Oxygen Demand	4		7		ND		ND		ND		4.4	2.7		ND		ND	2.6				5	ND	4.4	-	-	3.5	2.2	2.4	ND	ND	1.2	2.4	4.0				
Boron	0.073		0.05		0.07		ND		0.06		0.052	0.07		0.04		0.059	0.057					ND	0.07	-	-	0.05	0.06	-	ND	ND	0.045	0.053	0.0	1.0			
Chemical Oxygen Demand	38.8	12.8	38	18	19.9	14.1	10.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.9	ND	ND	23	11.4	9.7	ND	ND	11.3	8.4	-	21.3	13	35.2	14.9					
Chromium (Hexavalent)	ND		ND		ND		ND		ND		ND	ND		ND		ND	ND					ND	ND	-	-	ND	ND	-	ND	0.003	-	0.0	0.05				
Chloride	19.9	12.8	12	14	12.3	11	16.8	11.7	9.2	10.9	14	10.1	13.9	13	12.6	11.5	11.5	8	11.3	8.75	10.4	8.9	11.5	6.4	8.4	11.2	9.1	8.71	11.7	12.5	10.2	15.9	250.0				
Color (PCU units)	50		ND		100		15		5		40	ND		10		0	12.5				5	39		-	8	22	-	ND	15	10		19.7	15.0				
Nitrate-Nitrite	0.217	ND	ND	ND	0.18	ND	1.2	ND	ND	ND	0.12	ND	1.3	ND	ND	ND	ND	1.6	0.056	0.305	ND	ND	ND	ND	ND	ND	1.5	ND	0.054	ND	0.042	0.3	10.0				
Nitrogen-Ammonia	1.79	1.17	1.8	1.1	0.4	1.2	0.86	0.37	0.26	0.65	1	0.52	0.88	0.655	0.235	0.212	0.823	0.44	0.29	1.2	1.64	0.796	0.852	0.357	0.496	0.709	0.2	0.44	1.2	0.19	0.96	1.1	2.0				
Phenols	0.0074	0.009	ND	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.006	ND	0.004	0.0065	0.0	0.001				
Sulfate	5.52	7.27	7.2	6.1	7.3	6.9	6.1	7.1	7.1	6.6	6.8	4.3	5.4	6.7	7.2	6.91	5.16	7.7	5.8	ND	ND	5.3	5.4	6.2	5.4	5.4	6.2	5.65	6.1	6.2	4.4	6.5	250.0				
Total Organic Carbon (TOC)	3.1	2.4	4.2	3.2	4.4	3.6	3	2.4	3	3.1	2.7	4.4	5.3	2.7	1.6	1.5	3.6	3	1.4	3.9	3.6	4	3.6	3.4	3.9	3	3.1	1.65	5.2	ND	3.9	4.9					
Total Dissolved Solids (TDS)	320	309	322	312	331	287	307	282	404	378	325	308	318	286	294	290	308	295	296	410	370	339	332	326	324	311	278	300	342	279	337	311.8	500.0				
Total Hardness	262	222	241	267	254	276	252	240	262	244	282	259	262	240	270	260	290	287	271	280	310	263	291	287	273	286	257	250	350	250	300	265.5					
Total Kjeldahl Nitrogen (TKN)	2.19		3.1		1.4		1.3		ND		1.6	ND		ND		1.6	1.4					0.839	1.55	1.25	-	-	0.78	0.88	-	0.32	1	0.36	1.4	1.6			
Turbidity (NTU units)	36	8.9	140	23	75.7	109	1.9	1.7	3	6.2	6.9	1.9	4.5	37	8	0	4	0	4.1	3.1	0.1	0.3	3	0	9.4	25.4	3.3	0.8	1.7	1.4	15.6	116.0	5.0				
Cyanide	ND		ND		ND		ND		ND		ND	ND		ND		ND	ND					ND	ND	-	-	ND	ND	-	ND	ND	-	0.0	0.2				

(Shade) = Analyte reported at or above New York State standards (amended March and June 1998). These standards were used beginning with the 9/98 sampling event. Exceedances noted prior to this event reflect prior standards.  
\* = Applies to the sum of cis and trans-1,3-dichloropropene.  
\*\* = Guidance Value.  
ND values are included in calculation of Mean and are considered equal to zero.  
(Blank) or "-" = Not Analyzed.  
J = Estimated.  
B = Analyte was detected in method blank.  
<DL = Detected below method detection limit.



MW-11B  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02		
<b>PARAMETER METALS (mg/L)</b>																																					
Aluminum	4.3				3.1																																
Calcium	23.4	16.5	25.1		48.2	13.9	25.4			12.3													31.5		19.7											29.7	36.7
Iron	26.9	11.7	26.5		25.1	13.1	18.2			13.1					22.7	12.7	39.3					11.1		47.6		17.2									26.5	19.3	
Magnesium	7.6	4.5	8.1		14.8	4	9.8			4.61					9.5	3.87	8.09					6.5		7.93		5.45								9.34	14		
Manganese	6.99	6.5	7.1		17.1	5.42	7.44			4.56					8.5	4.45	5.27					6.5		8.69		7.80								11.9	10.8		
Potassium	3.3	1.1	4		4.1	1.6	3.1			3.46					4.04	2.04	9.5					3.2		4.62		1.84								3.19	3.08		
Sodium	1.3	1.4	3.3		8.8	3.3	7.5			1.58					6.38	1.67	3.02					2.8		3.59		2.05								3.99	7.24		
<b>PARAMETER (mg/l) TOXIC METALS</b>																																					
Antimony	ND				ND																																
Arsenic	ND				0.041																																
Barium	0.23				0.52																																
Beryllium					ND																																
Cadmium		<DL	<DL		ND	ND	ND			ND					ND	ND	ND					ND		ND		ND								ND		ND	
Chromium (Total)	<DL				0.04																																
Copper	<DL				0.01																																
Lead	<DL	<DL	0.008		ND	ND	0.020			0.005					0.006	0.004	0.024					0.009		0.003		0.001									ND	0.001	
Mercury	ND				ND																																
Nickel	0.62				0.05																																
Selenium	0.021	ND	0.08		ND	ND	ND			ND					0.007	ND	ND					ND		ND		ND								ND		ND	
Silver	ND				ND																																
Thallium	ND				ND																																
Zinc	0.04				0.12																																
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																					
Alkalinity	95	95	117			84.0	135.0			44.4					128	45.4																			145	192	
Biochemical Oxygen Demand	19.0																																				
Boron	ND				0.06																																
Chemical Oxygen Demand	21.0	15.0	12			5.0	ND			ND					43.9	17.5																			48.4	33.2	
Chromium (Hexavalent)	<DL				ND																																
Chloride	<DL	6	7			ND	4.0			ND					10.1	ND																			3.92	10.3	
Color (PCU units)	55.0																																				
Nitrate-Nitrite	<DL	<DL	<DL		ND	ND	ND			1.3					0.338	ND																			ND	0.176	
Nitrogen-Ammonia	1.0	<DL	<DL		1.6	0.6	2.2			0.4					1.01	ND																		0.390	0.56	4.12	
Phenols	0.002	ND	<DL			ND	ND			0.010					0.019	0.013																			0.001	0.0138	0.0225
Sulfate	11	16.3	19.9			21.0	12.0			12.0					8.7	8																			12	8.77	
Total Organic Carbon (TOC)	8	8	5		10.0	3.0	6.0			5.0					6.7	5.4																		6.6	4.3		
Total Dissolved Solids (TDS)	132.0	110	118			139	153.0			60.0					183	85																		153	216		
Total Hardness	89.5	60.7	96			51.0	104.0			54.0					187	99																		113	149		
Total Kjeldahl Nitrogen (TKN)	1.9				2.1																																
Turbidity (NTU units)	55	243	182			32.0	94.0			76.0					100	500																			33	9.7	
Cyanide	<DL																																				

MW-11B  
 HISTORICAL ANALYTICAL RESULTS  
 ISCHUA LANDFILL  
 OLEAN, NEW YORK

PARAMETER VOLATILES (ug/L)	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD	
Acetone							11	5	6	ND	16	4	14			5.5	5.5	3.4	ND	ND		2.3	ND	ND	1.7	ND	ND	ND	ND	ND	-	3.38	50.0	
Acrylonitrile							ND	ND	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0
Benzene	2.1	3.6	2.5	2	3	2.2	2.6	3.8	3.8	2.5	1.6	2.2	0.4			1.4	0.79	3.6	1.2	ND		1.1	ND	ND	1.4	0.67	ND	ND	ND	ND	-	1.94	1.0	
Bromobenzene	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0								
Bromochloromethane	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0								
Bromodichloromethane																																-	0.00	50.0
Bromoforn																																-	0.00	50.0
Bromomethane	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0								
2-Butanone																																-	0.00	50.0
n-Butylbenzene	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0								
sec-Butylbenzene	ND	ND	0.28	ND	0.32			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.02	5.0								
tert-Butylbenzene	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0								
Carbon disulfide																																-	0.00	-
Carbon tetrachloride	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0								
Chlorobenzene	ND	5.4	2.4	ND	2.7	0.67	0.59	6.4	5.1	2.1	0.46	0.81	ND			1.6	0.34	5.8	0.58	ND		0.71	ND	6.6	1.4	0.53	ND	ND	ND	ND	-	1.18	5.0	
Chloroethane	ND	0.74	ND	ND	1	0.95	0.8	0.94	0.86	0.64	0.36	0.45	0.44			0.5	0.27	1.1	ND	ND		0.5	ND	ND	0.34	ND	ND	ND	ND	ND	-	0.53	5.0	
Chloroform																																-	0.00	7.0
Chloromethane	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0								
2-Chlorotoluene	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0								
4-Chlorotoluene	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0								
Dibromochloromethane																																-	0.00	50.0
1,2-Dibromo-3-chloropropane																																-	0.00	0.04
1,2-Dibromoethane																																-	0.00	5.0
Dibromomethane	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0								
1,2-Dichlorobenzene	ND	0.88	ND	ND	0.43	ND	ND	1.5	0.94	0.36	ND	ND	ND			0.29	ND	0.99	ND	ND	ND	-	0.13	3.0										
1,3-Dichlorobenzene	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	3.0								
1,4-Dichlorobenzene	ND	1.7	ND	ND	1	ND	ND	2.2	1.5	0.71	ND	ND	ND			0.55	ND	1.6	ND	ND	0.25	ND	ND	0.26	ND	ND	ND	ND	ND	ND	-	0.27	3.0	
trans-1,4-Dichloro-2-butene																																-	0.00	5.0
Dichlorodifluoromethane	ND	ND	ND	ND	1.5	0.71	0.72	0.8	ND	0.84	0.5	0.65	ND			0.55	0.6	ND	ND	ND	-	8.6	0.47	5.0										
1,1-Dichloroethane	2.1	6.2	4.4	1.5	5.4	1.2	2.9	5.9	5.3	3.1	0.97	1	1			4	1.5	16	0.41	ND		1.1	ND	15	0.57	0.67	ND	ND	ND	ND	-	3.42	5.0	
1,2-Dichloroethane	ND	0.58	0.5	ND	ND	ND	ND			ND	ND	0.64	ND	ND	-	0.07	0.6																	
1,1-Dichloroethene	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0									
cis-1,2-Dichloroethene	3.8	9.9	9.7	4.1	14	3.8	8.4	8.7	8.7	6.2	2.9	2.9	1.3			5.5	2.6	16	1.4	ND		2.8	ND	ND	2.1	1.8	ND	ND	6.4	ND	-	6.25	5.0	
trans-1,2-Dichloroethene	ND	0.55	ND	ND	0.54	ND	ND	0.51	0.45	0.35	ND	ND	ND			0.22	ND	0.83	ND	ND	-	1.14	5.0											
1,2-Dichloropropane	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	1.0									
1,3-Dichloropropane	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0									
2,2-Dichloropropane	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0									
1,1-Dichloropropene	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0									
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	0.4									
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	0.4									
Ethylbenzene	ND	1.2	ND	ND	0.6	ND	ND	1.9	0.95	0.44	ND	ND	ND			ND	ND	1.3	ND	ND	-	0.27	5.0											
2-Hexanone																																-	0.00	50.0
Hexachlorobutadiene	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	0.5									
Iodomethane																																-	0.00	5.0
Isopropylbenzene	ND	0.5	ND	ND	0.48	0.43	0.42	0.62	0.53	0.4	0.35	0.48	ND			ND	ND	0.48	ND	ND	-	0.18	5.0											
p-Isopropyltoluene	ND	ND	ND	ND	ND			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	0.00	5.0									
Methylene chloride	ND	ND	ND	ND	ND	ND	0.21	ND	ND	ND	ND	ND	ND			ND	ND	0.77	ND	ND	-	0.36	5.0											
4-Methyl-2-pentanone																																-	0.00	-
Naphthalene	ND	1.2	ND	ND	0.42	ND																												

MW-11B  
 HISTORICAL ANALYTICAL RESULTS  
 ISCHUA LANDFILL  
 OLEAN, NEW YORK

	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD		
<b>PARAMETER METALS (mg/L)</b>																																			
Aluminum				3.2					ND			ND						ND				0.06	0	-	0.07	-	-	-	-	0.0369	-	0.67			
Calcium	40.8		21.5	46.2	23.2			57.6	55.5	34.4		26.9						70.2	15.6	45		18.5	14.9	55.6	13.6	-	18.8	-	-	19	-	25.33			
Iron	28.1		16.3	23.6	9.6			26	22.4	13.1		12.6						23.8	4.5	18		9.5	11.5	20.2	8.52	-	8.73	-	-	5.9	-	16.04	0.3		
Magnesium	15.9		6.58	16.2	6.8			20.7	23.6	12.4		7.8						32.6	4.8	16		5.9	4.9	21.5	4.3	-	5.2	-	-	5.69	-	8.89	35.0		
Manganese	11.2		9.41	14.8	9.4			12.9	13.9	10.7		11.9						16.6	7.5	16		9.31	8.09	20	7.69	-	9.89	-	-	8.89	-	8.59	0.3		
Potassium	4.1		2.21	4.3	1.7			4.2	4.6	2.6		1.6						4.8	1.6	2.3		1.3	ND	3	1.1	-	ND	-	-	2.12	-	2.53			
Sodium	8.7		1.31	7.4	2.1			10.5	11.7	4.9		2.1						13.3	1.1	6.2		1.2	ND	7.5	0.8	-	1.3	-	-	3.11	-	3.88	20.0		
<b>PARAMETER (mg/l) TOXIC METALS</b>																																			
Antimony				ND					ND			ND						ND				ND	-	-	ND	-	-	-	-	-	ND	-	0.00	0.003	
Arsenic				0.022					0.016			0.021						ND				0.01	-	-	0.014	-	-	-	-	-	0.0069	-	0.01	0.025	
Barium				0.37					0.4			0.18						0.48				0.206	-	-	0.149	-	-	-	-	-	0.158	-	0.17	1.0	
Beryllium				ND					ND			ND						ND				0.0003	-	-	ND	-	-	-	-	-	ND	-	0.00		
Cadmium	ND		ND	ND	ND			ND	ND	ND		ND						ND	ND	ND		ND	ND	ND	ND	-	ND	-	-	-	-	ND	-	0.00	0.005
Chromium (Total)				0.013					ND			ND						ND				0.002	-	-	0.003	-	-	-	-	-	0.003	-	0.00	0.05	
Copper				ND					ND			ND						ND				ND	-	-	ND	-	-	-	-	-	ND	-	0.00	0.2	
Lead	0.003		ND	ND	ND			ND	ND	ND		ND						0.006	ND	0.001		0.001	ND	ND	ND	-	ND	-	-	0.0017	-	0.00	0.025		
Mercury				ND					ND			ND						ND				ND	-	-	ND	-	-	-	-	-	ND	-	0.00	0.0007	
Nickel				0.025					ND			ND						ND				0.013	-	-	0.013	-	-	-	-	-	0.0106	-	0.05	0.1	
Selenium	ND		ND	ND	ND			ND	ND	ND		ND						ND				0.007	-	-	ND	-	-	-	-	-	ND	-	0.00	0.0	
Silver				ND					ND			ND						ND				ND	-	-	0.001	-	-	-	-	-	ND	-	0.00	0.05	
Thallium				ND					ND			ND						ND				ND	-	-	ND	-	-	-	-	-	ND	-	0.00	0.0005	
Zinc				0.022					0.027			0.065						0.02				0.035	-	-	0.046	-	-	-	-	-	0.977	-	0.08	2.0	
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																			
Alkalinity		205		90	175	67.1		229	218	150		62.5						374		210		-	-	299	-	-	80.8	-	-	179	-	108.8			
Biochemical Oxygen Demand				ND					4.9			4.5						12.2		11		-	-	-	-	-	4.1	-	-	9.6	-	4.1			
Boron				0.066					0.091			0.024						0.1				ND	-	-	-	-	-	-	-	0.0125	-	0.0	1.0		
Chemical Oxygen Demand	28.8	298	18	54.8	18.5			29.8	28	23.4		16						19.4	23.8	32		12.6	-	27.6	-	22.8	-	58.8	62.9	-	28.4				
Chromium (Hexavalent)				ND					ND			ND						ND				ND	-	-	-	-	-	-	-	ND	-	0.0	0.05		
Chloride	12.7			2.2	12.2	1.8		14.1	17.8	5.3		3.8				4.88		16.8	ND	9.48		ND	-	10.5	-	ND	-	-	6.4	-	4.6	250.0			
Color (PCU units)				60					80			60						200				-	-	-	-	-	-	-	10	-	31.0	15.0			
Nitrate-Nitrite	ND	0.04	ND	ND	ND			ND	ND	ND		ND						ND		ND		ND	-	ND	-	ND	-	ND	0.046	-	0.1	10.0			
Nitrogen-Ammonia	3.55	0.8	0.5	1.1	0.56			2.8	2.6	1.6		0.71						4	0.36	2.1		0.369	-	1.87	-	0.482	-	0.78	2.1	-	1.1	2.0			
Phenols	0.0157		ND	0.028	ND			0.01	0.01	ND		ND				ND		ND		ND		ND	-	0.0073	-	-	ND	-	-	0.0099	-	0.0	0.001		
Sulfate	5.9		5.8	4.6	5.9			4.1	3.2	5.1		5.2			5.15		6.7	4.1	ND		2.5	-	4.3	-	-	-	3.3	-	3.3	-	6.0	250.0			
Total Organic Carbon (TOC)	6.1	17	4	62.9	5	4.1		6.2	6.8	4.6	10.8	3			3.4		9	1.4			7.1	-	8.9	-	-	-	4.6	-	5.7	3.1	14.6	7.1			
Total Dissolved Solids (TDS)	262		125	283	99			304	402	174		190					388		280		115	-	320	-	-	-	96	-	170	-	143.8	500.0			
Total Hardness	167		81	182	85.9			229	236	137		99.3					310	58.6	180		70.6	57.1	227	-	-	-	68.5	-	88	-	101.1				
Total Kjeldahl Nitrogen (TKN)		14		4.3					3.9			1.1					2.2		2.09		0.85	-	-	-	-	-	-	-	1.1	3.8	-	2.1			
Turbidity (NTU units)	24		61	49.1	89.4			36.9	56	21.3		28			5	7	267	6	5	36.1	29	12.8	16.1	-	19.5	27.6	35.7	11.3	41.2	15	6.2	107	62.9	5.0	
Cyanide				ND					ND			ND						ND				-	-	-	-	-	-	-	-	ND	-	0.0	0.2		

(Shade) = Analyte reported at or above New York State standards (amended March and June 1998). These standards were used beginning with the 9/98 sampling event. Exceedances noted prior to this event reflect prior standards.  
 \* = Applies to the sum of cis and trans-1,3-dichloropropene.  
 \*\* = Guidance Value  
 ND values are included in calculation of Mean and are considered equal to zero.  
 (Blank) or "-" = Not Analyzed.  
 ND = Not Detected.  
 -DL = Detected below method detection limit.  
 J = Estimated.  
 B = Analyte was detected in method blank.





MW-12A  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

PARAMETER VOLATILES (ug/L)	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD		
Acetone							18	19	8.4	12	13	5.9	29	21	11	20		6.4	32	19		6.4	-	ND	11	-	ND	-	-	12.8	48.3	12.75	50.0		
Acrylonitrile							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	ND	ND	0.00	5.0
Benzene	2.1	5	2.6	7	4.6	7.1	6.3	13	6.3	4	7	4.1	1.6	1.5	4.5		7.7	7.8	6.2		6.3	-	7.1	5.1	-	6.6	-	-	7.2	ND	3.96	1.0			
Bromobenzene	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	0.00	5.0										
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	0.00	5.0										
Bromodichloromethane																																	0.00	50.0	
Bromoform																																	0.00	50.0	
Bromomethane	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	0.00	5.0										
2-Butanone																																	0.32	50.0	
n-Butylbenzene	ND	0.22	ND	1.4	ND	3.6	1.2	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	0.00	5.0								
sec-Butylbenzene	ND	ND	ND	0.37	ND	ND	ND	0.54	ND	ND	0.28	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	0.04	5.0		
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	0.01	5.0										
Carbon disulfide																																	0.06	60.0	
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	0.00	5.0										
Chlorobenzene	0.57	1.7	0.8	2.5	1.4	3.8	4	13	3.9	2.5	6.4	3	1.1	1.1	2.8		7.4	6.7	5.1		5.6	-	6.2	4.3	-	8.7	-	-	11.2	ND	2.26	5.0			
Chloroethane	0.54	ND	ND	2.3	1.2	1	0.94	1.1	0.66	0.48	0.66	0.65	0.61	ND	0.53		0.55	0.44	ND		0.74	-	ND	ND	-	ND	-	-	-	-	0.64	5.0			
Chloroform																																	0.04	7.0	
Chloromethane	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	0.17	5.0										
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	0.00	5.0										
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	0.00	5.0										
Dibromochloromethane																																	0.00	50.0	
1,2-Dibromo-3-chloropropane																																	0.00	0.04	
1,2-Dibromoethane																																		0.00	5.0
Dibromomethane	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	0.00	5.0										
1,2-Dichlorobenzene	ND	0.57	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		0.29	-	ND	0.21	-	ND	-	-	-	-	-	0.04	3.0								
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	0.08	3.0										
1,4-Dichlorobenzene	0.77	1.5	ND	2	0.9	1.9	2.1	5.1	1.8	2.9	3.3	4.4	ND	3.1	0.88	2.3		2.4	2.9	ND		2.3	-	ND	ND	-	ND	-	-	-	ND	1.83	3.0		
trans-1,4-Dichloro-2-butene																																	0.00	5.0	
Dichlorodifluoromethane	ND	ND	ND	1.2	1	1	1.1	ND	0.98	0.98	1.2	ND	0.86	ND	0.82		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	18.6	-	0.65	5.0		
1,1-Dichloroethane	ND	0.8	0.9	0.86	1.1	1.4	1.2	0.98	1.1	2.6	0.95	1.8	0.47	ND	0.84		1	0.68	ND		0.8	-	ND	0.52	-	ND	-	-	-	-	ND	1.22	5.0		
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	0.37	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	ND	0.02	0.6	
1,1-Dichloroethene	1.1	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	ND	0.09	5.0								
cis-1,2-Dichloroethene	3.1	5.2	3.3	7.2	4.3	5	4.6	5.4	4.5	3.1	4.4	3.6	1.9	1	4		4.3	3.7	ND		4	-	ND	3.2	-	ND	-	-	-	-	ND	3.36	5.0		
trans-1,2-Dichloroethene	ND	ND	0.46	0.46	0.59	0.44	0.43	0.54	0.92	0.37	0.7	ND	ND	0.33	ND		ND	ND	ND		0.4	-	ND	ND	-	ND	-	-	-	-	-	ND	0.37	5.0	
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	ND	0.00	1.0									
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	-	0.00	5.0									
2,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	-	0.00	5.0									
1,1-Dichloropropene	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	-	0.00	5.0									
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	ND	0.00	0.4									
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	ND	0.06	0.4									
Ethylbenzene	ND	ND	ND	0.57	ND	1.2	3	10	1.3	0.67	4.4	0.28	ND	ND	ND		5.1	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	ND	0.79	5.0	
2-Hexanone																																	0.00	50.0	
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	-	0.00	0.5									
Iodomethane																																		0.00	5.0
Isopropylbenzene	ND	ND	ND	1.3	0.47	0.79	0.48	1.6	0.61	0.51	0.76	0.42	ND	ND	0.54		0.82	0.86	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	0.31	5.0		
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	-	0.05	5.0									
Methylene chloride	ND	ND	ND	ND	ND	0.37	0.28	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	ND	0.22	5.0	
4-Methyl-2-pentanone																																		0.00	
Naphthalene	ND	ND	ND	ND	ND	ND	0.41	1.6	ND	ND	0.48	ND	ND	ND	ND		1.1	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	0.24	10.0		
n-Propylbenzene	ND	1.1	0.29	ND	0.49	ND	ND	ND	ND		0.59	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	-	0.05	5.0							
Styrene	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	ND	0.00	5.0									
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	ND	0.00	5.0									
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	ND	0.00	5.0									
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	ND	0.01	5.0									
Toluene	ND	ND	ND	0.74	ND	2.2	0.34	1.3	ND	0.46	0.47	0.25	ND	ND	ND		0.48	ND	ND		0.38	-	ND	0.4	-	ND	-	-	-	-	-	ND	0.30	5.0	
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	-	0.00	5.0									
1,2,4-Trichlorobenzene	ND	ND	ND	0.41	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND		ND	-	ND	ND	-	ND	-	-	-	-	-	-	0.01	5.0	

MW-12A  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD		
<b>PARAMETER METALS (mg/L)</b>																																			
Aluminum			0.11		ND		ND		ND			ND					ND				ND	-	-	ND	-	-	-	-	0.016	-	0.19				
Calcium		86.4	70.4	114	108	94.8	88	114	91	89.2		106					109	72.9			80.1	-	90.3	102	-	77.9	-	-	112	-	82.33				
Iron		26.3	30.9	21.5	45.6	30.9	33.5	33.9	40.6	33.8		33.3					30.4	29.7			30.9	-	32	29.8	-	33.8	-	-	42.4	-	24.25	0.3			
Magnesium		10.7	9.32	13.5	11.9	12.4	11.7	14.1	23.6	12.6		15.3					17.4	11.3			13.3	-	14.7	14.6	-	12.7	-	-	14.3	-	10.67	35.0			
Manganese		8.21	9.49	8.31	9.5	10.6	1.1	10.3	13.9	12.9		15.3					17	12			17.1	-	16.1	11.5	-	17.4	-	-	12.4	-	8.55	0.3			
Potassium		2.54	3.53	2.18	4.3	2.6	3.5	2.9	4.6	3.5		4.1					3.8	4.5			3.8	-	3.8	3.9	-	4.7	-	-	6.74	-	3.01				
Sodium		5.7	5.85	7.68	6.2	6.8	7	8.1	11.7	7.6		8.8					9.5	7.2			7.8	-	6.8	7.2	-	6.5	-	-	10.4	-	9.14	20.0			
<b>PARAMETER (mg/l) TOXIC METALS</b>																																			
Antimony			ND		ND		ND		ND			ND					ND				ND	-	-	ND	-	-	-	-	ND	-	0.00	0.003			
Arsenic			ND		0.06		0.07		0.06			0.03					0.047				0.042	-	-	0.068	-	-	-	-	0.056	-	0.03	0.025			
Barium		1.52	1.92		2	1.8	1.9	1.7	2.2			1.9					1.9				1.77	-	-	1.59	-	-	-	-	1.78	-	1.34	1.0			
Beryllium			ND		ND		ND		ND			ND					ND				ND	-	-	ND	-	-	-	-	ND	-	0.00				
Cadmium		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND					ND	ND			ND	-	ND	ND	-	ND	-	-	6E-04	-	0.00	0.005			
Chromium (Total)			ND	ND	ND		ND		ND			ND					ND				0.003	-	-	0.003	-	-	-	-	0.022	-	0.00	0.05			
Copper			ND		ND		ND		ND			ND					ND				ND	-	-	ND	-	-	-	-	0.004	-	0.00	0.2			
Lead		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND					ND	ND			0.001	-	ND	ND	-	ND	-	-	0.003	-	0.00	0.025			
Mercury			ND		ND		ND		ND			ND					ND				ND	-	-	ND	-	-	-	-	ND	-	0.00	0.0007			
Nickel			ND		ND		ND		ND			ND					ND				0.007	-	-	0.003	-	-	-	-	0.006	-	0.04	0.1			
Selenium		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND					ND				0.009	-	-	0.004	-	-	-	-	ND	-	0.00	0.0			
Silver		ND	ND	ND	ND	ND	ND	ND	ND	ND		ND					ND				0.003	-	-	0.003	-	-	-	-	ND	-	0.00	0.05			
Thallium			ND		ND		ND		ND			ND					ND				ND	-	-	ND	-	-	-	-	ND	-	0.00	0.0005			
Zinc			ND		ND		ND		ND			0.2					0.012				0.004	-	-	0.01	-	-	-	-	0.024	-	0.02	2.0			
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																			
Alkalinity		319	410	350	42.9	211	430	407	242	206		191				185				467	252	320		349	-	377	-	-	315	-	380	-	284.7		
Biochemical Oxygen Demand			11		15.9		4.7		8.9			4.5					8.6			16								7.9	-	9.6	-	8.1			
Boron			ND		0.09		0.09		0.12			0.1					0.11				0.11	-	-	0.07	-	-	-	-	0.118	-	0.0	1.0			
Chemical Oxygen Demand		26.5	38	34	61	31.6	55.9	48.6	61.3	46.7		33.6					36.4	50.6	41		22.1	-	38.8	36.2	-	52.9	-	-	75.4	-	27.9				
Chromium (Hexavalent)			ND		ND		ND		ND			ND					ND				ND	-	-	ND	-	-	-	-	ND	-	0.0	0.05			
Chloride		4.41	5.1	2.5	3	2.2	8.2	6.6	8.7	5.5		6.6			3.48		8.2	3.8	5.97		4.9	-	4.4	3.4	-	4.4	-	-	10.5	-	7.0	250.0			
Color (PCU units)			20		140		140		200			120					200					-	-		-	-	-	-	25	-	53.9	15.0			
Nitrate-Nitrite		ND	ND	ND	ND	ND	0.07	ND	ND	ND		ND					ND	ND	ND		ND	-	ND	ND	-	ND	-	-	0.065	-	0.5	10.0			
Nitrogen-Ammonia		2.54	4.1	2	1.3	1.4	4.3	1.8	4.5	3.2		3.8					5.9	7.7	5.26		5.57	-	4.45	5.8	-	6.1	-	-	7	-	2.8	2.0			
Phenols		0.004	ND	ND	0.02	ND	ND	ND	0.01			ND			ND		ND	0.014	ND		0.015	-	-	-	-	0.036	-	-	0.042	-	0.0	0.001			
Sulfate		5.8	ND	2.9	ND	4.4	ND	3.1	ND	4.2		ND			4.87		3.4	ND	ND		2.5	-	4.7	ND	-	2	-	2.9	-	2.4	250.0				
Total Organic Carbon (TOC)		3.4	7.8	8.2	29.5	6.1	12.1	6.3	11.7	8.8	35.4	8.8	23.2		13	6.1	8.8	9.5	13		11.7	-	-	16.2	-	12.6	-	7.5	24.9	9.0					
Total Dissolved Solids (TDS)		383	298	402	330	345	413	446	484	378		390					449	344	440		395	-	375	392	-	349	-	-	426	-	331.2	500.0			
Total Hardness		260	214	341	319	288	268	343	277	274		328					345	228			255	-	286	314	-	259	-	-	340	-	256.6				
Total Kjeldahl Nitrogen (TKN)			8.4		5		6.3		6.5			5.2					2.4		3.52		7.11	-	-	6.91	-	-	-	-	8.2	-	3.3				
Turbidity (NTU units)		53	38	48	56.4	22	30.2	45.2	75	64.4		13.9					19	150	12		4	29.5	79.7	54.4	31.5	-	36.3	22	66.8	26.6	-	12.4	219	85.6	5.0
Cyanide			ND		ND		ND		ND			ND					ND					-	-	-	-	-	-	-	ND	-	0.0	0.2			

(Shade) = Analyte reported at or above New York State standards (amended March and June 1998). These standards were used beginning with the 9/98 sampling event. Exceedances noted prior to this event reflect prior standards.  
\* = Applies to the sum of cis and trans-1,3-dichloropropene.  
\*\* = Guidance Value.  
ND values are included in calculation of Mean and are considered equal to zero.  
(Blank) or "-" = Not Analyzed.  
ND = Not Detected. J = Estimated.  
<DL = Detected below method detection limit. B = Analyte was detected in method blank.



MW-12B  
 HISTORICAL ANALYTICAL RESULTS  
 ISCHUA LANDFILL  
 OLEAN, NEW YORK

	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02					
<b>PARAMETER METALS (mg/L)</b>																																								
Aluminum	1.7				0.1				0.61				5.07				6.38				2.34			0.248		0.2		ND		ND		ND		ND						
Calcium	96.6	138	167	123	98.4	117	12.3	123	109	95.5	89.2	109	108	137	90.1	82.1	49.2	89.8	99.6	103	120	123	117	95.6	110	121	107	129	104	112	116	114	109					104		
Iron	45.7	63.8	57.6	52.6	23.9	28.6	57.3	62.8	63.5	57.2	53.9	54.9	47.8	65	13.8	35.9	11.5	19.3	40.2	44.2	48.6	63.7	55.5	26.2	50.6	40.9	38.9	25.7	43.2	23.1	50.4	14.4	30.5					53.7		
Magnesium	8.7	20.4	20.5	26.3	21.9	22.7	25.2	28.2	22.7	19.8	21.6	24.1	24.2	26.5	17.2	16.9	11.8	16	18.8	23.0	25.2	24.4	22.8	19.5	22.2	23.3	20.3	23.3	21.3	21.7	23.1	22.4	21					21.8		
Manganese	19	23.1	23.9	13.1	16.4	15.6	23.9	22.1	19.5	16.4	10.7	16.1	16	20.9	9.03	12.2	2.72	9.34	13.7	12.0	15.4	20.2	17.3	11.3	15.4	14.7	12.9	12.8	15.9	11.2	16.1	12.3	12.2					16		
Potassium	8.9	12.1	11.8	11	7.6	6.0	11.0	12.7	12.9	11.3	6.87	9.29	9.61	12.4	4.87	9.46	3.14	6.76	7.99	12.4	11.7	12.4	9.54	12.8	10.1	11.2	8.91	8.66	10	8.18	10.7	10	8.78					11.1		
Sodium	18.9	27.7	30.4	34.9	27.3	25.2	34.0	38.0	32.2	26.0	19.3	27.9	30.8	33.8	22.8	22.8	31	20.6	21.8	27.6	31.9	30.8	24.7	31.0	24.3	27.8	20.9	23.8	24.6	23.4	23.2	21.2	19.3					24.1		
<b>PARAMETER (mg/l) TOXIC METALS</b>																																								
Antimony	ND				ND				0.05				ND				ND				ND			0.055		ND		ND		ND		ND		ND						
Arsenic	ND				0.032				0.010				0.020				0.019				0.02			0.010		0.02		ND		0.03		ND		ND		0.01				
Barium	0.53				0.36				0.8				0.66				0.15				0.73			0.581		0.73		0.58		0.43		0.5								
Beryllium					ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND				
Cadmium		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	ND	ND	ND	ND	0.01	ND	ND										
Chromium (Total)	<DL				0.01				0.02				0.03				0.04				0.04			0.028		0.02		ND		0.02		ND		0.02		ND				
Copper	ND				ND				ND				0.01				0.02				0.02			ND		ND		ND		ND		ND		ND		ND				
Lead	<DL	ND	ND	ND	ND	ND	0.070	0.009	0.003	0.004	0.023	0.012	0.009	0.005	ND	0.005	0.017	0.002	0.001	0.003	0.01	ND	0	0.011	0.005	0	0	0	0	0	0	ND	0.01	0				0		
Mercury	ND				ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND				
Nickel	0.64				ND				0.05				0.09				0.04				0.1			0.058		0.08		0.06		0.06		0.06		0.05						
Selenium	0.04	0.03	0.05	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND														
Silver	ND				ND				ND				0.02				ND				0.01			ND		ND		ND		ND		ND		ND		ND				
Thallium	ND				ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND				
Zinc	0.03				0.01				0.02				0.06				0.06				0.08			0.095		0.05		0.07		0.03		ND								
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																								
Alkalinity	411	461	523	522	468	522	653	562	489	507	394	446	523	656	475	386	656	253	516	587	583	530	470		499	412	543		587	571	521	500	487				603			
Biochemical Oxygen Demand	45				6.0	ND			24.0				11				13				ND			29		26														
Boron	0.11				0.21	ND			0.25				0.02				ND				0.29			0.249		0.28		0.24		0.23		0.18								
Chemical Oxygen Demand	100	20	98	90	50	259	158.0	106	85.1	107	82.4	84.7	89.8	228	92.1	50.9	131	84	69.3	127	325	139	88.3		27.4	85.5	44.8		93.9	77.2	94	32.1	71.5				76.7			
Chromium (Hexavalent)	<DL				ND				ND				ND				ND				ND			0.010		ND		ND		0										
Chloride	42.5	46	64	7	71	36.0	70.0	75.0	32.4	37.4	29.8	56.3	72.6	61.6	27	15.5	69.9	38.6	38	55.2	79.1	43.8	29.2		30.9	35.6	29.8		36.4	34.9	32.8	40.1	27				42			
Color (PCU units)	51				ND				250				400				175				600						120													
Nitrate-Nitrite	<DL	<DL	<DL	ND	ND	ND	ND	ND	1.99	1.2	0.23	ND	ND	0.18	ND	ND	ND	0.1	ND	0.110	ND	ND	ND		ND	ND	ND		ND	ND	ND	1.28	ND					ND		
Nitrogen-Ammonia	16.3	8.7	7.5	0.5	17.5	2.8	20.8	38.0	20.5	19.7	11.8	12.6	19.1	22.9	27.1	6.31	2.6	20.8	20.3	13.8	24	13.4	8.66		11.2	13.7	15		20.4	16.9	18.1		12.5				25.3			
Phenols	0.005	0.084	ND	0.010	0.020	0.100	ND	ND	0.096	0.100	0.049	0.087	0.147	0.011	0.060	0.032	0.235	0.046	0.063	0.118	0.25	0.145	0.11		0.06	0.08	0.07		0.13	0.07	0.12		0.06				0.11			
Sulfate	14	1.8	16.8	ND	ND	ND	ND	ND	20.0	8.4	ND	ND	11				ND	ND	ND	ND	ND	ND	ND		ND	ND	6.4		11	ND	ND	ND	18	ND	18			ND		
Total Organic Carbon (TOC)	30.4	29	36	27	24	172	35.0	58.0	21.8	29.0	19.2	22.9	30	44.2	30.8	13	372	25.6	24.3	24.3	50.9	32.7	25.6		19	19	18		28	44	33	17	19				27.2			
Total Dissolved Solids (TDS)	436	580	546	685	584	454	639.0	588	474	556	430	602	380	688	426	367	658	530	461	568	670	565	470		544	438	468		543	480	558	503	514				509			
Total Hardness	277	427	721	415	336	386	134.0	422	376	404	361	386	521	595	554	320	589	290	326	352	446	408	386		366	398	351		347	301	385	377	359				349			
Total Kjeldahl Nitrogen (TKN)	11.2				15.8				21.9				22				30				19.5				24.3		12.8													
Turbidity (NTU units)	44	1440	370	570	179	62.0	173.0	240	80.0	58.0	120	130	200	140	64	40	155	88	98	150	190	100	125		75	43	48		23	600	51		48				140			
Cyanide	<DL				ND				ND				ND				ND				ND			ND		ND		ND		ND		ND								



MW-12B  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD		
<b>PARAMETER METALS (mg/L)</b>																																			
Aluminum	0.1		0.18		0.21		ND		ND		ND	ND		ND		ND	ND				0.053	0.001	-	-	ND	ND	-	ND	ND	0.0157	0.0282	0.64			
Calcium	126	95.7	96.1	110	99.9	119	119	115	106	113	124	113	118	122	126	117	130	117	105	130	130	107	111	120	126	148	104	133	135	121	106	110.41			
Iron	26.8	29.3	24.6	18.4	21.6	29.9	13.3	20.6	19.6	29.8	14.6	22.8	17.7	26.6	13.2	22.4	19.2	19.7	15.1	27	15	14.5	26.8	8.94	14.5	6.01	10.2	17.3	13.2	12.3	14.4	33.51	0.3		
Magnesium	24.7	19.6	17.8	20.9	19	22.6	22.7	20.7	19.8	22.9	24.3	22.8	24.1	25.6	24.9	23.2	26.2	23.5	20.9	27	28	22.2	23.7	23.3	24.5	29.3	19.1	24.4	27.3	22.8	20.8	22.10	35.0		
Manganese	13.2	11.4	10.8	9.84	10.6	12.7	12.2	11.4	13.1	12.4	11.2	12.5	10.7	11.9	9.03	11.5	11.2	11.1	10.6	12	11	9.61	11.7	11.2	9.39	8.04	13.4	10.8	10.5	10.7	9.04	13.59	0.3		
Potassium	7.87	6.84	8	5.81	6.6	6.9	6.9	5.1	6.2	7.2	7.4	6.9	8.1	7.35	5.17	5.97	6.44	5.7	7.1	6.4	7.5	4.8	7.4	3.8	4.6	3.3	4.6	ND	7.67	6.3	7.42	8.38			
Sodium	22.3	16.5	16.1	15.6	14.9	16.7	19.9	14.2	15.5	17.2	21	16.6	19.4	20.2	14.9	15.8	20	14.5	15.5	16	ND	13.3	17.1	12.2	14	13	11.2	16.1	17.4	11.8	14.5	22.09	20.0		
<b>PARAMETER (mg/l) TOXIC METALS</b>																																			
Antimony	ND		ND		ND		ND		ND		ND	ND		ND		ND	ND				ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	ND	0.00	0.003	
Arsenic	0.01	ND		0.01		ND		0.01		0.01	0.012	0.01		0.013		0.012	0.011				ND	0.007	-	-	0.013	0.014	-	ND	ND	0.0108	0.0095	0.01	0.025		
Barium	0.56		0.52		0.43		0.43		0.44		0.6	0.53		0.555		0.516	0.45				0.53	0.334	-	-	0.303	0.271	-	0.394	0.414	0.304	0.439	0.45	1.0		
Beryllium	ND		ND		ND		ND		ND		ND	ND		ND		ND	ND				ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	ND	0.00		
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00	0.005	
Chromium (Total)	ND		ND		0.01		ND		0.01		ND	ND		ND		ND	ND				ND	0.001	-	-	0.0009	ND	-	0.0175	ND	0.006	0.0069	0.01	0.05		
Copper	ND		ND		ND		ND		ND		ND	ND		ND		ND	ND				ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.2		
Lead	0	0.003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002	ND	0.002	ND	ND	0.003	0.002	ND	0.0046	ND	0.0015	0.0035	0.00	0.025		
Mercury	ND		ND		ND		ND		ND		ND	ND		ND		ND	ND				ND	ND	-	-	ND	ND	-	ND	ND	ND	6E-05	0.00	0.0007		
Nickel	0.05		ND		ND		ND		ND		ND	ND		ND		ND	ND				ND	0.006	-	-	0.005	0.004	-	ND	ND	0.0058	0.0063	0.05	0.1		
Selenium	0	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				ND	0.005	-	-	0.006	0.006	-	ND	ND	ND	ND	0.00	0.0		
Silver	ND		ND		ND		ND		ND		ND	ND		ND		ND	ND				ND	ND	-	-	0.001	0.002	-	ND	ND	ND	ND	0.00	0.05		
Thallium	ND		ND		ND		ND		ND		ND	ND		ND		ND	ND				ND	ND	-	-	ND	ND	-	0.013	ND	ND	0.004	0.00	0.0005		
Zinc	0.04		ND		ND		ND		0.03		0.03	0.018		ND		ND	0.014				0.014	0.014	-	-	0.01	ND	-	ND	ND	0.0028	0.0087	0.03	2.0		
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																			
Alkalinity	469	363	480	440	167	371	449	383	373	ND	476	267	457	482	410	413	490	482	407	440	480	460	485	461	487	530	388	468	484	539	483	465.1			
Biochemical Oxygen Demand	8		9		ND		6.3		3.5		6.3	4.7		11.9		ND	5		11	7	10.1	-	-	11.1	6.7	3.7	9	ND	9.9	6	9.6				
Boron	0.18		0.11		0.14		0.19		0.17		0.18	0.16		0.163		0.151	0.15				ND	0.14	-	-	0.1	0.08	-	0.119	0.107	0.11	0.165	0.1	1.0		
Chemical Oxygen Demand	80.2	54.1	45	42	83	44.6	71.3	23.7	50.5	43	46.5	41.2	42.9	45	38	41.6	36.3	31	48.8	38	45	37.4	56.7	26.6	42.8	24.5	30	-	46.3	48.4	73.3	77.6			
Chromium (Hexavalent)	ND		ND		ND		ND		ND		ND	ND		ND		ND	ND				ND	ND	-	-	ND	ND	-	ND	ND	-	0.0	0.05			
Chloride	45.5	23.8		17	24.8	18.3	38.6	17.4	16	21.4	27.7	15.7	27.3	25	21.7	16	25	14	14.5	13.6	22.7	12.8	19.1	8.1	10.2	9.6	7.9	12.6	18.2	11.4	16.3	34.0	250.0		
Color (PCU units)	500		30		120		60		160		300	80		30		0	320				0	280	-	-	340	90	-	20	5	15	-	178.0	15.0		
Nitrate-Nitrite	0.72	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	0.4	0.144	ND		0.104	ND	ND	0.055	0.182	ND	ND	ND	ND	ND	ND	ND	ND	0.052	1.4	0.2	10.0		
Nitrogen-Ammonia	14.2	14	12.2	10.4	2.3	8	17.1	5	4.3	8.8	6.3	8.3	9.2	13.2	7.36		9.36	8.9	11	7.82	9.24	6.63	12.5	3.7	7.03	5.29	5.1	6.87	9.3	6.7	12.9	12.8	2.0		
Phenols	0.06	0.0661	0.002	0.002	0.017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.09	ND	ND	0.031	0.087	0.026	0.041	0.006	ND	0.041	0.032	0.047	0.058	0.1	0.001		
Sulfate	ND	ND	2.2	2.2	ND	2.2	ND	2.6	ND	ND	2.1	ND	ND	ND	ND	2.32	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	3.2	3	ND	ND	2.6	1.3	2.2	250.0	
Total Organic Carbon (TOC)	15.1	11	14	13	23.5	13.7	14.9	10	13.2	16.2	13.3	14.4	17.9	14.9	9.6	9.1	11.4	11.2	8.7	10.9	11.5	12.7	17.2	8.7	14.1	9.3	11.6	9.52	9.8	3.2	19.5	30.4			
Total Dissolved Solids (TDS)	560	500	445	478	478	449	515	464	587	312	502	468	467	508	482	503	510	468	430	610	600	482	511	479	488	523	407	487	516	459	201	512.5	500.0		
Total Hardness	416	320	313	361	328	390	390	372	346	376	410	376	394	410	420	390	430	389	349			450	359	376	396	415	490	352	390	450	410	520	390.0		
Total Kjeldahl Nitrogen (TKN)	16.2		14		12.9		19.4		6		9.4	ND		13.1			9.95	9.5			5.2	9.26	7.89	-	-	7.59	5.25	-	7.53	7.7	6.4	14.3	12.6		
Turbidity (NTU units)	200	42	100	53	41.6	25.8	12.7	22.6	40	47.8	33.8	10.8	15.1	12	4	5	6	10	0.8	6.4	26.8	14.4	10.4	2.3	7.1	23.4	7.84	6.3	10.9	6.6	87.2	117.8	5.0		
Cyanide			ND		ND		ND		ND		ND	ND		ND		ND	ND				ND	ND	-	-	ND	ND	-	ND	ND	-	0.0	0.2			

(Shade) = Analyte reported at or above New York State standards (amended March and June 1998). These standards were used beginning with the 9/98 sampling event. Exceedances noted prior to this event reflect prior standards.  
\* = Applies to the sum of cis and trans-1,3-dichloropropene.  
\*\* = Guidance Value.  
ND values are included in calculation of Mean and are considered equal to zero.  
(Blank) or "-" = Not Analyzed.  
ND = Not Detected.  
J = Estimated.  
<DL = Detected below method detection limit. B = Analyte was detected in method blank.

MW-13  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

PARAMETER VOLATILES (ug/L)	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02		
Acetone																																					
Acrylonitrile																																					
Benzene	<DL			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Bromobenzene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Bromochloromethane	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Bromodichloromethane	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Bromoform	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Bromomethane	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
2-Butanone																																					
n-Butylbenzene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
sec-Butylbenzene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
tert-Butylbenzene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Carbon disulfide																																					
Carbon tetrachloride	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Chlorobenzene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Chloroethane	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Chloroform	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Chloromethane	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
2-Chlorotoluene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
4-Chlorotoluene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Dibromochloromethane	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
1,2-Dibromo-3-chloropropane	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
1,2-Dibromoethane	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Dibromomethane	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
1,2-Dichlorobenzene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
1,3-Dichlorobenzene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
1,4-Dichlorobenzene	0.06			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
trans-1,4-Dichloro-2-butene																																					
Dichlorodifluoromethane	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
1,1-Dichloroethane	2.2			3.0	2.0				2.0		2.0		2		1		1		ND		2		2		2		2		ND		2		1		1		0.9
1,2-Dichloroethane	<DL			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
1,1-Dichloroethene	ND			ND	ND				ND		ND		ND		ND		ND		2		ND		ND		ND		ND		ND		ND		ND		ND		ND
cis-1,2-Dichloroethene	ND			2.0	ND				1.0		0.9		0.8		0.6		0.6		0.8		0.8		0.8		1		0.8		0.9		ND		0.9		ND		ND
trans-1,2-Dichloroethene	0.81			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
1,2-Dichloropropane	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
1,3-Dichloropropane	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
2,2-Dichloropropane	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
1,1-Dichloropropene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
cis-1,3-Dichloropropene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
trans-1,3-Dichloropropene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Ethylbenzene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
2-Hexanone																																					
Hexachlorobutadiene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Iodomethane																																					
Isopropylbenzene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
p-Isopropyltoluene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Methylene chloride	ND			2.0	1.0				ND		ND		ND		ND		0.7		ND		0.7		ND		ND		ND		ND		ND		ND		ND		ND
4-Methyl-2-pentanone																																					
Naphthalene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
n-Propylbenzene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Styrene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
1,1,1,2-Tetrachloroethane	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
1,1,1,2-Tetrachloroethene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Tetrachloroethene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Toluene	ND			ND	ND				ND		ND		1		ND		ND																				
1,2,3-Trichlorobenzene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
1,2,4-Trichlorobenzene	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
1,1,1-Trichloroethane	ND			ND	ND				0.5		ND		ND		ND		ND		ND		ND		ND		ND												
1,1,2-Trichloroethane	ND			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		ND												
Trichloroethene	<DL			ND	ND				ND		ND		ND		ND		ND		ND		ND		ND		0.65												
Trichlorofluoromethane	ND			ND	ND				ND																												

MW-13  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02			
<b>PARAMETER METALS (mg/L)</b>																																						
Aluminum	5.04				12.6				7.85				8.91				1.17				15.2			1.54		10.4		2.14		0.78		0.85		1.48				
Calcium	53.1	48.8	54.7	52.8	65.9	62.6	53.7	56.2	55.2	56.4	48.7	51.2	51	41.3	41	45.4	50.9	45.2	36.5	38.2	50.8	48.6	51.9	44.5	42.5	44.8	37.1	45.3	40.4	41.2	34.4	40.8	35.5	44.9	38.3			
Iron	9.75	0.8	2	0.28	22.0	4.03	0.2	8.6	14.4	52.1	10.2	45.5	13.4	2.08	7.39	52.3	59.6	17.2	7.75	10.6	36.9	23.1	30.8	2.56	3.13	10.2	1.91	2.94	10.7	1.19	2.92	0.8	4.95	2.57	2.52			
Magnesium	11	9.9	13.2	11.3	15.1	11.9	10.8	12.6	13.7	17.8	11.8	16.6	13	9.91	11.3	17.4	15.7	12.2	9.82	10.9	15.6	14	15.0	10.6	10.9	11.8	9.16	9.98	11.1	9.36	8.79	9.79	9.72	10.1	9.58			
Manganese	3.33	1.94	2.02	1.06	0.83	0.82	0.18	0.71	2.85	1.98	1.94	2.82	2.37	1	2.29	2.95	11	2.08	1.94	1.39	3.79	3.11	1.79	2.58	1.44	4.79	2.03	1.38	2.35	2.18	2.6	1.54	1.15	2.99	1.87			
Potassium	2.6	1.5	3.1	1.1	5.1	2.1	1.3	3.8	4.22	7.24	2.85	6.79	4.88	2.21	2.67	8.74	3.26	4.41	1.91	2.36	3.9	4.47	4.70	2.22	1.78	4.49	1.53	3.16	3.85	1.55	2.64	2.91	3.06	1.42	1.15			
Sodium	6.6	8.6	9	8.4	8.0	7.5	7.5	7.8	8.76	7.75	6.29	5.92	8.38	6.22	7.8	7.64	0.04	7.65	6.57	8.01	8.69	7.71	7.03	8.45	7.17	7.95	6.95	7.75	6.99	7.38	7.36	7.43	7.01	6.59	8.25			
<b>PARAMETER (mg/l) TOXIC METALS</b>																																						
Antimony	ND				ND				0.03				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		
Arsenic	<DL				0.006				0.005				0.004				0.004				0.01			ND		0		0		ND		ND		ND		ND		
Barium	0.1				0.18				0.17				0.15				0.29				0.19			0.060		0.12		0.13		0.05		0.08		0.03				
Beryllium					ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		
Cadmium		<DL	<DL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.004	0.01	ND	ND	ND	ND	ND	0.01	ND	ND									
Chromium (Total)	<DL				0.03				0.02				0.03				ND				0.66			ND		0.02		ND		0.02		ND		ND		ND		
Copper	ND				0.02				ND				0.02				ND				0.03			ND		ND		ND		ND		ND		ND		ND		
Lead	0.004	ND	0.005	ND	0.009	0.007	ND	0.007	0.003	0.013	0.002	0.014	0.011	0.003	0.001	0.018	0.007	0.010	0.007	0.005	0.01	0.004	0.010	0.005	0.008	0.01	ND	0	0.01	0	0	0.01	0	0.02	0			
Mercury	ND				ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		
Nickel	0.1			ND	ND				ND				0.03				0.06				0.47			0.017		0.04		ND		ND		ND		ND		0.03		
Selenium	0.01	ND			ND	ND			ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		
Silver	ND				ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		
Thallium	0.2				ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		
Zinc	0.05				0.07				0.05				0.05				0.04				0.14			ND		0.04		0.03		0.02		0.02		0.02		ND		
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																						
Alkalinity	203	209	182	190	208	242	204	173	188	178	152	170	215	141	148	144	178	153	144	184	203	140	136	183	141	161	190	167	123	168	116	114	124	169	114			
Biochemical Oxygen Demand	<DL				ND	ND			7				14				10				9			12		22		9		ND		ND		ND		ND		
Boron	ND				0.08	ND			ND				0.03				ND				0.07			0.087		0.08		0.09		0.09		0.09		0.09		0.07		
Chemical Oxygen Demand	8.4	20	11	ND	7.0	5.0	ND	17.0	20.2	30.7	46	57.2	11.1	27.7	27.1	30.6	36.2	11.7	11.6	60.0	18.9	90.5	126	ND	ND	25.3	ND	10.3	ND	32.3	31.4	37.1	ND	10.4				
Chromium (Hexavalent)	<DL				ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		
Chloride	16.9	18	16.6	12	11	14.0	16.0	14.0	15.9	10.8	ND	12.6	11.9	11.7	12.5	11.7	13	11.4	10.3	10.1	9.66	9.82	9.05	11.5	ND	10.6	8.33	8.17	10.3	10.6	10.2	9.22	9.24	8.19	11.3			
Color (PCU units)	9				ND				20				15				ND				25			30		20		300		1250		300		250				
Nitrate-Nitrite	<DL	<DL	0.2	ND	0.04	0.4	0.18	0.28	0.67	0.22	0.22	0.21	0.22	0.39	0.11	0.16	0.15	0.12	0.06	0.552	0.08	0.206	ND	0.080	0.068	ND	0.13	0.14	0.17	0.09	0.1	0.11	0.13	0.42				
Nitrogen-Ammonia	<DL	<DL	<DL	0.1	0.2	ND	0.4	0.1	0.19	0.07	0.17	0.23	0.35	0.59	0.13	0.06	0.13	0.1	0.05	0.102	0.22	0.172	0.16	0.117	0.316	0.22	0.2	0.47	0.11	0.17	0.17	0.13	0.14	0.12	ND			
Phenols	0.002	ND	ND	ND	0.020	ND	ND	ND	ND	ND	ND	0.015	0.013	0.100	0.002	ND	0.004	ND	ND	0.039	0.01	ND	0.020	0.004	0.007	0.002	ND	ND	0.01	0.01	ND	ND	ND	ND	ND	ND		
Sulfate	8	1	23	ND	26	47.0	58.0	26.0	22	21.0	20	16	12	17	11	12	12	11	ND	6.3	6.5	26	17	18	11	12	8.4	108	26	ND	19	14	14	8.62	15.2			
Total Organic Carbon (TOC)	6.2	9	4.8	4	3.0	3.0	19.0	18	8.3	7.8	5.7	11.4	11	5.6	8.8	5.4	4.9	9.1	10.1	23.7	18.8	16.9	6.7	8.7	4.8	6	4.1	4.8	2.9	5.2	5.9	7.6	2.7	3.2				
Total Dissolved Solids (TDS)	212	222	225	236	291	309	260	221	238	209	201	218	212	211	171	192	215	205	169	187	252	199	221	206	169	213	161	211	215	183	162	170	156	199	175			
Total Hardness	178	163	191	178	203	205	178	192	241	175	259	189	201	218	211	180	257	163	132	140	191	179	191	155	151	160	130	154	111	112	122	142	129	154	135			
Total Kjeldahl Nitrogen (TKN)	0.9				1.1				2.19				3.36				ND				ND			3.10		ND		1.6		3.26		ND		ND		1.18		
Turbidity (NTU units)	75	320	128	175	308	79.0	44.0	107	600	52.0	170	31	31	60	100	40	270	17	69	19	280	43	80	33	24	70	19	66	54	700	37	77	23	168	6.8			
Cyanide	<DL				ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND		



MW-13  
 HISTORICAL ANALYTICAL RESULTS  
 ISCHUA LANDFILL  
 OLEAN, NEW YORK

	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD
<b>PARAMETER METALS (mg/L)</b>																																	
Aluminum	5.93		2.52		9.4		0.27		ND		ND	0.22		ND			0.296	ND			ND	0.02	0	-	0.08	ND	-	ND	0.238	0.026	ND	2.56	
Calcium	52.3	32.5	45.1	46.5	46.9	42.3	48.7	43.7	44.5	37.3	40.1	33.7	41.7	39.3	41.6	37.3	41.6	37.3	46.2	38	47	31.7	14.1	33.4	39.5	36.6	44.3	38.4	44	46.8	43.9	44.04	
Iron	10.8	6.82	4.89	1.26	12.8	0.74	0.33	0.07	0.12	0.1	0.16	0.36	0.21	0.133	0.103	0.223	0.409	0.14	0.21	0.039	0.19	0.1	0.34	1	0.19	0.08	0.42	0.101	0.459	0.0907	0.106	7.88	0.3
Magnesium	13.8	9.53	10.9	10.7	12.9	10.7	12	11	11.6	10.2	10.4	9.2	10.8	10.5	11.1	10.5	10.8	10.4	12.6	11	13	9.6	5.3	10.6	10.3	10.6	11.3	9.95	11.9	13	11.9	11.51	35.0
Manganese	4.84	1.45	5.57	0.76	4.2	0.83	0.48	0.1	7.5	0.53	0.08	0.42	0.24	0.167	0.08	0.28	0.365	0.34	0.49	0.12	0.55	0.219	2.09	0.562	0.145	0.294	0.136	0.641	0.94	0.171	0.0609	1.75	0.3
Potassium	2.68	2.61	1.97	1.06	4.2	1.1	1.3	0.87	2.1	0.84	1.1	0.78	0.94	0.874	0.825	0.696	1.05	0.7	1.1	0.64	0.91	0.6	ND	ND	0.7	1.7	ND	ND	ND	1.04	2.23		
Sodium	8.68	7.51	8	7.54	8.6	7.5	11.2	7.9	8.1	7.6	11	8.8	9.9	11.5	11.7	9.8	11.8	9.2	12.2	11	ND	11.5	1.9	10.8	10.1	11.3	10.4	11.2	12.4	10.7	10.2	8.29	20.0
<b>PARAMETER (mg/l) TOXIC METALS</b>																																	
Antimony	ND		ND		ND		ND		ND		ND	ND		ND			ND	ND			ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.003
Arsenic	0		ND		ND		ND		ND		ND	ND		ND			ND	ND			ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.025
Barium	0.11		0.1		0.13		0.01		0.03		0.013	0.018		0.015			0.021	0.019			ND	0.016	-	-	0.019	0.022	-	ND	ND	0.017	0.0166	0.06	1.0
Beryllium	ND		ND		ND		ND		ND		ND	ND		ND			ND	ND			ND	0.0002	-	-	ND	ND	-	ND	ND	ND	ND	0.00	
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00	0.005								
Chromium (Total)	0.02		ND		0.03		ND		ND		ND	ND		ND			ND	ND			ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.03	0.05
Copper	ND		0.01		0.01		ND		ND		ND	ND		ND			ND	ND			ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.2
Lead	0.01	0.01	ND	ND	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00	0.025
Mercury	ND		ND		ND		ND		ND		ND	ND		ND			ND	ND			ND	ND	-	-	ND	ND	-	ND	ND	ND	6E-05	0.00	0.0007
Nickel	0.04		ND		0.02		ND		ND		ND	ND		ND			ND	ND			ND	ND	-	-	ND	0.002	-	ND	ND	0.0021	0.0012	0.02	0.1
Selenium	ND		ND		ND		ND		ND		ND	ND		ND			ND	ND			ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.0
Silver	ND		ND		ND		ND		ND		ND	ND		ND			ND	ND			ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.05
Thallium	ND		ND		ND		ND		ND		ND	ND		ND			ND	ND			ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.01	0.0005
Zinc	0.05		0.02		0.04		ND		0.02		0.054	0.019		0.033			0.098	0.031			0.074	0.041	-	-	0.03	0.015	-	0.0206	0.0267	0.0143	0.0225	0.03	2.0
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																	
Alkalinity	175	111	165	150	181	129	132	148	160	155	202	79.8	147	132	156	165	186	156	189	140	180	147	164	147	158	154	168	145	169	170	191	162.2	
Biochemical Oxygen Demand	ND		ND		2.5		ND		ND		ND	ND		ND			ND	ND			ND	ND	-	-	ND	ND	ND	ND	ND	1	1	2.5	
Boron	0.09		0.06		0.08		0.07		0.06		0.073	0.045		0.058			0.068	0.045			ND	0.07	-	-	0.06	0.06	-	ND	0.0569	0.0434	0.06	0.0	1.0
Chemical Oxygen Demand	33.6	ND	ND	9	54.1	ND	12	ND	ND	12.9	ND	11.4	ND	ND	6	ND	30.3	ND	9.7	9.7	-	ND	17.2	11.9	15.7								
Chromium (Hexavalent)	ND		ND		ND		ND		ND		ND	ND		ND			ND	ND			ND	ND	-	-	ND	ND	-	ND	0.0059	-	0.0	0.05	
Chloride	11.2	8.78	8.4	7.5	5.7	6.6	10.2	8.1	6.5	6.5	6.2	6	7.4	6.9	5.43	5.94	5.66	6.7	7.1	5.52	4.96	6	5.7	5.3	4.4	6.3	5.3	4.82	4	6.3	4.4	8.9	250.0
Color (PCU units)	100		5		200		25		15		60	18		5			60	80			ND	12	-	-	14	16	-	10	5	5	-	86.3	15.0
Nitrate-Nitrite	0.13	0.14	0.2	0.07	0.1	ND	0.1	0.09	ND	0.18	0.19	0.16	0.098	0.113	ND	0.086	0.068	ND	0.055	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.066	0.067	0.1	10.0
Nitrogen-Ammonia	0.14	ND	0.2	0.2	0.14	0.2	ND	ND	0.21	0.1	ND	ND	ND	ND	0.084	ND	0.17	0.1	0.032	0.10	0.1	2.0											
Phenols	ND	ND	ND	0	0.02	ND	ND	ND	ND	ND	ND	ND	0.012	ND	ND	ND	ND	ND	0.247	ND	0.01	0.002	0.002	0.0	0.001								
Sulfate	10.4	9.97	8.8	9.2	6.9	8	14.2	9.8	6.4	9.5	10.6	8.3	6.8	6.7	6.11	6.19	6.7	6.6	4.1	ND	ND	3.9	3.5	3.6	3.5	3.2	3.6	ND	8.5	9	5.8	12.9	250.0
Total Organic Carbon (TOC)	2.8	1.7	5	2.4	15.8	1.9	3	2.3	2.8	2.7	2.3	2.2	3.2	2.1	1.4	1	2.2	2	ND	ND	2.4	2.4	2.2	2.2	2.2	543	2.21	3.5	ND	3.4	13.6		
Total Dissolved Solids (TDS)	197	149	190	192	220	163	255	220	334	157	148	179	163	193	144	193	188	178	175	260	190	161	167	164	172	168	183	163	204	197	195	199.4	500.0
Total Hardness	187	120	157	161	170	150	171	154	159	135	143	122	394	140	150	140	150	136	167	140	170	119	56.8	127	141	135	157	108	170	150	150	163.6	
Total Kjeldahl Nitrogen (TKN)	ND		ND		1.9		ND		ND		ND	ND		ND			ND	ND			ND	ND	-	-	0.29	0.21	-	ND	0.16	0.17	0.42	0.6	
Turbidity (NTU units)	140	53	190	110	149	246	21.2	40.6	21	10.3	9.2	4.6	8	30	1	8	32	5	8.1	12.3	10.1	13	5.1	21.7	5.4	23	14.3	5.3	11.7	6.3	17.7	85.0	5.0
Cyanide			ND		ND		ND		ND		ND	ND		ND			ND	ND			ND	ND	-	-	ND	ND	-	-	ND	ND	-	0.0	0.2

(Shade) = Analyte reported at or above New York State standards (amended March and June 1998). These standards were used beginning with the 9/98 sampling event. Exceedances noted prior to this event reflect prior standards.  
 \* = Applies to the sum of cis and trans-1,3-dichloropropene.  
 \*\* = Guidance Value.  
 ND values are included in calculation of Mean and are considered equal to zero.  
 (Blank) or "-" = Not Analyzed.  
 ND = Not Detected.  
 -DL = Detected below method detection limit. J = Estimated.  
 B = Analyte was detected in method blank.



MW-14  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02	
<b>PARAMETER METALS (mg/L)</b>																																				
Aluminum	22				7.7				3.42				6.45				13.4				7.68			4.10		7.33		1.28		1.66		0.34		0.83		
Calcium	50.7	65.1	58.2	69.6	80.5	82.8	79.9	70.7	84.3	82.6	80.9	73.7	78.4	84.2	75.4	73.1	83.7	72.8	69.6	67.8	80.6		79.1	66.4	80.7	81.1	71.5	48.8	79.1	62.4	49.6	47.8	54.8	44.4	65.1	
Iron	49.5	4.6	0.55	1.24	13.6	2.15	1.6	1.2	6.8	9.02	9.63	5.92	11.5	14	6.26	16	22.1	15.6	16.9	20.2	15.6		3.88	7.79	6.49	8.5	6.74	1.72	5.24	3.11	0.73	0.77	0.53	1.59	1.68	
Magnesium	17.7	15.9	17.2	19.5	22.6	19.5	19.1	19.3	21.7	21.5	21	19.1	20.6	22	19.9	20.7	21.4	19.1	19	19.4	21.8		19.1	17.5	20.8	20.5	19.7	17.6	17.8	13.8	13.1	11.2	14.2	14.4	15.9	
Manganese	2.28	0.9	0.58	0.32	0.54	0.39	0.08	0.05	0.39	0.03	0.35	0.23	0.5	0.66	0.37	0.76	0.79	0.64	0.598	0.870	0.85		0.21	0.447	0.258	0.43	0.46	0.12	0.37	0.33	0.07	0.22	0.06	0.06	0.096	
Potassium	7.3	3.9	7.5	6.8	6.5	3.4	7.2	6.3	5.12	5.4	9.59	5.27	4.34	8.58	4.04	7.26	6.86	5.83	6.45	5.82	3.97		3.53	3.62	5.01	5.69	4.5	5.92	5.45	3.16	9.09	3.5	2.51	2.83	2.59	
Sodium	8.9	10.2	14.5	20.4	18.3	12.9	27.3	20.5	17.5	16.5	20.9	18.7	15.9	15.7	14.2	18.3	18	15	14.7	15.5	15.7		12.3	14.9	16.2	16	15.4	18.5	15.2	16.9	18.9	17.4	15.5	17.3	16.4	
<b>PARAMETER (mg/l) TOXIC METALS</b>																																				
Antimony	0.01				ND				ND				ND				ND				ND			0.028		ND		ND		ND		ND		ND		ND
Arsenic	ND				ND				0.003				0.004				ND				0.01			0.004		ND		ND		0		0		ND		ND
Barium	0.15				0.08				0.08				0.1				0.14				0.12			0.087		0.13		0.12		0.1		0.1		0.15		
Beryllium					ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND
Cadmium		<DL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002	ND	0.01			ND	ND	ND	ND	0.01	ND	ND						
Chromium (Total)	0.02	0	0	ND	0.02	ND	ND	ND	0.02	0.03	0.03	0.02	0.03	0.03	0.02	0.06	0.05	0.07	0.05	0.034	0.03		ND	0.024	0.044	0.34	0.03	ND	0.02	0.02	0.02	ND	ND	ND	0.003	
Copper	ND				0.01				ND				0.01				0.03							ND		0.02		ND		ND		ND		ND		ND
Lead	0.013	<DL	<DL	ND	0.005	ND	0.070	0.010	0.001	0.005	0.003	0.005	0.007	0.006	0.005	0.010	0.011	0.007	0.006	0.007	0.01		0	0.024	0.005	0.01	0	0	0	0	ND	0	ND	0.01	0.001	
Mercury					ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND
Nickel	0.14				ND				ND				0.03				0.05				0.03			0.020		0.15		ND		ND		ND		ND		ND
Selenium	0.03	<DL	<DL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver					ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND
Thallium	0.2				ND				ND				ND				ND				ND			ND		ND		ND		ND		ND		ND		ND
Zinc	0.11				0.06				0.03				0.05				0.09				0.07			0.054		0.07		0.03		0.03		0.03		0.03		0.03
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																				
Alkalinity	207	224	226	209	244	233	299	236	237	221	236	231	189	227	221	244	235	225	232	237			224		234	235	171	189			139	136	187	139	165	
Biochemical Oxygen Demand	8				ND				6				ND				ND				19			3		8		3								
Boron	ND				0.04				ND				ND				ND				ND			ND		ND		0.06		ND		ND		ND		ND
Chemical Oxygen Demand	15.9	<DL	<DL	ND	ND	ND	ND	ND	12.2	ND	1.75	17.1	ND	ND	ND	ND	30.9	ND	14.3				ND		ND	ND	ND	ND			15.9	ND	ND	ND	ND	
Chromium (Hexavalent)	<DL				ND				ND				ND				ND							ND		ND		ND								ND
Chloride	2.4	8	7.8	3	9	ND	ND	4.0	ND	1.9	ND	2.5	ND	2.08	1.87	2.15	2.69	2.07	2	ND			ND		1.94	1.74	2.01	1.35			ND	1.58	1.68		1.52	
Color (PCU units)	25				ND				20								5										30		250						75	
Nitrate-Nitrite	<DL	<DL	<DL	ND	0.05	ND	ND	0.1	0.19	1.3	0.14	6.89	0.13	0.43	0.09	0.08	0.49	0.2	0.09	0.252			ND		0.19	0.15	0.14	0.46			0.31	0.53	0.21	0.4	0.363	
Nitrogen-Ammonia	<DL	<DL	<DL	ND	0.1	ND	0.3	ND	0.21	0.1	0.05	0.08	0.1	0.67	0.17	0.2	0.07	0.06	0.1	0.021			0.140		0.012	ND	ND	0.49			ND		ND	ND	ND	
Phenols	0.002	ND	<DL	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002	0.004	0.001	ND	ND	ND	ND	0.054	0.03		0.01		ND	ND	ND	ND			ND		ND	ND	0.0042	
Sulfate	63.3	47.3	59.8	68	81	173	64.0	109	90	100	75	93	94	82	68	100	80	100	80	69			77		75	69	79	54			66	99	75		82.1	
Total Organic Carbon (TOC)	5.2	4	2.3	2	1	1.0	1.0	3.5	4.8	4.0	1.2	2.0	1.2	3	1.2	5.8	ND	1.1	2.7	14.5			2.4		1.9	1.2	1.4	2.5			1.2	1.6	1.7	1.3	1.1	
Total Dissolved Solids (TDS)	305	310	316	331	373	375	429	369	395	348	371	377		383	319	306	317	344	340	327			326		331	338	288	282			270	238	281	241	285	
Total Hardness	199	228	216	254	294	287	278	256	346	315	315	287		378	355	293	387	260	252	249			276		287	287	260	194			178	165	195	170	228	
Total Kjeldahl Nitrogen (TKN)	<DL				0.9				ND				2.42				1.39				ND			2.98		ND		ND								
Turbidity (NTU units)	70	905	225	230	242	171	304	456	320	320	240	240	170	200	480	58	200	97	110	270			360		225	280	85	57			19		15	87	78	
Cyanide	0.01				ND				ND				ND				ND				ND			ND		ND		ND					ND			



MW-14  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD	
<b>PARAMETER METALS (mg/L)</b>																																		
Aluminum	0.4		4.33	1.1		ND	ND	ND			0.24	ND		ND		ND	ND				ND	-	-	ND	ND	-	ND	ND	ND	ND	2.57			
Calcium	35.5	40.3	96.8	67.5	52.7	68.3	34.6	23.5	55.6	33	57.1	37.2	31	26.1	56.5	43.2	49.1	61.7	53.9	32		41.5	50	54.9	59.1	45.8	55.1	50.6	59.9	60.1	52.8	60.64		
Iron	<b>0.84</b>	<b>1.77</b>	<b>9.15</b>	<b>0.54</b>	<b>1.5</b>	<b>0.64</b>	0.07	0.06	0.16	0.07	<b>0.74</b>	0.11	0.22	0.089	0.165	0.06	0.05	ND	0.13	0.049		0.03	ND	ND	0.13	0.05	ND	ND	0.162	ND	0.106	4.84	0.3	
Magnesium	10.3	12.4	14.4	8.7	15.5	15.8	25.4	16.6	19.1	17.1	19.1	18.1	21.3	14.8	17	17.9	17.8	16.9	16.4	19		14	15.1	15.3	15	14.6	14.7	13.4	15.2	15	13	17.38	35.0	
Manganese	0.04	0.06	<b>0.31</b>	0.06	0.08	0.06	ND	ND	0.11	ND	0.024	0.027	0.033	ND	0.215	ND	ND	0.12	ND			0.008	0.035	0.015	0.246	0.013	0.208	0.0524	0.126	0.0682	0.0486	0.27	0.3	
Potassium	3.2	3.71	4.33	5.48	3.7	3.8	2.7	3.6	2.5	3	3.3	2.6	3.9	3.72	2.09	2.24	2.45	2	2.4	2.2		1.8	2	ND	1.7	2.1	ND	ND	1.92	2.18	4.05			
Sodium	14.9	15.6	13.4	18	17	17.2	17.8	18.3	15.9	15.2	15.9	16.2	15.8	16.7	14.2	13.5	14.1	13.1	11.4	10		9.9	9.3	9.5	9.4	10.5	10	10.6	10.4	9.93	8.54	15.04	20.0	
<b>PARAMETER (mg/l) TOXIC METALS</b>																																		
Antimony	ND		ND		ND		ND	ND		ND	ND		ND		ND	ND						ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.003	
Arsenic	0		ND		ND		ND	ND		ND	ND		ND		ND	ND						ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.025	
Barium	0.12		0.3		0.22		0.1		0.08		0.15	0.064		0.138			0.06	0.068				0.071	-	-	0.054	0.065	-	ND	ND	0.0415	0.0403	0.09	1.0	
Beryllium	ND		ND		ND		ND	ND		ND	ND		ND		ND	ND						0.0002	-	-	ND	ND	-	ND	ND	ND	ND	0.00		
Cadmium	ND	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00	0.005									
Chromium (Total)	ND	0.01	0.02	ND	0.02	0.01	ND	ND	ND		0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	-	-	ND	ND	-	ND	ND	ND	ND	0.02	0.05	
Copper	ND		0.01		ND		ND		ND		ND	ND		ND		ND	ND					ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.2	
Lead	0	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001		0.0009	ND	ND	ND	ND	ND	0.0039	ND	ND	0.0013	0.00	0.025									
Mercury	ND		ND	ND	ND		<b>0.01</b>		ND		ND	ND		ND		ND	ND					ND	-	-	ND	ND	-	ND	ND	ND	0.00007	0.00	0.0007	
Nickel	ND		ND	ND		ND		ND	ND					ND	-	-	ND	ND	-	ND	ND	ND	0.0012	0.01	0.1									
Selenium	ND	ND	ND	ND	ND	ND	ND	ND				ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.0											
Silver	ND		ND	ND	ND		ND		ND		ND	ND		ND		ND	ND					ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.05	
Thallium	ND		ND	ND		ND		ND	ND					ND	-	-	ND	ND	-	ND	ND	ND	ND	0.01	0.0005									
Zinc	0.02		0.03		ND		ND		ND		0.015	0.016		0.01		0.015	ND					0.007	-	-	0.007	ND	-	ND	0.028	0.0016	0.0075	0.02	2.0	
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																		
Alkalinity			145	34	146	139		355	ND	158		181			159	179		257	218	190	ND	210	205	216	216	205	210	187	-	243	282	195.7		
Biochemical Oxygen Demand			ND		ND		ND		ND		0.03	0.03		0.027				0.033	0.031			ND	-	-	ND	0.04	-	ND	0.0215	0.0195	0.0	1.0		
Boron	ND						ND	ND		ND	ND	ND	ND	20	ND	ND	ND	ND	5.2	-	ND	13	24.6	5.3										
Chemical Oxygen Demand			ND	13	92.1	ND	ND	ND	ND						ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-	-		
Chromium (Hexavalent)			ND	ND		ND								ND	ND	-	-	ND	ND	-	-	0.0086	-	0.0	0.05									
Chloride			1.5	ND	1.5	1.6		1.4	1.6	1.4					1.42	1.94	1.62	1.7	1.7	1.91	15.1	ND	2.7	2	2.1	2.2	2.3	2.04	-	2.7	2.2	2.2	250.0	
Color (PCU units)			5		<b>120</b>																	ND	7	-	-	13	14	-	5	<b>20</b>	10	-	28.5	15.0
Nitrate-Nitrite			0.09	0.05	0.05	ND		ND	ND	ND					0.285		0.106	ND	ND	0.095		ND	ND	ND	ND	ND	ND	ND	ND	ND	0.086	0.55	0.3	10.0
Nitrogen-Ammonia			ND	ND	0.13	ND	ND	ND	ND						0.116		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11	0.12	0.024	0.051	0.1	2.0	
Phenols			ND		<b>0.02</b>	ND	ND	ND	<b>0.01</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	ND	ND	ND	ND	ND	ND	ND	ND	ND	<b>0.0065</b>	0.0	0.001	
Sulfate			49	48.4	55.4		53.8	50.7	44.7						37.9	33.3	33.6	30.4	22	19	16.9	17	16.1	15.6	13.6	15.1	14.4	12.4	-	18.2	13.4	57.8	250.0	
Total Organic Carbon (TOC)	ND	ND	ND	1.3	20	ND	ND		ND	1.9	11.1	ND	4.9	1.3	1.3	ND	1	ND	ND	ND		ND	1.1	ND	ND	1.2	ND	ND	2.3	0.085	4.5	2.2		
Total Dissolved Solids (TDS)			305		259	215		229	278	232					255	245		238	215	350	240	215	223	229	228	211	231	209	-	249	225	286.2	500.0	
Total Hardness			301	205	195	236	191	127	217	153		167			210	180	200	224	202	160			161	187	200	209	175	206	132	200	240	190	232.5	
Total Kjeldahl Nitrogen (TKN)			ND		1.8		ND		ND						ND	ND	ND	ND	ND	ND		0.597	ND	-	-	ND	ND	-	ND	0.98	0.14	0.59	0.4	
Turbidity (NTU units)			<b>74</b>	<b>67</b>	<b>129</b>	<b>415</b>		<b>21.7</b>		<b>24.1</b>		<b>6.3</b>	<b>16.7</b>	<b>22</b>	<b>3</b>	<b>2</b>	<b>42</b>	<b>6</b>	<b>5</b>	<b>6.2</b>	<b>50.1</b>	3.2	3	0	4.4	ND	<b>5.3</b>	<b>3.3</b>	<b>9.9</b>	<b>1.8</b>	<b>25</b>	<b>135.6</b>	<b>5.0</b>	
Cyanide					ND		ND		ND					ND		0.16						ND	-	-	ND	ND	-	-	ND	ND	-	0.0	0.2	

(Shade) = Analyte reported at or above New York State standards (amended March and June 1998). These standards were used beginning with the 9/98 sampling event. Exceedances noted prior to this event reflect prior standards.

\* = Applies to the sum of cis and trans-1,3-dichloropropene.

\*\* = Guidance Value.

ND values are included in calculation of Mean and are considered equal to zero.

(Blank) or "-" = Not Analyzed.

ND = Not Detected.

<DL = Detected below method detection limit.

J = Estimated.

B = Analyte was detected in method blank.



SEEP  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02				
<b>PARAMETER METALS (mg/L)</b>																																							
Aluminum	ND								0.06				0.2				0.87								ND		0.23				0.09		ND						
Calcium	12.8	40	32.8	41.6		29.0	35.3	42.1	26.7	33.8	33.2	39.3	38.2	35.7	28	28.1	40.6	29	29.9	39.5		45.8	29.6	32.4	27.6	32.2	37.3		40.4	49.2	39.2	41.6	38				54.2		
Iron	3.62	17.1	9.6	24.7		8.94	8.2	57.7	5.53	8.32	16.1	14.0	22.1	9.8	6.49	8.4	47.9	10.5	9.41	16.7		16.4	7.44	8.89	23.8	11.1	18.7		12.1	11.8	6.2	17.7	19.1				121		
Magnesium	4	9	10.3	13.6		9.0	10.9	14.3	8.26	10.1	10.7	12.9	12.8	11.6	9.09	8.86	12.6	8.86	9.17	13.5		14.4	8.82	10.9	8.98	10.7	11.2		12.8	16.2	12.7	14.3	12.5				14.6		
Manganese	3.85	11.3	9.2	9.65		6.3	9.48	10.8	5.52	8.82	8.02	9.59	8.5	8.4	5.74	6.53	8.82	6.89	6.97	8.63		10.8	6.39	6.59	6.23	6.24	8.21		6.68	9.27	7.13	8.03	7.73				11.3		
Potassium	2	3.2	2.4	3.3		3.2	4.5	4.2	3.34	3.78	2.22	2.92	2.63	3.23	3.04	2.53	2.94	2.9	2.6	3.20		3.89	2.39	2.85	2.56	2.94	2.76		3.4	3.94	3.23	3.39	2.93				4.3		
Sodium	4	10.3	7.1	8.2		8.3	8.8	10.1	7.22	7.23	6.31	6.64	7.92	6.71	6.43	6.12	9	6.11	5.25	7.41		8.17	4.80	6.69	5.12	6.37	5.46		7.08	9.23	6.51	7.54	6.08				8.06		
<b>PARAMETER (mg/l) TOXIC METALS</b>																																							
Antimony	ND								ND				ND				0.03								0.028		ND			ND		ND							
Arsenic	<DL								0.005				0.019				0.040								0.009	0.02				0.01		0.03							
Barium	0.05								0.11				0.18				0.22							0.131	0.14				0.21		0.172								
Beryllium		ND							ND				ND				ND							ND	ND	ND	ND	ND		ND		ND		ND					
Cadmium		<DL	ND	ND		ND		ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND															
Chromium (Total)	ND								ND				0				0.02							ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	
Copper	ND								ND				ND				ND							ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	
Lead	ND		0.003	ND		ND	0.030	0.014	ND	ND	0.002	0.001	0	0.007	0.002	0.002	0.005	0.001	ND	0.007		0.002	0.001	0.006	0.005	0	ND		0	0	ND	0.005	0		0.004				
Mercury	ND								ND				ND				ND							ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	
Nickel	0.11								ND				0.03				0.05							0.023	0.03				0.04		0.032								
Selenium	ND	<DL							ND				ND				ND							ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	
Silver	ND								ND				ND				0.01							ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	
Thallium	<DL								ND				ND				ND							ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	
Zinc	ND								0.003				0.02				0.02							ND	0.02					0.03		ND							
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																							
Alkalinity	102	190	167	176		168	204	194	112	143	86.4	224	169	173	124	125	213	166	155	211		204	80.0	160	104	139	169		190	227	177	160	182				192		
Biochemical Oxygen Demand	3								ND				ND				4							ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	
Boron	ND								ND				ND				ND							0.074		0.07				0.11		0.113							
Chemical Oxygen Demand	4.5	18	20	9		24.0	22.0	22.0	27.1	16.2	21.8	14.4	ND	21	14.4	ND	46.1	ND	ND	15.3		18.4	ND	ND	ND	ND	ND		17.4	ND	23.6	ND	15.8				23.6		
Chromium (Hexavalent)	ND								ND				ND				ND							ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	
Chloride	6.1	13	15	15		13.0	20.0	17.0	7.14	8.5	11	12.8	12.8	10.4	7.34	7.71	16.8	7.71	7.69	11.6		14	7.72	10.4	5.54	8.17	7.24		12.2	14.9	7.56	9.45	6.97				10.9		
Color (PCU units)	45								65.0				75				60							150	40				25		300								
Nitrate-Nitrite	0.1	<DL	<DL	ND		0.22	ND	ND	0.52	1.3	1.52	0.18	ND	0.63	ND	0.11	ND	ND	ND	ND		1.9	ND	ND	ND	1.47	ND		0.11	3.06	0.09	0.191	ND				0.289		
Nitrogen-Ammonia	1.5	<DL	<DL	0.3		1.5	3.1	7.4	2.93	3.5	3.07	3.55	3.61	2.87	1.21	2.44	3.74	2.76	2.93	3.02		2.61	2.24	2.59	2.31	2.18	3.06		1.86	3.11	2.25	2.63	2.48			2.82			
Phenols	0.003	<DL	ND	0.006		ND	ND	ND	0.009	0.026	0.010	0.023	0.001	0.006	0.003	0.015	0.012	0.006	0.021		0.035	0.012	0.012	0.006	0.01	0.01		0.01	0.03	0.01	0.0099	0.02				0.0199			
Sulfate	<DL	5.1	8	8		14.0	18.0	ND	16.0	15.0	45	7.6	15	11	9	14	15	17	8.3	12		40	16	13	8.5	25	10		13	11	7.9	25	11				14.7		
Total Organic Carbon (TOC)	3.7	8	8.1	6		9.0	7.0	16.0	6.0	11.4	5.2	7	8.5	11.5	3.6	4.8	8.8	4.1	4.4	6.6		9.1	4.3	4.2	6.0	4.5	5.8		5.7	9.5	4.6	4.5	5.1				6.9		
Total Dissolved Solids (TDS)	132	200	211	231		165	200	195	129	172	189	230	178	224	128	148	262	179	171	220		262	161	1700	150	185	179		206	247	207	200	224				240		
Total Hardness	48.5	137	124	160		110	133	164	111	144	142	168	186	198	164	123	261	109	112	154		174	110	126	106	124	139		154	190	150	163	146				195		
Total Kjeldahl Nitrogen (TKN)	1.8								2.14				4.17				5.91							2.89	2.54					3.83		5.31							
Turbidity (NTU units)	5	122	40.2	120		15.5	5.0	345	8.9	3.1	320	18	21	30	5.1	7.5	170	7	11	14		18	7	27	21	11	16		26	2.6	5.4	35	7			23			
Cyanide	<DL								ND				ND				ND							ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	



SEEP  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD		
<b>PARAMETER METALS (mg/L)</b>																																			
Aluminum			ND		ND		ND		0.44		ND	ND		ND		ND	0.32			0.19	ND	-	-	ND	ND	-	ND	ND	0.101	0.056	0.08				
Calcium	21.9	41.2	33.3	35.4	14.8	68	45.4	46.8	38.6	48.9	41.8	46.8	55	53.9	51.9	53.6	22.3	47.7	48	49	39	46.8	47	49.8	50.3	28.5	54.5	54.4	47.3	48.8	39.90				
Iron	79.6	10.8	7.87	12.1	3.1	17.1	14.1	47.1	9.4	1.8	11.4	8.7	14	24.3	15.7	18.2	6.2	10.6	15	25	12.1	7.69	14.1	13.8	20.7	0.14	15.7	10.1	13.4	9.27	17.19	0.3			
Magnesium	6.67	11.8	9.8	10.6	4.1	23.1	13.5	14.2	12.4	16.2	13.2	15.4	18.9	17.5	17	18	6.6	15.9	16	17	13.8	17.1	16.4	15.4	17	8.6	16.8	17.5	13.9	14.7	12.73	35.0			
Manganese	4.28	7.93	6.03	7.4	2	12.6	8.5	9.7	7.6	7.2	8.7	8.4	10.7	11.5	10.8	8.7	3.6	9.5	10	8.7	8.59	10.3	9.3	10.5	0.125	11	9.12	10.9	9.25	8.19	0.3				
Potassium	2.65	3.34	2.53	3.4	2	4.7	3.5	3.8	3	3.5	3.1	3.2	3.6	3.46	3.29	3.19	2.3	3.6	2.9	2.6	2.8	3.1	3.2	2.8	3.3	ND	ND	ND	5	4.39	3.03				
Sodium	3.89	5.93	4.99	5	2	10.5	6.2	6.4	5.4	7.2	6	6.8	8	6.6	5.8	7	2.8	7.1	5.5	ND	5.3	6.5	5	5.6	6.3	1.5	6.19	ND	6.59	6.04	6.27	20.0			
<b>PARAMETER (mg/l) TOXIC METALS</b>																																			
Antimony			ND		ND		ND		ND	ND	ND		ND		ND	ND				ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.003			
Arsenic			ND		0.02		0.01		0.06		ND	0.012		0.017			0.022	ND		ND	0.015	-	-	0.021	0.039	-	0.0177	0.0188	0.0164	0.02	0.01	0.025			
Barium			0.16		0.13		0.25		0.2		0.18	0.15		0.2			0.19	0.075			ND	0.157	-	-	0.185	0.21	-	ND	ND	0.15	0.182	0.11	1.0		
Beryllium			ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0003	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.00			
Cadmium			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00	0.005			
Chromium (Total)			ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001	-	-	0.001	0.002	-	ND	ND	0.0066	0.0036	0.00	0.05		
Copper			ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00	0.02			
Lead			0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002	ND	ND	ND	ND	ND	ND	ND	0.0015	ND	0.00	0.025		
Mercury			ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0033	0.00	0.0007			
Nickel			ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.004	-	-	0.004	0.004	-	ND	ND	0.0059	6E-05	0.01	0.1		
Selenium			ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.006	-	-	0.005	0.008	-	ND	ND	ND	ND	0.00	0.01			
Silver			ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	0.002	0.004	-	ND	ND	ND	ND	0.00	0.05		
Thallium			ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND	ND	-	0.0141	ND	ND	0.0042	0.00	0.0005		
Zinc			ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND	ND	-	ND	ND	ND	0.0028	0.00	2.0		
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																			
Alkalinity		85.7	180	150	132	46	261	178	174	172	232	128	245	245	181	207	218	144	228	210	210	ND	225	223	227	225	92.7	236	223	217	231	174.0			
Biochemical Oxygen Demand			4		4.4		2.8		ND		3.4	3.2		4.6			ND	ND		7	ND	6.8	-	-	7.9	5.1	ND	ND	ND	6.1	15.1	2.2			
Boron			0.06		0.07		0.11		0.08		0.07	0.067		0.072			0.059	0.044			ND	0.07	-	-	0.05	0.07	-	ND	ND	0.0687	0.0811	0.0	1.0		
Chemical Oxygen Demand		11.5	9	ND	17.1	11.4	16.2	23.3	23.4	ND	ND	13.8	10	ND	16.9	ND	ND	16.8	ND	62	24.4	11.2	6.7	ND	17.3	7.5	-	35.9	46.3	33	13.5				
Chromium (Hexavalent)			ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	ND	0.0099	-	0.0	0.05			
Chloride		3.26	7.9	5	4.8	1.5	15.9	6.5	8.8	5.6	8.9	4.8	7.4	8.1	7.02	6.4	7.28	4	6.6	6.41	5.59	4.6	6	4.9	3.8	6.3	ND	4.81	6.1	7.9	4.8	8.5	250.0		
Color (PCU units)			10		10		100		80		50	50		25			30	80			5	110	-	-	34	38	-	5	10	10	-	50.3	15.0		
Nitrate-Nitrite		0.21	ND	0.09	ND	0.19	ND	ND	ND	0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11	ND	0.2	10.0	
Nitrogen-Ammonia		1.47	2.8	2.3	1.4	0.76	3.4	1.9	1.6	2.1	1.9	2.4	2.3	2.71	2.68	1.96	1.9	0.92	3.5	2.84	1.98	2.61	2.68	2.32	2.65	2.98	ND	3.16	2.4	2.7	3.3	2.4	2.0		
Phenols		0.0052	0.002	ND	ND	0.02	ND	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0134	0.0089	ND	ND	0.0128	0.0094	0.0151	0.0172	0.0	0.001		
Sulfate		7.44	7.9	8.5	9.2	5.9	7	7.2	6.3	7.7	10.9	5.2	8	7.5	7.25	7.66	8.08	4.8	6.3	ND	5.8	7	5.2	5.8	5.5	22.6	5.44	8.3	3.9	5.2	10.5	250.0			
Total Organic Carbon (TOC)		2.8	6.9	3	3	2.6	8	3.9	6.2	4.2	3.9	4.6	4.9	5.2	3.6	2.9	4.1	4.8	4.5	ND	3.9	4.4	4.7	5	4.5	6.3	2.1	3.95	7.9	6.3	5.9	5.6			
Total Dissolved Solids (TDS)		126	208	180	194	67	331	208	129	191	215	195	235	271	246	256	257	94	211	230	290	220	227	250	236	232	128	263	238	213	237	227.9	500.0		
Total Hardness		82.2	151	123	132	53.8	265	169	175	147	189	159	180	220	210	200	210	82.9	184	190	190	154	187	185	188	196	107	220	240	180	250	159.8			
Total Kjeldahl Nitrogen (TKN)			3.6		2.8		4.2		2		3.3	2.8		3.11			2.57	1.4			2.52	2.9	3.04	-	-	2.78	3.23	-	3.02	2.2	3.3	3.9	2.4		
Turbidity (NTU units)		4.7	15	10	25.9	7.6	21	26.3	156	9.7	8.2	3.6	4.5	10	31	3	1	4	5.7	0.1	26.5	0.9	14	0	4.2	19.2	2.2	1.9	8.9	3.5	28.5	31.5	5.0		
Cyanide			ND		ND		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	ND	ND	-	ND	ND	-	0.0	0.2			

(Shade) = Analyte reported at or above New York State standards (amended March and June 1998). These standards were used beginning with the 9/98 sampling event. Exceedances noted prior to this event reflect prior standards.  
 \* = Applies to the sum of cis and trans-1,3-dichloropropene.  
 \*\* = Guidance Value.  
 ND values are included in calculation of Mean and are considered equal to zero.  
 (Blank) or "-" = Not Analyzed.  
 ND = Not Detected.  
 J = Estimated.  
 B = Analyte was detected in method blank.  
 <DL = Detected below method detection limit.

STREAM  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

PARAMETER VOLATILES (ug/L)	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02			
Acetone																																						
Acrylonitrile																																						
Benzene	<DL	ND	<DL			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Bromobenzene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Bromochloromethane	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Bromodichloromethane	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Bromoform	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Bromomethane	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
2-Butanone																																						
n-Butylbenzene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
sec-Butylbenzene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
tert-Butylbenzene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Carbon disulfide																																						
Carbon tetrachloride	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Chlorobenzene	ND	ND	<DL			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Chloroethane	ND	ND	<DL			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Chloroform	ND	ND	<DL			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Chloromethane	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
2-Chlorotoluene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
4-Chlorotoluene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Dibromochloromethane	ND	ND	ND			ND	ND		ND		ND																											
1,2-Dibromo-3-chloropropane	ND	ND	ND			ND	ND		ND		ND																											
1,2-Dibromoethane	ND	ND	ND			ND	ND		ND		ND																											
Dibromomethane	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
1,2-Dichlorobenzene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
1,3-Dichlorobenzene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
1,4-Dichlorobenzene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
trans-1,4-Dichloro-2-butene																																						
Dichlorodifluoromethane	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
1,1-Dichloroethane	ND	0.45	0.54			ND	ND		ND		1.0				ND					ND				ND	ND	ND	ND		ND	ND	ND							
1,2-Dichloroethane	ND	ND	<DL			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
1,1-Dichloroethene	ND	ND	<DL			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
cis-1,2-Dichloroethene	ND	0.68	1.63			ND	ND		ND		1.0				ND					ND				ND	ND	ND	ND		ND	ND	ND							
trans-1,2-Dichloroethene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
1,2-Dichloropropane	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
1,3-Dichloropropane	ND	ND	0.10			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
2,2-Dichloropropane	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
1,1-Dichloropropene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
cis-1,3-Dichloropropene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
trans-1,3-Dichloropropene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Ethylbenzene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
2-Hexanone																																						
Hexachlorobutadiene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Iodomethane																																						
Isopropylbenzene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
p-Isopropyltoluene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Methylene chloride	3.62	ND	<DL			1.0	3.0		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
4-Methyl-2-pentanone																																						
Naphthalene	ND	ND	<DL			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
n-Propylbenzene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Styrene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
1,1,1,2-Tetrachloroethane	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
1,1,2,2-Tetrachloroethane	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Tetrachloroethene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
Toluene	ND	ND	<DL			ND	ND		ND		1.0				ND					ND				ND	ND	ND	ND		ND	ND	ND							
1,2,3-Trichlorobenzene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
1,2,4-Trichlorobenzene	ND	ND	ND			ND	ND		ND		ND				ND					ND				ND	ND	ND	ND		ND	ND	ND							
1,1,1-Trichloroethane	ND	ND	<DL			ND	ND		ND		ND				ND					ND				ND														

STREAM  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02				
<b>PARAMETER METALS (mg/L)</b>																																							
Aluminum	ND								31.1																	0.15					0.12	17.4	ND						
Calcium	6.1	13.4	21.7			14.4	13.5		28.8	14.2	ND			19.9	9.94	26.6		20	18.3					16.3		14.6	13.6	21.5		13.4	25.1	17.4	33.4	22.3		17.3			
Iron	0.06	0.8	2.4			0.07	ND		51	0.54	71			0.03	0.2	0.79		2.03	0.15					0.05		0.19	0.44	0.32		0.29	0.65	0.14	0.67	0.89		0.15			
Magnesium	2	2.7	6.8			3.7	3.9		11.6	3.79	132			5.8	2.64	7.07		5.83	5.04					4.26		3.98	3.02	6.02		3.43	6.52	4.65	9.26	6.8		4.78			
Manganese	0.26	0.33	2			ND	0.01		23.2	0.72	31.5			0.35	0.06	0.25		0.94	0.28					0.01		0.05	0.06	0.83		0.1	1.11	0.08	0.95	0.59		0.02			
Potassium	1.1	0.9	1.7			1.6	1.5		5.45	1.71	5.86			1.59	1.26	1.43		1.85	1.47					1.47		1.26	1.71	1.71		1.41	1.86	1.5	2.21	1.64		1.26			
Sodium	ND	1.5	5.4			2.9	2.6		5.5	1.94	4.83			2.62	1.14	4.04		3.6	2.78					2.15		1.93	0.97	2.95		1.31	2.98	1.99	5.2	3.37		2.39			
<b>PARAMETER (mg/l) TOXIC METALS</b>																																							
Antimony	ND								0.03																	ND					ND		ND						
Arsenic	<DL								0.024																							ND		ND					
Barium	ND								0.37																						0.03		0.04						
Beryllium	ND								0																														
Cadmium	ND	ND	ND			ND	ND		ND	ND	ND			ND	ND	ND		ND	ND					ND		ND	ND		ND			ND							
Chromium (Total)	ND								0.04																														
Copper	ND								ND																														
Lead	ND	<DL	<DL			ND	0.040		0.018	ND	0.007			0.002	ND	0.002		0.006	ND					ND		0.002	ND	ND		ND	0	ND	0.01	0			ND		
Mercury	ND								ND																														
Nickel	0.15								0.097																														
Selenium	ND	ND				ND			ND																														
Silver	ND								ND																														
Thallium	<DL								ND																														
Zinc	ND								0.13																														
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																							
Alkalinity	64	57	85			28	38		106	44.3	97.6			55	30.2	96.3		63.6	63.9					39.8		44.9	31.9	93		24.6	157	50.7	117	70		49.3			
Biochemical Oxygen Demand	4								ND																														
Boron	ND								0.07																														
Chemical Oxygen Demand	10.1	11	11.4			ND	ND		46	ND	8.7			ND	ND	ND		ND	ND					ND		ND	34.6	ND		10.6	ND	ND	10.7	ND			ND		
Chromium (Hexavalent)	ND								ND																														
Chloride	ND								ND																														
Color (PCU units)	19								50																														
Nitrate-Nitrite	0.3	<DL	<DL			ND	0.19		1.8	0.13	0.72			0.52	0.13	0.1		2.28	0.31					0.500		0.442	ND	0.41		1.86	ND	0.25	0.86	0.58			0.34		
Nitrogen-Ammonia	<DL	<DL	<DL			0.2	0.1		0.04	0.54	1.02			0.54	0.15	0.53		0.32	0.32					0.06		0.1	0.03	0.51		ND	0.13	0.12	ND	0.3			0.29		
Phenols	0.001	ND	<DL			ND	ND		ND	ND	ND			ND	0.007	0.006		ND	ND					ND		0.005	0.02	ND		ND	ND	ND	ND	ND	ND			ND	
Sulfate	22.1	5.2	16.2			40	15.0		13	15	23			19	8	13		68	7.1					13		14	16	8.1		21	30	18	23	13			14.8		
Total Organic Carbon (TOC)	5.6	5	4			3	2.0		8.9	5.1	4.6			4	3.8	5.2		3.4	3.0					3.9		2.9	2.4	3.6		3.8	4.3	2.9	4.9	3			3.2		
Total Dissolved Solids (TDS)	110	254	144			110	89.0		76	48	128			123	24	126		140	82					86		58	100	110		81	103	87	151	118			96		
Total Hardness	23	44.6	82			51	51.0		101	55	127			116	64	112		73.9	66.4					58.2		52.8	46.4	78.5		47.6	89.5	62.6	122	83.7			62.9		
Total Kjeldahl Nitrogen (TKN)	0.4								1.5																		1.55												
Turbidity (NTU units)	<DL	18	9			0.4	1.0		340	7.9	175			5	2.6	0.52		12	2.8					1		0.56	3.4	4.3		5.5	0.59	0.81	2.7	2.3			0.38		
Cyanide	0.013								ND																														



STREAM  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
OLEAN, NEW YORK

	09/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD		
<b>PARAMETER METALS (mg/L)</b>																																			
Aluminum					ND		ND		2.3		1	0.48		0.439				1.3			0.31	1.64	-	-	0.15	0.15	-	0.398	ND	0.533	0.233	1.44			
Calcium	8.01			21.2	29.6	7.5	29.9	22.8	25.2	17.1	21.2	1.8	34.5	40.4	43.1	35.9		10.7	22.1	36	42	34	29.4	33	24.2	25.8	27.9	41.3	33.7	19.3	32.4	22.90			
Iron	0.46			0.74	0.05	0.66	0.06	0.18	2.5	1.2	1	0.42	0.06	0.405	0.407	0.787		1	0.22	0.52	0.47	1.74	0.24	0.18	0.28	0.47	ND	0.524	ND	0.963	0.319	2.92	0.3		
Magnesium	2.12			5.68	8	1.8	8.6	6.2	7.5	4.7	5.7	5.2	10.3	12	13.1	11.4		2.7	6.6	12	12	11.1	9.7	11.1	6.9	7.5	8.8	10.3	9.52	5.46	9.45	9.24	35		
Manganese	0.04			0.45	0.33	0.13	0.08	0.05	0.54	0.34	0.15	0.06	0.03	0.116	0.222	0.506		0.1	0.075	0.27	0.13	0.497	0.111	0.101	0.108	0.192	0.012	0.554	ND	0.198	0.0819	1.36	0.3		
Potassium	1.86			1.51	2.4	1.4	2	1.7	2.2	1.4	2.1	1.6	1.8	2.55	2.38	2.58		1.4	1.6	2	1.7	2.2	ND	ND	1.5	1.8	ND	ND	1.9	2.47	1.72				
Sodium	1.36			2.01	3.4	ND	5.2	2.5	3	1.6	2.3	1.8	5	6	5	4.3		ND	1.9	4.6	ND	4.2	3.2	3.2	1.6	1.7	3	ND	ND	3.18	3.52	2.70	20.0		
<b>PARAMETER (mg/l) TOXIC METALS</b>																																			
Antimony					ND		ND		ND		ND	ND		ND				ND			ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.003		
Arsenic					ND		ND		ND		ND	ND		ND				ND			ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.025		
Barium					ND		0.02		0.02		0.019	0.01		0.027				0.012			ND	0.027	-	-	0.01	0.011	-	ND	ND	0.011	0.0153	0.02	1.0		
Beryllium					ND		ND		ND		ND	ND		ND				ND			ND	4E-04	-	-	ND	ND	-	ND	ND	ND	ND	0.00			
Cadmium				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	0.00	0.005														
Chromium (Total)					ND		ND		ND		ND	ND		ND				ND			ND	0.001	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.05		
Copper					ND		ND		ND		ND	ND		ND				ND			ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.2		
Lead				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	0.001	ND	0.002	ND	0.0014	0.00	0.025									
Mercury					ND		ND		ND		ND	ND		ND				ND			ND	ND	-	-	ND	ND	-	ND	ND	7E-05	0.00	0.0007			
Nickel					ND		ND		ND		ND	ND		ND				ND			ND	ND	-	-	ND	ND	-	ND	ND	0.001	ND	0.01	0.1		
Selenium					ND		ND		ND		ND	ND		ND				ND			ND	ND	-	-	ND	0.003	-	ND	ND	ND	ND	0.00	0.01		
Silver					ND		ND		ND		ND	ND		ND				ND			ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.05		
Thallium					ND		ND		ND		ND	ND		ND				ND			ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0.00	0.0005		
Zinc					ND		ND		ND		ND	ND		ND				ND			ND	0.005	-	-	ND	ND	-	ND	ND	0.001	0.0027	0.00	2.0		
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																			
Alkalinity		21.2		65	111	12.2	85.1	69.2	55.1	48.3	67.8	59	132	160	172	145		40.7	71.5	130	150	144	114	141	86.8	90.9	100	136	96	60.2	134	82.5			
Biochemical Oxygen Demand					ND		ND		ND		ND	ND		ND				ND			ND	6	ND	-	-	ND	ND	ND	ND	ND	1.2	1	0.4		
Boron					ND		0.06		ND		0.035	ND		0.069				ND			ND	0.07	-	-	ND	0.04	-	ND	ND	0.018	0.0412	0.0	1.0		
Chemical Oxygen Demand		ND		9	ND	ND	ND	ND	ND	15.4	ND	ND	ND	ND	ND	12.6		14.6	16.5	ND	ND	9.5	8.1	14.3	9	28.6	11.3	-	ND	23.4	14	6.5			
Chromium (Hexavalent)					ND		ND		ND		ND	ND		ND				ND			ND	ND	-	-	ND	ND	-	ND	0.007	-	0.0	0.05			
Chloride		ND		1.9	3.2	ND	10.7	2.3	3.3	1.1	2	1.5	7.6	4.7	6.24	4.38		ND	1.3	2.61	4.26	2.8	3.8	2.5	ND	ND	2.9	2.47	ND	2.7	3.3	2.8	250		
Color (PCU units)					5		10		25		30	20		ND				80			5	12	-	-	34	105	-	15	10	15	-	20.7	15.0		
Nitrate-Nitrite		0.22		0.58	0.17	0.21	ND	0.17	0.26		0.23	0.24	ND	0.107				ND	ND	0.228	0.098	ND	ND	ND	ND	ND	0.23	ND	0.28	0.2	0.3	10.0			
Nitrogen-Ammonia		ND		0.1	ND	0.13	ND	ND	ND	0.13	ND	0.12	ND	ND	ND	0.28		ND	0.051	ND	ND	ND	0.1	0.084	0.1	2.0									
Phenols		ND		0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	0.007	ND	0.006	0.009	0.002	0.006	0.0	0.001									
Sulfate		6.41		15	8.8	3.8	20	12.8	9.1	8.6	17.6	8.3	5.6	4.9	4.65	8.21		4.5	10.1	ND	ND	5.2	11.6	7.4	7.5	5.5	10.1	6.65	41.2	5.9	8.7	13.6	250		
Total Organic Carbon (TOC)		2.3		2.8	2.3	2.6	2.7	2.6	2.7	3.6	3.2	2.7	3.4	3.1	1.9	1.4		6.1	2.4	ND	4	3.5	3.6	3	6.1	10.3	3	3.32	4	ND	4.9	3.6			
Total Dissolved Solids (TDS)		62		115	160	41	167	108	72	164	104	90	195	168	166	144		43	80	160	170	154	134	152	112	120	128	150	148	98	148	117.6	500		
Total Hardness		28.7		76	ND	26.1	110	82.4	93.8	62	76.4	66.3	ND	150	160	140		37.7	82.2	140	150	131	114	128	88.7	95.3	106	104	140	60	116	83.1			
Total Kjeldahl Nitrogen (TKN)					ND		ND		ND		ND	ND		ND				ND			ND	ND	-	-	0.49	0.86	-	0.17	0.18	0.48	0.15	0.3			
Turbidity (NTU units)		8.8		15	2	41.7	1.3	9.2	23	17.1	7.5	3	3.9	21	0	6		9	4.3	10.2	6.9	38.4	1.7	0	7	-	0.76	17.2	2	13.6	46	17.9	5.0		
Cyanide					ND		ND		ND		ND	ND		0.027				ND			ND	ND	-	-	ND	ND	-	ND	ND	-	0.0	0.2			

(Shade) = Analyte reported at or above New York State standards (amended March and June 1998). These standards were used beginning with the 9/98 sampling event. Exceedances noted prior to this event reflect prior standards.  
 \* = Applies to the sum of cis and trans-1,3-dichloropropene.  
 \*\* = Guidance Value.  
 ND values are included in calculation of Mean and are considered equal to zero.  
 (Blank) or "-" = Not Analyzed.  
 ND = Not Detected.  
 <DL = Detected below method detection limit.  
 J = Estimated.  
 B = Analyte was detected in method blank.

DUPLICATE  
HISTORICAL ANALYTICAL RESULTS  
ISCHUA LANDFILL  
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PARAMETER VOLATILES (ug/L)	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02			
Acetone																																						
Acrylonitrile																																						
Benzene																																						
Bromobenzene																																						
Bromochloromethane																																						
Bromodichloromethane																																						
Bromofom																																						
Bromomethane																																						
2-Butanone																																						
n-Butylbenzene																																						
sec-Butylbenzene																																						
tert-Butylbenzene																																						
Carbon disulfide																																						
Carbon tetrachloride																																						
Chlorobenzene																																						
Chloroethane																																						
Chloroform																																						
Chloromethane																																						
2-Chlorotoluene																																						
4-Chlorotoluene																																						
Dibromochloromethane																																						
1,2-Dibromo-3-chloropropane																																						
1,2-Dibromoethane																																						
Dibromomethane																																						
1,2-Dichlorobenzene																																						
1,3-Dichlorobenzene																																						
1,4-Dichlorobenzene																																						
trans-1,4-Dichloro-2-butene																																						
Dichlorodifluoromethane																																						
1,1-Dichloroethane																																						
1,2-Dichloroethane																																						
1,1-Dichloroethene																																						
cis-1,2-Dichloroethene																																						
trans-1,2-Dichloroethene																																						
1,2-Dichloropropane																																						
1,3-Dichloropropane																																						
2,2-Dichloropropane																																						
1,1-Dichloropropene																																						
cis-1,3-Dichloropropene																																						
trans-1,3-Dichloropropene																																						
Ethylbenzene																																						
2-Hexanone																																						
Hexachlorobutadiene																																						
Iodomethane																																						
Isopropylbenzene																																						
p-Isopropyltoluene																																						
Methylene chloride																																						
4-Methyl-2-pentanone																																						
Naphthalene																																						
n-Propylbenzene																																						
Styrene																																						
1,1,1,2-Tetrachloroethane																																						
1,1,2,2-Tetrachloroethane																																						
Tetrachloroethene																																						
Toluene																																						
1,2,3-Trichlorobenzene																																						
1,2,4-Trichlorobenzene																																						
1,1,1-Trichloroethane																																						
1,1,2-Trichloroethane																																						
Trichloroethene																																						
Trichlorofluoromethane																																						
1,2,3-Trichloropropane																																						
1,2,4-Trimethylbenzene																																						
1,3,5-Trimethylbenzene																																						
Vinyl acetate																																						
Vinyl chloride																																						
o-Xylene																																						
p-Xylene & m-Xylene																																						

DUPLICATE  
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	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92	9/92	12/92	3/93	6/93	9/93	12/93	3/94	6/94	9/94	12/94	3/95	6/95	9/95	12/95	4/96	9/96	3/97	9/97	3/98	9/98	3/99	9/99	3/00	9/00	3/01	9/01	3/02			
<b>PARAMETER (mg/L)</b>																																						
Aluminum																																						
Calcium																																						
Iron																																						
Magnesium																																						
Manganese																																						
Potassium																																						
Sodium																																						
<b>PARAMETER (mg/l) TOXIC METALS</b>																																						
Antimony																																						
Arsenic																																						
Barium																																						
Beryllium																																						
Cadmium																																						
Chromium (Total)																																						
Copper																																						
Lead																																						
Mercury																																						
Nickel																																						
Selenium																																						
Silver																																						
Thallium																																						
Zinc																																						
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																						
Alkalinity																																						
Biochemical Oxygen Demand																																						
Boron																																						
Chemical Oxygen Demand																																						
Chromium (Hexavalent)																																						
Chloride																																						
Color (PCU units)																																						
Nitrate-Nitrite																																						
Nitrogen-Ammonia																																						
Phenols																																						
Sulfate																																						
Total Organic Carbon (TOC)																																						
Total Dissolved Solids (TDS)																																						
Total Hardness																																						
Total Kjeldahl Nitrogen (TKN)																																						
Turbidity (NTU units)																																						
Cyanide																																						



DUPLICATE  
HISTORICAL ANALYTICAL RESULTS  
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	9/02	3/03	9/03	3/04	9/04	3/05	9/05	3/06	11/06	4/07	10/07	4/08	10/08	4/09	9/09	4/10	9/10	5/11	10/11	5/12	10/12	6/13	10/13	6/14	10/14	6/15	11/15	5/16	10/16	3/17	10/17	MEAN	NYS STD		
<b>PARAMETER METALS (mg/L)</b>																																			
Aluminum							ND	ND		ND	ND			ND		ND	ND			ND	0.008	0	-	ND	ND	-	ND	ND	ND	0.147	0.0086				
Calcium							122	22.4	55.2	39	49.3	112	128	65	68.7	66.6	89.5	80.3	73.4	34	86	67.2	80	122	118	74.2	28.1	70.8	94.3	71.7	32.9	74.024			
Iron							15.9	0.53	0.096	9.6	2.3	22.7	32.1	0.241	0.202	0.383	5.31	5.8	0.65	0.88	6	1.79	5.7	10.3	15.1	1.29	ND	0.311	3.04	0.066	0.204	5.6197	0.3		
Magnesium							23.4	5.9	17.1	12.5	16.4	22.8	26.2	20.4	21.6	21.2	13.2	12	23.7	11	13	23.2	12.7	24.1	25.5	23.7	8.8	20.2	13.8	22.3	9.62	17.773	35.0		
Manganese							12.8	0.065	0.14	7.6	7.3	12.6	13.2	4.82	2.27	3.03	8.24	7.2	7	0.35	9.2	9.08	8.08	11.2	9.62	7.32	0.014	3.69	7.2	2.04	0.0492	6.1643	0.3		
Potassium							7.7	1.8	2.3	3.1	3.6	6.7	8	1.83	2.04	2.08	2.9	2.2	2.3	1.8	2.7	2.2	2.8	4.1	4.7	2.3	ND	ND	ND	2.74	2.48	2.8948			
Sodium							21.2	2.7	15.5	5.7	7.5	16.5	21.2	9.6	9.5	9.2	10.5	6.5	9.6	4.2	ND	8.5	7.4	12.4	14.4	9.1	3	9.92	11.6	7.32	3.6	9.4656	20.0		
<b>PARAMETER (mg/l) TOXIC METALS</b>																																			
Antimony							ND	ND		ND	ND			ND		ND	ND				ND	ND	-	-	ND	ND	-	ND	ND	ND	ND	0	0.003		
Arsenic							ND	ND		ND	ND			ND		0.017	0.023				ND	0.005	-	-	0.014	0.005	-	ND	0.0163	ND	ND	0.0045	0.025		
Barium							0.48	0.011	0.07		0.18	0.54	0.64	0.0892	0.0543		0.18	0.15			ND	0.091	-	-	0.283	0.072	-	ND	ND	0.0518	0.0147	0.1384	1.0		
Beryllium							ND	ND		ND	ND			ND		ND	ND				ND	0.0002	-	-	ND	ND	-	ND	ND	ND	ND	1E-05			
Cadmium							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	0.005	
Chromium (Total)							ND	ND	ND	ND	0.0055	0.0059	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	0.001	ND	-	ND	ND	ND	ND	0.0006	0.05		
Copper							ND	ND	ND		ND	ND			ND		ND	ND				ND	ND	-	-	0.02	ND	-	ND	ND	ND	0.0011	0.2		
Lead							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001	ND	0.001	ND	ND	0.003	0.002	ND	0.0043	ND	ND	0.0005	0.025		
Mercury							ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				ND	ND	-	-	ND	ND	-	ND	ND	7E-05	3E-06	0.0007		
Nickel							ND	ND	ND		ND	ND			ND		ND					ND	0.005	-	-	0.005	0.005	-	ND	ND	0.0036	ND	0.0011	0.1	
Selenium							ND	ND	ND		ND	ND	ND	ND	ND	ND	ND					ND	0.005	-	-	0.006	0.006	-	ND	ND	ND	0.0009	0.0		
Silver							ND	ND	ND		ND	ND	ND	ND	ND	ND	ND					ND	ND	-	-	0.001	0.001	-	ND	ND	ND	0.0001	0.05		
Thallium							ND	ND	ND		ND	ND			ND		ND					ND	ND	-	-	ND	ND	-	ND	ND	ND	0	0.0005		
Zinc							ND	ND	ND		ND	ND			ND		0.0466					0.063	0.004	-	-	0.011	ND	-	ND	ND	0.0021	0.0089	2.0		
<b>PARAMETER (mg/l) LEACHATE INDICATORS</b>																																			
Alkalinity							468	67.3	151	106	208	520	498	267	254	310	263	287	293	130	280	315	290	462	480	300	102	268	293	299	120	281.25			
Biochemical Oxygen Demand							6	ND	ND		3.2	7.4		ND	ND	ND	ND	ND			ND	ND	4	-	-	14.2	3	ND	ND	ND	1	1	2.0947		
Boron							0.2	ND	ND		0.074	0.17		0.0417		0.0534	0.052				ND	0.07	-	-	0.11	0.06	-	ND	ND	0.0457	0.0411	0.051	1.0		
Chemical Oxygen Demand							67.1	ND	27.3	ND	ND	43.7	48.1	ND	ND		ND	ND	14	ND	24	10.7	14.2	29.8	12.1	12.8	9.7	-	15.1	13	14	14.817			
Chromium (Hexavalent)							ND	ND	ND		ND	ND			ND		ND	ND				ND	ND	-	-	ND	ND	-	ND	ND	-	0	0.005		
Chloride							39.4	2.3	1.7	5.6	8.9	17	29.1	12	12.6	11.1	23.4	4.1	11.1	2.87	12	9.1	7.5	8.8	12.6	10.2	2.9	8.83	18.6	12.4	3.2	11.492	250.0		
Color (PCU units)							140	100	ND		60	100		15		0	17.5				5	34	-	-	380	19	-	5	10	10	-	44.194	15.0		
Nitrate-Nitrite							ND	0.16	ND	0.085	ND	ND	0.3	ND	ND		ND	ND	2.7	0.224	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0064	0.21	0.1536	10.0		
Nitrogen-Ammonia							18	0.23	ND	1.9	1.9	9.8	9.8	0.886	0.245	0.245	0.75	0.78	0.43	ND	1.56	0.795	1.35	3.02	8.9	0.674	ND	0.44	1.1	0.19	0.055	2.522	2.0		
Phenols							ND	ND	0.016	ND	ND	0.0092	0.054	0.0247	ND	ND	ND	ND	ND	ND	ND	ND	0.0174	0.03	0.0527	ND	ND	0.0125	0.0115	ND	0.0025	0.0092	0.001		
Sulfate							ND	12.8	47.9	7.2	10.9	ND	ND	6.5	7.19	6.83	7.64	8.4	6.4	ND	ND	5.3	4.2	2.6	ND	5.4	10.6	5.78	9.6	6.6	8.6	7.2176	250.0		
Total Organic Carbon (TOC)							14.6	2.6	ND	4.2	3.9	13.6	18.4	2.7	2	1.3	4.7	2.6	2.3	ND	ND	4.2	7.3	10.1	14.8	3.1	2.9	1.75	4.9	ND	4.7	5.066			
Total Dissolved Solids (TDS)							536	111	436	179	237	446	515	299	296	289	326	278	303	130	350	340	312	494	483	316	115	301	319	287	147	313.8	500.0		
Total Hardness							401	80.2	208	149	191	374	427	250	260	250	280	250	281	130	270	263	252	404	400	283	106	240	310	248	120	257.09			
Total Kjeldahl Nitrogen (TKN)							19.8		ND		2.7	ND	ND	ND	ND		1.31	1.3				ND	1.13	1.25	-	-	9.53	0.86	-	0.4	1.3	0.32	0.2	2.1105	
Turbidity (NTU units)							22.5	7.4	ND	9.2	9											0	0.3	-	-	7.1	ND	-	0.8	0.8	-	-	3.5688	5.0	
Cyanide							ND	ND	ND		ND	ND			ND		ND	ND				ND	ND	-	-	ND	ND	-	ND	ND	-	0	0.2		

(Shade) = Analyte reported at or above New York State standards (amended March and June 1998). These standards were used beginning with the 9/98 sampling event. Exceedances noted prior to this event reflect prior standards.

\* = Applies to the sum of cis and trans-1,3-dichloropropene.

\*\* = Guidance Value.

ND values are included in calculation of Mean and are considered equal to zero.

(Blank) or "-" = Not Analyzed.

ND = Not Detected.

<DL = Detected below method detection limit.

J = Estimated.

B = Analyte was detected in method blank.