## P.W. GROSSER CONSULTING



July 19, 2013

Ms. Cynthia Whitfield, P.E. New York State Department of Environmental Conservation Division of Environmental Remediation 625 Broadway, 11<sup>th</sup> Floor, Cell 083 Albany, NY 12233

## RE: North Sea Landfill, Southampton, New York 1<sup>st</sup> - Semi-Annual Post-Closure Groundwater Monitoring Report 2013

Dear Ms. Whitfield:

On behalf of the Town of Southampton, P.W. Grosser Consulting, Inc has enclosed the Semi-Annual Post-Closure Groundwater Monitoring Report that documents our findings at the North Sea Landfill for the first half of 2013. If you have any questions or comments, please do not hesitate to contact me.

Very truly yours,

P.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST, PC

Derek Ersbak Project Manager

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encl.

cc: A. Wiedemer, EPA C. Fetten, TOS R. Ockerby, NYSDOH

w/o encl.

cc: C. Nuzzi, Councilman C. McKenzie, B&D

JUL 2 2 2013



## NORTH SEA LANDFILL 1370 MAJORS PATH SOUTHAMPTON, NEW YORK

## 1<sup>st</sup> - Semi-Annual Post-Closure Groundwater Monitoring Report 2013

#### Submitted To:



New York State Department of Environmental Conservation Division of Environmental Remediation 625 Broadway, 11<sup>th</sup> Floor, Cell 083 Albany, New York 12233

**Prepared For:** 



Town of Southampton 1370 Majors Path Southampton, New York 11968

Prepared By:



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PWGC Project Number: SHP1301





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### 1.0 INTRODUCTION

#### 1.1 Purpose and Scope

P.W. Grosser Consulting Inc. (PWGC) has prepared the following post-closure groundwater monitoring report for the North Sea Landfill, Southampton, NY. This report is intended to satisfy NYSDEC requirements for post-closure monitoring at the North Sea Landfill. The landfill is currently in post-closure and was removed from the United States Environmental Protection Agency (USEPA) Superfund National Priorities List (NPL) in 2005. The report provides a summary of the groundwater monitoring and results of groundwater and leachate samples collected during the first half of 2013.

#### 1.2 Site Location and Description

North Sea Landfill (the Landfill) was initially constructed in 1963 for the disposal of solid waste, refuse and septic system waste. The Landfill consisted of three cells (Cell No. 1, Cell No. 2 and Cell No. 3), sludge lagoons, a leachate collection system and a gas monitoring system. Cell No. 1 is an inactive, unlined landfill that has been capped and closed. Cell No. 2 is an inactive, lined landfill with a leachate collection system that was capped and closed in 1990. Cell No. 3 is a 6.6 acre, inactive, lined landfill with a leachate collection system that was capped and closed in 1997. The sludge lagoons were decommissioned in 1986.



## 2.0 GROUNDWATER MONITORING PLAN

Groundwater monitoring and sampling is performed in accordance with the USEPA approved Operation and Maintenance (O&M) Manual dated November 1994.

The groundwater monitoring plan for the site calls for the monitoring of both leachate and groundwater to confirm that the historic operation of the facility has not adversely impacted groundwater quality. The groundwater well network currently utilized for monitoring purposes at the North Sea Landfill consists of 20 groundwater monitoring wells that were installed as a part of the Remedial Investigation / Feasibility Study, the Cell No. 3 landfill expansion hydrogeologic investigation, and earlier monitoring activities.

#### 2.1 Sampling Frequency

In accordance with the O&M Manual, groundwater monitoring well sampling was performed on a quarterly basis. In 2005, the USEPA and NYSDEC approved reduction of number of wells sampled and sampling frequency to semi-annual as detailed in the table below:

1 <sup>st</sup> Half Semi-Annual Sa	mpling (April)	2 <sup>nd</sup> Half Semi-Annual San	npling (October)
Analysis	Sample Locations	Analysis	Sample Locations
Baseline Parameters	1A, 1B, 1C, 3A, 3B,	Routine Parameters	1A, 1B, 1C, 3A, 3B,
(6 NYCRR Part 360-2.11 (d)(6)	3C, 4A, 4B, 4C, 11A,	(6 NYCRR Part 360-2.11 (d)(6)	3C, 4A, 4B, 4C, 6AR,
	11B, 12A, & 12C		6B, 8, 9, 11A, 11B,
			12A, 12B
		Baseline Parameters	6AR, 6B, 11A, & 11B
		(6 NYCRR Part 360-2.11 (d)(6)	
		Metals Only	
Routine Parameters + Arsenic	LEA-Primary &	Baseline Parameters	11A & 11B
(6 NYCRR Part 360-2.11 (d)(6)	LEA-Secondary	(6 NYCRR Part 360-2.11 (d)(6)	
Minus VOC Analysis		VOCs Only	
		Routine Parameters + Arsenic	LEA-Primary &
		(6 NYCRR Part 360-2.11 (d)(6)	LEA-Secondary
		Minus VOC Analysis	

Note: Filtered metals analysis run on samples with turbidity in excess of 50 NTUs.

Appendix D includes list of analytes for 6 NYCRR Part 360-2.11 (d) (6)

### 2.2 Leachate Monitoring

The objectives of the leachate monitoring program are to adequately characterize and monitor the composition of:

- 1. Leachate in the primary leachate collection systems;
- 2. Liquids detected in the secondary liquids collection systems, prior to off-site treatment and disposal.

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The Town of Southampton monitors the leachate storage system and submits monthly status reports, which includes the monthly summary tables of leachate volumes consisting of the amount of leachate trucked, storage tank levels and the volume of leachate removed from the storage tank. Leachate quantity removals and allowable leakage rate (ALR) calculations will be discussed in the Annual Report.

### 2.3 Groundwater Monitoring

The groundwater monitoring well network for the landfill consists of nine groundwater monitoring locations (MW-1, MW-3, MW-4, MW-6, MW-7, MW-8, MW-9, MW-11, and MW-12) which are currently in use. Several of these locations are constructed with multiple wells which are screened at varying depths throughout the aquifer (A=shallow, B=intermediate, C=deep).

Thirteen groundwater monitoring wells, as well as the primary and secondary leachate collection systems were sampled on April 15 and 16, 2013 as part of the First Half 2013 sampling event. Samples collected as part of the First Half 2013 sampling event were delivered to H2M Labs, Inc. of Melville, New York and analyzed for the baseline parameters. Turbid groundwater samples were also analyzed for filtered metals. The data collected in the field and laboratory are summarized on **Tables 1** through **4** and the laboratory reports are attached in Appendix A. Depth to water and groundwater elevation data are summarized on Table 4 and a water table flow map is shown on **Figure 1**.

Analytical results from each monitoring well were compared to applicable standards and guidance values, as well as analytical results from the previous year. Compounds that exceed current NYSDEC groundwater standards or guidance values are indicated by shading on **Tables 1** through **3** and are discussed in the water quality section of this report.

#### 2.4 Well Condition Report

During the First Half 2013 sampling event, PWGC conducted an assessment of the monitoring wells. Well assessment checklists (**Appendix B**) were filled out appropriately in the field during the sampling event. The assessment checklist included well headspace readings, well conditions, and recommendations. Headspace readings were collected utilizing a photoionization detector (PID). No PID responses were observed. No deficiencies with the well conditions were noted.

#### 2.5 Sample Collection Procedures

Prior to collection of each sample, a minimum of three casing volumes were evacuated (purged) from the well using a Grundfos, or equivalent, submersible pump and temperature, specific conductivity, pH, dissolved oxygen and turbidity measurements were collected and recorded. Groundwater sampling logs are included in **Appendix C**. Groundwater samples were collected using disposable polyethylene bailers and a dedicated polyethylene bailers.



Additional sample volume was collected from groundwater monitoring wells where turbidity could not be reduced below 50 nephelometric turbidity units (NTUs) for laboratory filtering of metals. This included groundwater monitoring wells MW-11A, MW-11B and MW-12A.

### 2.6 Decontamination and Quality Assurance Quality Control Procedures

All non-disposable sampling equipment (i.e. submersible pump) was decontaminated prior to and between each well by using a distilled water and non-phosphate detergent wash followed by a distilled water rinse.

## 2.7 Groundwater Quality

During the First Half 2013 (April) groundwater sampling event, samples from thirteen groundwater monitoring wells were collected and submitted for analysis of baseline parameters. The inorganic portion of the analysis includes metals, nutrients, and the physical properties of the sample. Specific conductivity, temperature and pH values were reported from field measurements. However, they are listed in **Table 1** and discussed in the inorganic water quality section below. The list of organic groundwater quality results (**Table 2**) is comprised of volatile organic compounds (VOCs).

The laboratory results are compared to NYSDEC's Class GA Groundwater Standards, 6NYCRR Part 703. Analytical results are discussed below. The locations of groundwater monitoring wells are illustrated on **Figure 1**. The wells are grouped into clusters consisting of varying depths (A=shallow, B=intermediate, C=deep).

### 2.7.1 Inorganic Water Quality Results – April 2013

Long Island groundwater generally has a low pH and is typically measured below the NYSDEC standard range of 6.5 to 8.5. Two samples had a measured pH level below 6.5 with the largest deviation seen in sample MW-4A where the pH level measured 6.04. Historically, low pH values have been evident in both up-gradient and down-gradient wells documenting that it is not being influenced by landfill leachate.

Ammonia was detected above method detection limits in six groundwater samples. Ammonia was detected in three of the thirteen groundwater samples (MW-3B, MW-4B and MW-12B) at a concentration exceeding the NYSDEC groundwater standard (2.0 mg/L) indicating that leachate is present. The highest concentration of ammonia, 3.95 mg/L, was measured in sample MW-4B. The leachate plume has been observed to reach its deepest point at the MW-3B depth and discharge into fish cove where the MW-4 cluster well is located.

Chromium was detected above method detection limits in each of the groundwater samples. Chromium was detected in two of the thirteen groundwater samples (MW-3A and MW-4C) at a concentration exceeding the groundwater standard of 0.05 mg/L for chromium. Filtered metals analysis was not performed on these wells as turbidity was below 50 NTUs. Concentrations of chromium ranged from 0.0014 mg/L to 0.187 mg/L. Chromium adheres to soil particles and concentrations are significantly reduced by filtering samples to remove suspended particulates. Chromium concentrations in the filtered samples were significantly reduced when compared to the unfiltered results as observed in MW-11A, MW-11B and MW-12A.



Iron was detected above method detection limits in each of the thirteen groundwater samples. Seven of the thirteen groundwater samples exceeded the 0.3 mg/L NYSDEC ambient groundwater standard for iron. Iron was not detected above NTSDEC groundwater standards in the up-gradient (MW-1) well cluster. Concentrations of iron ranged from 0.0124 mg/L to 22.4 mg/L. Iron concentrations are highest in the wells where the leachate plume has been delineated indicating leachate is still present. In addition, iron adheres to fine sediment particles which are obtained as part of the sample. Iron concentrations detected are shown to be significantly reduced when the samples are filtered to remove suspended particulates as observed in MW-11A, MW-11B and MW-12A. However, iron concentrations in the filtered sample collected from MW-11A were above NYSDEC groundwater standards. The standard for iron is set based upon aesthetic considerations and is not detrimental to health. Iron concentrations were less than 1.0 mg/L in eight of the thirteen samples collected and analyzed.

Lead was detected above method detection limits in each of the groundwater samples. Lead was detected in one of the thirteen groundwater samples at a concentration exceeding the NYSDEC groundwater standard (0.025 mg/L). The highest concentration of lead (0.0254 mg/L) was measured in the sample collected from MW-11B; however lead concentrations were below standards in the filtered sample from this well. Lead adheres to soil particles and concentrations are significantly reduced by filtering samples to remove suspended particulates as observed in MW-11A, MW-11B and MW-12A.

Manganese was detected above method detection limits in each of the thirteen groundwater samples. Four samples (MW-3B, MW-4B, MW-11A, and MW-12A) of thirteen showed concentrations of manganese equal to or above the NYSDEC groundwater standard (0.3 mg/L). Manganese concentrations in the filtered samples still exceeded groundwater standards. Elevated manganese concentrations have been detected in down-gradient wells only which indicates leachate is present. The groundwater wells where manganese has been detected have remained the same and concentrations have stabilized over time indicating plume stabilization. Manganese concentrations in excess of 1.0 mg/L produce a metallic taste to water. The highest concentration of manganese was 3.72 mg/L measured from sample MW-12A. Manganese was detected in both the unfiltered and filtered metals samples at similar concentration as shown in MW-11A, MW-11B, and MW-12A. Manganese is also aesthetically objectionable and not considered a significant health threat.

Sodium was detected above method detection limits in each of the thirteen groundwater samples. Sodium was detected in two of the thirteen groundwater samples (MW-4B and MW-4C) at a concentration equaling or exceeding the NYSDEC groundwater standard (20 mg/L). Sodium concentrations ranged from 6.28 mg/L (MW-1B) to 24.9 mg/L (MW-4C). Sodium concentrations detected are shown to be significantly reduced when the samples are filtered to remove suspended particulates as observed in MW-11A, MW-11B and MW-12A.

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#### 2.7.2 Organic Water Quality Results – April 2013

Groundwater samples collected from wells were analyzed for VOCs as part of the First Half 2013 sampling program. Analytical results indicate that no VOCs were detected in the samples collected at concentrations exceeding the laboratory detection limits with the exception of chloroform in MW-1B, MW-1C and MW-11B, chlorobenzene in MW-4B, and 1,4-dichlorobenzene in MW-4B which was qualified as (J) estimated (**Table 2**). These detections are below NYSDEC groundwater standards.

#### 2.7.3 Well Cluster 4 & 11 Analysis

Monitoring wells MW-4A, MW-4B, and MW-4C are located down-gradient of the landfill along the edge of Fish Cove Pond. These wells represent the farthest down-gradient wells that are used to monitor the landfill. Historical monitoring has shown that the leading edge of the leachate plume is migrating into Fish Cove Pond. Conductivity, total dissolved solids, and chloride have been trending upwards in MW-4C. These increasing trends are not coupled with any significant increases in iron and manganese which would indicate the presence of leachate that is being broken down. Iron and manganese are prevalent in MW-4B where the plume has been documented. Iron and manganese levels in MW-4C are at background levels when compared to MW-4B.

Monitoring wells MW-11A and MW-11B are located down-gradient of Cell 3. These wells have been under close observation since March 1993. A graph of several leachate indicators detected in samples collected from monitoring wells MW-11A and MW-11B since 1997 are shown on **Figures 2** and **3**. Detected concentrations of certain constituents were noted in MW-11A and MW-11B during both sampling events. A review of the trends shows that concentrations have generally decreased over time indicating that the plume continues to degrade over time. Slightly elevated concentrations of iron, manganese, and lead are still detected in these wells.

#### 2.8 Groundwater Flow & Migration of Leachate Plume

Groundwater elevation data and laboratory analytical results are utilized to determine groundwater flow and to map the horizontal and vertical migration of the leachate plume. Depth to water and groundwater elevation data are shown on **Table 4**.

A groundwater contour map for April 2013 (**Figure 1**) was created with groundwater elevation data from eight water table monitoring wells (MW-1A, MW-3A, MW-4A, MW-6AR, MW-7A, MW-8, MW-9, MW-11A, and MW-12A). An evaluation of the water table elevation data indicates that groundwater flows from the landfill towards Fish Cove Pond. At Fish Cove Pond, an upward vertical flow component has been observed based upon head differential observed in the groundwater monitoring wells indicating groundwater is discharging into the pond.

Based upon historical groundwater sampling results and previous remedial investigations, the leachate plume migrates from the landfill, specifically Cell No. 1, and travels horizontally towards the northwest and discharges into Fish Cove Pond. The plume has been observed at its deepest point vertically at the MW-3B depth interval.

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### 2.9 Leachate Quality

The April 2013 analytical data indicate that contaminant concentrations in the leachate detection system (secondary) are diluted when compared to those of the leachate collection system (primary). Concentrations observed in both the primary and secondary leachate are lower when compared to concentrations detected during the October 2012 sampling event. The analytical results for the primary and secondary leachate are shown on **Table 3** and the laboratory report is attached as part of **Appendix A**.



### 3.0 DATA VALIDATION AND USABILITY REPORT

#### 3.1 Data Validation

In accordance with the contract, five percent of the groundwater analytical results were validated by Premiere Environmental Services, Merrick, New York. As part of the data validation process, all quality control (QC) issues were reviewed. A copy of the data validation and usability report is included in Appendix A. Compliance chart, re-submission communications, and the New York State Department of Environmental Conservation (NYSDEC) laboratory sample preparation and analysis summary forms are also included.

In summary, sample processing was primarily conducted with compliance to protocol requirements and adherence to quality criteria. Sample results are usable as reported or usable with minor qualification as estimated or edited to non-detection. These issues are discussed in the following analytical section. Although only 5% of the samples underwent full validation review, recommended qualifications below are stated to include all project samples as pertains to general quality issues, and where otherwise evident.

#### Data Completeness

Data packages were complete as received: no additional documentation was required.

#### 3.1.1 Metals Analyses

Review was conducted for method compliance, holding times, calibration analysis, ICP CRDL standard, ICP interference check standard, matrix spike analysis, post digestion spike analysis, duplicate sample analysis, ICP serial dilution, blanks, laboratory control sample analysis, instrument QC data, compound identification, field duplicate sample analysis, and system performance and overall assessment to each procedure. All were found acceptable for the validated samples, unless noted specifically within this text.

The percent recovery of all target analytes met QC criteria in this matrix spike analysis with the exception of Boron (<30%) and Selenium (60.2%). Selenium has been qualified as estimated (UJ/J) in the sample chosen for review. Boron was qualified as unusable (R) in the sample chosen for review.

The ICP serial dilution evaluation of MW-3B (Total Metals Analysis) and MW-11A (Filtered Metals Analysis) was acceptable, with the exception of that for potassium. Detected results for these analytes in the samples in this data set are therefore qualified as estimated (J).

#### 3.1.2 Wet Chemistry Analyses

Review was conducted for method compliance, holding times, calibration analysis, matrix spike analysis, duplicate sample analysis, blanks, laboratory control sample analysis, compound identification, field duplicate sample analysis, and system performance and overall assessment to each procedure. All were found acceptable for the validated samples, unless noted specifically within this text.

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The method blank was free from contamination of all target analytes above the reporting limit. The BOD blank depletion was greater than 2.0 mg/l, therefore BOD has been qualified "UJ" estimated.

### 3.1.3 VOC Analyses

Review was conducted for method compliance, holding times, surrogates, matrix spike/spike duplicate analysis, blank spike analysis, blank contamination, GC/MS calibration, GC/MS mass spectrometer tuning, field duplicate analysis, compound identification and overall assessment. All were found acceptable for the validated samples, unless noted specifically within this text.

All target analyte percent relative standard deviation (%RSD) criteria were met in the initial calibration curve analysis associated with this data set with the exception of Acetone (26.7%), Dibromochloromethane (21.3%), and Bromoform (30.3%). These compounds have been qualified "UJ/J" estimated in the sample chosen for data review.

The GC/MS calibration identified the % difference of all target compounds met QC criteria in this continuing calibration standard with the exception of the following:

e

	Analytes	% Differenc
٠	Chloromethane	25.6
•	Acetone	24.5
•	Carbon Tetrachloride	21.1
•	cis 1,3-Dichloropropene	21.8
•	trans 1,3-Dichloropropene	28.5
٠	Dibromochloromethane	24.6
•	Bromoform	31.4
oso t	araet analytes have been avalify	

These target analytes have been qualified "UJ/J" estimated in each of the samples that were included in the 5 % data review.

### 3.2 Data Usability Report

According to the Data Usability report, the analytical data were compliant with established protocols and met the project data quality objectives (DQO) and are usable, with the appropriate qualifiers, to determine the presence, absence, and magnitude of environmental contamination in the samples collected from the site. A copy of the Data Usability report is included in Appendix A.

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### 4.0 SUMMARY

Review of the data for the First Half 2013 indicates that previously implemented remedial actions continue to be effective at minimizing potential site impacts. In brief, the leachate quality has improved and the groundwater quality with regards to the inorganic constituents has improved when compared to the previous reporting periods. The groundwater quality with regards to the organic constituents has improved when compared to the previous reporting periods as organic constituents were detected at estimated concentrations but below groundwater standards in several of the samples collected. Several inorganic compounds are sporadically detected in wells MW-1A, 3A, 3B, 3C, 4A, 4B, 4C, 11A, 11B, 12A, and 12B. Contaminants detected in wells MW-3A, 3B, 3C, 4A, 4B, and 4C may be due to the expansion of the recharge basin, which is now located up-gradient of these wells. It is also due to the turbidity in the samples, as contaminant concentrations are significantly reduced in filtered samples.



## 5.0 RECOMENDATIONS

PWGC recommends that the Post-closure monitoring and maintenance operations program be continued and the groundwater and leachate sampling program be continued on a semi-annual basis.

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TABLES

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ANALYTICAL	UNITS	GW									MW	-1A								
PARAMETERS		STND	April 2005	Oct. 2005	April 2006	Oct. 2006	April 2007	Oct. 2007	April 2008	Oct. 2008	April 2009	Oct. 2009	April 2010	Oct Unfiltered	2010 Filtered	April 2011	Oct. 2011	April 2012	Oct. 2012	April 2013
Aluminum as Al	mg/L	NA	0.78	0.18	0.35	0.13	0.51	PNA	0.027 B	PNA	0.0092 U	PNA	0.0407 BJ	PNA	PNA	0.0156 B	PNA	0.174 B	PNA	0.0129 B
Antimony as Sb	ma/L	0.003 #	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.0044 U	PNA	0.0027 U	PNA	0.0028 U	PNA	PNA	0.0041 B	PNA	0.0085 B	PNA	0.0012 U
Arsenic as As	mg/L	0.025	0.006	0.005 U	0.005 U	0.005 U	0.005 U	PNA	0.0029 U	PNA	0.0028 U	PNA	0.0028 U	PNA	PNA	0.0019 U	PNA	0.0221 U	PNA	0.0028 U
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	PNA	0.0126 B	PNA	0.0186 B	PNA	0.0575 B	PNA	PNA	0.0185 BE	PNA	0.062 B	PNA	0.0058 B
Bervilium as Be	mg/L	0.003	0.001 U	PNA	0.001 U	PNA	0.001 U	PNA	0.00012 B	PNA	0.00016 U	PNA	0.0004 B	PNA	PNA	0.00013 U	PNA	0.00062 U	PNA	0.0001 U
Boron as B	mg/L	1.0	0.11	PNA	0.13	PNA	0.11	PNA	0.055 B	PNA	0.0945 B	PNA	0.156	PNA	PNA	0.0688 BE	PNA	0.263 B	PNA	0.0248 B
Cadmium as Cd	mg/L	0.005	0.005 U	PNA	0.005 U	PNA	0.005 U	0.0061 B	0.00027 U	0.00035 U	0.00023 U	0.00035	0.0004 B	0.00025 U	0.00025 U	0.00027 U	0.00017 U	0.00089 U	0.000087 U	0.0001 U
Calcium as Ca	mg/L	NA	57	42	61	72	56	39.7	27.3	68.6	80	70.4	10.6	44.5	46.1	39.3	66.8	182	66.8	14.1
Chromium as Cr	mg/L	0.05	0.035	PNA	0.038	PNA	0.14	PNA	0.00075 U	PNA	0.0013 B	PNA	0.0033 B	PNA	PNA	0.00068 B	PNA	0.013 B	PNA	0.0016 B
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0017 U	PNA	0.0012 U	PNA	0.0012 U	PNA	PNA	0.00049 U	PNA	0.0026 U	PNA	0.0004 U
Copper as Cu	mg/L	0.2	0.02	PNA	0.01 U	PNA	0.03	PNA	0.0016 U	PNA	0.0016 B	PNA	0.006 B	PNA	PNA	0.0012 B	PNA	0.0045 B	_ PNA_	0.0004 U
Cyanide as CN	mg/L	0.20	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U
Iron as Fe	mg/L	0.3	2.4	0.47	1.2	0.54	2.4	0.333	0.12	0.0564 B	0.0576 B	0.18	0.179	0.018 B	0.0071 B	0.0312 B	1.1	0.254 B	0.176	0.0124 B
Lead as Pb	mg/L	0.025	0.006	0.005 U	0.005 U	0.005 U	0.007	0.0021 B	0.0023 U	0.0013 U	0.0015 U	0.0018 U	0.0326 J	0.009	0.0077	0.0015 U	0.008	0.0247	0.001 B	0.0045
Magnesium	mg/L	35 #	PNA	16	NA	27	PNA	16.2	13.3	30	36,1	31.6	48.2	21.7	21.5	22.5	27.5	82.7	26.5	6.28
Manganese as Mn	mg/L	0.3	2.0	0.28	0.9	0.15	0.15	0.053	0.0365	0.0223	0.0111 B	0.085	0.0555	0.0015 B	0.0007 B	0.104	0.98 E	0.0665 B	0.0771	0.0023 B
Mercury as Hg	mg/L	0.0007	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.00025 U	PNA	0.0001 U	PNA	0.0001 U	PNA	0.0001 U	PNA	PNA	0.0001 U	PNA	0.0001 U	PNA	0.0001 U
Nickel as Ni	mg/L	0.1	0.02	PNA	0.02	PNA	0.06	PNA	0.0013 U	PNA	0.0014 U	PNA	0.0018 B	PNA	PNA	0.0012 U	PNA	0.005 B	PNA	0.0012 B
Potasium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	15.3	8.19	27.4	28.9 E	25.6	45.1	18.6	15.9	11.7	20.2	53.3	17.2	4.68 B
Selenium as Se	mg/L	0.01	0.004 U	PNA	0.004 U	PNA	0.004 U	PNA	0.0043 U	PNA	0.0027 U	PNA	0.0042 U	PNA	PNA	0.0026 U	PNA	8.0242 B	PNA	0.0025 B
Silver as Ag	mg/L	0.05	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.00089 U	PNA	0.0006 U	PNA	0.0005 U	PNA	PNA	0.00052 U	PNA	0.0089 B	PNA	0.0002 U
Sodium as Na	mg/L	20	21	PNA	15	PNA	14	13	13.1	22	29.6	33.4	30	21.8	20.9	20.2	19.4	68.6	16.8	7.87
Thallium as TI	mg/L	0.0005 #	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.0025 U	PNA	0.0033 U	PNA	0.0056 U	PNA	PNA	0.0037 B	PNA	0.0159 U	PNA	0.0019 U
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0022 U	PNA	0.00097 U	PNA	0.0012 U	PNA	PNA	0.00056 U	PNA	0.0015 B	PNA	0.0003 U
Zinc as Zn	mg/L	2#	0.03	PNA	0.01	PNA	0.04	PNA	0.0054 B	PNA	0.006 B	PNA	0.0057 B	PNA	PNA	0.0103 B	PNA	0.0022 U	PNA	0.0084 B
Alkalinity tot CaCo3	mg/L	NA	190	140	240	270	220	150	73.8	216	222	211	324	110 D	PNA	37.7	158 D	69 D	100 0	31
Chloride as Cl	mg/L	250.0	47	24	26	21	24	27.7	28.3	43.8	54.8	52.5	49.8	34.5	PNA	27.8	24.3	17.8	29.6	13.1
Sulfate as SO4	mg/L	250.0	38	24	34	26	27	10.5	33.4	48.8	101	114	171 J	103 D	PNA	141 D	106 D	63.7 D	120 0	
Bromide	mg/L	2#	PNA	PNA	PNA	PNA	PNA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	PNA	0.5 U	0.5 U	0.5 U		
BOD5	mg/L_	NA	10	2.1	2 U	2 U	2 U	2 U	11	2 U	U	2 U	2 U	2U	PNA	2 U	2 U	2 U		
COD	mg/L	NA	100	PNA	40 U	PNA	40 U	10 U	19.4	29.3	10 U		10 U	10.6	PNA	12.4	16.4	10 U		10 U
Color	units	NA	5 U	5 U	10	10	15	PNA	5	PNA	10	PNA	5	PNA	PNA	5 U	PNA	5 U		5 U
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	PNA	0.02 U	PNA	0.02 U		0.02 U										
Hardness as CaC03	mg/L	NA	230	170	250	290	230	160	128	144	520	330	460	210 D	PNA	190 D	288 D	152 D	200 0	62
Ammonia as N	mg/L	2.0	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.18	0.1 U	0.1 U	0.92	0.1 U	PNA	0.1 U	0.1 U	0.1 U		0.1
Nitrite as N	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.1 U	0.1 U	PNA	0.1 U	0.1 U	0.1 U	PNA	0.1 U	0.1 U	0.1 U		0.1 U
Nitrate as N	mg/L	10	1.6	PNA	1.9	PNA	2.5	5.93	3.91	3.79	5.55	0.1 U	1.14	2.84	PNA	6.47 D	4.45 D	4.07 D	0.02	
Phenols as Phenol	mg/L	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.005 U	0.005 U	0.0005 U	0.005 U	0.005 U	0.005 U	PNA	0.005 U	0.005 U	0.005 U	0.000 0	0.005 U
Tot Dissolved Solids	mg/L	NA	340	PNA	380	PNA	340	242	0.1	361	531	489	674	333	PNA	356	398	245	501	98
Tot. Kjeldahl Nitrogen	mg/L	NA	1.4	PNA	2.2	PNA	1.6	0.55	0.33	1.02	0.61	0.89	1.02 J	0.47	PNA	0.1 U	0.78	0.1 U	0.95	0.1 U
Tot Organic Carbon	mg/L	NA	10	6.5	10	9.5	7.6	5.9	4.7	8.4	7.3	22	12.4	4.6	PNA	4.8	47.2	2.8	4.8	9.4
Turbidity	NTU	NA	7.6	4.1	8.2	2.4	11	0	18.6	10	5.8	7	0	42	PNA	3.8	5.6	1.4	0	0
Temperature	deg.C	NA	15	13	13	13	13	12.8	12.31	13.45	12.85	12.86	13.47	12.39	PNA	11.96	13.13	12.98	12.31	12.57
pН	units	6.5-8.5	7.3	6.4	6.6	6.6	6.0	8.53	5.45	6.21	6.58	6.09	6.97	5.38	PNA	3.72	6.33	5.74	6.56	7.4
Spec. Cond	umho/cm	NA	500	460	570	620	550	PNA	PNA	542	656	950	1,110	432	PNA	490	630	410	690	212

NOTES:

\* ► NYSDEC, Class GA Groundwater Standards

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# = Guidance value, no standard exists.

NA = Not available.

PNA = parameter not analyzed for.

B = This flag is used when the analyte is found in the associated blank as in the sample.

E - This flag identified computes whose concentrations exceed the calibration range of the GCMS instrument for that specific analysis.

F - This flag indicates the results of a filtered metal analysis.

J - The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.

U. - The analyte was not detected above the reported sample quantitation limit. However, the reported quartitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be venified.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM \* Not Monitored

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ANALYTICAL	UNITS	GW									MW-1B								
		•	April 2005	Oct. 2005	April 2006	Oct. 2006	April 2007	Oct. 2007	April 2008	Oct. 2008	April 2009	Oct. 2009	April 2010	Oct. 2010	April 2011	0-1 2011	4	0-1 2012	April 2013
PARAMETERS		STND*	April 2005	Oct. 2005	April 2006	Oct. 2006	April 2007	Oct. 2007	April 2008	Oct. 2008	April 2009	Oct. 2009	April 2010	Oct. 2010	April 2011	Oct. 2011	April 2012	Oct. 2012	April 2013
Aluminum as Al	mg/L	NA	0.08	0.14	0.06	0.07	0.07	PNA	0.0571 B	PNA	0.0123 B	PNA	0.0196 UJ	PNA PNA	0.0241 B	PNA	0.0334 BJ	PNA	0.0438 B
Antimony as Sb	mg/L	0.003 #	0.005 U	PNA	0.005 U	PNA	_0.005 U	PNA	0.0044 U	PNA	0.0027 U	PNA	0.0028 U	PNA	0.0021 U	PNA	0.0018 B	PNA	0.0012 U
Arsenic as As	mg/L	0.025	0.005 U	0.005 U	0.005 U	0.005 U	0.007	PNA	0.0029 U	PNA	0.0028 U	PNA	0.00 <b>2</b> 8 U	PNA	0.0019 U	PNA	0.0044 U	PNA	0.0028 U
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	PNA	0.0125 B	PNA	0.0105 B	PNA	0.0104 B	PNA	0.0104 BE		0.012 B	PNA	0.0098 B
Beryllium as Be	mg/L	0.003	0.001 U		0.001 U	PNA	0.001 U	PNA	0.0001 U	PNA	0.00016 U	PNA	0.00017 U		0.00013 U	PNA	0.00012 U	PNA	0.0001 U
Boron as B	mg/L	1.0	0.02	PNA	0.02	PNA	0.01 U	PNA	0.009 B	PNA	0.0022 U	PNA	0.0104 B	PNA	0.0087 BE		0.0068 B	PNA	0.0129 B
Cadmium as Cd	mg/L	0.005	0.005 U		0.005 U	PNA	0.005 U	0.0033 B	0.00027 U	0.00035 U	0.00023 U	0.00034 U	0.00024 U	0.00025 U	0.00027 U	0.00017 U	0.00018 U	0.000087 U	0.0001 U
Calcium as Ca	_mg/L	NA	4.3	5.1	3.6	4.9	5.4	3.14	3.33 B	3.49	3.68 B	3.71 B	2.98 B	2.99 B	2.76 B	B	4.29 BJ	4.26 B	4.31 B
Chromium as Cr	mg/L	0.05	0.007	PNA	0.007	PNA	0.007	PNA	0.0073 B	PNA	0.0058 B	PNA	0.0036 B	PNA	0.0088 B	PNA	0.0062 BJ	PNA	0.0131
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0017 U	PNA	0.0012 U	PNA	0.0012 U	PNA	0.00049 U	PNA	0.00052 U	PNA	0.0004 U
Copper as Cu	mg/L	0.2	0.03	PNA	0.02	PNA	0.03	PNA	0.0016 U	PNA	0.0012 U	PNA	0.0072 B	PNA	0.0012 B	PNA	0.0017 B	PNA	0.0053 B
Cyanide as CN	mg/L	0.20	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.01 U		0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U
Iron as Fe	mg/L	0.3	0.42	0.71	0.35	0.42	0.36	0.189	0.15	0.0492 B	0.0532 B	0.405	0.0355 B	0.0151 B	0.0699 B	0.0516 U	0.0337 BJ	0.0767 B	0.177
Lead as Pb	mg/L	0.025	0.012	0.021	0.008	0.012	0.01	0.0022 B	0.0023 U	0.0013 U	0.0019 B	0.0058	0.0185 J	0.0081	0.0015 U	0.0091	0.0069	0.00096 U	0.0052
Magnesium	mg/L	35 #	PNA	1.5	PNA	1.4	PNA	1.74 B	1.86 B	2.17 B	2.33 B	2.26 B	1.58 B	1.48 B	1.31 B	1.24 B	2 BJ	1.99 B	1.95 B
Manganese as Mn	mg/L	0.3	0.01	0.02	0.02	0.01	0.02	0.0054 B	0.0037 B	0.0023 B	0.0018 B	0.0121 B	0.0015 B	0.0011 B	0.0017 B	0.003 BE	0.0012 BJ	0.0021 B	0.0041 B
Mercury as Hg	mg/L	0.0007	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.00025 U	PNA	0.0001 U	PNA	0.0001 U	PNA	0.0001 U	PNA	0.0001 U	PNA	0.00025	PNA	0.0001 U
Nickel as Ni	mg/L	0.1	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.0124 B	PNA 0.628 B	0.0064 B	PNA	0.0084 B	PNA	0.0055 B	PNA	0.0114 B	PNA	0.0095 B
Potasium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.642 B	0.631 B	0.020 0	0.77 BE	0.795 B	0.934 B	1.25 B	1.12 B	0.3 B	0.961 BJ	0.775 B	0.613 B
Selenium as Se	mg/L	0.01	0.004 U		0.004 U	PNA	0.004 U	PNA	0.0043 U	PNA	0.0027 U	PNA	0.0042 U	PNA	0.0026 U	PNA	0.0028 U	PNA	0.0023 U
Silver as Ag	mg/L	0.05	0.005 U 9.5	PNA	0.005 U 7.7	PNA	0.005 U 7.9	PNA	0.00089 U	PNA	0.0006 U	PNA	0.0005 U	 7.41	0.00052 U	PNA	0.0024 B	PNA	0.0002 U
Sodium as Na	mg/L_	20 0.0005 #	9.5 0.005 U	PNA PNA	0.005 U	PNA PNA	7.9 0.005 U	6.65 PNA	7.93 0.0025 U	8.13 PNA	6.78	6.92 PNA	7.09 0.0056 U	7.41 PNA	6.93	7.73 PNA	7.04 J 0.0032 U	7.16 PNA	6.28 0.0019 U
Thallium as TI	mg/L	0.0005 # NA	0.005 U PNA	PNA	0.005 U PNA	PNA PNA	0.005 U PNA	PNA	0.0025 U 0.0022 U	PNA	0.0033 U 0.00097 U	PNA	0.0056 U 0.0012 U	PNA	0.0032 B 0.00056 U	PNA	0.0032 U 0.00023 U	PNA	0.0003 B
Vanadium	mg/L	NA 2#		PNA	0.02	PNA	0.03	PNA	0.0101 B	PNA		PNA	0.0012 U	PNA	0.00056 U	PNA		PNA	the second se
Zinc as Zn Alkalinity tot CaCo3	mg/L	2# NA	0.04	18	18	34	16	7.6	26	11.1	0.0106 B	12	0.005 B	6.2	6.5	10.1 D	0.00044 U 12.9 D	 11.5	0.013 B
Chloride as Cl	mg/L	250.0	14	13	6.0	7.0	8.0	9.9	9.6	9.8	9.61	8.54	9.02	8.95	6.6	8.39	9.89	10.8	8.72
Sulfate as SO4	mg/L	250.0	9.0	80	8.0	8.0	5 11	9.9	9.14	8.5	8.58	7	7.8 1	8.33	6.31	6.15	6.58	8.09	7.62
Bromide	mg/L mg/L	250.0	PNA	PNA	PNA PNA	PNA	PNA	0.5 U	0.5 U	0.5 U	0.50 0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.15 0.5 U	0.56 U	0.5 U	0.5 U
BOD5	mg/L	NA NA	3.4	2.1	2 11	4.1	2 11	2 11	13	2 U	0.0	2 U	2 11	2 U	2 U	2 1	2 U	2 11	2 1
COD	mg/L	NA	40	PNA	40 U	PNA	40 U	10 U	10 U	14.4	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Color	units	NA	5 U	5 U		5 U	10	PNA	5	PNA	5 U	PNA	5	PNA	5 U	PNA	5	PNA	5 4
Chromium hex as Cr	ma/L	0.05	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U
Hardness as CaC03	mg/L	NA	16	19	15	18	19	10	0.02 U	34	28	19	14	21	11	18	22	17	16
Ammonia as N	mg/L	2.0	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1 U
Nitrite as N	mg/L	NA NA	PNA C	PNA	PNA	PNA	PNA 0	PNA	0.1 U	0.1 U	PNA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1 U
Nitrate as N	mg/L	10	0.5 U		0.5 U	PNA	0.5 U	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	1.49	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenois as Phenoi	mg/L	0.001	0.001 U	0.002	0.02	0.001	0.001 U	0.005 U	0.005 U	0.005 U		0,005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Tot Dissolved Solids	mg/L	NA	55	PNA	74	PNA	69	54	59	44	55	51	45	35	47	24	53	59	41
Tot, Kieldahl Nitrogen	mg/L	NA	0.2	PNA	0.4	PNA	1.8	0.1 U	0.1 U	0.11	0.1 U	0.25	0.56 J	0.45	0.5 UD		0.1 U	0.1 U	0.1 U
Tot Organic Carbon	mg/L	NA	2.5	6.5	3.3	9.5	1.2	1 U		1 1		1 U	1 1	1 U	1 U	5	1.3	1 U	3.4
Turbidity	NTU	NA	5.6	6.2	5.2	8,4	5.9	7	27.2	9.4	10.6	18.5	0	32	5.3	7.90	3.5	0.6	1.24
Temperature	deg.C	NA	13	12	12	12	11	11.6	11.63	11.55	11.46	12.5	11.4	11.25	11.72	13.12	12.55	11.4	12.39
pH	units	6.5-8.5	6.9	7.2	6.0	6.1	7.3	8.51	5.37	6.18	8.43	5.85	6.33	5.2	3.94	7,90	5.75	6.39	8.12
Spec. Cond	umho/cm	NA	62	77	71	82	73	PNA	PNA	61	59	91	78	53	59	77	91	84	1
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NOTES:

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\* = NYSDEC. Class GA Groundwaler Slandards

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# = Guidance value, no standard exists

NA = Not available

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 $\boldsymbol{B}$  = This flag is used when the analyte is found in the associated blank as in the sample

E - This flag identified compands whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis

F - This flag indicates the results of a filtered metal analysis

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample

U). The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified

1.0 = Compound exceeded standard. 1.0 = Compound at standard. NM = Not Monitored

ANALYTICAL	UNITS	GW									MV	¥-1C								
ARALITICAL	UNITO	3.							1				t. 2009						0.1.0010	A
PARAMETERS		STND*	April 2005	Oct. 2005	April 2006	Oct. 2006	April 2007	Oct. 2007	April 2008	Oct. 2008	April 2009	Unfiltered	Filtered	April 2010	Oct. 2010	April 2011	Oct. 2011	April 2012	Oct. 2012	April 2013
Aluminum as Al	mg/L	NA	0.05	0.11	0.03	0.04	0.03	PNA	0.591	PNA	0.0112 B	PNA	0.0271 B	0.0959 BJ	PNA	0.0659 B	PNA	0.644	PNA	0.0173 B
Antimony as Sb	mg/L	0.003 #	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.0044 U	PNA	0.0027 U	PNA	0.0034 B	0.0028 U	PNA	0.0021 U	PNA	0.0011 U	PNA	0.0012 U
Arsenic as As	mg/L	0.025	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	PNA	0.0029 U	PNA	0.0028 U	PNA	0.0023 U	0.0028 U	PNA	0.0019 U	PNA	0.0044 U	PNA	0.0028 U
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	PNA	0.0133 B	PNA	0.008 B	PNA	0.011 B	0.0093 B	PNA	0.0095 BE	PNA	0.0139 B	PNA	0.009 B
Beryllium as Be	mg/L	0.003	0.001 U	PNA	0.001 U	PNA	0.001 U	PNA	0.0001 U	PNA	0.00016 U	PNA	0.0053 B	0.00017 U	PNA	0.00013 U	PNA	0.00012 U	PNA	0.0001 U
Boron as B	mg/L	1.0	0.04	PNA	0.01	PNA	0.01	PNA	0.0089 B	PNA	0.0022 U	PNA	0.0237 B	0.0111 B	PNA	0.0072 BE	PNA	0.0065 B	PNA	0.0128 B
Cadmium as Cd	mg/L	0.005	0.005 U	PNA	0.005 U	PNA	0.005 U	0.00032 U	0.00027 U	0.00035 U	0.00023 U	0.00034 U	J 0.004 B	0.00024 U	0.00025 U	0.00027 U	0.00017 U	0.00018 U	0.000087 U	0.0001 U
Calcium as Ca	mg/L	NA	8.0	5.3	4.0	5.1	5.1	4.39 B	4.45 B	3.95 B	3.63 B	10.8	4.63 B	3.54 B	3.67 B	4.25 B	4.32 B	3.89 B	4.98 B	4.49 B
Chromium as Cr	mg/L	0.05	0.023	PNA	0.018	PNA	0.021	PNA	0.295	PNA	0.0049 B	PNA	0.0029 B	0.0118	PNA	0.0168	PNA	0.035	PNA	0.0037 B
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	_0.0065 B	PNA	0.0012 U	PNA	0.0012 U	0.0012 U	PNA	0.00057 B	PNA	0.0009 B	PNA	0.0004 U
Copper as Cu	mg/L	0.2	0.04	PNA	0.02	PNA	0.04	PNA	0.0209 B	PNA	0.0012 U	PNA	0.0062 B	0.0071 B	PNA	0.00077 B	PNA	0.0084 B	PNA	0.0013 B
Cyanide as CN	mg/L	0.20	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.01 U	PNA	0.01 U	PNA	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U
Iron as Fe	mg/L	0.3	0.68	0.57	0.23	0.36	0.26	0.024 U	2.69	0.418	0.0375 B	20.8	0.057 B	0.19	0.0099 B	0.243	0.0672 B	1.25	0.0389 B	0.0684 B
Lead as Pb	mg/L	0.025	0.007	0.007	0.005 U	0.005 U	0.005 U	0.0014 U	0.0042	0.0018 B	0.0023 B	0.0273	0.0018 U	0.0206 J	0.0092	0.0015 U	0.0077	0.0125	0.0011 B	0.0052
Magnesium	mg/L	35 #	PNA	1.5	PNA	1.5	PNA	2.13 B	2.64 B	2.1 B	2.03 B	7.19	1.81 B	1.84 B	1.94 B	2.09 B	1.58 B	2.06 B	2.45 N	2.23 B
Manganese as Mn	mg/L	0.3	0.05	0.02	0.02	0.01	0.03	0.0012 B	0.116	0.0194	0.0017 B		0.0125 B	0.0075 B	0.0006 B	0.0121 B	0.0138 BE	0.0424	0.0013 B	0.0026 B
Mercury as Hg	mg/L	0.0007	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.00025 U	PNA	0.0001 U	PNA	0.0001 U	PNA	PNA	0.0001 U	PNA	0.0001 U	PNA	0.0001 U	PNA	0.0001 U
Nickel as Ni	mg/L	0.1	0.01	PNA	0.02	PNA	0.02	PNA	0.132	PNA	0.0091 B	PNA	0.0085 B	0.0083 B	PNA	0.015 B	PNA	0.0162 B	PNA	0.009 B
Potasium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.604 B	0.726 B	0.66 B	0.803 BE		0.856 B	0.947 B	1.17 B	1	0.406 B	1.12 B	0.751 B	0.702 B
Selenium as Se	mg/L	0.01	0.004 U	PNA	0.004 U	PNA	0.004 U	PNA	0.0043 U	PNA	0.0027 U	PNA	0.0025 U	0.0042 U	PNA	0.0026 U	PNA	0.0028 U	PNA	0.0023 U
Silver as Ag	mg/L	0.05	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.00089 U	PNA	0.0006 U	PNA	0.00083 U	0.0005 U	PNA	0.00052 U	PNA	0.003 B	PNA	0.0002 U
Sodium as Na	mg/L	20	11	PNA	7.0	PNA	9.6	7.13	7.81	7.95	7.68	6.61	7.37	8.34	8.76	7.87	7.62	7.77	9.07	7.77
Thallium as TI	mg/L	0.0005 #	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.0025 U	PNA	0.0033 U	PNA	0.0032 U	0.0056 U	PNA	0.0027 U	PNA	0.0032 U	PNA	0.0019 U
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0035 B	PNA	0.00097 U	PNA	0.0014 U	0.0012 U	PNA	0.00056 U	PNA	0.0012 B	PNA	0.0004 B
Zinc as Zn	mg/L	2 #	0.05	PNA	0.02	PNA	0.06	PNA	0.0244	PNA	0.0103 B	PNA	0.0391	0.0061 B	PNA	0.0128 B	PNA	0.0129 B	PNA	0.0092 B
Alkalinity tot CaCo3	mg/L	NA	24	24	18	30	20	13	13.4	12	10.1	15	PNA	11.8	12	12.7	12.6 D	10.8 D	12	12.6
Chloride as Cl	mg/L	250.0	13	8	6.0	7.0	10	10.2	9.7	9.85	10.4	9.28	PNA	9.68	10.1	7.92	9.15	9.85	11.5	9.47
Sulfate as SO4	mg/L	250.0	9.0	5.0	5.0	5.0 U	5	7.6	8.78	8.1	8.29	7.55	PNA	7.34 J	8.12	6.97	6.33	7.23	8.21	7.61
Bromide	mg/L	2#	PNA	PNA	PNA	PNA	PNA	0.5 U	0.5 U	0.5 U	0.5 U		J PNA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BOD5	mg/L	NA	4.3	6	2 U	.3.2	4.1	U	14	2 U	2 U		J PNA	2 U	2 U	2 U	2 U	2 U	2 U	2
COD	mg/L	NA	80	PNA	40 U	PNA	40 U	10 U	14.4	11.9	U	10 U	PNA	10 U	10 U PNA	10 U	10 U	10 U	10 U PNA	10 U 5 U
Color	units	NA	5 U	5 U	5 U	5 U	10	PNA	10	PNA	5	PNA	PNA	5 0.02 U	PNA PNA	5 U 0.02 U	PNA PNA	20 0.02 U	PNA	0.02 U
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	0.02 U	PNA	PNA		64 D	18	23	19	19	18						
Hardness as CaC03	mg/L	NA	28	19	17	19	20	17	26	24	18	64	PNA PNA	18 0.1 U	0.1 U	18 0.1 U	23 0.1 U	19 0.1 U	19 0.1 U	0.1 U
Ammonia as N	mg/L	2.0	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.1 U	0.1 U		0.1 U				0.1 U	0.1 U				
Nitrite as N	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.1 U	0.1 U	PNA	0.1 U 0.36	PNA PNA	0.1 U 0.24	0.1 U	0.1 0	0.18	0.1 0	0.1 0	0.1 0
Nitrate as N	mg/L	10	0.5 U	PNA	0.5 U	PNA	0.5 U	0.1	0.11					0.005 U	0.005 U		0.005 U	0.005 U	0.005 U	0.005 U
Phenols as Phenol	mg/L	0.001	0.062	0.004	0.048	0.001	0.002	0.005 U	0.005 U	0.005 U 43	5 U 43	0.005 U 374	J PNA PNA	46	55	0.005 U 68	34	61	56	56
Tot Dissolved Solids	mg/L	NA	74	PNA	88	PNA	73	54	63				PNA	46	0.41	0.5 UD	0.36	0.1 U	0.1 U	0.1 U
Tot. Kjeldahl Nitrogen	mg/L	NA	0.6	PNA	0.2 U	PNA	1.4	0.1 U	0.1 U	0.18	0.1 U		PNA J PNA		0.41 1 U		0.36	1 U	1 U	3.8
Tot Organic Carbon	mg/L	NA	4.3	3.6	1.4	2.1	2.9	1 0		100	, ,	642	PNA	0	14.2	96.1	15.20	22,10	0.00	0.6
Turbidity	NTU	NA	4.3	5	2.7	4.1	2.9	0	34.8	18.5	6.1		PNA	11.33	14.2	96.1	15.20	15.74	11.36	12.56
Temperature	deg.C	NA	13	12	12	12	11	12.5	14.44	11.3	10.98	11.45			10.96 5.47	4.37	12.97 6.42	15.74 6.05	11.36 6.27	7.24
pH	units	6.5-8.5	8.3	7.6	6.1	6.1	6.4	8.3	5.9	6.25	6.48	5.2	PNA PNA	<b>6.31</b> 92		4.37	86	841	870	79.000
Spec. Cond	umho/cm	NA	64	79	70	75	77	PNA	PNA	59	56	100	PNA	92	65	/5	00	041	870	79.000

NOTES:

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\* = NYSDEC, Class GA Groundwater Standards

6 NYCRR Part 703

# = Guidance value, no standard exists.

NA = Not available.

PNA = parameter not analyzed for.

B = This flag is used when the analyte is found in the associated blank as in the sample.

E - This flag identified compunds whose concentrations exceed the calibration range of the GCIMS instrument for that specific analysis.

F - This flag indicates the results of a filtered metal analysis.

J The analyte was positively identified, the associated numerical value is the approximate concentration of the analyte in the sample.

U. The analyte was not detected above the reported sample quantitation imit. However, the reported quantitation imit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.

1.0 = Compound exceeded standard. 1.0 = Compound at standard. NM = Not Monitored

ANALYTICAL	UNITS	GW																					
ARALITICAL	UNIT OF									A	oril 2009	Oct	2009	Ap	ril 2010	Oct	2010			1	Oct	2012	1
PARAMETERS		STND*	April 2005	April 2006	Oct. 2006	April 2007	Oct. 2007	April 2008	Oct. 2008	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Fittered	April 2011	Oct. 2011	April 2012	Unfiltered	Filtered	April 2013
Aluminum as Al	./J.	NA	0.69	0.64	0.11	0.72	PNA	0.5	PNA	0.0232	B 0.0092	U PNA	PNA	0.0498 8	B 0.0196 U	J PNA	PNA	0.0787	B PNA	0.0311 B	PNA	PNA	0.0108 B
Antimony as Sb	mg/L	0.003 #	0.01 U	0.005 U	PNA	0.005 U	PNA	0.0044 U	PNA	0.0027	U 0.0027	U PNA	PNA	0.0042	0.0028	J PNA	PNA	0.0109	8 PNA	0.0011 U	PNA	PNA	0.0012 U
Arsenic as As	mg/L	0.025	0.004 U	0.005 U	0.005 U	0.005 U	PNA	0.0029 B	PNA	0.0028	U 0.0028	U PNA	PNA	0.0028 0	J 0.0028 U	J PNA	PNA	0.0019	U PNA	0.0044 U	PNA	0.0015 U	0.0028 U
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	0.111 B	PNA	0.0659	B 0.0586	B PNA	PNA	0.0393 8	B 0.0288 E	B PNA	PNA	0.0804	BE PNA	0.0344 B	PNA	PNA	0.0382 B
Beryllium as Be	mg/L	0.003	0.001 U	0.001 U	PNA	0.001 U	PNA	0.0002 B	PNA	0.00016	U 0.0002	U PNA	PNA	0.00017 L	J 0.0004 E	B PNA	PNA	0.00013	U PNA	0.00012 U	PNA	PNA	0.0001 U
Boron as B	mg/L	1.0	0.07	0.05	PNA	0.04	PNA	0.0588 B	PNA	0.0099	B 0009	B PNA	PNA	0.017 E	B 0.0227 E	3 PNA	PNA	0.0318	BE PNA	0.0274 B	PNA	PNA	0.0257 B
Cadmium as Cd	mg/L	0.005	0.005 U	0.005 U	PNA	0.005 U	0.00032 U	0.00027 U	0.00035 U	0.00023	U 0.0002	U 0.0034 U	0.00034 U	0.00024 L	J 0.0003 E	B 0.00025 U	0.00025 U	0.00027	U 0.00017 U	0.00018 U	0.000087 U	0.000087 U	0.0001 U
Calcium as Ca	mg/L	NA	19	14	11	37	18.1	15.5	14.3	28.5	28.10	19	18.9	13.4	14.1	14.9	14.8	21.5	7.04	15.5	9.77	8.98	18
Chromium as Cr	mg/L	0.05	1.7	2.8	PNA	1.0	PNA	6.5	PNA	0.343	0.0069	B PNA	PNA	0.553	0.0048	B PNA	PNA	1.69	PNA	0.126	PNA	PNA	0.104
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.0397 B	PNA	0.0018	B 0.0012	U PNA	PNA	0.0034 E	3 0.0012 U	J PNA	PNA	0.0119	B PNA	0.0008 B	PNA	PNA	0.0013 B
Copper as Cu	mg/L	0.2	0.02	0.03	PNA	0.02	PNA	0.118	PNA	0.0093	B 0.0028	B PNA	PNA	0.0177 E	3 0.0058 8	B PNA	PNA	0.0333	PNA	0.0058 B	PNA	PNA	0.0059 B
Cyanide as CN	mg/L	0.20	0.02 U	0.02 U	PNA	0.02 U	PNA	0.0100 U	PNA	0.01	U PNA	PNA	PNA	0.01 U	J PNA	PNA	PNA	0.01	U PNA	0.01 U	PNA	PNA	0.01 U
Iron as Fe	mg/L	0.3	7.6	11	1.4	6.5	7.87	31.0	39,9	1.63	0.014	B 10.7	0.0091 B	2.4	0.0235 8	B 0.376	0.0258 B	7.73	4.47	0.509	8.2	0.164	0.441
Lead as Pb	mg/L	0.025	0.005 U	0.005 U	0.005 U	0.006	0.0014 U	0.0023 U	0.0027 B	0.0015	U 0.0015	B 1.8 U	0.0018 U	0.0088	0.0088	0.0047	0.0053	0.0015	U 0.0016 U	0.0055	0.00096 U	0.00096 U	0.0033
Magnesium	mg/L.	35 #	PNA	PNA	2.1	PNA	4.81 B	3.79 B	4.46 B	5.97	5.9	5.08	5.03	3.17 E	3 3.3 E	B 4.2 B	3.98 B	4.96	B 1.28 E	3.74 B	2.24 B	2.09 B	4.1 B
Manganese as Mn	mg/L	0.3	0.31	0.35	0.04	0.39	0.589	2.33	8.47	0.123	0.0199	0.853	0.0025 B	0.304	0.0041 E	3 0.0355	0.0089 B	1.04	0.185 E	0.103	2.6	0.0225	0.0866
Mercury as Hg	mg/L	0.0007	0.00025 U	0.00025 U	0.00025 U	0.00025 U	PNA	0.0001 U	PNA	0.0001	U 0.0001	U PNA	PNA	0.0001 0	J 0.0001 U	J PNA	PNA	0.0001	U PNA	0.0001 U	PNA	PNA	0.0001 U
Nickel as Ni	mg/L	0.1	0.05	0.07	PNA	0.03	PNA	0.258	PNA	0.0551	0.0362	B PNA	PNA	0.0381 E	3 0.0134 E	B PNA	PNA	0.151	PNA	0.0351 B	PNA	PNA	0.0408
Potasium	mg/L.	NA	PNA	PNA	PNA	PNA	6.78	5.97	6.97	6.37	E 6.2	4.77 B	4.78 B	3.1 E	3 2.7 8	B 5.8	4.45 B	5.92	0.925 E	3.64 B	4.41 B	4.14 B	2.72 B
Selenium as Se	mg/L	0.01	0.004 U	0.004 U	PNA	0.004 U	PNA	0.0043 U	PNA	0.0027	U 0.0027	U PNA	PNA	0.0042 L	J 0.0042 L	J PNA	PNA	0.0026	U PNA	0.0028 U	PNA	PNA	0.0023 U
Silver as Ag	mg/L	0.05	0.005 U	0.005 U	PNA	0.005 U	PNA	0.0010 B	PNA	0.0006	U 0.0006	U PNA	PNA	0.0005 L	J 0.0005 U	J PNA	PNA	0.00052	U PNA	0.00032 U	PNA	PNA	0.0002 U
Sodium as Na	mg/L	20	78	34	PNA	140	28.4	32.2	17.1	40.1	60	12.4	11.9	16.7	15.8	16.6	14.5	58.4	18.9	8.94	7.8	7.4	16.9
Thallium as Ti	mg/L	0.0005 #	0.005 U	0.005 U	PNA	0.005 U	PNA	0.0027 B	PNA	0.0033	U 0.0033	U PNA	PNA	0.0056 t	J 0.0056 U	J PNA	PNA	0.0027	U PNA	0.0032 U	PNA	PNA	0.0019 U
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.0213 B	PNA	0.0015	B 0.0010	U PNA	PNA	0.0012 0	J 0.0012 U	J PNA	PNA	0.0064	B PNA	0.0003 B	PNA	PNA	0.0003 U
Zinc as Zn	mg/L	2#	0.01	0.01	PNA	0.01	PNA	0.1	PNA	0.0091	B 0.0172	B PNA	PNA	0.0036 E	3 0.0039 E	B PNA	PNA	0.0139	B PNA	0.0083 B	PNA	PNA	0.008 B
Alkalinity tot CaCo3	mg/L	NA	30	50	50	32	65	60.8	62	41	PNA	68.2	PNA	36.3	PNA	55 D	PNA	39.8	41.4 C	47.8 D	29.5	PNA	28.3
Chioride as Cl	mg/L	250.0	140	41	18	320	28.8	45.4	14.6	139	PNA	9.53	PNA	29.9	PNA	16.6	PNA	109	D 17.2	10.6	11.3	PNA	49.1
Sulfate as SO4	mg/L	250.0	19	10	6	7.0	13.9	9.5	11.8	6.76	PNA	7.36	PNA	6.42	PNA	8.34	PNA	5	U 5 U	5.77	7.43	PNA	5.84
Bromide	mg/L	2#	PNA	PNA	PNA	PNA	<0.5	0.5 U	0.5 U	0.5	U PNA	0.50 U	PNA	0.5 U	J PNA	0.5 U	PNA	0.5	U 0.5 L	0.5 U	0.5 U	PNA	0.5 U
BOD5	mg/L	NA	2 U	2 U	2 U	2 U	2 U	14	2 U	2	U PNA	2 U	PNA	2 1	J PNA	2 U	PNA	2	U 2 1	2 U	2 U	PNA	2 U
COD	mg/Ł	NA	40	40 U	PNA	40 U	10 U	16.9	10 U	10	U PNA	10 U	PNA	10 L	J PNA	10 U	PNA	10	U 10 L	10 0	10 U	PNA	10 U
Color	units	NA	5 U	5 U	5 U	5 U	PNA	40	PNA	5	PNA	PNA	PNA	20	PNA	PNA	PNA	10	PNA	10	PNA	PNA	5
Chromium hex as Cr	mg/L	0.05	0.02 U	0.02 U	PNA	0.02 U	PNA	0.0 U	PNA	0.02	U PNA	PNA	PNA	0.02 0	J PNA	PNA	PNA	0.02	U PNA	0.02 U	PNA	PNA	0.02 U
Hardness as CaC03	mg/L	NA	64	51	35	120	66	100	115	160	PNA	74	PNA	38	PNA	58 D	PNA	76	D 32	62 D	38 D	PNA	62 D
Ammonia as N	mg/L	2.0	0.05 U	0.05 U	0.05 U	0.05 U	0.85	1.2	0.1 U	0.1	U PNA	0.27	PNA	0.15	PNA	0.1 U	PNA	0.98	0.1 L	0.17	0.46	PNA	0.28
Nitrite as N	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.1 U	0.1 U	PNA	PNA	0.10 U	PNA	0.1 L	J PNA	0.1 U	PNA	0.1	U 0.1 L	0.1 U	0.1 U	PNA	0.1 U
Nitrate as N	mg/L	10	0.6	0.5	PNA	0.8	0.52	0.32	0.28	0.52	PNA	1.04	PNA	0.56	PNA	0.41	PNA	0.59	0.15	1.01	0.2	PNA	0.54
Phenois as Phenoi	mg/L	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.005 U	0.005 U	0.005	U PNA	5.0 U	PNA	0.005 L	J PNA	0.005 U	PNA	0.005	U 0.005 L	0.005 U	0.005 U	PNA	0.005 U
Tot Dissolved Solids	mg/L	NA	290	150	PNA	680	169	155	97	307	PNA	120	PNA	86	PNA	128	PNA	291	58	87	85	PNA	145
Tot. Kjeldahl Nitrogen	mg/L	NA	0.8	1.8	PNA	1.8	1.33	5.55	2.28	0.44	PNA	0.37	PNA	0.72	PNA	0.44	PNA	1.32	0.27	0.41 U	0.71	PNA	0.32
Tot Organic Carbon	mg/L	NA	1 U	1.3	1.8	<1 U	2.3	2.9	2.4	1.8	PNA	2.0	PNA	1.6	PNA	1.3	PNA	1.2	12.2	1.9	1 U	PNA	10.3
Turbidity	NTU	NA	7.7	77	20	66	21	88.2	634	100	PNA	93.6	PNA	184	PNA	114	PNA	120	49.3	6.6	148	PNA	1.6
Temperature	deg.C	NA	14	14	14	15	11.9	12.76	12.15	13.31	PNA	10.52	PNA	12.06	PNA	10.74	PNA	12.19	11.86	12.95	13.07	PNA	13.18
pH	units	6.5-8.5	6.4	6.3	6.9	6.3	8.47	6.30	8.37	6.27	PNA	8.57	PNA	6.79	PNA	5.88	PNA	4.47	5.68	6.28	6.85	PNA	7.1
Spec. Cond	umho/cm	NA	590	270	220	1100	PNA	PNA	152	434	PNA	213	PNA	223	PNA	153	PNA	480	202	166	121	PNA	258

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NOTES: - NYSDEC. Class GA Groundwater Standards

YOBEC Cask GA Gardented Earliest
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ANALYTICAL	UNITS	GW										MW-3B									
ANALTIICAL	UNITS								T				1	1	[	Oct	2011	- T			
PARAMETERS		STND⁺	April 2005	April 2006	Oct. 2006	April 2007	Oct. 2007	April 2008	Oct. 20	08	April 2009	Oct. 2009	April 2010	Oct. 2010	April 2011	Unfiltered	Filtered		April 2012	Oct. 2012	April 2013
Aluminum as Al	ma/L	NA	0.03	0.06	0.04	0.02	PNA	0.0 B	PNA		0.0092 U	PNA	0.0341 B	PNA	0.0161 B	PNA	PNA		0.0354 B	PNA	0.0123 B
Antimony as Sb	mg/L	0.003 #	0.01 U	0.005 U	PNA	0.005 U	PNA	0.0 U	PNA		0.0027 U	PNA	0.0028 U	PNA	0.0046 B	PNA	PNA		0.0011 U	PNA	0.0012 U
Arsenic as As	mg/L	0.025	0.025	0.023	0.019	0.024	PNA	0.0116	PNA		0.0128	PNA	0.0125	PNA	0.0134	PNA	PNA		0.0063 B	PNA	0.0125
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	0.042 B	PNA		0.052 B	PNA	0.0165 B	PNA	0.0409 BE	PNA	PNA		0.0319 B	PNA	0.291 B
Bervilium as Be	mg/L	0.003	0.001 U	0.001 U	PNA	0.001 U	PNA	0.0 U	PNA		0.00016 U	PNA	0.00017 U	PNA	0.00019 B	PNA	PNA		0.00012 U	PNA	0.0001 U
Boron as B	mg/L	1.0	0.1	0.08	PNA	0.12	PNA	0.1 B	PNA		0.0868 B	PNA	0.0131 B	PNA	0.0893 BE	PNA	PNA		0.0502 B	PNA	0.0402 B
Cadmium as Cd	mg/L	0.005	0.005 U	0.005 U	PNA	0.005 U	0.00032 U	0.00027 U	0.00035	U	0.00023 U	0.0034 U	0.00024 U	0.00025 U	0.00027 U	0.00017 U	0.0002	в	0.00018 U	0.000087 U	0.0001 U
Calcium as Ca	mg/L	NA	9.8	12	15	16	11.5	10.7	11.9		13.3	8.74	5.72	9.71	12	13	11.4		7.79	6.35	9.03
Chromium as Cr	mg/L	0.05	0.005 U	0.005 U	PNA	0.006	PNA	0.0 B	PNA		0.00079 B	PNA	0.002 B	PNA	0.0011 B	PNA	PNA		0.0081 B	PNA	0.0035 B
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.0056 B	PNA		0.0075 B	PNA	0.0031 B	PNA	0.0054 B	PNA	PNA		0.0041 B	PNA	0.0047 8
Copper as Cu	mg/L	0.2	0.01 U	0.01 U	PNA	0.01 U	PNA	0.0 U	PNA		0.0013 B	PNA	0.0037 B	PNA	0.00055 U	PNA	PNA		0.0007 U	PNA	0.0011 B
Cyanide as CN	mg/L	0.20	0.02 U	0.02 U	PNA	0.02 U	PNA	0.0 U	PNA		0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	PNA		0.01 U	PNA	0.01 U
Iron as Fe	mg/L	0.3	13	21	20	21	13.1	14.8	15.7		21.9	10.0	8.06	13.3	16.8	9.84	0.136		11.2	10.8	12.1
Lead as Pb	mg/L	0.025	0.005 U	0.005 U	0.005 U	0.005 U	0.0014 U	0.0023 U	0.0013	U	0.0015 U	0.0018 U	0.0169	0.0017 U	0.0018 B	0.0034	0.0061		0.0038	0.00096 U	0.0029 B
Magnesium	mg/L	35 #	PNA	PNA	5.3	PNA	3.99 B	4.04 B	4.49	В	5.06	3.26 B	2.09 B	3.8 B	4.45 B	3.09 B	3.18	в	2.51 B	1.9 B	2.96 B
Manganese as Mn	mg/L	0.3	1.5	3.5	3.1	3.3	1.97	2.13	2.62		3.69	1.79	1.79	2.58	2.37	4.36 E	0.995	_	2,34	3.54	3.4
Mercury as Hg	mg/L	0.0007	0.00025 U	0.00025 U	0.00025 U	0.00025 U	PNA	0.0 U	PNA		0.0001 U	PNA	0.0001 U	PNA	0.0001 U	PNA	PNA		0.0001 U	PNA	0.0001 U
Nickel as Ni	mg/L	0.1	0.01 U	0.01 U	PNA	0.01 U	PNA	0.0 B	PNA		0.0043 B	PNA	0.001 U	PNA	0.0027 B	PNA	PNA		0.002 B	PNA	0.0022 B
Potasium	mg/L	NA	PNA	PNA	PNA	PNA	5.99	4.81 B	5.59		6.21	4.96 B	2.99 B	3.68 B	6.82	4.37 B	6.61	E	4.86 B	2.59 B	3.72 B
Selenium as Se	mg/L	0.01	0.004 U	0.004 U	PNA	0.004 U	PNA	0.0 U	PNA		0.0027 U	PNA	0.0042 U	PNA	0.0026 U	PNA	PNA		0.0028 U	PNA	0.0023 U
Silver as Ag	mg/L	0.05	0.005 U	0.005 U	PNA	0.005 U	PNA	0.0 U	PNA		0.0006 U	PNA	0.0005 U	PNA	0.00052 U	PNA	PNA		0.00032 U	PNA	0.0002 U
Sodium as Na	mg/L	20	8.8	11	PNA	18	12.9	15.6	15.9		20	9.52	7.92	9.91	16	12.8	12.8	_	11.5	8.8	9.98
Thallium as TI	mg/L	0.0005 #	0.005 U	0.005 U	PNA	0.005 U	PNA	0.0 U	PNA		0.0033 U	PNA	0.0056 U	PNA	0.0027 U	PNA	PNA	_	0.0032 U	PNA	0.0019 U
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.0022 U	PNA		0.00097 U	PNA	0.0012 U	PNA	0.00072 B	PNA	PNA	_	0.00023 U	PNA	0.0003 U
Zinc as Zn	mg/L	2 #	0.01	0.02	PNA	0.02	PNA	0.0 B	PNA		0.0068 B	PNA	0.0101 B	PNA	0.0092 B	PNA	PNA		0.00044 U	PNA	0.0115 B
Alkalinity tot CaCo3	mg/L	NA	42	60	100	110	60.2	60.8	64		72	47.6	28.1	44 D	64.4 D	44.5 D	PNA		63 D	29.9	46.3 D
Chloride as Cl	mg/L	250.0	10	5	20	23	17.1	18.5	19.6		21.9	10.4	8.61	11.6	12.7	12.6	PNA		13.1	12	13.5
Sulfate as SO4	mg/L	250.0	40	12	7	7.0	11.1	11.9	12.2		9.9	10.1	8.06	8.62	8.24	7.3	PNA	-+-	8.61	10.5	11.2
Bromide	mg/L	2 #	PNA	PNA	PNA	PNA	0.5 U	0.5 U	0.0	U	0.5 U	0.50 U	0.5 U	0.5 U	0.5 U	0.5 U	PNA	_	0.5 U	0.5 U	0.5 U
BOD5	mg/L	NA	2 U	6.0	3.0 U	3 U	- ·	12	2	U	2 U	2 U	2 <u>U</u>	2 U	2 <u>U</u>	4	PNA	_	2 U	2 U	2 U
COD	mg/L	NA	80	40 U	PNA	40 U		21.8	26.8		13.3	10 U	10 U	10 U	13.7	10 U	PNA	$\rightarrow$	10 U	10 U	10 U
Color	units	NA	5 U	5 U	5 U	10	PNA	140	PNA		60	PNA	50	PNA	75 E		PNA	-+-	200 D	PNA	125 D
Chromium hex as Cr	mg/L	0.05	0.02 U	0.02 U	PNA	0.02 U	1111	0,0 U	PNA		0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	PNA		_0.02 U	PNA	0.0001 UD
Hardness as CaC03	mg/L	NA	40	51	60	62	54	60	52		170	48	37	58 D	60 D	64 D			41	37	84 D
Ammonia as N	mg/L	2.0	24	1.8	2.1	5.0	6.67	3.52	3.99		4.81	3.0	1.62	1.07	2.6	0.74	PNA		4.21 D	2.07	2.82 D
Nitrite as N	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.1 U	.0.1	U	PNA	0.1 U	0.1 U	0.1 U	0.1 U		1 7 10 1	—	0.1 U	0.1 U	0.1 U
Nitrate as N	mg/L	10	0.5 U	0.5 U	PNA	0.5 U	0.1 U	0.1 U	0.1	U	0.1 U	0.1 U	0.12	0.1 U	0.1 U		PNA	-	0.1 U	0.1 U	0.1 U
Phenols as Phenol	mg/L	0.001	0.001 U	0.002	0.001 U	0.002	0.005 U	0.005 U	0.005	U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U		PNA		0.005 U	0.005 U	0.005 U
Tot Dissolved Solids	mg/L	NA	91	110	PNA	180	135	111	101		127	93	63	104	116	73	PNA	-	85	82	75
Tot. Kjeldahl Nitrogen	mg/L	NA	2.4	2.4	PNA	8.6	7.66	5.73	5.39		6.01	3.64	1.9	1.63	2.67	1.42	PNA	-	8.44 D	3.16	3.05
Tot Organic Carbon	mg/L	NA	1 U	2.4	3.6	1.7	2.6	2.6	2.8		4.1	1.0	1U	1.7	2.5	13	PNA	-+-	1 U	1 U	14.2
Turbidity	NTU	NA	8.4	150	110	92	7	7.3	24.6		0	16.5	0	10.6	10.4	14.8	PNA	+	2.2	0	0
Temperature	deg.C	NA.	14	14	13	14	11.9	12.96	12.78		12.84	10.73	12.76	10.54	12.67	12.55	PNA		14.22	12.79	12.58
рН	units	6.5-8.5	6.5	6.1	6.5	6.4	8.35	6.39	6.43		6.56	5.77	6.92	7.54	6.97	6.29	PNA	-+-	6.49	6.95	6.44
Spec. Cond	umho/cm	NA	170	210	340	350	PNA	PNA	212		258	365	154	152	361	254	PNA		245	165	231

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\* = NYSDEC. Class GA Groundwater Standards

5 NYCRR Part 703 # = Guidance value, no standard exists

NA = Not available.

PNA = parameter not analyzed for

 ${\bf B}$  = This flag is used when the analyte is found in the associated blank as in the sample

E - This flag identified compunds whose concentrations exceed the calibration range of the GCMS instrument for that specific analysis

F - This flag indicates the results of a filtered metal analysis

J - The analyte was positively identified, the associated numerical value is the approximate concentration of the analyte in the sample

U) - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified

1.0 = Compound exceeded standard. 1.0 = Compound at standard. NM = Not Monitored

ANALYTICAL	UNITS	GW								MW	-3C							
			April 2005	April 2006	Oct. 2006	April 2007	Oct. 2007	April 2008	Oct. 2008	April 2009	Oct. 2009	April 2010	Oct. 2010	April 2011	Oct. 2011	April 2012	Oct. 2012	April 2013
PARAMETERS		STND*																
Aluminum as Al	mg/L	NA	0.04	0.05	0.06	0.03	PNA	0.0 B	PNA	0.0092 U	PNA	0.0268 B	PNA	0.0082 U	PNA	0.0369 B	PNA	0.0095 U
Antimony as Sb	mg/L	0.003 #	0.01 U	0.005 U	PNA	0.005 U	PNA	0.0 U	PNA	0.0027 U	PNA	0.0028 U	PNA	0.0021 U	PNA	0.0011 U	PNA	0.0036 B
Arsenic as As	mg/L	0.025	0.004 U	0.005 U	0.005 U	0.005 U	PNA	0.0 U	PNA	0.0028 U	PNA	0.0028 U	PNA	0.0019 U	PNA	0.0044 U	PNA	0.0028 U
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	0.0437 B	PNA	0.0376 B	PNA	0.0417 B	PNA	0.0403 BE	PNA	0.04 B	PNA	0.0248 B
Beryllium as Be	mg/L	0.003	0.001 U	0.001 U	PNA	0.001 U	PNA	0.0 U	PNA	0.00016 U	PNA	0.00017 U	PNA	0.00013 U	PNA	0.00012 U	PNA	0.0001 U
Boron as B	mg/L	1.0	0.02	0.03	PNA	0.03	PNA	0.0 B	PNA	0.0034 B	PNA	0.0167 B	PNA	0.0154 BE	PNA	0.0113 B	PNA	0.0175 B
Cadmium as Cd	mg/L	0.005	0.005 U	0.005 U	PNA	0.005 U	0.00032 U	0.00027 U	0.00035 U	0.00023 U	0.0034 U	0.00024 U	0.00025 U	0.00027 U	0.00017 U	0.00018 U	0.000087 U	0.0001 U
Calcium as Ca	mg/L	NA	10	17	18	19	22.2	18.9	18.9	16.7	16.4	16.1	16.8	16.5	16.6	13.8	14.1	12
Chromium as Cr	mg/L	0.05	0.016	0.014	PNA	0.02	PNA	0.0726	PNA	0.0507	PNA	0.0167	PNA	0.0034 B	PNA	0.0254	PNA	0.0029 B
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.0017 U	PNA	0.0012 U	PNA	0.0012 U	PNA	0.00049 U	PNA	0.00052 U	PNA	0.0004 U
Copper as Cu	mg/L	0.2	0.01 U	0.01 U	PNA	0.02	PNA	0.0 U	PNA	0.0012 U	PNA	0.0068 B	PNA	0.00065 B	PNA	0.0024 B	PNA	0.0004 U
Cyanide as CN	mg/L	0.20	0.02 U	0.02 U	PNA	0.02 U	PNA	0.0 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U
Iron as Fe	mg/L	0.3	0.16	0.16	0.16	0.29	0.823	0.354	0.182	0.283	0.107	0.0769 B	0.0584 B	0.0358 B	0.323	0.115	0.171	0.0185 B
Lead as Pb	mg/L	0.025	0.005 U	0.005 U	0.005 U	0.005 U	0.0014 U	0.0023 U	0.0013 U	0.0015 U	0.0018 U	0.0321	0.0157	0.0015 U	0.0128	0.0118	0.0012 B	0.0084
Magnesium	mg/L	35 #	PNA	PNA	7.8	PNA	10.6	9.56	9.84	8.73	8.34	7.84	8.36	8.75	5.23	6.48	6.35	5.66
Manganese as Mn	mg/L	0.3	0.03	0.06	0.07	0.06	0.181	0.099	0.0756	0.0628	0.0587	0.054	0.0677	0.0759	0.142 E	0.0517	0.053	0.0406
Mercury as Hg	mg/L	0.0007	0.00025 U	0.00025 U	0.00025 U	0.00025 U	PNA	0.0 U	PNA	0.0001 U	PNA	0.0001 U	PNA	0.0001 U	PNA	0.00011 B	PNA	0.0001 U
Nickel as Ni	mg/L	0.1	0.03	0.04	PNA	0.03	PNA	0.0 B	PNA	0.0098 B	PNA	0.0066 B	PNA	0.0094 B	PNA	0.0056 B	PNA	0.0044 B
Potasium	mg/L	NA	PNA	PNA	PNA	PNA	1.27 B	1.17 B	1.21 B	1.29 BE	1.36 B	1.34 B	1.78 B	1.69 B	1.3 B	1.32 B	1.01 B	1.03 B
Selenium as Se	mg/L	0.01	0.004 U	0.004 U	PNA	0.004 U	PNA	0.0 U	PNA	0.0027 U	PNA	0.0042 U	PNA	0.0026 U	PNA	0.0028 U	PNA	0.0023 U
Silver as Ag	mg/L	0.05	0.005 U	0.005 U	PNA	0.005 U	PNA	0.0 U	PNA	0.0006 <u>U</u>	PNA	0.0005 U	PNA	0.00052 U	PNA	0.00032 U	PNA	0.0002 U
Sodium as Na	mg/L	20	11	15	PNA	17	18.2	18.6	18.7	16.5	18	18.4	19.1	22.1	17.4	17	15.7	13.2
Thailium as TI	mg/L	0.0005 #	0.004 U		PNA	0.005 U	PNA	0.0 U	PNA	0.0033 U	PNA	0.0056 U	PNA	0.0027 U	PNA	0.0032 U	PNA	0.0019 U
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.0022 U	PNA	0.00097 U	PNA	0.0012 U	PNA	0.00085 B	PNA	0.0004 B	PNA	0.0004 B
Zinc as Zn	mg/L	2 #	0.01 U		PNA	0.02	PNA	0.0 B	PNA	0.0496	PNA	0.0047 B	PNA	0.0111 B	PNA	0.00044 U	PNA	0.0076 B
Alkalinity tot CaCo3	mg/L	NA	46	70	88	82	97.6	87.2	82.5	73.6	77.5	76.9	90 D	81.8 D	69.3 D	70.4 D	61.9 D	
Chloride as Cl	mg/L	250.0	16	26	23	26	27.7	23.7	23.9	21	20	22.4	22.8	16.8	12.3	16.7	16.1	13.2
Sulfate as SO4	mg/L	250.0	5 U	5 U	5 U	5 U	5 U	5U	5 U	5 U	5 U		_5 U	5 U	5 U	5 U	5 U	
Bromide	mg/L	2#	PNA	PNA	PNA	PNA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
BOD5	mg/L	NA	2 U	2U	2 U	3 U	U	13	2U	2 U	2 U		2 U	2 U	2 U	2 U	2 U	
COD	mg/L	NA	60	40 U	PNA	40 U	10 U	10 U	39.2	10 U	10 U		10 U	10 U	10 U	10 U	10 U	
Color	units	NA	5 U	5 U		10	PNA	5	PNA	5 U	PNA	5	PNA	5 U	PNA	5	PNA	5 U
Chromium hex as Cr	mg/L	0.05	0.02 U	0.02 U	PNA	0.02 U	PNA	0.0 U	PNA	0.02 U	PNA	0.02 U	NA	0.02 U	PNA	0.02 U	PNA	0.02 U
Hardness as CaC03	mg/L	NA	45	70	77	76	91	86	78	150	72	78	86 D	74 D	84 D	64 D	60 D	
Ammonia as N	mg/L	2.0	0.05 U		0.05 U	0.05 U	0.1 U	0.1 U	0.1 U	0.15	0.1 U		0.1 U	0.1 U	0.16	0.1 U	0.1 U	0.1 U
Nitrite as N	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.1 U	0.1 U	PNA	0.1 U		0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrate as N	mg/L	10	0.5 U	0.5 U	PNA	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.16	0.1 U	0.1	0.1
Phenols as Phenol	mg/L	0.001	0.002	0.002	0.001 U	0.001 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Tot Dissolved Solids	mg/L	NA	100	130	PNA	210	187	141	132	129	147	132	130	139	95	120	123	97
Tot. Kjeldahl Nitrogen	mg/L	NA	0.6	1.6	PNA	1.2	0.3	0.1 U	0.13	0.2	0.1 U	0.1 U	1.51	0.1 U	0.28	0.1 U	0.1 U	0.1 U
Tot Organic Carbon	mg/L	NA	1 U	1 U	1.5	1 U	1.4	1.1	1 U	1	1 U	1 U	1	1 U	20.4	1 U	1 U	15.9
Turbidity	NTU	NA	1.6	1.2	2.2	2.2	2	9.6	27	4.9	7	0	7.7	PNA	12.0	0.0	0.0	0
Temperature	deg.C	NA	13	15	13	13	12.5	12.67	12.47	12.4	11.56	12.59	11.95	PNA	13.11	16.55	12.71	12.57
pH Spec. Cond	units	6.5-8.5	6.6	6.3	6.7	6.6	8.58	6.24	6.48	6.55	6.27	6,78	5.95	PNA	6.80 210	6.23	6.98	7.15
	umho/cm	NA	150	200	320	260	PNA	PNA	187	170	256	264	195	PNA		210	197	191

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6 NYCRR Part 703

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1.0 = Compound exceeded standard. 1.0 = Compound at standard.

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Department         Symp         Operation         Op	NALYTICAL UI	UNITS	GW									MW-4A								
DADAMIDIS         Difference         Difference <thdifference< th="">        Difference        Difference&lt;</thdifference<>			· · · ·	Annil 2005	Oct 2005	Annii 2005	Oct 2006	April 2007	Oct 2007	April 2008	Oct 2008	April 2009	Oct 2009	April 2010	Oct 2010	April 2011	Oct 2011	April 2012	Oct 2012	April 2013
nume         0         0         0         0         0         PAA         PAA         0         PAA         PAA         PAA         PAA        PAA        PAA        PA	RAMETERS		STND*	April 2005	001. 2005	April 2008	001.2000	April 2007	001. 2007	April 2000	001.2008	April 2003	OCI. 1005	April 2010	OCL LUID	74011 2011	000.2011	April 1011	OCC. LOTE	
Americ         Orde         Orde         U         PNA         PNA<	num as Al m	mg/L	NA	1.0	0.5	1.3														0.243
Internation         Print	iony as Sb m	mg/L	0.003 #	0.01 U	PNA	0.005 U	PNA	0.005 U	PNA	0.0 U	PNA	0.0027 U	PNA	0.0028 U	PNA	0.0021 U	PNA	0.0011 U	PNA	0.0012 U
Depulse for         PMA         DOOT         U         DOOT <thu< th="">         DOOT         U         DOOT         <thdoot< th="">        U         <thdoot< th=""> <thdoo< td=""><td>nicasAs m</td><td>mg/L</td><td>0.025</td><td>0.005 U</td><td>0.004 U</td><td>0.005 U</td><td>0.005 U</td><td>0.006</td><td>PNA</td><td></td><td>PNA</td><td>0.0028 U</td><td>PNA</td><td>0.0028 U</td><td></td><td></td><td></td><td></td><td></td><td>0.0028 U</td></thdoo<></thdoot<></thdoot<></thu<>	nicasAs m	mg/L	0.025	0.005 U	0.004 U	0.005 U	0.005 U	0.006	PNA		PNA	0.0028 U	PNA	0.0028 U						0.0028 U
model         model         10         Oxide         PMA         0.005         U         0.0028         U         0.0022         U         0.0027         U         0.0017         U         0.0017 </td <td>m n</td> <td>mg/L</td> <td>1</td> <td>PNA</td> <td>PNA</td> <td>PNA</td> <td></td> <td></td> <td></td> <td>0.0275 B</td> <td></td> <td></td> <td></td> <td>0.0719 B</td> <td>-</td> <td></td> <td>the second s</td> <td></td> <td></td> <td>0.206</td>	m n	mg/L	1	PNA	PNA	PNA				0.0275 B				0.0719 B	-		the second s			0.206
Communic Cammunic Cammunicammunicamanu cammunic Cammunic Cammunic Cammunic Cammunic Camm	ium as Be m	mg/L	0.003	0.001 U	PNA	0.001 U														0.0002 B
Calor         NM         4.6         6.0         6.3         6.90         6.90         11.2         7.80         7.81         7.81         8.84         23.5           Consuma CC         mgL         6.84         PNA         PMA         0.001         9.74         0.002         9.74         0.0022         9.74         0.0022         9.74         0.0022         9.74         0.0022         9.74         0.0022         9.74         0.0022         9.74         0.0022         9.74         0.0022         9.74         0.0022         9.74         0.0022         9.74         0.0022         9.74         0.002         9.74         0.0022         9.74         0.002         9.74         0.001         9.74         0.001         9.74         0.001         9.74         0.001         9.74         0.001         0.76         0.001         0.76         0.001         0.76         0.001         0.001         0.76         0.001         0.76         0.001         0.76         0.001         0.76         0.001         0.76         0.001         0.76         0.001         0.76         0.001         0.76         0.001         0.76         0.001         0.76         0.001         0.76         0.001         0.76 <th< td=""><td>n as B m</td><td>mg/L</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.0212 B</td></th<>	n as B m	mg/L																		0.0212 B
Consult and C         region         No.         PMA         PDA         PDA        PDA         PDA													a de la seconda d							0.0003 B
Object         Org         Object         VM         PMA         PMA         PMA         PMA         0.007         U         PMA         0.0072         U         PMA         0.0012         U         PMA         0.0002         U         PMA         0.0012         U        PMA        <	um as Ca m	mg/L																		13.9
Compose and Criteria         Press         Ooit         U         Orit         U         Ooit         U         Orit         U	mium as Cr m	mg/L		and the second se		the second s				0.0 0										0.0046 B
Control         Old         Old         U         PNA         U         PNA <thu< th="">         PNA         U         <thu< td="" th<=""><td></td><td>mg/L</td><td></td><td></td><td></td><td>the second s</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>and the second se</td><td></td><td></td><td></td><td>0.0004 U</td></thu<></thu<>		mg/L				the second s										and the second se				0.0004 U
Data         Data         O         A         D </td <td>eras Cu m</td> <td>mg/L</td> <td>0.2</td> <td></td> <td>0.0004 U</td>	eras Cu m	mg/L	0.2																	0.0004 U
margl.         bit         0         0.005         U         0.005         U         0.005         U         0.0014         U         0.0014         U         0.0014         U         0.0015         U </td <td>de as CN m</td> <td>mg/L</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>and the second se</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.0.</td> <td>the second s</td> <td></td> <td>and the second se</td> <td>0.01 U</td>	de as CN m	mg/L							and the second se							0.0.	the second s		and the second se	0.01 U
Imagement         mpl         0.3         0.9         0.9         0.42         0.9         0.14         0.8         4.4         8         2.8         8         3.5         0         2.8         0.31         0.0278         0.0083         0.0177         0.0063         0.0011         0         0.0011         0         0.0011         0         0.0011         0         0.0011         0         0.0012         0         0.0011         0         0.0011         0         0.0011         0         0.0011         0         0.0025         0         0.0025         0         0.0025         0         0.0025         0         0.0025         0         0.0025         0         0.0025         0         0.0025         0         0.0027         0         PNA         0.0058         0         PNA         0.005         0         PNA         0.0058         0         PNA         0.0057         0         PNA         0.0058         0         PNA         0.0057         0         PNA         0.0051         0         PNA         0.0057         0<																		0.0011 0	CONTRACT AND DESCRIPTION	0.0631 B
Imagements as Mn         mg2         0.03         0.19         0.09         0.15         0.01         0.011         0.0274         0.0137         8         0.0164         0.0178         0.0428         0.0173         0.0583         0.0172         E         0.0001         U         PNA         0.00025         U         PNA         0.0011         U         PNA         0.0025         U         PNA         0.0011         U         PNA         0.0011         U         PNA         0.0025         U         PNA         0.0011         PNA         0.0011         PNA         0.0011         PNA         0.0011         PNA         0.0021         PNA         0.0028         U         PNA         0.0011         PNA         0.0022         U         PNA         0.0021         PNA         0.0022         U         PNA         0.0022 <td></td> <td>0.0063</td>																				0.0063
Image         Doc         Doc <thdoc< th=""> <thdoc< td="" th<=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>and the second se</td><td>4.57 B</td></thdoc<></thdoc<>																			and the second se	4.57 B
Invase and mode         opic         U         PMA         Opic         U         PMA         Opic         D         PMA         D         D         B         PMA         D <thd< th="">         D         <thd< th=""> <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>ADDRESS AND ADDRESS ADDRES</td><td>0.133</td></th<></thd<></thd<>																			ADDRESS AND ADDRESS ADDRES	0.133
Dissum         Dys.         NA         PNA         PNA         PNA         PNA         PNA         Dist         Dist <thdist< th=""> <thdis< t<="" td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.0001 U</td></thdis<></thdist<>																				0.0001 U
Stemma Se         mgL         0.01         0.004         U         PNA         0.004         U         PNA         0.0026         U         PNA         0.0027         U         PNA         0.00028         U         PNA         0.0022         U         PNA         0.0022         U         PNA         0.0026         U																			Carl Contract of the second	0.0056 B
Shore as Ag         mgL         0.05         0         PNA         0.005         U         PNA         0.005         U         PNA         0.0032         U         PNA           Sodum as Na         mgL         200         12         PNA         0.005         U         PNA         0.005         U         PNA         0.0032         U         PNA           Sodum as Na         mgL         2005         12         PNA         0.005         U         PNA         0.0005         U         PNA											2.40									4.36 B
code         mg0         20         12         PNA         10         PNA         13         105         142         28.8         19.6         16.1         19.2         14.8         17.0         15.1         14.1         15.1         16.1																				0.0023 U
Document         mg/L         Document         mg/L         Document         PNA         Document         PNA         Document         PNA         DPNA         DPNA         DPNA         DPNA         DPNA         DPNA         DPNA         DPNA         DPNA         DO0031         U         PNA         DO0051         U         PNA         DO0052         U         PNA         DO0053         U         PNA         DO0052         U         PNA         DO0053         U         PNA         DO012         U         PNA         DO0053         U         DO11         T13         T13         T13         T13         T13         T13         T13         T13         T13		_																	of the second	0.0002 U 18.3
Vandulum         mgL         NA         PNA	and the second se																		ALC AND DESCRIPTION OF A D	0.0019 U
Žinc as Zn         mgL         2 #         0.01         PNA         0.02         PNA         0.0         B         PNA         0.0148         B         PNA         0.0116         B         PNA         0.0005         B         PNA           Alkalini yu CaCo3         mgL         2500         19         33         16         25         19         192         139         35.4         47.6         25.5         30.3         20.7         18.2         2.4.4         6.5.5         8.2           Chorda as CM         mgL         25.00         10         11         30         10         11         13.1         14         12.0         5         U         11.7         16         J         17.3         10.9         11.4         12.3         14.4           Bromide         mgL         2.#         PNA         PNA         0.5         U         2.U         2.U         2.U <td< td=""><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.0003 U</td></td<>		_																		0.0003 U
Che Balt         Carbon         The         One         The         The <td></td> <td>_</td> <td></td> <td>0.0003 0</td>		_																		0.0003 0
Chronide as Cl         mgL         250.0         19         33         16         25         19         192         13.9         35.4         47.8         25.5         30.3         20.7         18.2         22.4         25.3         36.6           Sulfa as SO4         mgL         250.0         10         11         30         10         11         13.1         14         12.0         5         U         17.3         10.9         11.4         12.3         14.4           Bromide         mgL         2.#         PNA         PNA         PNA         PNA         PNA         O.5         U         0.5		_									1.01									2.2 B
Solution bit         mg/L         2500         10         11         30         10         11         13.1         14         12.0         5         U         11.7         16         J         17.3         10.9         11.4         12.3         14.4           Bronide         mg/L         28         PNA         PNA         PNA         PNA         D         0.5         U         0.0         U         0.0         U         0.0         U         0.0         U         0.0         U         0.0         U <td></td> <td>31.5</td>																				31.5
Domina Doc         mgC         200         DO         PNA         PNA         PNA         PNA         PNA         PNA         PNA         PNA         PNA         Dis         U         0.5         U </td <td></td> <td></td> <td>_</td> <td></td> <td>12</td>			_																	12
BOD5         mgL         NA         2         U         10         U<																				0.5 U
BOLD         mgL         NA         L </td <td></td> <td>0.5 0</td> <td></td> <td>0.5 U</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2 1</td>											0.5 0		0.5 U							2 1
OCO         mg/L         NA         S         U         S         U         S         U         S         U         S         U         S         U         S         U         S         U         PNA         O.02         U <thp< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td><u> </u></td><td></td><td>10 11</td><td></td><td>10 11</td><td><u> </u></td><td><u> </u></td><td><u> </u></td><td></td><td></td><td>2 0</td><td>10 U</td></thp<>							-		<u> </u>		10 11		10 11	<u> </u>	<u> </u>	<u> </u>			2 0	10 U
Octo         One         One <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>5 1</td>										5										5 1
Hardness as CaC03         mg/L         NA         26         35         31         32         39         29         26         32         140         40         47         30         D         33         33         35         45           Ammonia as N         mg/L         2.0         0.05         U         0.05         U         0.05         U         0.05         U         0.05         U         0.1         U							<u> </u>			00 11										0.02 U
Annona as No         mgL         2.0         0.05         U         0.01         U         0.1																				52 D
Nitrie as N         mgL         NA         PNA         PNA         PNA         PNA         PNA         PNA         PNA         PNA         PNA         Difference         Difference <thdifference< th="">         Difference         <thdi< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>40</td><td>0.1 U</td></thdi<></thdifference<>																			40	0.1 U
Initiate as N         mgL         10         2.3         PNA         4.9         PNA         7.4         2.65         1.5         3.97         0.1         U         7.01         6.33         3.59         D         4.55         D         3.3         D         4.3         D         7.03         D           Phenols as Phenol         mgL         0.001 <b>0.001</b> U         0.001         U         0.001         U         0.001         U         0.005         U         0.005 <td></td> <td>0.1 U</td>																				0.1 U
Principal mgL         0.001         0.001         0.001         0.001         0.001         0.005		_																		12.2 D
Tot Dissolved Solids         mgL         NA         84         PNA         110         PNA         130         97         68         111         176         134         133         76         103         79         103         163           Tot Kjøldah Nirogen         mgL         NA         0.4         PNA         1.8         PNA         1.4         0.24         0.1         0.2         0.18         0.12         0.1         U.J         0.5         U.D         0.11         0.1         U         0.1         U         1																				0.005 U
NA         0.4         PNA         1.8         PNA         1.4         0.24         0.1         U         0.2         0.18         0.12         0.1         U         0.5         UD         0.11         0.1         U         1 <thu< th=""> <thu< th=""> <thu< th=""></thu<></thu<></thu<>																				175
Tot Organic Carbon         mgL         NA         1         U         1		-																		0.1 U
NTUrbidity         NTU         NA         2.2         3.7         15         1         1.3         0         10.9         23.1         2.1         0.2         0         4.6         PNA         16.2         0.4         13.2           Temperature         deg.C         NA         12         15         12         14         12         13.4         1258         13.33         12.24         13.55         11         13.06         PNA         13.83         11.85         13.3										1 1				1 1				-	1 U	1.9
Temperature deg.C NA 12 15 12 14 12 13.4 1258 13.33 12.24 13.55 11 13.06 PNA 13.83 11.85 13.3						15	1		0	10.9	23.1	2.1	0.2	0	4.6	PNA		0.4	13.2	0.1
																				11.17
		units	6.5-8.5	5.5	\$.7			5.8			and the second se								and the second se	6.04
Der d													214		124	PNA	181	186	231	268

NOTES:

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\* = NYSDEC, Class GA Groundwater Standards

6 NYCRR Part 703

# = Guidance value, no slandard exists

NA = Not available

PNA = parameter not analyzed for

 ${\bf B}$  = This flag is used when the analyte is found in the associated blank as in the sample

E - This flag identified compands whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis

F - This flag indicates the results of a filtered metal analysis

J - The analyte was positively identified, the associated numerical value is the approximate concentration of the analyte in the sample

U) - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified

1.0 = Compound exceeded standard. 1.0 = Compound at standard. NM = Not Monitored

ANALYTICAL	UNITS	GW									MW-4B								
			April 2005	Oct. 2005	April 2006	Oct. 2006	April 2007	Oct. 2007	April 2008	Oct. 2008	April 2009	Oct. 2009	April 2010	Oct. 2010	April 2011	Oct. 2011	April 2012	Oct. 2012	April 2013
PARAMETERS		STND*	April 2005	Oct. 2005	April 2006	Uct. 2006	April 2007	Uct. 2007	April 2008	001. 2008	April 2009	001. 2009	April 2010	001.2010	April 2011	001. 2011	April 2012	000.2012	April 2013
Aluminum as Al	mg/L	NA	0.03	0.04	0.03	0.02	0.03	PNA	0.1 B	PNA	0.0092 U	PNA	0.049 BJ	PNA	0.0118 B	PNA	0.0287 B	PNA	0.0095 U
Antimony as Sb	mg/L	0.003 #	0.01 U	PNA	0.005 U	PNA	0.005 U	PNA	0.0 U	PNA	0.0027 U	PNA	0.0028 U	PNA	0.0043 B	PNA	0.0011 U	PNA	0.0012 U
Arsenic as As	mg/L	0.025	0.007	0.004 U	0.007	0.005 U	0.007	PNA	0.0 B	PNA	0.0037 B	PNA	0.0069 B	PNA	0.0041 B	PNA	0.0044 U	PNA	0.0028 U
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	PNA	0.0893 B	PNA	0.103 B	PNA	0.135 B	PNA	0.0747 BE	PNA	0.0921 B	PNA	0.0662 B
Beryllium as Be	mg/L	0.003	0.001 U	PNA	0.001 U	PNA	0.001 U	PNA	0.0 U	PNA	0.00016 U	PNA	0.00017 U	PNA	0.00013 U	PNA	0.00012 U	PNA	0.0001 U
Boron as B	mg/L	1.0	0.12	PNA	0.1	PNA	0.1	PNA	0.1 B	PNA	0.0772 B	PNA	0.108	PNA	0.0817 BE	PNA	0.0749 B	PNA	0.0761 B
Cadmium as Cd	mg/L	0,005	0.005 U		0.005 U	PNA	0.005 U	0.00032 U	0.00027 U	0.00035 U	0.00023 U	0.00034 U	0.00024 U	0.0003 B	0.00027 U	0.00017 U	0.00018 U	0.000087 U	0.0001U
Calcium as Ca	mg/L	NA	31	31	29	27	28	27.3	26	27.3	22.9	21.7	19.8	17.2	17.8	21.6	19	36.2	21.4
Chromium as Cr	mg/L	0.05	0.005 U	PNA	0.005 U	PNA	0.006	PNA	0.0 B	PNA	0.0075 B	PNA	0.0611	PNA	0.0168	PNA	0.0051 B	PNA	0.003 B
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0036 B	PNA	0.0037 B	PNA	0.0049 B	PNA	0.0039 B	PNA	0.0029 B	PNA	0.0029 B
Copper as Cu	mg/L	0.2	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.0 U	PNA	0.0012 U	PNA	0.0065 B	PNA	0.00055 U	PNA	0.0016 B	PNA	0.0004 U
Cyanide as CN	mg/L	0.20	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.0 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U
Iron as Fe	mg/L	0.3	2.1	1.6	1.4	0.53	2.4	2.17	3.74	4,7	6.16	8.56	11.3	6.54	7	1.28	4.94	11.7	4.1
Lead as Pb	mg/L	0.025	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0014 U	0.0023 U	0.0013 U	0.0015 U	0.0018 U	0.0242 J	0.0091	0.0015 U	0.0103	0.0099	0.0013 B	0.007
Magnesium	mg/L	35 #	PNA	16	PNA	15	PNA	14.2	14.3	15.4	12.9	11.8	10.4	9.41	10.2	10.8	9.7	17.9	11.2
Manganese as Mn	mg/L	0.3	0.67	1	0.31	0.24	0.49	0.689	0.84	1.05	0.936	1.07	1.32	1.05	1.02	0.265 E	0.87	2.11	0.815
Mercury as Hg	mg/L	0.0007	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.00025 U	PNA	0.0 U	PNA	0.0001 U	PNA	0.01 U	PNA	0.0001 U	PNA	0.0001 U	PNA	0.0001 U
Nickel as Ni	mg/L	0.1	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.0 B	PNA	0.0049 B	PNA	0.0042 B	PNA	0.0054 B	2 72 B	0.0045 B	PNA	0.0057 B
Potasium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	4.01 B	4.38 B	4.38 B	5.69 E	5.83	8.23	6.93	6.21	L./L 0	6.3	8.53	4.83 B
Selenium as Se	mg/L	0.01	0.004 U	PNA	0.004 U	PNA	0.004 U	PNA	0.0 U	PNA	0.0027 U	PNA	0.0042 U	PNA PNA	0.0026 U	PNA PNA	0.0028 U 0.00032 U	PNA	0.0031 B 0.0002 U
Silver as Ag	mg/L	0.05	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.0 U	PNA	0.0006 U	27.8	0.0005 U	23.6	0.00052 U 26.7	23.1	20.9	35	21.3
Sodium as Na	mg/L	20	31	PNA	34	PNA PNA	30 0.005 U	27.6 PNA	28.0 0.0 U	27.4 PNA	0.0033 U	PNA	0.0056 U	PNA PNA	0.0027 U	PNA PNA	0.0032 U	PNA	0.0019 U
Thallium as TI	mg/L	0.0005 #	0.005 U	PNA PNA	0.005 U PNA	PNA	PNA 0	PNA	0.0022 U	PNA	0.00033 U	PNA	0.0036 U	PNA	0.00027 0	PNA	0.0032 0	PNA	0.0003 U
Vanadium	mg/L	NA	PNA	PNA	0.01	PNA	0.02	PNA PNA	0.0437	PNA	0.00097 B	PNA	0.0136 B	PNA	0.00092 B	PNA	0.0003 B	PNA	0.0073 B
Zinc as Zn Alkalinity tot CaCo3	mg/L	2 # NA	0.02	160	150	150	140	135	134	124	130	147	146	120 D	105 D	108 D	119 D	92.2 D	110 D
Chloride as Cl	mg/L mg/L	250.0	42	39	37	36	39	32	28.6	27.9	28.2	30.1	29.7	22.5	18	22	20.4	19.6	26.2
Sulfate as SO4	mg/L mg/L	250.0	9.0	7.0	9.0	6.0	5.0	9.2	11.1	11.2	10.8	847	9.74 J	9.24	8.26	5.15	9.25	10.3	8.34
Bromide	mg/L mg/L	2,30.0	PNA PNA	PNA	PNA	PNA	PNA	0.5 U	0.5 U	PNA	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BOD5	mg/L	NA NA	7.6	13	4.2	25	2.2	2 U	13	0.5 U	2 U	2 11	2 11	2 11	2 11	2 1	2 1	2 1	2 U
COD	mg/L	NA	100	PNA	40 U	PNA	40 U	10 U	11.9	16.9	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Color	units	NA	5 U	15	5 U	5 U	10	PNA	30	PNA	35	PNA	50	PNA	50	PNA	90 D	PNA	70 D
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.0 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U
Hardness as CaC03	mg/L	NA	150	140	140	130	130	125	118	96	160	116	105	94 D	88 D	116 D	104 D	94 D	112 D
Ammonia as N	mg/L	2.0	3.0	3.2	2.0	0.98	0.62	1.88	1.64	1.43	4.76	4.21	6.25	3.96 D	2.99	0.37	2.84 D	2.82	3.95 D
Nitrite as N	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.1 U	0.1 U	PNA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrate as N	mg/L	10	0.5	PNA	1.3	PNA	0.5 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.13	0.1 U	0.1 U	0.72	0.1 U	0.1 U	0.14
Phenols as Phenol	mg/L	0.001	0.002	0.001 U	0.007	0.001 U	0.002 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Tot Dissolved Solids	mg/L	NA	260	PNA	260	PNA	270	232	200	194	189	207	188	174	158	140	149	147	159
Tot. Kjeldahl Nitrogen	mg/L	NA	3.2	8.4	2.0	2.8	2.8	2.6	2.7	2.83	5.49	7.22	6.06 J	6.15 D	3.53 D	0.54	6.3 D	3.39 D	5.94 D
Tot Organic Carbon	mg/L	NA	4.0	3.3	3.9	3.3	2.7	3.4	3	3.3	3,1	3.9	4.6	2.3	2.1	29.5	2.1	1.8	31.1
Turbidity	NTU	NA	7.1	PNA	6.7	PNA	4.1	1	9	25.2	0.2	2.6	0	3.9	PNA	11.3	0	22.4	0
Temperature	deg.C	NA	14	14	14	14	13	13.5	13.32	13.35	13.23	12.81	13.55	13.8	PNA	13.87	12.65	13.4	13.19
рН	units	6.5-8.5	6.1	6.7	6.5	6.6	6.6	8.52	6.24	6.42	6.54	5.72	6.8	7.33	PNA	6.28	6.5	6.59	7.36
Spec. Cond	umho/cm	NA	440	430	460	440	440	PNA	PNA	298	304	906	452	242	PNA	306	354	316	362

NOTES:

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6 NYCRR Part 703

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E - This flag identified compands whose concentrations exceed the calibration range of the GCIMS instrument for that specific analysis

F This flag indicates the results of a filtered metal analysis

J - The analyte was positively identified, the associated numerical value is the approximate concentration of the analyte in the sample

U - The analyte was not detected above the reported sample quantifation limit. However, the reported quantifation limit is approximate and may or may not represent the actual limit of quantifation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified

1.0 = Compound exceeded standard. 1.0 = Compound at standard. NM = Not Monitored

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ANALYTICAL	UNITS	GW									MW-4C								
ANALITICAL	UNITS																	0.1.0010	1
PARAMETERS		STND*	April 2005	Oct. 2005	April 2006	Oct. 2006	April 2007	Oct. 2007	April 2008	Oct. 2008	April 2009	Oct. 2009	April 2010	Oct. 2010	April 2011	Oct. 2011	April 2012	Oct. 2012	April 2013
Aluminum as Al	mg/L	NA	0.02	0.03	0.02	0.01	0.03	PNA	0.0 B	PNA	0.0548 B	PNA	0.0302 BJ	PNA	0.0112 B	PNA	0.0267 B	PNA	0.0126 B
Antimony as Sb	mg/L	0.003 #	0.01 U	PNA	0.005 U	PNA	0.005 U	PNA	0.0 U	PNA	0.0027 U	PNA	0.0028 U	PNA	0.004 B	PNA	0.0011 U	PNA	0.0012 U
Arsenic as As	mg/L	0.025	0.004 U	0.004 U	0.006	0.005 U	0.005 U	PNA	0.0 U	PNA	0.0028 U	PNA	0.0028 U	PNA	0.0019 U	PNA	0.0044 U	PNA	0.0028 U
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	PNA	0.0312 B	PNA	0.0489 B	PNA	0.0337 B	PNA	0.0388 BE	PNA	0.0393 B	PNA	0.0391 B
Beryllium as Be	mg/L	0.003	0.001 U	PNA	0.001 U	PNA	0.001 U	PNA	0.0 U	PNA	0.00016 U	PNA	0.00017 U	PNA	0.00013 U	PNA	0.00012 U	PNA	0.0001 U
Boron as B	mg/L	1.0	0.02	PNA	0.05 U	PNA	0.01 U	PNA	0.0 B	PNA	0.015 B	PNA	0.0101 U	PNA	0.0084 BE	PNA	0.0072 B	PNA	0.0108 B
Cadmium as Cd	mg/L	0.005	0.005 U	PNA	0.005 U	PNA	0.005 U	0.00032 U	0.00027 U	0.00035 U	0.00023 U	0.0034 U	0.00024 U	0.00025 U	0.00027 U	0.00017 U	0.00018 U	0.000087 U	0.0001 U
Calcium as Ca	mg/L	NA	12	12	15	14	15	17.1	17	16.5	7.98	17.2	17.3	17.9	20	18.7	21.4	30.6	23.2
Chromium as Cr	mg/L	0.05	0.036	PNA	0.14	PNA	0.23	PNA	0.0714	PNA	0.0048 B	PNA	0.125	PNA	0.355	PNA	0.258	PNA	0.187
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0017 U	PNA	0.0012 U	PNA	0.0024 B	PNA	0.0056 B	PNA	0.0057 B	PNA	0.005 B
Copper as Cu	mg/L	0.2	0.01 U		0.01 U	PNA	0.01	PNA	0.0 U	PNA	0.0012 U	PNA	0.0089 B	PNA	0.0067 B	PNA	0.0058 B	PNA	0.0043 B
Cyanide as CN	mg/L	0.20	0.02 U		0.02 U	PNA	0.02 U	PNA	0.0 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U
Iron as Fe	mg/L	0.3	0.28	0.29	0.33	0.16	0.65	0.587	0.245	0.391	0.0769 B	0.232	0.357	0.432	0.962	0.908	0.809	1.92	0.77
Lead as Pb	mg/L	0.025	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0014 U	0.0023 U	0.0013 U	0.0021 B	0.0018 U	0.0301 J	0.0128	0.0015 U	0.0096	0.0123	0.00096 U	0.008
Magnesium	mg/L	35 #	PNA	5.7	PNA	6.9	PNA	7.95	8.44	8.51	3.38 B	8.65	8.24	8.66	10.4	8.06	9.85	13.7	10.6
Manganese as Mn	mg/L	0.3	0.02	0.03	0.02	0.04	0.02	0.0296	0.0191	0.0292	0.0706	0.0219	0.0242	0.0335	0.0457	0.0621 E	0.0444	0.0778	0.0381
Mercury as Hg	mg/L_	0.0007	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.00025 U	PNA	0.0 U	PNA	0.0001 U	PNA	0.01 U	PNA	0.01 U	PNA	0.0001 U	PNA	0.0001 U
Nickel as Ni	mg/L	0.1	0.2	PNA	0.36	PNA	0.46	PNA	0.122	PNA	0.0025 B	PNA	0.2	PNA	0.249	PNA	0.206	PNA	0,344
Potasium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	1.07 B	1.17 B	1.2 B	2.87 BE	1.45 B	1.47 B	1.72 B	1.93 B	0.846 B	1.53 B	1.56 B	1.33 B
Selenium as Se	mg/L	0.01	0.004 U	PNA	0.004 U	PNA	0.004 U	PNA	0.0 U	PNA	0.0027 U	PNA	0.0045 B	PNA	0.0026 U	PNA	0.0028 U	PNA	0.0023 U
Silver as Ag	mg/L	0.05	0.005 U		0.005 U	PNA	0.005 U	PNA	0.0 U	PNA	0.0006 U	PNA	0.0005 U	PNA	0.00052 U	PNA	0.00032 U	PNA	0.0002 U
Sodium as Na	mg/L	20	12	PNA	19	PNA	16	15.8	21	20.4	16.9	19.7	20.9	21.7	26	19.7	22 0.0032 U	30.8 PNA	0.0019 U
Thallium as TI	mg/L	0.0005 #	0.005 U		0.005 U	PNA	0.005 U	PNA	0.0 U	PNA	0.0033 U	PNA	0.0056 U	PNA	0.0027 U	PNA			
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0022 U	PNA	0.00097 U	PNA	0.0012 U	PNA	0.0015 B	PNA	0.0003 B	PNA PNA	0.0003 U 0.0129 B
Zinc as Zn	mg/L	2 #	0.02	PNA	0.01 U	PNA	0.04	PNA	0.0 B	PNA	0.0114	PNA	0.007 B	PNA	0.0144 B	PNA	0.00011 0		
Alkalinity tot CaCo3	mg/L	NA	34	42	40	50	40	33.4	36 54.6	33.4	6.6	33.8	32 60.9	31 D 70 D	32.1 60.6 D	30.3 64.8 D	36.1 D	35.2 D 94 D	33.2 82.6 D
Chloride as Cl	mg/L	250.0	30	32	39	44 5 U	53	55.8 5 U	54.6	58.4	26.5 5 U	55.1 5 U	60.9 5 U	<u> </u>	60.6 D	5 U	5 1	94 U	5 U
Sulfate as SO4	mg/L	250.0	5 U		5 U	5 U PNA	5 U PNA	5 U 0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromide	mg/L	2#	PNA	PNA	2 U	2 U		2 11	11	2 11	2 U	2 11	2 1		2 U	2 1	2 U	2 11	2 11
BOD5	mg/L	NA	2 U	2.8 PNA	2 U 40 U	PNA U	40 U	10 U	10 U	11.9	10 U	10 U		<u> </u>	10 U				
COD	mg/L	NA NA	60 5 U	5 U	40 U	5 U		PNA	5	PNA	5	PNA	5	PNA	10 0	PNA	10 0	PNA	15
Color	units	0.05	0.02 U	PNA U	0.01	PNA U	0.02	PNA	0.0 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U
Chromium hex as Cr	mg/L				68	64	65	78	78	64	120	75	80	84 D	90 D	114 D	102 D	106 D	116 D
Hardness as CaC03	mg/L	NA 2.0	53 0.05 U	53 0.05 U		0.05 U		78 0.1 U	0.1 U	0.1 U	0.28	0.1 U	0.1 U	0,1 U	0.1 U	0.12	0.1 U	0.1 U	0.1 U
Ammonia as N	mg/L	2.0 NA	0.05 U PNA	0.05 U	0.05 U	0.05 U	0.05 _0	PNA 0	0.1 U	0.1 U	0.28 PNA	0.1 U	0.1 U	0.1 U	0.1 U	0.12 0.1 U	0.1 U	0.1 U	0.1 U
Nitrite as N Nitrate as N	mg/L	10	0.5 U	PNA	0.5 U	PNA	0.5 U	0.1 U	0.1 U	0.1 U	0.54	0.1 U	0.1 U	0.1 U	0.1 U	0.11	0.1 U	0.1 U	0.1 U
	mg/L		0.001	0.001 U	0.003	0.001 U	0.001 U	0.005 U	. 0,005 U	0.005 U	0.005 U	5 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Phenois as Phenol	mg/L	0.001 NA	110	PNA 0	150	PNA	190	178	165	158	117	185	183	211	232	196	223	268	250
Tot Dissolved Solids	mg/L	NA NA	0.2	PNA	0.8	PNA	3.6	0.15	0.1 U	0.16	0.34	0.23	0.32 J	0.25	0.5 UD	0.25	0.1 U	0.1 U	0.1 U
Tot. Kjeldahl Nitrogen	n mg/L	NA NA	3.2	1 U	0.0	1 1	1 1	1 11	1 1	1 11	1 1	1 1	1 1	1 U	1 1	8.6	3.2	1 U	9.9
Tot Organic Carbon Turbidity	mg/L NTU	NA NA	1.8	1.8	1.7	1.5	2.5	1	9.6	31.5	94	2	0	12.4	PNA	14.8	7.1	48.5	1.4
		NA NA	1.8	1.8	13	1.5	12	12.8	12.69	12.61	12.43	12.1	12.01	12.49	PNA	13.82	12.55	13.04	12.85
Temperature	deg.C units	6.5-8.5	6.6	7.0	6.9	7.0	6.7	8.51	6.70	6.68	7	6.63	7.09	6.87	PNA	7.01	6.71	6.7	8.08
pH Spec. Cond	units umho/cm	0.5-8.5 NA	180	230	250	300	260	PNA	PNA B.70	207	208	302	315	250	PNA	324	354	414	391
apec. Cond	umnovem	NA NA	100	230	200	300	200	FINA		201	200	302	0.0	200	100	014	004	414	

NOTES:

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ANALYTICAL	UNITS	GW														MW-11A												
DADAMETERS		STND	April 2005	Oct. 2005	April 2006	Oct. 2006	April 2007	Oct. 2007	April 2008	Oc	L 2008	Apri Unfiltered	2009 Filtered	Oc	t. 2009 Filtered	Apr	2010 Filtered	Oct. Unfiltered	2010 Filtered	April Unfittered	2011 Filtered	Oct.	2011 Filtered	April Unfiltered	2012 Filtered	Oct. Unfiltered	2012 Filtered	April 2013 Unfiltered Filtered
Auminum as Al	mgiL	NA	1	0.24	2.1	0.58	0.98	0.15 B	0.0552 B		0.0087 U					0.0406 B.		0.0348 B	0.0061 1	0.0576 B				0.0665 B				0.0179 B 0.0308
Antimony as Sb	mg/L	0.003#	0.01 U	PNA	0.017	PNA	0.809	0.0023 U				F 0.0027 U		0.0055		0.0028	0.0028 U	0.0029 U	0.0029 L	0.0056 B		0.008 B	0.0022 B	0.0011 U	0.0011 U	0.007 B	0.0044 B	0.0016 B 0.0013
Arsenic as As	mg/L	0.025	0.004	0.024	0.047	0.021	9,933	0.0182	8.6372	8.4531	0.0018 U		0.0 U		0.0023 U	0.0071 B	0.0028 U	0.017	0.0027 L	0.0106	0.0019 U	0.0520	0.0018 B	0.0121	0.0044 U	0.0299	0.0015 U	0.0044 B 0.0028
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	0.221	0.41	0.493	0.177 B	F 0.194 B	0.1 B	0.36	0.126 B	0.16 B	0.0730 B	0.181 B	0.111 5	0.208 E	0.0989 B	0.851	0.0751 B	0.212	0.1570 B	0.497	0.1470 B	0.164 B 0.1410
Beryilium as Be	mg/L	0.003	0.001 U	PNA	0.001 U	PNA	0.001 U	0.00025 B	0.00013 B	0.00012	0.000096 U		0.0 B	0.00026	J 0.00026 U	0.00017 U	0.00017 U	0.00016 U	0.00016 L		0.00013 U	0.00013 U	0.00013 U	0.09012 U	0.00012 U	0.00012 U	0.00012 U	0.0001 U 0.00090
Boron as B	mg/L	1.0	2.8	PNA	0.05	PNA	0.29	0.0366 B		0.0406	0.0446 B		0.0 B	0.0336	3 0.04 B	0.0437 B	0.0461 B	0.0129 B	0.0252 E	0.0391 B	0.0500 B	0.003 U	0.0334 B	0.0194 8	0.0342 B	0.0639 B	0.0319 B	0.0419 BR 0.0508
Cadmum as Cd	mg/L	0.005	0.019	PNA	0.005 U	PNA	0.005 U	0.00032 U	0.00045 B	0.00035		F 0.00023 U	0.0 B	0.00034	J 0.00034 U	0.00024 U	0.00024 U	0.0005 B	0.00025 L	0.00027 U	0.00027 U	0.0032 B	0.00017 U	0.0004 B	0.00020 B		0.00009 U	0.0001 U 0.00080
Calcium as Ca	mgit.	NA	79	44	50	50	63	17	37.3	39.2		37.9	33.30	28.5	26.8	32.4	28.8	23.4	22.8	39.3	41.4	44.7	32.6	30.7	27.5	97.2	30.6	42.6 41.2
Chromium as Cr	mgi	0.05	0.012	PNA	0.02	PNA	0.018	0.0031 B		0.0034	0.00043 B		0.0 B		6 0.00044 U	0.0013 9	0.0007 B	0.0008 U	0.0008 L	0.0031 B	0.0025 B	0.0032 B 0.0181 B	0.0005 B	0.0283 0.0166 B	0.0053 B 0.0132 B	0.0149 E	0.0039 B	0.0046 B 0.0033 0.0107 B 0.0113
Cobelt	mg/L	NA	PNA	PNA	PNA	PNA	PNA		0.0214 B			F 0.0094 B			0.0112 0		0.0074 B	0.0188 B	0.0141 E				0.0031 B					
Copper as Cu	mgil	0.2	0.01 U	PNA	0.02	PNA	0.01	0.0039 B	0.02.01	0.0363	0.0065 B	F 0.0057 B	0.0 B	0.0218 PNA	B 0.0011 B	0.0028 3	0.0030 B	0.0031 U PNA	0.0031 U	0.00055_U	0.0079 B PNA	0.0007 U PNA	PNA 0	0.0034 B 0.01 U	0.0007 U PNA	0.00052 U PNA	0.0005 U PNA	0.0004 U 0.0016 0.01 U PNA
Cyanida as CN	mgiL	0.20	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.01 U	0.01 1	0.0443 B		PNA 8.8	227	4.50	50.9	1.40		5.50	10.1	3.54	E24	4.83	44.1	7.68	120	5.50	22.4 4.54
fron as Fe	mgiL	0.3	0.005 U	400	0.033	8.427	0.632	0.0054	253 0.0023 U	0.0139	0.0013 U		0.0 U		0.0018 U	0.0019 B.	0.0169	0.0173 U	0.0052	8.9251	0.0015 U	0.0327 U	0.0033	0.0132	0.0069	0.00096 U	0.00096 U	0.0049 0.0064
Lead as Pb	mg/L mg/L	35 #	0.005 U	16	PNA	17	PNA	9.29	12.3	19	18.9 1		15.2	12.5	12.3	10.6	9,44	9.81	9.28	13.9	15.10	10.7	10.70	12.3	11.40	33.6	10.6	15.8 15.00
Magnesium Manganese as Mri	mg/L	0.3	14	13	16	7.9		1.74	\$.17	7.44		3.81	3.00	6.43	4.00	2.1	1.31	2.11	1.74	4.6	1.14	18.1 E	3.15	2.58	2.15	7.33	2.27	2.02 1.83
Mercury as Hg	mg/L	0.0007	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.0001 U	0.0001 U	0.00013	0.00013 U		0.0 U		J 0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 B	0.0001 U	0.0001 U	0.0001 U	0.0001 U 0.0001
Nickel as Ni	mg/L	0.1	0.01	PNA	0.02	PNA	0.02	0.0053 B		0.011	0.0059 8		0.0 B		0.0086 B	0.001 U	0.0039 B	0.0045 B	0.0071 5	0.0036 8	0.0049 B	0.00066 U	0.0025 B	0.0107 B	0.0073 B	0.0118 B	0.0056 B	0.0045 B 0.0056
Potasium	ma/L	NA	PNA	PNA	PNA	PNA	PNA	7.66	6.91	7.92	7.93	5.99 E	5.4	5.42	5.25	4.9 8	3.99 B	5.02	3.86 8	6.83	7.56	0.0489 U	6.10 E	6.25	5.97	11.2	3.74 B	5.05 J 5.10
Selenium as Se	mg/L	0.01	0.004 U	PNA	0.004 U	PNA	0.004 U	0.0024 1/	0.0043 U	0.0019 L	0.0019 U	F 0.0027 U	0.0 U	0.0025	0.0025 U	0.0042 U	0.0042 U	0.0032 U	0.0032 1	0.0026 U	0.0026 U	0.0282 U	0.0028 U	0.0028 U	0.0028 U	0.0022 B	0.0021 U	0.0023 UJ 0.0023
Silver as Ag	mg/L	0.05	0.005 U	PNA	0.005 U	PNA	0.005 U	0.0008 B	0.0013 B	0.0019 8	0.0013 B	F 0.00086 B	0.0 B	0.00083	J 0.00083 U	0.0005 U	0.0005 U	0.00043 U	0.00043 1	0.00052 U	0.0007 B	0.00042 U	0.0004 U	0.00032 U	0.00032 U	0.00098 B	0.00029 U	0.0002 U 0.00045
Sodium as Na	mg/L	20	17	PNA	15	PNA	14	7.72	11.8	11.2	11.3 1	12.3	10.70	9.5	9.24	9.83	8.5	8.33	7.07	9.76	11.1	10.6	10.9	12.1	11.5	44.5	12.8	13.9 12.9
Thailium as TI	mg/L	0.0005 #	0.004 U	PNA	0.005 U	PNA	0.005 U	0.0023 U	8.0128	0.0131	0.0032 8		0.0 U	0.0.01	0.0032 U	0.0056 U	0.0056 U	0.0036 U	0.0036 1	0.0027 U	0.0027 U	0.0034 U	0.0034 U	0.0032 U	0.0032 U	0.0029 U	0.0029 U	0.0019 U 0.0019
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.0027 B	0.0004 0	0.0073	8 0.00074 U		0.0 B	0.000	3 0.0014 U	0.0012 U	0.0012 U	0.0013 U	0.0013 L	0.0039 B		0.00021 U	0.00021 U	0.0008 B	0.00023 U	0.0005 B	0.00018 U	0.0003 U 0.00030
Zinc as Zn	mg/L	2#	0.08	PNA	0.1	PNA	0.06	0.0118 B	0.0357	0.0383	0.32	0.0000 0	0.0 B	0.0337	0.0166 8	0.0192 B	0.0049 B	0.0277	0.0072 E	0.0159 B		0.0457	0.0078 B	0.0171 B	0.0069 B	0.0614	0.0163 B	0.0103 B 0.0129
Alkalinity tot CaCo3	mg/L	NA	310	220	260	260	230	77.6	133	148	PNA	154	PNA	0.41	PNA	131	PNA	100 D	PNA	148 D		97.6 D	PNA	118 D	PNA	111 D	PNA	174 D PNA 14.8 PNA
Chloride as Cl	mgil	250.0	16	15	16	20	12	11	13.6	13.5	PNA	12	PNA	10.9	PNA	9.02	PNA	8.82	PNA	8.33	PNA	14.4	PNA	16.4	PNA	61.0	PNA	14.8 PNA 23.1 PNA
Sulfale as SO4	ոցլ	250.0	19	17	31	12	9.0	16.5	14.0	10.8	PNA	10.2	PNA	9.97	PNA	9.92 J	PNA	7.64 0.5 U	PNA	6.97	PNA	9.14	PNA	21.6 0.5 U	PNA	32.9 0.5 U	PNA	0.5 U PNA
Bromide	mg/L	2#	PNA	PNA	PNA 14	PNA	PNA	0.5 U	0.5 U	0.5 L	PNA PNA	0.5 U	PNA	0.5	J PNA PNA	0.5 U	PNA PNA	0.6 0	PNA	0.5 U	PNA PNA	0.5 U	PNA	2 11	PNA	2 11	PNA	2 U PNA
BODS	mgiL	NA NA	13	20 PNA	70	5 PNA	3 U 60		26.8	39.2	PNA	10 U	PNA	18.2	PNA	10 U	PNA	10 U	PNA	12.4	PNA	29.9	PNA	10 1/	PNA	10 11	PNA	10 U PNA
000	ingL units	NA	180 5 U	5 11	10	15	10	PNA PNA	20.8	39.2 PNA	PNA	80	PNA	PNA	PNA	40	PNA	PNA	PNA	25	PNA	PNA	PNA	20	PNA	PNA	PNA	50 D PNA
Chromium hex as Cr	mgL	0.05	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 L	PNA	PNA	0.02 U	PNA	PNA	PNA	0.02 U	PNA	PNA	PNA	0.02 U	PNA	PNA	PNA	0.02 U	PNA	PNA	PNA	0.02 U PNA
Hardness as CaC03	mg/L	NA	290	170	190	200	240	200	150	190	PNA	280	PNA	110	PNA	135	PNA	140 D	PNA	180 D	PNA	116 D	PNA	144 D	PNA	164 D	PNA	190 D PNA
Ammonia as N	mol	2.0	1.4	0.9	1.2	2.6	0.88	0.18	0.1 U	0.1 1	PNA	0.43	PNA	0.41	PNA	0.53	PNA	0.43	PNA	0.19	PNA	0.36	PNA	0.3	PNA	0.55	PNA	0.32 PNA
Nitrite as N	mot.	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.1 U	0.1 0	PNA	PNA	PNA	0.1	J PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U PNA
Nitrate as N	mgi.	10	1.8	PNA	1.6	PNA	0.5 U	0.1 U	0.18	0.1 L	J PNA	0.27	PNA	0.22	PNA	0.48	PNA	0.2	PNA	0.36	PNA	0.37	PNA	0.16	PNA	0.28	PNA	0.1 U PNA
Phenois as Phenoi	mg/t,	0.001	0.03	0.002 U	0.001 U	0.002 U	0.001 U	0.005 U	0.005 U	0.005 0	PNA	0.005 U	PNA	0.005	J PNA	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.005 U PNA
Tot Dissolved Solids	mg/L	NA	340	PNA	300	PNA	330	147	198	198	PNA	198	PNA	176	PNA	160	PNA	138	PNA	186	PNA	157	PNA	177	PNA	213	PNA	232 PNA
Tol. Kjeldahl Nitrogen	mgiL	NA	5.6	PNA	4.2	PNA	6,4	0.63	0.84	1.64	PNA	1.28	PNA	1.03	PNA	0.66 J	PNA	0.83	PNA	0.52	PNA	2.84	PNA	0.64	PNA	0.97	PNA	0.44 PNA
Tot Organic Carbon	mgiL	NA	19	9.6	16	8.1	8.2	1.9	4.4	7.2	PNA	3.1	PNA	2	PNA	<u>1</u> U	PNA	1	PNA	4.4	PNA	33.4	PNA	1.5	PNA	2.1	PNA	45.4 PNA
Turbidity	NTU	NA	3.5	3500	3200	1500	1200	227	>1,000	1,000	PNA	>1,000	PNA	178	PNA	>1,000	PNA	>1.000	PNA	>1,000	PNA	>1,000	PNA	172	PNA	44.8	PNA PNA	79.9 PNA
Temperature	deg.C	NA	15	16	16	16	. 14	14.8	15.93	15	PNA	13.96	PNA	12	PNA	14.28	PNA	13.87	PNA	13.85	PNA	14.01	PNA	6.61	PNA	6.19	PNA	13.86 PNA 6.7 PNA
pH	units umbo/cm	6.5-8.5 NA	7.3	440	<b>6.3</b> 530	7.9	6.6 510	8.21 PNA	5.84 PNA	6.12 538	PNA	8.42 334	PNA	5.96	PNA	6.61	PNA	237	PNA	6.00 364	PNA	223	PNA	385	PNA	406	PNA	469 PNA
Spec. Cond	umho/cm	NA	520	440	530	530	510	PNA	PNA	530	PNA	334	PNA	124	PNA		LENA	237	FINA	304		223	r na	365	1.00	400		
NOTES: - VYSDEC Class GA G																												
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ANALYTICAL	UNITS	GW													MW-11B												
, and a constant	••								Oct.	2008		April 2009	Oc	1. 2009		11 2010	Oct	2010		Oct	2011	Apr	ril 2012	Oct.	2012	Apri	ril 2013
PARAMETERS		STND*	April 2005	Oct. 2005	Oct. 2006	April 2007	Oct. 2007	April 2008	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Fittered	Unfiltered	Filtered	April 2011	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
Aluminum as Al	mg/L	NA	0.44	1.1	0.82	0.51	21.5	0.793	0.411	0.0087 U	IF 14.1	0.0 U	1.55	0.0177	U 7.03	0.0333 B	3.02	0.0626 B	1.7	5.24	0.0686 B	2.22	0.0457 B	7.48	0.077 8	2.15	0.0095 U
Antimony as Sb	ma/L	0.003#	0.01 U	PNA	PNA	0.005 U	0.0089 B	0.0044 U	0.0023 U	0.0023 L	F 0.0031	B 0.0 U	0.0021 0	0.0021	U 0.0028 U	0.0028 U	0.0029 U	0.0029 U	0.0031 B	0.0022 U	0 0023 B	0.0016 8	B 0.0052 B	0.8041 B	0.0018 U	0.0012 U	0.0109 B
Arsenic as As	mg/L	0.025	0.005 U	0.005 U	0 008	0.007	0.121	0.0029 U	0.0056 8	0.0018 U	IF 0.0115	00 U	0.0023	J 0.0023	U 0.0028 U	0.0028 U	0.0027 U	0.0027 U	0.0019 U	0.0121	0 0018 U	0.0044 U	J 0.0044 U	0.0116	0.0015 U	0.0052 B	0.0028 B
Barium	mg/L	1	PNA	PNA	PNA	PNA	0.497	0.0346 B	0.0281 BE	0.0137 8	IF 0.134	B 0.0 B	0.0203 E	8 0.0083	B 0.0824 B	0.0104 B	0.0429 8	0.0076 B	0.0516 BE	0.164 B	0.0274 B	0.0297 B	B 0.0084 B	0.0944 8	0.012 B	0.0293 B	0.0096 B
Beryllium as Be	mg/L	0.003	0.001 U	PNA	PNA	0.001 U	0.0015 B	0.0001 U	0.000096 U	0.000096 L	IF 0.00055	B 0.0 U	0.00026	0.00026	U 0.00017 U	0.0002 U	0.00016 U	0.00016 U	0.0003 B	0.00013 U	0.00013 U	0.00012 U	J 0.00012 U	0.0002 B	0.00012 U	0.0001 U	0.0001 U
Boron as B	mg/L	1.0	0.86	PNA	PNA	0.15	0.0999 B	0.0219 B	0.0139 B	0.0148 E	F 0.0219	B 0.0 B	0.0128 E	8 0.0122	B 0.0112 E	0.0128 B	0.0063 BJ	0.0074 B	0.074 BE	0.0351 BJ	0.0733 8	0.0083 B	3 0.0113 B	0.0301 B	0.0161 8	0.0151 B	0.0192 B
Cadmium as Cd	mg/L	0 005	0.005	PNA	PNA	0.005 U	0.00032 U	0.00027 U	0.00035 U	0.00035 L	IF 0.00023	U 0.0 U	0.00034 1	0.00034	U 0.0003 E	0.0002 U	0.0007 B	0.00025 U	0.00027 U	0.0016 B	0.00017 U	0.00018 U	0.00018 U	0.000087 U	0.000087 U	0.0001 U	0.0002 B
Calcium as Ca	mg/L	NA	70	36	68	72	37.8	12.3	10.5	10.3	F 27.1	21 70	6.18	5.33	22.5	19.50	11.3	9.12	113	46.1	42.3	5.48	4.69 U	21.5	6.44	14.9	14.2
Chromium as Cr	mg/L	0.05	0.005	PNA	PNA	0.012	0.28	0.0192	0.0137	0.0024 8	F 0.0618	0.0 B	0.0156	0.00044	U 0.0276	0.0009 B	0 0147	0.0011 B	0.02	0.0095	0.035	0.0186	0.0017 B	9.074 E	0.0041 B	0.0313	0.0023 B
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	0.026 B	0.002 B	0.00097 B	0.00088 L	IF 0.009	B 00 U	0.0013 E	3 0.0012	U 0.0042 E	0.0012 U	0.0017 B	0.0013 U	0.0014 B	0.006 B	0.00044 U	0.0011 B	3 0.00052 U	0.0053 B	0.00028 U	0.0014 B	8 0.0004 U
Copper as Cu	mg/L	0.2	0.01 U	PNA	PNA	0.01	0.16	0.005 B	0.0053 B	0.00057 E	F 0.0574	0.0 B	0.007 €	3 0.00083	U 0.0276	0.0054 B	0.0153 B	0.0036 B	0.0074 B	0.016 B	0.0007 B	0.008 B	B 0.0027 B	0.0365	0.0034 B	0.009 B	3 0.0004 U
Cyanide as CN	mg/L	0.20	0.02 U	PNA	PNA	0.02 U	PNA	0.01 U	0.01 U	PNA	0.01	U PNA	PNA	PNA	0.01 L	PNA	PNA	PNA	0.01 U	PNA	PNA	0.01 U	PNA	PNA	PNA	0.01 U	PNA
Iron as Fe	mg/L	0.3	140	<b>65</b>	75	44	34.7	18.1	14.3	0.0294 E	IF 36	0.036 B	5.8	0.231	14.2	0.047 B	5.59	0.188	2.28	50.4	0.433	5.01	0.107	36.2	0.176	12.7	0.0487 B
Lead as Pb	mg/L	0.025	0.005 U	0.014	0.015	0.011	0.151	0.0051	0.0028 B	0.0013 U	F 0.0975	0.0 B	0 0114	0.0018	U 0.108	0.0161	0.0434	0.0071	0 0106	0.0343	0.0083	0.0275	0.0077	0.0525	0.00096 U	0.0254	0.0031
Magnesium	mg/L	35#	PNA	5.7	17	PNA	14.4	3.48	3.29 B	3 18 B	IF 9.74	5.3	2.34 E	3 1.73	4.02 E	1.6 B	2.79 B	1.39 B	12.6	11.8	10.9	2.46 B	3 1.64 B	8.71	2.18 B	4.49 B	3.8 B
Manganese as Mn	mg/L	0.3	4.0	0.3	61	1.3	2.7	0.442	0.257	0.0223	F 1.00	0.0793	0.137	0.0961	0.845	0.203	0.237	0.0811	0.0936	4.82 EJ	0.0408	0.0953	0.0298	0.774	0.0265	0.273	0.0276
Mercury as Hg	mg/L	0.0007	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.0001 U	0.0001 U	0.00013 U	0.00013 U	IF 0.00028	0.0 U	0.0001	0.0001	U 0.00012 E	0.0001 U	0.0001 U	0.0001 U	0.01 U	0.0001 U	_0.0001 U	0.00014 B	3 0.0001 U	0.0001 U	0.0001 U	0.0001 U	0.0001 U
Nickel as Ni	mg/L	0.1	0.01 U	PNA	PNA	0.01	0.168	0.011 B	0.0053 B	0.0037 8	F 0.0352	B 0.0 B	0.009 E	8 0.0024	B 0.0117 E	0.0010 U	0.0079 B	0.0013 B	0.0072 B	0.0598	0.0051 B	0.0055 B	3 0.0007 B	0.031 B	0.0022 B	0.0081 8	0.0046 B
Potasium	mg/L	NA	PNA	PNA	PNA	PNA	7.15	2.52 B	2.25 B	2.4 B		E 3.66B	162 E	3 1.39	B 3 E	1.7 B	2.32 B	1.2 8	8.19	7.43	7.61 J	1.62 B	3 1.41 B	3.96 B	1.36 B	2.12 B	2.05 B
Selenium as Se	mg/L	0.01	0.004 U	PNA	PNA	0.004 U	0.0024 U	0.0043 U	0.002 B	0.0019 U	IF 0.0027	U 0.0 U	0.0025 L	0.0025	U 0.0042 U	0.0042 U	0.0032 U	0.0032 U	0.0026 U	0.0028 U	0.0028 U	0.0028 U	J 0.0035 B	0.0027 B	0.0021 U	0.0023 U	0.0153
Silver as Ag	mg/L	0.05	0.005 U	PNA	PNA	0.005 U	0.0029 B	0.00089 U	0.00054 U	0.00054 U	0.0000	U 0.0 U	0.00083 L	J 0.00083	U 0.0005 U	0.0005 U	0.00043 U	0.00043 U	0.0006 B	0.00042 U	0.00042 U	0.00032 U	J 0.00032 U	0.00034 B	0.00029 U	0.0002 U	0.0002 U
Sodium as Na	mg/L_	20	12	PNA	PNA	14	9.59	7.63	8.11		F 7.73	7.59	7.86	7.08	6.02	5.37	7.69	6.48	7.59	10.2	10.9	8.33	7.82	24.4	7.62	7.07	7.42
Thallium as TI	mg/L	0.0005 #	0.004 U	PNA	PNA	0.005 U	0.0141	0.0025 U	0.0019 U	0.0037 8	F 0.0033	U 0.0 U	0.0032 L	J 0.0032	U 0.0056 U	0.0056 U	0.0036 U	0.0036 U	0.0034 B	0.0034 U	0.0034 U	0.0032 U	J 0.0032 U	0.0029 U	0.0029 U	0.0019 U	0 0019 U
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	0.0848	_0.0033 B	0 0022 B	0.00074 U	0.0520	B 0.0 U	0.0037 E	3 0.0014	U 0.0155 E	0.0012 U	0.0078 B	0.0013 U	0.0058 8	0.0165 B	U.00021 U	0.0052 B	3 0.0004 8	0.0211 B	0.00018 U	0.006 B	0.0009 B
Zinc as Zn	mgA.	2#	0.05	PNA	PNA	0.04	0.272	0 0156 B	0.0156 B	0.0228	F 0.156	0.0 B	0.0224	0.0084	B 0.0885	0 0040 B	0.0484	0.0098 B	0.03	0.0699	0.0103 B	0.0257	0.0029 B	0.124	0.017 B	0.0293	0.0091 B
Alkalinity tot CaCo3	mg/L	NA	340	110	360	270	25.5	36 7	34.4	PNA	61.8	PNA	20.2	PNA	69.6	PNA	26	PNA	301 D	163 D	PNA	12.8	PNA	16.5	PNA	47 D	PNA
Chioride as Cl	.mg/L	250.0	9.0	7.0	2 U	13	10.8	10.2	10.3	PNA	10.1	PNA	9.29	PNA	6.91	PNA	9.58	PNA	6.44	8.72	PNA	10.4	PNA	11.6	PNA	10.5	PNA
Sulfate as SO4	mg/L	250.0	10	120	8	10	13.5	8.37	8.31	PNA	7 52	PNA	6.74	PNA	7.05	PNA	8.65	PNA	7.25	5 U	PNA	7.7	PNA	9.13	PNA	6.66	PNA
Bromide	mg/L	2#	PNA	PNA	PNA	PNA	0.5 U	0.5 U	0.5 U	PNA	0.5	U PNA	0.5 L	PNA	0.5 L	PNA	0.5 U	PNA	0.5 U	05 U	PNA	0.5 U	PNA	0.5 U	PNA	0.5 U	PNA
BOD5	mg/L	NA	18	12	9.4	6.4	3	14	_ 2 U	PNA	3	PNA	2 (	J PNA	2 1	PNA	2 U	PNA	2 U	2 U	PNA	2 U	PNA	2 U	PNA	2 U	PNA
COD	mg/L	NA	200	PNA	PNA	40 U	150	31.7	10 U	PNA	276	PNA	30.3	PNA	107	PNA	99	PNA	15.7	101	PNA	10 U	PNA	10 U	PNA	10 U	PNA
Color	units	NA	60	15	15	20	PNA	50	PNA	PNA	160	PNA	PNA	PNA	50	PNA	PNA	PNA	20	PNA	PNA	35	PNA	PNA	PNA	75 D	PNA
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	PNA	0.02 U	PNA	0.02 U	PNA	PNA	0.02	U PNA	PNA	PNA	0.02 0	PNA	PNA	PNA	0 02 U	PNA	PNA	0.02 U	PNA	PNA	PNA	0.02 U	PNA
Hardness as CaC03	mg/L	NA	240	110	240	250	48	60	68	PNA	180	PNA	27	PNA	75	PNA	50 D	PNA	310 D	228 D	PNA	30	PNA	34	PNA	68 D	PNA
Ammonia as N	mg/L	2.0	PNA PNA	0.43		0.24	01 U	0.1 U	0.1 U	PNA	0.21	PNA		PNA	0.15	PNA	0.16	PNA	0.1 U	0.19	PNA	0.1 U	I PNA	0.1 U	PNA		PNA
Nitrite as N	mg/L	NA		PNA	PNA	PNA	PNA	0.1 U	0.1 U	PNA	PNA	PNA	0.1 U		0.1 1	PNA -	0.1 U	PNA	0.1 U	0.1 U	PNA	0.1 U		0.1 U	PNA	0.1 U	PNA
Nitrate as N	mg/L	10	0.5 U	PNA	PNA	4.9	0.25 0.005 U	0.52 0.005 U	0.3	PNA	0.57	PNA	0.26	PNA PNA	0.22	PNA PNA	0.1 U 0.005 U	PNA PNA	104	1.25 0.005 U	PNA	0.17 0.005 U	PNA PNA	0.23 0.005 U	PNA	0.51	PNA PNA
Phenois as Phenol	mg/L	0001	340	0.001 U PNA	0.002 U	400		0.005 U	0.005 U		120	U PNA	83 U	PNA	0.005 U 104	PNA	0.005 U		0.005 U 360	0.005 U	PNA	0.005 U	PNA PNA	0.005 U	PNA	0.005 U 89	PNA PNA
Tot Dissolved Solids Tot Kieldahl Nitrogen	mg/L	NA NA		PNA	PNA PNA	400	85 2.3	0.79	75 0.8	PNA	72	PNA	0.75	PNA PNA	1.88	PNA	1.37	PNA PNA	0.31	3 15	PNA	0.44	PNA	0.74	PNA	0.65	PNA
	mg/L		17	16 16	16 PNA	7.0	11.0	2.1		PNA	4.4	PNA	0.75	J PNA		PNA	1.37	PNA	4.3	44.1	PNA PNA	0.44	PNA I PNA	0.74	PNA	14.4	PNA
Tot Organic Carbon	mg/L	NA	27	580	460	250	300	112	2.0	PNA		PNA	1.000	PNA	9.6	PNA	1.6	PNA PNA	4.3	347		60.2	PNA	61	PNA	14.4	PNA
Turbidity	NTU	NA		15	15	250	300	112	120	PNA	954	PNA	1.000	PNA PNA	>1,000	PNA	7 13	PNA PNA	13.73	13.18	PNA	13.84	PNA	13.57	PNA PNA	126	PNA
Temperature	deg C units	65-85	15 6.8	6.0	7.8	6.5	14.5		13 6.13	PNA	12 89	PNA	13.88	PNA PNA	7 13	PNA	12.72	PNA	4.81	13 18	PNA	13.84	PNA	6.51	PNA PNA	7.52	PNA PNA
pH Spec Cond	units umho/cm	6.5-8.5 NA	6.8	230	7.8	590	8.49 PNA	5.81 PNA	<b>8.13</b> 103	PNA PNA	356	PNA PNA	371	PNA	204	PNA	12.72	PNA PNA	4.81 565	90	PNA	95	PNA	112	PNA	167	PNA
ohec roug	umnovcm	L NA	610	230	700	390	1PNA	PNA	103	FNA	330	PNA	<u>ari</u>	1 PRA	204		09	PRA	300	30	PRA	90		112	PINA	1	1 PRA

NOTES: NYSDEC Class GA Groundwater Standards

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6 NYCRR Part 703

Guidence value, no standard exets NA. Not available

PNA parameter not analyzed for 8. This flag is used when the analyte is found in the associated blank us in the sample

8 This legislation of the second second second second the cateration range of the GCMS instrument for that specific analysis F . This legislation the results of a New dimensional analysis

J - The analyte was positively identified the associated numerical value is the approximate concentration of the analyte in the sample

U - The analyte was analyzed for .but was not detected above the reported sample quantitation limit

U to apply we analyzed to be an of decoded apply an import space spatiation into U. The apply and decoded apply and provide lamps spatiation into U. The apply and decoded apply and provide lamps spatiation into a sponsorial and may or may not represent the gold limit of spatiation increasing it accurately and proper measure the analysis in the sample B. The unphase measures are unperformed and apply and the analysis cannot be written in the sponsorial and may or may not represent the gold limit of spatiation increasing it accurately and proper measure the analysis B. The unphase measures are an analysis of the analysis cannot be written in the sponsorial and may or may not represent the gold limit of spatiation increasing it accurately and proper measures the analysis of the analysis

NM Not Monitored

ANALYTICAL	UNITS	GW												MW-12A											
, and a linear		-"	April 2005	Oct. 2005	April 2006	Oct. 2006	April 2007	Oct. 2007	April 2008	Oct. 2008	Apri	1 2009	Oct.	2009	Apri	1 2010	Oct. 2010		2011	Oct. 2011		il 2012			1 2013
PARAMETERS		STND*	April 2005	Oct. 2005	April 2006	Oct. 2006	April 2007	Oct. 2007	2008		Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered		Unfiltered	Filtered		Unfiltered	Filtered	Oct. 2012	Unfiltered	Filtered
Aluminum as Al	mg/L	NA	0.11	0.09	0.31	0.17	0.21	PNA	0.1 B	PNA	0.0245 B	00 U	PNA	PNA	0.389	0.0196 L	I PNA	0.225	0.107 B	PNA	0.0548 E	0.0391 B	PNA	0.09 B	0.0214 B
Antimony as Sb	mg/L	0.003 #	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.0 U	PNA	0.0027 U	0.0 U	PNA	PNA	0.0028 U	0.0028 L	I PNA	0.0021 U	0.0022 B	PNA	0.0011 L	0.0013 B	PNA	0.0012 U	0.0012 U
Arsenic as As	mg/L	0.025	0.031	0.005 U	0.021	0.008	0.013	PNA	0.0 B	PNA	0.0028 U	0.0 U	PNA	PNA	0.0216	0.0028	PNA	0.0141	0.0019 U	PNA	0.0044 U	0.0044 U	PNA	0.0064 B	0.0028 U
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	PNA	0.0 B	PNA	0.0427 B	0.0 B	PNA	PNA	0.0815 B	0.0368 E	PNA	0.0747 BE	0.0640 B	PNA	0.0535 B	0.0475 B	PNA	0.0465 B	0.0421 B
Beryllium as Be	mg/L	0.003	0.001 U	PNA	0.001 U	PNA	0.001 U	PNA	0.0 B	PNA	0.00016 U	0.0 U	PNA	PNA	0.00017 U	0.0002 U	PNA	0.00013 U	0.00017 B	PNA	0.00012 U	0.00012 U	PNA	0.0001 U	0.0001 U
Boron as B	mg/L	1.0	0.18	PNA	0.06	PNA	0.1	PNA	0.0 B	PNA	0.0462 B	0.0 B	PNA	PNA	0.0307 B	0.0336 E	PNA	0.0721 BE	0.0794 B	PNA	0.0695 E	0.0692 B	PNA	0.0479 B	0.0491 B
Cadmium as Cd	mg/L	0.005	0.005 U	PNA	0.005 U	PNA	0.005 U	0.00032 U	0.00027 U	0.00035 U	0.00027 B	0.0 U	0.00034 U	0.00034 U	0.00024 U	0.0002 U	0.00025 U	0.00027 U	0.00035 B	0.00017 U	0.00018 L	0.00018 U	0.000087 U	0.0001 U	0.0001 U
Calcium as Ca	mg/L	NA	29	14	22	32	42	15.9	10.9	19.1	25.8	27.10	22.9	22.8	17.5	16.40	16.1	25	25.2	15.8	26.3	24.3	46.4	25.1	25.1
Chromium as Cr	mg/L	0.05	0.005 U	PNA	0.011	PNA	0.011	PNA	0.0 B	PNA	0.0011 B	0.0 B	PNA	PNA	0.0135	0.0006 E	PNA	0.0127	0.0138 B	PNA	0.0038 8	0.0014 B	PNA	0.0063 B	0.0018 B
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0 B	PNA	0.0012 B	0.0 B	PNA	PNA	0.0083 B	0.0042 E	PNA	0.0072 B	0.0052 B	PNA	0.0062 B	0.0051 B	PNA	0.0043 B	0.0036 B
Copper as Cu	mg/L	0.2	0.01	PNA	0.01 U	PNA	0.01	PNA	0.0 B	PNA	0.0016 B	0.0 B	PNA	PNA	0.0083 B	0.0049 8	PNA	0.005 B	0.262	PNA	0.0016 B	0.0009 B	PNA	0.0025 B	0.0025 B
Cyanide as CN	mg/L	0.20	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.0 U	PNA	0.1 U	PNA	PNA	PNA	0.01 U	PNA	PNA	0.01 U	PNA	PNA	0.01 U	PNA	PNA	0.01 U	PNA
Iron as Fe	mg/L	0.3	19	16	29	8.5	19	2.96	13.8	0.604	2.74	0.220	5.08	0.0902 B	28.4	0.041 B	0.537	16.8	4.730	2.61	2.08	0.134	10.3	6.78	0.236
Lead as Pb	mg/L	0.025	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0014 U	0.0023 U	0.0013 U	0.0015 U	0.0 U	0.0018 U	0.0018 U	0.013	0.0194	0.012	0.0025 B	0.0121 B	0.0079	0.0046	0.0056	0.00096 U	0.0042	0.0056
Magnesium	mg/L	35 #	PNA	3.9	PNA	9.3	PNA	4.93B	3.5 B	6.98	9.82	10.3	7.64	7.56	4.94 B	.4.7 E	4.4 B	7.51	7.61	3.93 B	7.27	6.8	12.5	6.79	6.73
Manganese as Mn	mg/L	0.3	0.7	0.34	1.2	1.1	1.7	0.194	0.125	0.217	0.15	0.16	0.179	0.179	2.56	2.30	1.6	3.9	3.630	1.98 E	4.3	3.86	5.93	3.72	3.61
Mercury as Hg	mg/L	0.0007	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.00025 U	PNA	0.0 U	PNA	0.0001 U	0.0 U	PNA	PNA	0.0001 U	0.0001 L	PNA	0.0001 U	0.0001 U	PNA	0.0001 L	0.00017 B	PNA	0.0001 U	0.0001 U
Nickel as Ni	mg/L	0.1	0.01 U	PNA	0.01	PNA	0.02	PNA	0.0 B	PNA	0.0036 B	0.0 B	PNA	PNA	0.0089 B	0.0025 E	PNA	0.0153 B	0.0369 B	PNA	0.0084 E	0.0071 B	PNA	0.0105 B	0.0066 B
Potasium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	4.64 B	2.55 B	3.31 B	4.87 BE	5.1	3.26 B	3.34 B	3.31 B	2.8 8	6.36	9.9	10.2	5.78	8.16	7.58	8.7	6.34	6.28
Selenium as Se	mg/L	0.01	0.004 U	PNA	0.004 U	PNA	0.004 U	PNA	0.0 U	PNA	0.0027 U	0.0 U	PNA	PNA	0.0042 U	0.0042 U	I PNA	0.0026 U	0.0026 U	PNA	0.0028	0.0028 U	PNA	0.0023 U	0.0023 U
Silver as Ag	mg/L	0.05	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.0 U	PNA	0.0006 U	0.0 U	PNA	PNA	0.0005 U	0.0005 U	PNA	0.00073 B	0.00052 U	PNA	0.0005 B	0.00037 B	PNA	0.00022 B	0.00045 B
Sodium as Na	mg/L	20	14	PNA	12	PNA	17	8.46	8.94	. 11.7	12	12.60	11.3	10.9	10.3	9.08	11	13.1	15.00	10.1	12.8	11.8	21	9.97	9.7
Thallium as TI	mg/L	0.0005#	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.0 U	PNA	0.0033 U	0.0 U	PNA	PNA	0.0056 U	0.0056 U	I PNA	0.0027 U	0.0027 U	PNA	0.0032 U	0.0032 U	PNA	0.0019 B	0.0019 U
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0 B	PNA	0.0025 B	0.0 U	PNA	PNA	0.0136 B	0.0012 U	PNA	0.0121 B	0.0045 B	PNA	0.0016 E	0.00023 U	PNA	0.0033 B	0.0003 U
Zinc as Zn	mg/L	2#	0.03	PNA	0.02	PNA	0.02	PNA	0.0 B	PNA	0.0163 B	0.0 B	PNA	PNA	0.0201	0.0030 B	PNA	0.0094 B	0.404	PNA	0.0016 E	0.0071 B	PNA	0.0172 B	0.0104 B
Alkalinity tot CaCo3	mg/L	NA	88	44	68	110	130	36	27	57.8	78	PNA	69.9	PNA	54.2	PNA	50 D	94 D	PNA	52.8 D	97 C	PNA	67.8 D	85.4 D	PNA
Chloride as Cl	mg/L	250.0	13	12	11	16	20	12.1	11	14.3	14.2	PNA	11.4	PNA	10.2	PNA	12.8	11.2	PNA	10.9	36.6	PNA	11.7	11.9	PNA
Sulfate as SO4	mg/L	250.0	55	27	24	35	34	20	17.3	26	28.8	PNA	21.7	PNA	21.6	PNA	20.3	22.8	PNA	14	19	PNA	20.1	19.4	PNA
Bromide	mg/L	2#	PNA	PNA	PNA	PNA	PNA	0.5 U	0.5 U	0.5 U	0.5 U	PNA	0.5 U	PNA	0.5 U	PNA	0.5 U	0.5 U	PNA	0.5 U	0.5 U	PNA	0.5 U	0.5 U	PNA
BOD5	mg/L	NA	2.6	2.5	2 U	2.3	4.8	2	13	2 U	2 U	PNA	2 U	PNA	2 U	PNA	2 U	3	PNA	2 U	2 1	PNA	2 U	2 U	PNA
COD	mg/L	NA	60	PNA	40 U	PNA	40 U	10 U	10 U	10 U	10 U	PNA	10 U	PNA	10 U	PNA	10 U	10 U	PNA	10 U	10 U	PNA	10 U	10 U	PNA
Color	units	NA	5 U	1 <u>5</u> U	10	5 U	10	PNA	70	PNA	30	PNA	PNA	PNA	40	PNA	PNA	40	PNA	PNA	20	PNA	PNA	75 D	PNA
Chromium hex as Cr	mg/L	0.05	0.02 U	J PNA	0.02 U	PNA	0.02 U	PNA	0.0 U	PNA	0.02 U	PNA	PNA	PNA	<0.02 U	PNA	PNA	0.02 U	PNA	PNA	0.02 L	PNA	PNA	0.02 U	PNA
Hardness as CaC03	mg/L	NA	110	51	85	120	150	61	60	52	190	PNA	90	PNA	75	PNA	62	105 D	PNA	.86 D	104 0	PNA	88 D	116 D	PNA
Ammonia as N	mg/L	2.0	2.2	0.07	0.19	0.14	1.0	0.1 U	0.1 U	0.1 U	1.09	PNA	0.1 U	PNA	0.36	PNA	1.0	2.88	PNA	0.85	1.82	PNA	0.94	1.56	PNA
Nitrite as N	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.1 U	0.1 U	PNA	PNA	0.1 U	PNA	0.1 U	PNA	0.1 U	0.1 U	PNA	0.1 U	0.1 L	PNA	0.1 U	0.1 U	PNA
Nitrate as N	mg/L	10	1.5	PNA	1.6	PNA	1.6	0.86	0.6	0.66	0.78	PNA	1.41	PNA	0.24	PNA	0.96	0.74	PNA	0.51	0.74	PNA	0.84	0.34	PNA
Phenois as Phenol	mg/L	0.001	0.001 U	0.001 U	0.001 U	0.001	0.001 U	0.005 U	0.005 U	0.005 U	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.005 U	0.005 U	PNA	0.005 U	0.005 U	PNA	0.005 U	0.005 U	PNA
Tot Dissolved Solids	mg/L	NA	170	PNA	150	PNA	300	112	92	126	170	PNA	133	PNA	122	PNA	109	160	PNA	95	144	PNA	125	140	PNA
Tot. Kjeklahl Nitrogen	mg/L	NA	0.6	PNA	0.4	PNA	5.6	1.66	0.19	0.31	0.97	PNA	0.7	PNA	0.65	PNA	1.69	3.63	PNA	1.24	3.38	PNA	1.42	1.89	PNA
Tot Organic Carbon	mg/L	NA	2.1	1.5	2.5	3.4	2.7	1.4	1.5	1.1	1.9	PNA	1 U	PNA	1.5	PNA	1 U	2.3	PNA	15.4	1 0	PNA	1.2	22.3	PNA
Turbidity	NTU	NA	5.2	62	140	35	22	12.8	44.2	13.5	115	PNA	71.5	PNA	338	PNA	4.9	PNA	PNA	54.3	60.5	PNA	36.1	81.5	PNA
Temperature	deg.C	NA	15	14	14	14	13	12.7	13.46	12.94	12.29	PNA	11.97	PNA	12.67	PNA	12.3	PNA	PNA	13.86	13.05	PNA	12.76	12.86	PNA
pН	units	6.5-8.5	6.6	6.5	6.3	7.6	6.6	6.82	5.82	6.17	6.28	PNA	5.5	PNA	6.03	PNA	6.40	PNA	PNA	5.78	6.12	PNA	6.43	7.53	PNA
Spec. Cond	umho/cm	NA	240	150	200	270	390	PNA	PNA	167	225	PNA	275	PNA	208	PNA	145	PNA	PNA	199	325	PNA	241	286	PNA

NOTES:

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' = NYSDEC. Class GA Ground-valer Standards

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# = Guidance value, no standard exets

NA = Not available

PNA = parameter not analyzed for

B = This flag is used when the analyte is found in the associated blank as in the sample E - This flag identified companies whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis

F - This flag indicates the results of a Hored metal analysis

J - The analyte was postwely identified, the associated numerical value is the approximate concentration of the analyte in the sample

U -The analytic was analyzed for, but was not detected above the reported sample quantitation limit. U. The analyse was not detected above the reported sample quantitation inst. However, the reported quantitation innet is approximate and may or may not represent the actual kind of quantitation necessary to accurately and protective measure the analyse in the sample

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ANALYTICAL	UNITS	GW									MW	-12B								
			April 2005	Oct. 2005	April 2006	Oct. 2006	April 2007	Oct. 2007	April 2008	Oct. 2008	April 2009	Oct. 2009	April 2010	Oct. 2010	April 2011	Oct. 2011	April		Oct. 2012	April 2012
PARAMETERS		STND*															Unfiltered	Filtered		
Aluminum as Al	mg/L	NA	0.26	0.45	0.07	0.1	0.14	PNA .	0.6	PNA	0.0955 B	0.14 8	0.34	PNA	0.0656 B	PNA	1.61	0.0362 B	PNA	0.0161 B
Antimony as Sb	mg/L	0.003 #	0.005 U	PNA	0.005 Ü	PNA	0.005 U	PNA	0.0 U	PNA	0.0027 U	0.0021 U	0.0028 U	PNA	0.0041 B	PNA	0.0015 B	0.0011 U	PNA	0.0018 B
Arsenic as As	mg/L	0.025	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	PNA	0.0 U	PNA	0.0028 U	0.0023 U	0.0028 U	PNA	0.0019 U	PNA	0.0044 U	0.0044 U	PNA	0.0028 U
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	PNA	0.0 B	PNA	0.0333 B	0.114 B	0.0286 B	PNA	0.0141 BE	PNA	0.16 B	0.137 B	PNA	0.0977 B
Beryllium as Be	mg/L	0.003	0.001 U	PNA	0.001 U	PNA	0.001 U	PNA	0.0 B	PNA	0.00016 U	0.00026 U	0.00017 U	PNA	0.00013 U	PNA	0.00012 U	0.00012 U	PNA	0.0001 U
Boron as B	mg/L	1.0	0.07	PNA	0.02	PNA	0.01	PNA	0.1 B	PNA	0.0591 B	0.106	0.0188 B	PNA	0.0111 BE	PNA	0.103	0.101	PNA	0.0743 B
Cadmium as Cd	mg/L	0.005	0.005 U	PNA	0.005 U	PNA	0.005 U	0.00032 U	0.00027 U	0.00035 U	0.00023 U	0.00034 U	0.00024 U	0.00025 U	0.00027 U	0.00017 U	0.00018 U	0.00018 U	0.000087 U	0.0001 U
Calcium as Ca	mg/L	NA	15	10	8.9	8.9	11	8.18	24.8	18.1	23.8	32.5	8.67	6.32	8.22	15.8	41.6	39.2	25.1	25.2
Chromium as Cr	mg/L	0.05	0.047	PNA	0.011	PNA	0.022	PNA	0.0201	PNA	0.0027 B	0.0029 B	0.0086 B	PNA	0.0014 B	PNA	0.0397	0.0013 B	PNA	0.0014 B
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0 U	PNA	0.0012 U	0.0012 U	0.0012 U	PNA	0.00049 U	PNA	0.0033 B	0.0007 B	PNA	0.0004 U
Copper as Cu	mg/L	0.2	0.04	PNA	0.01	PNA	0.03	PNA	0.0 B	PNA	0.0015 B	0.0032 B	0.0069 B	PNA	0.00055 U	PNA	0.0109 B	0.002 B	PNA	0.0016 B
Cyanide as CN	mg/L	0.20	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.0 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	PNA	0.01 U
Iron as Fe	mg/L	0.3	4.8	4.1	- 1	1.1	2.3	0.235	2.52	0.138	0.4	0.565	1	0.216	0.182	0.0516 U	4.91	0.027 B		0.0274 B
Lead as Pb	mg/L	0.025	0.006	0.009	0.005 U	0.005 U	0.005 U	0.0014 U	0.0023 U	0.0013 U	0.0017 B	0.0018 U	0.0239	0.0094	0.0015 U	0.0078	0.0144	0.0078	0.0011 B	0.0055
Magnesium	mg/L	35 #	PNA	2.8	PNA	2.8	PNA	4.32 B	11.1	7.09	13.2	11.1	2.46 B	1.76 B	2.56 B	5.49	12.3	11.6	8.33	7.03
Manganese as Mn	mg/L	0.3	0.17	0.11	0.09	0.11	0.07	0.0052 B	0.0263	0.0083 B	0.0152	0.0348	0.199	0.0346	0.0102 B	0.0057 BE	0.92	0.818	0.112	0.124
Mercury as Hg	_mg/L	0.0007	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.00025 U	PNA	_0.0 U	PNA	0.0001 U	PNA	0.0001 U		0.0001 U	PNA	0.0001 U	0.0001 U	PNA	0.0001 U
Nickel as Ni	mg/L	0.1	0.05	PNA	0.01	PNA	0.03	PNA	0.0 B	PNA	0.0075 B	0.0096 B	0.0089 B	PNA	0.0014 B	PNA	0.0386 B	0.0181 B	PNA	0.0085 B
Potasium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.832 B	3.48 B	2.02 B	2.25 BE	10.5	4.83 B	3.94 B	2.28 B	0.77 B	10.7	10.1	6.64	10 U
Selenium as Se	mg/L	0.01	0.004 U	PNA	0.004 U	PNA	0.004 U	PNA	0.0 U	PNA	0.0027 U	0.0025 U	0.0042 U	PNA	0.0026 U	PNA	0.0028 U	0.0031 BJ	PNA	0.0023 U
Silver as Ag	mg/L	0.05	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.0 U	PNA	0.0006 U	0.00083 U	0.0005 U		0.00052 U	PNA	0.00032 U	0.00032 U	PNA	0.00023 B
Sodium as Na	mg/L	20	10	PNA	7.9	PNA	9.5	6.68	12.8	10	14.2	16.5	8.47	8.22	8.96	11.8	19.2	19.9	13.4	11 U
Thallium as TI	mg/L	0.0005 #	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	0.0 U	PNA	0.0033 U	0.0032 U	0.0056 U	PNA	0.0028 B	PNA	0.0032 U	0.0032 U	PNA	0.0019 U
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0 B	PNA	0.0014 B	0.0014 U	0.0029 B	PNA	0.0014 B	PNA	0.0096 B	0.0008 B	PNA	0.0012 B
Zinc as Zn	mg/L	2#	0.04	PNA	0.01	PNA	0.03	PNA	0.0 B	PNA	0.0173 B	0.0095 B	0.0142 B	PNA	0.0128 B	PNA	0.0109 B	0.0035 B	PNA	0.0073 B
Alkalinity tot CaCo3	mg/L	NA	40	42	30	34	32	25.6	91.8	55	69.6	110	25.7	19 D	208	41.7	147 D	PNA	50.1 D	82.6 D
Chloride as Cl	mg/L	250.0	13	8	11	8	11	10.2	14.3	12.2	17.5	17.3	10.6	9.85	8.01	13.7	24.1	PNA	10.9	14.7
Sulfate as SO4	mg/L	250.0	32	14	11	16	15	11 U	22	17.5	43.7	46.7	10.6	8.47	8.56	19.9	47.2	PNA	20.1	29.3
Bromide	mg/L	2#	PNA	PNA	PNA	PNA	PNA	0.5 U	0.5 U	PNA	0.5 U	0.5 U								
BOD5	mg/L	NA	4.0	7.5	2 U	9.6	4.3	2 U	13	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	PNA	2 U	2 U
COD	mg/L	NA	40	PNA	40 U	PNA	40 U	10 U	16.9	10 U	10 U	10 U	10 U	10 Ū	10 U	10 U	10 U	PNA	10 U	10 U
Color	units	NA	5 U	5 U	10	5 U	10	PNA	20	PNA	5	PNA	10	PNA	5 U	PNA	20	PNA	PNA	5 U
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.0 U	PNA	0.02 U		0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	PNA	0.02 U
Hardness as CaC03	mg/L	NA	58	37	34	34	41	39	100	84	160	130	33	26 D	28 D	68 D	158 D	PNA	68 D	94 D
Ammonia as N	mg/L	2.0	0.22	0.05 U	0.05 U	0.1 U	0.05 U	0.1 U	0.1 U	0.1 U	0.14	0.1 U	0100	0.1 U	0.1 U	0.1 U	2.52	PNA	1.15	2.44
Nitrite as N	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.1 U		PNA	0.1 U	0.1 0	0.1 U	0.1 U	0.1 U	0.1 U	PNA	0.1 U	0.1 U
Nitrate as N	mg/L	10	0.5 U	PNA	0.5 U	PNA	0.5	0.63	1.02	0.56	0.25	0.43	0.71	0.42	0.63	0.71	0.1 U	PNA	2.07 D	1.17
Phenols as Phenol	mg/L	0.001	0.001 U	0.002	0.006	0.001	0.001 U	0.005 U	0.005 U	PNA	0.005 U	0.005 U								
Tot Dissolved Solids	mg/L	NA	120	PNA	93	PNA	160	95	168	104	173	217	72	56	69	97	246	PNA	117	164
Tot. Kjeldahl Nitrogen	mg/L	NA	1.0	PNA	0.4	PNA	1.6	0.1 U	1.06	0.22	0.29	4.94	0.35	0.26	0.5 UD	0.19	4.6	PNA	1.32 D	3.99
Tot Organic Carbon	mg/L	NA	5.5	3.6	2.1	11	3.1	1 U	2	1 U	1.7	2.3	1 U	1 U	1 U	11.4	2.4	PNA	1 U	20.6
Turbidity	NTU	NA	2.4	30	7.0	13.0	15	6.62	38.7	13.5	17.4	23.6	6.4	18.1	PNA	12.7	100	PNA	0	1.32
Temperature	deg.C	NA	15	13	13	14	13	12.3	12.9	12.94	11.79	11.7	12.27	11.96	PNA	13.76	14.05	PNA	12.45	13.85
pН	units	6.5-8.5	6.3	6.6	6.1	7.3	6.8	6.96	5.64	6.17	6.2	5.55	6	6.16	PNA	5.95	6.12	PNA	6.58	7.67
Spec. Cond	umho/cm	NA	330	120	150	120	190	PNA	PNA	167	224	999	130	82	PNA	195	455	PNA	226	2

NOTES:

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\* = NYSDEC. Class GA Groundwater Standards

6 NYCRR Part 703

# = Guidance value. no standard exists.

NA = Not available. PNA = parameter not analyzed for.

B = This flag is used when the analyte is found in the associated blank as in the sample.

E - This flag identified compunds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. F - This flag indicates the results of a filtered metal analysis

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

U -The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be veniled. 1.0 = Compound exceeded standard. 1.0 = Compound at standard. NM = Not Monitored

Parameters	Units	GW Standard*	MW-1/	A	MW-1E	3	MW-10	;	MW-3A		MW-3B		MW-30		MW-4A		MW-4B		MW-4C	MW-11A	1	MW-11B	3	MW 1	2A	MW 12	в
Chloromethane	mg/L	NA	5	υ	5	UJ	5	υ	5	U	5	υ	5	U	5	U	5	υ	5 U	5 1	1	5	U	5	υ	5	U
Vinyl chloride	mg/L	0.002	2	U	2	υ	2	U	2	υ	2	U	2	U	2	υ	2	υ	2 U	2	J	2	Ų	2	U	2	U
Bromomethane	mg/L	0.005	5	U	5	U	5	U	5	U	5	U	5	υ	5	U	5	U	5 U	5 1	J	5	υ	5	U	5	U
Chlorcethane	mg/L	0.005	5	U	5	U	5	U	5	u	5	0	5	U	5	υ	5	U	5 U	5		5	U	5	U	5	U
Acrykonitrile	mg/L	0.005	5	U	5	υ	5	U	5	υ	5	U	5	U	5	υ	5	U	5 U	5 . 1	1	5	υ	5	U	5	U
Trichlorofluoromethane	mg/L	0.005	5	U	5	U	5	U	5	υ	5	U	5	υ	5	U	5	U	5 U	5 1	J	5	U	5	U	5	υ
1,1-Dichloroethene	mg/L	0.005	5	U	5	U	5	υ	5	U	5	U	5	U	5	υ	5	υ	5 U	5 1	L	5	U	5	U	5	U
lodomethane	mg/L	NA	5	U	5	U	5	U	5	U	5	υ	5	υ	5	υ	5	υ	5 U	5 1	٦ [ ``	5	U	5	U	5	U
Vinyl acetate	mg/L	0.005	5	U	5	U	5	U	5	U	5	U	5	υ	5	U	5	υ	5 U	5 1	1	5	υ	5	U	5	U
Acetone	mg/L	NA	5	U	5	UJ	5	υ	5	U	5	υ	5	U	5	U	5	U.	5 U	3 E	N	5	U	5	U	5	U
Carbon disulfide	mg/L	NA	5	U	5	U	5	U	5	υ	5	U	5	υ	5	U	5	υ	5 U	5 1	L L	5	υ	5	U	5	U
Methylene chloride	mg/L	0.005	5	1 u	5	U	5	U	5	υ	5	U	5	υ	5	U	5	υ	5 U	5 1	,	5	U	5	υ	5	U
trans-1,2-Dichloroethene	mg/L	0.005	5	U	5	U	5	U	5	υ	5	U	5	υ	5	υ	5	υ	5 U	5 1		5	υ	5	υ	5	U
1,1-Dichloroethane	mg/L	0.005	5	U	5	U	5	U	5	υ	5	U	5	υ	5	υ	5	υ	5 U	5 1	J	5	U	5	υ	5	U
cis-1,2-Dichloroethene	mg/L	0.005	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	υ	5 U	5 1	,	5	U	5	U	5	U
2-Butanone	mg/L	0.005	5	U	5	U	5	υ	5	U	5	U	5	U	5	U	5	υ	5 U	5 1	L	5	U	5	U	5	U
Bromochioromethane	mg/L	0.005	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	υ	5 U	5 1	J	5	U	5	. U	5	υ
Chloroform	mg/L	0.007	5	U	3	J	2	J	5	U	5	U	5	U	5	U	5	U	5 U	5 1	1	2	J	5	υ	5	U
1,1,1-Trichloroethane	mg/L	0.005	5	U	5	U	5	υ	5	U	5	υ	5	U	5	U	5	υ	5 U	5 0	,	5	U	5	U	5	U
Carbon tetrachloride	mg/L	0.005	5	U	5	UJ	5	U	5	υ	5	U	5	υ	5	υ	5	υ	5 U	5 (	L	5	U	5	U	5	U
Benzene	mg/L	0.001	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	υ	5 U	5 1	, i	5	υ	5	U	5	U
1.2-Dichloroethane	mg/L	0.005	5	U	5	U	5	U	5	U	5	υ	5	U	5	U	5	υ	5 U	5 1	L	5	υ	5	υ	5	U
Trichloroethene	mg/L	0.005	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	υ	5 U	5	J	5	υ	5	U	5	U
1.2-Dichloropropane	mg/L	0.001	1	U	1	U	1	U	1	U	1	U	1	υ	1	U	1	U	1 U	1 1	J	1	υ	1	U	1	U
Dibromomethane	mg/L	0.005	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5 U	5 0	J L	5	U	5	U	5	U
Bromodichloromethane	mg/L	NA	5	U	5	U	5	U	5	υ	5	υ	5	U	5	υ	5	υ	5 U	5 1		5	υ	5	U	5	U
cis-1,3-Dichloropropene	mg/L	0.0004	0.4	υ	0.4	U	0.4	υ	0.4	U	0.4 U	0.4	J.	0.4	υ	0.4	U	0.4	υ								
4-Methyl-2-pentanone	mg/L	0.005	5	U	5	U	5	U	5	U	5	υ	5	U	5	υ	5	υ	5 U	5 1	,	5	υ	5	U	5	U
Toluene	mg/L	0.005	5	U	5	U	5	υ	5	υ	5	U	5	υ	5	U	5	υ	5 U	5 1		5	U	5	U	5	U
trans-1,3-Dichloropropene	mg/L	0.0004	0.4	U	0.4	UJ	0.4	υ	0.4	u	0.4	U	0.4	U	0.4	U	0.4	υ	0.4 U	0.4	. I	0.4	υ	0.4	U	0.4	υ
1,1,2-Trichloroethane	mg/L	0.001	1	U	1	U	1	U	1	υ	1	υ	1	υ	1	υ	1	υ	1 U	1 (	J	1	U	1	υ	1	U
Tetrachloroethene	mg/L	0.005	5	U	5	U	5	υ	5	U	5	U	5	υ	5	υ	5	υ	5 U	5	J	5	U	5	U	5	U
2-Hexanone	mg/L	NA	5	U	5	υ	5	U	5	U	5	υ	5	U	5	U	5	U	5 U	5 1	J	5	υ	5	U	5	U
Dibromochloromethane	mg/L	0.005	5	U	5	υJ	5	U	5	υ	5	υ	5	υ	5	υ	5	υ	5 U	5 1	L	5	υ	5	U	5	U
1.2-Dibromoethane	mg/L	NA	1	U	1	U	1	υ	1	υ	1	U	1	υ	1	U	1	U	1 U	1 1	J	1	U	1	U	1	U
Chlorobenzene	mg/L	0.005	5	U	5	U	5	U	5	U	5	υ	5	U	5	U	2	J	5 U	5 1	1	5	U	5	U	5	υ
trans-1,4-Dichloro-2-butene	mg/L	0.005	5	U	5	U	5	U	5	U	5	U	5	υ	5	υ	5	υ	5 U	5	1	5	U	5	U	5	U
Ethylbenzene	mg/L	0.005	5	U	5	υ	5	υ	5	U	5	U	5	υ	5	U	5	U	5 U	5 1		5	U	5	U	5	υ
1,1,1,2 Tetrachloroethane	mg/L	0.005	5	U	5	υ	5	U	5	υ	5	U	5	U	5	U	5	U	5 U	5 1	J	5	υ	5	U	5	U.
Xylene (total)	mg/L	0.005	5	U	5	U	5	υ	5	U	5	U	5	U	5	U	5	υ	5 U	5 1	L	5	U	5	U	5	U
Styrene	mg/L	0.005	5	U	5	υ	5	U	5	υ	5	U	5	υ	5	U	5	U	5 U	5 1	L	5	U	5	U	5	U
Bromoform	mg/L	NA	5	U	5	UJ	5	U	5	U	5	U	5	υ	5	υ	5	υ	5 U	5	J	5	υ	5	U	5	U
1,1.2.2-Tetrachloroethane	mg/L	0.005	5	U	5	U	5	υ	5	U	5	U	5	υ	5	υ	5	υ	5 U	5	L	5	U	5	U	5	U
1.4-Dichkorobenzene	mg/L	0.003	3	U	3	U	3	U	3	υ	3	υ	3	U	3	U	2	J	3 U	3	J	3	U	3	U	3	U
1,2-Dichlorobenzene	mg/L	0.003	3	U	3	U	3	U	3	υ	3	U	3	U	3	υ	3	υ	3 U	3	J I	3	υ	3	U	3	U
1.2-Dibromo-3-chloropropane	mg/L	0.0004	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1 U	1 1	L	1	υ	1	U	1	U U

#### NOTES:

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@ = A compound is presented if it has been detected in one or more locations

\* = New York State Department of Environmental Conservation. Class GA Groundwater Standards. 6 NYCRR Part 703

^ Standard was taken for total phenols

U - the analyte was analyzed for, but was not detected above the reported sample quantitation limit.

U.J - The analyte was not detected above the reported sample quantitation smit. However, the reported quantitation limit is approximate and may not represent the actual limit of quantitation necessary to accurately and proceety measure the analyte in the sample

J - The analyte was positively identified, the associated numerical value is the approximate concentration of the analyte in the sample.

Indicates compound is at the standard

indicates compound exceeds the standard

# = Guidance Value, no standard exists

NM = Not Monitored

#### TOWN OF SOUTHAMPTON NORTH SEA LANDFILL TABLE 3 LEACHATE QUALITY RESULTS April 2013

Analytical Parameter								Leachat	Collection (P	rimary)															Leachate	Detection (S	condary)							
Units mg/L	April	October	April	October	April	October	April	October	April	October	April	October	April	October	April	October	April	April	October	April	October	April	October	April	October	April	October	April	October	April	October	April	October	April
	2005	2005	2006	2006	2007	2007	2008	2008	2009	2009	2010	2010	2011	2011	2012	2012	2013	2005	2005	2006	2006	2007	2007	2008	2008	2009	2009	2010	2010	2011	2011	2012	2012	2013
Arsenic as As	NA	NA	NA	NA	NA	0.0398	0 0407	0.0021	0.0028B	0 158	<0.0028	<0.0027	0.0023 B	0.0048 8	< 0.0044	0.0048 B	<0.0028	NA	NA	NA	NA	NA	0.217	0,102	0.0148	<0.0028	0.0875	<0.0028	<0.0027	< 0.0019	0.0038 B	< 0.0044	0.0074 B	0.0035 B
Cadmum as Cd	<0.025	<0.005	<0.005	<0.005	<0.005	0.00128	0.0014 B	< 0.00035	<0.00023	0.0034	<0.00024	<0.00025	0.001 B	< 0.00017	0.0002 B	<0.000087	<0.0001	<0.005	<0.005	<0.005	<0.005	<0.005	<0 00032	0.0011 B	< 0.00035	<0.00023	<0.00034	<0.00024	<0.00025	< 0.00027	< 0.00017	< 0.00018	<0.000087	<0.0001
Caloum as Ca	82	59	160	3.10	99	115	99.8	73.1	69.8	291	57.4	80.9	68	70.3	72	100	71.6	83	61	.96	82	75	583	117	111	71.5	142	63	104	67.8	85.5	74.6	150	68.8
Iron as Fe	39	1.7	67	38	41	115	422	36.9	47	2930	25.8	33.5	21.2	42.1	36.1	25.7	13,6	0.25	0.35	0.73	0.2	11	496	127	20.2	0.957	101	5.71	0 692	0.99	0.573	0.147	5.41	14.2
Lead as Pb	<0.025	<0.005	0.007	<0.005	<0.005	6 0764	<0.0023	0 0014 B	<0.6015	0.116	0.0071	<0.0017	0.0066	< 0.0033	0.0189	<0.00096	0.0058	<0.005	<0.005	<0.005	<0.005	<0.005	0,108	0.0272	0.0044	0.00248	3 06	0.0173	0.0164	< 0.0015	0.0113	0.0108	0 0024 B	0.0033
Magnesium as Mg	22	6.8	26	28	21	46.7	20.6	191	17.1	37.6	12.6	18.9	17.9	14	. 17	33.7	21.4	14	5.8	9.4	8	11	48.7	11.9	153	10	15.5	7.52	12.3	11.3	12.8	10.7	25.9	8 08
Manganese as Mn	3.4	0.4	3.6	2.9	3.2	3,11	4.97	3.05	3.09	167	2.83	2.01	2.03	2.66	2.94	2.59	2.06	3.5	0.02	0.38	0.02	0.79	6.06	3.24	2.43	0.368	2.92	4.31	0.436	0.991	0 727 E	0.163	2.33	5.71
Potassium as K	85	_25	810	140	96	236	76 2	.71.9	60.1	141	48.9	83.7	67.4	41.3	67 7	160	86.1	58	17	39	19	36	214	20.5	32.3	10.7E	43.6	16.2	35.3	35.6	35.8	22.4	109	134 E
Sodium as Na	180	10	170	250	170	506	146	141	123	328	99.4	186	137	99.4	148	419	186		6.1	49	11	.52	455	39	61.3	17.5	84.5	27.4	55.7	62.1	66.8	21.2	283	176
Alkalinity total CaCO3	1100	140	980	1300	980	2710	884	778	653	1640	556	820	771	605	808 D	1,860 D	948 D	570	130	300	210	480	2000	438	389	202	489	256	340	350 D	386 D	204 D	986 D	236 D
BODS	NA	NA	NA	NA	NA	68	96	17	53	117	9	47	20	15	< 2	31	21	NA	NA	NA	NA	NA	NA	NA	257	42	555	< 10	10	16	16	× 2	47	< 2
COD	180	220	210	240	150	629	455	178	69.2	549	62.6	163	125	94.4	141	382 D	148 D	120	380	<40	50	70	2600	257	138	154	743	< 10	56.1	69.3	75.7	35.7	181 D	31.1
Chloride as Cl	210	.16	160	250	210	495	310	168	152	399	107	227	156 D	122 D	193 D	475 D	207 D	100	5	58	10	64	496	46.1	56.6	20.8	100	29.4	52.8	57.3 D	73.7 D	33.1	288 D	29.8
Hardness as CaCO3	300	180	600	390	330	580	330	350	500	870	225	300	280 D	272 D	272 D	450 D	360 D	260	180	280	240	230	1000	330	320	62G	440		310	230 D	272 D	260 D	460 D	250 D
Ammonia as N	140	1.6	110	160	110	263	9.92	107	166	179	81.4	898	46.7 D	41.4 D	75.3 D	164 D	145 D	58	0.07	23	<0.1	44	276	2.1	20.8	83.2	27.8	13.9	13.9	24.1 D	19.2 D	2.08 D	77.8 D	12 9 D
Nitrite as N	NA	NA	NA	NA	NA	NA	NA	<0.10	NA	< 1	<0.10	0.3	0.12	< 0.10	< 0.10	< 0.10	< 0.10	NA	NA	NA	NA	NA	NA	NA	0.29	NA	0.23	<0.10	<0.10	0.21	0.25	G 19	0.2	< 0.10
Ntrate as N	<0.5	<0.5	<0.5	⊲0.5	<0.5	0.25	0.89	< 0.10	5.73	0.15	<0.10	1.27	0.72 D	0.43	0.23	0.11	0.41	<0.5	4.5	10	3.6	<0.5	1.04	2.71	2.47	0.29	8.62	<0.10	6.96	1.84 D	4.08 D	5.73 D	10.6 D	< 0.10
Bromide	NA .	NA	NA	NA	NA	2.8	0.85	0.92	0.69	1.84	0.58	1 03	< 0.50	0.6	0.71	.3.33 D	0.91	NA	NA	NA	NA	NA	2.6	<0.5	< 0.50	<0.5	0.53	<0.50	<0.50	< 0.50	< 0.50	< 0.50	1.06	< 0.50
Total Recoverable Phenolics	NA	NA	NA	NA	NA	16.600	8,700	8	<0.0005	0.013	<0.005	0.0133	< 0.005	0.0114	< 0.005	0.0056	0.0077	NA	NA	NA	NA	NA	18,200	10,300	5	0.0058	0.0079	<0.005	<0.005	< 0.005	0.0143	< 0.005	0.0052	< 0.005
Sulfate as SO4	35	74	100	10	19	121	25.5	9.91	16.7	24 5	8.29	391	18	< 5.00	7.64	20.3	10.5	<75	52	80	45	20	282	64.4	65.6	45 3	105	15.4	48.8	22.3	13.4	15.9	44.7	10.8
Total Dissolved Solids	930	340	1300	1300	970	2180	772	690	710	1520	570	925	875	592 D	782 D	2,050 D	948 D	610	280	730	390	480	2350	468	465	332	762	302	559	508	488 D	357	1,550 D	292
Total Organic Carbon	66	28	63	76	51	111	53.5	59.2	38.7	123	32.1	56.6	38.6	152 D	51.4	104 D	246 D	27	13	. 14	13	20 .	122	39.6	27.5	12.2	41,3	89	21.2	23.2	964D	14.1	63.3 D	67.1 D
Total Kjeldahl Nitorgen	NA	NA	NA	NA	NA	521	38 3	129	5.08	392	56 1	149	113 D	85.5 D	137 D	328 D	171 D	NA	NA	NA	NA	NA	474	10.7	26.2	120	103	14.9	22.5	40.0 D	37.9 D	5.67 D	128 D	13.6
Turbidity NTU	6.5	5.8	440	570	610	NA	NA	NA	NA	1,000	250	815	900	> 1.000	244	187	104	5.9	5.5	15	2.4	120	NA	NA	NA	NA	976	20.9	77.3	78	55	20.8	52	21.1

 $\theta$  = This flag is used when the analyte is found in the associated blank as in the sample

E - This flag identified compands whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis

E . This flag indicates the results of a filtered metal analysis

I

J - The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit

U) - The analyse was not detected above the reported sample wantitation limit. However, the reported quantitation limit is approximate and may or may not reported the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample

#### TOWN OF SOUTHAMPTON NORTH SEA LANDFILL

#### TABLE 4

#### GROUNDWATER ELEVATIONS April 2013

Monitoring	* Casing	April	2005	Octob	er 2005	Apri	2006	Octob	er 2006	Apr	1 2007	Octob	er 2007	Apri	2008	Octob	er 2008	Apri	2009	Octob	er 2009	April	2010	Octob	er 2010	April	2011	Octobe	or 2011	April	2012	Octob	er 2012	April	2013
Well Number	Elevation	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE	DTW	GWE		GWE
MW-1A	113.87	102.40	11.47	103.22	10.65	102.03	11.84	101.36	12.51	101.23	12.64	102.55	11.32	102.50	11.37	104.12	9.75	103.34	10.53	102.76	11.11	101.22	12.65	102.43	11.44	103.49	10.38	104.13	9.74	104.12	9.75	104.12	9.75	104.53	9.75
MW-1B	115.09	103.61	11.48	104.43	10.66	103.24	11.85	102.58	12.51	102.45	12.64	103.78	11.31	103.01	12.08	105.38	9.71	104.56	10.53	103.96	11.13	103.00	12.09	103.64	11.45	104.66	10.43	105.34	9.75	105.30	9.79	105.30	9.79	105.77	9.79
MW-1C	114.99	104.57	10.42	105.31	9.68	104.49	10.50	103.94	11.05	103.83	11.16	105.22	9.77	104.98	10.01	106.28	8.71	105.43	9.56	105.16	9.83	103.10	11.89	105.06	9.93	105.52	9.47	106.27	8.72	106.15	8.84	106.15	8.84	106.44	8.84
MW-2	74.8	64.22	10.58	64.81	9.99	63.46	11.34	63.36	11.44	63.31	11.49	NM		NM		NM		NM		NM		NM	-												
MW-3A	55.3	46.39	8.91	NM		46.22	9.08	45.59	9.71	45.47	9.83	47.09	8.21	47.45	7.85	47.89	7.41	47.27	8.03	47.20	8.10	47.30	8.00	46.89	8.41	47.43	7.87	47.90	7.40	47.96	7.34	47.96	7.34	47.93	7.37
MW-3B	51.9	43.11	8.79	NM		42.95	8.95	42.35	9.55	42.20	9.70	43.81	8.09	44.45	7.45	44.70	7.20	43.97	7.93	43.90	8.00	43.03	8.87	43.59	8.31	44.15	7.75	44.59	7.31	44.66	7.24	44.66	7.24	44.62	7.28
MW-3C	51.4	42.97	8.43	NM		42.95	8.45	42.57	8.83	42.21	9.19	43.88	7.52	43.91	7.49	44.28	7.12	43.62	7.78	43.72	7.68	43.66	7.74	43.59	7.81	43.73	7.67	44.26	7.14	44.23	7.17	44.23	7.17	44.22	7.18
MW-4A	16	13.21	2.79	12.89	3.11	13.47	2.53	12.93	3.07	13.11	2.89	13.78	2.22	13.66	2.34	13.51	2.49	13.63	2.37	13.63	2.37	12.68	3.32	13.02	2.98	13.10	2.90	13.42	2.58	13.66	2.34	13.87	2.13	13.80	2.20
MW-4B	16.1	13.21	2.89	12.37	3.73	13.85	2.25	13.03	3.07	13.25	2.85	11.06	5.04	13.63	2.47	13.64	2.46	13.81	2.29	13.87	2.23	12.82	3.28	13.14	2.96	13.27	2.83	13.51	2.59	13.73	2.37	14.50	1.60	13.89	2.21
MW-4C	16	8.40	7.60	8.36	7.64	8.74	7.26	8.03	7.97	8.15	7.85	9.34	6.66	9.20	6.80	9.61	6.39	9.01	6.99	9.15	6.85	7.14	8.86	8.62	7.38	9,11	6.89	9.37	6.63	9.48	6.52	10.25	5.75	9.40	6.60
MW-5A	74.27	64.11	10.16	64.77	9.50	63.92	10.35	63.09	11.18	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	
MW-5B	75.25	NM		NM		65.67	9.58	65.39	9.86	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	( - J	NM	
MW-5C	74.33	NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	()	NM	
MW-6A	NS	NM		NM		NM		NM		88.75		NM		NM		NM		NM		NM		NM		NM		NM		NM		NM	••	NM	· · ·	NM	
MW-6AR	100.72	NM		NM		NM		91.28	9.44	NM		90.23	10.49	91.13	9.59	91.67	9.05	90.82	9.90	90.47	10.25	88.80	11.92	90.12	10.60	90.99	9.73	91.67	9.05	91.58	9.14	92.62	8.10	91.99	8.73
MW-6B	103.46	92.55	10.91	92.97	10.49	91.97	11.49	91.28	12.18	91.13	12.33	92.62	10.84	93.54	9.92	94.06	9.40	93.25	10.21	92.85	10.61	91.23	12.23	92.43	11.03	93.55	9.91	94.04	9.42	93.97	9.49	94.94	8.52	94.32	9.14
MW-7A	92.83	82.11	10.72	82.49	10.34	81.69	11.14	80.94	11.89	80.78	12.05	NM		NM		NM		82.83	10.00	82.48	10.35	80.58	12.25	82.20	10.63	82.94	9.89	83.61	9.22	83.60	9.23	84.61	8.22	83.69	9.14
MW-7B	92.72	81.67	11.05	82.47	10.25	81.57	11.15	80.85	11.87	80.66	12.06	NM		NM		83.52	9.20	82.63	10.09	NM		NM		NM		82.86	9.86	83.48	9.24	83.50	9.22	84.52	8.20	83.82	8.90
MW-7C	93.31	83.73	9.58	84.22	9.09	83.66	9.65	83.11	10.20	82.77	10.54	NM		NM		NM		84.41	8.90	NM		NM		NM		84.54	8.77	85.27	8.04	85.12	8.19	86.10	7.21	85.03	8.28
MW-8	86.02	74.99	11.03	75.79	10.23	74.75	11.27	73.99	12.03	73.90	12.12	75.72	10.30	76.21	9.81	76.68	9.34	75.91	10.11	75.43	10.59	73.72	12.30	75.06	10.96	76.02	10.00	76.62	9.40	76.68	9.34	77.65	8.37	76.91	9.11
MW-9	82.56	71.99	10.57	72.86	9.70	71.88	10.68	71.06	11.50	70.98	11.58	72.49	10.07	73.23	9.33	73.65	8.91	72.91	9.65	72.58	9.98	70.57	11.99	72.25	10.31	73.05	9.51	73.61	8.95	73.69	8.87	74.63	7.93	73.81	8.75
MW-11A	80.78	70.56	10.22	71.32	9.46	70.32	10.46	69.52	11.26	69.43	11.35	70.97	9.81	71.61	9.17	72.05	8.73	71.57	9.21	71.11	9.67	71.90	8.88	70.88	9.90	71.46	9.32	72.03	8.75	72.06	8.72	72.98	7.80	73.59	7.19
MW-11B	78.32	43.85	34.47	59.19	19.13	NM		47.72	30.60	51.04	27.28	63.68	14.64	69.10	9.22	69.57	8.75	67.16	11.16	68.64	9.68	62.79	15.53	67.68	10.64	68.81	9.51	69.50	8.82	69.61	8.71	74.43	7.89	73.59	8.73
MW-12A	87.95	78.31	9.64	78.61	9.34	78.36	9.59	77.48	10.47	77.46	10.49	78.87	9.08	79.41	8.54	79.90	8.05	79.22	8.73	79.05	8.90	76.42	11.53	78.76	9.19	79.42	8.53	79.91	8.04	79.96	7.99	80.75	7.20	79.96	7.99
MW-12B	88.28	79.19	9.09	79.47	8.81	79.23	9.05	78.37	9.91	78.35	9.93	79.46	8.82	80.04	8.24	80.50	7.78	79.82	8.46	79.64	8.64	77.01	11.27	79.34	8.94	80.02	8.26	80.50	7.78	80.80	7.48	81.30	6.98	80.57	7.71

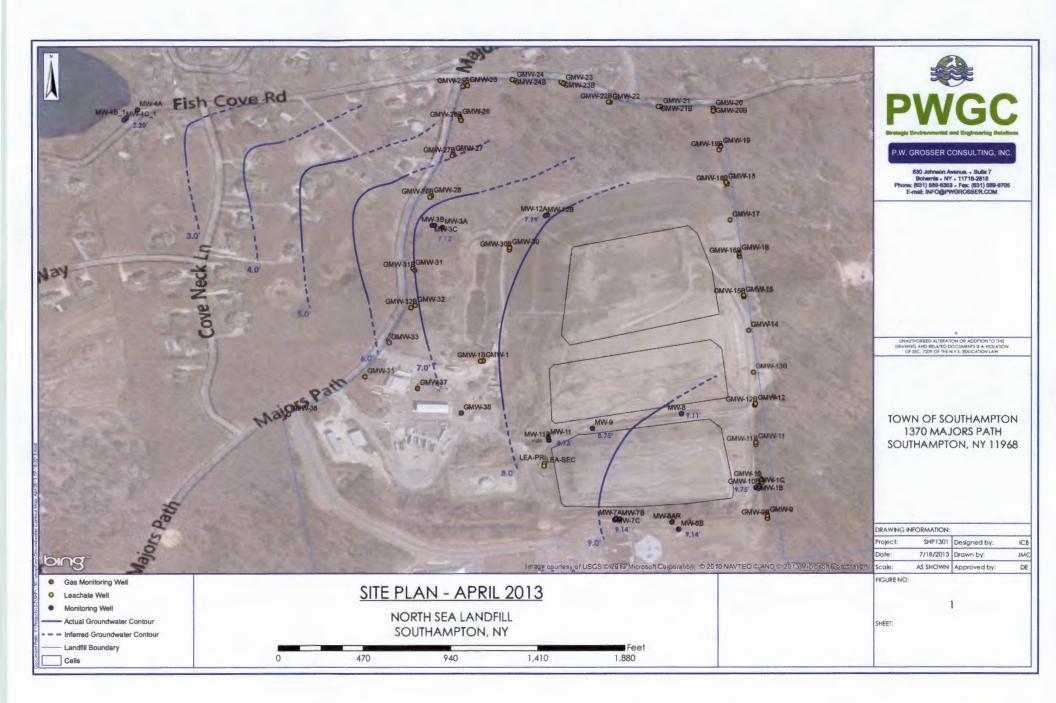
NOTES:

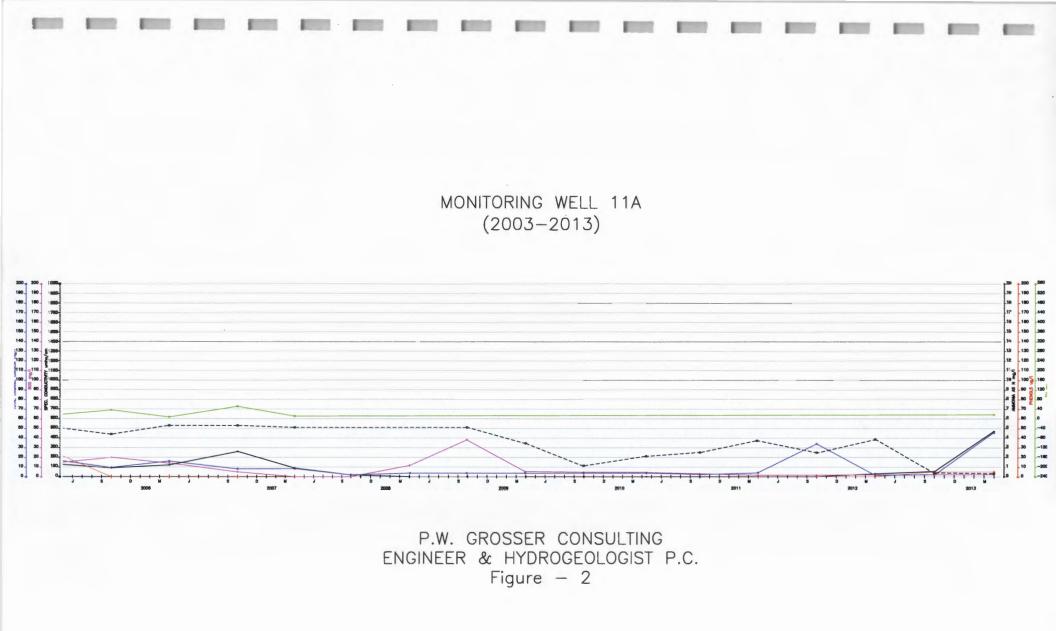
I

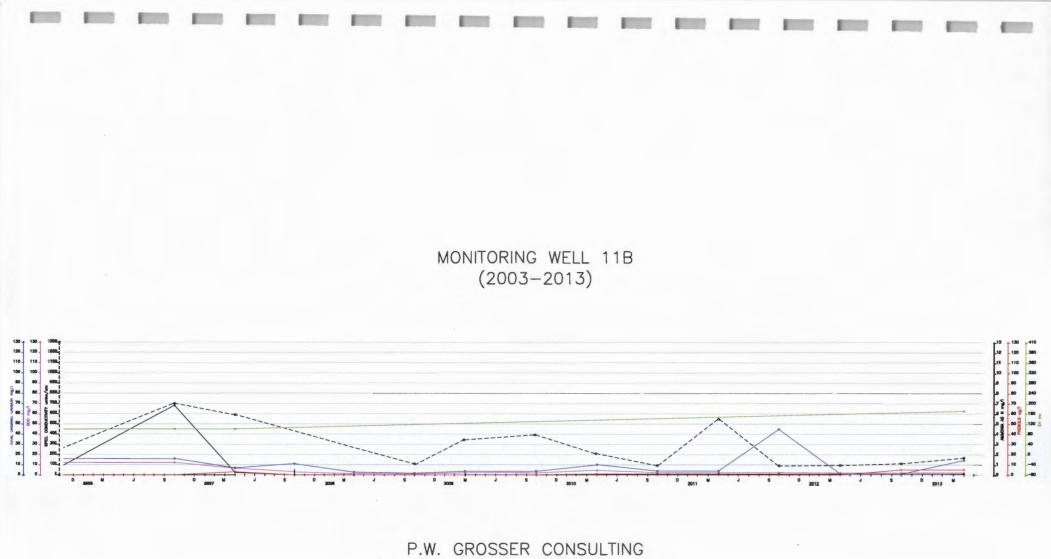
\* = SURVEYED TO MEAN SEA LEVEL GWE = GROUNDWATER ELEVATION DTW = DEPTH TO WATER NM = NOT MONITORED NS = NOT SURVEYED FIGURES

P.W. Grosser Consulting, Inc • P.W. Grosser Consulting Engineer & Hydrogeologist, PC 630 Johnson Avenue, Suite 7 • Bohemia, NY 11716 • Branch Location - Seattle, WA PH 631.589.6353 • FX 631.589.8705 • <u>www.pwgrosser.com</u>

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P.W. GROSSER CONSULTING ENGINEER & HYDROGEOLOGIST P.C. Figure – 3

VProjects 8-2014/11301 - North Box Landlik Sampling/1st Domi-Annual Rempting/CADironan autolice me-11b - April 2013-deg (Layourt) May 10,2018-2:54pm By: Land

APPENDIX A

# LABORATORY ANAYTICAL REPORTS / DATA VALIDATION & USABILITY REPORT

P.W. Grosser Consulting, Inc • P.W. Grosser Consulting Engineer & Hydrogeologist, PC 630 Johnson Avenue, Suite 7 • Bohemia, NY 11716 • Branch Location - Seattle, WA PH 631.589.6353 • FX 631.589.8705 • <u>www.pwgrosser.com</u>

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tei 631.694.3040 fax 631.420.8436

# SAMPLE DATA SUMMARY PACKAGE

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NORTH SEA LANDFILL SAMPLES RECEIVED: 4/16/13 & 4/17/13 WATER SAMPLES SDG NO.: TOS012/012F

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- 10. INTERNAL STANDARD AREA DATA 10.1 VOLATILES



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575 Broad Hollow Road Melville, NY 11747 tel 631.694.3040 fax 631.420.8436

## 1. NYS DEC SUMMARY FORMS

# SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: TOS012			Analyt	ical Requ
Customer Sample	Laboratory Sample	ME	MSVOA	wc
Code	Code			
DUP001	1304917-001	X	X	x
LEA-PRIMARY	1304917-002	Х		Х
LEA-SECONDARY	1304917-003	Х		Х
MW-3A	1304917-004	Х	X	Х
MW-3B	1304917-005	Х	X	Х
MW-3C	1304917-006	Х	X	X
MW-4A	1304917-007	X	X	X
MW-4B	1304917-008	Х	X	Х
MW-4C	1304917-009	Х	X	X
FB001	1304917-010	х	X	х
TRIP BLANK 001	1304917-011		X	
STORAGE BLANK	1304917-012		X	
MW-1A	1304A27-001	X	X	х
MW-1B	1304A27-002	х	X	Х
MW-1C	1304A27-003	х	X	Х
MW-11A	1304A27-004	х	X	Х
MW-11B	1304A27-005	х	X	Х
MW-12A	1304A27-006	х	X	x
MW-12B	1304A27-007	X	×	Х
FB002	1304A27-008	X	X	X
TRIP BLANK	1304A27-009		X	

CLP, Non-CLP (Please indicate year of protocol) ASP B 2000 TCI (TAL HSL. Priority Pollutant, CG 5/L0/13

TOS012/012F S3

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## SAMPLE PREPARATION AND ANALYSIS SUMMARY

SDG: TOS012

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VOLATILE (VOA) ANALYSES

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Laboratory Samp ID	Client Sample ID	Matrix	Analytical Protocol	Date Collected	DateRecd at Lab	Date Extracted	Date Analyzed	Extraction Method	DF	Level	Aux Cleanup
1304917-001A	DUP001	Aqueous	ASPB 8260	15-Apr-13	16-Apr-13		17-Apr-13		1	LOW	
1304917-004A	MW-3A	Aqueous	ASPB 8260	15-Apr-13	16-Apr-13		17-Apr-13		1	LOW	
1304917-005A	MW-3B	Aqueous	ASPB 8260	15-Apr-13	16-Apr-13		17-Apr-13		1	LOW	
1304917-005AMS	MW-3BMS	Aqueous	ASPB 8260	15-Apr-13	16-Apr-13		17-Apr-13		1	LOW	
1304917-005AMSD	MW-3BMSD	Aqueous	ASPB 8260	15-Apr-13	16-Apr-13		17-Apr-13		1	LOW	
1304917-006A	MW-3C	Aqueous	ASPB 8260	15-Apr-13	16-Apr-13		17-Apr-13		1	LOW	
1304917-007A	MW-4A	Aqueous	ASPB 8260	15-Apr-13	16-Apr-13		17-Apr-13		1	LOW	
1304917-008A	MW-4B	Aqueous	ASPB 8260	15-Apr-13	16-Apr-13		17-Apr-13		1	LOW	
1304917-009A	MW-4C	Aqueous	ASPB 8260	15-Apr-13	16-Apr-13		17-Apr-13		1	LOW	
1304917-010A	FB001	Aqueous	ASPB 8260	15-Apr-13	16-Apr-13		18-Apr-13		1	LOW	
1304917-011A	TRIP BLANK 001	Aqueous	ASPB 8260	15-Apr-13	16-Apr-13		18-Apr-13		1	LOW	
1304917-012A	STORAGE BLANK	Aqueous	ASPB 8260	16-Apr-13	16-Apr-13		18-Apr-13		1	LOW	
1304A27-001A	MW-1A	Aqueous	ASPB 8260	16-Apr-13	17-Apr-13		18-Apr-13		1	LOW	
1304A27-002A	MW-1B	Aqueous	ASPB 8260	16-Apr-13	17-Apr-13		18-Apr-13		1	LOW	
1304A27-003A	MW-1C	Aqueous	ASPB 8260	16-Apr-13	17-Apr-13		18-Apr-13		1	LOW	
1304A27-004A	MW-11A	Aqueous	ASPB 8260	16-Apr-13	17-Apr-13		18-Apr-13		1	LOW	
1304A27-005A	MW-11B	Aqueous	ASPB 8260	16-Apr-13	17-Apr-13		18-Apr-13		1	LOW	
1304A27-006A	MW-12A	Aqueous	ASPB 8260	16-Apr-13	17-Apr-13		18-Apr-13		1	LOW	
1304A27-007A	MW-12B	Aqueous	ASPB 8260	16-Apr-13	17-Apr-13		18-Apr-13		1	LOW	
1304A27-008A	FB002	Aqueous	ASPB 8260	16-Apr-13	17-Apr-13		18-Apr-13		1	LOW	
1304A27-009A	TRIP BLANK	Aqueous	ASPB 8260	16-Apr-13	17-Apr-13		18-Apr-13		1	LOW	

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSIS

SDG : TOS012

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Laboratory Samp ID	Client Sample ID	Matrix	Metals Requested	DateRecd at Lab	Date Analyzed
1304917-001	DUP001	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	16-Apr-13	04/13 - 05/13
1304917-002	LEA-PRIMARY	WATER	AS,CA,CD,FE,K,MG,MN,NA,PB,	16-Apr-13	05/13
1304917-003	LEA-SECONDARY	WATER	AS,CA,CD,FE,K,MG,MN,NA,PB,	16-Apr-13	05/13
1304917-004	MW-3A	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	16-Apr-13	04/13 - 05/13
1304917-005	MW-3B	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	16-Apr-13	04/13 - 05/13
1304917-005DUP	MW-3BD	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	16-Apr-13	04/13 - 05/13
1304917-005MS	MW-3BS	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	16-Apr-13	04/13 - 05/13
1304917-006	MW-3C	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	16-Apr-13	04/13 - 05/13
1304917-007	MW-4A	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	16-Apr-13	04/13 - 05/13
1304917-008	MW-4B	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	16-Apr-13	04/13 - 05/13
1304917-009	MW-4C	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	16-Apr-13	04/13 - 05/13
1304917-010	FB001	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	16-Apr-13	04/13 - 05/13
1304A27-001	MW-1A	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	17-Apr-13	04/13 - 05/13
1304A27-002	MW-1B	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	17-Apr-13	04/13 - 05/13
1304A27-003	MW-1C	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	17-Apr-13	04/13 - 05/13
1304A27-004	MW-11A	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	17-Apr-13	04/13 - 05/13
1304A27-005	MW-11B	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	17-Apr-13	04/13 - 05/13
1304A27-006	MW-12A	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	17-Apr-13	04/13 - 05/13
1304A27-007	MW-12B	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	17-Apr-13	04/13 - 05/13
1304A27-008	FB002	WATER	AG,AL,AS,B,BA,BE,CA,CD,CN,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	17-Apr-13	04/13 - 05/13

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## ŧ NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## SAMPLE PREPARATION AND ANALYSIS SUMMARY **INORGANIC ANALYSIS**

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#### SDG : TOS012F

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Laboratory Samp ID	Client Sample ID	Matrix	Metals Requested	DateRecd at Lab	Date Analyzed
1304A28-001	MW-11A	WATER	AG,AL,AS,B,BA,BE,CA,CD,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	17-Apr-13	04/13 - 05/13
1304A28-001DUP	MW-11AD	WATER	AG,AL,AS,B,BA,BE,CA,CD,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	17-Apr-13	04/13 - 05/13
1304A28-001MS	MW-11AS	WATER	AG,AL,AS,B,BA,BE,CA,CD,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	17-Apr-13	04/13 - 05/13
1304A28-002	MW-11B	WATER	AG,AL,AS,B,BA,BE,CA,CD,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	17-Apr-13	04/13 - 05/13
1304A28-003	MW-12A	WATER	AG,AL,AS,B,BA,BE,CA,CD,CO,CR,CU,FE,HG,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN,	17-Apr-13	04/13 - 05/13

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## NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSIS

<u>SDG : TOS012</u>

Laboratory Samp ID	Client Sample ID	Matrix	Tests	DateRecd at Lab	Date Analyzed
1304917-001	DUP001	Groundwater	SELECT WET CHEMISTRY **	04/16/13	04/13
1304917-002	LEA-PRIMARY	Leachate	SELECT WET CHEMISTRY **	04/16/13	04/13
1304917-003	LEA-SECONDARY	Leachate	SELECT WET CHEMISTRY **	04/16/13	04/13
1304917-004	MW-3A	Groundwater	SELECT WET CHEMISTRY **	04/16/13	04/13
1304917-005	MW-3B	Groundwater	SELECT WET CHEMISTRY **	04/16/13	04/13
1304917-005DUP	MW-3BDUP	Groundwater	SELECT WET CHEMISTRY **	04/16/13	04/13
1304917-005MS	MW-3BMS	Groundwater	SELECT WET CHEMISTRY **	04/16/13	04/13
1304917-006	MW-3C	Groundwater	SELECT WET CHEMISTRY **	04/16/13	04/13
1304917-007	MW-4A	Groundwater	SELECT WET CHEMISTRY **	04/16/13	04/13
1304917-008	MW-4B	Groundwater	SELECT WET CHEMISTRY **	04/16/13	04/13
1304917-009	MW-4C	Groundwater	SELECT WET CHEMISTRY **	04/16/13	04/13
1304917-010	FB001	Field Blank	SELECT WET CHEMISTRY **	04/16/13	04/13
1304A27-001	MW-1A	Groundwater	SELECT WET CHEMISTRY **	04/17/13	04/13
1304A27-002	MW-1B	Groundwater	SELECT WET CHEMISTRY **	04/17/13	04/13
1304A27-003	MW-1C	Groundwater	SELECT WET CHEMISTRY **	04/17/13	04/13
1304A27-004	MW-11A	Groundwater	SELECT WET CHEMISTRY **	04/17/13	04/13
1304A27-005	MW-11B	Groundwater	SELECT WET CHEMISTRY **	04/17/13	04/13
1304A27-006	MW-12A	Groundwater	SELECT WET CHEMISTRY **	04/17/13	04/13
1304A27-007	MW-12B	Groundwater	SELECT WET CHEMISTRY **	04/17/13	04/13
1304A27-008	FB002	Field Blank	SELECT WET CHEMISTRY **	04/17/13	04/13

\*\* Alkalinity, Total (As CaCO3); Biochemical Oxygen Demand; Bromide; Chemical
 Oxygen Demand; Chloride; Chromium, Hexavalent; Color; Cyanide; Hardness (As CaCO3); Nitrate as N; Nitrite as N; Nitrogen, Ammonia (As N); Nitrogen, Kjeldahl, Total; Phenolics, Total Recoverable; Sulfate; Total Dissolved Solids; Total Organic Carbon;



labs

tel 631.694.3040 fax 631.420.8436

## 2. CHAIN OF CUSTODY DOCUMENTATION

575 Broad Hollow Rd, Melville, NY 11747-5076	I	Ì	42	:±2	25	<b>C</b> /	KT	Lĸ	NA	ᠳ	CHAIN	CL CL3	10 1 1 212
Tel: (631) 694-3040 Fax: (631) 420-8436	CLIE	NT:	Q1	36	)	TOS						H2M SDG	NO: TO SUBLOISF
PROJECT NAME/NUMBER		Ι								Γ	NOTES:		Project Contact:
North Sea Land Fill	ž				N	*					* Lob to ?	filtes	yirolt
1370 Majors Path	tion tak				al al	S					metals.		Dereu Erebak
Southampton, NY	Sample Containe Description				C.C.	metal							631-589-6353
SAMPLERS: (signature)/Client	Sam				8	8							PIS/Quote #
Bri Balt					aseline Pormaters	bailoccic							
DELIVERABLES: ASP Carlosory B 30-70	5 2			L	QL								
TURNAROUND TIME:	Total No. of Containers						JEST				4		
Sandoral		OR	GAN	c					INO	RG.			
DATE TIME MATRIX FIELD I.D.	↓	<b>V</b> ON	BNA	Post PCB					Metal	Ŋ	LAB I.	D. NO.	REMARKS:
4151020 QW MW-3B	10				Х						10491	7-005	
1140 MW-3C					X							000	
120 $MW-3A$		1			X							and	
1020 MW-3B/MS		1			X							WS	
					$\mathbf{x}$							<u>_</u>	
		+			$\overline{\boldsymbol{\lambda}}$							UIO	
1100 FB001					$\widehat{}$							<u> </u>	
1315 MW-4A					$\mathbf{S}$								
1400 NW-HB					Ą							300	
1510 MW-9C	$h_{-}$				入							<u> </u>	
VXX V DUPOOL	V V				$\lambda$						Cł.	$\Box$	
Relinquished by: (Signature)/ Date Time Received by: (Signature)/	iature)				4)1	te /	di	28			LABOR	ATORY USE OF	ILY
						ם	F			•	ncies Between	Samples were: 1. Shipped or H	
Relinquished by: (Signature) HILS 95 Keek		Y			All.	12	Tin O			-	abels and xord? Y or N		d, Temp 112, 12.
Relinquished by: (Signature) Date Time Received by: (Sign		$\underline{D}$			Da	_	Tin			lain:		4. Property preserv	
												COC Tape was:	
Relinquished by: (Signature) Date Time Received by: (Sign	ature)				Da	te	Tin	ne				1. Present on outer 2. Unbroken on out	package: YorN erpackage: YorN
						3. COC record pres		3. COC record pres	ent & complete upon sample receipt:				
												Y or N	

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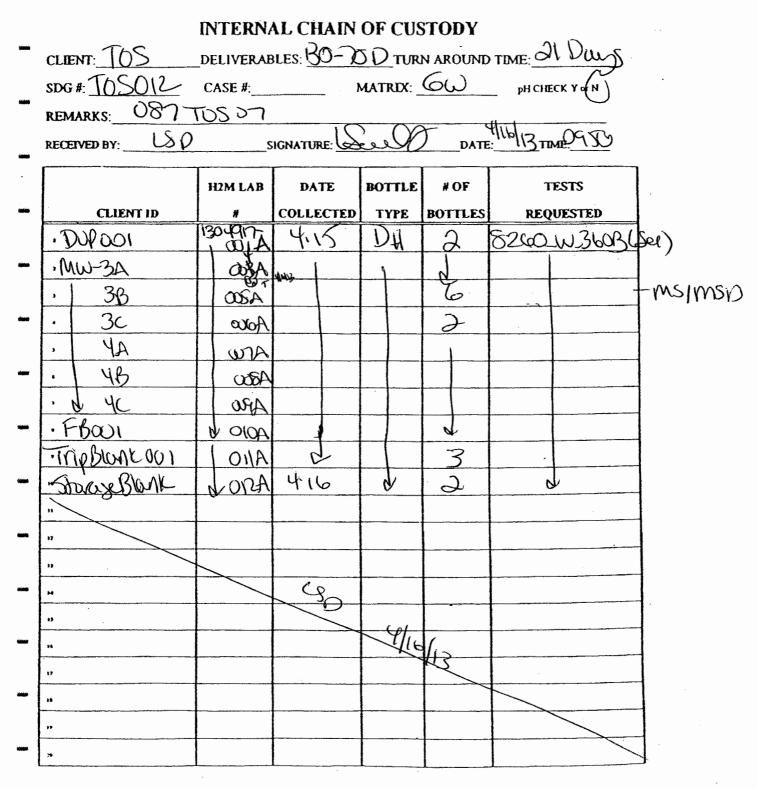
# 42055 EXTERNAL CHAIN OF CUSTOUY

575 Broad Hollow Rd, Melville, NY 11747-5076														
<b>Tel:</b> (631) 694-3040 <b>Fax:</b> (631) 420-8436		CLIE	NT:	?W(	50	ې		TC	S				H2M SDG	NO: TOS 012
PROJECT NAME/NUMBER						260						NOTES:		Project Contact:
North Sea Landfill		ner	~	-		Parmetes+Arge								Darak Carrank
1370 Majons Path		Contail cription	5			a la								Derek Erspak Phone Number:
Southampton, NY		Sample Containe Description	14-			5								
SAMPLERS: (signature)/Client			Val			Pa								631-589-6353
R. Rt		0	IL VI			Routine								PIS/Quote #
propare		>	How			لم ل					Į			
DELIVERABLES: ASP Category B	6 - 2	-	Ч			Ľ								
0	0-70	No. of Riners		AN	ALY	SIS F	REQU	JEST	ED					
TURNAROUND TIME: Standard		Total No. of Containers	OR	GANI	С					INO	RG.			
DATE TIME MATRIX FIELD I.D.		¥	<b>V</b> ÖN	BNA	PcB					Metal	CN	LAB I.		REMARKS:
415 865 Kinduk LEA-PRIMARY		q				X						130491-	7 - 02	
15 900 J LEA-SECONDARY		9				$\times$						N	603	
		X3	み	>									$O\bar{N}$	
	11613	0	7											
	,													
		)												
Relinguished by: (Signature)/ Date Time Re	sceived by (Signa	iture)				Da	te	Tin				LABOR	ATORY USE ON	ILY
LAN DUIS IND	_ // V	VL					6	1				ncies Between	Samples were:	
	Keen		· · · · ·				13	Tin ひもう	ne SV		Rec	I. Shipped_or Hand Delivered_Alrbit#         1. Shipped_or Hand Delivered_Alrbit#         2. Amblent or chilled, Temp         3. Received in good condition: Y or N         4. Property preserved: Y or N		
Ratigquished by: (Signature) Date Time Re	sceived by: (Signa	iture)				Da	te	Tin	ne		COC Tape was:			
						0-		-					1. Present on outer	
Relinquished by: (Signature) Date Time Received by: (Signat						Da	18	Tin	ne				3. COC record pres	er package: Y or N ent & complete upon sample receipt:
										<u></u>			YorN	

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	H 2 labs		M	Broad Ielvill	•		いう OIL ceipt Checklist
-	[M]	TE	L: (631) 694-3040 FA. Website: v	•	1) 420-8436 h2mlabs.com		
	Client Name TOS				Date and	Time Received:	4/16/2013 9:50:00 AM
1000	Work Order Number: 13	04917 RcptN	o: 1		Received	by Linda Sicilia	no
	Completed by:	SiliDe		Rev	iewed by:	Jempy .	Cir
	Completed Date: 4/	16/2013 11:11:12 AM		Rev	iewed Date:	4/18/2013	<u>12:30:22 PM</u>
	Carrier name: H2M Pick	up					
	Chain of custody present?		Yes	$\checkmark$	No 🗌		
	Chain of custody signed w	hen relinquished and receive	ed? Yes		No 🗌		
	Chain of custody agrees w	with sample labels?	Yes		No 🗌		
	Are matrices correctly ider	ntified on Chain of custody?	Yes		No 🗌		
	Is it clear what analyses w		Yes	_	No 🗌		-
	Custody seals intact on sa	ample bottles?	Yes		No 🛄	Not Present	
	Samples in proper contain	er/bottle?	Yes		No 🗌		
	Were correct preservative	s used and noted?	Yes		No 🗔	NA	
	Preservative added to bot	tles:					
	Sample Condition?		Intact		Broken	Leaking	
	Sufficient sample volume		Yes		No 🗌 No 🗍		
	Were container labels con		Yes Yes				
inini i	All samples received withi	-					
	Was an attempt made to o	•	Yes		No 🗌	NA	
		temp. of > 0° C to 6.0° C?	Yes		No 🗌	NA	
cigat	Response when temperat		Maria		N. 🗆	_	
	Sample Temp. taken and		Yes	_			.2 °
	Water - Were bubbles abs		Yes	<b></b>	No 🗌	No Vials	
-	Water - Was there Chlorir		Yes	<b></b>	No 🗌	NA	
	Water - pH acceptable up	-	Yes		No 🗹	No Water	
	Are Samples considered a	acceptable?	Yes				
	Custody Seals present?		Yes		No 🗹		
	Airbill or Sticker?		Air Bil		Sticker	Not Present	
	Airbill No:						
	Case Number:	SDG:			SAS:		
		TOS012					
		be detailed in the comments	section below, if app $= = = = = =$		e. =======		
	Client Contacted?	Yes 🗹 No	Person Contacted:				
	Contact Mode:	🗍 Phone: 🗌 Fax:	🛄 Email:		In Person:		
وتنت	Client Instructions:						
	Date Contacted:		Contacted By:				
	Regarding:		-				
4040	Comments:						
	pH of metals bottle for s	sample "LEA-PRIMARY" was	s neutral possibly due	e to m	natrix,		
حتين	LEA-Primary and Secor for these samples. TBs not listed on COC	ndary samples are being ana	lyzed for "Routine Pa	aramto	ers" which do not	include VOC anla	ysis. H2M received VOC vials
	CorrectiveAction:	with 1:1 nitric acid 4/16/13 @	12.20				
-	It is assumed that the V	OC bottles were collected in	error.				
	TBs were added to COO						

- H2M LABS, INC.



VOLATILE

P 0220

H2M LABS, INC. CLIENT: TOS -sd 1: TOSA2

# INTERNAL CHAIN OF CUSTODY

[		SAMPLE	I		PURPOSE OF	
DATE	TIME	RELINQUISHED BY	SAMPLE RECEIVED BY	BOTTLE TYPE	CHANGE OF CUSTODY	тіні
Millio	and the second se		STON W	~		
1415	1245	BIOM D	SICN Mayur	<u>H</u>	anaiso	
1		91CM	3100 ( )		$\bigcirc$	
		81Cal	8101			
		# 3 COM	alon			
		8104	NOTE			
		8]Cul	\$10x			
		5104	ସୀଠନ		- 2.4	
·····		810M	310M			
		810M	אסוג			
-		310M	AICH			
		a10N	SICH			
		5100	SICN			
		3100	SICH			
		עסופ	SICN			
-		NOIE	31CH			
		NOLE	SICN			
		310N	NOIE			
		SION	810N			
		SION	SICN			
			SION	• -		
		\$10M	SION			
		3109	NOIE			
		910M	9ICN			
		310M	SICN		· · · · · · · · · · · · · · · · · · ·	
		ROH	SICN			-
		NOIS	SICN	•		

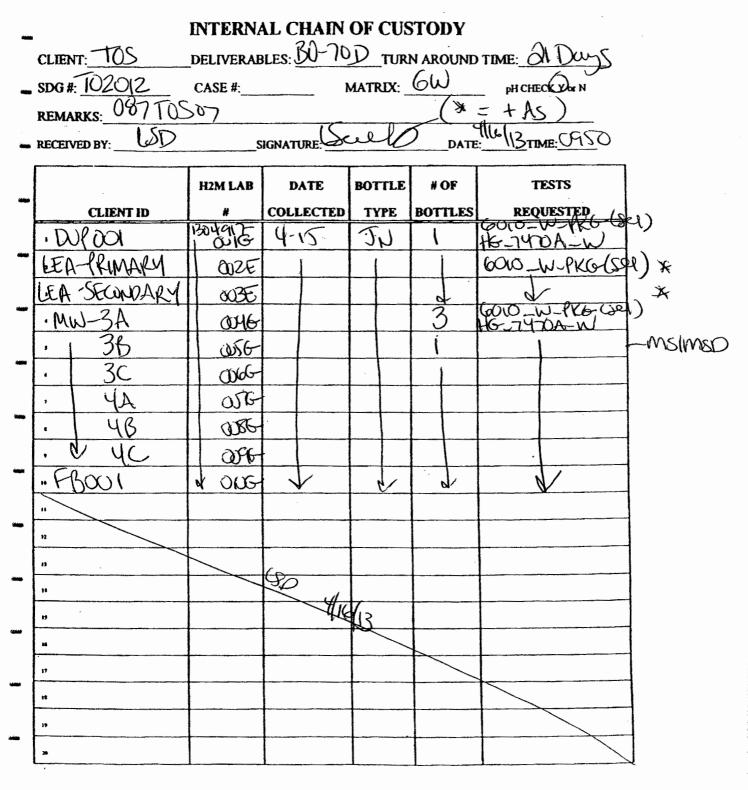
VOLATILE

<u>.</u>

P 0221

TOS012/012F S13

# -H2M LABS, INC.



METALS

H2M LABS, INC. CLIENT: TOS

SDG #: TUSOIZ

INTERNAL CHAIN OF CUSTODY

-		SAMPLE			PURPOSE OF	
		RELINQUISHED	SAMPLE	BOTTLE TYPE	CHANGE OF CUSTODY	INIT
DATE	TIME	BY	RECEIVED BY		d'amb	
- Mildi 3	bes	UV V		JN	agorn	
5/113	800	SICON A	SIGN	DIRS	ICPANA24	
		SIGN	SICN /			
		SIGN /	910N	-		
		BICM	SION			
7		8100)	91001			
F		SIGN	SICH			
<b>T</b>		SICH	4016			
		81 CB	910N			
		510N	SICN			
		8108	SICN			
		атон	SICN			
T		SION	SIGN			
		310x	SIGN			
T		NOIE	SICN			
		NOIE	SICN			
		310N	31cn			
		SION	SION			
		SION	SICN			
		SION	SION			
		31 CM	SION			
-		SIGN	SION			
		9ION	SICN			
-		510N	SICN			
		SION	SICN			
		SIGN	SICN			

TOS012/012F S15

METALS

P 0062

# TZM LABS, INC.

	• INTERNAL CHAIN OF CUSTODY • IENT: TOS DELIVERABLES: BO-TOD TURN AROUND TIME: 21 Day											
TIENT: 105	DELIVERAE	les: <u>90- 10</u>	<u>V</u> _tur	N AROUND	TIME: 21 Darp							
-G#: TOS012		}	MATRIX:	62	PH CHECK Y AN							
MARKS: 0877	0507				the particular second							
RECEIVED BY:	S	IGNATURE:	xul	DATE	t [16] 3.71ME:0950							
	H2M LAB	DATE	BOTTLE	# OF	TESTS							
CLIENT ID	#	COLLECTED	TYPE	BOTTLES	REQUESTED							
1009001	13049117 2013	4.15	DS	2	702-9060-W							
: -	DICO	-1	FN	1	Hard-wc_SM							
3	QUD		Hs	1	COD-W, NH3-W-SM ND3-W, Phenols-W,T	KNIN						
•	<b>WIE</b>		FS	١	Concentral							
	001F		E	2	AIK-W-SM, ANUT 3	10- WWCSEL) 102-A-W						
LEA-PRIMARY	002A		E	2	AIK-W-SM ANION300.	WW(SA)						
7	062B		Hs	1	COD-W, NHB-W-SW NB-W, Phonols-W, THA	0_ WW(Ser) TDS_NSM (1591), C46_W, NOZ-A-W WW(S91) TDS-W_SN -W						
3	0020		DS	a	TOC_W_SM							
· V	020		FN	1	Herd-WC-SM							
"LEA-SEUNDARY	003A-D		Abore	Above	As Above (Sam As Above (Sumple	peaza-D)						
"MW-3A	004B-F		As	AS	AS Above (Sumple	001B-F)						
• 3B	05					-msimsD						
<u> </u>	000											
" 4A	007					· ·						
" YB	008					_						
" & YC	wyn		V			-						
"FBOUI	ond	N		d.	V	-						
18		yo										
17			410	13								
29												
						10						

WET CHEMISTRY

H2M LABS, INC.

CLIENT: TOS

SDG #: TOSDIZ

# INTERNAL CHAIN OF CUSTODY

i dente			SAMPLE		[	PURPOSE OF	
	1		RELINQUISHED	SAMPLE	BOTTLE	CHANGE OF	1
	DATE	TIME	BY	RECEIVED BY	TYPE	CUSTODY	INIT
		1245	stan Sy	SION	DS, FN, HK	ardynol	Thrac
	HIGB	1413		Cito,	Fg, E	cruin roj	10.8
	4/11/13	0515	SIGN	store bundent	E	Color Kotto /Store	2-
	11	0800	BIQUE IL I	STON L L	Ē	BUD/Storge	
-	41113	0.00	er and the first	SIGN d/	and the second se		1
	417/13	0810	this hol	Matter Inos	t	NO3/NO2/Starage	
	HITIS	10:00	Stat	Haneuver Third	Fa	CNIStorae,	
		· ·	BIOM	SIGN / // -	1 E	Au 142	Â
		11:00	# AN INTER	Manawati her		AIK Story	*
	4-18-13	11:45	flancessate hier of	MARIN	E	TOS Starrige	<
	4-19-3	1000	MOIN HOIR	SION	Fr	Had stare	
			8100	STON N/ 7		Pheneslik	
	4/22/13		SION	SICN NO	Hs		
_	42213	930	STON - HEAL	ofe An	HS	Al#3/Shorag	2
	9123113	0600	Bte Ar	Sten City 2	HS	TEN Storge	
	4/23/13	1115	SION IMI -	SICN Matter Lie	$\overline{D}$ .	TEN O'	
		-	SION	STON & DI	110	CINKIG	
ļ	4/03/13	0900	The first first	SIGN AVA	HS	COD/Shorage	
	4/23/13	15:45	HALINAAA I	BRAC	Ē	Anins /sto	rege -
	4/25/13	0630	STON A VOUL	stene And	Hy	TENIStry	
1	4/25/13	, P	STON - /LAL -	SIGN			
	114115	(130)	SION	SION		1KN and	
			SION	SION			
	1		SION	SICN			
			NOIE	SION			
]		·					
	· · ·		SICN	NOIE			
			SION	SIGN			
			8108	SIGN			
			SIGN	SIGN			
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WET CHEMISTRY

P 0095

# I . The And Sy II all

# 42157 EXTERNAL CHAIN OF CUSTODY

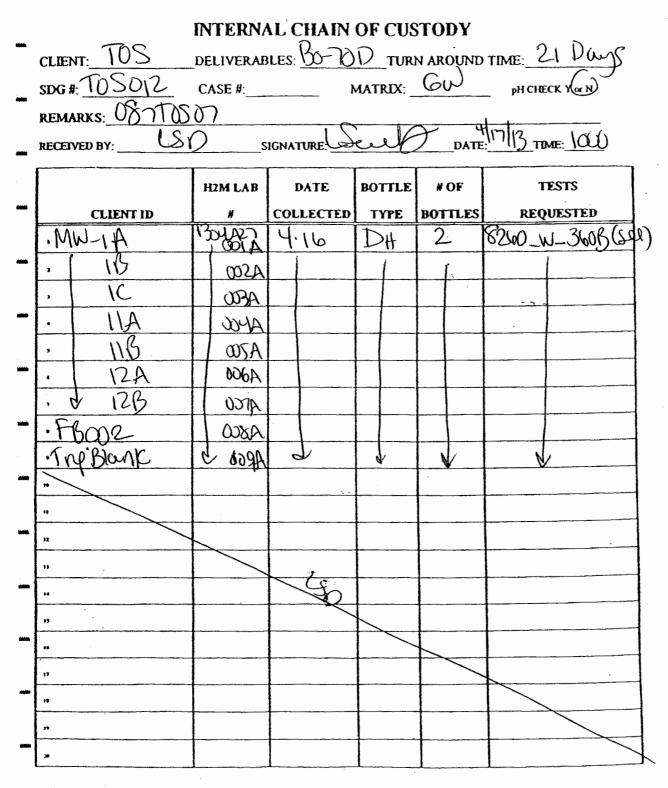
575 Broad Hollow Rd, Melville, NY 11/4/-50/0		17.	<i>M</i>	n	~	1			HOM CDC	NO: ME C = 2 = 2
Tel: (631) 694-3040 Fax: (631) 420-8436	CLIE		<u>, ۲</u>	VUJ		$(\uparrow 0$	$\left  \right\rangle$		NOTES:	NO: 705012 012
PROJECT NAME/NUMBER					<b>*</b> y ⊀				A Lan to filler	Project Contact:
North Sea Landfill	Sample Container Description				Rath molecs					Derek Ersbak
1370 Major Path Southampton, NY	Cont				Pur no	3			Metals.	Phone Number:
					and a					631-589-6353
SAMPLERS: (signature)/Client	Sam				00	1 1				PIS/Quote #
Andrikan					Baselino					
· Unin Carl					8 3	3				
DELIVERABLES: ASP Carkgory B.					£ 5	<u>۲</u>		]		
not congay D.	lo. o		AN	ALYS	SIS REQ	UESTED				
TURNAROUND TIME: Steendard	Total No. of Containers	OR	GAN	ю			INOR	G.		
	¥0	<b>V</b> QV	≰	3 8			Metal	z	012	O2F
DATE TIME MATRIX FIELD I.D.	<b>+</b>	ž	8				Ž	0	LAB I.D. NO.	REMARKS:
4 INTO GW FBOUL	10				XL_		↓↓		304A27-018	1
1 1025 1 MW-1C					$\times$				Q)Z	
1100 MW-1B					$\times$				02	
1120 MW-1A					$\mathbf{X}$				001	
1240 MW-12B	$\vee$				X				007	
1300 MW-12A	. ((					1			006	1304A28-m3
1440 MW-11B	1								260	1304A28-003
V 1505 V MW-11A					<b>V</b> N			+	004	
	3				$\mathcal{A}$	+		-+	0 009	
16/17X GW TripBlank	$\gamma$					╞╼┼═╴			V (U),	
elinquished by: (Signa iture) Date Time Registre	Move (Signature)		<b>E</b>	<u> </u>	Qate e	Time /	<u>∤</u> ↓			
Anto 2111 4117112 420 A	$\sim$		_		And	Time/	Disco		LABORATORY USE O ties Between Samoles were:	
elinquished by: (Signatiure) Date Time Reveive	by: (Signature)				Bate	Time			bels and 2 Ambient of chill	Hand DeliveredAirbill# led, Temp2,0,2,7
TVV Trills W three					4h/B	Time 1000	coc		or insperiod in Sec	
elynquished by: (Signative) Date Time Received	d by: (Signature)				Date	Time	Expla	47:	4. Property preser	YOU. TOTA
Relinquished by: (Signature) Date Time Received by: (Sign									<u>COC Tape was:</u> 1. Present on outs	rpackage: YorN (duct,
					Date	Time	]		2. Unbroken on ou	Iter package: Y or N Fufe)
										were a complete abou semble receive
							4			

WHITE COPY - OBIGINAL TOS012/012F ST8 YELLOW COPY - CLIENT

PINK COPY - LABORATORY

H 2 labs	575 Broad	A LABS INC Hollow Rd. e, NY 11747 S	,	2012_ eceipt Checklist
TEL: (631) 6	94-3040 FAX: (63 Website: www.h	•		
Client Name TOS		Date and	Time Received:	4/17/2013 10:00:00 AM
Work Order Number: 1304A27 RcptNo: 1		Received	by Linda Sicili	ano
Completed by: Renon Silinder	. Revi	iewed by:	Jempy	ar
Completed Date: 4/17/2013 10:51:50 AM	Revi	iewed Date:	4/18/201	<u>3 4:36:44 PM</u>
Carrier name: H2M Pickup				
Chain of custody present?	Yes 🗹	No 🗆		
Chain of custody signed when relinquished and received?	Yes 🗹			
Chain of custody agrees with sample labels?	Yes 🗹			
	Yes 🗹			
Are matrices correctly identified on Chain of custody?	Yes 🗹			
Is it clear what analyses were requested?	Yes		Not Present	
Custody seals intact on sample bottles?			Not Flesent	
Samples in proper container/bottle?	Yes 🗹	No 🗌		
Were correct preservatives used and noted?	Yes 🗹	No	NA	
Preservative added to bottles:				
Sample Condition?	Intact 🗹	Broken	Leaking	
Sufficient sample volume for indicated test?	Yes 🗹	No		
Were container labels complete (ID, Pres, Date)?	Yes 🗹	No		
All samples received within holding time?	Yes 🗹	No		
Was an attempt made to cool the samples?	Yes 🗹	No 🗌	NA	
All samples received at a temp. of > 0° C to 6.0° C?	Yes 🗹	No 🗌	NA	
Response when temperature is outside of range:				
Sample Temp. taken and recorded upon receipt?	Yes 🗹	No 🗌	1.6 To 2	2.8 °
Water - Were bubbles absent in VOC vials?	Yes 🗹	No 🗔	No Vials	
Water - Was there Chlorine Present?	Yes 🗌	No 🗔	NA	
Water - pH acceptable upon receipt?	Yes 🗹	No 🗆	No Water	
Are Samples considered acceptable?	Yes 🗹	No 🗌		
	Yes	No 🗹		
Custody Seals present?	Air Bil	Sticker	Not Present	
Airbill or Sticker?			Not Presen	
Airbill No:				
Case Number: SDG: TOS012		SAS:		
Any No response should be detailed in the comments section b	elow, if applicable	e		
Client Contacted? Yes V No Person	Contacted:			
Contact Mode: Phone: Fax:	Email:	In Person:		
Client Instructions:				
Date Contacted: Contacte	ed Bv:			
Regarding: Comments:				
CorrectiveAction:				

- H2M LABS, INC.

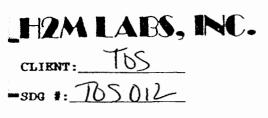


VOLATILE

P 0226

TOS012/012F S20

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## INTERNAL CHAIN OF CUSTODY

		SAMPLE RELINQUISHED	SAMPLE	BOTTLE	PURPOSE OF CHANGE OF	1.11.7
DATE	TIMB	BY BY	RECEIVED BY	TYPE	CUSTODY	INIT
Mm/13	1200	to the second	STON BALAGULA	DH	analysis	
		8104	SICN V			
1688)		8102	\$10W			
		\$100	Noie			
		SIGN .	SION			
		9] Chat	3109			
		810M	3102		- 7	
		BION	3108			
		BION	NOIE			
		KOIE	91CN			
		810N 810N	SICN			
		3104	SIGN			
		310M	SICN			
ו•••		310M	9ICN			
		9100	SICH			
		3100	3100			
		NOIL	510N			
		ROR	SICN			
-		MON	SION			
		3100	SION			
		3108	SION			
		3104	SICN			
		310%	SIGN			
		310x	SICN			
		SIGN	SICH		· · · · ·	

VOLATILE

P 0227

TOS012/012F S21

		AL CHAIN			
CLIENT: TOS	DELIVERAE	BLES: <u>BO-70</u>	D_TUR	N AROUNE	TIME: 21 Days
SDG # TUS 012	CASE #:	1	MATRIX: _	<u>6w</u>	PH CHECK Y ar N
REMARKS: DET	2201		·		4
RECEIVED BY:	)s	SIGNATURE:	wh	DATE	"[]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]
	H2M LAB	DATE	BOTTLE	# OF	TESTS
CLIENT ID	#	COLLECTED		BOTTLES	REQUESTED
. MW-1A	BYA27	4.16	JN	. 1	6010-W_PKG-GA
· 1 1B	0026-			1	
. IC	036				
·   11A	046				
, IB	are				
· 12A	alo	+			
· V 12B	arc	-			
·FBWZ	V 0086		d	X	J J
					7
"				·.	
12					
В .					
14		S	>		
13			4/1		
16			1 mg	R	
17	-				
12					
19			1		
			+		+

METALS

1.11 - 11.11

-

H2M LABS, INC. CLIENT: TOS SDG #: TOSO12

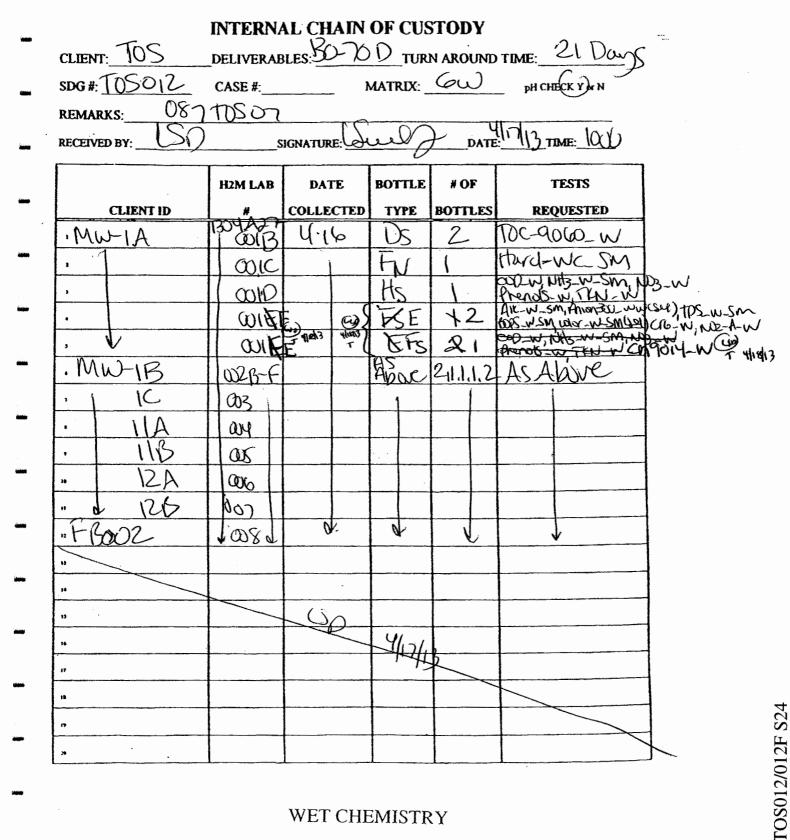
## INTERNAL CHAIN OF CUSTODY

			SAMPLE RELINQUISHED	SAMPLE	BOTTLE	PURPOSE OF CHANGE OF	INIT
Series	DATE	TIME	BY	RECRIVED BY	TYPE	CUSTODY	1011
	11113	1400	Un-	SIGN AVS	SN	anaixon	
	6113	800	SIGN HE	SIGN A F	DIGS	iching	r
-			BIGM C	SION (			
			BION /	91004	·		
			810W	910 <del>4</del>			
			BION	SION			
			SIGN	310W			
			SION	SION			
			\$10H	NOIE			
-			\$100)	BICN			
			SION	SICN			
			SION	SICN			
			NOIE	SICN			
			SION	SIGN			
			MOIE	SICN			
			SION	SICN			
-			SION	SION			
			910M	SION			
_			SICH	SICN			
			STON	SION			
-			ston	SION			
			SION	SION			
ļ			310N	SIGN			
-			5108	SICN			
			NOIE	SICN			
-			NOIE	SICN			

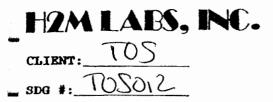
METALS

P 0065

H2M LABS, INC.



WET CHEMISTRY



5

# INTERNAL CHAIN OF CUSTODY

		SAMPLE	I	l	PURPOSE OF	
1		RELINQUISHED	SAMPLB	BOTTLE	CHANGE OF	
DATE	TIME	BY	RECEIVED BY	TYPE	CUSTOPY	INIT
7417/12	1200	Serlor	STON	PS, FN	analysis/	Aunge
4/12/13	0530	8700	STON S. My 5-	Ē	Cto/Glar/Storing	
4/8/13	0730	eran S. Alyland	STOR VILLAN	E	BoD/Storage	
4/18/13	0745	Chepil	STOR ATTEN	Ē	NO2/NO-192240	
411813	1 :		Janawesti Third	Fs	CN/Storage.	
4118/13	11:00	Mathew hand	HamawaleThind	Ε	AIK Storage	
4-18-13	1a:15	Hanawa Find	* ALLEO	E	TDS 8000	,
4-19-13	( <b>D</b> °3	SIGN SIGN	sion which an	FN	Hand stong	
4/22/13	0600	SIGN CALL	Eital	H T	Phenes Store	r
-4/22/13	930	store fing	SIGN St Arc	145	NH3/Storge	-
4/23/13	0600	Byl Ay	SIGN 2. J. Man	HS	TEN Shrige	
4/23/13	1115 '	ant Miz	SICK Attention	2·	TEName	e'
Typzha	15:45	*THE MILL	SIGH LANG	E	Aniono/storo	ee.
4/20/3	0730	ethin -	She And	Hs_	Cul Storge	
<b>T</b>		SICH	SICH			
1		SION	SICN			
		SION	8108			
		510N	SION			
		зіон	SICN		· · ·	
T		SION	SIGN			
<b></b>		NOIS	SION			
7		NOIE	SICN			
		NOIS	SICN			
		NOIE	SICN			
	· · · ·	310N	SICN			
		SION	SIGN			
			· · · · · · · · · · · · · · · · · · ·			

# WET CHEMISTRY

TOS012/012F S25

575 Broad Hollow Rd, Melville, NY 11747-5076		1		1					\ <b>-</b>			• • •
Tel: (631) 694-3040 Fax: (631) 420-8436	CLIE		<u>_ Y\</u>	_	_		(70	5)		NOTES:	HZM SDG	NO: TOSO12 012
PROJECT NAME/NUMBER					T'S	*		1		A Lain to	5100	Project Contact:
North Sea Laudfill	erie r					5				Metal.		Derek Ersbak
1370 Major Path Southampton, NY	to to				d d	herar				in central	۰ <i>د</i>	Phone Number:
SAMPLERS: (signature)/Client	ample Container Description				B	Ž						631-589-6353
	Sar				9	-9						PIS/Quote #
Andreal					Deservo Parminerer	Dissolved						
ASP Caregory B.	5 5			L			JESTED		L			
URNAROUND TIMIE: Steendard	Total No. of Containers	OR	GANI					INO	RG.			
DATE TIME MATRIX FIELD I.D.		VOA	BNA	Peet Peet				Metal	S	UN LAB I.	2 d. no.	CIZF REMARKS:
ILLIOPISO GW FBOUZ	10				$\mathbf{X}$						-7-008	
1 1025 1 MW-1C	1				Х					1	QUZ	
1100 MW-1B	$\overline{11}$				Х						002	na heinen van naan de state die state van de state de state
1120 1 MW-1A					$\mathbf{\nabla}$						100	
1240 MW-12B	V				X						057	a a a g a g a g a g a g a g a g a g a g
1300 MW-12A	11				$\Diamond$	$\mathbf{X}$					and the	1304A28-1213
1440 MW-11B	ł				$\overline{\mathbb{V}}$	$\overline{\mathbf{X}}$					<u> 260</u>	1
V 1505 V MW-11A					$\nabla$	Ň					WY	2 31
10/17XX Fiw TripBlank	3				$\overline{\mathbf{V}}$	ζ.)				d.	COG	
linguished by: (Signs ture) Date Time Received by (Si	igniature)					ate p	Time	<b> </b>		LABOR	ATORY USE ON	ILY
Inquished by: (Signa ture) UNAP CL ULLE Unquished by: (Signal ture) Unquished by: (Signal ture) Unquished by: (Signal, ure) Unquished by: (Signal, ure) Unq	210	Y			4	710 13 ate	Time 1000 Time	Sam	ple L Rec	ncies Between abeis and xord? Y or N	Samples were:	and Delivered Airbill $\#$ d, Temp ( $\bigcirc$ , 2, () , 1 $\oslash$ , 8 d condition: Dor N ed: Y or N
linquished by: (Signatu re) Date Time Received by: (Si	ignature)				Da	ate	Time				2. Unbroken on out	ar package: Y or N Trafic.) ent & complete upon sample recisipt:

WHITE COPY - ORIGINAL

H 2 labs	N FEL: (631) 694-3040 FA	Broad Ielvill X: (63	1 LABS INC Hollow Rd. e, NY 11747 1) 420-8436 2mlabs.com	Sample Re	TDS 012F eccipt Checklist
Client Name TOS			Date a	and Time Received:	4/17/2013 10:00:00 AM
Work Order Number: 1304A28 Rcpt	No: 1		Receiv	ved by Linda Sicili	ano
Completed by: Renew Sile De Completed Date: 4/17/2013 11:05:12 AM	e_		iewed by: iewed Date:	Jan / 1 4/18/201	а
Carrier name: H2M Pickup					
	Yes		No 🗌	ł	
Chain of custody present?					
Chain of custody signed when relinquished and receiv	Yea Yes				
Chain of custody agrees with sample labels? Are matrices correctly identified on Chain of custody?					
Is it clear what analyses were requested?	Yes				
Custody seals intact on sample bottles?	Yes				
•	Yes	_			
Samples in proper container/bottle?	Yes				
Were correct preservatives used and noted?	res			J NA	
Preservative added to bottles:	Intact		Broken	Lasking	
Sample Condition? Sufficient sample volume for indicated test?	Yes		No		
Were container labels complete (ID, Pres, Date)?	Yes				
All samples received within holding time?	Yes				
			_	_	<b>F</b>
Was an attempt made to cool the samples?	Yes Yes		No No		
All samples received at a temp. of > 0° C to 6.0° C?	Yes			NA	
Response when temperature is outside of range:	Yes		No 🗌	] 1.6 To 2	2.8 °
Sample Temp. taken and recorded upon receipt?	Yes				
Water - Were bubbles absent in VOC vials?	Yes				
Water - Was there Chlorine Present?	Yes			_	
Water - pH acceptable upon receipt?	Yes			<b>_</b>	
Are Samples considered acceptable?		_	No 🗌		
Custody Seals present?	Yes		No 🗹		
Airbill or Sticker?	Air Bil		Sticker	] Not Present	
Airbill No:					
Case Number: SDG: TOS012F			SAS:		
Any No response should be detailed in the comment	s section below, if app	licabl	e. :		
Client Contacted?  Yes  No	Person Contacted:				
Contact Mode: Phone: Fax:	Email:		🔲 In Perso	on:	
Client Instructions:					
Date Contacted:	Contacted By:				
Regarding: Comments:	d bu aliant				
Trip Blanks for both days of sampling were provide	a by client.				
CorrectiveAction:					

client: <u>TOS</u> sdg #: <u>TOSO12</u> F	DELIVERAE	les: <u>100-1</u>	<u>()</u> tur	N AROUND	TIME: 2( )	
SDG #: 103014-	CASE #:	}	MATRIX: _	60	PH CHECK Y KN	
REMARKS: D8772	501	IGNATURE:	2.00	<u> </u>	HIN BTIME: DUD	
RECEIVED BY:	S	IGNATURE:		DATE		1
	H2M LAB	DATE	BOTTLE	# OF	TESTS	
CLIENT ID	#	COLLECTED	ТҮРЕ	BOTTLES		-
· MW-11A (M4MSP)	1304A28-	4.16	JU	. 1	TAUMPKG-W_D	SS thite
· 1 /1B	1 COZA					
· 2 12A	2 asA	2	2	2	2	
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11		C C				1
12			Y/			-
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10						1
-						1
16						-
1						-
12						
· · · ·						-
19						-
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P 0067

H2M LABS, INC. CLIENT: TOS SDG #: TOSO12F

## INTERNAL CHAIN OF CUSTODY

	DATE	TIME	SAMPLE RELINQUISHED BY	SAMPLE RECEIVED, BY	BOTTLE TYPE	PURPOSE OF CHANGE OF CUSTODY	INIT
i i i i i i	9/17/13	1200	81 Cal	SIGN	1	digestion	FUNR
			SION	STON CHAR	7		
-	5113	XD	SIGN	SION	1263	1CPANLY13	
			SIGN /	SICON			
			\$10¥	3109	-		
Marije			BION				
				3103			
			8100	910M			
-			\$10x	NOIS			
			SICH	alon			
			\$1 CDJ	SICN			
			aicn	SICN			
			310N	SICN			
-			SION	SICN			
ł			SI 018	SIGN			
-			8108	SIGN			
			SION	SIGN			
			SION	SIGN			
-							
			SION	SION			
_	ļ		SION	SICN			
			SION	SION			
			NOIE	SION			
-			SION	SIGN			
			ROIG	SICN			
-			alon	SICN			
ł			ROID	SIGN			
			SION	SICN			
[						L	L

TOS012/012F S29

METALS

P 0068



labs

575 Broad Hollow Road Melville, NY 11747 tei 631.694.3040 fax 631.420.8436

## 3. SDG NARRATIVES



labs

tel 631.694.3040 fax 631.420.8436

#### SDG NARRATIVE FOR VOLATILE ANALYSES SAMPLE RECEIVED: 4/16/12 & 4/17/13 SDG#: TOS012

For Sample(s):

DUP001	MW-4B	MW-1C
LEA-PRIMARY	MW-4C	MW-11A
LEA-SECONDARY	FB001	MW-11B
MW-3A	TRIP BLANK 001	MW-12A
MW-3B	STORAGE BLANK	MW-12B
MW-3C	MW-1A	FB002
MW-4A	MW-1B	TRIP

The above sample(s) and blank(s) was/were analyzed for a specific list of volatile organic analytes by EPA method 8260B according to the requirements of the NYSDEC ASP 2000 with category B deliverables.

All Q. C. data and calibrations met the requirements of the method, and no problems were encountered with sample analysis. The following should be noted:

Sample MW-3B was analyzes as the matrix spike / matrix spike duplicate (MS/MSD). All percent recoveries and RPDs were met. A lab fortified blank was analyzed and indicates good method efficiency.

Low levels of acetone were present in the method blanks. This analyte was flagged with a "B" qualifier if present in samples associated with these blanks.

In the initial calibration of 3/18/13 the %RSD was greater than 20.5% but below the limit of 40% for dibromochloromethane (21.3%) and bromoform (30.3%). In the continuing calibration of 4/17/13, trans-1,3-dichloropropane had a %D greater than 25% but below the limit of 40%.

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

Date Reported: April 26, 2013

Joann M. Slavin Senior Vice President



labs

tel 631.694.3040 fax 631.420.8436

#### SDG NARRATIVE FOR TOTAL METALS ANALYSES SAMPLE(S) RECEIVED: 4/16/13 & 4/17/13 SDG #: TOS012

Page 1 of 2

For Sample(s):

MW-4A	MW-1C
MW-4B	MW-11A
MW-4C	MW-11B
FB001	MW-12A
MW-1A	MW-12B
MW-1B	FB002
	MW-4B MW-4C FB001 MW-1A

The above water sample(s) was/were received by H2M Labs, for analysis of select lists of total metals and cyanide.

Samples were prepared and analyzed using EPA methods 6010B with a TS ICAP 6000 Instrument, 7470A with a Leeman HYDRA mercury analyzer and cyanide methods 9010/9014.

All Q. C. data and calibrations met the requirements of the method, unless discussed below, and no problems were encountered with sample analysis. The following should be noted:

Sample MW-3B was utilized for Q. C. analysis and reporting.

The sample spike recoveries for boron and selenium were below the acceptance limit. Data for the analytes were flagged with the "N" qualifier on Forms 1 and 5A. The post spike recoveries were within the acceptance limits.

The sample spike recovery for iron was above 125%. Since the sample result exceeded the spike concentrations by more than four times, post spike analysis and data qualifiers were not required.

The ICP serial dilution analysis did not meet acceptance criteria for potassium. Potassium data were reported flagged "E" on forms 1 and 9.



labs

tel 631.694.3040 fax 631.420.8436

#### SDG NARRATIVE FOR TOTAL METALS ANALYSES SAMPLE(S) RECEIVED: 4/16/13 & 4/17/13 SDG #: TOS012

Page 2 of 2

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

Date Reported: May 6, 2013

\*\*\*\*\* L'ach

\*\*\*\*\*\*\*\*\*

Ursula Middel Technical Manager



labs

tel 631.694.3040 fax 631.420.8436

#### SDG NARRATIVE FOR DISSOLVED METALS ANALYSES SAMPLE(S) RECEIVED: 4/16/13 & 4/17/13 SDG #: TOS012F

For Sample(s):

## MW-11A MW-11B MW-12A

The above water sample(s) was/were received by H2M Labs, for analysis of a select list of dissolved metals.

Samples were prepared and analyzed using EPA methods 6010B with a TS ICAP 6000 Instrument, 7470A with a Leeman HYDRA mercury analyzer and cyanide methods 9010/9014.

All Q. C. data and calibrations met the requirements of the method, unless discussed below, and no problems were encountered with sample analysis. The following should be noted:

Sample MW-11A was utilized for Q. C. analysis and reporting.

The sample spike recovery for boron was below the acceptance limit. Data for the analyte were flagged with the "N" qualifier on Forms 1 and 5A. The post spike recovery was within the acceptance limits.

The ICP serial dilution analysis did not meet acceptance criteria for potassium. Potassium data were reported flagged "E" on forms 1 and 9.

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

Date Reported: May 6, 2013

Middle

Ursula Middel Technical Manager



575 Broad Hollow Road

Melville, NY 11747

tel 631.694.3040 fax 631.420.8436

#### SDG NARRATIVE FOR WET CHEMISTRY ANALYSES SAMPLE(S) RECEIVED: 4/16/13 & 4/17/13 SDG #: TOS012

For Sample(s):

DUP001	MW-4A	MW-1C
LEA-PRIMARY	MW-4B	MW-11A
LEA-SECONDARY	MW-4C	MW-11B
MW-3A	FB001	MW-12A
MW-3B	MW-1A	MW-12B
MW-3C	MW-1B	FB002

Sample(s) was/were received by H2M Labs, Inc. for select wet chemistry analysis.

Samples were prepared and analyzed using the following methods:

Alkalinity	SM 2320 B	Nitrite	EPA 353.2
Anions- Cl, S04, Br	EPA 300.0	Nitrate	EPA 353.2
Biochemical Oxygen Demand	SM 5210 B	Phenols	EPA 420.1
Chemical Oxygen Demand	EPA 410.4	Total Dissolved Solids	SM 2540 C
Hardness	SM 2340 C	Total Kjeldahl Nitrogen	EPA 351.2
Ammonia	EPA 350.1	Total Organic Carbon	EPA SW846 9060

Sample MW-3B was utilized for QC analysis and reporting.

BOD blank depletion exceeded 0.2 mg/l for the samples received on 4/16/13 and 4/17/13. BOD Batch acceptance was based on LCS standard analysis.

Samples were diluted and reanalyzed as required to keep instrument readings within calibration ranges or to minimize matrix interferences.

No other issues were noted during the analysis of this sample group.

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

Date Reported: May 6, 2013

\*\*\*\*\*\*

Joann M. Slavin Senior Vice President



labs

575 Broad Hollow Road Melville, NY 11747

tel 631.694.3040 fax 631.420.8436

# **SAMPLE REPORTS** 4.1 VOLATILES 4.

- 4.2 TOTAL METALS
- FILTERED METALS WET CHEMISTRY 4.3
- 4.4



labs

575 Broad Hollow Road Melville, NY 11747

tel 631.694.3040 fax 631.420.8436

# 4.1 VOLATILES

# H2M LABS, INC.

#### **QUALIFIERS FOR REPORTING ORGANICS DATA**

Value - If the result is a value greater than or equal to the quantification limit, report the value.

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

 $\frac{(300 \text{ U})}{D} \times \text{df where } D = \frac{100\% \text{moisture}}{100}$ and df - dilution factor

For example, at 24% moisture,  $D = \frac{100 - 24}{100} = 0.76$ 

 $\frac{(300 \text{ U})}{.76} \times 10 - 4300 \text{ U} \text{ rounded to the appropriate number of significant figures}$ 

For semivolatile soil samples, the extract must be concentrated to 0.5 mL, and the sensitivity of the analysis is not compromised by the cleanup procedures. Similarly, pesticide samples subjected to GPC are concentrated to 5.0 mL. Therefore, the CRQL values in Exhibit C will apply to all samples, regardless of cleanup. However, if a sample extract cannot be concentrated to the protocol-specified volume (see Exhibit C), this fact must be accounted for in reporting the sample quantitation limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified quantification limit but greater than zero. (e.g.: If limit of quantification is 10 ug/L and a concentration of 3 ug/L is calculated, report as 3J.) The sample quantitation limit must be adjusted for dilution as discussed for the U flag.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

**P** - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns (see Form X). The lower of the two values is reported of Form I with a "P".

C - This flag applies to pesticide results when the <u>identification</u> has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag, instead use a Laboratory defined flag, discussed below.

# H2M LABS, INC.

**B** - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified target compound.

**E** - This flag identified compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, <u>except as noted in Exhibit D</u>, the sample or extract must be diluted and re -analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration ranges in the second analysis, then the results of both analyses shall be reported on separate copies of Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number. NOTE: For total xylenes, where three isomers are quantified as two peaks, the calibration range of <u>each peak</u> should be considered separately, e.g. a diluted analysis is not required for total xylenes unless the concentration of the peak representing the single isomer exceed 200 ug/L or the peak representing the two coeluting isomers on that GC column exceed 400 ug/L. Similarly, if the two 1,2-Dichloroethene isomers coelute, a diluted analysis is not required unless the concentration exceed 400 ug/L.

**D** - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and all concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.

A - This flag indicates that a TIC is a suspected aldol -condensation product.

X - Other specific flags may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the SDG narrative. Begin by using "X". If more than one flag is required use "Y" and "Z" as needed. If more than five qualifiers are required for a sample result, used the "X" flag to combine several flags as needed. For instance, the "X" flag might combine "A", "B", and "D" flags for some samples. The laboratory defined flags limited to the letters "X", "Y" and "Z".

The combination of flags "BU' or "UB" is expressly prohibited. Blank contaminants are flagged "B" <u>only</u> when they are detected in the sample.

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

DUP001

Lab Name: H2M LABS I	NC Cont	ract:	
Lab Code: <u>H2M</u>	Case No.: TOS SA	LS No.:	SDG No.: TOS012
Matrix: (soil/water)	WATER	Lab Sample ID:	1304917-001A
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	3\F60373.D
Level: (low/med)	LOW	Date Received:	04/16/13
% Moisture: not dec.		Date Analyzed:	04/17/13
GC Column: DB-624	ID: <u>0.18</u> (mm)	Dilution Factor:	<u>1.00</u>
Soil Extract Volume:	(µL)	Soil Aliquot Vol	ume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q	
74-87-3	Chloromethane	5	U	
75-01-4	Vinyl chloride	2	U	
74-83-9	Bromomethane	5	U	
75-00-3	Chloroethane	5	U	
107-13-1	Acrylonitrile	5	U	
75-69-4	Trichlorofluoromethane	5	U	
75-35-4	1,1-Dichloroethene	5	U	
74-88-4	Iodomethane	5	U	
108-05-4	Vinyl acetate	5	U	
67-64-1	Acetone	5	U	
75-15-(	Carbon disulfide	5	U	
75-09-2	Methylene chloride	5	Ū	
156-60-5	trans-1,2-Dichloroethene	5	U	
75-34-3	1,1-Dichloroethane	5	U	
156-59-2	cis-1,2-Dichloroethene	5	U	
78-93-3	2-Butanone	5	U	
74-97-5	Bromochloromethane	5	U	
67-66-3	Chloroform	5	U	
71-55-6	1,1,1-Trichloroethane	5	U	
56-23-5	Carbon tetrachloride	5	U	
71-43-2	Benzene	1	U	
107-06-2	1,2-Dichloroethane	5	U	
79-01-6	Trichloroethene	5	U	
78-87-5	1,2-Dichloropropane	1	U	
74-95-3	Dibromomethane	5	U	
75-27-4	Bromodichloromethane	5	U	
10061-01-9	cis-1,3-Dichloropropene	0.4	U	
108-10-1	4-Methyl-2-pentanone	5	U	
108-88-3	Toluene	5	U	
10061-02-6	trans-1,3-Dichloropropene	0.4	U	
79-00-5	1,1,2-Trichloroethane	1	U	
127-18-4	Tetrachloroethene	5	U	
591-78-6	2-Hexanone	5	U	
124-48-1	Dibromochloromethane	5	U	
106-93-4	1,2-Dibromoethane	1	U	

FORM I VOA - 1

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

DUP001

Lab Name:	H2M LABS I	NC	Cont	tract:	
Lab Code:	<u>H2M</u>	Case No.:	<u>tos</u> s	AS No.:	SDG No.: TOS012
Matrix: (so	)il/water)	WATER		Lab Sample ID:	1304917-001A
Sample wt/v	701: <u>5</u>	(g/mL)	ML	Lab File ID:	3\F60373.D
Level: (1	.ow/med}	LOW		Date Received:	04/16/13
% Moisture:	not dec.			Date Analyzed:	04/17/13
GC Column:	DB-624	ID:	<u>0.18</u> (mm)	Dilution Factor:	1.00
Soil Extrac	t Volume:		(µL)	Soil Aliquot Volu	me (uL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	ប
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

TOS012/012F S41

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_	VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS										DUP001		
-	Lab Nam	ne:	H2M LABS	INC				Contrac	t:				
	Lab Coo	de:	<u>H2M</u>		Case No.	: <u>TOS</u>	S	AS No.:	<u>, , , , , , , , , , , , , , , , , </u>	SDG N	o.: <u>TOS</u>	<u>5012</u>	
ine .	Matrix	: (soi)	1/water)		WATER				Lab Sampl	e ID:	130491	7-001A	
	Sample	wt/vo	l: <u>5</u>			(g/mL)	ML		Lab File	ID:	3\F603	73.D	
-	Level:	(lo	w/med)	LOW					Date Rece	ived:	04/16/3	<u>L3</u>	
	% Moist	ture: 1	not dec.						Date Anal	yzed:	04/17/2	<u>13</u>	
-	GC Colu	ımrı: I	DB-624		ID: <u>0.18</u>	(mm)			Dilution	Factor:	1.00		
	Soil Ex	xtract	Volume:			(µl)			Soil Aliq	uot Volum	e:	<u>0</u>	(µL)
Linear								CONCENT	RATION UNI	TS:			
	Number	TICs	found:		0			(µg/L с	r μg/Kg)		<u>UG/L</u>		_
-		С	AS NUMBER			COMPOUND	NAME		RT	EST.C	ONC.	Q	

1**a** 

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-3A

Lab Name:	H2M LABS IN	4C	Contra	ct:	
Lab Code:	<u>H2M</u>	Case No.:	tos sas	No.:	SDG No.: TOS012
Matrix: (so	il/water)	WATER		Lab Sample ID:	1304917-004A
Sample wt/v	ol: <u>5</u>	(g/mL)	ML	Lab File ID:	3\F60374.D
Level: (1	.ow/med)	TOM		Date Received:	04/16/13
<pre>% Moisture:</pre>	not dec.			Date Analyzed:	04/17/13
GC Column:	DB-624	ID:	<u>0.18</u> (mm)	Dilution Factor:	1.00
Soil Extrac	t Volume:		(µL)	Soil Aliquot Volu	ume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74-83-9	-	5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	Ŭ
108-05-4	Vinyl acetate	5	U
67-64-2	Acetone	5	U
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	U U U
156-60-5	trans-1,2-Dichloroethene	5	
75-34-3	1,1-Dichloroethane	5	
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	5	U
67-66-2	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	1	U
107-06-2	2 1,2-Dichloroethane	5	U
79-01-0	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	1	U
74-95-2	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-	cis-1,3-Dichloropropene	0.4	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-	Toluene	5	U
10061-02-	trans-1,3-Dichloropropene	0.4	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-3A

Lab Name:	H2M LABS IN	<u>1C</u>	Contr	act:	
Lab Code:	<u>H2M</u>	Case No.:	<u>tos</u> sa	S No.:	SDG No.: TOS012
Matrix: (so	il/water)	WATER		Lab Sample ID:	1304917-004A
Sample wt/v	rol: <u>5</u>	(g/mL)	ML	Lab File ID:	3\F60374.D
Level: (1	.ow/med)	LOW		Date Received:	04/16/13
<pre>% Moisture:</pre>	not dec.			Date Analyzed:	04/17/13
GC Column:	DB-624	ID:	0.18 (mm)	Dilution Factor:	1.00
Soil Extrac	t Volume:		(µL)	Soil Aliquot Vol	nme (hr)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

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				v		RGANICS A					MW-3A		
					TENTATI	VELY IDENT	TETEI	O COMPOUN	DS	1			
Canto	Lab Nam	ne:	H2M LABS	INC				Contrac	t:				
	Lab.Cod	le:	H2M		Case No.	: <u>TOS</u>	S	AS No.:		SDG N	o.: <u>TOS</u>	012	
	Matrix:	(soil	/water)		WATER				Lab Sampl	e ID:	1304917	-004A	
	Sample	wt/vol	: <u>5</u>			(g/mL)	ML		Lab File	ID:	3\F6037	<u>4.D</u>	
i di di di di	Level:	(low	/med)	LOW					Date Rece	ived:	04/16/1	.3	
	∛ Moist	ure: n	ot dec.						Date Anal	yzed:	04/17/1	13	
-	GC Colu	1mn: <u>D</u>	B-624		ID: <u>0.18</u>	(mm)			Dilution	Factor:	1.00		
	Soil Ex	tract	Volume:			(µl)			Soil Aliq	uot Volum	e:	<u>0</u>	(µL)
								CONCENT	RATION UNI	TS:			
	Number	TICs f	ound:		0			(µg/L c	or µg/Kg)		UG/L		_
iiiiik		CA	S NUMBER			COMPOUND	NAME		RT	EST.C	CONC.	Q	

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-3B

Lab Name:	H2M LABS I	NC	Co	ontrad	et:		
Lab Code:	<u>H2M</u>	Case No.:	TOS	SAS	No.:	SDG No.: TOS	012
Matrix: (so	oil/water)	WATER			Lab Sample ID:	<u>1304917-005A</u>	
Sample wt/v	vol: <u>5</u>	(g/mL)	ML		Lab File ID:	3\F60375.D	
Level: ()	low/med)	LOW			Date Received:	04/16/13	
% Moisture:	: not dec.				Date Analyzed:	04/17/13	
GC Column:	DB-624	ID:	<u>0.18</u> (m	nm)	Dilution Factor:	1.00	
Soil Extrac	ct Volume:		(µL)		Soil Aliquot Volu	me (µ:	L)

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74-83-	Bromomethane	5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-2	Acetone	5	U
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-1		5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-0	1,1,1-Trichloroethane	5	U
56-23-	Carbon tetrachloride	5	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	5	U
79-01-0	Trichloroethene	5	U
78-87-	1,2-Dichloropropane	1	U
74-95-1	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-	cis-1,3-Dichloropropene	0.4	U
108-10-2	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-0	trans-1,3-Dichloropropene	0.4	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	5	U
591-78-0	2-Hexanone	5	U
124-48-2	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	1	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-3B

Lab Name: H2M LABS I		Contract:	
Lab Code: <u>H2M</u>	Case No.: TOS	SAS No.:	SDG No.: TOS012
Matrix: (soil/water)	WATER	Lab Sample ID:	1304917-005A
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	3\F60375.D
Level: (low/med)	LOW	Date Received:	04/16/13
% Moisture: not dec.		Date Analyzed:	04/17/13
GC Column: DB-624	ID: <u>0.18</u> (1	mm) Dilution Factor:	1.00
Soil Extract Volume:	(µL)	Soil Aliquot Vol	ume (uL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

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-				,	VOLATILE C	DRGANICS A	NALYSIS	DATA S	HEET		MW-3B		
					TENTATI	VELY IDENI	IFIED (	COMPOUNI	os	1			
	Lab Nam	ne:	H2M LABS	INC			(	Contract	t:				
	Lab Cod	le:	H2M		Case No.	.: <u>TOS</u>	SAS	No.:		SDG N	o.: <u>TOS</u>	3012	
	Matrix	: (soi)	l/water)		WATER				Lab Sample	e ID:	130491	7-005A	
	Sample	wt/vo	l: <u>5</u>			(g/mL)	ML		Lab File	ID:	3\F603	75.D	
	Level:	(10	w/med)	LOW					Date Rece	ived:	04/16/	13	
	% Moist	ture:	not dec.						Date Anal	yzed:	04/17/2	13	
-	GC Colu	ımn: I	DB-624		ID: <u>0.18</u>	(mm)			Dilution	Factor:	1.00		
	Soil Ex	ktract	Volume:			(µl)			Soil Aliq	uot Volum	le:	<u>0</u>	(μL)
(COL)							1	CONCENT	RATION UNI	TS:			
	Number	TICs	found:		0			(µg/L 0	r μg/Kg)		UG/L		-
-		С	AS NUMBER			COMPOUND	NAME		RT	EST.C	CONC .	Q	

#### 1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-3C

Lab Name:	H2M LABS IN	NC	Contract	:	
Lab Code:	H2M	Case No.: TOS	SAS No	».:	SDG No.: TOS012
Matrix: (so	oil/water)	WATER	La	ab Sample ID:	1304917-006A
Sample wt/w	vol: <u>5</u>	(g/mL) ML	La	ab File ID:	3\F60378.D
Level: (]	low/med)	LOW	Da	ate Received:	04/16/13
% Moisture:	not dec.		Da	ate Analyzed:	04/17/13
GC Column:	DB-624	ID: <u>0.1</u>	1 <mark>8 (mm.)</mark> Di	ilution Factor:	1.00
Soil Extrac	ct Volume:	(	pL) Sc	oil Aliquot Volu	me (µL)

# CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74-83-9		5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	Ū
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	1	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	0.4	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3		5	U
10061-02-6		0.4	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	5	U
591-78-6		5	U
124-48-1	Dibromochloromethane	5	U
106-93-4		1	U

FORM I VOA - 1

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-3C

Lab Name:	H2M LABS IN	NC	Contra	ct:	
Lab Code:	<u>H2M</u>	Case No.:	TOS SAS	No.:	SDG No.: TOS012
Matrix: (so	il/water)	WATER		Lab Sample ID:	1304917-006A
Sample wt/v	rol: <u>5</u>	(g/mL)	ML	Lab File ID:	3\F60378.D
Level: (1	.ow/med)	LOW		Date Received:	04/16/13
<pre>% Moisture:</pre>	not dec.			Date Analyzed:	04/17/13
GC Column:	DB-624	ID:	0.18 (mm)	Dilution Factor:	1.00
Soil Extrac	t Volume:		(µL)	Soil Aliquot Volu	me (μL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

CONCENTRATION UNITS:         Number TICs found:       0 $(\mu g/L \text{ or } \mu g/Kg)$ UG/L	ليبتل						1F					EPA SAN	APLE NO	).
Lab Name:H2M LABS INCContract:Lab Code:H2MCase No.:TOSSAS No.:SDG No.:TOS012Matrix:(soil/water)WATERLab Sample ID:1304917-006ASample wt/vol:5(g/mL)MLLab File ID: $3\setminus F60378.D$ Level:(low/med)LOWDate Received: $04/16/13$ % Moisture:not dec.Date Analyzed: $04/17/13$ GC Column:DB-624ID: $0.18$ (mm)Dilution Factor: $1.00$ soil Extract Volume:(µ1)Soil Aliquot Volume:0(µ2/LCONCENTRATION UNITS:Number TICs found:0(µg/L or µg/Kg)UG/L					1							MW-3C		
Lab Code:H2MCase No.:TOSSAS No.:SDG No.:TOS012Matrix:(soil/water)WATERLab Sample ID: $1304917-006A$ Sample wt/vol:5(g/mL)MLLab File ID: $3\setminus F60378.D$ Level:(low/med)LOWDate Received: $04/16/13$ % Moisture: not dec.Date Analyzed: $04/17/13$ GC Column:DB-624ID: $0.18$ (mm)Dilution Factor: $1.00$ Soil Extract Volume:( $\mu$ l)Soil Aliquot Volume: $0$ ( $\mu$ CONCENTRATION UNITS:Number TICs found:0( $\mu$ g/L or $\mu$ g/Kg)UG/L						TENTATI	VELY IDENT	TFIED	COMPOUN	DS				
Matrix: (soil/water)WATERLab Sample ID: $1304917-006A$ Sample wt/vol:5(g/mL)MLLab File ID: $3\setminus F60378.D$ Level: (low/med)LOWDate Received: $04/16/13$ % Moisture: not dec.Date Analyzed: $04/17/13$ GC Column:DB-624ID: $0.18$ (mm)Soil Extract Volume:(µl)Soil Aliquot Volume: $0$ (µCONCENTRATION UNITS:Number TICs found:0(µg/L or µg/Kg)UG/L		Lab Nam	ne:	H2M LABS	INC				Contrac	t:				
Sample wt/vol: $5$ $(g/mL)$ $ML$ Lab File ID: $3 \setminus F60378.D$ Level:(low/med)LOWDate Received: $04/16/13$ % Moisture: not dec.Date Analyzed: $04/17/13$ GC Column:DB-624ID: $0.18$ (mm)Soil Extract Volume:(µ1)Soil Aliquot Volume: $0$ Mumber TICs found:0 $(\mu g/L \text{ or } \mu g/Kg)$ UG/L		Lab Cod	le:	<u>H2M</u>		Case No.	: <u>TOS</u>	SA	S No.: _		SDG N	o.: <u>TO</u>	5012	
Level:       (low/med)       LOW       Date Received: $04/16/13$ % Moisture: not dec.       Date Analyzed: $04/17/13$ GC Column:       DB-624       ID: $0.18$ (mm)       Dilution Factor: $1.00$ Soil Extract Volume:       (µl)       Soil Aliquot Volume: $0$ (µ)         CONCENTRATION UNITS:         Number TICs found:       0       (µg/L or µg/Kg)       UG/L		Matrix	: (soil	/water)		WATER				Lab Sampl	e ID:	130491	7-006A	
% Moisture: not dec.       Date Analyzed: $04/17/13$ GC Column: DB-624       ID: $0.18$ (mm)       Dilution Factor: $1.00$ Soil Extract Volume:       (µ1)       Soil Aliquot Volume: $0$ (µ2)         CONCENTRATION UNITS:         Number TICs found:       0       (µg/L or µg/Kg)       UG/L		Sample	wt/vol	: <u>5</u>			(g/mL)	ML		Lab File	ID:	3\F603	78.D	
GC Column:       DB-624       ID: $0.18$ (mm)       Dilution Factor: $1.00$ Soil Extract Volume:       (µl)       Soil Aliquot Volume:       0       (µl)         CONCENTRATION UNITS:       Number TICs found:       0       (µg/L or µg/Kg)       UG/L		Level:	(low	v/med)	LOW					Date Rece	ived:	04/16/	13	
Soil Extract Volume: (µ1) Soil Aliquot Volume: 0 (µ2) CONCENTRATION UNITS: Number TICs found: 0 (µg/L or µg/Kg) UG/L		% Moist	ure: r	not dec.						Date Anal	yzed:	04/17/	13	
CONCENTRATION UNITS: Number TICs found: 0 $(\mu g/L \text{ or } \mu g/Kg)$ UG/L	فتشت	GC Colu	ımn: D	<u>B-624</u>		ID: <u>0.18</u>	(mm)			Dilution	Factor:	1.00		
Number TICs found: 0 $(\mu g/L \text{ or } \mu g/Kg)$ UG/L		Soil Ex	ktract	Volume:			(µl)			Soil Aliq	uot Volum	e:	<u>0</u>	(µL)
									CONCENT	RATION UNI	TS:			
		Number	TICs f	ound:		0			(µg/L o	r μg/Kg)		UG/L		-1
- CAS NONBER CONFOUND NAME RI ESI.CONC. Q			CI	AS NUMBER			COMPOUND	NAME		RT	EST.C	ONC.	Q	

#### 1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-4A

Lab Name:	H2M LABS IN	NC	Contra	ct:	
Lab Code:	<u>H2M</u>	Case No.:	tos sas	No.:	SDG No.: TOS012
Matrix: (so	oil/water)	WATER		Lab Sample ID:	1304917-007A
Sample wt/w	vol: <u>5</u>	(g/mL)	ML	Lab File ID:	3\F60379.D
Level: ()	low/med)	LOW		Date Received:	04/16/13
<pre>% Moisture:</pre>	not dec.			Date Analyzed:	04/17/13
GC Column:	DB-624	ID:	<u>0.18</u> (mm)	Dilution Factor:	1.00
Soil Extra	ct Volume:		(µL)	Soil Aliquot Volu	ume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	ç
74-87-	Chloromethane	5	U
75-01-	Vinyl chloride	2	U
74-83-	Bromomethane	5	U
75-00-	Chloroethane	5	U
107-13-	Acrylonitrile	5	U
75-69-	Trichlorofluoromethane	5	U
75-35-	1,1-Dichloroethene	5	U
74-88-	Iodomethane	5	U
108-05-	Vinyl acetate	5	U
67-64-	Acetone	5	U
75-15-	) Carbon disulfide	5	U
75-09-	2 Methylene chloride	5	U
156-60-	trans-1,2-Dichloroethene	5	U
75-34-	1,1-Dichloroethane	5	U
156-59-	cis-1,2-Dichloroethene	5	U
78-93-	2-Butanone	5	U
74-97-	Bromochloromethane	5	U
67-66-	Chloroform	5	U
71-55-	1,1,1-Trichloroethane	5	U
56-23-	6 Carbon tetrachloride	5	U
71-43-	2 Benzene	1	U
107-06-	1,2-Dichloroethane	5	U
79-01-	Trichloroethene	5	U
78-87-	1,2-Dichloropropane	1	U
74-95-	Dibromomethane	5	U
75-27-	Bromodichloromethane	5	U
10061-01-	cis-1,3-Dichloropropene	0.4	U
108-10-	4-Methyl-2-pentanone	5	U
108-88-	70 Toluene	5	U
10061-02-	trans-1,3-Dichloropropene	0.4	U
79-00-	1,1,2-Trichloroethane	1	U
127-18-	Tetrachloroethene	5	U
591-78-	2-Hexanone	5	U
124-48-	Dibromochloromethane	5	U
106-93-	1,2-Dibromoethane	1	U

FORM I VOA - 1

1B

# VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-4A

Lab Name:	H2M LABS IN	<u>4C</u>	Contra	ct:	
Lab Code:	<u>H2M</u>	Case No.:	TOS SAS	No.:	SDG No.: TOS012
Matrix: (so	oil/water)	WATER		Lab Sample ID:	1304917-007A
Sample wt/v	vol: <u>5</u>	(g/mL)	ML	Lab File ID:	3\F60379.D
Level: (1	.ow/med)	LOW		Date Received:	04/16/13
% Moisture:	not dec.			Date Analyzed:	04/17/13
GC Column:	DB-624	ID:	0.18 (mm)	Dilution Factor:	1.00
Soil Extrac	t Volume:		(pL)	Soil Aliquot Volu	me (uL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

مىنىد		1F					SAMPLE NO	).
-			VOLATILE ORGANICS A TENTATIVELY IDEN	MW-	MW-4A			
<b></b>	' Lab Nam	ne: <u>H2M LABS IN</u>		Contract	:			
	Lab Coo	de: <u>H2M</u>	Case No.: TOS	SAS No.: _		SDG No.:	TOS012	
1664	Matrix	: (soil/water)	WATER		Lab Sampl	e ID: <u>130</u>	4917-007A	
	Sample	wt/vol: <u>5</u>	(g/mL)	ML	Lab File	ID: <u>3\F</u>	60379.D	
-	Level:	(low/med) LC	W		Date Rece	ived: 04/	16/13	
	% Moist	ture: not dec.			Date Anal	yzed: <u>04/</u>	17/13	
- Cipen	GC Colu	umn: <u>DB-624</u>	ID: 0.18 (mm)		Dilution	Factor: <u>1.0</u>	0	
	Soil E	xtract Volume:	(µl)		Soil Aliq	uot Volume:	<u>0</u>	(μL)
				CONCENTI	RATION UNI	TS:		
	Number	TICs found:	0	(µg/L 01	r μg/Kg)	UG/I		-
		CAS NUMBER	COMPOUND	NAME	RT	EST.CONC.	Q	
		TICs found:	0	CONCENTI (µg/L 0)	RATION UNI r µg/Kg)	TS: <u>UG/1</u>	2	(μ ]

# VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-4B

Lab Name:	H2M LABS I	NC	Cor	ntrac	:t:			
Lab Code:	H2M	Case No.:	TOS	SAS 1	No.:		SDG No.:	ros012
Matrix: (se	oil/water)	WATER		:	Lab :	Sample ID:	1304917-00	BA
Sample wt/	vol: <u>5</u>	(g/mL)	ML	:	Lab	File ID:	3\F60380.D	
Level: (	low/med)	LOW		1	Date	Received:	04/16/13	
% Moisture	: not dec.			1	Date	Analyzed:	04/17/13	
GC Column:	DB-624	ID:	<u>0.18</u> (mm	<b>a)</b> 1	Dilu	tion Factor:	1.00	
Soil Extra	ct Volume:		(µL)		Soil	Aliquot Volu	me	(µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	Ŭ
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	1	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	0.4	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	0.4	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	1	U

#### 1B

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-4B

Lab Name:	H2M LABS I	NC	Contrac	ct:	
Lab Code:	H2M	Case No.: T	SAS SAS	No.:	SDG No.: TOS012
Matrix: (so	oil/water)	WATER		Lab Sample ID:	1304917-008A
Sample wt/v	vol: <u>5</u>	(g/mL)	ML	Lab File ID:	3\F60380.D
Level: ()	low/med)	LOW		Date Received:	04/16/13
% Moisture:	not dec.			Date Analyzed:	04/17/13
GC Column:	DB-624	ID:	<u>0.18</u> (mm)	Dilution Factor:	1.00
Soil Extra	ct Volume:		(µL)	Soil Aliquot Volu	ıme (µL)

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	2	J
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	2	J
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	l	U

# TOS012/012F S56

		1F		EPA SAMPLE NO.
-		VOLATILE ORGANICS ANALYSIS DA TENTATIVELY IDENTIFIED COM		MW-4B
-	Lab Name: <u>H2M LABS I</u>		tract:	
	Lab Code: <u>H2M</u>	Case No.: TOS SAS No	SDG	No.: <u>TOS012</u>
	Matrix: (soil/water)	WATER	Lab Sample ID:	1304917-008A
	Sample wt/vol: 5	(g/mL) <u>ML</u>	Lab File ID:	3\F60380.D
inger	Level: (low/med) L	OW	Date Received:	04/16/13
	% Moisture: not dec.		Date Analyzed:	04/17/13
ingt.	GC Column: DB-624	ID: 0.18 (mm)	Dilution Factor:	1.00
	Soil Extract Volume:	(µl)	Soil Aliquot Volu	me: <u>0</u> (μL)
tijin.		CON	CENTRATION UNITS:	
	Number TICs found:	۰ 0 (µg	/L or µg/Kg)	UG/L
ŝ,	CAS NUMBER	COMPOUND NAME	RT EST.	CONC. Q

#### 1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-4C

Lab Name:	H2M LABS IN	IC	Co	ontrad	ot:		
Lab Code: I	H2M	Case No.:	TOS	SAS	No.:	SDG No.: TOSO12	
Matrix: (soi	l/water)	WATER			Lab Sample ID:	1304917-009A	
Sample wt/vo	51: <u>5</u>	(g/mL)	ML		Lab File ID:	3\F60381.D	
Level: (lo	w/med)	LOW			Date Received:	04/16/13	
% Moisture:	not dec.				Date Analyzed:	04/17/13	
GC Column:	DB-624	ID:	<u>0.18</u> (m	um)	Dilution Factor:	1.00	
Soil Extract	: Volume:		(µL)		Soil Aliquot Volu	me (µL)	

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	1	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	· · · ·	0.4	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	0.4	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	1	U

FORM I VOA - 1

1B

# VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-4C

Lab Name: H2M LABS	INC Co	ontract:	
Lab Code: H2M	Case No.: TOS	SAS No.:	SDG No.: TOS012
Matrix: (soil/water)	WATER	Lab Sample ID:	1304917-009A
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	3\F60381.D
Level: (low/med)	LOW	Date Received:	04/16/13
<pre>% Moisture: not dec.</pre>		Date Analyzed:	04/17/13
GC Column: DB-624	ID: <u>0.18</u> (m	m) Dilution Factor:	1.00
Soil Extract Volume:	(µL)	Soil Aliquot Vol	ume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1 .	U

						1F					EPA SAM	IPLE NO	).
				7	JOLATILE C	RGANICS A	NALYSIS	DATA SI	HEET		MW-4C		
					TENTATIV	VELY IDENI	IFIED C	OMPOUND	S				
ijaja	Lab Nam	ne:	H2M LABS	INC			с	ontract	:				
	Lab Cod	de:	H2M		Case No.	: <u>TOS</u>	SAS	No.:		SDG N	0.: <u>TOS</u>	5012	
Link	Matrix	: (soi)	l/water)		WATER				Lab Sampl	e ID:	1304917	7-009A	
	Sample	wt/vo	1: <u>5</u>			(g/mL)	ML		Lab File	ID:	<u>3\F6038</u>	<u>81.D</u>	
idage -	Level:	(10	w/med)	LOW					Date Rece	ived:	04/16/1	13	
	% Moist	ture: 1	not dec.						Date Anal	yzed:	04/17/2	13	
-	GC Colu	umn: I	DB-624		ID: <u>0.18</u>	(mm)			Dilution	Factor:	1.00		
	Soil Ex	xtract	Volume:			(µl)			Soil Aliq	uot Volum	e:	<u>0</u>	(μL)
-							С	CONCENTR	RATION UNI	TS:			
	Number	TICs	found:		0		(	µg/L or	μg/Kg)		UG/L		_
		C	AS NUMBER			COMPOUND	NAME		RT	EST.C	CONC.	Q	

		1A		
VOLATILE	ORGANICS	ANALYSIS	DATA	SHEET

FB001

Lab Name:	H2M LABS I	NC	Contrac	st:	
Lab Code:	<u>H2M</u>	Case No.: TOS	SAS	No.:	SDG No.: TOS012
Matrix: (so	oil/water)	WATER		Lab Sample ID:	1304917-010A
Sample wt/w	vol: <u>5</u>	(g/mL) <u>M</u>	Ľ	Lab File ID:	3\F60382.D
Level: (]	low/med)	LOW		Date Received:	04/16/13
<pre>% Moisture:</pre>	: not dec.			Date Analyzed:	04/18/13
GC Column:	DB-624	ID: <u>0</u> .	.18 (mm)	Dilution Factor:	1.00
Soil Extrac	ct Volume:		(µL)	Soil Aliquot Volu	ume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	5	U
75-0 <b>9-</b> 2	Methylene chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6		5	U
78-87-5	1,2-Dichloropropane	1	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	0.4	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6		0.4	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	1	U

# 1B VOLATILE ORGANICS ANALYSIS DATA SHEET

FB001

Lab Name: H2M LABS		ontract:	
Lab Code: H2M	Case No.: TOS	SAS No.:	SDG No.: TOS012
Matrix: (soil/water)	WATER	Lab Sample ID:	1304917-010A
Sample wt/vol: 5	(g/mL) <u>ML</u>	Lab File ID:	3\F60382.D
Level: (low/med)	LOW	Date Received:	04/16/13
% Moisture: not dec.		Date Analyzed:	04/18/13
GC Column: DB-624	ID: <u>0.18</u> (m	m) Dilution Factor:	1.00
Soil Extract Volume:	(µL)	Soil Aliquot Vol	ume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

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				v			NALYSIS DA TIFIED COMP				FB001		
-	Lab Nam	ne:	H2M LABS	INC			Cont	rac	t:				
	Lab Cod	de:	H2M		Case No.	: <u>TOS</u>	SAS No	.: _		SDG N	o.: <u>TO</u>	S012	
-	Matrix	: (soil	/water)		WATER				Lab Sampl	e ID:	130491	7-010A	
	Sample	wt/vol	: <u>5</u>			(g/mL)	ML		Lab File	ID:	<u>3\F603</u>	82.D	
عنت	Level:	(low	/med)	LOW					Date Rece	ived:	04/16/	13	
	% Moist	ture: n	ot dec.						Date Anal	yzed:	04/18/	<u>13</u>	
iatio	GC Colu	umn: DI	B-624		ID: <u>0.18</u>	(mm)			Dilution	Factor:	1.00		
	Soil Ex	ktract	Volume:			(µl)			Soil Aliq	uot Volum	e:	<u>0</u>	(µL)
-							CON	CENT	RATION UNI	TS:			
	Number	TICs f	ound:		0		(µg/	/L O	r μg/Kg)		UG/L		_
<u></u>		CA	S NUMBER			COMPOUND	NAME		RT	EST.C	CONC.	Q	

# 1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

TRIP BLANK 001

Lab Name: H2M LABS I	<u>NC</u>	Contract:	
Lab Code: <u>H2M</u>	Case No.: TOS	SAS No.:	SDG No.: TOS012
Matrix: (soil/water)	WATER	Lab Sample ID:	1304917-011A
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	3\F60383.D
Level: (low/med)	LOW	Date Received:	04/16/13
% Moisture: not dec.		Date Analyzed:	04/18/13
GC Column: DB-624	ID: <u>0.18</u> (	mm) Dilution Factor:	1.00
Soil Extract Volume:	(µL)	Soil Aliquot Volu	me (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	Ŭ
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	1	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	0.4	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	0.4	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	1	U

# 1B

# VOLATILE ORGANICS ANALYSIS DATA SHEET

TRIP BLANK 001

Lab Name:	H2M LABS IN	NC	Contract:	
Lab Code:	H2M	Case No.: TOS	SAS No.:	SDG No.: TOS012
Matrix: (so	oil/water)	WATER	Lab Sample ID:	1304917-011A
Sample wt/w	vol: <u>5</u>	(g/mL) ML	Lab File ID:	3\F60383.D
Level: (1	Low/med)	LOW	Date Received:	04/16/13
% Moisture:	not dec.		Date Analyzed:	04/18/13
GC Column:	DB-624	ID: 0.18	(mm) Dilution Factor:	1.00
Soil Extrac	ct Volume:	(µI	) Soil Aliquot Volu	me (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

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					NALYSIS DATA S			TRIP BLA	NK OC	)1
	Lab Nam	me: <u>H2M LABS</u>	INC		Contract	:				
	Lab Cod	de: <u>H2M</u>	Case No.	: TOS	SAS No.: _		SDG No	.: <u>TOS</u> 0	12	
	Matrix	: (soil/water)	WATER			Lab Sample	e ID:	1304917-	011A	
	Sample	wt/vol: <u>5</u>		(g/mL)	ML	Lab File	ID:	3\F60383	<u>.D</u>	
فتقف	Level:	(low/med)	LOW			Date Rece	ived:	04/16/13		
	% Moist	ture: not dec.				Date Anal	yzed:	04/18/13		
	GC Colu	umn: DB-624	ID: 0.18	(mm)		Dilution	Factor:	1.00		
	Soil Ex	xtract Volume:		(µl)		Soil Aliq	uot Volume	:	<u>0</u>	(µL)
					CONCENTI	RATION UNI	TS:			
	Number	TICs found:	0		(µg/L 0)	r μg/Kg)		UG/L		_
-		CAS NUMBER		COMPOUND	NAME	RT	EST.CO	DNC.	Q	

# 1A

# VOLATILE ORGANICS ANALYSIS DATA SHEET

STORAGE BLANK

Lab Name:	H2M LABS I	NC	Contra	ct:	
Lab Code:	H2M	Case No.:	tos sas	No.:	SDG No.: TOSO12
Matrix: (so	oil/water)	WATER		Lab Sample ID:	1304917-012A
Sample wt/w	rol: <u>5</u>	(g/mL)	ML	Lab File ID:	3\F60384.D
Level: (]	low/med)	LOW		Date Received:	04/16/13
<pre>% Moisture:</pre>	not dec.			Date Analyzed:	04/18/13
GC Column:	DB-624	ID:	0.18 (mm)	Dilution Factor:	1.00
Soil Extrac	t Volume:		(µL)	Soil Aliquot Volu	me (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74 - 83 - 9		5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-1	Acetone	1	BJ
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	11	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	1	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	0.4	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5.	U
10061-02-6	trans-1,3-Dichloropropene	0.4	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	1.	U

1B

# VOLATILE ORGANICS ANALYSIS DATA SHEET

STORAGE BLANK

Lab Name: <u>H2M LABS I</u>	NC Contr	act:	
Lab Code: <u>H2M</u>	Case No.: TOS SAS	No.:	SDG No.: TOS012
Matrix: (soil/water)	WATER	Lab Sample ID:	1304917-012A
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	3\F60384.D
Level: (low/med)	LOW	Date Received:	04/16/13
% Moisture: not dec.		Date Analyzed:	04/18/13
GC Column: DB-624	ID: <u>0.18</u> (mm)	Dilution Factor:	1.00
Soil Extract Volume:	(pL)	Soil Aliquot Vol	ume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

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					IDNIALI		IFIED COMPOUN	03	1			
ίζο <b>π</b>	Lab Nam	ne:	H2M LABS	INC			Contrac	:t:				
	Lab Cod	le:	H2M		Case No.	: <u>TOS</u>	SAS No.:		SDG N	io.: <u>TOS</u>	012	
	Matrix:	(soi)	/water)		WATER			Lab Sample	e ID:	<u>1304917</u>	-012A	
	Sample	wt/vo]	.: <u>5</u>			(g/mL)	ML	Lab File	ID:	<u>3\F6038</u>	<u>4.</u> D	
-	Level:	(100	v/med)	LOW				Date Rece	ived:	04/16/1	3	
	% Moist	ure: r	not dec.					Date Anal	yzed:	04/18/1	3	
-	GC Colu	ımn: <u>D</u>	B-624		ID: <u>0.18</u>	(mm)		Dilution	Factor:	1.00		
	Soil Ex	tract	Volume:			(µl)		Soil Aliq	uot Volum	ie:	<u>0</u>	(μL)
i i i i i i i i i i i i i i i i i i i							CONCENT	RATION UNI	TS:			
	Number	TICs f	found:		0		(µg/L с	or µg/Kg)		UG/L		_
		CZ	AS NUMBER			COMPOUND	NAME	RT	EST.C	CONC.	Q	

# VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-1A

Lab Name: H2M LABS I	<u>NC</u> Co	ontract:	
Lab Code: H2M	Case No.: TOS	SAS No.:	SDG No.: TOS012
Matrix: (soil/water)	WATER	Lab Sample ID:	1304A27-001A
Sample wt/vol: 5	(g/mL) <u>ML</u>	Lab File ID:	3\F60385.D
Level: (low/med)	LOW	Date Received:	04/17/13
<pre>% Moisture: not dec.</pre>		Date Analyzed:	04/18/13
GC Column: DB-624	ID: <u>0.18</u> (m	m) Dilution Factor:	1.00
Soil Extract Volume:	(µL)	Soil Aliquot Vol	ume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	1	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	0.4	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	· · · · · · · · · · · · · · · · · · ·	0.4	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	5	U
591-78-6		5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	1	U

# VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-1A

Lab Name: H2M LABS INC	Contra	act:	
Lab Code: <u>H2M</u> Case	No.: <u>TOS</u> SAS	No.:	SDG No.: TOS012
Matrix: (soil/water) W	ATER	Lab Sample ID:	1304A27-001A
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	3\F60385.D
Level: (low/med) LOW		Date Received:	04/17/13
<pre>% Moisture: not dec.</pre>		Date Analyzed:	04/18/13
GC Column: DB-624	ID: 0.18 (mm)	Dilution Factor:	1.00
Soil Extract Volume:	(µL)	Soil Aliquot Volu	ume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

-		lF			EP	A SAMPLE NO	D.
		VOLATILE ORGANICS A TENTATIVELY IDENT			MW	I-1A	
inger .	Lab Name: H2M LABS I	NC	Contract	:			
	Lab Code: <u>H2M</u>	Case No.: TOS	SAS No.:		SDG No.:	TOS012	
-	Matrix: (soil/water)	WATER		Lab Sample	ID: <u>13</u>	04A27-001A	
	Sample wt/vol: 5	(g/mL)	ML	Lab File I	D: <u>3\</u>	F60385.D	
	Level: (low/med) <u>L</u>	WC		Date Recei	ved: <u>04</u>	/17/13	
	% Moisture: not dec.			Date Analy	zed: 04	/18/13	
<b>سین</b>	GC Column: DB-624	ID: <u>0.18</u> (mm)		Dilution F	actor: <u>1</u>	.00	
	Soil Extract Volume:	(µl)		Soil Aliqu	ot Volume:	<u>0</u>	(µL)
			CONCENTR	ATION UNIT	S:		
	Number TICs found:	0	(µg/L or	μg/Kg)	<u>UG</u>	<u>/L</u>	
i Antini	CAS NUMBER	COMPOUND	NAME	RT	EST.CONC	. Q	

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-1B

Lab Name: <u>H2M LABS</u>	INC Contr	act:	
Lab Code: <u>H2M</u>	Case No.: TOS SAS	8 No.:	SDG No.: TOS012
Matrix: (soil/water)	WATER	Lab Sample ID:	1304A27-002A
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	3\F60386.D
Level: (low/med)	LOW	Date Received:	04/17/13
% Moisture: not dec.		Date Analyzed:	04/18/13
GC Column: DB-624	ID: 0.18 (mm)	Dilution Factor:	1.00
Soil Extract Volume:	(µL)	Soil Aliquot Vol	ume (µL)

### CONCENTRATION UNITS:

(µL) Soil Aliquot Volume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q	
74-87-3	Chloromethane	5	U	
75-01-4	Vinyl chloride	2	U	
74-83-9	Bromomethane	5	U	
75-00-3	Chloroethane	5	U	
107-13-1	Acrylonitrile	5	U	
75-69-4	Trichlorofluoromethane	5	U	
75-35-4	1,1-Dichloroethene	5	U	
74-88-4	Iodomethane	5	U	
108-05-4	Vinyl acetate	5	U	
67-64-1	Acetone	5	U	
75-15-0	Carbon disulfide	5	U	
75-09-2	Methylene chloride	5	U	
156-60-5	trans-1,2-Dichloroethene	5	U	
75-34-3	1,1-Dichloroethane	5	U	
156-59-2	cis-1,2-Dichloroethene	5	U	
78-93-3	2-Butanone	5	U	
74-97-5	Bromochloromethane	5	U	
67-66-3	Chloroform	3	J	
71-55-6	1,1,1-Trichloroethane	5	U	
56-23-5	Carbon tetrachloride	5	U	
71-43-2	Benzene	1	U	
107-06-2	1,2-Dichloroethane	5	U	
79-01-6	Trichloroethene	5	U	
78-87-5	1,2-Dichloropropane	1	U	
74-95-3	Dibromomethane	5	U	
75-27-4	Bromodichloromethane	5	U	
10061-01-5	cis-1,3-Dichloropropene	0.4	U	
108-10-1	4-Methyl-2-pentanone	5	U	
108-88-3	Toluene	5	U	
10061-02-6	trans-1,3-Dichloropropene	0.4	U	
79-00-5	1,1,2-Trichloroethane	1	U	
127-18-4	Tetrachloroethene	5	U	
591-78-6	2-Hexanone	5	U	
124-48-1	Dibromochloromethane	5	U	
106-93-4	1,2-Dibromoethane	1	U	

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-1B

Lab Name: H	2M LABS IN	<u>c</u>	Contract:	
Lab Code: H	<u>2M</u>	Case No.: TOS	SAS No.:	SDG No.: TOS012
Matrix: (soi]	l/water)	WATER	Lab Sample ID:	1304A27-002A
Sample wt/vol	1: <u>5</u>	(g/mL) ML	Lab File ID:	3\F60386.D
Level: (low	w/med)	LOW	Date Received:	04/17/13
<pre>% Moisture: r</pre>	not dec.		Date Analyzed:	04/18/13
GC Column:	DB-624	ID: 0.18	(mm) Dilution Factor	: <u>1.00</u>
Soil Extract	Volume:	(րԼ)	) Soil Aliquot Vo	lume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

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_				1	VOLATILE (	RGANICS A	NALYSIS DATA S	HEET		MW-1B		
					TENTATI	VELY IDENT	IFIED COMPOUND	S				
	Lab Nam	ne:	H2M LABS	INC			Contract					
	Lab Coo	de:	H2M		Case No.	: <u>TOS</u>	SAS No.: _		SDG N	o.: <u>TOS</u>	012	
	Matrix	: (soi)	l/water)		WATER			Lab Sampl	e ID:	1304A27	-002A	
	Sample	wt/vo	1: <u>5</u>			(g/mL)	ML	Lab File	ID:	<u>3\F6038</u>	6.D	
	Level:	(10	w/med)	LOW				Date Rece	ived:	04/17/1	.3	
	% Moist	ture: 1	not dec.					Date Anal	yzed:	04/18/1	.3	
inter.	GC Colu	umn: I	DB-624		ID: <u>0.18</u>	(mm)		Dilution	Factor:	1.00		
	Soil E	xtract	Volume:			(µl)		Soil Alig	uot Volum	e:	<u>0</u>	(μL)
-							CONCENTI	RATION UNI	TS:			
	Number	TICs	found:		0		(µg/L 0)	r μg/Kg)		<u>UG/L</u>		_
-		С	AS NUMBER			COMPOUND	NAME	RT	EST.C	ONC.	Q	
												_

### EPA SAMPLE NO.

MW-1C

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:H2M LABS INCContract:Lab Code:H2MCase No.:TOSSAS No.:SDG No.:TOS012Matrix:(soil/water)WATERLab Sample ID:1304A27-003ASample wt/vol:5(g/mL) MLLab File ID:3\F60387.DLevel:(low/med)LOWDate Received:04/17/13% Moisture:not dec.Date Analyzed:04/18/13GC Column:DB-624ID:0.18 (mm)Dilution Factor:1.00Soil Extract Volume:(µL)Soil Aliquot Volume(µL)

### CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74-83-9	Bromomethane	. 5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	2	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	1	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	0.4	Ū
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	0.4	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	1	U

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-1C

Lab Name:	H2M LABS I	NC	Co	ntract	:	
Lab Code:	<u>H2M</u>	Case No.:	TOS	SAS No	».:	SDG No.: TOS012
Matrix: (sc	oil/wat <b>er</b> )	WATER		L	ab Sample ID:	1304A27-003A
Sample wt/w	rol: <u>5</u>	(g/mL)	ML	L	ab File ID:	3\F60387.D
Level: (1	low/med)	LOW		Da	ate Received:	04/17/13
<pre>% Moisture:</pre>	not dec.			D	ate Analyzed:	04/18/13
GC Column:	DB-624	ID:	<u>0.18</u> (mm	m) D	ilution Factor:	1.00
Soil Extrac	t Volume:		(µL)	S	oil Aliquot Volu	me (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q	
108-90-7	Chlorobenzene	5	U	
110-57-6	trans-1,4-Dichloro-2-butene	5	U	
100-41-4	Ethylbenzene	5	U	
630-20-6	1,1,1,2-Tetrachloroethane	5	U	
1330-20-7	Xylene (total)	5	U	
100-42-5	Styrene	5	U	
75-25-2	Bromoform	5	U	
79-34-5	1,1,2,2-Tetrachloroethane	5	U	
96-18-4	1,2,3-Trichloropropane	5	U	
106-46-7	1,4-Dichlorobenzene	3	U	
95-50-1	1,2-Dichlorobenzene	3	U	
96-12-8	1,2-Dibromo-3-chloropropane	1	U	

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							NALYSIS DATA S			MW-1C		
					TENTATI	VELY IDENI	TIFIED COMPOUN	DS				
itime	Lab Nam	ne:	H2M LABS	INC			Contrac	t:				
	Lab Coo	de:	H2M		Case No.	: <u>TOS</u>	SAS No.:		SDG N	lo.: <u>TOS</u>	3012	
idean	Matrix	: (soil	/water)		WATER			Lab Sampl	e ID:	1304A27	7-003A	
	Sample	wt/vol	L: <u>5</u>			(g/mL)	ML	Lab File	ID:	3\F6038	37.D	
فيتعتب	Level:	(low	v/med)	LOW				Date Rece	ived:	04/17/2	13	
	% Moist	ture: r	not dec.					Date Anal	yzed:	04/18/2	13	
-	GC Colu	umn: D	B-624		ID: <u>0.18</u>	(mm)		Dilution	Factor:	1.00		
	Soil Ex	xtract	Volume:			(µl)		Soil Aliq	uot Volum	1e :	<u>0</u>	(µL)
it fait							CONCENT	RATION UNI	TS:			
	Number	TICs f	found:		0		(µg/L o	r μg/Kg)	·····	<u>UG/L</u>	·	r
-		c	AS NUMBER			COMPOUND	NAME	RT	EST.C	CONC.	Q	

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-11A

Lab Name: H2M L	ABS INC	Contract:	
Lab Code: <u>H2M</u>	Case No.: TOS	SAS No.:	SDG No.: TOS012
Matrix: (soil/wat	er) <u>WATER</u>	Lab Sample I	D: <u>1304A27-004A</u>
Sample wt/vol:	<u>5</u> (g/mL) <u>ML</u>	Lab File ID:	3\F60388.D
Level: (low/med	LOW	Date Receive	ed: 04/17/13
۴ Moisture: not d	lec.	Date Analyze	ed: 04/18/13
GC Column: DB-6	24 ID: 0.18	(mm) Dilution Fac	tor: <u>1.00</u>
Soil Extract Volu	me: (pi	L) Soil Aliquot	: Volume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74-83-9		5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4		5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-1		3	BJ
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	U
156-60-5		5	U
75-34-3		5	U
156-59-2		5	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	1	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	0.4	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	0.4	U
79-00-5		1	U
127-18-4		5	U
591-78-6	2-Hexanone	5	U
124-48-1		5	U
106-93-4		1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-11A

Lab Name: H2M LABS INC	Contra	et:	
Lab Code: <u>H2M</u> Ca	se No.: <u>TOS</u> SAS	No.:	SDG No.: TOS012
Matrix: (soil/water)	WATER	Lab Sample ID:	1304A27-004A
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	3\F60388.D
Level: (low/med) LC	W	Date Received:	04/17/13
% Moisture: not dec.		Date Analyzed:	04/18/13
GC Column: DB-624	ID: 0.18 (mm)	Dilution Factor:	1.00
Soil Extract Volume:	(µL)	Soil Aliquot Volu	me (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

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-				,			NALYSIS DATA TIFIED COMPOU			MW-11A		
i in s	Lab Nam	ne:	H2M LABS	INC			Contra	ct:				
	Lab Coo	le:	H2M		Case No.	: <u>TOS</u>	SAS No.:		SDG N	io.: <u>Tos</u>	3012	
	Matrix	: (soil	l/water)		WATER			Lab Samp]	le ID:	1304A27	7-004A	
	Sample	wt/vo]	1: <u>5</u>			(g/mL)	ML	Lab File	ID:	3\F6038	38.D	
-	Level:	(10)	w/med)	LOW				Date Rece	eived:	04/17/1	13	
	% Moist	ture: 1	not dec.					Date Ana	lyzed:	04/18/2	13	
<b>Vitin</b>	GC Colu	umn: I	DB-624		ID: <u>0.18</u>	(mm)		Dilution	Factor:	1.00		
	Soil Ex	xtract	Volume:			(µl)		Soil Alio	quot Volum	ie:	<u>0</u>	(µL)
							CONCEN	TRATION UN	ITS:			
	Number	TICs :	found:		0		(µg/L	or µg/Kg)		UG/L		_
		c	AS NUMBER			COMPOUND	NAME	RT	EST.C	CONC.	Q	

### EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

 MW-11B

 Lab Name:
 <u>H2M LABS INC</u>
 Contract:

 Lab Code:
 <u>H2M</u>
 Case No.:
 TOS
 SAS No.:
 SDG No.:
 TOS012

 Matrix:
 (soil/water)
 <u>WATER</u>
 Lab Sample ID:
 <u>1304A27-005A</u>

 Sample wt/vol:
 <u>5</u>
 (g/mL) <u>ML</u>
 Lab File ID:
 <u>3\F60389.D</u>

 Level:
 (low/med)
 LOW
 Date Received:
 04/17/13

 % Moisture: not dec.
 Date Analyzed:
 04/18/13

 GC Column:
 DB-624
 ID: 0.18 (mm)
 Dilution Factor:
 1.00

 Soil Extract Volume:
 (µL)
 Soil Aliquot Volume
 (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74-83-9	Bromomethane	5	U
75-00-1	Chloroethane	5	U
107-13-3	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-3	Acetone	5	U
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	U
156-60-9	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
74-97-9	Bromochloromethane	5	U
67-66-1	Chloroform	2	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	1	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-9	cis-1,3-Dichloropropene	0.4	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	0.4	U
79-00-5		1	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	1	U

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### VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-11B

Lab Name:	H2M LABS I	NC		Contrad	st:			
Lab Code:	<u>H2M</u>	Case No.:	TOS	SAS	No.:		SDG No.:	05012
Matrix: (so	il/water)	WATER			Lab :	Sample ID:	1304A27-00	<u>5A</u>
Sample wt/v	701: <u>5</u>	(g/mL)	ML		Lab	File ID:	<u>3\F60389.D</u>	
Level: (1	.ow/med)	LOW			Date	Received:	04/17/13	
% Moisture:	not dec.				Date	Analyzed:	04/18/13	
GC Column:	DB-624	ID:	<u>0.18</u>	(mm)	Dilu	tion Factor:	1.00	
Soil Extrac	t Volume:		(µL)		Soil	Aliquot Volu	me	(µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

TOS012/012F S83

-						1F					EPA SAM	IPLE NO	-
	VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS									MW-11B			
	Lab Nam	no.	H2M LABS	TNC	IENIAII	VEDI IDENI		tract		l			
	Bab Hat			1110			com	cruct					
	Lab Coo	le:	H2M		Case No.	: <u>TOS</u>	SAS No	.: _		SDG N	o.: <u>TOS</u>	3012	
	Matrix	: (soi]	l/water)		WATER				Lab Sample	e ID:	1304A2	7-005A	
	Sample	wt/vol	l: <u>5</u>			(g/mL)	ML		Lab File	ID:	<u>3\F6038</u>	39.D	
	Level:	(10)	w/med)	LOW					Date Rece	ived:	04/17/2	13	
	% Moist	ture: 1	not dec.						Date Anal	yzed:	04/18/2	13	
in a	GC Colu	ב : מחוג	DB~624		ID: <u>0.18</u>	(mm)			Dilution	Factor:	1.00		
	Soil Ex	xtract	Volume:			(µl)			Soil Aliq	uot Volum	e:	<u>0</u>	(µL)
isinin	CONCENTRATION UNITS:						TS:						
	Number	TICs	found:		0		(μg	/L or	c μg/Kg)		UG/L		1
ijen		C	AS NUMBER			COMPOUND	NAME		RT	EST.C	CONC.	Q	

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-12A

Lab Name:	H2M LABS I	NC	Contract:	
Lab Code:	<u>H2M</u>	Case No.: TOS	SAS No.:	SDG No.: TOSO12
Matrix: (so	oil/water)	WATER	Lab Sample ID:	1304A27-006A
Sample wt/w	vol: <u>5</u>	(g/mL) ML	Lab File ID:	3\F60390.D
Level: ()	low/med)	LOW	Date Received:	04/17/13
<pre>% Moisture:</pre>	: not dec.		Date Analyzed:	04/18/13
GC Column:	DB-624	ID: 0.18	(mm) Dilution Factor:	1.00
Soil Extrac	ct Volume:	(µL)	Soil Aliquot Vol	ume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	1	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	0.4	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	0.4	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	1	U

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### VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-12A

Lab Name:	H2M LABS I	NC	Cont	ract:	
Lab Code:	H2M	Case No.:	tos si	AS No.:	SDG No.: TOS012
Matrix: (so	oil/water)	WATER		Lab Sample ID:	1304A27-006A
Sample wt/v	vol: <u>5</u>	(g/mL)	ML	Lab File ID:	3\F60390.D
Level: ()	Low/med)	LOW		Date Received:	04/17/13
% Moisture:	not dec.			Date Analyzed:	04/18/13
GC Column:	DB-624	ID:	<u>0.18</u> (mm)	Dilution Factor:	1.00
Soil Extra	ct Volume:		(pL)	Soil Aliquot Vol	ume (pL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

						1F					EPA SAM	IPLE NO	).
				v		ORGANICS AN VELY IDENT					MW-12A		
Ann	Lab Nat	ne:	H2M LABS	INC				Contract	t:				
	Lab Coo	de:	H2M		Case No.	: TOS	SA	AS No.:		SDG N	o.: <u>TOS</u>	3012	
	Matrix	: (soi)	l/water)		WATER				Lab Sampl	e ID:	1304A27	7-006A	
	Sample	wt/vo	l: <u>5</u>			(g/mL)	ML		Lab File	ID:	<u>3\F6039</u>	90.D	
Nation	Level:	(10)	w/med)	LOW					Date Rece	ived:	04/17/2	13	
	% Moist	ture: 1	not dec.						Date Anal	yzed:	04/18/2	13	
iiim	GC Colu	umn: I	DB-624		ID: <u>0.18</u>	(mm)			Dilution	Factor:	1.00		
	Soil Ex	xtract	Volume:			(µl)			Soil Aliq	uot Volum	e:	<u>0</u>	(µL)
-								CONCENT	RATION UNI	TS:			
	Number	TICs	found:		0			(µg/L 0	r μg/Kg)		UG/L		7
		С	AS NUMBER			COMPOUND	NAME		RT	EST.C	CONC.	Q	

EPA SAMPLE NO.

VOLATILE	ORGANICS	ANALYSIS	DATA	SHEET
	0110121200			Q

MW-12B

Lab Name:	H2M LABS IN	4C	Cor	ntract:	
Lab Code:	<u>H2M</u>	Case No.:	TOS	SAS No.:	SDG No.: TOSO12
Matrix: (so	il/water)	WATER		Lab Sample ID:	1304A27-007A
Sample wt/v	ro1: <u>5</u>	(g/mL)	ML	Lab File ID:	3\F60391.D
Level: (1	.ow/med)	TOM		Date Received:	04/17/13
<pre>% Moisture:</pre>	not dec.			Date Analyzed:	04/18/13
GC Column:	DB-624	ID:	<u>0.18</u> (mm	a) Dilution Factor:	1.00
Soil Extrac	t Volume:		(µL)	Soil Aliquot Volum	ne (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-1	Acetone	5	U
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	υ
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	1	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	0.4	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	0.4	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
	1,2-Dibromoethane	1	U

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1B

### VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-12B

Lab Name:	H2M LABS IN	<u>1C</u>	Contra	et:	
Lab Code:	<u>H2M</u>	Case No.:	tos sas	No.:	SDG No.: TOS012
Matrix: (so	oil/water)	WATER		Lab Sample ID:	1304A27-007A
Sample wt/v	vol: <u>5</u>	(g/mL)	ML	Lab File ID:	3\F60391.D
Level: (1	low/med)	LOW		Date Received:	04/17/13
<pre>% Moisture:</pre>	not dec.			Date Analyzed:	04/18/13
GC Column:	DB-624	ID:	<u>0.18</u> (mm)	Dilution Factor:	1.00
Soil Extrac	ct Volume:		(µL)	Soil Aliquot Volu	me (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) UG/L	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

					1F					EPA SAN	MPLE NO	).
-						NALYSIS DAT				MW-12B		
	Lab Nam	ne: <u>H2M LAB</u>	S INC			Cont						
	Lab Cod	le: <u>H2M</u>		Case No.	: <u>TOS</u>	SAS No.	:		SDG N	o.: <u>TO</u>	5012	
	Matrix	(soil/water)		WATER			:	Lab Sample	e ID:	1304A2	7-007A	
	Sample	wt/vol: 5			(g/mL)	ML	:	Lab File	ID:	3\F603	91.D	
iterit.	Level:	(low/med)	LOW				]	Date Rece	ived:	04/17/	13	
	% Moist	ure: not dec.					1	Date Anal	yzed:	04/18/	13	
	GC Colu	1mn: DB-624		ID: 0.18	(mm)		1	Dilution	Factor:	1.00		
	Soil Ex	ctract Volume:			(µl)			Soil Aliq	uot Volum	e:	<u>0</u>	(µL)
<u>iiine</u>						CONC	ENTR	ATION UNI	TS :			
	Number	TICs found:		0		(µg/	'L or	µg/Kg)		UG/L		_
i		CAS NUMBE	R		COMPOUND	NAME		RT	EST.C	CONC.	Q	

1A

### VOLATILE ORGANICS ANALYSIS DATA SHEET

FB002

Lab Name:	H2M LABS IN	NC	Cont	:ract:	
Lab Code:	<u>H2M</u>	Case No.:	<u>tos</u> s	AS No.:	SDG No.: TOS012
Matrix: (so	oil/water)	WATER		Lab Sample ID:	1304A27-008A
Sample wt/v	rol: <u>5</u>	(g/mL)	ML	Lab File ID:	3\F60396.D
Level: (1	.ow/med)	LOW		Date Received:	04/17/13
<pre>% Moisture:</pre>	not dec.			Date Analyzed:	04/18/13
GC Column:	DB-624	ID:	<u>0.18</u> (mm)	Dilution Factor:	1.00
Soil Extrac	t Volume:		(µL)	Soil Aliquot Volu	ume (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-1	Acetone	1	BJ
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1 · + +	1	U
74-95-3	Dibromomethane	5	U
75-27-4		5	U
10061-01-5	cis-1,3-Dichloropropene	0.4	U
108-10-1		5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	0.4	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	1	U

### 1B

### VOLATILE ORGANICS ANALYSIS DATA SHEET

FB002

Lab Name: <u>H2M LABS IN</u>	NC Cont	ract:	
Lab Code: <u>H2M</u>	Case No.: TOS S	AS No.:	SDG No.: TOS012
Matrix: (soil/water)	WATER	Lab Sample ID:	1304A27-008A
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	3\F60396.D
Level: (low/med)	LOW	Date Received:	04/17/13
% Moisture: not dec.		Date Analyzed:	04/18/13
GC Column: DB-624	ID: <u>0.18</u> (mm)	Dilution Factor:	1.00
Soil Extract Volume:	(µL)	Soil Aliquot Vol	Lume (µL)

### CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	υ
100-41-4	Ethylbenzene	5	υ
630-20-6	1,1,1,2-Tetrachloroethane	5	υ
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

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-				7	VOLATILE C						FB002		
					IENIALL	VELY IDENI	TLLE	J COMPOUN	DS				
ومورد	Lab Nat	ne:	H2M LABS	INC				Contrac	t:				
	Lab Cod	de:	<u>H2M</u>		Case No.	: <u>TOS</u>	S	AS No.:		SDG N	Io.: <u>TOS</u>	5012	
<u> İdene</u> r	Matrix	: (soil	l/water)		WATER				Lab Sampl	e ID:	1304A2	7-008A	
	Sample	wt/vol	l: <u>5</u>			(g/mL)	ML		Lab File	ID:	3\F6039	96.D	
ine.	Level:	(lov	w/med)	LOW					Date Rece	vived:	04/17/2	13	
	% Moist	ture: 1	not dec.						Date Anal	yzed:	04/18/3	13	
-	GC Colu	umn: <u>I</u>	DB-624		ID: <u>0.18</u>	(mm)			Dilution	Factor:	1.00		
	Soil E	xtract	Volume:			(µl)			Soil Alig	uot Volum	ne:	<u>0</u>	(µL)
4000								CONCENT	RATION UNI	(TS:			
	Number	TICs i	found:		0			(µg/L c	or µg/Kg)		UG/L		
-		C	AS NUMBER			COMPOUND	NAME		RT	EST.C	CONC.	Q	

VOLATILE	ORGANICS	ANALYSIS	DATA	SHEET

TRIP BLANK

Lab Name:	H2M LABS IN	1C	Contrac	st:	
Lab Code:	H2M	Case No.: <u>T</u>	SAS SAS	No.:	SDG No.: TOS012
Matrix: (so	il/water)	WATER		Lab Sample ID:	1304A27-009A
Sample wt/v	rol: <u>5</u>	(g/mL)	ML	Lab File ID:	3\F60397.D
Level: (1	low/med)	LOW		Date Received:	04/17/13
% Moisture:	not dec.			Date Analyzed:	04/18/13
GC Column:	DB-624	ID:	0.18 (mm)	Dilution Factor:	1.00
Soil Extrac	ct Volume:		(µL)	Soil Aliquot Volu	me (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	2	U
74-83-9		5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-1	Acetone	2	BJ
75- <b>1</b> 5-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	1	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	1	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	0.4	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	0.4	U
79-00-5	1,1,2-Trichloroethane	1	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	5	U
124-48-1	Dibromochloromethane	5	U
106-93-4	1,2-Dibromoethane	1	U

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### VOLATILE ORGANICS ANALYSIS DATA SHEET

TRIP BLANK

Lab Name: <u>H2M LABS</u>	INC	Contract:	
Lab Code: <u>H2M</u>	Case No.: TOS	SAS No.:	SDG No.: TOS012
Matrix: (soil/water)	WATER	Lab Sample ID:	1304A27-009A
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	3\F60397.D
Level: (low/med)	LOW	Date Received:	04/17/13
% Moisture: not dec.		Date Analyzed:	04/18/13
GC Column: DB-624	ID: 0.18	(mm) Dilution Factor:	1.00
Soil Extract Volume:	(µL)	) Soil Aliquot Volu	me (µL)

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

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i digana	Lab Nat	ne:	H2M LABS	INC				Contrac	t:				
	Lab Co	de:	<u>H2M</u>		Case No.	.:. <u>TOS</u>	SAS	5 No.: _		SDG N	0.: <u>TO</u>	3012	
Ana	Matrix	: (soi)	l/water)		WATER				Lab Sampl	e ID:	1304A2	7-009A	
	Sample	wt/vo:	1: <u>5</u>			(g/mL)	ML		Lab File	ID:	<u>3\F603</u>	97.D	
ilian	Level:	(10)	w/med)	LOW					Date Rece	ived:	<u>04/17/3</u>	13	
	% Moist	ture: 1	not dec.						Date Anal	yzed:	04/18/2	13	
ingen so	GC Colu	<u>ו</u> מאנ	DB-624		ID: <u>0.18</u>	(mm)			Dilution	Factor:	1.00		
	Soil Ex	xtract	Volume:			(µl)			Soil Aliq	uot Volum	e:	<u>0</u>	(µL)
Maria								CONCENT	RATION UNI	TS:			
	Number	TICs i	found:		0			(µg/L o	r µg/Kg)		UG/L		_
(danta)		C	AS NUMBER			COMPOUND	NAME		RT	EST.C	ONC.	Q	



labs

575 Broad Hollow Road Melville, NY 11747 tel 631.694.3040 fax 631.420.8436

## 4.2 TOTAL METALS

## - H2M LABS, INC.

### QUALIFIERS FOR METALS ANALYSIS

- Q (Quality Control) Qualifiers
- E Serial dilution is not within acceptance criteria or the reported value is
   estimated because of the presence of interference. An explanatory note is included in the SDG narrative.
- N Matrix spike sample recovery not within control limits.
  - \* Duplicate analysis is not within control limits.
- C (Concentration) Qualifiers
- B Entered if the reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL).
- U Entered if the analyte was analyzed for but not detected, i.e., less than the IDL.
- M (Method) Qualifiers
  - P Analyzed by ICP.
  - MS Analyzed by ICP-MS
  - CV Analyzed by Manual Cold Vapor techniques.
  - AV Analyzed by Automated Cold Vapor techniques.
  - C Analyzed by Manual Spectrophotometric Method.
  - CA- Analyzed by Midi-distillation Spectrophotometric Method.
    - NR Analyte not Required.

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U.S. EFA - CLE	U.	s.	EPA	-	CLP
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1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

Lab Name: H2M LABS INC

SAS No.:

SDG No.: TOS012

Lab Sample ID: 1304917-001

Date Received: 4/16/2013

Matrix (soil/water): <u>WATER</u>

Level (low/med): LOW

% Solids:

Lab Code: H2M

### Concentration Units (ug/L or mg/kg dry weight): UG/L

Case No.

0.0

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	16.0	в		P
7440-36-0	Antimony	2.1	В		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	27.7	В		P
7440-41-7	Beryllium	0.20	В		P
7440-42-8	Boron	16.4	В	N	P
7440-43-9	Cadmium	0.20	В		P
7440-70-2	Calcium	12600			P
7440-47-3	Chromium	3.4	В		P
7440-48-4	Cobalt	0.40	U		P
7440-50-8	Copper	3.0	В		P
57-12-5	Cyanide	10.0	U		CA
7439-89-6	Iron	25.6	В		P
7439-92-1	Lead	9.1			P
7439-95-4	Magnesium	5830			P
7439-96-5	Manganese	42.4			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	4.5	В		P
7440-09-7	Potassium	975	В	E	P
7782-49-2	Selenium	2.3	U	N	P
7440-22-4	Silver	0.20	U		P
7440-23-5	Sodium	13600			P
7440-28-0	Thallium	1.9	U		P
7440-62-2	Vanadium	0.50	В		P
7440-66-6	Zinc	5.6	B		P

Color Before: COLORLESS Clarity Before:CLOUDYTexture:Color After:COLORLESS Clarity After:CLEARArtifacts:

Comments:

Date Reported 5/2/2013

			U.S. EPA	- (	CLP				
-			1						EPA SAMPLE NO
		1N	ORGANIC ANALYSI	S	DATA SHI	SET			LEA-PRIMARY
Lab Name:	H2M LABS	INC							
Lab Code:	<u>H2M</u>	Case No.	SAS	5 N	o.:		5	SDG	No.: <u>TOS012</u>
Matrix (so	<pre>pil/water):</pre>	WATER			Lab Sar	nple	ID:	<u>13</u>	04917-002
Level (low	v/med):	LOW			Date Re	ecei	ved:	4/	16/2013
<pre>% Solids:</pre>		0.0							
	Concentra	tion Units	(ug/L or mg/kg	dr	y weight	t):	UG/L		
	CAS No.	Analyte	Concentration	С	Q	М			
	7440-38-2	Arsenic	2.8	U		Р			
	7440-43-9	Cadmium	0.10	U		Р			
	7440-70-2	Calcium	71600			Р			
	7439-89-6	Iron	13600			Р			
_	7439-92-1	Lead	5.8			Р			
-	7439-95-4	Magnesium	21400			Р			
	7439-96-5	Manganese	2060			Р			
	7440-09-7	Potassium	86100		E	Р			
<b>.</b>	7440-23-5	Sodium	186000			Р			
Color Befo	ore: COLORL	ESS_Clarity	Before: CLEA	R		,	Textu	re:	
Color Afte	er: COLORL	ESS Clarity	After: CLEA	R	_	i	Artifa	acts	5:
-									

Comments: Date Reported 5/2/2013

		IN	1 ORGANIC ANALYSI	S	DATA SH	EET			ſ	SAMPLE
Lab Name:	H2M LABS	INC							LEA	A-SECONDAF
Lab Code:	<u>H2M</u>	Case No.	SA	S N	10.:			SDG	No.:	TOS012
Matrix (sc	<pre>&gt;il/water):</pre>	WATER			Lab Sa	mple	ID:	13	04917-	-003
Level (low	/med):	LOW			Date R	lecei	ved:	4/	16/201	13
% Solids:		0.0								
	Concentra	tion Units	(ug/L or mg/kg	dr	y weigh	t):	UG/	L		
	CAS No.	Analyte	Concentration	С	Q	м				
	7440-38-2	Arsenic	3.5	в		P				
	7440-43-9		0.10			P				
	7440-70-2	Calcium	68800			P	1			
	7439-89-6	Iron	14200			P				
	7439-92-1	Lead	3.3			P				
	7439-95-4	Magnesium	8080			Р	1			
	7439-96-5	Manganese	5710			Р				
	7440-09-7	Potassium	13400		E	Р				
	7440-23-5	Sodium	17600			Р				
							]			
Color Befo	ore: COLORL	ESS_Clarity	Before: CLEA	R			Textu	ire:		
Color Afte	er: COLORL	ESS_Clarity	After: CLEA	R			Artif	acts	s: _	

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Lab N

- Lab (
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- Leve
- 8 So.

Comments:

Date Reported 5/2/2013

TOS012/012F S101

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1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO MW-3A

Lab Name: H2M LABS INC

SAS No.: SDG No.: TOS012

Lab Sample ID: <u>1304917-004</u>

Date Received: 4/16/2013

Lab Code: <u>H2M</u> Case No.

0.0

- Matrix (soil/water): <u>WATER</u>
- Level (low/med): LOW
- % Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum	10.8	В		E
7440-36-0	Antimony	1.2			E
7440-38-2	Arsenic	2.8	U		E
7440-39-3	Barium	38.2	В		I
7440-41-7	Beryllium	0.10	U		E
7440-42-8	Boron	25.7	В	N	I
7440-43-9	Cadmium	0.10	U		I
7440-70-2	Calcium	18000			I
7440-47-3	Chromium	104			I
7440-48-4	Cobalt	1.3	В		I
7440-50-8	Copper	5.9	В		J
57-12-5	Cyanide	10.0	U		C
7439-89-6	Iron	441			1
7439-92-1	Lead	3.3			]
7439-95-4	Magnesium	4100	В		I
7439-96-5	Manganese	86.6			1
7439-97-6	Mercury	0.10	U		C
7440-02-0	Nickel	40.8			J
7440-09-7	Potassium	2720	В	E	J
7782-49-2	Selenium	2.3	U	N	] ]
7440-22-4	Silver	0.20	U		1
7440-23-5	Sodium	16900			
7440-28-0	Thallium	1.9	U		1
7440-62-2	Vanadium	0.30	U		] ]
7440-66-6	Zinc	8.0	В		

 Color	Before	COLORLESS	Clarity	Before:	CLEAR	Texture:	
Color	After:	COLORLESS	Clarity	After:	CLEAR	Artifacts:	

Comments:

Date Reported 5/2/2013

1 • INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO MW-3B

Lab Name: H2M LABS INC

Lab Sample ID: <u>1304917-005</u>

Date Received: 4/16/2013

Lab Code: <u>H2M</u> Case No. SAS No.: SDG No.: <u>TOS012</u>

Matrix (soil/water): WATER

0.0

Level (low/med): LOW

% Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	1
7429-90-5	Aluminum	12.3	В		T I
7440-36-0	Antimony	1.2	U		
7440-38-2	Arsenic	12.5			1
7440-39-3	Barium	29.1	В		1
7440-41-7	Beryllium	. 0.10	U		1
7440-42-8	Boron	40.2	В	N	
7440-43-9	Cadmium	0.10	U		1
7440-70-2	Calcium	9030			]
7440-47-3	Chromium	3.5	В		
7440-48-4	Cobalt	4.7	В		1
7440-50-8	Copper	1.1	В		
57-12-5	Cyanide	10.0	U		C
7439-89-6	Iron	12100			
7439-92-1	Lead	2.9	В		1
7439-95-4	Magnesium	2960	В		
7439-96-5	Manganese	3400			
7439-97-6	Mercury	0.10	U		C
7440-02-0	Nickel	2.2	B		]
7440-09-7	Potassium	3720	В	E	
7782-49-2	Selenium	2.3	U	N	]
7440-22-4	Silver	0.20	U		
7440-23-5	Sodium	9980			1
7440-28-0	Thallium	1.9	U		1
7440-62-2	Vanadium	0.30	U		
7440-66-6	Zinc	11.5	в		

Color Bef	re: COLORLESS	_ Clarity	Before:	CLEAR	Texture:	
Color Afte	er: COLORLESS	Clarity	After:	CLEAR	Artifacts:	

Comments:

Date Reported 5/2/2013

FORM I - IN

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO MW-3C

Lab Name: H2M LABS INC

SDG No.: TOS012

Lab Code: <u>H2M</u> Case No.

0.0

Matrix (soil/water): <u>WATER</u>

Level (low/med): LOW

% Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum	9.5	U		P
7440-36-0	Antimony	3.6	В		P
7440-38-2		2.8	U		P
7440-39-3	Barium	24.8	В		E
7440-41-7	Beryllium	0.10	U		E
7440-42-8	Boron	17.5	В	N	E
7440-43-9	Cadmium	0.10	U		E
7440-70-2	Calcium	12000			I
7440-47-3	Chromium	2.9	В		E
7440-48-4	Cobalt	0.40	U		E
7440-50-8	Copper	0.40	U		I
57-12-5	Cyanide	10.0	U		C
7439-89-6	Iron	18.5	В		I
7439-92-1	Lead	8.4			I
7439-95-4	Magnesium	5660			E
7439-96-5	Manganese	40.6			H
7439-97-6	Mercury	0.10	U		C
7440-02-0	Nickel	4.4	В		I
7440-09-7	Potassium	1030	В	E	I
7782-49-2	Selenium	2.3	U	N	I
7440-22-4	Silver	0.20	U		I
7440-23-5	Sodium	13200			H
7440-28-0	Thallium	1.9			I
7440-62-2	Vanadium	0.40	В		I
7440-66-6	Zinc	7.6	В		1

 Color Before: COLORLESS
 Clarity Before:
 CLEAR
 Texture:

 Color After:
 COLORLESS
 Clarity After:
 CLEAR
 Artifacts:

Comments:

Date Reported 5/2/2013

SAS No.:

Lab Sample ID: <u>1304917-006</u>

Date Received: <u>4/16/2013</u>

1 INORGANIC SHEET EPA SAMPLE NO

MW-4A

Lab Name: H2M LABS INC

SDG No.: TOS012

Case No. Lab Code: H2M

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	243			P
7440-36-0	Antimony	1.2	U		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	206			P
7440-41-7	Beryllium	0.20	В		P
7440-42-8	Boron	21.2	В	N	P
7440-43-9	Cadmium	0.30	В		Р
7440-70-2	Calcium	13900			P
7440-47-3	Chromium	4.6	В		P
7440-48-4	Cobalt	0.40	U		P
7440-50-8	Copper	0.40	U		P
57-12-5	Cyanide	10.0	U		CA
7439-89-6	Iron	63.1	В		Р
7439-92-1	Lead	6.3			P
7439-95-4	Magnesium	4570	В		P
7439-96-5	Manganese	133			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	5.6	В		Р
7440-09-7	Potassium	4360	В	E	P
7782-49-2	Selenium	2.3	U	N	P
7440-22-4	Silver	0.20	U		P
7440-23-5	Sodium	18300			P
7440-28-0	Thallium	1.9	U		P
7440-62-2	Vanadium	0.30	U		P
7440-66-6	Zinc	12.5	в		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: Color After: COLORLESS Clarity After: Artifacts: CLEAR

Comments:

Date Reported 5/2/2013

ANALYSIS	DATA

SAS No.:

Lab Sample ID: 1304917-007

Date Received: 4/16/2013

0.0

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1 INORGANIC ANALYSIS DATA SHEET

SAS No.:

EPA SAMPLE NO

Lab Name: H2M LABS INC

Lab Code: H2M

SDG No.: TOS012

Lab Sample ID: 1304917-008

Date Received: 4/16/2013

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L

Case No.

0.0

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	9.5	U		P
7440-36-0	Antimony	1.2	U		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	66.2	В		Р
7440-41-7	Beryllium	0.10	U		P
7440-42-8	Boron	76.1	В	N	P
7440-43-9	Cadmium	0.10	U		Р
7440-70-2	Calcium	21400			P
7440-47-3	Chromium	3.0	В		P
7440-48-4	Cobalt	2.9	В		P
7440-50-8	Copper	0.40	U		P
57-12-5	Cyanide	10.0	U		CP
7439-89-6	Iron	4100			P
7439-92-1	Lead	7.0			P
7439-95-4	Magnesium	11200			Р
7439-96-5	Manganese	815			Р
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	5.7	В		P
7440-09-7	Potassium	4830	В	E	P
7782-49-2	Selenium	3.1	В	N	Р
7440-22-4	Silver	0.20	U		P
7440-23-5	Sodium	21300			P
7440-28-0	Thallium	1.9	U		P
7440-62-2	Vanadium	0.30			Р
7440-66-6	Zinc	7.3	В		P

Color Before: COLORLESS Clarity Before: CLEAR TO Color After: COLORLESS Clarity After: CLEAR A

Comments:

Date Reported 5/2/2013

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U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

SAS No.:

EPA SAMPLE NO MW-4C

Lab Name: H2M LABS INC

SDG No.: TOS012

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids:

Lab Code: H2M

Concentration Units (ug/L or mg/kg dry weight): UG/L

Case No.

0.0

CAS No.	Analyte	Concentration	С	Q	1
7429-90-5	Aluminum	12.6	в		E
7440-36-0	Antimony	1.2	U		I
7440-38-2	Arsenic	2.8	U		I
7440-39-3	Barium	39.1	B		I
7440-41-7	Beryllium	0.10	U		I
7440-42-8	Boron	10.8	В	N	I
7440-43-9	Cadmium	0.10	U		1
7440-70-2	Calcium	23200			1
7440-47-3	Chromium	187			1
7440-48-4	Cobalt	5.0	В		1
7440-50-8	Copper	4.3	В		1
57-12-5	Cyanide	10.0	U		C
7439-89-6	Iron	770			]
7439-92-1	Lead	8.0			
7439-95-4	Magnesium	10600			1
7439-96-5	Manganese	38.1			
7439-97-6	Mercury	0.10	U		C
7440-02-0	Nickel	344			1
7440-09-7	Potassium	1330	В	E	1
7782-49-2	Selenium	2.3	U	N	1
7440-22-4	Silver	0.20	U		
7440-23-5	Sodium	24900			1
7440-28-0	Thallium	1.9	U		1
7440-62-2	Vanadium	0.30	U		1
7440-66-6	Zinc	12.9	1 5		

 Color Before: COLORLESS Clarity Before:
 CLEAR
 Texture:

 Color After:
 COLORLESS Clarity After:
 CLEAR
 Artifacts:

Comments:

Lab Sample ID: <u>1304917-009</u>

Date Received: 4/16/2013

EPA SAMPLE NO

Lab Name: <u>H2M LABS INC</u>

Lab Code: <u>H2M</u> Case No.

0.0

- Matrix (soil/water): <u>WATER</u>
  - Level (low/med): LOW
- % Solids:

#### Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	1
7429-90-5	Aluminum	9.7	В		1
7440-36-0	Antimony	1.2	U		
7440-38-2	Arsenic	2.8	U		
7440-39-3	Barium	3.7	U		1
7440-41-7	Beryllium	0.10	U		1
7440-42-8	Boron	4.0	В	N	1
7440-43-9	Cadmium	0.10	U		1
7440-70-2	Calcium	56.6	В		1
7440-47-3	Chromium	1.3	В		1
7440-48-4	Cobalt	0.40			1
7440-50-8	Copper	0.60	В		] ]
57-12-5	Cyanide	10.0	U		C
7439-89-6	Iron	3.0	В		] ]
7439-92-1	Lead	1.0	U		]
7439-95-4	Magnesium	16.9	U		1
7439-96-5	Manganese	0.40			1
7439-97-6	Mercury	0.10	U		C
7440-02-0	Nickel	0.70	В		1
7440-09-7	Potassium	84.4	В	E	
7782-49-2	Selenium	2.3	U	N	
7440-22-4	Silver	0.20	U		
7440-23-5	Sodium	67.0	U		
7440-28-0	Thallium	1.9			1
7440-62-2	Vanadium	0.30	U		
7440-66-6	Zinc	6.8	в		

ينسن	Color	Before:	COLORLESS	Clarity	Before:	CLEAR	Texture:	
	Color	After:	COLORLESS	Clarity	After:	CLEAR	Artifacts:	

Comments:	
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Date Reported 5/2/2013

TOS012/012F S108

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SAS No.: SDG No.: <u>TOS012</u>

Lab Sample ID: <u>1304917-010</u>

Date Received: 4/16/2013

U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

Lab Name: H2M LABS INC

SDG No.: TOS012

Lab Code: <u>H2M</u> Case No.

0.0

Matrix (soil/water): <u>WATER</u>

Level (low/med): LOW

% Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	12.9	В		P
7440-36-0	Antimony	1.2	U		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	5.8	В		P
7440-41-7	Beryllium	0.10	U		P
7440-42-8	Boron	24.8	В	N	P
7440-43-9	Cadmium	0.10	U		P
7440-70-2	Calcium	14100			P
7440-47-3	Chromium	1.6	В		P
7440-48-4	Cobalt	0.40	U		P
7440-50-8	Copper	0.40	U		P
57-12-5	Cyanide	10.0	U		C
7439-89-6	Iron	12.4	В		P
7439-92-1	Lead	4.5			E
7439-95-4	Magnesium	6280			F
7439-96-5	Manganese	2.3	В		F
7439-97-6	Mercury	0.10	U		C
7440-02-0	Nickel	1.2	В		F
7440-09-7	Potassium	4680	В	E	P
7782-49-2	Selenium	2.5	В	N	F
7440-22-4	Silver	0.20	U		F
7440-23-5	Sodium	7870			P
7440-28-0	Thallium	1.9	U		P
7440-62-2	Vanadium	0.30	U		F
7440-66-6	Zinc	8.4	В		P

 Color Before: COLORLESS Clarity Before:
 CLEAR
 Texture:

 Color After: COLORLESS Clarity After:
 CLEAR
 Artifacts:

Comments:

Date Reported 5/2/2013

SAS No.:

Lab Sample ID: 1304A27-001

Date Received: 4/17/2013

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1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-1B

Lab Name: <u>H2M LABS INC</u>

SAS No.:

SDG No.: TOS012

Lab Sample ID: <u>1304A27-002</u>

Date Received: <u>4/17/2013</u>

Matrix (soil/water): <u>WATER</u>

Lab Code: <u>H2M</u> Case No.

0.0

- Level (low/med): LOW
- 🗕 😵 Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	43.8	В		P
7440-36-0	Antimony	1.2	U		Р
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	9.8	В		P
7440-41-7	Beryllium	0.10	U		P
7440-42-8	Boron	12.9	В	N	P
7440-43-9	Cadmium	0.10	U		P
7440-70-2	Calcium	4310	В		P
7440-47-3	Chromium	13.1			P
7440-48-4	Cobalt	0.40	U		P
7440-50-8	Copper	5.3	В		P
57-12-5	Cyanide	10.0	U		C
7439-89-6	Iron	177			P
7439-92-1	Lead	5.2			F
7439-95-4	Magnesium	1950	В		E
7439-96-5	Manganese	4.1	В		P
7439-97-6	Mercury	0.10	U		C
7440-02-0	Nickel	9.5	В		P
7440-09-7	Potassium	613	В	E	F
7782-49-2	Selenium	2.3	U	N	P
7440-22-4	Silver	0.20	U		F
7440-23-5	Sodium	6280			P
7440-28-0	Thallium	1.9	U		E
7440-62-2	Vanadium	0.30	В		E
7440-66-6	Zinc	13.0	В		F

Color	Before	: COLORLESS	Clarity	Before:	CLEAR	Texture:	
Color	After:	COLORLESS	Clarity	After:	CLEAR	Artifacts:	

Comments:

Date Reported 5/2/2013

U.S. EPA - CLP

1 INORGANIC ANALYSIS DATA SHEET

SAS No.:

EPA SAMPLE NO MW-1C

Lab Name: H2M LABS INC

SDG No.: TOS012

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids:

Lab Code: H2M

Concentration Units (ug/L or mg/kg dry weight): UG/L

Case No.

0.0

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	17.3	В		P
7440-36-0	Antimony	1.2	U		F
7440-38-2	Arsenic	2.8	U		E
7440-39-3	Barium	9.0	В		E
7440-41-7	Beryllium	0.10	U		E
7440-42-8	Boron	12.8	В	N	E
7440-43-9	Cadmium	0.10	U		F
7440-70-2	Calcium	4490	В		E
7440-47-3	Chromium	3.7	В		E
7440-48-4	Cobalt	0.40	U		E
7440-50-8	Copper	1.3	В		I
57-12-5	Cyanide	10.0	U		C.
7439-89-6	Iron	68.4	В		E
7439-92-1	Lead	5.2			I
7439-95-4	Magnesium	2230	В		I
7439-96-5	Manganese	2.6	В		I
7439-97-6	Mercury	0.10	U		C
7440-02-0	Nickel	9.0	В		E
7440-09-7	Potassium	702	В	E	E
7782-49-2	Selenium	2.3	U	N	E
7440-22-4	Silver	0.20	U		I
7440-23-5	Sodium	7770			E
7440-28-0	Thallium	1.9	U		E
7440-62-2	Vanadium	0.40	В		E
7440-66-6	Zinc	9.2	В		F

Color Before: COLORLESS Clarity Before: CLEAR Texture: Color After: COLORLESS Clarity After: CLEAR

Artifacts:

Comments:

Date Reported 5/2/2013

Lab Sample ID: <u>1304A27-003</u> Date Received: 4/17/2013

FORM I - IN

EPA SAMPLE NO

Lab Name: H2M LABS INC

SAS No.:

SDG No.: TOS012

Lab Sample ID: <u>1304A27-004</u>

Date Received: 4/17/2013

Matrix (soil/water): <u>WATER</u>

Level (low/med): LOW

% Solids:

Lab Code: H2M

#### Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum	17.9	в		P
7440-36-0	Antimony	1.6	В		E
7440-38-2	Arsenic	4.4	В		E
7440-39-3	Barium	164	В		E
7440-41-7	Beryllium	0.10	U		E
7440-42-8	Boron	41.9	В	N	E
7440-43-9	Cadmium	0.10	U		E
7440-70-2	Calcium	42600			E
7440-47-3	Chromium	4.6			E
7440-48-4	Cobalt	10.7	В		E
7440-50-8	Copper	0.40	U		E
57-12-5	Cyanide	10.0	U		C
7439-89-6	Iron	22400			I
7439-92-1	Lead	4.9			I
7439-95-4	Magnesium	15800			I
7439-96-5	Manganese	2020			1
7439-97-6	Mercury	0.10	U		C
7440-02-0	Nickel	4.5	В		I
7440-09-7	Potassium	5050		E	I
7782-49-2	Selenium	2.3	U	N	1
7440-22-4	Silver	0.20	U		I
7440-23-5	Sodium	13900			]]
7440-28-0	Thallium	1.9	U		1
7440-62-2	Vanadium	0.30	U		I
7440-66-6	Zinc	10.3	В		

Case No.

0.0

 Color Before: COLORLESS Clarity Before: CLEAR
 Texture:

 Color After: COLORLESS Clarity After: CLEAR
 Artifacts:

Comments:

Date Reported 5/2/2013

SAS No.:

EPA SAMPLE NO

M₩-11B

Lab Name: H2M LABS INC

Lab Sample ID: <u>1304A27-005</u>

Date Received: 4/17/2013

SDG No.: TOS012

Lab Code: <u>H2M</u> Case No.

0.0

- Matrix (soil/water): <u>WATER</u>
- Level (low/med): LOW
  - % Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	2150			P
7440-36-0	Antimony	1.2	U		Р
7440-38-2	Arsenic	5.2	В		Р
7440-39-3	Barium	29.3	В		P
7440-41-7	Beryllium	0.10	U		Р
7440-42-8	Boron	15.1	В	N	P
7440-43-9	Cadmium	0.10	U		Р
7440-70-2	Calcium	14900			Р
7440-47-3	Chromium	31.3			Р
7440-48-4	Cobalt	1.4	В		P
7440-50-8	Copper	9.0	В		P
57-12-5	Cyanide	10.0	U		CA
7439-89-6	Iron	12700			Р
7439-92-1	Lead	25.4			P
7439-95-4	Magnesium	4490	В		P
7439-96-5	Manganese	273			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.1	В		P
7440-09-7	Potassium	2120	B	E	Р
7782-49-2	Selenium	2.3	U	N	P
7440-22-4	Silver	0.20	U		Р
7440-23-5	Sodium	7070			P
7440-28-0	Thallium	1.9	U		P
7440-62-2	Vanadium	6.0	В		P
7440-66-6	Zinc	29.3			Р

Color Before: COLORLESS Clarity Before: CLOUDY Color After: COLORLESS Clarity After: CLEAR Texture: \_\_\_\_\_\_Artifacts:

Comments:

Date Reported 5/2/2013

EPA SAMPLE NO

MW-12A

Lab Name: H2M LABS INC

SDG No.: TOS012

Lab Code: <u>H2M</u> Case No.

0.0

Matrix (soil/water): <u>WATER</u>

Level (low/med): LOW

Lab Sample ID: <u>1304A27-006</u> Date Received: <u>4/17/2013</u>

SAS No.:

% Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	90.0	В		P
7440-36-0	Antimony	1.2	U		P
7440-38-2	Arsenic	6.4	В		P
7440-39-3	Barium	46.5	В		P
7440-41-7	Beryllium	0.10	U		F
7440-42-8	Boron	47.9	В	N	P
7440-43-9	Cadmium	0.10	U		P
7440-70-2	Calcium	25100			E
7440-47-3	Chromium	6.3	В		E
7440-48-4	Cobalt	4.3	В		E
7440-50-8	Copper	2.5	В		E
57-12-5	Cyanide	10.0	U		C
7439-89-6	Iron	6780			F
7439-92-1	Lead	4.2			I
7439-95-4	Magnesium	6790			F
7439-96-5	Manganese	3720			E
7439-97-6	Mercury	0.10	U		C
7440-02-0	Nickel	10.5	В		E
7440-09-7	Potassium	6340		E	E
7782-49-2	Selenium	2.3	U	N	I
7440-22-4	Silver	0.22	В		F
7440-23-5	Sodium	9970			F
7440-28-0	Thallium	1.9	В		E
7440-62-2	Vanadium	3.3			E
7440-66-6	Zinc	17.2	В		F

 Color Before: COLORLESS Clarity Before: CLEAR
 Texture:

 Color After: COLORLESS Clarity After: CLEAR
 Artifacts:

Comments:

Date Reported 5/2/2013

EPA SAMPLE NO

MW-12B

Lab Name: H2M LABS INC

SAS No.:

SDG No.: TOS012

Lab Sample ID: 1304A27-007

Date Received: 4/17/2013

Matrix (soil/water): WATER

Case No.

0.0

Level (low/med): LOW

% Solids:

Lab Code: H2M

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	16.1	В		Р
7440-36-0	Antimony	1.8	В		Р
7440-38-2	Arsenic	2.8	U		Р
7440-39-3	Barium	97.7	В		Р
7440-41-7	Beryllium	0.10	U		Р
7440-42-8	Boron	74.3	В	N	P
7440-43-9	Cadmium	0.10	U		Р
7440-70-2	Calcium	25200			P
7440-47-3	Chromium	1.4	В		P
7440-48-4	Cobalt	0.40	U		Р
7440-50-8	Copper	1.6	В		P
57-12-5	Cyanide	10.0			CA
7439-89-6	Iron	27.4	В		P
7439-92-1	Lead	5.5			Р
7439-95-4	Magnesium	7030			Р
7439-96-5	Manganese	124			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	8.5	В		P
7440-09-7	Potassium	10000		E	P
7782-49-2	Selenium	2.3	U	N	Р
7440-22-4	Silver	0.23	В		P
7440-23-5	Sodium	11000			P
7440-28-0	Thallium	1.9	U		P
7440-62-2	Vanadium	1.2	В		Р
7440-66-6	Zinc	7.3	В		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: Color After: COLORLESS Clarity After: CLEAR

Artifacts:

Comments: Date Reported 5/2/2013

EPA SAMPLE NO

FB002

Lab Name: H2M LABS INC

Lab Code: H2M

SAS No.: SDO

Lab Sample ID: <u>1304A27-008</u>

Date Received: 4/17/2013

SDG No.: TOS012

Matrix (soil/water): <u>WATER</u>

Level (low/med): LOW

% Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L

Case No.

0.0

CAS No.	Analyte	Concentration	С	Q	1
7429-90-5	Aluminum	9.9	в		
7440-36-0	Antimony	1.2	U		
7440-38-2	Arsenic	2.8	U		1
7440-39-3	Barium	3.7	U		]
7440-41-7	Beryllium	0.10	U		
7440-42-8	Boron	3.8	В	N	1
7440-43-9	Cadmium	0.10	U		1
7440-70-2	Calcium	88.9	В		
7440-47-3	Chromium	1.0	В		
7440-48-4	Cobalt	0.40	U		
7440-50-8	Copper	0.50	В		
57-12-5	Cyanide	10.0	U		C
7439-89-6	Iron	8.4	В		1
7439-92-1	Lead	1.0	U		
7439-95-4	Magnesium	16.9	U		
7439-96-5	Manganese	0.70	В		
7439-97-6	Mercury	0.10	U		C
7440-02-0	Nickel	0.90	В		
7440-09-7	Potassium	135	В	Е	
7782-49-2	Selenium	2.3	U	N	
7440-22-4	Silver	0.20	U		
7440-23-5	Sodium	67.0	U		
7440-28-0	Thallium	1.9	U		
7440-62-2	Vanadium	0.30	U		
7440-66-6	Zinc	5.2	в		

 Color Before: COLORLESS Clarity Before: CLEAR
 Texture:

 Color After: COLORLESS Clarity After: CLEAR
 Artifacts:

Comments:

Date Reported 5/2/2013

TOS012/012F S116

ILM04.1



575 Broad Hollow Road Melville, NY 11747 tei 631.694.3040 fax 631.420.8436

### 4.3 FILTERED METALS

## H2M LABS, INC.

#### QUALIFIERS FOR METALS ANALYSIS

Q (Quality Control) Qualifiers

 E - Serial dilution is not within acceptance criteria or the reported value is estimated because of the presence of interference. An explanatory note is included in the SDG narrative.
 N - Matrix spike sample recovery not within control limits.
 \* Duplicate analysis is not within control limits.

 C (Concentration) Qualifiers

 B - Entered if the reported value is less than the Contract Required Detection limit (CRDL) but greater than the Instrument Detection Limit (IDL)

Limit (CRDL) but greater than the Instrument Detection Limit (IDL).

U - Entered if the analyte was analyzed for but not detected, i.e., less than the IDL.

#### M (Method) Qualifiers

- P Analyzed by ICP.
- MS Analyzed by ICP-MS
- CV Analyzed by Manual Cold Vapor techniques.
- AV Analyzed by Automated Cold Vapor techniques.
- C Analyzed by Manual Spectrophotometric Method.
- CA- Analyzed by Midi-distillation Spectrophotometric Method.
  - NR Analyte not Required.

-H HHE

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EPA SAMPLE NO

1 INORGANIC ANALYSIS DATA SHEET

MW-11A

Lab Name: H2M LABS INC

Matrix (soil/water): WATER

Lab Code: H2M

Level (low/med):

SAS No.:

SDG No.: TOS012F

Lab Sample ID: <u>1304A28-001</u>

Date Received: <u>4/17/2013</u>

% Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L

Case No.

LOW

0.0

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	30.8	в		P
7440-36-0	Antimony	1.3	В		P
7440-38-2	Arsenic	2.8	U		P
7440-39-3	Barium	141	В		P
7440-41-7	Beryllium	0.90	В		P
7440-42-8	Boron	50.8	В	N	P
7440-43-9	Cadmium	0.80	В		P
7440-70-2	Calcium	41200			P
7440-47-3	Chromium	3.3	В		P
7440-48-4	Cobalt	11.3	В		P
7440-50-8	Copper	1.6	В		Р
7439-89-6	Iron	4540			P
7439-92-1	Lead	6.4		,	P
7439-95-4	Magnesium	15000			P
7439-96-5	Manganese	1830			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0		5.6	В		Р
7440-09-7	Potassium	5100		E	P
7782-49-2	Selenium	2.3	U		Р
7440-22-4	Silver	0.45	В		P
7440-23-5	Sodium	12900			P
7440-28-0	Thallium	1.9	U		Р
7440-62-2	Vanadium	0.30	υ		P
7440-66-6	Zinc	12.9	В		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: Color After: COLORLESS Clarity After: CLEAR Artifacts:

С	omn	lei	nt	s	:

Date Reported 5/3/2013

SAS No.:

EPA SAMPLE NO

MW-11B

1 INORGANIC ANALYSIS DATA SHEET

Lab Name: H2M LABS INC

SDG	No.:	<u>TOS012F</u>

Lab Sample ID: <u>1304A28-002</u>

Date Received: 4/17/2013

Matrix (soil/water): WATER

Lab Code: <u>H2M</u> Case No.

0.0

- Level (low/med): LOW
  - % Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L

Aluminum Antimony Arsenic Barium Beryllium Boron Cadmium Calcium	9.5 10.9 2.8 9.6 0.10 19.2 0.20	B U B U		P P P P
Arsenic Barium Beryllium Boron Cadmium	2.8 9.6 0.10 19.2	U B U		P P
Barium Beryllium Boron Cadmium	9.6 0.10 19.2	B U		P
Beryllium Boron Cadmium	0.10	U		
Boron Cadmium	19.2			
Cadmium		В		P
	0.20		N	P
Calcium		В		P
	14200			P
Chromium	2.3	В		P
Cobalt	0.40	U		P
Copper	0.40	U		P
Iron	48.7	В		P
Lead	3.1			P
Agnesium	3800	В		P
	27.6			P
Aercury	0.10	U		CV
Nickel	4.6	В		P
Potassium	2050	В	Е	P
Selenium	15.3			P
Silver				P
Sodium	7420			P
Thallium	1.9	U		P
Vanadium	0.90	В		P
Zinc	9.1	в		P
	opper ron Aagnesium Aaganese Vercury Vickel otassium elenium Vallium Yanadium	opper         0.40           ron         48.7           read         3.1           lagnesium         3800           langanese         27.6           version         0.10           lickel         4.6           otassium         2050           elenium         15.3           ilver         0.20           odium         7420           hallium         1.9           'anadium         0.90	opper         0.40         U           ron         48.7         B           lagnesium         3800         B           lagnesium         3800         B           lagnesium         27.6         D           lercury         0.10         U           lickel         4.6         B           otassium         2050         B           elenium         15.3         D           dilver         0.20         U           odium         7420         D           hallium         1.9         U <td>opper         0.40         U           ron         48.7         B           wead         3.1         Image: Second Sec</td>	opper         0.40         U           ron         48.7         B           wead         3.1         Image: Second Sec

مغنية	Color	Before:	COLORLESS	Clarity	Before:	CLEAR	Texture:	
	Color	After:	COLORLESS	Clarity	After:	CLEAR	Artifacts:	

#### Comments:

Date Reported 5/3/2013

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-12A

Lab Name: <u>H2M LABS INC</u>

Lab Code: H2M

SAS No.: SDG

Lab Sample ID: <u>1304A28-003</u>

Date Received: 4/17/2013

SDG No.: TOS012F

Matrix (soil/water): <u>WATER</u>

Case No.

0.0

- Level (low/med): LOW
  - % Solids:

#### Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	21.4	В		P
7440-36-0	Antimony	1.2	U		P
7440-38-2		2.8	U		Р
7440-39-3	Barium	42.1	В		Р
7440-41-7	Beryllium	0.10	U		Р
7440-42-8	Boron	49.1	В	N	Р
7440-43-9	Cadmium	0.10	U		Р
7440-70-2	Calcium	25100			Р
7440-47-3	Chromium	1.8	В		P
7440-48-4	Cobalt	3.6			Р
7440-50-8	Copper	2.5			Р
7439-89-6	Iron	236			P
7439-92-1	Lead	5.6			P
7439-95-4	Magnesium	6730			Р
7439-96-5		3610			Р
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	6.6	В		P
7440-09-7	Potassium	6280		Е	Р
7782-49-2	Selenium	2.3	U		Р
7440-22-4	Silver	0.45			P
7440-23-5	Sodium	9700			Р
7440-28-0		1.9			Р
7440-62-2	Vanadium	0.30	υ		Р
7440-66-6	Zinc	10.4			P

Color Before: COLORLESS Clarity Before: CLEAR Texture:
 Color After: COLORLESS Clarity After: CLEAR Artifacts:

#### Comments:

Date Reported 5/3/2013



575 Broad Hollow Road Melville, NY 11747 tei 631.694.3040 fax 631.420.8436

#### 4.4 WET CHEMISTRY



575 Broad Hollow Rd. , Melville, NY 11747 TEL: (631) 694-3040 FAX: (631) 420-8436 NYSDOH ID#10478

#### LABORATORY RESULTS

Lab No. : 1304917-001

Client Sample ID: DUP001

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Town of Southampton

Waste Management Division Southampton, New York 11968

Attn To : **Christine Fetten** Collected : 4/15/2013 Received : 4/16/2013 9:50:00 AM

Collected By : PWG99

Sample	Information:
Type :	Groundwater

Origin:

Analytical Method:	SM2320B :					Analyst: HT
Parameter(s)	<u>Results</u>	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Alkalinity, Total (As CaCO3	i) 58.1	D	2	mg/L	04/17/2013 12:45 PM	Container-01 of
Analytical Method:	E300.0:	<b></b>				Analyst: bka
Parameter(s)	Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	04/23/2013 7:38 PM	Container-01 of
Chloride	12.9		1	mg/L	04/23/2013 7:38 PM	Container-01 o
Sulfate	< 5.00		1	mg/L	04/23/2013 7:38 PM	Container-01 o
Analytical Method:	SM52108 :	Prep Method:	SM5	210B	Prep Date: 4/17/2013 6:39:36 AM	Analyst: CN
Parameter(s)	<u>Results</u>	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Biochemical Oxygen Dema	nd < 2		1	mg/L	04/17/2013 9:10 AM	Container-01 o
NOTES:						
Blank depletion exceeds 0.		epletion of 0.	3 mg/L			
Analytical Method:	E410.4 :					Analyst: CN
Parameter(s)	Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Chemical Oxygen Demand	< 10		1	mg/L	04/23/2013 8:51 AM	Container-01 o
Analytical Method:	SM2120B : IOC					Analyst: EM
Parameter(s)	<u>Results</u>	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Color	< 5		1	units	04/17/2013 5:52 AM	Container-01 o
Analytical Method:	M3500-Cr D :					Analyst: EM
Parameter(s)	Results	<b>Qualifier</b>	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Chromium, Hexavalent	< 0.02		1	mg/L	04/17/2013 5:32 AM	Container-01 o
Analytical Method:	SM2340C :					Analyst: JA
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Hardness (As CaCO3)	52	D	2	mg/L	04/19/2013 10:40 AM	Container-01 o
Analytical Method:	SM4500-NH3 H :					Analyst: bka
Parameter(s)	Results	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	04/22/2013 11:53 AM	Container-01 o
Analytical Method:	E353.2 :					Analyst: MJL
<b>D</b>	D	OuellGas	0.0	11-14-	6 t ti	Container:
Parameter(s)	Results	Quanter	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container.

D.F. = Dilution Factor D = Results for Dilution H = Received/analyzed outside of analytical holding time

J = Estimated value - below calibration range s = Recovery exceeded control limits for this analyte

+ = ELAP / NELAC does not offer certification for this analyte c = Calibration acceptability criteria exceeded for this analyte

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Page 1 of 20

Date Repor

Qualifiers: E = Value above quantitation range B = Found in Blank

-	presumptive evidence of compound	•
e Reported :	5/3/2013	

r = Reporting limit > MDL and < LOQ



575 Broad Hollow Rd., Melville, NY 11747 TEL: (631) 694-3040 FAX: (631) 420-8436 NYSDOH ID#10478

#### LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

**Town of Southampton** 

Waste Management Division Southampton, New York 11968

**Christine Fetten** Attn To : Collected : 4/15/2013 Received : 4/16/2013 9:50:00 AM Sample Information: Type : Groundwater

Origin:

Collected By : PWG99					
Analytical Method:	E353.2 :				Analyst: MJL
Parameter(s)	<u>Results</u>	Qualifier D.F.	<u>Units</u>	Analyzed:	Container:
Nitrate as N	0.10	1	mg/L	04/17/2013 11:58 AM	Container-01 of 0
Analytical Method:	E420.1 :	Prep Method: E420	D.1	Prep Date: 4/22/2013 6:30:00 AM	Analyst: EM
Parameter(s)	Results	Qualifier D.F.	<u>Units</u>	Analyzed:	Container:
Phenolics, Total Recoverab	le < 5.0	1	µg/L	04/24/2013 8:02 AM	Container-01 of C
Analytical Method:	SM2540C : IOC				Analyst: MM
Parameter(s)	Results	Qualifier D.F.	<u>Units</u>	Analyzed:	Container:
Total Dissolved Solids	95	1	mg/L	04/18/2013 12:18 PM	Container-01 of 0
Analytical Method:	E351.2 :	Prep Method: E35	1.2	Prep Date: 4/23/2013 6:45:00 AM	Analyst: MJL
Parameter(s)	Results	Qualifier D.F.	<u>Units</u>	Analyzed:	Container.
Nitrogen, Kjeldahl, Total	< 0.10	1	mg/L	04/23/2013 2:21 PM	Container-01 of C
Analytical Method:	SW9060 :				Analyst: CO
Parameter(s)	Results	Qualifier D.F.	<u>Units</u>	Analyzed:	Container:
Total Organic Carbon	15.6	1	mg/L	04/25/2013 3:39 PM	Container-01 of

Lab No. : 1304917-001

Client Sample ID: DUP001

Qualifiers: E = Value above quantitation range

- B = Found in Blank
- D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

- r = Reporting limit > MDL and < LOQ
- J = Estimated value below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported :

5/3/2013

Joann M. Slavin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

H 2 labs M 575 Broad H TEL: (631) 6 NYSDOH ID	94-3040 FAX: (631	. NY 11747 ) 420-8436	The !	LABORATORY ults for the samples and ab is not directly responsible for b and is responsible only for the	analytes requested the integrity of the sample before receipt at	
Town of Southampton Waste Management Divisi Southampton, New York Attn To : Christine Fet Collected : 4/15/2013 8:55: Received : 4/16/2013 9:50: Collected By : PWG99	11968 Iten 00 AM	Clien		io. :1304917-002 le ID: LEA-PRIMARY	<u>Sample I</u> Type : Le Origin:	nformation: eachate
	M2320B :					Analyst: HT
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Alkalinity, Total (As CaCO3)	948	D	10	mg/L	04/17/2013 12:52 PM	Container-01 of 0
Analytical Method: E3	300.0 :					Analyst: bka
Parameter(s)	Results	Qualifier	<u>D.F,</u>	Units	Analyzed:	Container:
Bromide	0.91		1	mg/L	04/23/2013 8:33 PM	Container-01 of 0
Chloride	207	D	20	mg/L	04/23/2013 8:46 PM	Container-01 of 0
Sulfate	10.5		1	mg/L	04/23/2013 8:33 PM	Container-01 of 0
Analytical Method: SI	M5210B :	Prep Method:	SMS	5210B	Prep Date: 4/17/2013 6:39:36 AM	Analyst: CN
Parameter(s)	<u>Results</u>	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Biochemical Oxygen Demand NOTES: Blank depletion exceeds 0.2 n	ng/L - average d	epletion of 0	1 .3 mg/L	mg/L	04/17/2013 9:15 AM	Container-01 of 0
	410.4 :					Analyst: CN
Parameter(s)	Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Chemical Oxygen Demand	148	D	4	mg/L	04/23/2013 8:53 AM	Container-01 of 0
Analytical Method: SI	M2340C :					Analyst: JA
Parameter(s)	Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Hardness (As CaCO3)	360	D	20	mg/L	04/19/2013 10:45 AM	Container-01 of 0
Analytical Method: SI	M4500-NH3 H :					Analyst: bka
Parameter(s)	<u>Results</u>	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrogen, Ammonia (As N)	145	D	50	mg/L	04/22/2013 11:54 AM	Container-01 of 0
Analytical Method: E:	353.2 :					Analyst: MJL
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrite as N	< 0.10		1	mg/L	04/17/2013 7:44 AM	Container-01 of 0
Analytical Method: E: Parameter(s)	353.2 : Results	Qualifier	D.F.	Units	Analyzed:	Analyst: MJL Container:
Nitrate as N	0.41		1	mg/L	04/17/2013 11:59 AM	
		Prep Method:	E42		Prep Date: 4/22/2013 6:30:00 AM	Analyst: EM
Parameter(s)		Qualifier	<u>D.F.</u>	Units	<u>Analyzed:</u>	Container:
	<u>Incoullo</u>	acuantici	<u>م انگ</u>	<u></u>	LURATE-OW.	

1

µg/L

7.7 Phenolics, Total Recoverable

Qualifiers: E = Value above quantitation range

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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04/24/2013 8:03 AM Container-01 of 01

F Z labs	5						
K Z					LABORATORY	RESULTS	
V 575 B	road Hollow Rd.	, Melville	NY 11747	Res	ults for the samples and	d analytes requested	
	631) 694-3040 ЮН ID#10478	FAX: (631	) 420-8436		ab is not directly responsible fo b and is responsible only for th	r the integrity of the sample before receipt at e certified tests requested.	
Town of Southampto Waste Management [					120 1017 000		Information:
Southampton, New Y					o. :1304917-002	Type : Lo	eachate
	e Fetten		Client	Samp	le ID: LEA-PRIMARY	<u>(</u>	
	8:55:00 AM					Origin:	
Received : 4/16/2013	9:50:00 AM						
Collected By : PWG99							
		: IOC					Analyst: MM
Collected By : PWG99		: IOC <u>Results</u>	Qualifier	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Analyst:</u> MM <u>Container:</u>
Collected By : PWG99 Analytical Methor Parameter(s)			<u>Qualifier</u> D	<u>D.F.</u> 4	<u>Units</u> mg/L	<u>Analyzed:</u> 04/18/2013 12:21 PM	Container:
Collected By : PWG99 Analytical Methor Parameter(s)	<u>1:</u> SM2540C	<u>Results</u> 948			mg/L		Container:
Collected By : PWG99 Analytical Methor Parameter(s) Total Dissolved Solids	<u>1:</u> SM2540C	<u>Results</u> 948	D Prep Method:	4	mg/L	04/18/2013 12:21 PM	Container: Container-01 o
Collected By : PWG99 Analytical Methor Parameter(s) Total Dissolved Solids Analytical Methor Parameter(s)	<u>1:</u> SM2540C	Results 948	D Prep Method:	4 E35	mg/L 1.2	04/18/2013 12:21 PM Prep Date: 4/23/2013 6:45:00 AM	<u>Container:</u> Container-01 o <u>Analyst:</u> MJL <u>Container:</u>
Collected By : PWG99 Analytical Methor Parameter(s) Total Dissolved Solids Analytical Methor	<u>1:</u> SM2540C <u>1:</u> E351.2 :	Results 948 <u>Results</u> 171	D Prep Method: Qualifier	4 E35 <u>D.F.</u>	mg/L 1.2 <u>Units</u>	04/18/2013 12:21 PM <u>Prep Date:</u> 4/23/2013 6:45:00 AM <u>Analyzed:</u>	<u>Container:</u> Container-01 o <u>Analyst:</u> MJL <u>Container:</u>
Collected By : PWG99 Analytical Method Parameter(s) Total Dissolved Solids Analytical Method Parameter(s) Nitrogen, Kjeldahl, Total	<u>1:</u> SM2540C <u>1:</u> E351.2 :	Results 948 <u>Results</u> 171	D Prep Method: Qualifier D	4 E35 <u>D.F.</u>	mg/L 1.2 <u>Units</u>	04/18/2013 12:21 PM <u>Prep Date:</u> 4/23/2013 6:45:00 AM <u>Analyzed:</u>	<u>Container:</u> Container-01 of <u>Analyst:</u> MJL <u>Container:</u> Container-01 of

Qualifiers: E = Value above B = Found in E		Joann M. Alavin
	Factor D = Results for Dilution	
	analyzed outside of analytical holding time LAC does not offer certification for this analyte	Laboratory Manager
c = Calibration r = Reporting li	acceptability criteria exceeded for this analyte mit > MDL and < LOQ value - below calibration range	Test results meet the requirements of NELAC unless otherwise noted.
	exceeded control limits for this analyte presumptive evidence of compound	This report shall not be reproduced except in full, without the written approval of the laboratory.
Date Reported :	5/3/2013	Page 4 of 20

	abs						
					LABORATORY	RESULTS	
M	575 Broad Hollow Rd.	, Melville	NY 11747	Res	ults for the samples and		
	TEL: (631) 694-3040 NYSDOH ID#10478	FAX: (631	) 420-8436	The la		the integrity of the sample before receipt at	
Town of Southan	npton					Sample	nformation:
Waste Manageme	ent Division			Lab N	o. :1304917-003	Type : Le	
Southampton, Ne			Client	Sampl	e ID: LEA-SECOND		
	ristine Fetten					Origin:	
	013 9:00:00 AM 013 9:50:00 AM					- · · g	
Received : 4/16/2 Collected By : PWG							
							Analyst: UT
Analytical M	lethod: SM2320B		Qualifier	DE	Linita	Analyzed:	Analyst: HT Container:
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units		
Alkalinity, Total (As		236	D	10	mg/L	04/17/2013 1:01 PM	Container-01 of
Analytical M	lethod: E300.0 :		0 115			A set us t	<u>Analyst:</u> bka
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Bromide		< 0.50		1	mg/L	04/23/2013 9:00 PM	Container-01 of
Chloride		29.8		1	mg/L	04/23/2013 9:00 PM	Container-01 of
Sulfate		10.8		1	mg/L	04/23/2013 9:00 PM	Container-01 of
Analytical M	lethod: SM5210B		Prep Method:		210B	Prep Date: 4/17/2013 6:39:36 AM	Analyst: CN
Parameter(s)			Qualifier	<u>D.F.</u>	Units	Analyzed:	Container.
Biochemical Oxyger	Demand	< 2		1	mg/L	04/17/2013 9:20 AM	Container-01 of
NOTES:							
Blank depletion exce		average d	epletion of 0.	3 mg/L			
Analytical M							Analyst: CN
Analytical M Parameter(s)	tethod: E410.4 :	Results	epletion of 0.	<u>D.F.</u>	Units	Analyzed:	Container:
Analytical M	lethod: E410.4 : emand	Results 31.1				<u>Analyzed:</u> 04/23/2013 8:55 AM	Container: Container-01 of
Analytical M Parameter(s) Chemical Oxygen D Analytical M	lethod: E410.4 : emand	Results 31.1	Qualifier	<u>D.F.</u> 1	<u>Units</u> mg/L	04/23/2013 8:55 AM	Container: Container-01 of Analyst: JA
Analytical M Parameter(s) Chemical Oxygen D	lethod: E410.4 : emand	Results 31.1 :: Results	Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u>	<u>Units</u> mg/L <u>Units</u>	04/23/2013 8:55 AM <u>Analyzed:</u>	Container: Container-01 of Analyst: JA Container:
Analytical M Parameter(s) Chemical Oxygen D Analytical M	tethod: E410.4 : emand tethod: SM23400	Results 31.1 :: Results 250	Qualifier	<u>D.F.</u> 1	<u>Units</u> mg/L	04/23/2013 8:55 AM	Container: Container-01 of <u>Analyst:</u> JA <u>Container:</u> Container-01 of
Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Hardness (As CaCC Analytical M	tethod: E410.4 : emand tethod: SM23400	Results 31.1 :: Results 250	<u>Qualifier</u> <u>Qualifier</u> D	<u>D.F.</u> 1 <u>D.F.</u> 10	<u>Units</u> mg/L <u>Units</u> mg/L	04/23/2013 8:55 AM <u>Analyzed:</u> 04/19/2013 10:50 AM	Container; Container-01 of <u>Analyst:</u> JA <u>Container;</u> Container-01 of <u>Analyst:</u> bka
Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Hardness (As CaCC Analytical M Parameter(s)	tethod: E410.4 : emand tethod: SM2340C D3) tethod: SM4500-h	Results 31.1 : Results 250 NH3 H : Results	Qualifier Qualifier D Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 10 <u>D.F.</u>	Units mg/L Units mg/L Units	04/23/2013 8:55 AM <u>Analyzed:</u> 04/19/2013 10:50 AM <u>Analyzed:</u>	Container: Container-01 of <u>Analyst:</u> JA <u>Container:</u> Container-01 of <u>Analyst:</u> bka <u>Container:</u>
Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Hardness (As CaCC Analytical M	tethod: E410.4 : emand tethod: SM2340C D3) tethod: SM4500-h	Results           31.1           ::           Results           250           NH3 H :	<u>Qualifier</u> <u>Qualifier</u> D	<u>D.F.</u> 1 <u>D.F.</u> 10	<u>Units</u> mg/L <u>Units</u> mg/L	04/23/2013 8:55 AM <u>Analyzed:</u> 04/19/2013 10:50 AM	Container: Container-01 of <u>Analyst:</u> JA <u>Container:</u> Container-01 of <u>Analyst:</u> bka <u>Container:</u> Container-01 of
Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Hardness (As CaCC Analytical M Parameter(s) Nitrogen, Ammonia Analytical M	tethod: E410.4 : emand tethod: SM2340C D3) tethod: SM4500-1 (As N)	Results           31.1           ::           Results           250           NH3 H :           Results           12.9	Qualifier Qualifier D Qualifier D	<u>D.F.</u> 1 <u>D.F.</u> 10 <u>D.F.</u> 50	<u>Units</u> mg/L <u>Units</u> mg/L <u>Units</u> mg/L	04/23/2013 8:55 AM <u>Analvzed:</u> 04/19/2013 10:50 AM <u>Analvzed:</u> 04/22/2013 11:55 AM	Container: Container-01 of Analyst: JA Container: Container-01 of Analyst: bka Container: Container: Container:
Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Hardness (As CaCC Analytical M Parameter(s) Nitrogen, Ammonia	tethod: E410.4 : emand tethod: SM2340C D3) tethod: SM4500-1 (As N)	Results           31.1           ::           Results           250           NH3 H :           Results           12.9	Qualifier Qualifier D Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 10 <u>D.F.</u>	Units mg/L Units mg/L Units	04/23/2013 8:55 AM <u>Analyzed:</u> 04/19/2013 10:50 AM <u>Analyzed:</u> 04/22/2013 11:55 AM <u>Analyzed:</u>	Container; Container-01 o Analyst: JA Container: Container-01 o Analyst: bka Container: Container: Container-01 o Analyst: MJL Container.
Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Hardness (As CaCC Analytical M Parameter(s) Nitrogen, Ammonia Analytical M	tethod: E410.4 : emand tethod: SM2340C D3) tethod: SM4500-1 (As N)	Results           31.1           ::           Results           250           NH3 H :           Results           12.9	Qualifier Qualifier D Qualifier D	<u>D.F.</u> 1 <u>D.F.</u> 10 <u>D.F.</u> 50	<u>Units</u> mg/L <u>Units</u> mg/L <u>Units</u> mg/L	04/23/2013 8:55 AM <u>Analvzed:</u> 04/19/2013 10:50 AM <u>Analvzed:</u> 04/22/2013 11:55 AM	Container; Container-01 o Analyst: JA Container: Container-01 o Analyst: bka Container: Container: Container-01 o Analyst: MJL Container.
Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Hardness (As CaCC Analytical M Parameter(s) Nitrogen, Ammonia Analytical M Parameter(s) Nitrite as N Analytical M	tethod: E410.4 : emand tethod: SM2340C D3) tethod: SM4500-1 (As N)	Results           31.1           ::           Results           250           NH3 H :           Results           12.9           Results <td>Qualifier Qualifier D Qualifier D Qualifier</td> <td><u>D.F.</u> 1 <u>D.F.</u> 10 <u>D.F.</u> 50 <u>D.F.</u> 1</td> <td>Units mg/L <u>Units</u> mg/L <u>Units</u> mg/L <u>Units</u> mg/L</td> <td>04/23/2013 8:55 AM <u>Analyzed:</u> 04/19/2013 10:50 AM <u>Analyzed:</u> 04/22/2013 11:55 AM <u>Analyzed:</u> 04/17/2013 7:45 AM</td> <td>Container: Container-01 o Analyst: JA Container: Container-01 o Analyst: bka Container-01 o Analyst: MJL Container-01 o Analyst: MJL</td>	Qualifier Qualifier D Qualifier D Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 10 <u>D.F.</u> 50 <u>D.F.</u> 1	Units mg/L <u>Units</u> mg/L <u>Units</u> mg/L <u>Units</u> mg/L	04/23/2013 8:55 AM <u>Analyzed:</u> 04/19/2013 10:50 AM <u>Analyzed:</u> 04/22/2013 11:55 AM <u>Analyzed:</u> 04/17/2013 7:45 AM	Container: Container-01 o Analyst: JA Container: Container-01 o Analyst: bka Container-01 o Analyst: MJL Container-01 o Analyst: MJL
Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Hardness (As CaCC Analytical M Parameter(s) Nitrogen, Ammonia Analytical M Parameter(s) Nitrite as N	tethod: E410.4 : emand tethod: SM2340C D3) tethod: SM4500-1 (As N) tethod: E353.2 :	Results           31.1           ::           Results           250           NH3 H :           Results           12.9           Results <td>Qualifier Qualifier D Qualifier D</td> <td><u>D.F.</u> 1 <u>D.F.</u> 10 <u>D.F.</u> 50 <u>D.F.</u></td> <td>Units mg/L <u>Units</u> mg/L <u>Units</u> mg/L <u>Units</u> mg/L</td> <td>04/23/2013 8:55 AM <u>Analyzed:</u> 04/19/2013 10:50 AM <u>Analyzed:</u> 04/22/2013 11:55 AM <u>Analyzed:</u> 04/17/2013 7:45 AM <u>Analyzed:</u></td> <td>Container-01 of Analyst: JA Container-01 of Analyst: bka Container-01 of Analyst: bka Container-01 of Analyst: MJL Container-01 of Analyst: MJL Container-01 of Analyst: MJL Container-01 of</td>	Qualifier Qualifier D Qualifier D	<u>D.F.</u> 1 <u>D.F.</u> 10 <u>D.F.</u> 50 <u>D.F.</u>	Units mg/L <u>Units</u> mg/L <u>Units</u> mg/L <u>Units</u> mg/L	04/23/2013 8:55 AM <u>Analyzed:</u> 04/19/2013 10:50 AM <u>Analyzed:</u> 04/22/2013 11:55 AM <u>Analyzed:</u> 04/17/2013 7:45 AM <u>Analyzed:</u>	Container-01 of Analyst: JA Container-01 of Analyst: bka Container-01 of Analyst: bka Container-01 of Analyst: MJL Container-01 of Analyst: MJL Container-01 of Analyst: MJL Container-01 of
Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Hardness (As CaCC Analytical M Parameter(s) Nitrogen, Ammonia Analytical M Parameter(s) Nitrite as N Analytical M	tethod: E410.4 : emand tethod: SM2340C D3) tethod: SM4500-1 (As N) tethod: E353.2 :	Results           31.1           ::           Results           250           NH3 H :           Results           12.9           Results <td>Qualifier Qualifier D Qualifier D Qualifier</td> <td><u>D.F.</u> 1 <u>D.F.</u> 10 <u>D.F.</u> 50 <u>D.F.</u> 1</td> <td>Units mg/L <u>Units</u> mg/L <u>Units</u> mg/L <u>Units</u> mg/L</td> <td>04/23/2013 8:55 AM <u>Analyzed:</u> 04/19/2013 10:50 AM <u>Analyzed:</u> 04/22/2013 11:55 AM <u>Analyzed:</u> 04/17/2013 7:45 AM <u>Analyzed:</u> 04/17/2013 12:00 PM</td> <td>Container: Container-01 of Analyst: JA Container: Container-01 of Analyst: bka Container: Container: Container: Container: Container-01 of Analyst: MJL Container: Container: Container:</td>	Qualifier Qualifier D Qualifier D Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 10 <u>D.F.</u> 50 <u>D.F.</u> 1	Units mg/L <u>Units</u> mg/L <u>Units</u> mg/L <u>Units</u> mg/L	04/23/2013 8:55 AM <u>Analyzed:</u> 04/19/2013 10:50 AM <u>Analyzed:</u> 04/22/2013 11:55 AM <u>Analyzed:</u> 04/17/2013 7:45 AM <u>Analyzed:</u> 04/17/2013 12:00 PM	Container: Container-01 of Analyst: JA Container: Container-01 of Analyst: bka Container: Container: Container: Container: Container-01 of Analyst: MJL Container: Container: Container:
Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Hardness (As CaCO Analytical M Parameter(s) Nitrogen, Ammonia Analytical M Parameter(s) Nitrite as N <u>Analytical M</u> Parameter(s)	tethod:         E410.4 :           eemand	Results           31.1           31.1           250           NH3 H :           Results           12.9           Results           < 0.10	Qualifier Qualifier D Qualifier D Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 50 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L Units mg/L Units mg/L Units mg/L <u>Units</u> mg/L	04/23/2013 8:55 AM <u>Analyzed:</u> 04/19/2013 10:50 AM <u>Analyzed:</u> 04/22/2013 11:55 AM <u>Analyzed:</u> 04/17/2013 7:45 AM <u>Analyzed:</u>	Container-01 of Analyst: JA Container-01 of Analyst: bka Container-01 of Analyst: bka Container-01 of Analyst: MJL Container-01 of Analyst: MJL Container-01 of Analyst: MJL Container-01 of

< 5.0 1 µg/L

Qualifiers: E = Value above quantitation range

B = Found in Blank

Phenolics, Total Recoverable

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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TOS012/012F S127

04/24/2013 8:04 AM Container-01 of 01

H Z labs								
N.A.					LABOR	ATORY RESULT	S	
575 Broa	d Hollow Rd.	. Melville	NY 11747	Res	ults for the	samples and analytes re	equested	
	1) 694-3040 1 ID#10478	FAX: (631)	) 420-8436			y responsible for the integrity of sible only for the certified tests		
Town of Southampton							Sample	Information:
Waste Management Div				Lab N	o. :1304	917-003	Type : Le	
Southampton, New Yor			Client	Sampl	e ID: LEA	-SECONDARY	.)[	
Attn To : Christine Collected : 4/15/2013 9:0							Origin:	
Received : 4/16/2013 9:: Collected By : PWG99	50:00 AM							
Analytical Method:	SM2540C	: 10C						Analyst: MM
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units		Analyzed:	Container.
Total Dissolved Solids		292		1	mg/L		04/18/2013 12:24 PM	Container-01 of (
Analytical Method:	E351.2 :		Prep Method:	E35	1.2	Prep Date:	4/23/2013 6:45:00 AM	Analyst: MJL
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units		Analyzed:	Container.
Nitrogen, Kjeldahl, Total		13.6		1	mg/L		04/23/2013 3:04 PM	Container-01 of (
Analytical Method:	SM5310B							Analyst: CO
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>		Analyzed:	Container:
Total Organic Carbon		67.1	D	20	mg/L		04/17/2013 3:05 PM	Container-01 of (

Qualifiers: E = Value a	bove quantitation range	Joann M. Slavin
B = Found i	n Blank	
D.F. = Dilut	on Factor D = Results for Dilution	
H = Receive	ed/analyzed outside of analytical holding time	Laboratory Manager
+ = ELAP /	NELAC does not offer certification for this analyte	
c = Calibrat	on acceptability criteria exceeded for this analyte	
r = Reportin	g limit > MDL and < LOQ	Test results meet the requirements of NELAC unless
J = Estimat	ed value - below calibration range	otherwise noted.
s = Recove	ry exceeded control limits for this analyte	This report shall not be reproduced except in full,
N = Indicate	s presumptive evidence of compound	without the written approval of the laboratory.
Date Reported :	5/3/2013	Page 6 of 2

				LABORATORY	RESULTS	
575 Broad	Hollow Rd. , Melville	NY 11747	Res	ults for the samples and		
TEL: (631) NYSDOH I	694-3040 FAX: (631		The la		the integrity of the sample before receipt at	
Town of Southampton					Sample	Information:
Waste Management Divi	sion		Lab N	o. : 1304917-004		roundwater
Southampton, New York		Client		e ID: MW-3A	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Attn To : Christine F					Origin:	
Collected : 4/15/2013 12:						
Received : 4/16/2013 9:5 Collected By : PWG99	0.00 AW					
	CM (22200 P					Analyst: HT
Analytical Method: Parameter(s)	SM2320B : Results	Qualifier	D.F.	Units	Analyzed:	Container:
		Guanner	1	mg/L	04/17/2013 1:08 PM	Container-01 o
Alkalinity, Total (As CaCO3)				mg/L	04/17/2013 1.00 PM	
Analytical Method: Parameter(s)	E300.0 : Results	Qualifier	D.F.	Units	Analyzed:	<u>Analyst:</u> bka <u>Container.</u>
Bromide	< 0.50	Guanner	<u></u>	mg/L	04/23/2013 9:27 PM	Container-01 c
Chloride	49.1		1	mg/L	04/23/2013 9:27 PM	Container-01 c
Sulfate	5.84		1	mg/L	04/23/2013 9:27 PM	Container-01 d
		Prep Method:		5210B	Prep Date: 4/17/2013 6:39:36 AM	Analyst: CN
Parameter(s)		Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Deman			1	mg/L	04/17/2013 9:25 AM	Container-01 c
NOTES:						
Blank depletion exceeds 0.2	2 mg/L - average d	epletion of 0	.3 mg/L			
Anal tical Mathead	F410.4 ·					
Analytical Method:	2.1.0.1.					Analyst: CN
Parameter(s)		Qualifier	<u>D.F.</u>	Units	Analyzed:	Analyst: CN Container:
		Qualifier	<u>D.F.</u> 1	<u>Units</u> mg/L	<u>Analyzed:</u> 04/23/2013 8:57 AM	Container:
Parameter(s) Chemical Oxygen Demand	Results	<u>Qualifier</u>				Container: Container-01 c
Parameter(s) Chemical Oxygen Demand	<u>Results</u> < 10 SM2120B : IOC	Qualifier Qualifier				Container:
Parameter(s) Chemical Oxygen Demand Analytical Method:	<u>Results</u> < 10 SM2120B : IOC		1	mg/L	04/23/2013 8:57 AM	Container: Container-01 c Analyst: EM
Parameter(s) Chemical Oxygen Demand Analytical Method: Parameter(s) Color	<u>Results</u> < 10 SM2120B : IOC <u>Results</u>		1 <u>D.F.</u>	mg/L	04/23/2013 8:57 AM <u>Analyzed:</u>	Container: Container-01 c <u>Analyst:</u> EM <u>Container:</u>
Parameter(s) Chemical Oxygen Demand Analytical Method: Parameter(s) Color	Results           < 10		1 <u>D.F.</u>	mg/L	04/23/2013 8:57 AM <u>Analyzed:</u>	Container: Container-01 of <u>Analyst:</u> EM <u>Container</u> : Container-01 of
Parameter(s) Chemical Oxygen Demand Analytical Method: Parameter(s) Color Analytical Method:	Results           < 10	Qualifier	1 <u>D.F.</u> 1	mg/L Units units	04/23/2013 8:57 AM <u>Analyzed:</u> 04/17/2013 5:53 AM	Container: Container-01 c <u>Analyst:</u> EM <u>Container:</u> Container-01 c <u>Analyst:</u> EM
Parameter(s) Chemical Oxygen Demand Analytical Method: Parameter(s) Color Analytical Method: Parameter(s) Chromium, Hexavalent Analytical Method:	Results           < 10	Qualifier Qualifier	1 <u>D.F.</u> 1 <u>D.F.</u> 1	mg/L <u>Units</u> units <u>Units</u>	04/23/2013 8:57 AM <u>Analyzed:</u> 04/17/2013 5:53 AM <u>Analyzed:</u>	Container: Container-01 of Analyst: EM Container: Container-01 of Analyst: EM Container: Container-01 of Analyst: JA
Parameter(s) Chemical Oxygen Demand Analytical Method: Parameter(s) Color Analytical Method: Parameter(s) Chromium, Hexavalent	Results           < 10	Qualifier Qualifier	1 <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> units <u>Units</u>	04/23/2013 8:57 AM <u>Analyzed:</u> 04/17/2013 5:53 AM <u>Analyzed:</u>	Container: Container-01 of Analyst: EM Container-01 of Analyst: EM Container: Container-01 of
Parameter(s) Chemical Oxygen Demand Analytical Method: Parameter(s) Color Analytical Method: Parameter(s) Chromium, Hexavalent Analytical Method:	Results           < 10	Qualifier Qualifier	1 <u>D.F.</u> 1 <u>D.F.</u> 1	mg/L <u>Units</u> units <u>Units</u> mg/L	04/23/2013 8:57 AM <u>Analyzed:</u> 04/17/2013 5:53 AM <u>Analyzed:</u> 04/17/2013 5:33 AM	Container: Container-01 of <u>Analyst:</u> EM <u>Container-01 of</u> <u>Analyst:</u> EM <u>Container-01 of</u> <u>Analyst:</u> JA <u>Container:</u>
Parameter(s) Chemical Oxygen Demand Analytical Method: Parameter(s) Color <u>Analytical Method:</u> Parameter(s) Chromium, Hexavalent <u>Analytical Method:</u> Parameter(s)	Results           < 10	Qualifier Qualifier Qualifier	1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> units <u>Units</u> mg/L <u>Units</u>	04/23/2013 8:57 AM <u>Analyzed:</u> 04/17/2013 5:53 AM <u>Analyzed:</u> 04/17/2013 5:33 AM <u>Analyzed:</u> 04/19/2013 10:55 AM	Container-01 c Analyst: EM Container-01 c Analyst: EM Container-01 c Analyst: EM Container-01 c Analyst: JA Container-01 c Analyst: JA Container-01 c Analyst: bka
Parameter(s) Chemical Oxygen Demand Analytical Method: Parameter(s) Color Analytical Method: Parameter(s) Chromium, Hexavalent Analytical Method: Parameter(s) Hardness (As CaCO3)	Results           < 10	Qualifier Qualifier Qualifier	1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> units <u>Units</u> mg/L <u>Units</u>	04/23/2013 8:57 AM <u>Analyzed:</u> 04/17/2013 5:53 AM <u>Analyzed:</u> 04/17/2013 5:33 AM <u>Analyzed:</u> 04/19/2013 10:55 AM <u>Analyzed:</u>	Container: Container-01 of Analyst: EM Container-01 of Analyst: EM Container-01 of Analyst: JA Container: Container: Container: Container: Container: bka Container:
Parameter(s) Chemical Oxygen Demand Analytical Method: Parameter(s) Color Analytical Method: Parameter(s) Chromium, Hexavalent Analytical Method: Parameter(s) Hardness (As CaCO3) Analytical Method:	Results           < 10	Qualifier Qualifier Qualifier D	1 <u>D.F.</u> 1 <u>D.F.</u> 2	mg/L <u>Units</u> units <u>Units</u> mg/L <u>Units</u> mg/L	04/23/2013 8:57 AM <u>Analyzed:</u> 04/17/2013 5:53 AM <u>Analyzed:</u> 04/17/2013 5:33 AM <u>Analyzed:</u> 04/19/2013 10:55 AM	Container: Container-01 of Analyst: EM Container-01 of Analyst: EM Container-01 of Analyst: JA Container: Container: Container: Container: Container: bka Container:
Parameter(s) Chemical Oxygen Demand Analytical Method: Parameter(s) Color Analytical Method: Parameter(s) Chromium, Hexavalent Analytical Method: Parameter(s) Hardness (As CaCO3) Analytical Method: Parameter(s) Nitrogen, Ammonia (As N)	Results           < 10	Qualifier Qualifier Qualifier D	1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 2 <u>D.F.</u>	mg/L <u>Units</u> units <u>Units</u> mg/L <u>Units</u> mg/L <u>Units</u>	04/23/2013 8:57 AM <u>Analyzed:</u> 04/17/2013 5:53 AM <u>Analyzed:</u> 04/17/2013 5:33 AM <u>Analyzed:</u> 04/19/2013 10:55 AM <u>Analyzed:</u>	Container-01 c Analyst: EM Container-01 c Analyst: EM Container-01 c Analyst: EM Container-01 c Analyst: JA Container-01 c Analyst: JA Container-01 c Analyst: bka

Qualifiers: E = Value above quantitation range

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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<b>2</b> labs						
N7				LABORATORY	RESULTS	
575 Broad Hollow	Rd., Melville, N	Y 11747	Res	ults for the samples and	d analytes requested	
TEL: (631) 694-304 NYSDOH ID#1047		20-8436		ab is not directly responsible for b and is responsible only for th	r the integrity of the sample before receipt at e certified tests requested.	
Town of Southampton					Sample	nformation:
Waste Management Division	_		Lab N	o. :1304917-004	Contract of Contra	roundwater
Southampton, New York 1196 Attn To : Christine Fetten	8	Client	Sampl	e ID: MW-3A		
Collected : 4/15/2013 12:20:00	РМ				Origin:	
Received : 4/16/2013 9:50:00 A	M					
Collected By : PWG99						
Analytical Method; E353.2	:					Analyst: MJL
Parameter(s)	<u>Results</u> C	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrate as N	0.54		1	mg/L	04/17/2013 12:01 PM	Container-01 of 01
Analytical Method: E420.1	: Pre	ep Method:	E.42	0.1	Prep Date; 4/22/2013 6:30:00 AM	Analyst: EM
Parameter(s)	Results G	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container.
Phenolics, Total Recoverable	< 5.0		1	µg/L	04/24/2013 8:05 AM	Container-01 of 01
Analytical Method: SM254	DC : IOC					Analyst: MM
Parameter(s)	Results C	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Total Dissolved Solids	145		1	mg/L	04/18/2013 12:27 PM	Container-01 of 02
Analytical Method: E351.2	: Pre	ep Method:	E35	1.2	Prep Date: 4/25/2013 7:15:00 AM	Analyst: MJL
Parameter(s)	Results C	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrogen, Kjeldahl, Total	0.32		1	mg/L	04/25/2013 3:21 PM	Container-01 of 01
Analytical Method: SW906	:0 :					Analyst: CO
Parameter(s)	<u>Results</u>	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Total Organic Carbon	10.3		1	mg/L	04/25/2013 4:17 PM	Container-01 of 02

	/alue above qu Found in Blank	uantitation range	Joan M. Alavin
		tor D = Results for Dilution	
H = F + = E	Received/analy	rzed outside of analytical holding time does not offer certification for this analyte	Laboratory Manager
r = R	eporting limit >	eptability criteria exceeded for this analyte MDL and < LOQ - below calibration range	Test results meet the requirements of NELAC unless otherwise noted.
		eded control limits for this analyte Imptive evidence of compound	This report shall not be reproduced except in full, without the written approval of the laboratory.
Date Repo	orted :	5/3/2013	Page 8 of 2

H 2 labs	Š						
	Broad Hollow Rd. (631) 694-3040		e, NY 11747 ) 420-8436	Res	LABORATOR	Y RESULTS ind analytes requested	
	OCH ID#10478	1 AA. (03)	, 120-0400			for the integrity of the sample before receipt at the certified tests requested.	
Town of Southampto						Sample I	nformation:
Waste Management				Lab N	o. :1304917-005	Type : G	roundwater
•	ne Fetten		Clien	t Sampl	e ID: MW-3B		
Collected : 4/15/2013	10:20:00 AM 9:50:00 AM	Л				Origin:	
Analytical Metho	d: SM2320B	;					Analyst: HT
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Alkalinity, Total (As CaC	O3)	46.3	D	2	mg/L	04/17/2013 2:07 PM	Container-01 d
Analytical Metho	d: E300.0 :					1118	Analyst: bka
Parameter(s)		<b>Results</b>	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Bromide		< 0.50		1	mg/L	04/23/2013 9:40 PM	Container-01
Chloride		13.5		1	mg/L	04/23/2013 9:40 PM	Container-01 e
Sulfate		11.2		1	mg/L	04/23/2013 9:40 PM	Container-01
Analytical Metho	d: SM5210B	:	Prep Method:	SM5	210B	Prep Date: 4/17/2013 6:39:36 AM	Analyst: CN
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Anaiyzed:	Container:
Biochemical Oxygen De NOTES: Blank depletion exceeds Analytical Metho	s 0.2 mg/L - a	< 2 average d	epletion of 0	1 ).3 mg/L	mg/L	04/17/2013 9:30 AM	Container-01 c
Parameter(s)		Results	Qualifier	D.F.	Units	Analyzed:	Container:
Chemical Oxygen Dema	ind	< 10		1	mg/L	04/23/2013 8:59 AM	Container-01 d
Analytical Metho		: IOC					Analyst: EM
Parameter(s)	-	Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Color		125	D	5	units	04/17/2013 5:54 AM	Container-01
Analytical Metho	d: M3500-Cr	D:					Analyst: EM
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Chromium, Hexavalent		< 0.10	D	5	mg/L	04/17/2013 5:45 AM	Container-01
Analytical Metho	d: SM2340C	:			· · · · · · · · · · · · · · · · · · ·		Analyst: JA
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Hardness (As CaCO3)		84	D	4	mg/L	04/19/2013 11:00 AM	Container-01
Analytical Metho	d: SM4500-N						Analyst: bka
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Nitrogen, Ammonia (As	N)	2. <b>8</b> 2	D	5	mg/L	04/22/2013 11:58 AM	
Analytical Metho	d: E353.2 :						Analyst: MJI
Parameter(s)		Results	Qualifier	D.F.	<u>Units</u>	Analyzed:	Container:
			and the second damage of the s				Container-01

Qualifiers: E = Value above quantitation range

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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Page 9 of 20

2 labs						
575 Broad Hollow Rd. TEL: (631) 694-3040 NYSDOH ID#10478		, NY 11747 ) 420-8436	The la	LABORATORY ults for the samples and ab is not directly responsible for b and is responsible only for the	analytes requested the integrity of the sample before receipt at	
Town of Southampton Waste Management Division Southampton, New York 11968 Attn To: Christine Fetten		Client		o. :1304917-005 le ID: MW-3B		Information: roundwater
Collected : 4/15/2013 10:20:00 AM Received : 4/16/2013 9:50:00 AM Collected By : PWG99	1				Origin:	
Analytical Method: E353.2 :						Analyst: MJL
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrate as N	< 0.10		1	mg/L	04/17/2013 1:48 PM	Container-01 of 03
Analytical Method: E420.1 :		Prep Method:	E42	0.1	Prep Date: 4/22/2013 6:30:00 AM	Analyst: EM
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	04/24/2013 8:06 AM	Container-01 of 03
Analytical Method: SM2540C	: IOC					Analyst: MM
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Total Dissolved Solids	75		1	mg/L	04/18/2013 12:30 PM	Container-01 of 06
Analytical Method: E351.2 :		Prep Method:	E35	1.2	Prep Date: 4/23/2013 6:45:00 AM	Analyst: MJL
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrogen, Kjeldahl, Total	3.05		1	mg/L	04/23/2013 3:05 PM	Container-01 of 03
Analytical Method: SW9060 :						Analyst: CO
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Total Organic Carbon	14.2		1	mg/L	04/26/2013 8:19 AM	Container-01 of 06

Qualifiers:	E = Value abov	e quantitation range	Joann M. Deavin
	B = Found in B	lank	Same a fee
	D.F. = Dilution	Factor D = Results for Dilution	
	H = Received/a	analyzed outside of analytical holding time	Laboratory Manager
	+ = ELAP / NE	LAC does not offer certification for this analyte	
	c = Calibration	acceptability criteria exceeded for this analyte	
	r = Reporting li	mit > MDL and < LOQ	Test results meet the requirements of NELAC unless
	J = Estimated	value - below calibration range	otherwise noted.
	s = Recovery e	exceeded control limits for this analyte	This report shall not be reproduced except in full,
	N = Indicates p	resumptive evidence of compound	without the written approval of the laboratory.
Dat	e Reported :	5/3/2013	Page 10 of 20

					LADODATODY	DECHITE	
M 575.1	Broad Hollow Rd. ,	Melville	NY 11747	Pee	LABORATORY		
	(631) 694-3040	FAX: (631)			ults for the samples and	, .	
NYS	DOH ID#10478				ib is not directly responsible for b and is responsible only for the	r the integrity of the sample before receipt at e certified tests requested.	
Town of Southampto	on					Sample	Information:
Waste Management				Lab N	o. : 1304917-006	Type : G	roundwater
Southampton, New )			Client	t Sampl	e ID: MW-3C		
	ne Fetten 3 11:40:00 AM	•				Origin:	
	3 9:50:00 AM	•					
Collected By : PWG99	•						
Analytical Metho	d: SM2320B :	:					Analyst: HT
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Alkalinity, Total (As CaC	:03)	56.1		1	mg/L	04/17/2013 2:30 PM	Container-01
Analytical Metho	od: E300.0 :						Analyst: bk
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Bromide		< 0.50		1	<b>m</b> g/L	04/23/2013 10:21 PM	Container-01
Chloride		13.2		1	mg/L	04/23/2013 10:21 PM	Container-01
Sulfate		< 5.00		1	mg/L	04/23/2013 10:21 PM	Container-01
Analytical Metho	od: SM5210B :	:	Prep Method:	SM5	210B	Prep Date: 4/17/2013 6:39:36 AM	Analyst: CN
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Biochemical Oxygen De	emand	< 2		1	mg/L	04/17/2013 9:40 AM	Container-01
				•	mg/c	04/17/2015 5.40 AW	Container-01
NOTES:					ligit	04/17/2013 3.40 AW	Container-UT
Blank depletion exceeds		verage d	epletion of 0		ingre		
Blank depletion exceeds Analytical Metho				.3 mg/L			Analyst: CN
Blank depletion exceeds Analytical Metho Parameter(s)	od: E410.4 :	Results	epletion of 0 Qualifier	.3 mg/L <u>D.F.</u>	Units	Analyzed:	Analyst: CN Container:
Blank depletion exceeds Analytical Metho Parameter(s) Chemical Oxygen Dema	od: E410.4 : and	Results < 10		.3 mg/L			<u>Analyst:</u> CN <u>Container;</u> Container-01
Blank depletion exceeds Analytical Metho Parameter(s) Chemical Oxygen Dema Analytical Metho	od: E410.4 : and	<u>Results</u> < 10 : IOC	Qualifier	.3 mg/L <u>D.F.</u> 1	<u>Units</u> mg/L	<u>Analyzed:</u> 04/23/2013 9:05 AM	Analyst: CN Container: Container-01 Analyst: EN
Blank depletion exceeds Analytical Metho Parameter(s) Chemical Oxygen Dema Analytical Metho Parameter(s)	od: E410.4 : and	Results < 10 : IOC Results		.3 mg/L <u>D.F.</u> 1 <u>D.F.</u>	<u>Units</u> mg/L <u>Units</u>	<u>Analyzed:</u> 04/23/2013 9:05 AM <u>Analyzed:</u>	Analyst: CN <u>Container</u> : Container-01 <u>Analyst:</u> EN <u>Container</u> :
Blank depletion exceeds Analytical Metho Parameter(s) Chemical Oxygen Dema Analytical Metho Parameter(s) Color	od: E410.4 : and od: SM2120B	Results < 10 : IOC Results < 5	Qualifier	.3 mg/L <u>D.F.</u> 1	<u>Units</u> mg/L	<u>Analyzed:</u> 04/23/2013 9:05 AM	Analyst: CN Container: Container-01 <u>Analyst:</u> EN <u>Container:</u> Container-01
Blank depletion exceeds Analytical Metho Parameter(s) Chemical Oxygen Dema Analytical Metho Parameter(s) Color Analytical Metho	od: E410.4 : and od: SM2120B	<u>Results</u> < 10 : IOC <u>Results</u> < 5 D :	Qualifier Qualifier	.3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1	<u>Units</u> mg/L <u>Units</u> units	<u>Analyzed:</u> 04/23/2013 9:05 AM <u>Analyzed:</u> 04/17/2013 5:56 AM	Analyst: CN Container-01 Analyst: EN Container-01 Container-01 Analyst: EN
Blank depletion exceeds <u>Analytical Metho</u> <u>Parameter(s)</u> Chemical Oxygen Dema <u>Analytical Metho</u> <u>Parameter(s)</u> Color <u>Analytical Metho</u> <u>Parameter(s)</u>	od: E410.4 : and od: SM2120B	Results < 10 : IOC <u>Results</u> < 5 D : <u>Results</u>	Qualifier	.3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L Units units Units	<u>Analyzed:</u> 04/23/2013 9:05 AM <u>Analyzed:</u> 04/17/2013 5:56 AM <u>Analyzed;</u>	Analyst: CN Container-01 Analyst: EN Container-01 Analyst: EN Container-01 Analyst: EN Container;
Blank depletion exceeds Analytical Metho Parameter(s) Chemical Oxygen Dema Analytical Metho Parameter(s) Color Analytical Metho	od: E410.4 : and od: SM2120B : od: M3500-Cr	Results           < 10	Qualifier Qualifier	.3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1	<u>Units</u> mg/L <u>Units</u> units	<u>Analyzed:</u> 04/23/2013 9:05 AM <u>Analyzed:</u> 04/17/2013 5:56 AM	Analyst: CN Container. Container-01 Analyst: EN Container-01 Analyst: EN Container. Container.01
Blank depletion exceeds <u>Analytical Metho</u> <u>Parameter(s)</u> Chemical Oxygen Dema <u>Analytical Metho</u> <u>Parameter(s)</u> Color <u>Analytical Metho</u> <u>Parameter(s)</u> Chromium, Hexavalent <u>Analytical Metho</u>	od: E410.4 : and od: SM2120B od: M3500-Cr	Results           < 10	Qualifier Qualifier Qualifier	.3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L Units units Units mg/L	<u>Analyzed:</u> 04/23/2013 9:05 AM <u>Analyzed:</u> 04/17/2013 5:56 AM <u>Analyzed:</u> 04/17/2013 5:37 AM	Analyst: CN Container. Container-01 Analyst: EN Container-01 Analyst: EN Container. Container.01 Analyst: JA
Blank depletion exceeds <u>Analytical Metho</u> <u>Parameter(s)</u> Chemical Oxygen Dema <u>Analytical Metho</u> <u>Parameter(s)</u> Color <u>Analytical Metho</u> <u>Parameter(s)</u> Chromium, Hexavalent	od: E410.4 : and od: SM2120B od: M3500-Cr	Results           < 10	Qualifier Qualifier	.3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L Units units Units	<u>Analyzed:</u> 04/23/2013 9:05 AM <u>Analyzed:</u> 04/17/2013 5:56 AM <u>Analyzed:</u> 04/17/2013 5:37 AM <u>Analyzed:</u>	Analyst: CN Container: Container-01 Analyst: EM Container-01 Analyst: EM Container-01 Analyst: JA Container:
Blank depletion exceeds <u>Analytical Metho</u> <u>Parameter(s)</u> Chemical Oxygen Dema <u>Analytical Metho</u> <u>Parameter(s)</u> Color <u>Analytical Metho</u> <u>Parameter(s)</u> Chromium, Hexavalent <u>Analytical Metho</u>	od: E410.4 : and od: SM2120B od: M3500-Cr	Results           < 10	Qualifier Qualifier Qualifier	.3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L Units units Units mg/L	<u>Analyzed:</u> 04/23/2013 9:05 AM <u>Analyzed:</u> 04/17/2013 5:56 AM <u>Analyzed:</u> 04/17/2013 5:37 AM	Analyst: CN Container: Container-01 Analyst: EM Container-01 Analyst: EM Container-01 Analyst: JA Container:
Blank depletion exceeds <u>Analytical Metho</u> <u>Parameter(s)</u> Chemical Oxygen Dema <u>Analytical Metho</u> <u>Parameter(s)</u> Color <u>Analytical Metho</u> <u>Parameter(s)</u> Chromium, Hexavalent <u>Analytical Metho</u> <u>Parameter(s)</u> Hardness (As CaCO3) <u>Analytical Metho</u>	od: E410.4 : and od: SM2120B : od: M3500-Cr od: SM2340C	Results           < 10	Qualifier Qualifier Qualifier Qualifier	.3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L Units units Units mg/L Units	<u>Analyzed:</u> 04/23/2013 9:05 AM <u>Analyzed:</u> 04/17/2013 5:56 AM <u>Analyzed:</u> 04/17/2013 5:37 AM <u>Analyzed:</u> 04/19/2013 11:15 AM	Analyst: CN <u>Container</u> : Container-01 <u>Analyst:</u> EN <u>Container</u> : Container-01 <u>Analyst:</u> EN <u>Container</u> : Container-01 <u>Analyst:</u> JA <u>Container</u> : Container-01 <u>Analyst:</u> bk
Blank depletion exceeds <u>Analytical Method</u> <u>Parameter(s)</u> Chemical Oxygen Dema <u>Analytical Method</u> <u>Parameter(s)</u> Color <u>Analytical Method</u> <u>Parameter(s)</u> Chromium, Hexavalent <u>Analytical Method</u> <u>Parameter(s)</u> Hardness (As CaCO3)	od: E410.4 : and od: SM2120B : od: M3500-Cr od: SM2340C	Results           < 10	Qualifier Qualifier Qualifier	.3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L Units Units Units Units Units mg/L Units mg/L Units Units	<u>Analyzed:</u> 04/23/2013 9:05 AM <u>Analyzed:</u> 04/17/2013 5:56 AM <u>Analyzed:</u> 04/17/2013 5:37 AM <u>Analyzed:</u> 04/19/2013 11:15 AM <u>Analyzed:</u>	Analyst: CN Container. Container. Container. Container. Container. Container. Container. Container. Container. Container. Container. Container. Container.
Blank depletion exceeds <u>Analytical Metho</u> <u>Parameter(s)</u> Chemical Oxygen Dema <u>Analytical Metho</u> <u>Parameter(s)</u> Color <u>Analytical Metho</u> <u>Parameter(s)</u> Chromium, Hexavalent <u>Analytical Metho</u> <u>Parameter(s)</u> Hardness (As CaCO3) <u>Analytical Metho</u>	od:         E410.4 :           and	Results           < 10	Qualifier Qualifier Qualifier Qualifier	.3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L Units units Units mg/L Units mg/L	<u>Analyzed:</u> 04/23/2013 9:05 AM <u>Analyzed:</u> 04/17/2013 5:56 AM <u>Analyzed:</u> 04/17/2013 5:37 AM <u>Analyzed:</u> 04/19/2013 11:15 AM	Analyst: CN Container: Container-01 Analyst: EN Container-01 Analyst: EN Container-01 Analyst: JA Container-01 Analyst: JA Container-01 Analyst: bk Container-01 Analyst: bk
Blank depletion exceeds <u>Analytical Metho</u> <u>Parameter(s)</u> Chemical Oxygen Dema <u>Analytical Metho</u> <u>Parameter(s)</u> Color <u>Analytical Metho</u> <u>Parameter(s)</u> Chromium, Hexavalent <u>Analytical Metho</u> <u>Parameter(s)</u> Hardness (As CaCO3) <u>Analytical Metho</u> <u>Parameter(s)</u>	od:       E410.4 :         and	Results           < 10	Qualifier Qualifier Qualifier Qualifier	.3 mg/L D.F. 1 D.F. 1 D.F. 1 D.F. 1 D.F.	Units mg/L Units Units Units Units Units mg/L Units mg/L Units Units	<u>Analyzed:</u> 04/23/2013 9:05 AM <u>Analyzed:</u> 04/17/2013 5:56 AM <u>Analyzed:</u> 04/17/2013 5:37 AM <u>Analyzed:</u> 04/19/2013 11:15 AM <u>Analyzed:</u>	Analyst: CN Container. Container. Container. Container. Container. Container. Container. Container. Container. Container. Container. Container. Container.

-

Qualifiers: E = Value above quantitation range

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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575 Broad Hollow Rd., Melville, NY 11747 TEL: (631) 694-3040 FAX: (631) 420-8436 NYSDOH ID#10478

#### LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Town of Southampton Waste Management Division

Southampton, New York 11968 **Christine Fetten** Attn To:

: 4/15/2013 11:40:00 AM Collected Received : 4/16/2013 9:50:00 AM

Collected By PWG99

#### Sample Information: Type : Groundwater

Origin:

Collected By : PWG99	5050.0						Analyst: MJL
Analytical Method:	E353.2 :	_					
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrate as N		0.10		1	mg/L	04/17/2013 1:14 PM	Container-01 of
Analytical Method:	E420.1:		Prep Method:	E42	0.1	Prep Date: 4/22/2013 6:30:00 AM	Analyst: EM
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Phenolics, Total Recovera	ble	< 5.0		1	µg/L	04/24/2013 8:09 AM	Container-01 of
Analytical Method:	SM2540C	: IOC					Analyst: MM
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Total Dissolved Solids		97		1	mg/L	04/18/2013 12:39 PM	Container-01 of
Analytical Method:	E351.2 :		Prep Method:	E35	1.2	Prep Date: 4/23/2013 6:45:00 AM	Analyst: MJL
Parameter(s)		<b>Results</b>	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrogen, Kjeldahl, Total		< 0.10		1	mg/L	04/23/2013 2:27 PM	Container-01 of
Analytical Method;	SW9060 :						Analyst: CO
Parameter(s)		<b>Results</b>	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Total Organic Carbon		15.9		1	mg/L	04/25/2013 6:50 PM	Container-01 of

Lab No. : 1304917-006

Client Sample ID: MW-3C

Qualifiers: E = Value above quantitation range

- B = Found in Blank
- D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte c = Calibration acceptability criteria exceeded for this analyte

- r = Reporting limit > MDL and < LOQ
- J = Estimated value below calibration range
- s = Recovery exceeded control limits for this analyte
- N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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						DECHITE	
Μ	575 Broad Hollow Rd	. Melville	NY 11747	Res	LABORATORY ults for the samples and		
	TEL: (631) 694-3040 NYSDOH ID#10478	FAX: (631	) 420-8436	The l		r the integrity of the sample before receipt at	
Town of South	hampton					Sample	Information:
•	ement Division			Lab N	lo. : 1304917-007		Froundwater
•	, New York 11968		Client	Samp	le ID: MW-4A		
	Christine Fetten 15/2013 1:15:00 PM					Origin:	
	16/2013 9:50:00 AM					Ū.	
Collected By : PV							
Analytic	al Method: SM2320B	:					Analyst: HT
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Alkalinity, Total (	As CaCO3)	2.20		1	mg/L	04/17/2013 2:54 PM	Container-01 o
Analytic	al Method: E300.0 :		·····				Analyst: bka
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Bromide		< 0.50		1	mg/L	04/23/2013 10:34 PM	Container-01 o
Chloride		31.5		1	mg/L	04/23/2013 10:34 PM	Container-01 o
Sulfate		12.0		1	mg/L	04/23/2013 10:34 PM	Container-01 o
Analytic	al Method: SM5210B	:	Prep Method:	SM	5210B	Prep Date: 4/17/2013 6:39:36 AM	Analyst: CN
Parameter(s)		Results	Qualifier	00	1 1-14-	A set di	<b>•</b> • •
		1000010	Guanner	<u>D.F.</u>	<u>Units</u>	Analyzed;	Container:
Biochemical Oxy	gen Demand	< 2	Quanter	<u>D.r.</u> 1	mg/L	04/17/2013 9:45 AM	
Biochemical Oxy NOTES:	gen Demand		Quannet				Container: Container-01 o
NOTES: Blank depletion e	exceeds 0.2 mg/L - a	< 2		1	mg/L		Container-01 o
NOTES: Blank depletion e Analytic		< 2 average d	epletion of 0	1 .3 mg/L	mg/L	04/17/2013 9:45 AM	Container-01 o Analyst: CN
NOTES: Blank depletion e	exceeds 0.2 mg/L - a	< 2		1	mg/L	04/17/2013 9:45 AM <u>Analyzed:</u>	Container-01 o Analyst: CN Container:
NOTES: Blank depletion e Analytic	exceeds 0.2 mg/L - a al Method: E410.4 : n Demand	< 2 average d <u>Results</u> < 10	epletion of 0	1 .3 mg/L	mg/L	04/17/2013 9:45 AM	Container-01 o Analyst: CN Container: Container-01 o
NOTES: Blank depletion e <u>Analytic</u> <u>Parameter(s)</u> Chemical Oxyget <u>Analytic</u>	exceeds 0.2 mg/L - a	< 2 average d <u>Results</u> < 10 :: IOC	epletion of 0 Qualifier	1 .3 mg/L <u>D.F.</u> 1	mg/L Units mg/L	04/17/2013 9:45 AM <u>Analyzed:</u> 04/23/2013 9:07 AM	Container-01 o Analyst: CN Container: Container-01 o Analyst: EM
NOTES: Blank depletion e <u>Analytic</u> Parameter(s) Chemical Oxygen	exceeds 0.2 mg/L - a al Method: E410.4 : n Demand	< 2 average d <u>Results</u> < 10 :: IOC	epletion of 0	1 .3 mg/L <u>D.F.</u>	mg/L <u>Units</u>	04/17/2013 9:45 AM <u>Analyzed:</u>	Container-01 o Analyst: CN Container: Container-01 o Analyst: EM Container:
NOTES: Blank depletion e <u>Analytic</u> <u>Parameter(s)</u> Chemical Oxyget <u>Analytic</u>	exceeds 0.2 mg/L - a al Method: E410.4 : n Demand	< 2 average d <u>Results</u> < 10 :: IOC	epletion of 0 Qualifier	1 .3 mg/L <u>D.F.</u> 1	mg/L Units mg/L	04/17/2013 9:45 AM <u>Analyzed:</u> 04/23/2013 9:07 AM	Container-01 o Analyst: CN Container: Container-01 o Analyst: EM
NOTES: Blank depletion e <u>Analytic</u> Parameter(s) Chemical Oxyget <u>Analytic</u> Parameter(s) Color <u>Analytic</u>	exceeds 0.2 mg/L - a al Method: E410.4 : n Demand	< 2 average d <u>Results</u> < 10 : IOC <u>Results</u> < 5	epletion of 0 Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> mg/L <u>Units</u>	04/17/2013 9:45 AM <u>Analyzęd:</u> 04/23/2013 9:07 AM <u>Analyzed:</u>	Container-01 o Analyst: CN Container: Container-01 o Analyst: EM Container:
NOTES: Blank depletion e <u>Analytic</u> Parameter(s) Chemical Oxyget <u>Analytic</u> Parameter(s) Color	exceeds 0.2 mg/L - a al Method: E410.4 : n Demand al Method: SM2120B	< 2 average d <u>Results</u> < 10 : IOC <u>Results</u> < 5 • D :	epletion of 0 Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> mg/L <u>Units</u>	04/17/2013 9:45 AM <u>Analyzed:</u> 04/23/2013 9:07 AM <u>Analyzed:</u> 04/17/2013 5:57 AM <u>Analyzed:</u>	Container-01 o Analyst: CN Container: Container-01 o Analyst: EM Container-01 o Analyst: EM Container:
NOTES: Blank depletion e <u>Analytic</u> Parameter(s) Chemical Oxyget <u>Analytic</u> Parameter(s) Color <u>Analytic</u>	exceeds 0.2 mg/L - a al <u>Method:</u> E410.4 : n Demand al <u>Method:</u> SM2120B al <u>Method:</u> M3500-Ca	< 2 average d <u>Results</u> < 10 : IOC <u>Results</u> < 5 • D :	epletion of 0 Qualifier Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1	mg/L <u>Units</u> mg/L <u>Units</u> units	04/17/2013 9:45 AM <u>Analyzed:</u> 04/23/2013 9:07 AM <u>Analyzed:</u> 04/17/2013 5:57 AM	Container-01 o Analyst: CN Container: Container-01 o Analyst: EM Container: Container:
NOTES: Blank depletion e <u>Analytic</u> <u>Parameter(s)</u> Chemical Oxygen <u>Analytic</u> <u>Parameter(s)</u> Color <u>Analytic</u> <u>Parameter(s)</u> Chromium, Hexa <u>Analytic</u>	exceeds 0.2 mg/L - a al <u>Method:</u> E410.4 : n Demand al <u>Method:</u> SM2120B al <u>Method:</u> M3500-Ca	< 2 Average d Results < 10 : IOC Results < 5 : D : <u>Results</u> < 0.02	epletion of 0 Qualifier Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> mg/L <u>Units</u> <u>Units</u>	04/17/2013 9:45 AM <u>Analyzed:</u> 04/23/2013 9:07 AM <u>Analyzed:</u> 04/17/2013 5:57 AM <u>Analyzed:</u>	Container-01 o Analyst: CN Container: Container-01 o Analyst: EM Container-01 o Analyst: EM Container:
NOTES: Blank depletion e <u>Analytic</u> <u>Parameter(s)</u> Chemical Oxygen <u>Analytic</u> <u>Parameter(s)</u> Color <u>Analytic</u> <u>Parameter(s)</u> Chromium, Hexa	exceeds 0.2 mg/L - a al Method: E410.4 : n Demand al Method: SM21208 al Method: M3500-Co ivalent	< 2 average d <u>Results</u> < 10 : IOC <u>Results</u> < 5 : D : <u>Results</u> < 0.02 :	epletion of 0 Qualifier Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> mg/L <u>Units</u> <u>Units</u>	04/17/2013 9:45 AM <u>Analyzed:</u> 04/23/2013 9:07 AM <u>Analyzed:</u> 04/17/2013 5:57 AM <u>Analyzed:</u>	Container-01 o <u>Analyst:</u> CN <u>Container</u> : Container-01 o <u>Analyst:</u> EM <u>Container</u> : Container-01 o <u>Analyst:</u> EM <u>Container</u> : Container-01 o
NOTES: Blank depletion e <u>Analytic</u> <u>Parameter(s)</u> Chemical Oxygen <u>Analytic</u> <u>Parameter(s)</u> Color <u>Analytic</u> <u>Parameter(s)</u> Chromium, Hexa <u>Analytic</u>	exceeds 0.2 mg/L - a al Method: E410.4 : n Demand al Method: SM2120B al Method: M3500-Ca avalent al Method: SM2340C	< 2 average d <u>Results</u> < 10 : IOC <u>Results</u> < 5 : D : <u>Results</u> < 0.02 :	epletion of 0 Qualifier Qualifier Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1	mg/L <u>Units</u> mg/L <u>Units</u> <u>Units</u> <u>Units</u> mg/L	04/17/2013 9:45 AM <u>Analyzed:</u> 04/23/2013 9:07 AM <u>Analyzed:</u> 04/17/2013 5:57 AM <u>Analyzed:</u> 04/17/2013 5:38 AM	Container-01 o <u>Analyst:</u> CN <u>Container</u> : Container-01 o <u>Analyst:</u> EM <u>Container</u> : Container-01 o <u>Analyst:</u> EM <u>Container</u> : Container-01 o <u>Analyst:</u> JA <u>Container</u> :
NOTES: Blank depletion e <u>Analytic</u> <u>Parameter(s)</u> Chemical Oxyget <u>Analytic</u> <u>Parameter(s)</u> Color <u>Analytic</u> <u>Parameter(s)</u> Chromium, Hexa <u>Analytic</u> <u>Parameter(s)</u> Hardness (As Ca	exceeds 0.2 mg/L - a al Method: E410.4 : n Demand al Method: SM2120B al Method: M3500-Ca avalent al Method: SM2340C	< 2 average d <u>Results</u> < 10 : IOC <u>Results</u> < 5 O : <u>Results</u> < 0.02 : <u>Results</u> 52	epletion of 0 Qualifier Qualifier Qualifier Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	mg/L Units mg/L Units units Units Mg/L Units	04/17/2013 9:45 AM Analyzed: 04/23/2013 9:07 AM <u>Analyzed:</u> 04/17/2013 5:57 AM <u>Analyzed:</u> 04/17/2013 5:38 AM <u>Analyzed:</u>	Container-01 o <u>Analyst:</u> CN <u>Container</u> : Container-01 o <u>Analyst:</u> EM <u>Container</u> : Container-01 o <u>Analyst:</u> EM <u>Container</u> : Container-01 o <u>Analyst:</u> JA <u>Container</u> : Container-01 o
NOTES: Blank depletion e <u>Analytic</u> <u>Parameter(s)</u> Chemical Oxyget <u>Analytic</u> <u>Parameter(s)</u> Color <u>Analytic</u> <u>Parameter(s)</u> Chromium, Hexa <u>Analytic</u> <u>Parameter(s)</u> Hardness (As Ca	exceeds 0.2 mg/L - a al Method: E410.4 : n Demand al Method: SM2120B al Method: M3500-Ca avatent al Method: SM2340C aCO3)	< 2 Average d <u>Results</u> < 10 : IOC <u>Results</u> < 5 • D : <u>Results</u> < 0.02 : <u>Results</u> 52 • H3 H :	epletion of 0 Qualifier Qualifier Qualifier Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	mg/L Units mg/L Units units Units Mg/L Units	04/17/2013 9:45 AM Analyzed: 04/23/2013 9:07 AM <u>Analyzed:</u> 04/17/2013 5:57 AM <u>Analyzed:</u> 04/17/2013 5:38 AM <u>Analyzed:</u>	Container-01 o <u>Analyst:</u> CN <u>Container</u> : Container-01 o <u>Analyst:</u> EM <u>Container</u> : Container-01 o <u>Analyst:</u> EM <u>Container</u> : Container-01 o <u>Analyst:</u> JA <u>Container</u> : Container-01 o
NOTES: Blank depletion e <u>Analytic</u> <u>Parameter(s)</u> Chemical Oxyget <u>Analytic</u> <u>Parameter(s)</u> Color <u>Analytic</u> <u>Parameter(s)</u> Chromium, Hexa <u>Analytic</u> <u>Parameter(s)</u> Hardness (As Ca <u>Analytic</u>	exceeds 0.2 mg/L - a al Method: E410.4 : n Demand al Method: SM2120B al Method: M3500-Ca avalent al Method: SM2340C aCO3) al Method: SM4500-f	< 2 Average d <u>Results</u> < 10 : IOC <u>Results</u> < 5 • D : <u>Results</u> < 0.02 : <u>Results</u> 52 • H3 H :	epletion of 0 Qualifier Qualifier Qualifier Qualifier D	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 2	mg/L <u>Units</u> mg/L <u>Units</u> <u>Units</u> <u>Units</u> mg/L <u>Units</u> mg/L	04/17/2013 9:45 AM <u>Analyzed:</u> 04/23/2013 9:07 AM <u>Analyzed:</u> 04/17/2013 5:57 AM <u>Analyzed:</u> 04/17/2013 5:38 AM <u>Analyzed:</u> 04/19/2013 11:20 AM	Container-01 o <u>Analyst:</u> CN <u>Container</u> : Container-01 o <u>Analyst:</u> EM <u>Container</u> : Container-01 o <u>Analyst:</u> EM <u>Container</u> : Container-01 o <u>Analyst:</u> bka <u>Container</u> :
NOTES: Blank depletion e <u>Analytic</u> Parameter(s) Chemical Oxyget <u>Analytic</u> Parameter(s) Color <u>Analytic</u> Parameter(s) Chromium, Hexa <u>Analytic</u> Parameter(s) Hardness (As Ca <u>Analytic</u> Parameter(s) Nitrogen, Ammon	exceeds 0.2 mg/L - a al Method: E410.4 : n Demand al Method: SM2120B al Method: M3500-Ca avalent al Method: SM2340C aCO3) al Method: SM4500-f	< 2 Average d <u>Results</u> < 10 : IOC <u>Results</u> < 5 : D : <u>Results</u> < 0.02 : <u>Results</u> 52 VH3 H : <u>Results</u>	epletion of 0 Qualifier Qualifier Qualifier Qualifier D	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 2 <u>D.F.</u>	mg/L Units mg/L Units Units Units Units Units Units mg/L Units mg/L Units Units	04/17/2013 9:45 AM <u>Analyzed:</u> 04/23/2013 9:07 AM <u>Analyzed:</u> 04/17/2013 5:57 AM <u>Analyzed:</u> 04/17/2013 5:38 AM <u>Analyzed:</u> 04/19/2013 11:20 AM <u>Analyzed:</u>	Container-01 o <u>Analyst:</u> CN <u>Container</u> : Container-01 o <u>Analyst:</u> EM <u>Container</u> : Container-01 o <u>Analyst:</u> EM <u>Container</u> : Container-01 o <u>Analyst:</u> bka <u>Container</u> :

Qualifiers: E = Value above quantitation range

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte c = Calibration acceptability criteria exceeded for this analyte

- r = Reporting limit > MDL and < LOQ
- J = Estimated value below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

5/3/2013 Date Reported :

Joann M. Slavin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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	i Holiow Rd. , ) 694-3040 ID#10478	Melville FAX: (631	NY 11747 ) 420-8436	The la	ults for the sar	TORY RESULTS nples and analytes requested sponsible for the integrity of the sample befor e only for the certified tests requested.	re receipt a
Town of Southampton Waste Management Divi Southampton, New York Attn To : Christine F Collected : 4/15/2013 1:1 Received : 4/16/2013 9:5 Collected By : PWG99	<b>4 11968</b> Fetten 5:00 PM		Client		o. : 130491 e ID: MW-44		<u>Samp</u> Type : Origin:
	E353.2 :						
	E353.2 :	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Anal	l <u>yzed:</u>
Analytical Method:	E353.2 :	Results 12.2	<u>Qualifier</u> D	<u>D.F.</u> 10	<u>Units</u> mg/L		l <u>yzed:</u> 13 1:15 Pf
<u>Analytical Method:</u> <u>Parameter(s)</u> Nitrate as N	E353.2 : E420.1 :	12.2			mg/L		13 1:15 Pi
<u>Analytical Method:</u> <u>Parameter(s)</u> Nitrate as N		12.2	D Prep Method:	10	mg/L	04/17/20 Prep Date: 4/22/2013 6:3	13 1:15 Pi
Analytical Method: Parameter(s) Nitrate as N Analytical Method: Parameter(s)	E420.1 : le	12.2 <u>Results</u> < 5.0	D Prep Method:	10 E42	mg/L 0.1	04/17/20 <u>Prep Date:</u> 4/22/2013 6:3 <u>Ana</u>	13 1:15 P 0:00 AM I <u>vzed:</u>
Analytical Method: Parameter(s) Nitrate as N Analytical Method: Parameter(s) Phenolics, Total Recoverab Analytical Method:	E420.1 :	12.2 <u>Results</u> < 5.0	D Prep Method: Qualifier	10 E420 <u>D.F.</u> 1	mg/L 0.1 <u>Units</u> µg/L	04/17/20 <u>Prep Date:</u> 4/22/2013 6:3 <u>Ana</u> 04/24/20	13 1:15 Pl 0:00 AM <u>lvzed:</u> 13 8:10 Al
Analytical Method: Parameter(s) Nitrate as N Analytical Method: Parameter(s) Phenolics, Total Recoverab	E420.1 : le	12.2 <u>Results</u> < 5.0	D Prep Method:	10 E420 <u>D.F.</u>	mg/L 0.1 <u>Units</u>	04/17/20 <u>Prep Date:</u> 4/22/2013 6:3 <u>Ana</u> 04/24/20	13 1:15 Pi 0:00 AM

Prep Method:

Results Qualifier

Results Qualifier

< 0.10

1.9

Joan M. Stain B = Found in Blank D.F. = Dilution Factor D = Results for Dilution H = Received/analyzed outside of analytical holding time Laboratory Manager + = ELAP / NELAC does not offer certification for this analyte c = Calibration acceptability criteria exceeded for this analyte

E351.2

<u>Units</u>

<u>Units</u>

mg/L

mg/L

<u>D.F</u>

1

D.F

1

Test results meet the requirements of NELAC unless r = Reporting limit > MDL and < LOQ otherwise noted. J = Estimated value - below calibration range

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# Qualifiers: E = Value above quantitation range

Analytical Method: E351.2 :

Analytical Method: SW9060 :

Parameter(s)

Parameter(s)

Nitrogen, Kjeldahl, Total

Total Organic Carbon

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013 Sample Information: Type : Groundwater

Analyst: MJL

Container:

Analyst: EM

Container.

Container:

Analyst: MJL

Container:

Analyst: CO

Container.

Container-01 of 02

Container-01 of 01

04/18/2013 12:42 PM Container-01 of 02

Container-01 of 01 Analyst: MM

Container-01 of 01

04/17/2013 1:15 PM

04/24/2013 8:10 AM

Analyzed:

04/23/2013 2:30 PM

Analyzed:

04/25/2013 7:28 PM

Prep Date: 4/23/2013 6:45:00 AM

<b>2</b> 1a	abs						
M					LABORATORY		
	575 Broad Hollow Rd.		NY 11747	Res	ults for the samples and	d analytes requested	
	TEL: (631) 694-3040 NYSDOH ID#10478	FAX: (031	) 420-8436		ab is not directly responsible for b and is responsible only for the	r the integrity of the sample before receipt at e certified tests requested.	
Town of Southan	npton					Sample	Information:
Waste Manageme				Lab N	o. : 1304917-008		roundwater
Southampton, Ne			Client	Samp	le ID: MW-4B		
_	ristine Fetten					Origin:	
	2013 2:00:00 PM					Chigin	
Received : 4/16/2 Collected By : PWG	2013 9:50:00 AM 99						
Analytical M	Method: SM2320B	:					Analyst: HT
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Alkalinity, Total (As	CaCO3)	110	D	4	mg/L	04/17/2013 2:59 PM	Container-01 of
Analytical M	Method: E300.0 :						Analyst: bka
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Bromide		< 0.50		1	mg/L	04/23/2013 11:15 PM	Container-01 of
Chloride		26.2		1	mg/L	04/23/2013 11:15 PM	Container-01 of
Sulfate		8.34		1	mg/L	04/23/2013 11:15 PM	Container-01 of
Analytical M	Method: SM5210B	:	Prep Method:	SMS	5210B	Prep Date: 4/17/2013 6:39:36 AM	Analyst: CN
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Biochemical Oxyger	n Demand	< 2		1	mg/L	04/17/2013 9:50 AM	Container-01 of
NOTES: Blank depletion exce	eeds 0.2 ma/L - a	average d	enletion of 0	3 ma/l			
	Method: E410.4 :	iverage a		o mg/c			Analyst: CN
Parameter(s)		<b>O</b> . <b>H</b> .					Analyst. Civ
		Results	Qualifier	D.F.	Units	Analyzed:	Analyst: CN Container:
Chemical Oxygen D	emand	< 10	Qualifier	<u>D.F.</u> 1	<u>Units</u> mg/L	<u>Analyzed:</u> 04/23/2013 9:09 AM	
Chemical Oxygen D		< 10	Qualifier				Container:
		< 10 : IOC	Qualifier Qualifier				Container: Container-01 of
Analytical M		< 10 : IOC		1	mg/L	04/23/2013 9:09 AM	Container: Container-01 of Analyst: EM
Analytical M Parameter(s)	<u>lethod:</u> SM2120B	< 10 : IOC <u>Results</u> 70	Qualifier	1 <u>D.F.</u>	mg/L <u>Units</u>	04/23/2013 9:09 AM Analyzed:	<u>Container:</u> Container-01 of <u>Analyst:</u> EM <u>Container:</u>
Analytical M Parameter(s) Color	<u>lethod:</u> SM2120B	< 10 : IOC <u>Results</u> 70 D :	Qualifier	1 <u>D.F.</u>	mg/L <u>Units</u>	04/23/2013 9:09 AM Analyzed:	<u>Container:</u> Container-01 of <u>Analyst:</u> EM <u>Container:</u> Container-01 of
Analytical M Parameter(s) Color Analytical M	Method: SM2120B Method: M3500-Cr	< 10 : IOC <u>Results</u> 70 D :	<u>Qualifier</u> D	1 <u>D.F.</u> 2	mg/L <u>Units</u> units	04/23/2013 9:09 AM <u>Analyzed:</u> 04/17/2013 5:58 AM	Container: Container-01 of <u>Analyst:</u> EM <u>Container:</u> Container-01 of <u>Analyst:</u> EM
Analytical M Parameter(s) Color <u>Analytical M</u> Parameter(s)	Method: SM2120B Method: M3500-Cr lent	< 10 : IOC <u>Results</u> 70 D : <u>Results</u> < 0.02	<u>Qualifier</u> D	1 <u>D.F.</u> 2 <u>D.F.</u>	mg/L <u>Units</u> units <u>Units</u>	04/23/2013 9:09 AM <u>Analyzed:</u> 04/17/2013 5:58 AM <u>Analyzed:</u>	Container: Container-01 of Analyst: EM Container: Container-01 of Analyst: EM Container:
Analytical M Parameter(s) Color <u>Analytical M</u> Parameter(s) Chromium, Hexavale	Method: SM2120B Method: M3500-Cr lent	< 10 : IOC <u>Results</u> 70 D : <u>Results</u> < 0.02 :	<u>Qualifier</u> D	1 <u>D.F.</u> 2 <u>D.F.</u>	mg/L <u>Units</u> units <u>Units</u>	04/23/2013 9:09 AM <u>Analyzed:</u> 04/17/2013 5:58 AM <u>Analyzed:</u>	Container: Container-01 of <u>Analyst:</u> EM <u>Container:</u> Container-01 of <u>Analyst:</u> EM <u>Container:</u> Container-01 of
Analytical M Parameter(s) Color Analytical M Parameter(s) Chromium, Hexavale Analytical M Parameter(s)	<u>Method:</u> SM2120B <u>Method:</u> M3500-Cr lent <u>Method:</u> SM2340C	< 10 : IOC <u>Results</u> 70 D : <u>Results</u> < 0.02 :	<u>Qualifier</u> D <u>Qualifier</u>	1 <u>D.F.</u> 2 <u>D.F.</u> 1	mg/L <u>Units</u> units <u>Units</u> mg/L	04/23/2013 9:09 AM <u>Analyzed:</u> 04/17/2013 5:58 AM <u>Analyzed:</u> 04/17/2013 5:39 AM	Container: Container-01 of Analyst: EM Container: Container-01 of Analyst: EM Container: Container: Container: JA Container
Analytical M Parameter(s) Color Analytical M Parameter(s) Chromium, Hexavale Analytical M Parameter(s)	Method: SM2120B Method: M3500-Cr ent Method: SM2340C D3)	< 10 : IOC <u>Results</u> 70 D : <u>Results</u> < 0.02 : <u>Results</u> 112	Qualifier D Qualifier Qualifier	1 <u>D.F.</u> 2 <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> units <u>Units</u> mg/L <u>Units</u>	04/23/2013 9:09 AM <u>Analyzed:</u> 04/17/2013 5:58 AM <u>Analyzed:</u> 04/17/2013 5:39 AM <u>Analyzed:</u>	Container: Container-01 of Analyst: EM Container: Container-01 of Analyst: EM Container: Container: Container: JA Container
Analytical M Parameter(s) Color Analytical M Parameter(s) Chromium, Hexavalo Analytical M Parameter(s) Hardness (As CaCC	Method: SM2120B Method: M3500-Cr ent Method: SM2340C D3)	< 10 : IOC <u>Results</u> 70 D : <u>Results</u> < 0.02 : <u>Results</u> 112 H13 H :	Qualifier D Qualifier Qualifier	1 <u>D.F.</u> 2 <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> units <u>Units</u> mg/L <u>Units</u>	04/23/2013 9:09 AM <u>Analyzed:</u> 04/17/2013 5:58 AM <u>Analyzed:</u> 04/17/2013 5:39 AM <u>Analyzed:</u>	Container-01 of Analyst: EM Container: Container-01 of Analyst: EM Container: Container: Container-01 of Analyst: JA Container: Container-01 of
Analytical M Parameter(s) Color Analytical M Parameter(s) Chromium, Hexavale Analytical M Parameter(s) Hardness (As CaCC Analytical M	Method:         SM2120B           Method:         M3500-Cr           lent         Method:           Method:         SM2340C           D3)         Method:	< 10 : IOC <u>Results</u> 70 D : <u>Results</u> < 0.02 : <u>Results</u> 112 H13 H :	Qualifier D Qualifier Qualifier D	1 <u>D.F.</u> 2 <u>D.F.</u> 1 <u>D.F.</u> 4	mg/L <u>Units</u> units <u>Units</u> mg/L <u>Units</u> mg/L	04/23/2013 9:09 AM <u>Analyzed:</u> 04/17/2013 5:58 AM <u>Analyzed:</u> 04/17/2013 5:39 AM <u>Analyzed:</u> 04/19/2013 11:25 AM	Container: Container-01 of Analyst: EM Container: Container-01 of Analyst: EM Container: Container: Container: Container: Container: Container: Container: bka Container:
Analytical M Parameter(s) Color Analytical M Parameter(s) Chromium, Hexavale Analytical M Parameter(s) Hardness (As CaCC Analytical M Parameter(s) Nitrogen, Ammonia	Method:         SM2120B           Method:         M3500-Cr           lent         Method:           Method:         SM2340C           D3)         Method:	<ul> <li>&lt; 10</li> <li>: IOC</li> <li>Results</li> <li>70</li> <li>D :</li> <li>Results</li> <li>&lt; 0.02</li> <li>:</li> <li>Results</li> <li>112</li> <li>IH3 H :</li> <li>Results</li> </ul>	Qualifier D Qualifier Qualifier D Qualifier	1 <u>D.F.</u> 2 <u>D.F.</u> 1 <u>D.F.</u> 4 <u>D.F.</u>	mg/L <u>Units</u> units <u>Units</u> mg/L <u>Units</u> mg/L <u>Units</u>	04/23/2013 9:09 AM <u>Analyzed:</u> 04/17/2013 5:58 AM <u>Analyzed:</u> 04/17/2013 5:39 AM <u>Analyzed:</u> 04/19/2013 11:25 AM <u>Analyzed:</u>	Container: Container-01 of Analyst: EM Container: Container-01 of Analyst: EM Container: Container-01 of Analyst: JA Container: Container:
Analytical M Parameter(s) Color Analytical M Parameter(s) Chromium, Hexavale Analytical M Parameter(s) Hardness (As CaCC Analytical M Parameter(s) Nitrogen, Ammonia	Method:         SM2120B           Method:         M3500-Cr           lent         Method:           Method:         SM2340C           D3)         Method:           Method:         SM4500-N           (As N)         SM4500-N	<ul> <li>&lt; 10</li> <li>: IOC</li> <li><u>Results</u></li> <li>70</li> <li>D:</li> <li><u>Results</u></li> <li>&lt; 0.02</li> <li>:</li> <li><u>Results</u></li> <li>112</li> <li>IH3 H :</li> <li><u>Results</u></li> <li>3.95</li> </ul>	Qualifier D Qualifier Qualifier D Qualifier	1 <u>D.F.</u> 2 <u>D.F.</u> 1 <u>D.F.</u> 4 <u>D.F.</u>	mg/L <u>Units</u> units <u>Units</u> mg/L <u>Units</u> mg/L <u>Units</u>	04/23/2013 9:09 AM <u>Analyzed:</u> 04/17/2013 5:58 AM <u>Analyzed:</u> 04/17/2013 5:39 AM <u>Analyzed:</u> 04/19/2013 11:25 AM <u>Analyzed:</u>	Container: Container-01 of Analyst: EM Container: Container-01 of Analyst: EM Container: Container: Container: Container: Container: Container: Container: Container:

-

Qualifiers: E = Value above quantitation range

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound e Reported : 5/3/2013

Date Reported :

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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TEL: (63	ad Hollow Rd. 11) 694-3040 H ID#10478		, NY 11747 ) 420-8436	The la	ab is not directly responsible	Y RESULTS nd analytes requested for the integrity of the sample before receipt at the certified tests requested.	
Town of Southampton Waste Management Div Southampton, New You Attn To : Christine Collected : 4/15/2013 2: Received : 4/16/2013 9: Collected By : PWG99	rk 11968 Fetten :00:00 PM		Client		o. : 1304917-008 le ID: MW-4B		Information: roundwater
Analytical Method: Parameter(s)	E353.2 :	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: MJL Container:
Nitrate as N		0.14	diamin	1	mg/L	04/17/2013 1:16 PM	Container-01 of (
Analytical Method:	E420.1 :		Prep Method:	E42	0.1	Prep Date: 4/22/2013 6:30:00 AM	Analyst: EM
Parameter(s)		Results	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Phenolics, Total Recovera	ble	< 5.0		1	µg/L	04/24/2013 8:11 AM	Container-01 of (
Analytical Method:	SM2540C	: IOC				· · · · · · · · · · · · · · · · · · ·	Analyst: MM
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Total Dissolved Solids		159		1	mg/L	04/18/2013 12:45 PM	Container-01 of
Analytical Method:	E351.2 :		Prep Method:	E35	1.2	Prep Date: 4/23/2013 6:45:00 AM	Analyst: MJL
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrogen, Kjeldahl, Total		5.94	D	10	mg/L	04/23/2013 3:08 PM	Container-01 of
Analytical Method:	SW9060 :						Analyst: CO
Parameter(s)		<b>Results</b>	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:

1

mg/L

Joann M. Dearin H = Received/analyzed outside of analytical holding time Laboratory Manager + = ELAP / NELAC does not offer certification for this analyte c = Calibration acceptability criteria exceeded for this analyte Test results meet the requirements of NELAC unless otherwise noted. This report shall not be reproduced except in full, without the written approval of the laboratory. Page 16 of 20

04/25/2013 8:07 PM Container-01 of 02

TOS012/012F S138

Total Organic Carbon

Qualifiers: E = Value above quantitation range B = Found in Blank

Date Reported :

D.F. = Dilution Factor D = Results for Dilution

J = Estimated value - below calibration range s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

5/3/2013

r = Reporting limit > MDL and < LOQ

31.1

	labs						
М	575 Broad Hollow Rd.	Mahalla	NY 11747	<b>D</b> -	LABORATORY		
	TEL: (631) 694-3040		) 420-8436		ults for the samples and	, , ,	
	NYSDOH ID#10478				ab is not directly responsible for ab and is responsible only for the	the integrity of the sample before receipt at e certified tests requested.	
Town of South	•					Sample	Information:
Waste Manage	New York 11968			Lab N	lo. : 1304917-009	Type: G	roundwater
•	Christine Fetten		Client	t Samp	le ID: MW-4C		
Collected : 4/15	5/2013 3:10:00 PM					Origin:	
Received : 4/16	6/2013 9:50:00 AM						
Collected By : PW	/G99						
Analytica	al Method: SM2320B	:					Analyst: HT
Parameter(s)		Results	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Alkalinity, Total (A	As CaCO3)	33.2		1	mg/L	04/17/2013 3:06 PM	Container-01 of
Analytica	Method: E300.0 :		<i></i>				Analyst: bka
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Bromide		< 0.50		1	mg/L	04/23/2013 11:28 PM	Container-01 o
Chloride		82.6	D	5	mg/L	04/23/2013 11:42 PM	Container-01 of
Sulfate		< 5.00		1	mg/L	04/23/2013 11:28 PM	Container-01 of
Analytica	Method: SM5210B	:	Prep Method:	SMS	5210B	Prep Date: 4/17/2013 6:39:36 AM	Analyst: CN
Parameter(s) Biochemical Oxyg	gen Demand	Results	Qualifier	<u>D.F.</u> 1	Units mg/L	<u>Analyzed:</u> 04/17/2013 9:55 AM	Container: Container-01 of
Biochemical Oxyg NOTES: Blank depletion e	xceeds 0.2 mg/L - a	<2		1	mg/L		Container-01 of
Biochemical Oxyg NOTES: Blank depletion e		< 2 average d	epletion of 0	1 .3 mg/L	mg/L		
Biochemical Oxyg NOTES: Blank depletion ex Analytica	xceeds 0.2 mg/L - a al Method: E410.4 :	< 2 average d		1	mg/L	04/17/2013 9:55 AM	Container-01 of Analyst: CN Container:
Biochemical Oxyg NOTES: Blank depletion ex <u>Analytica</u> <u>Parameter(s)</u> Chemical Oxygen	xceeds 0.2 mg/L - a al Method: E410.4 :	< 2 average d <u>Results</u> < 10	epletion of 0	1 .3 mg/L <u>D.F.</u>	mg/L	04/17/2013 9:55 AM <u>Analyzed:</u>	Container-01 o Analyst: CN Container:
Biochemical Oxyg NOTES: Blank depletion ex <u>Analytica</u> <u>Parameter(s)</u> Chemical Oxygen	xceeds 0.2 mg/L - a al Method: E410.4 : n Demand	< 2 average d <u>Results</u> < 10	epletion of 0 Qualifier	1 .3 mg/L <u>D.F.</u>	mg/L	04/17/2013 9:55 AM <u>Analyzed:</u>	Container-01 o Analyst: CN <u>Container-</u> 01 o
Biochemical Oxyg NOTES: Blank depletion ex <u>Analytica</u> <u>Parameter(s)</u> Chemical Oxygen <u>Analytica</u>	xceeds 0.2 mg/L - a al Method: E410.4 : n Demand	< 2 average d <u>Results</u> < 10 : IOC	epletion of 0 Qualifier	1 .3 mg/L <u>D.F.</u> 1	mg/L <u>Units</u> mg/L	04/17/2013 9:55 AM <u>Analyzed:</u> 04/23/2013 9:11 AM	Container-01 o Analyst: CN Container- Container-01 o Analyst: EM Container:
Biochemical Oxyg NOTES: Blank depletion ex <u>Analytica</u> <u>Parameter(s)</u> Chemical Oxygen <u>Analytica</u> <u>Parameter(s)</u> Color	xceeds 0.2 mg/L - a al Method: E410.4 : n Demand	< 2 average d <u>Results</u> < 10 : IOC <u>Results</u> 15	epletion of 0 Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> mg/L <u>Units</u>	04/17/2013 9:55 AM <u>Analyzed:</u> 04/23/2013 9:11 AM <u>Analyzed:</u>	Container-01 o Analyst: CN Container- Container-01 o Analyst: EM Container:
Biochemical Oxyg NOTES: Blank depletion ex <u>Analytica</u> <u>Parameter(s)</u> Chemical Oxygen <u>Analytica</u> <u>Parameter(s)</u> Color	exceeds 0.2 mg/L - a al Method: E410.4 : In Demand al Method: SM2120B	< 2 average d < 10 : IOC Results 15 D :	epletion of 0 Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> mg/L <u>Units</u>	04/17/2013 9:55 AM <u>Analyzed:</u> 04/23/2013 9:11 AM <u>Analyzed:</u>	Container-01 of Analyst: CN <u>Container-</u> 01 of Analyst: EM <u>Container:</u> Container-01 of
Biochemical Oxyg NOTES: Blank depletion ex <u>Analytica</u> <u>Parameter(s)</u> Chemical Oxygen <u>Analytica</u> Color <u>Analytica</u>	al Method: M3500-Cr	< 2 average d < 10 : IOC Results 15 D :	epletion of 0 Qualifier Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1	mg/L <u>Units</u> mg/L <u>Units</u> units	04/17/2013 9:55 AM <u>Analyzed:</u> 04/23/2013 9:11 AM <u>Analyzed:</u> 04/17/2013 5:59 AM	Container-01 of Analyst: CN Container- Container-01 of Analyst: EM Container-01 of Analyst: EM Container-
Biochemical Oxyg NOTES: Blank depletion e: <u>Analytica</u> <u>Parameter(s)</u> Chemical Oxygen <u>Analytica</u> <u>Parameter(s)</u> Color <u>Analytica</u> <u>Parameter(s)</u> Chromium, Hexay	al Method: M3500-Cr	<pre>&lt; 2 Average d Results &lt; 10 : IOC Results 15 D: Results &lt; 0.02</pre>	epletion of 0 Qualifier Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> mg/L <u>Units</u> <u>Units</u>	04/17/2013 9:55 AM <u>Analyzed:</u> 04/23/2013 9:11 AM <u>Analyzed:</u> 04/17/2013 5:59 AM <u>Analyzed:</u>	Container-01 of Analyst: CN Container-01 of Analyst: EM Container: Container-01 of Analyst: EM
Biochemical Oxyg NOTES: Blank depletion e: <u>Analytica</u> <u>Parameter(s)</u> Chemical Oxygen <u>Analytica</u> <u>Parameter(s)</u> Color <u>Analytica</u> <u>Parameter(s)</u> Chromium, Hexay	al Method: SM21208 al Method: SM21208 al Method: M3500-Cr valent	< 2 Average d Results < 10 : IOC Results 15 D : Results < 0.02 :	epletion of 0 Qualifier Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> mg/L <u>Units</u> <u>Units</u>	04/17/2013 9:55 AM <u>Analyzed:</u> 04/23/2013 9:11 AM <u>Analyzed:</u> 04/17/2013 5:59 AM <u>Analyzed:</u>	Container-01 of Analyst: CN Container- Container-01 of Analyst: EM Container-01 of Analyst: EM Container; Container-01 of
Biochemical Oxyg NOTES: Blank depletion e: <u>Analytica</u> <u>Parameter(s)</u> Chemical Oxygen <u>Analytica</u> <u>Parameter(s)</u> Color <u>Analytica</u> <u>Parameter(s)</u> Chromium, Hexav <u>Analytica</u>	al Method: M3500-Cr valent al Method: SM2120B SM2120B SM2120B SM2120B SM2120B SM2120B SM2120B SM2340C	< 2 Average d Results < 10 : IOC Results 15 D : Results < 0.02 :	epletion of 0 Qualifier Qualifier Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> mg/L <u>Units</u> <u>Units</u> <u>Units</u> mg/L	04/17/2013 9:55 AM <u>Analyzed:</u> 04/23/2013 9:11 AM <u>Analyzed:</u> 04/17/2013 5:59 AM <u>Analyzed:</u> 04/17/2013 5:40 AM	Container-01 of <u>Analyst:</u> CN <u>Container-01 of</u> <u>Analyst:</u> EM <u>Container-01 of</u> <u>Analyst:</u> EM <u>Container-01 of</u> <u>Analyst:</u> EM <u>Container-01 of</u> <u>Analyst:</u> JA <u>Container-01 of</u>
Biochemical Oxyg NOTES: Blank depletion ex <u>Analytica</u> <u>Parameter(s)</u> Chemical Oxygen <u>Analytica</u> <u>Parameter(s)</u> Color <u>Analytica</u> <u>Parameter(s)</u> Chromium, Hexav <u>Analytica</u> <u>Parameter(s)</u> Hardness (As Cad	al Method: M3500-Cr valent al Method: SM2120B SM2120B SM2120B SM2120B SM2120B SM2120B SM2120B SM2340C	< 2           average d           Results           < 10	epletion of 0 Qualifier Qualifier Qualifier Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> mg/L <u>Units</u> <u>Units</u> <u>Units</u> mg/L <u>Units</u>	04/17/2013 9:55 AM <u>Analyzed:</u> 04/23/2013 9:11 AM <u>Analyzed:</u> 04/17/2013 5:59 AM <u>Analyzed:</u> 04/17/2013 5:40 AM <u>Analyzed:</u>	Container-01 of <u>Analyst:</u> CN <u>Container-01 of</u> <u>Analyst:</u> EM <u>Container-01 of</u> <u>Analyst:</u> EM <u>Container-01 of</u> <u>Analyst:</u> EM <u>Container-01 of</u> <u>Analyst:</u> JA <u>Container-01 of</u>
Biochemical Oxyg NOTES: Blank depletion ex <u>Analytica</u> <u>Parameter(s)</u> Chemical Oxygen <u>Analytica</u> <u>Parameter(s)</u> Color <u>Analytica</u> <u>Parameter(s)</u> Chromium, Hexav <u>Analytica</u> <u>Parameter(s)</u> Hardness (As Cad	xceeds 0.2 mg/L - a al Method: E410.4 : b Demand al Method: SM2120B al Method: M3500-Cr valent al Method: SM2340C CO3)	<ul> <li>&lt; 2</li> <li>average d</li> <li>Results</li> <li>&lt; 10</li> <li>: IOC</li> <li>Results</li> <li>15</li> <li>D :</li> <li>Results</li> <li>&lt; 0.02</li> <li>:</li> <li>Results</li> <li></li> <li>116</li> <li>IH3 H :</li> </ul>	epletion of 0 Qualifier Qualifier Qualifier Qualifier	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> mg/L <u>Units</u> <u>Units</u> <u>Units</u> mg/L <u>Units</u>	04/17/2013 9:55 AM <u>Analyzed:</u> 04/23/2013 9:11 AM <u>Analyzed:</u> 04/17/2013 5:59 AM <u>Analyzed:</u> 04/17/2013 5:40 AM <u>Analyzed:</u>	Container-01 o <u>Analyst:</u> CN <u>Container-</u> Container-01 o <u>Analyst:</u> EM <u>Container-</u> Container-01 o <u>Analyst:</u> EM <u>Container-</u> Container-01 o <u>Analyst:</u> JA <u>Container-</u> Container-01 o
Biochemical Oxyg NOTES: Blank depletion ex <u>Analytica</u> <u>Parameter(s)</u> Chemical Oxygen <u>Analytica</u> <u>Parameter(s)</u> Color <u>Analytica</u> <u>Parameter(s)</u> Chromium, Hexav <u>Analytica</u> <u>Parameter(s)</u> Hardness (As Cad <u>Analytica</u>	exceeds 0.2 mg/L - a al Method: E410.4 : b Demand al Method: SM2120B al Method: M3500-Cr valent al Method: SM2340C CO3) al Method: SM4500-h	<ul> <li>&lt; 2</li> <li>average d</li> <li>Results</li> <li>&lt; 10</li> <li>: IOC</li> <li>Results</li> <li>15</li> <li>D :</li> <li>Results</li> <li>&lt; 0.02</li> <li>:</li> <li>Results</li> <li></li> <li>116</li> <li>IH3 H :</li> </ul>	epletion of 0 Qualifier Qualifier Qualifier Qualifier D	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 4	mg/L <u>Units</u> mg/L <u>Units</u> units <u>Units</u> mg/L <u>Units</u> mg/L	04/17/2013 9:55 AM <u>Analyzed:</u> 04/23/2013 9:11 AM <u>Analyzed:</u> 04/17/2013 5:59 AM <u>Analyzed:</u> 04/17/2013 5:40 AM <u>Analyzed:</u> 04/19/2013 11:30 AM	Container-01 o <u>Analyst:</u> CN <u>Container-</u> Container-01 o <u>Analyst:</u> EM <u>Container-</u> Container-01 o <u>Analyst:</u> EM <u>Container-</u> Container-01 o <u>Analyst:</u> JA <u>Container-</u> Container-01 o <u>Analyst:</u> bka <u>Container-</u>
Biochemical Oxyg NOTES: Blank depletion ex <u>Analytica</u> <u>Parameter(s)</u> Chemical Oxygen <u>Analytica</u> <u>Parameter(s)</u> Color <u>Analytica</u> <u>Parameter(s)</u> Chromium, Hexav <u>Analytica</u> <u>Parameter(s)</u> Hardness (As Cato <u>Analytica</u> <u>Parameter(s)</u> Nitrogen, Ammon	exceeds 0.2 mg/L - a al Method: E410.4 : b Demand al Method: SM2120B al Method: M3500-Cr valent al Method: SM2340C CO3) al Method: SM4500-h	< 2           Average d           Results           < 10	epletion of 0 Qualifier Qualifier Qualifier Qualifier D	1 .3 mg/L <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 4 <u>D.F.</u>	mg/L Units mg/L Units Units Units Units Units Units mg/L Units mg/L Units Units	04/17/2013 9:55 AM <u>Analyzed:</u> 04/23/2013 9:11 AM <u>Analyzed:</u> 04/17/2013 5:59 AM <u>Analyzed:</u> 04/17/2013 5:40 AM <u>Analyzed:</u> 04/19/2013 11:30 AM <u>Analyzed:</u>	Container-01 of <u>Analyst:</u> CN <u>Container</u> Container-01 of <u>Analyst:</u> EM <u>Container</u> Container-01 of <u>Analyst:</u> EM <u>Container</u> Container-01 of <u>Analyst:</u> JA <u>Container</u> Container-01 of <u>Analyst:</u> bka <u>Container</u>

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Qualifiers: E = Value above quantitation range

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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H 2 labs 575 Broad Hallow Rd TEL: (631) 694-3040 NYSDOH ID#10478	. , Melville, NY 11747 FAX: (631) 420-8436	LABORATORY Results for the samples and The lab is not directly responsible for the lab and is responsible only for the	analytes requested the integrity of the sample before receipt at	
Town of Southampton Waste Management Division				nformation:
Southampton, New York 11968		Lab No. : 1304917-009	Type : Gi	roundwater
Attn To         Christine Fetten           Collected         : 4/15/2013 3:10:00 PM           Received         : 4/16/2013 9:50:00 AM           Collected By : PWG99	Client	Sample ID: MW-4C	Origin:	
Analytical Method: E353.2 :				Analyst: MJL
Parameter(s)	Results Qualifier	D.F. Units	Analyzed:	Container:
Nitrate as N	< 0.10	1 mg/L	04/17/2013 1:17 PM	Container-01 of 01
Analytical Method: E420.1 :	Prep Method:	E420.1	Prep Date: 4/22/2013 6:30:00 AM	Analyst: EM
Parameter(s)	Results Qualifier	<u>D.F. Units</u>	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0	1 μg/L	04/24/2013 8:12 AM	Container-01 of 01
Analytical Method: SM2540C	: IOC			Analyst: MM
Parameter(s)	Results Qualifier	D.F. Units	Analyzed:	Container:
Total Dissolved Solids	250	1 mg/L	04/18/2013 12:48 PM	Container-01 of 02
Analytical Method: E351.2 :	Prep Method:	E351.2	Prep Date: 4/23/2013 6:45:00 AM	Analyst: MJL
Parameter(s)	Results Qualifier	D.F. Units	Analyzed:	Container:
Nitrogen, Kjeldahi, Total	< 0.10	1 mg/L	04/23/2013 2:32 PM	Container-01 of 01
Analytical Method: SW9060				Analyst: CO
Parameter(s)	Results Qualifier	<u>D.F. Units</u>	Analyzed:	Container;
Total Organic Carbon	9.9	1 mg/L	04/25/2013 8:45 PM	Container-01 of 02

Qualifiers:	E = Value abov B = Found in B	re quantitation range	Joann M. Slavin
	D.F. = Dilution H = Received/a + = ELAP / NE	Factor D = Results for Dilution analyzed outside of analytical holding time LAC does not offer certification for this analyte	Laboratory Manager
	r = Reporting li	acceptability criteria exceeded for this analyte mit > MDL and < LOQ value - below calibration range	Test results meet the requirements of NELAC unless otherwise noted.
	,	exceeded control limits for this analyte presumptive evidence of compound	This report shall not be reproduced except in full, without the written approval of the laboratory.
Dat	e Reported :	5/3/2013	Page 18 of 20

H 2 labs						
				LABORATORY	RESULTS	
575 Broad Hollo	w Rol., Melville	, NY 11747	Res	ults for the samples and		
TEL: (631) 694-3 NYSDOH ID#10-		) 420-8436		ab is not directly responsible for b and is responsible only for th	the integrity of the sample before receipt at e certified tests requested.	
Town of Southampton					Sample	Information:
Waste Management Division			Lab N	o. :1304917-010		ield Blank
Southampton, New York 119		Clien	t Sampl	le ID: FB001		
Attn To : Christine Fetter					Origin:	
Collected : 4/15/2013 11:00:0 Received : 4/16/2013 9:50:00						
Collected By : PWG99						
Analytical Method: SM23	320B :					Analyst: HT
Parameter(s)	Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Alkalinity, Total (As CaCO3)	< <b>1</b> .00		1	mg/L	04/17/2013 3:14 PM	Container-01 of
Analytical Method: E300	0.0 :					Analyst: bka
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	04/23/2013 11:55 PM	Container-01
Chloride	< 2.00		1	mg/L	04/23/2013 11:55 PM	Container-01
Sulfate	< 5.00		1	mg/L	04/23/2013 11:55 PM	Container-01
Analytical Method: SM52	2108 :	Prep Method:	SM5	210B	Prep Date: 4/17/2013 6:39:36 AM	Analyst: CN
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	04/17/2013 10:00 AM	Container-01 c
NOTES:						
Blank depletion exceeds 0.2 mg/	/L - average d	epletion of 0	).3 mg/L			
Analytical Method: E410	).4 :					Analyst: CN
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Chemical Oxygen Demand	< 10		1	mg/L	04/23/2013 9:13 AM	Container-01 of
Analytical Method: SM21	120B : IOC			. <u> </u>		Analyst: EM
Parameter(s)	Results	Qualifier	<u>D,F.</u>	Units	Analyzed:	Container:
Color	< 5		1	units	04/17/2013 6:00 AM	Container-01 d
Analytical Method: M350	00-Cr D :					Analyst: EM
Parameter(s)	Results	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Chromium, Hexavalent	< 0.02		1	mg/L	04/17/2013 5:41 AM	Container-01
Analytical Method: SM23	340C :					Analyst: JA
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Hardness (As CaCO3)			1	mg/L	04/19/2013 11:35 AM	Container-01
	< 5		•	÷		
Analytical Method: SM45	< 5 500-NH3 H :					Analyst: bka
Analytical Method: SM45 Parameter(s)	500-NH3 H :	Qualifier	<u>D.F.</u>	Units	Analyzed:	<u>Analyst:</u> bka <u>Container:</u>
	500-NH3 H :	Qualifier			<u>Analyzed:</u> 04/22/2013 12:08 PM	Container:
Parameter(s)	500-NH3 H : <u>Results</u> < 0.10	Qualifier	<u>D.F.</u>	<u>Units</u>		Container: Container-01
<u>Parameter(s)</u> Nitrogen, Ammonia (As N)	500-NH3 H : <u>Results</u> < 0.10 3.2 :	Qualifier Qualifier	<u>D.F.</u>	<u>Units</u>		

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- Qualifiers: E = Value above quantitation range
  - B = Found in Blank
  - D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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Parameter(s)ResultsQualifierD.F.UnitsAnalyzed:Container:Nitrate as N2.09D10mg/L04/18/2013 11:11 AMContainer:01/18/2013 12:14 AMContainer:01/18/2013 12:14 AMContainer:01/18/2013 12:14 AMContainer:01/18/2013 12:54 PMContainer:01/18/2013 12:54 PMContainer:0	H 2 labs						
TEL: (631) 694-3040 NYSDOH ID#10478       FAX: (631) 420-8436 The lab is not dired sty responsible only for the certified tests requested.         Town of Southampton Waste Management Division Southampton, New York 11968 Client Sample ID: MW-1A       Sample Information Type : Groundwater Client Sample ID: MW-1A         Collected       : 4/16/2013 11:20:00 AM Collected 3: 4/17/2013 10:00:00 AM Collected By :PWG99       Origin:         Analytical Method;       E33.2 :       Analytic         Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed;       Container.01         Nitrate as N       2.09       D       10       mg/L       04/18/2013 11:11 AM       Container.01         Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed;       Container.01         Paramete	M				LABORATORY	RESULTS	
NYSDOH IDP10478     The lab is not directly responsible for the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at the lab and is responsible on the integrity of the sample bfore receipt at type: Groundwater Sample ID: MW-1A       Total Dissolved Solids     Results     Qualifier     D.F.     Units     Analyzed:     Container-01       Analytical Method;     SM2540C : IOC     Analyzed:     Container-01     Analyzed:     Container-01       Analytical Method;     SM2540C : IOC     Analyzed:     Container-01       Analytical Method;			• • • • • •	Res	ults for the samples and	analytes requested	
Waste Management Division Southampton, New York 11968     Lab No. : 1304A27-001     Sample Information Type : Groundwater       Attn To :     Christine Fetten Collected : 4/16/2013 11:20:00 AM Received : 4/17/2013 10:00:00 AM Collected By : PWG99     Origin:       Analytical Method;     E353.2: Parameter(s)     Analysi: M. 2.09     Analysi: M. 2.09     Analysi: M. Prep Method;       Nitrate as N     2.09     D     10     mg/L     04/18/2013 11:11 AM       Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed;       Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed;       Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed;     Container-01       Analytical Method;     E420.1:     Prep Date: 4/22/2013 6:30:00 AM     Analyst: FM       Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed;     Container-01       Analytical Method;     SM2540C : IOC     Analyzed;     Container-01     Analyzed;     Container-01       Analytical Method;     SM2540C : IOC     Analyzed;     Container-01     Analyzed;     Container-01       Analytical Method;     SM2540C : IOC     E351.2     Prep Date: 4/23/2013 12:54 PM     Container-01       Analytical Method;     SM2540C : IOC     Analyzed;     Conta		FAX: (631	) 420-8436				
Attn To:       Christine Fetten       Origin:         Collected       : 4/16/2013 11:20:00 AM       Origin:         Received       : 4/17/2013 10:00:00 AM       Collected By: PWG99         Analytical Method;       E353.2 :       Analyst:         Parameter(s)       Results       Qualifier       D.F.       Units       Analyst:       Malyst:         Nitrate as N       2.09       D       10       mg/L       04/18/2013 11:11 AM       Container-01         Analytical Method;       E420.1 :       Prep Method;       E420.1       Prep Date: 4/22/2013 6:30:00 AM       Analyst: EM         Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container-01         Analytical Method;       E420.1 :       Prep Method;       E420.1       Prep Date: 4/22/2013 6:30:00 AM       Analyst: EM         Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container-01         Analytical Method;       SM2540C : IOC       Analyzed:       Container-01       Analyzed:       Container-01         Analytical Method;       B351.2 :       Prep Method;       E351.2       Prep Date: 4/23/2013 6:45:00 AM       Analyst: M.         Parameter(s)       Results       Quali	Waste Management Division		Client				
Parameter(s)ResultsQualifierD.F.UnitsAnalyzed:Container:Nitrate as N2.09D10mg/L04/18/2013 11:11 AMContainer:-01Analytical Method:E420.1 :Prep Method:E420.1Prep Date: 4/22/2013 6:30:00 AMAnalyst: EMParameter(s)ResultsQualifierD.F.UnitsAnalyzed:Container:-01Phenolics, Total Recoverable< 5.0	Collected :4/16/2013 11:20:00 AN Received :4/17/2013 10:00:00 AN		Guent	Jamp	I III IIII	Origin:	
Instruction       Instrument of the second sec	Analytical Method: E353.2 :						Analyst: MJL
Analytical Method;       E420.1 :       Prep Method;       E420.1 :       Prep Method;       E420.1 :       Prep Date:       4/22/2013 6:30:00 AM       Analyst:       EM         Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container.         Phenolics, Total Recoverable       < 5.0	Parameter(s)	<b>Results</b>	<u>Qualifier</u>	<u>D.F.</u>	Units	Analyzed:	Container:
Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container-01         Phenolics, Total Recoverable       < 5.0	Nitrate as N	2.09	D	10	mg/L	04/18/2013 11:11 AM	Container-01 of 01
Phenolics, Total Recoverable       < 5.0       1       µg/L       04/24/2013 8:14 AM       Container-01         Analytical Method:       SM2540C : IOC       Analyst:       Mile       Analyst:       Mile         Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container-01         Analytical Method:       SM2540C : IOC       Analyzed:       Container.       Container.         Total Dissolved Solids       98       1       mg/L       04/18/2013 12:54 PM       Container-01         Analytical Method:       E351.2 :       Prep Method:       E351.2       Prep Method:       E351.2       Outits       Analyzed:       Container-01         Analytical Method:       E351.2 :       Prep Method:       E351.2       Prep Date: 4/23/2013 6:45:00 AM       Analyst:       M.         Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container-01         Mitrogen, Kjeldahl, Total       < 0.10       1       mg/L       04/23/2013 2:33 PM       Container-01         Analytical Method:       SW9060 :       Results       Qualifier       D.F.       Units       Analyzed:       Container-01         Parameter(s)       Results       Qualifier       D.F. </td <td>Analytical Method: E420.1 :</td> <td></td> <td>Prep Method;</td> <td>E42</td> <td>0.1</td> <td>Prep Date: 4/22/2013 6:30:00 AM</td> <td>Analyst: EM</td>	Analytical Method: E420.1 :		Prep Method;	E42	0.1	Prep Date: 4/22/2013 6:30:00 AM	Analyst: EM
Analytical Method:       SM2540C : IOC       Analyst:       Mil         Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container:         Total Dissolved Solids       98       1       mg/L       04/18/2013 12:54 PM       Container:01         Analytical Method;       E351.2 :       Prep Method;       E351.2       Prep Date: 4/23/2013 6:45:00 AM       Analyst:       M.         Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container:01         Nitrogen, Kjeldahl, Total       < 0.10	Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container.
Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container:         Total Dissolved Solids       98       1       mg/L       04/18/2013 12:54 PM       Container:01         Analyzical Method;       E351.2 :       Prep Method;       E351.2       Prep Date: 4/23/2013 6:45:00 AM       Analyzit: M.         Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container:01         Nitrogen, Kjeldahl, Total       < 0.10	Phenolics, Total Recoverable	< 5.0		1	µg/L	04/24/2013 8:14 AM	Container-01 of 01
Total Dissolved Solids       98       1       mg/L       04/18/2013 12:54 PM       Container-01         Analytical Method;       E351.2 :       Prep Method;       E351.2 :       Prep Method;       E351.2 :       Prep Date;       4/23/2013 6:45:00 AM       Analyst:       M.         Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container-01         Nitrogen, Kjeldahl, Total       < 0.10	Analytical Method: SM2540C	: 100					Analyst: MM
Analytical Method;     E351.2 :     Prep Method;     E351.2 :     Prep Method;     E351.2 :       Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed:     Container:       Nitrogen, Kjeldahl, Total     < 0.10	Parameter(s)	Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container:         Nitrogen, Kjeldahl, Total       < 0.10	Total Dissolved Solids	98		1	mg/L	04/18/2013 12:54 PM	Container-01 of 02
Nitrogen, Kjeldahl, Total     < 0.10     1     mg/L     04/23/2013 2:33 PM     Container-01       Analytical Method:     SW9060 :     Analytical Method:     SW9060 :     Analytical Method:     Container:       Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed:     Container:	Analytical Method: E351.2 :		Prep Method:	E35	1.2	Prep Date: 4/23/2013 6:45:00 AM	Analyst: MJL
Analytical Method:     SW9060 :     Analyst:     Container:       Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed:     Container:	Parameter(s)	Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Parameter(s) Results Qualifier D.F. Units Analyzed: Container:	Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	04/23/2013 2:33 PM	Container-01 of 0
	Analytical Method: SW9060	:					Analyst: CO
Total Organic Carbon         9.4         1         mg/L         04/25/2013 11:17 PM         Container-01	Parameter(s)	Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
	Total Organic Carbon	9.4		1	mg/L	04/25/2013 11:17 PM	Container-01 of 0

Qualifiers:	E = Value abov B = Found in B	ve quantitation range Blank	Joann M. Slavin
	H = Received/a + = ELAP / NE	Factor D = Results for Dilution analyzed outside of analytical holding time LAC does not offer certification for this analyte acceptability criteria exceeded for this analyte	Laboratory Manager
	r = Reporting li	mit > MDL and < LOQ value - below calibration range	Test results meet the requirements of NELAC unless otherwise noted.
		exceeded control limits for this analyte presumptive evidence of compound	This report shall not be reproduced except in full, without the written approval of the laboratory.
Dat	te Reported :	5/3/2013	Page 2 of 16

## يعلنا

					LABORATORY	RESULTS	
575 Broad	d Hollow Rd. , Mi	elville,	NY 11747	Res	ults for the samples and		
	1)694-3040 FAX: 11D#10478	: (631)	) 420-8436		ab is not directly responsible for b and is responsible only for the	the integrity of the sample before receipt at e certified tests requested.	
Town of Southampton Waste Management Divi	vision				4204427 002		Information:
Southampton, New York			0		o. :1304A27-002	Type: G	roundwater
Attn To : Christine F	Fetten		Client	Samp	le ID: MW-1B		
Collected : 4/16/2013 11:	:00:00 AM					Origin:	
Received : 4/17/2013 10	:00:00 AM						
Collected By : PWG99							
Analytical Method:	SM2320B :						Analyst: HT
Parameter(s)	Res	ults	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Alkalinity, Total (As CaCO3	3) 11.0	0		1	mg/L	04/18/2013 1:54 PM	Container-01 c
Analytical Method:	E300.0 :						Analyst: bka
Parameter(s)	Res	ults	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Bromide	< 0.	.50		1	mg/L	04/24/2013 12:36 AM	Container-01 c
Chloride	8.72	2		1	mg/L	04/24/2013 12:36 AM	Container-01 o
Sulfate	7.6	2		1	mg/L	04/24/2013 12:36 AM	Container-01 o
Analytical Method:	SM52108 :		Prep Method:	SM5	210B	Prep Date: 4/18/2013 7:27:47 AM	Analyst: CN
Parameter(s)	Res	ults	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Biochemical Oxygen Dema	and < 2			1	mg/L	04/18/2013 10:25 AM	Container-01 c
					-		
NOTES:							
NOTES: Blank depletion exceeds 0.2	2 mg/L - averag	ge de	epletion of 0.	65 mg/	L		
	_	ge de	epletion of 0.	65 mg/	L		Analyst: CN
Blank depletion exceeds 0.2	E410.4 :		epletion of 0. Qualifier	65 mg/ <u>D.F.</u>	L <u>Units</u>	Analyzed:	<u>Analyst:</u> CN <u>Container:</u>
Blank depletion exceeds 0.2 Analytical Method:	E410.4 : <u>Res</u>	sults				<u>Analyzed:</u> 04/30/2013 8:42 AM	Container:
Blank depletion exceeds 0.2 Analytical Method: Parameter(s)	E410.4 : <u>Res</u>	s <u>ults</u> 0		<u>D.F.</u>	<u>Units</u>		Container-01 c
Blank depletion exceeds 0.2 <u>Analytical Method:</u> <u>Parameter(s)</u> Chemical Oxygen Demand	E410.4 : <u>Res</u> < 1 SM2120B : IOC	oults		<u>D.F.</u>	<u>Units</u>		Container: Container-01 o
Blank depletion exceeds 0.2 Analytical Method; Parameter(s) Chemical Oxygen Demand Analytical Method;	E410.4 : <u>Res</u> < 1 SM2120B : IOC	o 0 Sults	Qualifier	<u>D.F.</u> 1	<u>Units</u> mg/L	04/30/2013 8:42 AM	Container: Container-01 o <u>Analyst:</u> EM <u>Container:</u>
Blank depletion exceeds 0.2 Analytical Method: Parameter(s) Chemical Oxygen Demand Analytical Method: Parameter(s)	E410.4 : <u>Res</u> < 11 SM2120B : IOC <u>Res</u>	o 0 Sults	Qualifier	<u>D.F.</u> 1 <u>D.F.</u>	<u>Units</u> mg/L <u>Units</u>	04/30/2013 8:42 AM <u>Analyzed:</u>	Container: Container-01 o <u>Analyst:</u> EM <u>Container:</u>
Blank depletion exceeds 0.2 Analytical Method: Parameter(s) Chemical Oxygen Demand Analytical Method: Parameter(s) Color	E410.4 : <u>Res</u> < 11 SM2120B : IOC <u>Res</u> < 5 M3500-Cr D :	o 0 Sults	Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u>	<u>Units</u> mg/L <u>Units</u>	04/30/2013 8:42 AM <u>Analyzed:</u>	Container-01 of Analyst: EM Container- Container-01 of
Blank depletion exceeds 0.2 <u>Analytical Method:</u> <u>Parameter(s)</u> Chemical Oxygen Demand <u>Analytical Method:</u> <u>Parameter(s)</u> Color <u>Analytical Method:</u>	E410.4 : <u>Res</u> < 11 SM2120B : IOC <u>Res</u> < 5 M3500-Cr D :	o o sults sults	Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1	<u>Units</u> mg/L <u>Units</u> units	04/30/2013 8:42 AM <u>Analyzed:</u> 04/18/2013 6:04 AM	Container-01 c Analyst: EM Container-01 c Container- Container-01 c Analyst: EM Container-
Blank depletion exceeds 0.2 <u>Analytical Method:</u> <u>Parameter(s)</u> Chemical Oxygen Demand <u>Analytical Method:</u> <u>Parameter(s)</u> Color <u>Analytical Method:</u> <u>Parameter(s)</u>	E410.4 : <u>Res</u> < 11 SM2120B : IOC <u>Res</u> < 5 M3500-Cr D : <u>Res</u>	o o sults sults	Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L <u>Units</u> units <u>Units</u>	04/30/2013 8:42 AM <u>Analyzed:</u> 04/18/2013 6:04 AM <u>Analyzed:</u>	Container-01 c Analyst: EM Container-01 c Container- Container-01 c Analyst: EM Container-
Blank depletion exceeds 0.2 <u>Analytical Method:</u> <u>Parameter(s)</u> Chemical Oxygen Demand <u>Analytical Method:</u> <u>Parameter(s)</u> Color <u>Analytical Method:</u> <u>Parameter(s)</u> Chromium, Hexavalent	E410.4 : <u>Res</u> < 14 SM2120B : IOC <u>Res</u> < 5 M3500-Cr D : <u>Res</u> < 0 SM2340C :	o o sults sults 0.02	Qualifier Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	<u>Units</u> mg/L <u>Units</u> units <u>Units</u> mg/L	04/30/2013 8:42 AM <u>Analyzed:</u> 04/18/2013 6:04 AM <u>Analyzed:</u>	Container-01 c Analyst: EM Container- Container-01 c Analyst: EM Container- Container-01 c
Blank depletion exceeds 0.2 <u>Analytical Method:</u> <u>Parameter(s)</u> Chemical Oxygen Demand <u>Analytical Method:</u> <u>Parameter(s)</u> Color <u>Analytical Method:</u> <u>Parameter(s)</u> Chromium, Hexavalent <u>Analytical Method:</u>	E410.4 : <u>Res</u> < 14 SM2120B : IOC <u>Res</u> < 5 M3500-Cr D : <u>Res</u> < 0 SM2340C :	sults 0 sults sults 0.02 sults	Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1	Units mg/L <u>Units</u> units <u>Units</u>	04/30/2013 8:42 AM <u>Analyzed:</u> 04/18/2013 6:04 AM <u>Analyzed:</u> 04/18/2013 5:50 AM	Container-01 of Analyst: EM Container-01 of Container-01 of Analyst: EM Container- Container-01 of Analyst: JA Container:
Blank depletion exceeds 0.: <u>Analytical Method:</u> <u>Parameter(s)</u> Chemical Oxygen Demand <u>Analytical Method:</u> <u>Parameter(s)</u> Color <u>Analytical Method:</u> <u>Parameter(s)</u> Chromium, Hexavalent <u>Analytical Method:</u> <u>Parameter(s)</u>	E410.4 : <u>Res</u> < 11 SM2120B : IOC <u>Res</u> < 5 M3500-Cr D : <u>Res</u> < 0 SM2340C : <u>Res</u> 16	sults 0 sults 5 .02 sults	Qualifier Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L Units units Units mg/L Units	04/30/2013 8:42 AM <u>Analyzed:</u> 04/18/2013 6:04 AM <u>Analyzed:</u> 04/18/2013 5:50 AM <u>Analyzed:</u>	Container-01 of Analyst: EM Container-01 of Analyst: EM Container-01 of Analyst: EM Container-01 of Analyst: JA Container: Container: Container-01 of
Blank depletion exceeds 0.2 <u>Analytical Method:</u> <u>Parameter(s)</u> Chemical Oxygen Demand <u>Analytical Method:</u> <u>Parameter(s)</u> Color <u>Analytical Method:</u> <u>Parameter(s)</u> Chromium, Hexavalent <u>Analytical Method:</u> <u>Parameter(s)</u> Hardness (As CaCO3)	E410.4 : <u>Res</u> < 14 SM2120B : IOC <u>Res</u> < 5 M3500-Cr D : <u>Res</u> < 0 SM2340C : <u>Res</u> 16 SM4500-NH3 H	sults 0 sults 0.02 sults	Qualifier Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L Units units Units mg/L Units	04/30/2013 8:42 AM <u>Analyzed:</u> 04/18/2013 6:04 AM <u>Analyzed:</u> 04/18/2013 5:50 AM <u>Analyzed:</u>	Container-01 of Analyst: EM Container-01 of Analyst: EM Container-01 of Analyst: EM Container-01 of Analyst: JA Container: Container-01 of
Blank depletion exceeds 0.2 <u>Analytical Method:</u> <u>Parameter(s)</u> Chemical Oxygen Demand <u>Analytical Method:</u> <u>Parameter(s)</u> Color <u>Analytical Method:</u> <u>Parameter(s)</u> Chromium, Hexavalent <u>Analytical Method:</u> <u>Parameter(s)</u> Hardness (As CaCO3) <u>Analytical Method:</u>	E410.4 : <u>Res</u> < 1/1 SM2120B : IOC <u>Res</u> < 5 M3500-Cr D : <u>Res</u> < 0 SM2340C : <u>Res</u> 16 SM4500-NH3 H <u>Res</u>	sults 0 sults 0.02 sults	Qualifier Qualifier Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1	<u>Units</u> mg/L <u>Units</u> units <u>Units</u> mg/L <u>Units</u> mg/L	04/30/2013 8:42 AM <u>Analyzed:</u> 04/18/2013 6:04 AM <u>Analyzed:</u> 04/18/2013 5:50 AM <u>Analyzed:</u> 04/19/2013 11:45 AM	Container- Container- Analyst: EM Container- Container- Container- Container- Container- Container- Container: Container: Container- Container- Container- Container- Container- Container- Container- Container-
Blank depletion exceeds 0.2 <u>Analytical Method:</u> <u>Parameter(s)</u> Chemical Oxygen Demand <u>Analytical Method:</u> <u>Parameter(s)</u> Color <u>Analytical Method:</u> <u>Parameter(s)</u> Chromium, Hexavalent <u>Analytical Method:</u> <u>Parameter(s)</u> Hardness (As CaCO3) <u>Analytical Method:</u> <u>Parameter(s)</u>	E410.4 : <u>Res</u> < 11 SM2120B : IOC <u>Res</u> < 5 M3500-Cr D : <u>Res</u> < 0 SM2340C : <u>Res</u> 16 SM4500-NH3 H <u>Res</u> < 0	sults 0 sults 0.02 sults sults	Qualifier Qualifier Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L Units units Units mg/L Units mg/L Units	04/30/2013 8:42 AM <u>Analyzed:</u> 04/18/2013 6:04 AM <u>Analyzed:</u> 04/18/2013 5:50 AM <u>Analyzed:</u> 04/19/2013 11:45 AM <u>Analyzed:</u>	Container-01 of Analyst: EM Container-01 of Container-01 of Analyst: EM Container- Container-01 of Analyst: JA Container-01 of Analyst: bka Container: Container: Container-01 of Analyst: bka Container:
Blank depletion exceeds 0.: <u>Analytical Method:</u> <u>Parameter(s)</u> Chemical Oxygen Demand <u>Analytical Method:</u> <u>Parameter(s)</u> Color <u>Analytical Method:</u> <u>Parameter(s)</u> Chromium, Hexavalent <u>Analytical Method:</u> <u>Parameter(s)</u> Hardness (As CaCO3) <u>Analytical Method:</u> <u>Parameter(s)</u> Nitrogen, Ammonia (As N)	E410.4 : <u>Res</u> < 11 SM2120B : IOC <u>Res</u> < 5 M3500-Cr D : <u>Res</u> < 0 SM2340C : <u>Res</u> 16 SM4500-NH3 H <u>Res</u> < 0 E353.2 :	sults 0 sults .02 sults .10	Qualifier Qualifier Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L Units units Units mg/L Units mg/L Units	04/30/2013 8:42 AM <u>Analyzed:</u> 04/18/2013 6:04 AM <u>Analyzed:</u> 04/18/2013 5:50 AM <u>Analyzed:</u> 04/19/2013 11:45 AM <u>Analyzed:</u>	Container-01 of Analyst: EM Container-01 of Analyst: EM Container-01 of Analyst: JA Container- Container-01 of Analyst: bka Container-01 of Analyst: bka

Qualifiers: E = Value above quantitation range

8 = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported :

Joann M. Slavin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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5/3/2013



575 Broad Hollow Rd. , Melville, NY 11747 TEL: (631) 694-3040 FAX: (631) 420-8436 NYSDOH ID#10478

## LABORATORY RESULTS

Lab No. : 1304A27-002

Client Sample ID: MW-18

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

## Town of Southampton Waste Management Division

Southampton, New York 11968 Christine Fetten Attn To :

Collected :4/16/2013 11:00:00 AM Received : 4/17/2013 10:00:00 AM

#### reted P. **D**

Sample Information: Type : Groundwater

Origin:

Analytical Method:	E353.2 :						Analyst:	MJL
Parameter(s)	Res	ults	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	<u>Contair</u>	ner:
Nitrate as N	< 0.	10		1	mg/L	04/18/2013 10:32 AM	Container	r-01 o
Analytical Method:	E420.1 :		Prep Method:	E42	0.1	Prep Date: 4/22/2013 6:30:00 AM	Analyst:	EM
Parameter(s)	Res	ults	Qualifier	<u>D.F.</u>	Units	Analyzed:	<u>Contair</u>	ner:
Phenolics, Total Recoveral	ole < 5.	0		1	µg/L	04/24/2013 8:15 AM	Container	r-01 o
Analytical Method:	SM2540C : IOC						Analyst:	MM
Parameter(s)	Res	ults	Qualifier	<u>D.F.</u>	Units	Analyzed:	Contair	ner:
Total Dissolved Solids	41			1	mg/L	04/18/2013 12:57 PM	Container	r-01 o
Analytical Method:	E351.2 :		Prep Method:	E35	1.2	Prep Date: 4/23/2013 6:45:00 AM	Analyst:	MJL
Parameter(s)	Res	ults	Qualifier	<u>D.F.</u>	Units	Analyzed:	Contair	ner:
Nitrogen, Kjeldahl, Total	< 0.	10		1	mg/L	04/23/2013 2:34 PM	Container	r-01 o
Analytical Method:	SW9060 :						Analyst:	CO
Parameter(s)	Res	ults	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Contair	ner:
	3.4			1	mg/L	04/25/2013 11:56 PM	Container	

#### Qualifiers: E = Value above quantitation range B = Found in Blank D.F. = Dilution Factor D = Results for Dilution H = Received/analyzed outside of analytical holding time + = ELAP / NELAC does not offer certification for this analyte c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

- J = Estimated value below calibration range
- s = Recovery exceeded control limits for this analyte
- N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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Page 4 of 16

	575 Broad Hollow Rd TEL: (631) 694-3040 NYSDOH ID#10478		e, NY 11747 I) 420-8436	Thel	LABORATORY ults for the samples and ab is not directly responsible for b and is responsible only for th	d analytes requested or the integrity of the sample before receipt at	
Town of Southan	noton						
Waste Manageme	•				4204407 002		Information:
Southampton, Ne			01		o. : 1304A27-003	Type : G	roundwater
Attn To : Ch	ristine Fetten		Client	t Samp	le ID: MW-1C	Origin	
	2013 10:25:00 AM					Origin:	
	2013 10:00:00 AN	M					
Collected By : PWG9	99						
Analytical M	lethod: SM2320B	:					Analyst: HT
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Alkalinity, Total (As	CaCO3)	12.6		1	mg/L	04/18/2013 2:02 PM	Container-01
Analytical M	lethod: E300.0:				·····		Analyst: bk
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Bromide		< 0.50		1	mg/L	04/24/2013 12:49 AM	Container-01
Chloride		9.47		1	mg/L	04/24/2013 12:49 AM	Container-01
Sulfate		7.61		1	mg/L	04/24/2013 12:49 AM	Container-01
Analytical M	tethod: SM5210B	:	Prep Method:	SM	5210B	Prep Date: 4/18/2013 7:27:47 AM	Analyst: CN
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Biochemical Oxygen	n Demand	< 2		1	mg/L	04/18/2013 10:30 AM	Container-01
					-		
NOTES:					-		
Blank depletion exce		average d	epletion of 0	.65 mg/	L		
Blank depletion exce Analytical M	eeds 0.2 mg/L - a <u>lethod:</u> E410.4 :						Analyst: CN
Blank depletion exce			epletion of 0 Qualifier	<u>D.F.</u>	L Units	Analyzed:	Analyst: CN Container:
Blank depletion exce Analytical M	<u>tethod:</u> E410.4 :						Analyst: CN
Blank depletion exce Analytical M Parameter(s) Chemical Oxygen D Analytical M	lemand	Results < 10		<u>D.F.</u>	Units	Analyzed:	Analyst: CN Container: Container-01 Analyst: EN
Blank depletion exce <u>Analytical M</u> <u>Parameter(s)</u> Chemical Oxygen D	lemand	Results < 10		<u>D.F.</u>	Units	Analyzed:	<u>Analyst:</u> CN <u>Container:</u> Container-01
Blank depletion exce Analytical M Parameter(s) Chemical Oxygen D Analytical M	lemand	Results < 10	Qualifier	<u>D.F.</u> 1	<u>Units</u> mg/L	<u>Analyzed:</u> 04/30/2013 8:44 AM	Analyst: CN Container: Container-01 Analyst: EN
Blank depletion exce Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s)	<u>lethod:</u> E410.4 : lemand <u>lethod:</u> SM2120B	Results < 10 : IOC Results < 5	Qualifier	<u>D.F.</u> 1 <u>D.F.</u>	<u>Units</u> mg/L <u>Units</u>	<u>Analyzed:</u> 04/30/2013 8:44 AM <u>Analyzed:</u>	Analyst: CN <u>Container</u> : Container-01 <u>Analyst:</u> EN <u>Container</u> .
Blank depletion exce Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Color	<u>lethod:</u> E410.4 : lemand <u>lethod:</u> SM2120B	Results < 10 : IOC Results < 5 rD :	Qualifier	<u>D.F.</u> 1 <u>D.F.</u>	<u>Units</u> mg/L <u>Units</u>	<u>Analyzed:</u> 04/30/2013 8:44 AM <u>Analyzed:</u>	Analyst: CN Container: Container-01 Analyst: EN Container: Container-01
Blank depletion exce Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Color Analytical M	<u>tethod:</u> E410.4 : lemand <u>tethod:</u> SM2120B <u>tethod:</u> M3500-Co	Results < 10 : IOC Results < 5 rD :	Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1	<u>Units</u> mg/L <u>Units</u> units	<u>Analyzed:</u> 04/30/2013 8:44 AM <u>Analyzed:</u> 04/18/2013 6:05 AM	Analyst: CN Container: Container-01 Analyst: EN Container-01 Analyst: EN
Blank depletion exce Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Color Analytical M Parameter(s)	tethod: E410.4 : lemand tethod: SM21208 tethod: M3500-Co ent	<u>Results</u> < 10 : IOC <u>Results</u> < 5 rD : <u>Results</u> < 0.02	Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	<u>Units</u> mg/L <u>Units</u> units <u>Units</u>	<u>Analyzed:</u> 04/30/2013 8:44 AM <u>Analyzed:</u> 04/18/2013 6:05 AM <u>Analyzed:</u>	Analyst: CN <u>Container</u> : Container-01 <u>Analyst:</u> EN <u>Container</u> . Container-01 <u>Analyst:</u> EN <u>Container</u> .
Blank depletion exce Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Color Analytical M Parameter(s) Chromium, Hexavalu	tethod: E410.4 : lemand tethod: SM21208 tethod: M3500-Co ent	<u>Results</u> < 10 : IOC <u>Results</u> < 5 TD : <u>Results</u> < 0.02	Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	<u>Units</u> mg/L <u>Units</u> units <u>Units</u>	<u>Analyzed:</u> 04/30/2013 8:44 AM <u>Analyzed:</u> 04/18/2013 6:05 AM <u>Analyzed:</u>	Analyst: CN Container-01 Analyst: EN Container-01 Analyst: EN Container-01 Analyst: EN Container-01
Blank depletion exce Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Color Analytical M Parameter(s) Chromium, Hexavald Analytical M	tethod: E410.4 : emand tethod: SM2120B tethod: M3500-Co ent tethod: SM2340C	<u>Results</u> < 10 : IOC <u>Results</u> < 5 TD : <u>Results</u> < 0.02	Qualifier Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1	<u>Units</u> mg/L <u>Units</u> units <u>Units</u> mg/L	<u>Analyzed:</u> 04/30/2013 8:44 AM <u>Analyzed:</u> 04/18/2013 6:05 AM <u>Analyzed:</u> 04/18/2013 5:51 AM	Analyst: CN Container: Container-01 Analyst: EM Container-01 Analyst: EM Container-01 Analyst: JA Container:
Blank depletion exce Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Color Analytical M Parameter(s) Chromium, Hexavala Analytical M Parameter(s)	tethod: E410.4 : lemand tethod: SM21208 Method: M3500-Co ent Method: SM2340C D3)	Results < 10 : IOC Results < 5 TD : Results < 0.02 : Results 18	Qualifier Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L Units units <u>Units</u> mg/L Units	<u>Analyzed:</u> 04/30/2013 8:44 AM <u>Analyzed:</u> 04/18/2013 6:05 AM <u>Analyzed:</u> 04/18/2013 5:51 AM <u>Analyzed:</u>	Analyst: CN Container: Container-01 Analyst: EM Container-01 Analyst: EM Container-01 Analyst: JA Container:
Blank depletion exce Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Color Analytical M Parameter(s) Chromium, Hexavalu Analytical M Parameter(s) Hardness (As CaCC	tethod: E410.4 : lemand tethod: SM21208 Method: M3500-Co ent Method: SM2340C D3)	Results           < 10	Qualifier Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L Units units <u>Units</u> mg/L Units	<u>Analyzed:</u> 04/30/2013 8:44 AM <u>Analyzed:</u> 04/18/2013 6:05 AM <u>Analyzed:</u> 04/18/2013 5:51 AM <u>Analyzed:</u>	Analyst: CN <u>Container</u> : Container-01 <u>Analyst:</u> EN <u>Container</u> : Container-01 <u>Analyst:</u> EN <u>Container</u> : Container-01 <u>Analyst:</u> JA <u>Container</u> : Container-01
Blank depletion exce Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Color Analytical M Parameter(s) Chromium, Hexavalu Analytical M Parameter(s) Hardness (As CaCC Analytical M	Iethod:         E410.4 :           Iemand         Iethod:           Method:         SM2120B           Iethod:         M3500-Ci           ent         Iethod:           Method:         SM2340C           D3)         SM4500-I	Results           < 10	Qualifier Qualifier Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L <u>Units</u> units <u>Units</u> mg/L <u>Units</u> mg/L	<u>Analyzed:</u> 04/30/2013 8:44 AM <u>Analyzed:</u> 04/18/2013 6:05 AM <u>Analyzed:</u> 04/18/2013 5:51 AM <u>Analyzed:</u> 04/19/2013 11:50 AM	Analyst: CN <u>Container</u> : Container-01 <u>Analyst:</u> EN <u>Container</u> . Container-01 <u>Analyst:</u> EN <u>Container</u> . Container-01 <u>Analyst:</u> JA <u>Container</u> . Container-01 <u>Analyst:</u> bk
Blank depletion exce Analytical M Parameter(s) Chemical Oxygen D Analytical M Parameter(s) Color Analytical M Parameter(s) Chromium, Hexavalu Analytical M Parameter(s) Hardness (As CaCC Analytical M Parameter(s) Nitrogen, Ammonia	Iethod:         E410.4 :           Iemand         Iethod:           Method:         SM2120B           Iethod:         M3500-Ci           ent         Iethod:           Method:         SM2340C           D3)         SM4500-I	Results           < 10	Qualifier Qualifier Qualifier Qualifier	<u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u> 1 <u>D.F.</u>	Units mg/L Units Units Units Units Units mg/L Units mg/L Units Units	<u>Analyzed:</u> 04/30/2013 8:44 AM <u>Analyzed:</u> 04/18/2013 6:05 AM <u>Analyzed:</u> 04/18/2013 5:51 AM <u>Analyzed:</u> 04/19/2013 11:50 AM <u>Analyzed:</u>	Analyst: CN Container-01 Analyst: EN Container-01 Analyst: EN Container-01 Analyst: EN Container-01 Analyst: JA Container-01 Analyst: bk Container-01

-

Qualifiers: E = Value above quantitation range

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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TOS012/012F S147



575 Broad Hollow Rd. , Melville, NY 11747 TEL: (631) 694-3040 FAX: (631) 420-8436 NYSDOH 10#10478

## LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

#### Town of Southampton Waste Management Division Southampton, New York 11968

 Attn To
 Christine Fetten

 Collected
 : 4/16/2013 10:25:00 AM

 Received
 : 4/17/2013 10:00:00 AM

Collected By : PWG99

# Lab No. : 1304A27-003

#### Client Sample ID: MW-1C

Sample Information: Type : Groundwater

Origin:

Analytical Method:	E353.2 :						Analyst:	MJL
Parameter(s)		Results	Qualifier	<u>D,F.</u>	<u>Units</u>	Analyzed:	Contair	ner:
Nitrate as N		0.29		1	mg/L	04/18/2013 10:33 AM	Container	-01 of 0
Analytical Method:	E420.1 :	<u> </u>	Prep Method:	E42	0.1	Prep Date: 4/22/2013 6:30:00 AM	Analyst:	EM
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Contair	<u>ner:</u>
Phenolics, Total Recoveral	ole	< 5.0		1	µg/L	04/24/2013 8:16 AM	Container	-01 of
Analytical Method:	SM2540C	: IOC					Analyst:	MM
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Contair	ner:
Total Dissolved Solids		56		1	mg/L	04/18/2013 1:00 PM	Container	-01 of
Analytical Method:	E351.2 :		Prep Method:	E35	1.2	Prep Date: 4/23/2013 6:45:00 AM	Analyst:	MJL
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Contair	<u>ner:</u>
Nitrogen, Kjeldahl, Total		< 0.10		1	mg/L	04/23/2013 2:35 PM	Container	-01 of
Analytical Method:	SW9060 :						Analyst:	CO
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Contair	ner:
Total Organic Carbon		3.8		1	mg/L	04/26/2013 12:34 AM	Container	r-01 of

Qualifiers: E = Value above quantitation range

- B = Found in Blank
- D.F. = Dilution Factor D = Results for Dilution H = Received/analyzed outside of analytical holding time
- + = ELAP / NELAC does not offer certification for this analyte
- c = Calibration acceptability criteria exceeded for this analyte
- r = Reporting limit > MDL and < LOQ
- J = Estimated value below calibration range
- s = Recovery exceeded control limits for this analyte
- N = Indicates presumptive evidence of compound
- Date Reported : 5/3/2013

Joann M. Slavin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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F 2 labs						
				LABORATORY	RESULTS	
575 Broad	Hollow Rd. , Melville,	NY 11747	Res	uits for the samples and		
TEL: (631) NYSDOH I	, , ,	420-8436	The la the la	ab is not directly responsible for b and is responsible only for the	r the integrity of the sample before receipt at e certified tests requested.	
Town of Southampton					Sample	nformation:
Waste Management Divis			Lab N	o. : 1304A27-004		roundwater
Southampton, New York		Clien	t Sampl	e ID: MW-11A		
Attn To : Christine Fe					Origin:	
Collected : 4/16/2013 3:05 Received : 4/17/2013 10:0					-	
Collected By : PWG99	0.00 / 10					
Analytical Method:	5M2320B :					Analyst: HT
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Alkalinity, Total (As CaCO3)	174	D	10	mg/L	04/18/2013 2:09 PM	Container-01 c
Analytical Method: 8	300.0 :	•••••				Analyst: bka
Parameter(s)		Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	04/24/2013 1:03 AM	Container-01 c
Chloride	14.8		1	mg/L	04/24/2013 1:03 AM	Container-01 c
Sulfate	23.1		1	mg/L	04/24/2013 1:03 AM	Container-01 of
Analytical Method:	SM52108 :	Prep Method:	SM5	2108	Prep Date: 4/18/2013 7:27:47 AM	Analyst: CN
Parameter(s)	<u>Results</u>	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Biochemical Oxygen Deman	d < 2		1	mg/L	04/18/2013 10:35 AM	Container-01 c
NOTES:						
Blank depletion exceeds 0.2		epletion of 0	.65 mg/	L		
Analytical Method:					A anti-anti-	Analyst: CN
Parameter(s)		Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Chemical Oxygen Demand	< 10		1	mg/L	04/30/2013 8:46 AM	Container-01 o
	SM2120B : IOC					Analyst: EM
Parameter(s)		Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Color	50	D	5	units	04/18/2013 6:06 AM	Container-01 o
	M3500-Cr D :					Analyst: EM
Parameter(s)	Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Chromium, Hexavalent	< 0.02		1	mg/L	04/18/2013 5:52 AM	Container-01 c
	SM2340C :					Analyst: JA
Parameter(s)	<u>Results</u>	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Hardness (As CaCO3)	190	D	10	mg/L	04/19/2013 11:55 AM	
	SM4500-NH3 H :					Analyst: bka
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrogen, Ammonia (As N)	0.32		1	mg/L	04/23/2013 1:32 PM	Container-01 c
Analytical Method:			_			Analyst: MJL
Parameter(s)		<u>Qualifier</u>	<u>D.F.</u>	Units	Analyzed:	Container.
Nitrite as N	< 0.10		1	mg/L	04/18/2013 8:58 AM	Container-01 c

Qualifiers: E = Value above quantitation range

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

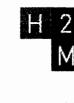
N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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575 Broad Hollow Rd. , Melville. NY 11747 TEL: (631) 694-3040 FAX: (631) 420-8436 NYSDOH ID#10478

## LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Town of Southampton

Waste Management Division Southampton, New York 11968

Christine Fetten Attn To : : 4/16/2013 3:05:00 PM Collected Received :4/17/2013 10:00:00 AM

Collected By : PWG99

Sample Information: Type : Groundwater

Origin:

Concered By It Webb				
Analytical Method:	E353.2 :			Analyst: MJL
Parameter(s)	Results Qualifier	D.F. Units	Analyzed:	Container:
Nitrate as N	< 0.10	1 mg/L	04/18/2013 10:34 AM	Container-01 of
Analytical Method:	E420.1 : Prep Metho	<u>id:</u> E420.1	Prep Date: 4/22/2013 6:30:00 AM	Analyst: EM
Parameter(s)	Results Qualifier	<u>D.F. Units</u>	Analyzed:	Container:
Phenolics, Total Recoveral	ble < 5.0	1 µg/L	04/24/2013 8:17 AM	Container-01 of
Analytical Method:	SM2540C : IOC		·	Analyst: MM
Parameter(s)	Results Qualifier	D.F. Units	Analyzed:	Container:
Total Dissolved Solids	232	1 mg/L	04/18/2013 1:03 PM	Container-01 of
Analytical Method:	E351.2 : Prep Metho	od: E351.2	Prep Date: 4/23/2013 6:45:00 AM	Analyst: MJL
Parameter(s)	Results Qualifier	<u>D.F. Units</u>	Analyzed:	Container:
Nitrogen, Kjeldahl, Total	0.44	1 mg/L	04/23/2013 2:36 PM	Container-01 of
Analytical Method:	SW9060 :			Analyst: CO
Parameter(s)	Results Qualifier	D.F. Units	Analyzed:	Container:
Total Organic Carbon	45.4	1 mg/L	04/26/2013 1:12 AM	Container-01 of

Lab No. : 1304A27-004

Client Sample ID: MW-11A

Qualifiers: E = Value above quantitation range

- B = Found in Blank
- D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

- r = Reporting limit > MDL and < LOQ
- J = Estimated value below calibration range

s = Recovery exceeded control limits for this analyte N = Indicates presumptive evidence of compound

5/3/2013

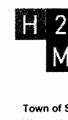
Date Reported :

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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575 Broad Hollow Rd. . Melville, NY 11747 TEL: (631) 694-3040 FAX: (631) 420-8436 NYSDOH I0#10478

# LABORATORY RESULTS

Lab No. : 1304A27-005

Client Sample ID: MW-11B

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Town of Southampton

Waste Management Division Southampton, New York 11968

Attn To : Christine Fetten Collected :4/16/2013 2:40:00 PM

Received : 4/17/2013 10:00:00 AM Collected By : PWG99 Sample Information:

Type : Groundwater

Origin:

Analytical Method:	SM2320B :					Analyst: HT
Parameter(s)	Result	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Alkalinity, Total (As CaCO3	s) 47.0	D	2	mg/L	04/18/2013 2:16 PM	Container-01 o
Analytical Method:	E300.0 :					Analyst: bka
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	04/24/2013 1:16 AM	Container-01 o
Chloride	10.5		1	mg/L	04/24/2013 1:16 AM	Container-01 o
Sulfate	6.66		1	mg/L	04/24/2013 1:16 AM	Container-01 o
Analytical Method:	SM5210B :	Prep Method	SM5	210B	Prep Date: 4/18/2013 7:27:47 AM	Analyst: CN
Parameter(s)	Result	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Biochemical Oxygen Dema	nd < 2		1	mg/L	04/18/2013 10:40 AM	Container-01 o
NOTES:						
Blank depletion exceeds 0.	<u> </u>	depletion of	0.65 mg/	L		
Analytical Method:	E410.4 :					Analyst: CN
Parameter(s)	Result	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Chemical Oxygen Demand	< 10		1	mg/L	04/30/2013 8:48 AM	Container-01 o
Analytical Method:	SM2120B : IOC				terrenterrente entretterrenterr	Analyst: EM
Parameter(s)	Result	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Color	75	D	5	units	04/18/2013 6:07 AM	Container-01 o
Analytical Method:	M3500-Cr D :					Analyst: EM
Parameter(s)	Result	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Chromium, Hexavalent	< 0.02		1	mg/L	04/18/2013 5:53 AM	Container-01 o
Analytical Method:	SM2340C :					Analyst: JA
Parameter(s)	Result	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Hardness (As CaCO3)	68	D	2	mg/L	04/19/2013 12:00 PM	Container-01 c
Analytical Method:	SM4500-NH3 H :					Analyst: bka
Parameter(s)	Result	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	04/23/2013 1:33 PM	Container-01 o
Analytical Method:	E353.2 :					Analyst: MJL
Parameter(s)	Result	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Nitrite as N	< 0.10		1	mg/L	04/18/2013 8:59 AM	Container-01 o

Qualifiers: E = Value above quantitation range

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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TOS012/012F S151



575 Broad Hollow Rd. Melville, NY 11747 TEL: (631) 694-3040 FAX: (631) 420-8436 NY SDOH ID#10478

## LABORATORY RESULTS

Lab No. : 1304A27-005

Client Sample ID: MW-11B

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

# Town of Southampton

Waste Management Division Southampton, New York 11968

 Attn To:
 Christine Fetten

 Collected
 : 4/16/2013 2:40:00 PM

 Received
 : 4/17/2013 10:00:00 AM

Collected By : PWG99

Sample Information:

Type : Groundwater

Origin:

Nitrate as N0.511mg/L04/18/2013 10:38 AMContainerAnalytical Method:E420.1:Prep Method:E420.1Prep Date: 4/22/2013 6:30:00 AMAnalyst:Parameter(s)ResultsQualifierD.F.UnitsAnalyzed:ContainerPhenolics, Total Recoverable< 5.01µg/L04/18/2013 8:18 AMContainerAnalytical Method:SM2540C : IOCAnalyzed:ContainerParameter(s)ResultsQualifierD.F.UnitsAnalyzed:ContainerTotal Dissolved Solids891mg/L04/18/2013 1:06 PMContainerAnalytical Method:E351.2:Prep Method:E351.2Prep Date: 4/23/2013 6:45:00 AMAnalyst:Parameter(s)ResultsQualifierD.F.UnitsAnalyzed:ContainerAnalytical Method:E351.2:Prep Method:E351.2Prep Date: 4/23/2013 6:45:00 AMAnalyst:Parameter(s)ResultsQualifierD.F.UnitsAnalyzed:ContainerNitrogen, Kjeldahl, Total0.651mg/L04/23/2013 2:37 PMContainerAnalytical Method:SW9060 :AnalysticAnalyzed:ContainerParameter(s)ResultsQualifierD.F.UnitsAnalyzed:ContainerNitrogen, Kjeldahl, Total0.651mg/L04/23/2013 2:37 PMContainerParameter(s)ResultsQualifierD.F.UnitsAnalyzed:ContainerParameter(s)Resu	Analytical Method:	E353.2 :						Analyst: MJ
Analytical Method:       E420.1 :       Prep Method:       E420.1 :       Prep Method:       E420.1 :       Prep Date:       4/22/2013 6:30:00 AM       Analyst:         Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container         Phenolics, Total Recoverable       < 5.0	Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container         Phenolics, Total Recoverable       < 5.0	Nitrate as N		0.51		1	mg/L	04/18/2013 10:38 AM	Container-01
Phenolics, Total Recoverable       < 5.0       1       µg/L       04/24/2013 8:18 AM       Container         Analytical Method:       SM2540C : IOC       Analytical Method:       SM2540C : IOC       Analytical Method:       Container         Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container         Total Dissolved Solids       89       1       mg/L       04/18/2013 1:06 PM       Container         Analytical Method:       E351.2 :       Prep Method:       E351.2       Prep Date: 4/23/2013 6:45:00 AM       Analyst:         Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container         Nitrogen, Kjeldahl, Total       0.65       1       mg/L       04/23/2013 2:37 PM       Container         Analytical Method:       SW9060 :       Easuits       Qualifier       D.F.       Units       Analyzed:       Container         Analytical Method:       SW9060 :       Easuits       Qualifier       D.F.       Units       Analyzed:       Container         Analytical Method:       SW9060 :       Easuits       Qualifier       D.F.       Units       Analyzed:       Container         Parameter(s)       Results       Qualifier	Analytical Method:	E420.1:	Ē	rep Method:	E420	D.1	Prep Date: 4/22/2013 6:30:00 AM	Analyst: EM
Analytical Method:     SM2540C : IOC     Analyst:       Parameter(s)     Results     Qualifier     D.F.     Units     Analyst:       Total Dissolved Solids     89     1     mg/L     04/18/2013 1:06 PM     Container       Analytical Method:     E351.2 :     Prep Method:     E351.2     Prep Date: 4/23/2013 6:45:00 AM     Analyst:       Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed:     Container       Nitrogen, Kjeldahl, Total     0.65     1     mg/L     04/23/2013 2:37 PM     Container       Analytical Method:     SW9060 :	Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container         Total Dissolved Solids       89       1       mg/L       04/18/2013 1:06 PM       Container         Analytical Method:       E351.2 :       Prep Method:       E351.2       Prep Date: 4/23/2013 6:45:00 AM       Analyset:         Parameter(s)       Results       Qualifier       D.F.       Units       Analyzed:       Container         Nitrogen, Kjeldahl, Total       0.65       1       mg/L       04/23/2013 2:37 PM       Container         Analytical Method:       SW9060 :	Phenolics, Total Recoverat	bie	< 5.0		1	µg/L	04/24/2013 8:18 AM	Container-01
Total Dissolved Solids     89     1     mg/L     04/18/2013 1:06 PM     Container       Analytical Method:     E351.2 :     Prep Method:     E351.2 :     Prep Date: 4/23/2013 6:45:00 AM     Analyts:       Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed:     Container       Nitrogen, Kjeldahl, Total     0.65     1     mg/L     04/23/2013 2:37 PM     Container       Analytical Method:     SW9060 :     Analytical Method:     SW9060 :     Analyzed:     Container       Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed:     Container	Analytical Method:	SM2540C	: IOC					Analyst: MM
Analytical Method:     E351.2 :     Prep Method:     E351.2 :     Prep Method:     E351.2 :       Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed:     Contained       Nitrogen, Kjeldahl, Total     0.65     1     mg/L     04/23/2013 2:37 PM     Contained       Analytical Method:     SW9060 :     Analytical Method:     SW9060 :     Analytical Method:     Contained       Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed:     Contained	Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed:     Contain       Nitrogen, Kjeldahl, Total     0.65     1     mg/L     04/23/2013 2:37 PM     Container       Analytical Method:     SW9060 :     Analytical     Analyzed:     Container       Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed:     Container	Total Dissolved Solids		89		1	mg/L	04/18/2013 1:06 PM	Container-01
Nitrogen, Kjeldahl, Total     0.65     1     mg/L     04/23/2013 2:37 PM     Container       Analytical Method:     SW9060 :     Analytical Method:     SW9060 :     Analytical Method:     Container       Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed:     Container	Analytical Method:	E351.2 :	F	Prep Method:	E35	1.2	Prep Date: 4/23/2013 6:45:00 AM	Analyst: MJ
Analytical Method:     SW9060 :     Analytical Method:     SW9060 :       Parameter(s)     Results     Qualifier     D.F.     Units     Analyzed:     Contain	Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Parameter(s)         Results         Qualifier         D.F.         Units         Analyzed:         Contain	Nitrogen, Kjeldahl, Total		0.65		1	mg/L	04/23/2013 2:37 PM	Container-01
	Analytical Method:	SW9060 :						Analyst: CC
Total Organic Carbon 14.4 1 mg/L 04/26/2013 1:51 AM Container	Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
	Total Organic Carbon		14.4		1	mg/L	04/26/2013 1:51 AM	Container-01

- B = Found in Blank
- D.F. = Dilution Factor D = Results for Dilution
- H = Received/analyzed outside of analytical holding time
- + = ELAP / NELAC does not offer certification for this analyte
- $\mathbf{c}$  = Calibration acceptability criteria exceeded for this analyte
- r = Reporting limit > MDL and < LOQ
- J = Estimated value below calibration range
- s = Recovery exceeded control limits for this analyte
- N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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TE	5 Broad Hollow Rd. L: (631) 694-3040 /SDOH ID#10478		. NY 11747 ) 420-8436	The la	LABORATORY ults for the samples and ab is not directly responsible for b and is responsible only for the	analytes requested the integrity of the sample before receipt at	
Town of Southamp						Sample I	Information:
Waste Management Division				Lab N	o. :1304A27-006	Type: G	roundwater
Southampton, New			Client	t Sampl	e ID: MW-12A		
	tine Fetten 13 1:00:00 PM					Origin:	
	13 10:00:00 PM					-	
Collected By : PWG99							
-							Analyst: HT
Analytical Met	<u>100.</u> 3WIZ3ZUB		Qualifier	D.F.	Units	Analyzed:	Container:
			D	4		04/18/2013 2:23 PM	Container-01 of
Alkalinity, Total (As Ca		85.4	U	4	mg/L	04/10/2015 2,25 / 10	··
	hod: E300.0 :	Desuite	Qualifian	<b>.</b>	Linita	Analyzed:	Analyst: bka Container:
Parameter(s)			Qualifier	<u>D.F.</u>	Units		
Bromide		< 0.50		1	mg/L	04/24/2013 1:57 AM	Container-01 of
Chloride		11.9		1	mg/L	04/24/2013 1:57 AM	Container-01 of
Sulfate		19.4		1	mg/L	04/24/2013 1:57 AM	Container-01 of
Analytical Met	hod: SM5210B	3:	Prep Method:		210B	Prep Date: 4/18/2013 7:27:47 AM	Analyst: CN
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
NOTES: Blank depletion excee Analytical Met		average d	epletion of 0	.65 mg/	L		Analyst: CN
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container.
Chemical Oxygen Der	nand	< 10		1	mg/L	04/30/2013 8:50 AM	Container-01 of
Chemical Oxygen Der Analytical Met				1	mg/L	04/30/2013 8:50 AM	
Analytical Met		B: IOC	Qualifier			04/30/2013 8:50 AM Analyzed:	Container-01 of Analyst: EM Container:
Analytical Met Parameter(s)		3 : IOC <u>Results</u>	<u>Qualifier</u> D	<u>D.F.</u>	Units		Analyst: EM Container:
<u>Analytical Met</u> <u>Parameter(s)</u> Color	hod: SM2120E	3 : IOC <u>Results</u> 75	<u>Qualifier</u> D			Analyzed:	<u>Analyst:</u> EM <u>Container</u> Container-01 or
Analytical Met Parameter(s) Color Analytical Met	hod: SM2120E	B : IOC <u>Results</u> 75 r D :	D	<u>D.F.</u> 5	<u>Units</u> units	Analyzed:	Analyst: EM
Analytical Met Parameter(s) Color <u>Analytical Met</u> Parameter(s)	<u>hod:</u> SM2120E	B : IOC <u>Results</u> 75 r D : <u>Results</u>		<u>D.F.</u> 5 <u>D.F.</u>	<u>Units</u> units <u>Units</u>	<u>Analyzed:</u> 04/18/2013 6:08 AM	Analyst: EM <u>Container</u> : Container-01 or <u>Analyst:</u> EM
Analytical Met Parameter(s) Color <u>Analytical Met</u> <u>Parameter(s)</u> Chromium, Hexavalen	<u>hod:</u> SM2120E <u>hod:</u> M3500-C nt	3 : IOC <u>Results</u> 75 r D : <u>Results</u> < 0.02	D	<u>D.F.</u> 5	<u>Units</u> units	<u>Analyzed:</u> 04/18/2013 6:08 AM <u>Analyzed:</u>	Analyst: EM <u>Container</u> Container-01 or <u>Analyst:</u> EM <u>Container</u> Container-01 or
Analytical Met Parameter(s) Color <u>Analytical Met</u> Parameter(s) Chromium, Hexavalen <u>Analytical Met</u>	<u>hod:</u> SM2120E <u>hod:</u> M3500-C nt	3 : IOC <u>Results</u> 75 T D : <u>Results</u> < 0.02 C :	D Qualifier	<u>D.F.</u> 5 <u>D.F.</u> 1	<u>Units</u> units <u>Units</u> mg/L	<u>Analyzed:</u> 04/18/2013 6:08 AM <u>Analyzed:</u>	Analyst: EM Container: Container-01 o Analyst: EM Container:
Analytical Met Parameter(s) Color <u>Analytical Met</u> Parameter(s) Chromium, Hexavalen <u>Analytical Met</u> Parameter(s)	<u>hod:</u> SM2120E <u>hod:</u> M3500-C nt <u>thod:</u> SM2340C	3 : IOC <u>Results</u> 75 r D : <u>Results</u> < 0.02 C : <u>Results</u>	D <u>Qualifier</u> <u>Qualifier</u>	<u>D.F.</u> 5 <u>D.F.</u> 1 <u>D.F.</u>	Units units Units mg/L Units	<u>Analyzed:</u> 04/18/2013 6:08 AM <u>Analyzed:</u> 04/18/2013 5:54 AM <u>Analyzed:</u>	Analyst: EM <u>Container</u> . Container-01 of <u>Analyst:</u> EM <u>Container</u> . Container-01 of <u>Analyst:</u> JA <u>Container</u> .
Analytical Met Parameter(s) Color <u>Analytical Met</u> Parameter(s) Chromium, Hexavalen <u>Analytical Met</u> <u>Parameter(s)</u> Hardness (As CaCO3	<u>hod:</u> SM2120E <u>hod:</u> M3500-C nt <u>hod:</u> SM2340C	3 : IOC <u>Results</u> 75 r D : <u>Results</u> < 0.02 C: <u>Results</u> 116	D Qualifier	<u>D.F.</u> 5 <u>D.F.</u> 1	<u>Units</u> units <u>Units</u> mg/L	<u>Analyzed:</u> 04/18/2013 6:08 AM <u>Analyzed:</u> 04/18/2013 5:54 AM	Analyst: EM <u>Container</u> Container-01 of <u>Analyst:</u> EM <u>Container</u> Container-01 of <u>Analyst:</u> JA <u>Container</u> Container-01 of
Analytical Met Parameter(s) Color <u>Analytical Met</u> Parameter(s) Chromium, Hexavalen <u>Analytical Met</u> Parameter(s) Hardness (As CaCO3 <u>Analytical Met</u>	<u>hod:</u> SM2120E <u>hod:</u> M3500-C nt <u>hod:</u> SM2340C	3 : IOC <u>Results</u> 75 r D : <u>Results</u> < 0.02 C: <u>Results</u> 116 NH3 H :	D Qualifier Qualifier D	<u>D.F.</u> 5 <u>D.F.</u> 1 <u>D.F.</u> 4	Units units <u>Units</u> mg/L <u>Units</u> mg/L	<u>Analyzed:</u> 04/18/2013 6:08 AM <u>Analyzed:</u> 04/18/2013 5:54 AM <u>Analyzed:</u> 04/19/2013 12:05 PM	Analyst: EM <u>Container</u> Container-01 o <u>Analyst:</u> EM <u>Container</u> Container-01 o <u>Analyst:</u> JA <u>Container</u> Container-01 o <u>Analyst:</u> bka
Analytical Met Parameter(s) Color <u>Analytical Met</u> Parameter(s) Chromium, Hexavalen <u>Analytical Met</u> Parameter(s) Hardness (As CaCO3 <u>Analytical Met</u> Parameter(s)	hod: SM2120E hod: M3500-C nt <u>hod:</u> SM2340C ) hod: SM4500-	3 : IOC <u>Results</u> 75 r D : <u>Results</u> < 0.02 C : <u>Results</u> 116 NH3 H : <u>Results</u>	D <u>Qualifier</u> <u>Qualifier</u>	<u>D.F.</u> 5 <u>D.F.</u> 1 <u>D.F.</u> 4 <u>D.F.</u>	Units units <u>Units</u> mg/L <u>Units</u> mg/L <u>Units</u>	<u>Analyzed:</u> 04/18/2013 6:08 AM <u>Analyzed:</u> 04/18/2013 5:54 AM <u>Analyzed:</u> 04/19/2013 12:05 PM <u>Analyzed:</u>	Analyst: EM Container-01 o Analyst: EM Container. Container. Container. Container. Container. Container. Container.
Analytical Met Parameter(s) Color <u>Analytical Met</u> Parameter(s) Chromium, Hexavalen <u>Analytical Met</u> Parameter(s) Hardness (As CaCO3 <u>Analytical Met</u> Parameter(s) Nitrogen, Ammonia (A	<u>hod:</u> SM2120E <u>hod:</u> M3500-C nt <u>hod:</u> SM2340C ) <u>hod:</u> SM4500- As N)	3 : IOC <u>Results</u> 75 r D : <u>Results</u> < 0.02 C: <u>Results</u> 116 NH3 H :	D Qualifier Qualifier D	<u>D.F.</u> 5 <u>D.F.</u> 1 <u>D.F.</u> 4	Units units <u>Units</u> mg/L <u>Units</u> mg/L	<u>Analyzed:</u> 04/18/2013 6:08 AM <u>Analyzed:</u> 04/18/2013 5:54 AM <u>Analyzed:</u> 04/19/2013 12:05 PM	Analyst: EM <u>Container</u> . Container-01 o Analyst: EM <u>Container</u> . Container-01 o Analyst: JA <u>Container</u> . Container. Container. Container.
Analytical Met Parameter(s) Color <u>Analytical Met</u> Parameter(s) Chromium, Hexavalen <u>Analytical Met</u> Parameter(s) Hardness (As CaCO3 <u>Analytical Met</u> Parameter(s) Nitrogen, Ammonia (A	hod: SM2120E hod: M3500-C nt <u>hod:</u> SM2340C ) hod: SM4500-	3 : IOC <u>Results</u> 75 75 75 75 75 75 75 75 75 75	D Qualifier Qualifier D	<u>D.F.</u> 5 <u>D.F.</u> 1 <u>D.F.</u> 4 <u>D.F.</u>	Units units <u>Units</u> mg/L <u>Units</u> mg/L <u>Units</u>	<u>Analyzed:</u> 04/18/2013 6:08 AM <u>Analyzed:</u> 04/18/2013 5:54 AM <u>Analyzed:</u> 04/19/2013 12:05 PM <u>Analyzed:</u>	Analyst: EM <u>Container</u> Container-01 of <u>Analyst:</u> EM <u>Container</u> Container-01 of <u>Analyst:</u> JA <u>Container</u> Container-01 of <u>Analyst:</u> bka

inere.

Qualifiers: E = Value above quantitation range

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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Dear 11

F S153

TEL	S. Broad Hollow Rd. : (631) 694-3040 :DOH ID#10478		. NY 11747 ) 420-8436	The	LABORATORY ults for the samples and ab is not directly responsible for b and is responsible only for the	analytes requested	
Town of Southampt Waste Management Southampton, New Attn To : Christ Collected :4/16/2013	on Division	٨	Client	Lab N	io. :1304A27-006 le ID: MW-12A	Sample	Information: roundwater
Analytical Meth	od: E353.2 :					A	Analyst: MJL
Parameter(s)			Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrate as N		0.34		1	mg/L	04/18/2013 10:39 AM	Container-01 of 0
Analytical Meth	od: E420.1 :		Prep Method:	E42	0.1	Prep Date: 4/22/2013 6:30:00 AM	Analyst: EM
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Phenolics, Total Recov	erable	< 5.0		1	µg/L	04/24/2013 8:19 AM	Container-01 of 0
Analytical Meth	od; SM2540C	: IOC					Analyst: MM
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Total Dissolved Solids		140		1	mg/L	04/18/2013 1:09 PM	Container-01 of 02
Analytical Meth	od: E351.2 :		Prep Method:	E35	1.2	Prep Date: 4/23/2013 6:45:00 AM	Analyst: MJL
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrogen, Kjeldahl, Tota	ii	1.89		1	mg/L	04/23/2013 2:38 PM	Container-01 of 0
Analytical Meth	od: SW9060 :					and a second	Analyst: CO
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Total Organic Carbon		22.3		1	mg/L	04/26/2013 2:29 AM	Container-01 of 0

Qualifiers:	E = Value abo	ve quantitation range	Joann M. Slavin
	B = Found in E	Blank	gourne a fer
	D.F. = Dilution	Factor D = Results for Dilution	
	H = Received/	analyzed outside of analytical holding time	Laboratory Manager
	+ = ELAP / NE	LAC does not offer certification for this analyte	
	c = Calibration	acceptability criteria exceeded for this analyte	
	r = Reporting i	imit > MDL and < LOQ	Test results meet the requirements of NELAC unless
	J = Estimated	value - below calibration range	otherwise noted.
	s = Recovery	exceeded control limits for this analyte	This report shall not be reproduced except in full,
	N = Indicates	presumptive evidence of compound	without the written approval of the laboratory.
Dat	e Reported :	5/3/2013	Page



Page 12 of 16

				LABORATORY	RESULTS	
575 Broad Hollow Rd	I., Melville	, NY 11747	Res	ults for the samples and		
TEL: (631) 694-3040 NYSDOH ID#10478	FAX: (631	) 420-8436	The l	•	the integrity of the sample before receipt at	
Town of Southampton					Sample	Information:
Waste Management Division			Lab N	lo. : <b>1304A27-007</b>		roundwater
Southampton, New York 11968		Clien	t Samp	le ID: MW-12B		
Attn To : Christine Fetten Collected : 4/16/2013 12:40:00 Pl	м				Origin:	
Received : 4/17/2013 10:00:00 A					-	
Collected By : PWG99						
Analytical Method: SM2320E	3:					Analyst: HT
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Alkalinity, Total (As CaCO3)	82.6	D	4	mg/L	04/18/2013 2:36 PM	Container-01
Analytical Method: E300.0 :				and a second	ναλαδιώση το <sup>του</sup> βάλαστο το Ισπατογία Γ΄ Γ΄ Υγγολλα <sup>το</sup> το πολβασβ	Analyst: bka
Parameter(s)	<u>Results</u>	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	04/24/2013 2:10 AM	Container-01
Chloride	14.7		1	mg/L	04/24/2013 2:10 AM	Container-01
Sulfate	29.3		1	mg/L	04/24/2013 2:10 AM	Container-01
Analytical Method: SM5210E	3 :	Prep Method:	SMS	5210B	Prep Date; 4/18/2013 7:27:47 AM	Analyst: CN
Parameter(s)	<u>Results</u>	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	<u>Container:</u>
Biochemical Oxygen Demand	< 2		1	mg/L	04/18/2013 10:50 AM	Container-01
NOTES:						
Blank depletion exceeds 0.2 mg/L -	average d	epletion of 0	.65 mg/	L		
Analytical Method: E410.4 : Parameter(s)	Poculto	Qualifier	חב	Linite	Analyzed:	Analyst: CN Container:
	< 10	Quaimer	<u>D.F.</u>	Units	04/30/2013 8:52 AM	Container-01 (
Chemical Oxygen Demand	< 10		1	mg/L	04/30/2013 6.52 AW	
Analytical Method: SM2120E		Qualifier		Lipita	Ambgodi	Analyst: EM
Analytical Method: SM2120E Parameter(s)	Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Analyst: EM Container:
<u>Analytical Method:</u> SM2120E <u>Parameter(s)</u> Color	<u>Results</u> < 5	Qualifier	<u>D.F.</u> 1	<u>Units</u> units	<u>Analyzed:</u> 04/18/2013 6:09 AM	Analyst: EM Container: Container-01
Analytical Method: SM2120E Parameter(s) Color Analytical Method: M3500-C	<u>Results</u> < 5 r D :		1	units	04/18/2013 6:09 AM	Analyst: EM Container: Container-01 o Analyst: EM
Analytical Method: SM2120E Parameter(s) Color Analytical Method: M3500-C Parameter(s)	Results < 5 r D : Results	Qualifier Qualifier	1 <u>D.F.</u>	units Units	04/18/2013 6:09 AM <u>Analyzed:</u>	Analyst: EM Container. Container-01 ( <u>Analyst:</u> EM <u>Container:</u>
Analytical Method: SM2120E Parameter(s) Color Analytical Method: M3500-C Parameter(s) Chromium, Hexavalent	<u>Results</u> < 5 r D : <u>Results</u> < 0.02		1	units	04/18/2013 6:09 AM	Analyst: EM <u>Container</u> . Container-01 of <u>Analyst:</u> EM <u>Container</u> . Container-01 of
Analytical Method: SM2120E Parameter(s) Color Analytical Method: M3500-C Parameter(s) Chromium, Hexavalent Analytical Method: SM23400	Results           < 5	Qualifier	1 <u>D.F.</u> 1	units <u>Units</u> mg/L	04/18/2013 6:09 AM <u>Analyzed:</u> 04/18/2013 5:55 AM	Analyst: EM <u>Container</u> . Container-01 of <u>Analyst:</u> EM <u>Container</u> . Container-01 of <u>Analyst:</u> JA
Analytical Method: SM2120E Parameter(s) Color Analytical Method: M3500-C Parameter(s) Chromium, Hexavalent Analytical Method: SM23400 Parameter(s)	Results < 5 r D : Results < 0.02 C: Results	Qualifier Qualifier	1 <u>D.F.</u> 1 <u>D.F.</u>	units <u>Units</u> mg/L <u>Units</u>	04/18/2013 6:09 AM <u>Analyzed:</u> 04/18/2013 5:55 AM <u>Analyzed:</u>	Analyst: EM <u>Container-</u> Container-01 of <u>Analyst:</u> EM <u>Container:</u> Container-01 of <u>Analyst:</u> JA <u>Container.</u>
Analytical Method: SM2120E Parameter(s) Color Analytical Method: M3500-C Parameter(s) Chromium, Hexavalent Analytical Method: SM2340C Parameter(s) Hardness (As CaCO3)	Results < 5 r D : Results < 0.02 C: Results 94	Qualifier	1 <u>D.F.</u> 1	units <u>Units</u> mg/L	04/18/2013 6:09 AM <u>Analyzed:</u> 04/18/2013 5:55 AM	Analyst: EM Container- Container- Container- Container- Container- Analyst: JA Container- Container-
Analytical Method: SM2120E Parameter(s) Color Analytical Method: M3500-C Parameter(s) Chromium, Hexavalent Analytical Method: SM2340C Parameter(s) Hardness (As CaCO3) Analytical Method: SM4500-	Results           < 5	<u>Qualifier</u> <u>Qualifier</u> D	1 <u>D.F.</u> 1 <u>D.F.</u> 2	units <u>Units</u> mg/L <u>Units</u> mg/L	04/18/2013 6:09 AM <u>Analyzed:</u> 04/18/2013 5:55 AM <u>Analyzed:</u> 04/19/2013 12:10 PM	Analyst: EM Container- Container- Container- Container- Container- Analyst: JA Container- Container
Analytical Method: SM2120E Parameter(s) Color Analytical Method: M3500-C Parameter(s) Chromium, Hexavalent Analytical Method: SM2340C Parameter(s) Hardness (As CaCO3) Analytical Method: SM4500- Parameter(s)	Results < 5 r D : Results < 0.02 C: Results 94 NH3 H : Results	Qualifier Qualifier	1 <u>D.F.</u> 1 <u>D.F.</u> 2 <u>D.F.</u>	Units Units mg/L Units mg/L Units	04/18/2013 6:09 AM <u>Analyzed:</u> 04/18/2013 5:55 AM <u>Analyzed:</u> 04/19/2013 12:10 PM <u>Analyzed:</u>	Analyst: EM Container- Container-01 of Analyst: EM Container-01 of Analyst: JA Container. Container. Container.
Analytical Method: SM2120E Parameter(s) Color Analytical Method: M3500-C Parameter(s) Chromium, Hexavalent Analytical Method: SM2340C Parameter(s) Hardness (As CaCO3) Analytical Method: SM4500- Parameter(s) Nitrogen, Ammonia (As N)	Results           < 5	<u>Qualifier</u> <u>Qualifier</u> D	1 <u>D.F.</u> 1 <u>D.F.</u> 2	units <u>Units</u> mg/L <u>Units</u> mg/L	04/18/2013 6:09 AM <u>Analyzed:</u> 04/18/2013 5:55 AM <u>Analyzed:</u> 04/19/2013 12:10 PM	Analyst: EM <u>Container</u> Container-01 of <u>Analyst:</u> EM <u>Container</u> Container <u>Container</u> Container Container <u>Analyst:</u> bka <u>Container</u> Container
Analytical Method: SM2120E Parameter(s) Color Analytical Method: M3500-C Parameter(s) Chromium, Hexavalent Analytical Method: SM2340C Parameter(s) Hardness (As CaCO3) Analytical Method: SM4500- Parameter(s)	Results           < 5	<u>Qualifier</u> <u>Qualifier</u> D	1 <u>D.F.</u> 1 <u>D.F.</u> 2 <u>D.F.</u>	Units Units mg/L Units mg/L Units	04/18/2013 6:09 AM <u>Analyzed:</u> 04/18/2013 5:55 AM <u>Analyzed:</u> 04/19/2013 12:10 PM <u>Analyzed:</u>	Analyst: EM Container- Container-01 of Analyst: EM Container-01 of Analyst: JA Container. Container. Container.

Qualifiers: E = Value above quantitation range

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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H 2 labs 575 Broad Hollow Rd TEL: (631) 694-3040 NYSDOH ID#10478	. , Melville, NY 11747 FAX: (631) 420-8436	LABORATORY Results for the samples and The lab is not directly responsible for the lab and is responsible only for the	analytes requested	
Town of Southampton Waste Management Division Southampton, New York 11968 Attn To: Christine Fetten	Clier	Lab No. : <b>1304A27-007</b> t Sample ID: MW-12B		nformation; roundwater
Collected : 4/16/2013 12:40:00 Pf Received : 4/17/2013 10:00:00 Af Collected By : PWG99			Origin:	
Analytical Method: E353.2 :				Analyst: MJL
Parameter(s)	Results Qualifier	D.F. Units	Analyzed:	Container:
Nitrate as N	1.17	1 mg/L	04/18/2013 10:40 AM	Container-01 of 01
Analytical Method: E420.1 :	Prep Method	E420.1	Prep Date: 4/23/2013 7:45:00 AM	Analyst: EM
Parameter(s)	Results Qualifier	D.F. Units	Analyzed:	Container.
Phenolics, Total Recoverable	< 5.0	1 µg/L	04/24/2013 8:22 AM	Container-01 of 01
Analytical Method: SM25400	: 10C			Analyst: MM
Parameter(s)	Results Qualifier	<u>D.F. Units</u>	Analyzed:	Container:
Total Dissolved Solids	164	1 mg/L	04/18/2013 1:12 PM	Container-01 of 02
Analytical Method: E351.2 :	Prep Method	E351.2	Prep Date: 4/23/2013 6:45:00 AM	Analyst: MJL
Parameter(s)	Results Qualifier	<u>D.F. Units</u>	Analyzed:	Container:
Nitrogen, Kjeldahl, Total	3.99	1 mg/L	04/23/2013 2:40 PM	Container-01 of 01
Analytical Method: SW9060				Analyst: CO
Parameter(s)	Results Qualifier	D.F. Units	Analyzed:	Container.
Total Organic Carbon	20.6	1 mg/L	04/26/2013 3:07 AM	Container-01 of 02

Joann M. Slavin Qualifiers: E = Value above quantitation range B = Found in Blank D.F. = Dilution Factor D = Results for Dilution H = Received/analyzed outside of analytical holding time Laboratory Manager + = ELAP / NELAC does not offer certification for this analyte c = Calibration acceptability criteria exceeded for this analyte Test results meet the requirements of NELAC unless r = Reporting limit > MDL and < LOQ otherwise noted. J = Estimated value - below calibration range s = Recovery exceeded control limits for this analyte This report shall not be reproduced except in full, without the written approval of the laboratory. N = Indicates presumptive evidence of compound Date Reported : 5/3/2013

# Page 14 of 16

F Z labs						
575 Broad	d Hollow Rd. , Meiville	, NY 11747	Res	LABORATORY ults for the samples and		
TEL: (631) NYSDOH		) 420-8436	The I		r the integrity of the sample before receipt at	
Town of Southampton					Sample	Information:
Waste Management Divi			Lab N	lo. :1304A27-008		ield Blank
Southampton, New York Attn To : Christine F		Client	t Samp	ie ID: FB002		
Collected :4/16/2013 9:3					Origin:	
Received : 4/17/2013 10: Collected By : PWG99	00:00 AM					
	SM2320B :					Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Alkalinity, Total (As CaCO3)			1	mg/L	04/18/2013 2:44 PM	Container-01 of
Analytical Method:	-					Analyst: bka
Parameter(s)		Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	04/24/2013 2:24 AM	Container-01 of
Chloride	< 2.00		1	mg/L	04/24/2013 2:24 AM	Container-01 of
Sulfate	< 5.00		1	mg/L	04/24/2013 2:24 AM	Container-01 of
Analytical Method:	SM5210B :	Prep Method:	SM	5210B	Prep Date: 4/18/2013 7:27:47 AM	Analyst: CN
Parameter(s)	<u>Results</u>	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Biochemical Oxygen Demar NOTES: Blank depletion exceeds 0.2 Analytical Method:	2 mg/L - average de	epletion of 0	1 .65 mg/	mg/L L	04/18/2013 10:55 AM	Analyst: CN
Parameter(s)	<b>Results</b>	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Chemical Oxygen Demand	< 10		1	mg/L	04/30/2013 8:54 AM	Container-01 of
Analytical Method:	SM2120B : IOC			••••••••••••••••••••••••••••••••••••••		Analyst: EM
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Color	< 5		1	units	04/18/2013 6:10 AM	Container-01 of
A polytigat Mathad:						
	M3500-Cr D :					<u>Analyst:</u> EM
Parameter(s)	<u>Results</u>	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Parameter(s) Chromium, Hexavalent	<u>Results</u> < 0.02	Qualifier	<u>D.F.</u> 1	<u>Units</u> mg/L	<u>Analyzed:</u> 04/18/2013 5:56 AM	Container: Container-01 of
Parameter(s) Chromium, Hexavalent Analytical Method:	<u>Results</u> < 0.02 SM2340C :		1	mg/L	04/18/2013 5:56 AM	Container: Container-01 of Analyst: JA
Parameter(s) Chromium, Hexavalent <u>Analytical Method:</u> Parameter(s)	<u>Results</u> < 0.02 SM2340C : <u>Results</u>	Qualifier Qualifier	1 <u>D.F.</u>	mg/L <u>Units</u>	04/18/2013 5:56 AM <u>Analyzed:</u>	Container: Container-01 of <u>Analyst:</u> JA <u>Container;</u>
Parameter(s) Chromium, Hexavalent <u>Analytical Method:</u> Parameter(s) Hardness (As CaCO3)	Results           < 0.02		1	mg/L	04/18/2013 5:56 AM	Container: Container-01 of <u>Analyst:</u> JA <u>Container;</u> Container-01 of
Parameter(s) Chromium, Hexavalent <u>Analytical Method:</u> Parameter(s) Hardness (As CaCO3) <u>Analytical Method:</u>	Results           < 0.02	Qualifier	1 <u>D.F.</u> 1	mg/L <u>Units</u> mg/L	04/18/2013 5:56 AM <u>Analvzed:</u> 04/19/2013 12:15 PM	Container: Container-01 of <u>Analyst:</u> JA <u>Container:</u> Container-01 of <u>Analyst:</u> bka
Parameter(s) Chromium, Hexavalent <u>Analytical Method:</u> Parameter(s) Hardness (As CaCO3) <u>Analytical Method:</u> Parameter(s)	Results           < 0.02		1 <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> mg/L <u>Units</u>	04/18/2013 5:56 AM <u>Analyzed:</u> 04/19/2013 12:15 PM <u>Analyzed:</u>	Container-01 of Anatyst: JA Container: Container-01 of Analyst: bka Container:
Parameter(s) Chromium, Hexavalent <u>Analytical Method:</u> Parameter(s) Hardness (As CaCO3) <u>Analytical Method:</u> Parameter(s) Nitrogen, Ammonia (As N)	Results           < 0.02	Qualifier	1 <u>D.F.</u> 1	mg/L <u>Units</u> mg/L	04/18/2013 5:56 AM <u>Analvzed:</u> 04/19/2013 12:15 PM	Container: Container-01 of <u>Analyst:</u> JA <u>Container:</u> Container-01 of <u>Analyst:</u> bka <u>Container:</u> Container-01 of
Parameter(s) Chromium, Hexavalent <u>Analytical Method:</u> Parameter(s) Hardness (As CaCO3) <u>Analytical Method:</u> Parameter(s) Nitrogen, Ammonia (As N)	Results           < 0.02	Qualifier	1 <u>D.F.</u> 1 <u>D.F.</u>	mg/L <u>Units</u> mg/L <u>Units</u>	04/18/2013 5:56 AM <u>Analyzed:</u> 04/19/2013 12:15 PM <u>Analyzed:</u>	Container-01 of Anatyst: JA Container: Container-01 of Analyst: bka Container:

Qualifiers: E = Value above quantitation range

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported :

Joann M. Dlavin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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5/3/2013

H 2 labs						
М				LABORATORY		
575 Broad Hollow Rd		NY 11747	Res	ults for the samples and	analytes requested	
TEL: (631) 694-3040 NYSDOH ID#10478	FAX: (631	) 420-8436		eb is not directly responsible for b and is responsible only for th	the integrity of the sample before receipt a e certified tests requested.	t
Town of Southampton					Samo	le Information:
Waste Management Division			i ah N	o. : 1304A27-008		Field Blank
Southampton, New York 11968		Client		le ID: FB002	1)00	
Attn To:Christine FettenCollected: 4/16/2013 9:30:00 AMReceived: 4/17/2013 10:00:00 AICollected By : PWG99	-				Origin	:
Analytical Method: E353.2 :						Analyst: MJL
Parameter(s)	Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Nitrate as N	< 0.10		1	mg/L	04/18/2013 10:42	M Container-01 of 01
Analytical Method: E420.1 :		Prep Method:	E42	0.1	Prep Date: 4/23/2013 7:45:00 AM	Analyst: EM
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	04/24/2013 8:23 A	M Container-01 of 01
Analytical Method: SM25400	C: IOC					Analyst: MM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	< 10		1	mg/L	04/18/2013 1:15 PI	M Container-01 of 02
Analytical Method: E351.2 :		Prep Method:	E35	1.2	Prep Date: 4/23/2013 6:45:00 AM	Analyst: MJL
Parameter(s)	<b>Results</b>	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	04/23/2013 2:41 PI	M Container-01 of 01
Analytical Method: SW9060	:					Analyst: CO
Parameter(s)	Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Total Organic Carbon	< 1.0		1	mg/L	04/26/2013 3:46 Al	M Container-01 of 02

Qualifiers: E = Value above quantitation range B = Found in Blank D.F. = Dilution Factor D = Results for Dilution	Joann M. Alavin
H = Received/analyzed outside of analytical holding time + = ELAP / NELAC does not offer certification for this analyte	Laboratory Manager
c = Calibration acceptability criteria exceeded for this analyte r = Reporting limit > MDL and < LOQ J = Estimated value - below calibration range	Test results meet the requirements of NELAC unless otherwise noted.
s = Recovery exceeded control limits for this analyte N = Indicates presumptive evidence of compound	This report shall not be reproduced except in full, without the written approval of the laboratory.

Date Reported :

5/3/2013



575 Broad Hollow Road Melville, NY 11747

tel 631.694.3040 fax 631.420.8436

# SURROGATE SPIKE ANALYSIS RESULTS 5.1 VOLATILES 5.

#### WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

 Lab	Name:	H2M LABS INC			Contract:	·····		
Lab	Code:	H2M	Case No.:	TOS	SAS No.:		SDG No.:	<u>TOS012</u>

SMC2 SMC1 SMC3 OTHER TOT EPA SAMPLE NO. DCA # TOL # BFB # OUT 01 VBLK041713 02 LFB041713 03MSB041713 04 DUP001 05 MW-3A 06 MW-3B 07 MW-3BMS 08 MW-3BMSD 09 MW-3C 10 MW-4A 11 MW-4B 12 MW-4C 13 FB001 14 TRIP BLANK 001 15 STORAGE BLANK 16 MW-1A 17 MW-1B 18 MW-1C 19 MW-11A 20 MW-11B 21 MW-12A 22 MW-12B 23 VBLK041813 24 FB002 25 TRIP BLANK 

> QC Limit (76 - 114)= 1,2-Dichloroethane-d4 SMC 1 DCA = Toluene-d8 (88 - 110)SMC 2 TOL SMC 3 BFB (86-115) = 4-Bromofluorobenzene # Column to be used to flag recovery values \* Values outside of contract required QC limits

page 1 of 1

FORM II VOA-1

OLM04.2



575 Broad Hollow Road Melville, NY 11747 tel 631.694.3040 fax 631.420.8436

# 6. MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY 6.1 VOLATILES

3

#### SYSTEM MONITORING SPIKE/DUPLICATE RECOVERY

Lab Name: H2M LABS I	NC	Contra	ct:		
Lab Code: <u>H2M</u> Ca	se No.:	IOS SAS No.:	SDO	G No.:	TOS012
Matrix Spike - Sample N	o.:	MW-3B	Level:(]	.ow/med)	TOM
	SPIKE	SAMPLE	MS	MS	QC.
	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS

	ADDED	CONCENTRATION	CONCENTRATION	%	
COMPOUND	(µg/L)	(µg/L)	(µg/L)	REC #	REC.
1,1-Dichloroethene	50	0	44	88	61-145
Benzene	50	0	48	95	76-127
Trichloroethene	50	0	49	97	71-120
Toluene	50	0	48	97	76-125
Chlorobenzene	50	0	49	97	75-130

	SPIKE ADDED	MSD CONCENTRATION	MSD %	%	QC	LIMITS
COMPOUND	(µg/L)	(µg/L)	REC #	RPD #	RPD	REC.
1,1-Dichloroethene	50	44	87	1	14	61-145
Benzene	50	47	94	1	11	76-127
Trichloroethene	50	48	96	1	14	71-120
Toluene	50	48	96	1	13	76-125
Chlorobenzene	50	49	99	2	13	75-130

# Col	mn to	o be	used	to	flag	recovery	and	RPD	values	with	an	asterisk
-------	-------	------	------	----	------	----------	-----	-----	--------	------	----	----------

*	Values	outside	of	QC	limits
---	--------	---------	----	----	--------

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

FORM III

ASPB 8260

3A

#### SYSTEM MONITORING SPIKE RECOVERY

Lab Code: H2M Case	NO.: TO:	S SAS No.:	SDG	No.:	TOS012
Sample ID LFB041713			Level:(lo	w/med)	LOW
Column ID DB-624			Colum	n Diam	0.18
Inst. ID HP5973-1		Init. Ca	alib. Date(s):0	3/18/1:	3 18:56
Analysis Date: <u>04/17/13 1</u>	9:06		<u>0</u>	3/18/1	3 21:19
	SPIKE	SAMPLE	SPIKE	SPIKE	QC.
	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS
COMPOUND	(µg/L)	(µg/L)	(µg/L)	REC #	REC.
Chloromethane	50	0	47	93	46-144
Vinyl chloride	50	0	45	91	43-143
Bromomethane	50	0	49	99	52-147
Chloroethane	50	0	47	94	49-151
Acrylonitrile	50	0	48	97	59-148
Trichlorofluoromethane	50	0	45	89	27-173
1,1-Dichloroethene	50	0	46	92	45-146
Iodomethane	50	0	47	94	61-144
Vinyl acetate	50	0	49	98	20-158
Acetone	50	0	50	100	23-188
Carbon disulfide	50	0	45	91	48-132
Methylene chloride	50	0	49	98	61-142
trans-1,2-Dichloroethene	50	0	47	93	56-142
1,1-Dichloroethane	50	0	47	94	83-151
cis-1,2-Dichloroethene	50	0	47	94	72-121
2-Butanone	50	0	43	86	44-162
Bromochloromethane	50	0	49	97	81-116
Chloroform	50	0	49	97	72-122
1,1,1-Trichloroethane	50	0	46	91	65-118
Carbon tetrachloride	50	0	45	91	59-120
Benzene	50	0	47	95	73-119
1,2-Dichloroethane	50	0	50	99	74-129
Trichloroethene	50	0	47	93	69-117
1,2-Dichloropropane	50	0	49	97	75-117
Dibromomethane	50	0	49	98	75-125
Bromodichloromethane	50	0	48	97	78-117
cis-1,3-Dichloropropene	50	0	48	96	78-116
4-Methyl-2-pentanone	50	0	49	97	69-132
Toluene	50	0	47	95	72-119
trans-1,3-Dichloropropene	50	0	48	96	79-116

 $\ensuremath{\texttt{\#}}$  Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

Spike Recovery: 0 out of 47 outside limits

COMMENTS :

FORM III

SW8260B

3A

#### SYSTEM MONITORING SPIKE RECOVERY

Lab Name: H2M LABS IN	с	Contract			
Lab Code: H2M Cas	e No.: TOS	SAS No.:	SDG	No.:	TOS012
Sample ID LFB041713			Level: (lo	w/med)	LOW
Column ID DB-624			Colum	n Diam	0.18
Inst. ID HP5973-1		Init. Ca	alib. Date(s): <u>(</u>	3/18/1	3 18:56
Analysis Date: 04/17/13 1	9:06		<u>(</u>	03/18/1	3 21:19
1,1,2-Trichloroethane	50	0	49	98	80-117
Tetrachloroethene	50	0	47	94	60-128
2-Hexanone	50	0	49	98	83-115
Dibromochloromethane	50	0	48	97	70-120
1,2-Dibromoethane	50	0	49	98	83-115
Chlorobenzene	50	0	47	95	75-113
trans-1,4-Dichloro-2-butene	50	0	47	94	71-121
Ethylbenzene	50	0	47	94	70-113
1,1,1,2-Tetrachloroethane	50	0	48	97	74-113
Xylene (total)	150	0	140	96	71-109
Styrene	50	0	48	96	72-118
Bromoform	50	0	48	96	65-122
1,1,2,2-Tetrachloroethane	50	0	48	96	74-121
1,2,3-Trichloropropane	50	0	48	96	71-123
1,4-Dichlorobenzene	50	0	48	96	71-113
1,2-Dichlorobenzene	50	0	48	95	74-113
1,2-Dibromo-3-chloropropane	50	0	48	96	74-119

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

Spike Recovery: 0 out of 47 outside limits

FORM III

COMMENTS:

SW8260B

#### 3A SYSTEM MONITORING SPIKE RECOVERY

Lab Name: H2M LABS INC	2	Contract						
Lab Code: <u>H2M</u> Case	No.: TO	S SAS No.:	SDG	No.:	TOS012			
Sample ID MSB041713			Level:(lo	w/med)	LOW			
Column ID DB-624			Colum	n Diam	0.18			
Inst. ID HP5973-1 Init. Calib. Date(s):03/18/13 18:56								
Analysis Date: 04/17/13 19:35 03/18/13 21:19								
	SPIKE	SAMPLE	SPIKE	SPIKE	QC.			
	ADDED	CONCENTRATION	CONCENTRATION	%	LIMITS			
COMPOUND	(µg/L)	(µg/L)	(µg/L)	REC #	REC.			
1,1-Dichloroethene	50	0	43	85	61-145			
Benzene	50	0	47	94	76-127			
Trichloroethene	50	0	49	98	71-120			
Toluene	50	0	48	97	76-125			
Chlorobenzene	50	0	51	102	75-130			

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III



575 Broad Hollow Road Melville, NY 11747

tei 631.694.3040 fax 631.420.8436

#### 7. **DUPLICATE SUMMARY RESULTS**

- 7.1 7.2 7.3 TOTAL METALS FILTERED METALS WET CHEMISTRY

U.S. EPA - CLP

6 DUPLICATES EPA SAMPLE NO

MW-3B

Contract:

SAS No.: SDG No.: TOS012

Level (low/med): LOW

% Solids for Sample: 0.0

Matrix (soil/water): WATER

Lab Name: <u>H2M LABS INC</u>

Lab Code: <u>H2M</u> Case No.

% Solids for Duplicate: 0.0

### Concentration Units (ug/L or mg/kg dry weight): UG/L

Antimony Arsenic 10 Barium 200 Beryllium Boron 100 Cadmium Calcium 5000 Chromium 10 Cobalt 50 Copper 25 Cyanide Iron 25 Cyanide 3. Magnesium 5000 Manganese Mercury 40	0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 5.0000	$\begin{array}{r} 12.3000 \\ 1.2000 \\ 12.4900 \\ 29.1000 \\ 0.1000 \\ 40.2000 \\ 0.1000 \\ 9032.0000 \\ 3.5000 \\ 4.7000 \\ 1.1000 \end{array}$	B U B U U B B B B	$\begin{array}{r}9.5000\\1.2000\\30.0000\\0.1000\\43.6000\\0.1000\\43.6000\\0.1000\\9302.0000\\4.2000\\5.0000\end{array}$	U B U B U B	200.0 8.8 3.0 8.1 2.9	P P P
Arsenic 10 Barium 200 Beryllium Boron 100 Cadmium Calcium 5000 Chromium 10 Cobalt 50 Copper 25 Cyanide Iron 25 Cyanide 3. Magnesium 5000 Manganese Mercury Vickel 40 Potassium 5000	0.0000	$\begin{array}{r} 12.4900\\ 29.1000\\ 0.1000\\ 40.2000\\ 0.1000\\ 9032.0000\\ 3.5000\\ 4.7000\\ 1.1000\end{array}$	B U B U B B B	13.6400 30.0000 0.1000 43.6000 0.1000 9302.0000 4.2000	B U B U B	3.0	P P P P
Barium200BerylliumBoron100CadmiumCadmiumCadmiumCalcium5000Chromium10Cobalt50Cobalt50Coper25CyanideSolutionLead3.Magnesium5000ManganeseMercuryMickel40Potassium5000	0.0000	$\begin{array}{r} 29.1000 \\ 0.1000 \\ 40.2000 \\ 0.1000 \\ 9032.0000 \\ 3.5000 \\ 4.7000 \\ 1.1000 \end{array}$	U B U B B	30.0000 0.1000 43.6000 0.1000 9302.0000 4.2000	U B U B	3.0	P P P P
Beryllium Boron 100 Cadmium Calcium 5000 Chromium 10 Cobalt 50 Copper 25 Cyanide Iron 5000 Manganese Mercury 40 Potassium 5000	0.0000	0.1000 40.2000 0.1000 9032.0000 3.5000 4.7000 1.1000	U B U B B	0.1000 43.6000 0.1000 9302.0000 4.2000	U B U B	8.1	 P P P
Boron100CadmiumCalciumCalcium5000Chromium10Cobalt50Copper25CyanideCopperLead3.Magnesium5000ManganeseMarcuryMickel40Potassium5000	00.0000	40.2000 0.1000 9032.0000 3.5000 4.7000 1.1000	B U B B	43.6000 0.1000 9302.0000 4.2000	B U B		 P P
CadmiumCalcium5000Chromium10Cobalt50Copper25Cyanide10Lead3.Magnesium5000Manganese40Mercury10Nickel40Potassium5000	00.0000	0.1000 9032.0000 3.5000 4.7000 1.1000	U B B	0.1000 9302.0000 4.2000	U B		P
Calcium5000Chromium10Cobalt50Copper25Cyanide10Lead3.Magnesium5000Manganese40Mercury10Nickel40Potassium5000	0.0000	9032.0000 3.5000 4.7000 1.1000	B B	9302.0000 4.2000	В	 2.9	
Chromium10Cobalt50Copper25Cyanide1Iron1Lead3.Magnesium500Manganese1Mercury1Nickel40Potassium500	0.0000	3.5000 4.7000 1.1000	В	4.2000		 2.9	
Cobalt50Copper25Cyanide1Iron1Jead3.Magnesium500Manganese1Mercury1Nickel40Potassium500	0.0000	4.7000 1.1000	В				 P
Copper25CyanideIronLeadJagnesium5000ManganeseMercuryNickel40Potassium5000		1.1000		E 0000		18.2	P
Cyanide Iron Jead 3. Magnesium 5000 Manganese Mercury Nickel 40 Potassium 500	5.0000			5.0000	B	6.2	P
Iron Lead 3. Magnesium 5000 Manganese Mercury Nickel 40 Potassium 500			В	2.0000	В	58.1	P
Lead 3. Magnesium 5000 Manganese Mercury Nickel 40 Potassium 500		10.0000	U	10.0000	U		Cł
Magnesium 5000 Manganese Mercury Nickel 40 Potassium 500		12110.0000		12340.0000		1.9	P
Manganese Mercury Nickel 40 Potassium 500	.0000	2.8950	В	3.3490		14.5	P
Aercury Nickel 40 Potassium 500	00.0000	2962.0000	В	3036.0000	В	2.5	P
Nickel 40 Potassium 500		3398.0000		3527.0000		3.7	P
Potassium 500		0.1000	U	0.1000	U		CI
and the second sec	0.0000	2.2000	В	2.0000	B	9.5	P
Selenium	00.0000	3724.0000	В	3894.0000	В	4.5	P
		2.3000	U	2.3000	U		P
Silver		0.2000	U	0.2000	U		P
Sodium 500	00.0000	9985.0000		10490.0000		4.9	P
Thallium		1.9000	U	1.9000	U		P
/anadium		0.3000	U	0.3000			 F
Zinc 20		11.5000	В	7.9000	В	37.1	P

U.S. EPA - CLP

6 DUPLICATES EPA SAMPLE NO

% Solids for Duplicate: 0.0

Lab Name:	H2M LABS I	NC		Contract:		MW-	11A
Lab Code:		Case	No.	SAS No.:		SDG No.:	TOS012F
Matrix (so	oil/water):	WATER			Level	(low/med):	LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	с	Duplicate (D) C	RPD	Q	M
Aluminum	200.0000	30.8000	В	24.5000 B	22.8		1
Antimony	60.0000	1.2740	В	1.2000 U	200.0		
Arsenic		2.8000	U	2.8000 U			
Barium	200.0000	140.9000	В	149.8000 B	6.1		
Beryllium	5.0000	0.9000	В	0.2000 B	127.3		
Boron	100.0000	50.8000	В	52.7000 B	3.7		
Cadmium	5.0000	0.8000	B	0.1000 U	200.0		
Calcium		41160.0000		44170.0000	7.1		
Chromium	10.0000	3.3000	В	2.4000 B	31.6		
Cobalt	50.0000	11.3000	B	11.4000 B	0.9		
Copper	25.0000	1.6000	В	0.4000 U	200.0	1	
Iron		4541.0000		4889.0000	7.4		
Lead	3.0000	6.3620		6.2170	2.3		
Magnesium	5000.0000	15030.0000		16170.0000	7.3		
Manganese		1834.0000		1957.0000	6.5		
Mercury		0.1000	U	0.1000 U			(
Nickel	40.0000	5.6000	В	5.2000 B	7.4		
Potassium	5000.0000	5096.0000		5351.0000	4.9		
Selenium		2.3000	U	2.3000 U			
Silver	10.0000	0.4485	B	0.2000 U	200.0		
Sodium	5000.0000	12870.0000		13770.0000	6.8		
Thallium		1.9000	U	1.9000 U			-
Vanadium		0.3000	U	0.3000 U			1
Zinc	20.0000	12.9000	В	18.6000 B	36.2		+

# H2M LABS INC

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Date: 01-May-13

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# QC SUMMARY REPORT

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SDG: TOS012

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Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC		overy nits	RPDRef Value	%RPD	%RP UCI
MB-041713	MB-041713	Alkalinity, Total (As CaCO3)	< 1	MG/L	1			T	[			1
LCS-041713	LCS-041713	Alkalinity, Total (As CaCO3)	24.5	MG/L	25	< 1	98	80	120			
1304917-005FMS	MW-3BMS	Alkalinity, Total (As CaCO3)	90.3	MG/L	50	46.3	88	75	125			1
1304917-005FDUP	MW-3BDUP	Alkalinity, Total (As CaCO3)	44.8	MG/L				1		46.3	3.3	20
				I							1	- <b>L</b>
MB-041813	MB-041813	Alkalinity, Total (As CaCO3)	< 1	MG/L				1				Τ
LCS-041813	LCS-C41813	Alkalinity, Total (As CaCO3)	24.6	MG/L	25	< 1	98	80	120			
						*						
MB-39303	MB-39303	Biochemical Oxygen Demand	< 2	MG/L	1	[		1			Τ	1
LCS-39303	LCS-39303	Biochemical Oxygen Demand	186	MG/L	198	< 2	94	85	116			
	an a		annalis i de la companya					1		<u>.                                    </u>		
MB-39281	MB-39281	Biochemical Oxygen Demand	< 2	MG/L	1			1	1	1		T
LCS-39281	LCS-39281	Biochemical Oxygen Demand	201	MG/L	198	< 2	102	85	116			
1304917-005FDUP	MW-3BDUP	Biochemical Oxygen Demand	< 2	MG/L				1		< 2		20
MB-042313	MB-042313	Bromide	< 0.5	MG/L	T			T				
LCS-042313	LCS-042313	Bromide	2.38	MG/L	2.5	< 0.5	95	90	110			
1304917-005FMS	MW-3BMS	Bromide	0.99	MG/L	1	< 0.5	99	80	120			
1304917-005FDUP	MW-3BDUP	Bromide	< 0.5	MG/L				1		< 0.5		20
	a sh <b>akara an an an a</b> n an an		. huga u u	Ai								
MB-042313	MB-042313	Chemical Oxygen Demand	< 10	MG/L	T							
LCS-042313	LCS-C42313	Chemical Oxygen Demand	100	MG/L	100	< 10	100	90	110			
1304917-005DMS	MW-38MS	Chemical Oxygen Demand	110	MG/L	100	< 10	110	90	110		1	
1304917-005DDUP	MW-3BDUP	Chemical Oxygen Demand	< 10	MG/L						< 10		20
MB-043013	MB-043013	Chemical Oxygen Demand	< 10	MG/L	1			1				
LCS-043013	LCS-C43013	Chemical Oxygen Demand	103	MG/L	100	< 10	103	90	110			1

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# QC SUMMARY REPORT

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SDG: TOS012

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Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Reco		RPDRef Value	%RPD	%RPI UCL
MB-042313	MB-042313	Chloride	< 2	MG/L	T						1	T
LCS-042313	LCS-042313	Chloride	9.43	MG/L	10	< 2	94	90	110			
1304917-005FMS	MW-3BMS	Chloride	23.2	MG/L	10	13.5	97	80	120		1	
1304917-005FDUP	MW-3BDUP	Chloride	< 2	MG/L						13.5	0.35	20
							L	<b>_</b>				
MB-041813	MB-041813	Chromium, Hexavalent	< 0.02	MG/L	T							· · · · ·
LCS-041813	LCS-041813	Chromium, Hexavalent	0.20	MG/L	0.2	< 0.02	100	80	120			
		· · ·										
MB-041713	MB-041713	Chromium, Hexavalent	< 0.02	MG/L								
LCS-041713	LCS-041713	Chromium, Hexavalent	0.20	MG/L	0.2	< 0.02	100	80	120		1	
1304917-005FMS	1304917-005FMS	Chromium, Hexavalent	0.79	MG/L	1	< 0.1	79	75	125			
1304917-005FDUP	1304917-005FDUP	Chromium, Hexavalent	< 0.1	MG/L						< 0.1		20
MB-041713	MB-041713	Color	< 5	Units								
LCS-041713	LCS-041713	Color	40	Units	40	< 5	100	80	120			
1304917-005FDUP	MW-3BDUP	Color	125	Units				1		125		20
MB-041813	MB-041813	Color	< 5	Units								
LCS-041813	LCS-041813	Color	40	Units	40	< 5	100	80	120			
				····								
MB-041913	MB-041913	Hardness (As CaCO3)	< 5	MG/L				[				
LCS-041913	LCS-041913	Hardness (As CaCO3)	1020	MG/L	1000	< 5	102	80	120			
1304917-005CMS	MW-3BMS	Hardness (As CaCO3)	480	MG/L	400	84	99	75	125			
1304917-005CDUP	MW-3BDUP	Hardness (As CaCO3)	80	MG/L						84	4.9	20
	<u> </u>											
MB-041713	MB-041713	Nitrate as N	< 0.1	MG/L		Ι		Ι			1	
LCS-041713	LCS-041713	Nitrate as N	1.21	MG/L	1.13	< 0.1	107	90	110		1	1

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575 Broad Hollow Rd. , Melville, NY 11747 TEL: (631) 694-3040 FAX: (631) 420-8436 NYSDOH ID#10478

## LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

Town of Southampton Waste Management Division Southampton, New York 11968

Christine Fetten Attn To : Collected : 4/15/2013 11:00:00 AM Received : 4/16/2013 9:50:00 AM

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Sample Information: Type : Field Blank

Origin:

Analytical Method:	E353.2 :						<u>Analyst:</u> MJL
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrate as N		< 0.10		1	mg/L	04/17/2013 1:19 PM	Container-01 of
Analytical Method:	E420.1 :		Prep Method:	E420	).1	Prep Date: 4/22/2013 6:30:00 AM	Analyst: EM
Parameter(s)		<b>Results</b>	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Phenolics, Total Recoveral	ole	< 5.0		1	µg/L	04/24/2013 8:13 AM	Container-01 of
Analytical Method:	SM2540C	: 10C					Analyst: MM
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Total Dissolved Solids		< 10		1	mg/L	04/18/2013 12:51 PM	Container-01 of
Analytical Method:	E351.2 :		Prep Method:	E35	1.2	Prep Date: 4/23/2013 6:45:00 AM	Analyst: MJL
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Nitrogen, Kjeldahl, Total		< 0.10		1	mg/L	04/23/2013 2:32 PM	Container-01 of
Analytical Method:	SW9060 :						Analyst: CO
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Total Organic Carbon		< 1.0		1	mg/L	04/25/2013 10:39 PM	Container-01 of

Lab No. : 1304917-010

Client Sample ID: FB001

Qualifiers: E = Value above quantitation range	Joann M. Slavin
B = Found in Blank	Partie a ferra
D.F. = Dilution Factor D = Results for Dilution	0
H = Received/analyzed outside of analytical holding time	Laboratory Manager
+ = ELAP / NELAC does not offer certification for this analyte	, , , , , , , , , , , , , , , , , , , ,
c = Calibration acceptability criteria exceeded for this analyte	
r = Reporting limit > MDL and < LOQ	Test results meet the requirements of NELAC unit
J = Estimated value - below calibration range	otherwise noted.
s = Recovery exceeded control limits for this analyte	This report shall not be reproduced except in full,

N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

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TOS012/012F S142

<b>12</b> la	bs						
					LABORATOR	Y RESULTS	
<b>V</b> 5	75 Broad Hollow Rd.	, Meiville	NY 11747	Res		ind analytes requested	
	EL: (631) 694-3040 YSDOH ID#10478	FAX: (631	) 420-8436			for the integrity of the sample before receipt at the certified tests requested.	
Town of Southam	oton					Sample I	nformation:
Waste Manageme				Lab N	o. : 1304A27-00		roundwater
Southampton, New	stine Fetten		Client	Sampl	ie ID: MW-1A		
	13 11:20:00 AN	А				Origin:	
	13 10:00:00 AN						
Collected By : PWG9							
Analytical Me	thod: SM2320B	:					Analyst: HT
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Alkalinity, Total (As C	aCO3)	31.0		1	mg/L	04/18/2013 1:48 PM	Container-01 of
Analytical Me	thod: E300.0 :						Analyst: bka
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Bromide		< 0.50		1	mg/L	04/24/2013 12:09 AM	Container-01 of
Chloride		13.1		1	mg/L	04/24/2013 12:09 AM	Container-01 of
Sulfate		25.7		1	mg/L	04/24/2013 12:09 AM	Container-01 of
Analytical Me	thod: SM5210B	:	Prep Method:	SMS	5210B	Prep Date: 4/18/2013 7:27:47 AM	Analyst: CN
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Container:
Biochemical Oxygen	Demand	< 2		1	mg/L	04/18/2013 10:20 AM	Container-01 of
NOTES:					_		
Blank depletion excee		average d	epletion of 0	.65 mg/	L		Analysis Chi
Analytical Me Parameter(s)	thod: E410.4 :	Doguito	Qualifier	D.F.	Unito	Analyzed:	Analyst: CN Container:
		Results	Qualifier		<u>Units</u>	04/30/2013 8:36 AM	Container-01 of
Chemical Oxygen De		< 10		1	mg/L	04/30/2013 0.30 AM	
Analytical Me	thod: SM2120B		Outlifer	<b>D C</b>	Linita	Archard	Analyst: EM
Parameter(s)	······································		Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Color		< 5		1	units	04/18/2013 6:02 AM	Container-01 of
Analytical Me	thod: M3500-Cr					•	Analyst: EM
Parameter(s)		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Chromium, Hexavale		< 0.02		1	mg/L	04/18/2013 5:47 AM	Container-01 of
Analytical Me	thod: SM2340C	_					<u>Analyst:</u> JA
Parameter(s)			Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Hardness (As CaCO	-	62		1	mg/L.	04/19/2013 11:40 AM	
Analytical Me	thod: SM4500-N						Analyst: bka
Parameter(s)	<u> </u>		Qualifier	<u>D.F.</u>	Units	Analyzed:	Container:
Nitrogen, Ammonia (	· · · · · · · · · · · · · · · · · · ·	< 0.10		1	mg/L	04/22/2013 12:14 PM	
Analytical Me	thod: E353.2 :						Analyst: MJL
Parameter(s)			<u>Qualifier</u>	<u>D.F.</u>	Units	Analyzed:	Container.
Nitrite as N		< 0.10		1	mg/L	04/18/2013 8:52 AM	Container-01 of

Qualifiers: E = Value above quantitation range

B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte

c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound 5/3/2013

Date Reported :

Joann M. Slavin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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# QC SUMMARY REPORT

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SDG: TOS012

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Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC		overy nits	RPDRef Value	%RPD	%RP UCI
											r	
MB-041813	MB-041813	Nitrate as N	< 0.1	MG/L					ļ			
LCS-041813	LCS-041813	Nitrate as N	1.13	MG/L	1.13	< 0.1	100	90	110			
MB-041713	MB-041713	Nitrate as N	< 0.1	MG/L	1							
LCS-041713	LCS-041713	Nitrate as N	1.16	MG/L	1.13	< 0.1	103	90	110			
1304917-005DMS	MW-3BMS	Nitrate as N	0.52	MG/L	0.5	< 0.1	104	90	110			
1304917-005DDUP	MW-3BDUP	Nitrate as N	< 0.1	MG/L						< 0.1		20
MB-041813	MB-041813	Nitrite as N	< 0.1	MG/L	1		]				1	T
LCS-041813	LCS-041813	Nitrite as N	1.03	MG/L	1	< 0.1	103	90	110			
MB-041713	MB-041713	Nitrite as N	< 0.1	MG/L	T				1			
LCS-041713	LCS-041713	Nitrite as N	1.03	MG/L	1	< 0.1	103	90	110			
1304917-005FMS	MW-3BMS	Nitrite as N	0.45	MG/L	0.5	< 0.1	90	90	110			
1304917-005FDUP	MW-3BDUP	Nitrite as N	< 0.1	MG/L						< 0.1		20
	innandara go,aans araratti											
MB-042213	MB-042213	Nitrogen, Ammonia (As N)	< 0.1	MG/L								
LCS-042213	LCS-042213	Nitrogen, Ammonia (As N)	1.03	MG/L	1	< 0.1	103	90	110			
1304917-005DMS	MW-3BMS	Nitrogen, Ammonia (As N)	5.39	MG/L	2.5	2.82	103	75	125			
1304917-005DDUP	MW-3BDUP	Nitrogen, Ammonia (As N)	2.90	MG/L						2.82	2.5	20
and We fan												
MB1-042513	MB1-042513	Nitrogen, Ammonia (As N)	< 0.1	MG/L								
LCS1-042513	LCS1-042513	Nitrogen, Ammonia (As N)	1.03	MG/L	1	< 0.1	103	90	110			
MB-042313	MB-042313	Nitrogen, Ammonia (As N)	< 0.1	MG/L	T							
LCS-042313	LCS-042313	Nitrogen, Ammonia (As N)	1.02	MG/L	1	< 0.1	102	90	110			
MB-39401	MB-39401	Nitrogen, Kjeldahl, Total	< 0.1	MG/L	T		1	1		[	1	
LCS-39401	LCS-39401	Nitrogen, Kjeldahl, Total	4.06	MG/L	4	< 0.1	102	90	110		1	

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# QC SUMMARY REPORT

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SDG: TOS012

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Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC		nits	RPDRef Value	%RPD	%RP UC
MB-39354	MB-39354	Nitrogen, Kjeldahl, Total	< 0.1	MG/L	1	<u> </u>		Γ	<u> </u>	[		
LCS-39354	LCS-39354	Nitrogen, Kjeldahl, Total	3.71	MG/L	4	< 0.1	93	90	110			
1304917-005DMS	1304917-005DMS	Nitrogen, Kjeldahl, Total	7.57	MG/L	4	2.90	117	75	125			
1304917-005DDUP	1304917-005DDUP	Nitrogen, Kjeldahl, Total	2.84	MG/L						2.90	1.9	20
								<b>.</b>	<del>.</del>		1	
MB-39356	MB-39356	Phenolics, Total Recoverable	< 5	UG/L								
LCS-39356	LCS-39356	Phenolics, Total Recoverable	26.8	UG/L	30	< 5	89	80	120			<u> </u>
MB-39333	MB-39333	Phenolics, Total Recoverable	< 5	UG/L	1	1		1				
LCS-39333	LCS-39333	Phenolics, Total Recoverable	30.3	UG/L	30	< 5	101	80	120			
1304917-005DMS	MW-3BMS	Phenolics, Total Recoverable	17.5	UG/L	20	< 5	88	75	125			1
1304917-005DDUP	MW-3BDUP	Phenolics, Total Recoverable	< 5	UG/L	1					< 5		20
									<b></b> _			
MB-042313	MB-042313	Sulfate	< 5	MG/L					1			
LCS-042313	LCS-042313	Sulfate	9.84	MG/L	10	< 5	98	90	110			
1304917-005FMS	MW-3BMS	Sulfate	20.9	MG/L	10	11.2	97	80	120			
1304917-005FDUP	MW-3BDUP	Sulfate	11.2	MG/L					1	11.2	0.33	20
MB-041813	MB-041813	Total Dissolved Solids	< 10	MG/L				1				
LCS-041813	LCS-041813	Total Dissolved Solids	281	MG/L	300	< 10	94	80	120			
1304917-005FMS	MW-3BMS	Total Dissolved Solids	385	MG/L	300	75	103	75	125			
1304917-005FDUP	MW-3BDUP	Total Dissolved Solids	80	MG/L						75	6.5	20
						<b>.</b>		- <b>T</b>		<del></del>		
MB-041713	MB-041713	Total Organic Carbon	< 1	MG/L								
LCS-041713	LCS-041713	Total Organic Carbon	26.5	MG/L	25	< 1	106	80	120			
	ND 040540	Tatal Orneria Orthog		MO			I	1	<u> </u>	1	· _ · · · · · · · · · · · · · · · · · ·	
MB-042513	MB-042513	Total Organic Carbon	< 1	MG/L MG/L			140		120			+
LCS-042513	LCS-042513	Total Organic Carbon	27.6		25	<1	110	80				
1304917-005BMS	MW-3BMS	Total Organic Carbon	24.9	MG/L	10	14.2	108	75	125	44.0	0.00	00
1304917-005BDUP	MW-3BDUP	Total Organic Carbon	14.3	MG/L						14.2	0.99	20

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575 Broad Hollow Road Melville, NY 11747

tel 631.694.3040 fax 631.420.8436

# SPIKE SAMPLE RESULTS8.1TOTAL METALS8.2FILTERED METALS8.3WET CHEMISTRY 8.

U.S. EPA - CLP

5A SPIKE SAMPLE RECOVERY EPA SAMPLE NO

MW-3BS

Lab Name: <u>H2M LABS INC</u>

Contract:

Lab Code:H2MCase No.SAS No.:SDG No.:TOS012

Level (low/med): LOW

% Solids for Sample: 0.0

Comments:

Matrix (soil/water): WATER

Concentration Units (ug/L or mg/kg dry weight): UG/L

	Control								
	Limit	Spiked Sample		Sample		Spike			
Analyte	%R	Result (SSR)	С	Result (SR)	С	Added (SA)	_%R	Q	М
Aluminum	75-125	2164.0000		12.3000	В	2000.00	107.6		Ρ
Antimony	75-125	537.8000		1.2000	U	500.00	107.6		P
Arsenic	75-125	52.3500		12.4900		40.00	99.6		P
Barium	75-125	2060.0000		29.1000	В	2000.00	101.5		P
Beryllium	75-125	50.7000		0.1000	U	50.00	101.4		P
Boron	75-125	44.3000	В	40.2000	В	50.00	8.2	N	P
Cadmium	75-125	48.4000		0.1000	U	50.00	96.8		P
Chromium	75-125	205.8000		3.5000	В	200.00	101.2		Ρ
Cobalt	75-125	506.9000		4.7000	В	500.00	100.4		P
Copper	75-125	256.6000		1.1000	В	250.00	102.2		Ρ
Cyanide	75-125	102.6307		10.0000	U	100.00	102.6		CA
Iron		13530.0000		12110.0000		1000.00	142.0		P
Lead	75-125	24.8400		2.8950	В	20.00	109.7		Ρ
Manganese		4017.0002		3398.0000		500.00	123.8		Ρ
Mercury	75-125	0.7480		0.1000	U	1.00	74.8	~	CV
Nickel	75-125	494.1000		2.2000	В	500.00	98.4		P
Selenium	75-125	6.0220		2.3000	U	10.00	60.2		P
Silver	75-125	49.8900		0.2000	U	50.00	99.8		P
Thallium	75-125	56.8000		1.9000	U	50.00	113.6		P
Vanadium	75-125	514.0000		0.3000	U	500.00	102.8		Р
Zinc	75~125	518.0000		11.5000	В	500.00	101.3		P

TOS012/012F S174

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FORM V (Part 1) - IN

ILM04.1

U.S. EPA -	CLP
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5B POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

MW-3BA

Lab Name: <u>H2M LABS INC</u>

Contract:

SDG No.: TOS012

Level (low/med): LOW

Matrix (soil/water): WATER

Concentration Units: ug/L

	Analyte	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	С	Spike Added (SA)	۶R	Q	M
	Boron		2106.00	40.20	B	2000.0	103.3		P
inter a	Selenium		29.10	2.30	U	30.0	97.0		P

Lab Code: <u>H2M</u> Case No. SAS No.:

Comments:

FORM V (Part 2) - IN

ILM04.1

TOS012/012F S175

5A SPIKE SAMPLE RECOVERY

#### EPA SAMPLE NO

MW-11AS

Lab Name: <u>H2M LABS INC</u>

Lab Code: <u>H2M</u> Case No.

Contract:

SAS No.:

SDG No.: <u>TOS012F</u>

Level (low/med): LOW

Matrix (soil/water): <u>WATER</u>

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

	Control								
	Limit	Spiked Sample		Sample		Spike			
Analyte	۶R	Result (SSR)	С	Result (SR)	С	Added (SA)	%R	Q	1
Aluminum	75-125	2202.0000		30.8000	В	2000.00	108.6		]]
Antimony	75-125	550.3000		1.2740	В	500.00	109.8		
Arsenic	75-125	40.4400		2.8000	U	40.00	101.1		
Barium	75-125	2227.0000		140.9000	В	2000.00	104.3		
Beryllium	75-125	51.3000		0.9000	В	50.00	100.8		
Boron	75-125	47.8000	В	50.8000	В	50.00	-6.0	N	
Cadmium	75-125	49.1000		0.8000	В	50.00	96.6		
Chromium	75-125	205.0000		3.3000	В	200.00	100.9		
Cobalt	75-125	515.7000		11.3000	В	500.00	100.9		
Copper	75-125	256.8000		1.6000	В	250.00	102.1		
Iron		5781.0000		4541.0000		1000.00	124.0		
Lead	75-125	29.0700		6.3620		20.00	113.5		
Manganese	75-125	2426.0000		1834.0000		500.00	118.4		
Mercury	75-125	0.7830		0.1000	U	1.00	78.3		C
Nickel	75-125	498.3000		5.6000	В	500.00	98.5		
Selenium	75-125	9.5400		2.3000	U	10.00	95.4		
Silver	75-125	50.0600		0.4485	В	50.00	99.2		
Thallium	75-125	56.0400		1.9000	U	50.00	112.1		
Vanadium	75-125	523.0000		0.3000	U	500.00	104.6		
Zinc	75-125	523.8000		12.9000	В	500.00	102,2		

Comments:

TOS012/012F S176

ILM04.1

	U.S. EPA - CLP									
			POG	ST DIGEST	5B SPIKE SAMP	LE RECO	WERY	EPA SA	MPLI	e no
, La	ab Name:	H2M LABS		JI DIGESI	Contra		VEILT	MW-	11AA	1
La	ab Code:	<u>H2M</u>	Case Nc	).	SA	S No.:		SDG No.:	TOS	012F
Ma	atrix (so	il/water):	WATER				Level (	low/med):	LOW	
k										
<b></b>				Concent	ration Unit	s: ug/I	[			<i>r</i> 1
	Analyte	Control Limit %R	Spiked S Result (	- 1	Sample Result (S		Spike Added (SA	) %R	Q	M

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Comments:

TOS012/012F S177

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# H2M LABS INC

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Date: 01-May-13

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# QC SUMMARY REPORT

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SDG: TOS012

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Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Reco Lin		RPDRef Value	%RPD	%RPI UCL
MB-041713	MB-041713		< 1	MG/L	T	T	1	1			T	Г
		Alkalinity, Total (As CaCO3)		MG/L	25		98	80	120			
LCS-041713	LCS-041713	Alkalinity, Total (As CaCO3)	24.5			< 1						
1304917-005FMS	MW-3BMS	Alkalinity, Total (As CaCO3)	90.3	MG/L	50	46.3	88	75	125		<u> </u>	
1304917-005FDUP	MW-3BDUP	Alkalinity, Total (As CaCO3)	44.8	MG/L						46.3	3.3	20
10 044040				MG/L	- <u>_</u>	1	1		1		1	T
MB-041813	MB-041813	Alkalinity, Total (As CaCO3)	< 1						100			+
LCS-041813	LCS-C41813	Alkalinity, Total (As CaCO3)	24.6	MG/L	25	< 1	98	80	120		<u> </u>	
MB-39303	MB-39303	Biochemical Oxygen Demand	< 2	MG/L	T	1		1	[		1	
LCS-39303	LCS-39303	Biochemical Oxygen Demand	186	MG/L	198	< 2	94	85	116			
······································			<b></b> L	1		1		1.	1	L		
MB-39281	MB-39281	Biochemical Oxygen Demand	< 2	MG/L	T			1				
LCS-39281	LCS-39281	Biochemical Oxygen Demand	201	MG/L	198	< 2	102	85	116			
1304917-005FDUP	MW-38DUP	Biochemical Oxygen Demand	< 2	MG/L						< 2		20
												- <b>.</b>
MB-042313	MB-042313	Bromide	< 0.5	MG/L								
LCS-042313	LCS-042313	Bromide	2.38	MG/L	2.5	< 0.5	95	90	110			
1304917-005FMS	MW-3BMS	Bromide	0.99	MG/L	1	< 0.5	99	80	120			1
1304917-005FDUP	MW-3BDUP	Bromide	< 0.5	MG/L						< 0.5		20
MB-042313	MB-042313	Chemical Oxygen Demand	< 10	MG/L								
LCS-042313	LCS-C42313	Chemical Oxygen Demand	100	MG/L	100	< 10	100	90	110			
1304917-005DMS	MW-3BMS	Chemical Oxygen Demand	110	MG/L	100	< 10	110	90	110			
1304917-005DDUP	MW-3BDUP	Chemical Oxygen Demand	< 10	MG/L						< 10		20
MB-043013	MB-043013	Chemical Oxygen Demand	< 10	MG/L								
LCS-043013	LCS-C43013	Chemical Oxygen Demand	103	MG/L	100	< 10	103	90	110			

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# QC SUMMARY REPORT

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Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result		Reco	overy nits	RPDRef Value	%RPD	%RPI UCL
MB-042313	MB-042313	Chloride	< 2	MG/L	1			Τ	1			
LCS-042313	LCS-042313	Chloride	9.43	MG/L	10	< 2	94	90	110		1	
1304917-005FMS	MW-3BMS	Chloride	23.2	MG/L	10	13.5	97	80	120			1
1304917-005FDUP	MW-3BDUP	Chloride	< 2	MG/L						13.5	0.35	20
	<u></u>		· · · · · · · · · · · · · · · · · · ·					<b>.</b>			••••	
MB-041813	MB-041813	Chromium, Hexavalent	< 0.02	MG/L					T			
LCS-041813	LCS-041813	Chromium, Hexavalent	0.20	MG/L	0.2	< 0.02	100	80	120			
MB-041713	MB-041713	Chromium, Hexavalent	< 0.02	MG/L	1							
LCS-041713	LCS-041713	Chromium, Hexavalent	0.20	MG/L	0.2	< 0.02	100	80	120			
1304917-005FMS	1304917-005FMS	Chromium, Hexavalent	0.79	MG/L	1	< 0.1	79	75	125			
1304917-005FDUP	1304917-005FDUP	Chromium, Hexavalent	< 0.1	MG/L						< 0.1		20
MB-041713	MB-041713	Color	< 5	Units	1							T
LCS-041713	LCS-041713	Color	40	Units	40	< 5	100	80	120			
1304917-005FDUP	MW-3BDUP	Color	125	Units	1					125		20
MB-041813	MB-041813	Color	< 5	Units							· .	T
LCS-041813	LCS-041813	Color	40	Units	40	< 5	100	80	120			
MB-041913	MB-041913	Hardness (As CaCO3)	< 5	MG/L								
LCS-041913	LCS-041913	Hardness (As CaCO3)	1020	MG/L	1000	< 5	102	80	120			
1304917-005CMS	MW-3BMS	Hardness (As CaCO3)	480	MG/L	400	84	99	75	125		1	1
1304917-005CDUP	MW-3BDUP	Hardness (As CaCO3)	80	MG/L						84	4.9	20
MB-041713	MB-041713	Nitrate as N	< 0.1	MG/L					1	1		
LCS-041713	LCS-041713	Nitrate as N	1.21	MG/L	1.13	< 0.1	107	90	110			1

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Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Reco	overy nits	RPDRef Value	%RPD	%RP UC
Sample ID:	Cheft Sample ID:	Analyte										
MB-041813	MB-041813	Nitrate as N	< 0.1	MG/L								
LCS-041813	LCS-041813	Nitrate as N	1.13	MG/L	1.13	< 0.1	100	90	110			
MB-041713	MB-041713	Nitrate as N	< 0.1	MG/L			<b>I</b>	T	1		T	1
LCS-041713	LCS-041713	Nitrate as N	1.16	MG/L	1.13	< 0.1	103	90	110		+	
1304917-005DMS	MW-3BMS	Nitrate as N	0.52	MG/L	0.5	< 0.1	104		110		+	<del> </del>
1304917-005DDUP	MW-3BDUP	Nitrate as N	< 0.1	MG/L						< 0.1		20
							<u> </u>	I	.l		1	
MB-041813	MB-041813	Nitrite as N	< 0.1	MG/L	T						T	<u> </u>
LCS-041813	LCS-041813	Nitrite as N	1.03	MG/L	1	< 0.1	103	90	110			-
MB-041713	MB-041713	Nitrite as N	< 0.1	MG/L				1				
LCS-041713	LCS-041713	Nitrite as N	1.03	MG/L	1	< 0.1	103	90	110			
1304917-005FMS	MW-3BMS	Nitrite as N	0.45	MG/L	0.5	< 0.1	90	90	110			1
1304917-005FDUP	MW-3BDUP	Nitrite as N	< 0.1	MG/L						< 0.1		20
MB-042213	MB-042213	Nitrogen, Ammonia (As N)	< 0.1	MG/L	1			[	1		}	
LCS-042213	LCS-042213	Nitrogen, Ammonia (As N)	1.03	MG/L	1	< 0.1	103	90	110			
1304917-005DMS	MW-3BMS	Nitrogen, Ammonia (As N)	5.39	MG/L	2.5	2.82	103	75	125			
1304917-005DDUP	MW-3BDUP	Nitrogen, Ammonia (As N)	2.90	MG/L						2.82	2.5	20
MB1-042513	MB1-042513	Nitrogen, Ammonia (As N)	< 0.1	MG/L								
LCS1-042513	LCS1-042513	Nitrogen, Ammonia (As N)	1.03	MG/L	1	< 0.1	103	90	110			
MB-042313	MB-042313	Nitrogen, Ammonia (As N)	< 0.1	MG/L	1				1			
LCS-042313	LCS-042313	Nitrogen, Ammonia (As N)	1.02	MG/L	1	< 0.1	102	90	110			
MB-39401	MB-39401	Nitrogen, Kjeldahl, Total	< 0.1	MG/L					1			
LCS-39401	LCS-39401	Nitrogen, Kjeldahl, Total	4.06	MG/L	4	< 0.1	102	90	110		1	

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Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Reco Lir	overy nits	RPDRef Value	%RPD	%RP UC
MB-39354	MB-39354	Nitrogen, Kjeldahl, Total	< 0.1	MG/L								
LCS-39354	LCS-39354	Nitrogen, Kjeldahl, Total	3.71	MG/L	4	< 0.1	93	90	110			1
1304917-005DMS	1304917-005DMS	Nitrogen, Kjeldahl, Total	7.57	MG/L	4	2.90	117	75	125		1	1
1304917-005DDUP	1304917-005DDUP	Nitrogen, Kjeldahl, Total	2.84	MG/L						2.90	1.9	20
MB-39356	MB-39356	Dhanalias Tatal Deseurable	< 5	UG/L		1		1	T			1
		Phenolics, Total Recoverable							400		+	
LCS-39356	LCS-39356	Phenolics, Total Recoverable	26.8	UG/L	30	< 5	89	80	120			
MB-39333	MB-39333	Phenolics, Total Recoverable	< 5	UG/L					1			
LCS-39333	LCS-39333	Phenolics, Total Recoverable	30.3	UG/L	30	< 5	101	80	120			
1304917-005DMS	MW-3BMS	Phenolics, Total Recoverable	17.5	UG/L	20	< 5	88	75	125			
1304917-005DDUP	MW-3BDUP	Phenolics, Total Recoverable	< 5	UG/L						< 5		20
		· · · · · · · · · · · · · · · · · · ·									.,	
MB-042313	MB-042313	Sulfate	< 5	MG/L				ļ	L			
LCS-042313	LCS-042313	Sulfate	9.84	MG/L	10	< 5	98	90	110			
1304917-005FMS	MW-3BMS	Sulfate	20.9	MG/L	10	11.2	97	80	120			
1304917-005FDUP	MW-3BDUP	Sulfate	11.2	MG/L		L				11.2	0.33	20
MB-041813	MB-041813	Total Dissolved Solids	< 10	MG/L		Γ					T	<u> </u>
LCS-041813	LCS-041813	Total Dissolved Solids	281	MG/L	300	< 10	94	80	120		+	
1304917-005FMS	MW-3BMS	Total Dissolved Solids	385	MG/L	300	75	103	75	125		+	
1304917-005FDUP	MW-3BDUP	Total Dissolved Solids	80	MG/L						75	6.5	20
				·				A				- <b>I</b>
MB-041713	MB-041713	Total Organic Carbon	< 1	MG/L								
LCS-041713	LCS-041713	Total Organic Carbon	26.5	MG/L	25	< 1	106	80	120			
110 010510	100 010510				·····	1	r				T	
MB-042513	MB-042513	Total Organic Carbon	< 1	MG/L					100			
LCS-042513	LCS-042513	Total Organic Carbon	27.6	MG/L	25	< 1	110	80	120			
1304917-005BMS	MW-3BMS	Total Organic Carbon	24.9	MG/L	10	14.2	108	75	125			
1304917-005BDUP	MW-3BDUP	Total Organic Carbon	14.3	MG/L						14.2	0.99	20

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575 Broad Hollow Road Melville, NY 11747

labs

tel 631.694.3040 fax 631.420.8436

#### **BLANK SUMMARY DATA AND RESULTS** 9.

- VOLATILES 9.1
- TOTAL METALS FILTERED METALS WET CHEMISTRY 9.2 9.3
- 9.4

EPA SAMPLE NO.

4A VOLATILE METHOD BLANK SUMMARY

VBLK041713

Lab Name:<u>H2M LABS INC</u>Contract:Lab Code:<u>H2M</u>Case No.:<u>TOS</u>Lab File ID:<u>3\F60370.D</u>Lab Sample ID:<u>VBLK041713</u>Date Analyzed:<u>04/17/13</u>Time Analyzed:<u>18:38</u>GC Column:<u>DB-624</u> ID:<u>0.18</u> (mm)Heated Purge:<u>VIN)</u>Instrument ID:<u>HP5973-1</u>

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

1	EPA	LAB	LAB	TIME
	<b>_</b>			
	SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED
01	LFB041713	LFB041713	3\F60371.D	19:06
02	MSB041713	MSB041713	3\F60372.D	19:35
03	DUP001	1304917-001A	3\F60373.D	20:04
04	MW-3A	1304917-004A	3\F60374.D	20:33
05	MW-3B	1304917-005A	3\F60375.D	21:01
06	MW-3BMS	1304917-005AMS	3\F60376.D	21:30
07	MW-3BMSD	1304917-005AMSD	3\F60377.D	21:59
08	MW-3C	1304917-006A	3\F60378.D	22:27
09	MW-4A	1304917-007A	3\F60379.D	22:56
10	MW-4B	1304917-008A	3\F60380.D	23:25
11	MW-4C	1304917-009A	3\F60381.D	23:54
12	FB001	1304917-010A	3\F60382.D	0:22
13	TRIP BLANK 001	1304917-011A	3\F60383.D	0:51
14	STORAGE BLANK	1304917-012A	3\F60384.D	1:20
15	MW-1A	1304A27-001A	3\F60385.D	1:48
16	MW-1B	1304A27-002A	3\F60386.D	2:17
17	MW-1C	1304A27-003A	3\F60387.D	2:46
18	MW-11A	1304A27-004A	3\F60388.D	3:15
19	MW-11B	1304A27-005A	3\F60389.D	3:44
20	MW-12A	1304A27-006A	3\F60390.D	4:12
21	MW-12B	1304A27-007A	3\F60391.D	4:41

COMMENTS:

page <u>1</u> of <u>1</u>

1B VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK041713

Lab Name: H2M LABS	INC Co	ntract:	
Lab Code: H2M	Case No.: TOS	SAS No.:	SDG No.: TOS012
Matrix: (soil/water)	WATER	Lab Sample ID:	VBLK041713
Sample wt/vol: $5$	(g/mL) ML	Lab File ID:	3\ <b>F60370</b> .D
Level: (low/med)	LOW	Date Received:	
% Moisture: not dec.		Date Analyzed:	04/17/13
GC Column: DB-624	ID: <u>0.18</u> (mu	n) Dilution Factor:	1.00
Soil Extract Volume:	(µL)	Soil Aliquot Volu	ume (uL)

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
107-13-1	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-4	Iodomethane	5	U
108-05-4	Vinyl acetate	5	U
67-64-1	Acetone	1	J
75-15-0	Carbon disulfide	5	U
75-09-2	Methylene chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	5	U
74-97-5	Bromochloromethane	5	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
108-10-1	4-Methyl-2-pentanone	5	U
108-88-3	Toluene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6		5	U
124-48-1		5	U
106-93-4	1,2-Dibromoethane	5	U

## EPA SAMPLE NO.

1B

### VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK041713

Lab Name:	H2M LABS I	NC	Contra	act:	
Lab Code:	H2M	Case No.:	tos sas	No.:	SDG No.: TOS012
Matrix: (so	oil/water)	WATER		Lab Sample ID:	VBLK041713
Sample wt/v	vol: <u>5</u>	(g/mL)	ML	Lab File ID:	3\F60370.D
Level: (]	Low/med)	LOW		Date Received:	
% Moisture:	not dec.			Date Analyzed:	04/17/13
GC Column:	DB-624	ID:	<u>0.18</u> (mm)	Dilution Factor:	1.00
Soil Extrac	ct Volume:		(µL)	Soil Aliquot Vol	ume (µL)

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U

-				1 <b>F</b>				EPA SAMP	LE NO	).
			VOLATILE O	RGANICS AN	NALYSIS DATA S	HEET		VBLK0417	12	
			TENTATI	JELY IDENT	IFIED COMPOUNI	DS		VBLKU41/	13	
ii a	Lab Name: H	2M LABS INC	!		Contract	::				
	Lab Code: <u>H</u>	12M	Case No.	: <u>TOS</u>	SAS No.: _		SDG No	.: <u>TOSO</u>	12	
-	Matrix: (soil/	water)	WATER			Lab Sampl	e ID:	VBLK0417	13	
	Sample wt/vol:	5		(g/mL)	ML	Lab File	ID:	<u>3\F60370</u>	<u>.</u> D	
iine	Level: (low/	med) LO	I			Date Rece	ived:			
	% Moisture: no	ot dec.				Date Anal	yzed:	04/17/13	ł	
	GC Column: DB	-624	ID: <u>0.18</u>	(mm)		Dilution	Factor:	1.00		
	Soil Extract V	Volume:		(µl)		Soil Aliq	uot Volume	:	<u>0</u>	(µL)
					CONCENT	CENTRATION UNITS:				
	Number TICs fo	ound:	0		(μg/L 0:	r μg/Kg)	1	UG/L		_
	CAS	S NUMBER		COMPOUND	NAME	RT	EST.CO	NC.	Q	

EPA SAMPLE NO. VBLK041813

4A VOLATILE METHOD BLANK SUMMARY

Lab Name:H2M LABS INCContract:Lab Code:H2MCase No.:TOSSAS No.:SDG No.:TOS012Lab File ID:3\F60394.DLab Sample ID:VBLK041813Date Analyzed:04/18/13Time Analyzed:17:12GC Column:DB-624ID:0.18(mm)Heated Purge:(Y/N)NInstrument ID:HP5973-1HP5973-1Heated Purge:HP5973-1Heated Purge:HP5973-1

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	EPA	LAB	LAB	TIME
	SAMPLE NO.	SAMPLE ID	FILE ID	ANALYZED
01	FB002	1304A27-008A	3\F60396.D	18:09
02	TRIP BLANK	1304A27-009A	3\F60397.D	18:38

COMMENTS:

page <u>1</u> of <u>1</u>

1B

VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK041813

Lab Name: <u>H2M LABS 1</u>	Cont	ract:	
Lab Code: <u>H2M</u>	Case No.: TOS S	AS No.:	SDG No.: TOS012
Matrix: (soil/water)	WATER	Lab Sample ID:	VBLK041813
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	3\F60394.D
Level: (low/med)	LOW	Date Received:	
<pre>% Moisture: not dec.</pre>		Date Analyzed:	04/18/13
GC Column: DB-624	ID: <u>0.18</u> (mm)	Dilution Factor:	1.00
Soil Extract Volume:	(µL)	Soil Aliquot Vol	ume (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl chloride	5	U
74-83-	Bromomethane	5	U
75-00-1	Chloroethane	5	U
107-13-	Acrylonitrile	5	U
75-69-4	Trichlorofluoromethane	5	U
75-35-4	1,1-Dichloroethene	5	U
74-88-	Iodomethane	5	U
108-05-	Vinyl acetate	5	U
67-64-	Acetone	2	J
75-15-	Carbon disulfide	5	U
75-09-3	Methylene chloride	5	U
156-60-	trans-1,2-Dichloroethene	5	U
75-34-	1,1-Dichloroethane	5	U
156-59-	cis-1,2-Dichloroethene	5	U
78-93-	2-Butanone	5	U
74-97-	Bromochloromethane	5	U
67-66-	Chloroform	5	U
71-55-		5	U
56-23-	Carbon tetrachloride	5	U
71-43-	2 Benzene	5	U
107-06-	2 1,2-Dichloroethane	5	U
79-01-	5 Trichloroethene	5	U
78-87-	1,2-Dichloropropane	5	U
74-95-	Dibromomethane	5	U
75-27-	Bromodichloromethane	5	U
10061-01-	5 cis-1,3-Dichloropropene	5	U
108-10-	4-Methyl-2-pentanone	5	ប
108-88-	3 Toluene	5	U
10061-02-	5 trans-1,3-Dichloropropene	5	U
79-00-	5 1,1,2-Trichloroethane	5	U
127-18-	Tetrachloroethene	5	U
591-78-	2-Hexanone	5	U
124-48-	Dibromochloromethane	5	U
106-93-	1,2-Dibromoethane	5	ប

1B VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK041813

Lab Name:	H2M LABS IN	<u>4C</u>	Con	tract:	
Lab Code:	<u>H2M</u>	Case No.:	TOS S	AS No.:	SDG No.: TOS012
Matrix: (so	oil/water)	WATER		Lab Sample ID:	VBLK041813
Sample wt/v	rol: <u>5</u>	(g/mL)	ML	Lab File ID:	3\F60394.D
Level: (1	.ow/med)	LOW		Date Received:	
<pre>% Moisture:</pre>	not dec.			Date Analyzed:	04/18/13
GC Column:	DB-624	ID:	<u>0.18</u> (mm)	Dilution Factor:	1.00
Soil Extrac	t Volume:		(µL)	Soil Aliquot Volu	me (μL)

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q
108-90-7	Chlorobenzene	5	U
110-57-6	trans-1,4-Dichloro-2-butene	5	U
100-41-4	Ethylbenzene	5	U
630-20-6	1,1,1,2-Tetrachloroethane	5	U
1330-20-7	Xylene (total)	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
96-18-4	1,2,3-Trichloropropane	5	U
106-46-7	1,4-Dichlorobenzene	5	U
95-50-1	1,2-Dichlorobenzene	5	U
96-12-8	1,2-Dibromo-3-chloropropane	5	U

معند		lF		EPA SAMPLE NO.
		VOLATILE ORGANICS ANALYSIS DATA TENTATIVELY IDENTIFIED COMPO		VBLK041813
lines:				
-	Lab Name: <u>H2M LABS INC</u>	Contr	act:	
	Lab Code: H2M	Case No.: TOS SAS No.:	SDG N	Io.: <u>TOS012</u>
	Matrix: (soil/water)	WATER	Lab Sample ID:	VBLK041813
	Sample wt/vol: 5	(g/mL) <u>ML</u>	Lab File ID:	<u>3\F60394.D</u>
فانتلا	Level: (low/med) LOW		Date Received:	
	% Moisture: not dec.		Date Analyzed:	04/18/13
	GC Column: DB-624	ID: <u>0.18</u> (mm)	Dilution Factor:	1.00
	Soil Extract Volume:	(µl)	Soil Aliquot Volum	ne: <u>0</u> (μL)
		CONCE	NTRATION UNITS:	
	Number TICs found:	0 (µg/L	or µg/Kg)	UG/L
-	CAS NUMBER	COMPOUND NAME	RT EST.C	CONC. Q

Lab	Name:		LABS INC					
Lab	Code:	H2M	Case	No.	SAS No.:			

SDG No.: TOS012

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Initial Calib. Continuing Calibration Preparation Blank Blank (ug/L) 1 С 2 С 3 С Blank С М Analyte (ug/L) С 9.5 U 9.500 U Ρ Aluminum 9.5 U 27.0 B 9.5 U 1.2 U -1.6 B -1.5 B 1.2 U 1.200 U Ρ Antimony 2.8 U 2.8 U 2.8 U 3.810 B Ρ 2.8 U Arsenic 3.7 U 3.7 U 3.7 U 3.7 U 3.700 U Ρ Barium 0.1 U 0.2 B 0.100 U Beryllium 0.1 U 0.3 B Ρ 2.8 U 4.0 B 2.8 U 2.8 U 2.800 U Ρ Boron 0.2 B 0.1 U 0.3 B 0.100 U Ρ 0.2 B Cadmium 5.3 U -8.7 B 15.4 B 5.3 U 5.300 U Ρ Calcium 0.7 B 0.700 B Ρ Chromium 0.4 U -0.6 B 1.0 B 0.400 U 0.6 B Ρ Cobalt 0.6 B 0.6 B 0.5 B 2.900 B Ρ Copper -2.4 B 1.3 B 1.1 B 1.3 B 1.800 U 10.5 B Ρ 2.3 B 6.8 B 9.2 B Iron 1.0 U 1.000 U ₽ 1.0 U 1.0 U 1.0 U Lead 16.900 U Ρ Magnesium 16.9 U 16.9 U -17.0 B 16.9 U 0.2 B 0.800 B Ρ 0.2 B 0.6 B Manganese 0.2 B 0.3 U Ρ 0.3 U 0.300 U 0.3 B 0.3 U Nickel -200.0 B 49.000 U Ρ -290.0 B Potassium 49.0 U 49.0 U Ρ 2.300 U Selenium 2.3 U 2.3 U 2.3 U 2.3 U P 0.200 U Silver -0.9 B -0.7 B -0.4 B -0.3 B -100.0 B Ρ 67.000 U -100.0 B Sodium 80.0 B 77.9 B 1.900 U Ρ 1.9 U 1.9 U Thallium 1.9 U 1.9 U 0.300 U Ρ 0.3 B 0.5 B Vanadium 0.3 U 0.4 B 0.300 U P 0.4 B 0.7 B Zinc 0.3 U 0.3 U

TOS012/012F S191

U.S. E	PA - CLP
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	Lab Name:	H2M LAE	S INC	Contract:			
	Lab Code:	H2M	Case No.	SAS No.:		SDG No.:	TOS012
•	Preparatio	n Blank	Matrix (soil/wat	er): WATER			
	Preparatio	n Blank	Concentration Ur	nits (ug/L or mg/kg):	UG/L		

	Initial Calib.		Con	tin	uing Calib	rat	tion		Prepa-		
	Blank			Ē	lank (ug/L	)			ration		
Analyte	(ug/L)	С	1	С	2	С	3	С	Blank	С	
Aluminum			9.5	U	9.5		9.5	U			
Antimony			-1.3	В	-1.3	В	-2.2	В			
Arsenic			2.8	U	2.8		2.8	U			
Barium			3.7	U	3.7	U	3.7	U			
Beryllium			0.1	U	0.1	U	0.1	U			
Boron			5.3	В	4.3	В	2.9	В			Ĺ
Cadmium			0.3	В	0.2	В	0.3	В			
Calcium			5.3	U	5.3	U	5.3	U			
Chromium			0.4	U	0.4	U	0.4	U			
Cobalt			0.4	U	0.4	U	0.4	U			
Copper			1.0	В	-0.8	В	0.4	U			
Iron			3.5	В	1.8	U	2.1	В			
Lead			1.0	U	-2.3		1.0	U		_	
Magnesium			16.9	U	16.9	U	16.9	U			
Manganese			0.2	В	0.1		0.1	U			
Nickel			-0.4	В	0.6		0.6	В			
Potassium			-220.0	В	-150.0	В	-68.0	В			L
Selenium			-4.6	В	2.3	U	2.3	U			
Silver			-0.5	В	-0.3		0.4	В			L
Sodium			-92.0	В	67.0		67.0	U			L
Thallium			1.9	U	1.9		1.9	U			L
Vanadium			0.3	В	0.3		0.3	В		_	L
Zinc			0.3	U	0.3	TT	0.3	В			

ILM04.1

FORM III - IN

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U.S.	EPA	-	CLP
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	Lab Name:	H2M LAE	BS INC	Cont	ract:			
	Lab Code:	H2M	Case No.	SAS	No.:	S	SDG No.:	<u>TOS012</u>
•	Preparatio	n Blank	Matrix (soil/wa	ter): WATER				
	Preparatio	n Blank	Concentration U	nits (ug/L or m	a/ka): (	JG/L		

	Initial Calib. Blank		Con		uing Calik lank (ug/I		tion		Prepa- ration		
Analyte	(ug/L)	С	1	С	2	С	3	с	Blank	С	
Aluminum			128.0	В							
Antimony			-1.4	В							
Arsenic			2.8	Ù							
Barium			3.7	U							
Beryllium			0.5	В							
Boron			2.8	U							
Cadmium			0.5	В							
Calcium			126.0	В							
Chromium			0.5	В							
Cobalt			0.4	U							
Copper			1.1	В							
Iron			60.1	В							
Lead			1.0	U							
Magnesium			123.0	В							
Manganese			0.4	В							
Nickel			1.2	В							
Potassium			-140.0	В							
Selenium			2.3	U							
Silver			0.2	U							
Sodium			67.0	U							L
Thallium			1.9	U							
Vanadium			0.8	В	······································						1
Zinc			0.7	В							

FORM III - IN

Lab Name:	H2M LABS	INC	Contract:			
Lab Code:	<u>H2M</u>	Case No.	SAS No.:		SDG No.:	TOS012
Preparatio	n Blank Ma	atrix (soil/water):	WATER			
Preparatio	n Blank Co	oncentration Units (u	g/L or mg/kg):	UG/L		

Initial Calib. Continuing Calibration Preparation Blank Blank (ug/L) 2 C С 3 Blank С Analyte (ug/L) С 1 С М 0.1 U 0.1 U 0.1 U 0.1 U 0.100 U CV Mercury

TOS012/012F S194

Lab Name:	H2M LABS 1	INC		Contra	act:		
Lab Code:	<u>H2M</u>	Case No.		SAS No	D.:	SDG No.:	TOS012
Preparatio	n Blank Ma	trix (soil/wa	ater): WATE	CR			
Preparatio	n Blank Co	ncentration (	Units (ug/L d	or mg/	kg): UG/L		

		Initial Calib. Blank			Cont		uing Ca lank (1			ion			Prepa- ration		
	Analyte	(ug/L)	С	1		С	2		С	3		С	Blank	С	м
M	ercury				0.1	U		0.1	U		0.1	U			CV

TOS012/012F S195

## U.S. EPA - CLP 3 BLANKS

Lab Name:	H2M LABS	<u>S INC</u>	Contract:			
Lab Code:	<u>H2M</u>	Case No.	SAS No.:		SDG No.:	<u>TOS012</u>
Preparatio	n Blank M	Matrix (soil/water):	WATER			
Preparatio	n Blank (	Concentration Units (	ug/L or mg/kg):	UG/L		

•		Initial Calib. Blank		Co		ing Cal ank (ug		ion		Prepa- ration			
	Analyte	(ug/L)	С	1	С	2	С	3	С	Blank	С		м
	Cyanide	10.	0 U	10.	U U	10	.0 U	10.0	U	10.00	U 00	С	A

FORM III - IN

Lab Name:	H2M LAP	<u>BS INC</u>	Contract:			
Lab Code:	<u>H2M</u>	Case No.	SAS No.:		SDG No.:	TOS012
Preparatio	on Blank	Matrix (soil/water):	WATER			
Preparatio	n Blank	Concentration Units (	ug/L or mg/kg):	UG/L		

	Analyte	Initial Calib. Blank (ug/L)	С	Con 1		nuing Calib Blank (ug/L 2		tion 3	с	Prepa- ratior Blank	n	с	M
-	Cyanide	10.	U 0	10.0	U	10.0	U	10.0	U	10.	000	U	CA

-

U.S.	EPA	-	CLP
	3		
E	BLANK	S	

	Lab Name:	H2M LABS IN	<u>c</u>	Contract:		
•	Lab Code:	H2M	Case No.	SAS No.:	SDG No.:	TOS012F
	Preparatio	n Blank Matr	<pre>ix (soil/water):</pre>	WATER		

• Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

	Initial										
	Calib.	Con	tir	nuing Calib	ra	tion		Prepa-		l	
	Blank		H	Blank (ug/L	)			ration			
Analyte	(ug/L) C	1	С	2	С	3	С	Blank	С		
Aluminum	9.5 U	27.0	В	9.5	U	9.5	U	9.500	U	İ	
Antimony	1.2 U	-1.6	В	-1.5	В	1.2	U	1.200	U		
Arsenic	2.8 U	2.8	U	2.8	U	2.8	U	2.800	U		
Barium	3.7 U	3.7	U	3.7	U	3.7	U	3.700	U		
Beryllium	0.1 U	0.1	U	0.2	В	0.3	В	0.100	U	I	
Boron	4.0 B	2.8	U	2.8	U	2.8	U	4.200			
Cadmium	0.2 B	0.2	В	0.1	U	0.3	В	0.100	U		
Calcium	-8.7 B	15.4	В	5.3	U	5.3	U	5.300	U		
Chromium	0.4 U	-0.6	В	1.0	В	0.7	В	1.000	В		
Cobalt	0.6 B	0.6	В	0.5	В	0.6	В	0.400	U	-	
Copper	-2.4 B	1.3	В	1.1	В	1.3	В	2.200		1	
Iron	2.3 B	10.5	В	6.8	В	9.2	В	3.800	В		
Lead	1.0 U	1.0	U	1.0	U	1.0	U	1.000	U		
Magnesium	16.9 U	16.9	U	-17.0	В	16.9	U	16.900			
Manganese	0.2 B	0.2	В	0.2	В	0.6	В	0.200			
Nickel	0.3 B	0.3	U	0.3	U	0.3	U	0.300			
Potassium	49.0 U	49.0	U	-290.0	В	-200.0	В	49.000			
Selenium	2.3 U		U	2.3	U	2.3	U	2.300			
Silver	-0.9 B	-0.7	В	-0.4	В	-0.3	В	0.200			
Sodium	80.0 B	77.9	В	-100.0	В	-100.0	В	67.000		1	
Thallium	1.9 U		U	1.9		1.9	U	1.900			
Vanadium	0.3 U		В	0.3	·	0.5	в	0.300			
Zinc	0.3 U	0.3	U	0.4	В	0.7	В	0.800	В		
			-								

TOS012/012F S198

FORM III - IN

			U	.S. EPA - CLP			
				3 BLANKS			
	Lab Name:	H2M LABS IN	<u>c</u>	Contract:			
	Lab Code:	<u>H2M</u>	Case No.	SAS No.:		SDG No.:	TOS012F
	Preparatio	n Blank Matr	ix (soil/water):	WATER			
-	Preparatio	n Blank Conc	entration Units	(ug/L or mg/kg):	<u>UG/L</u>		

	Initial										
	Calib.		Con	tir	uing Calib	ra	tion		Prepa-		
	Blank			E	Blank (ug/L	)			ration		
Analyte	(ug/L)	С	1	С	2	С	3	С	Blank	С	
Aluminum			9.5	U	9.5		9.5	U			
Antimony			-1.3	В	-1.3		-2.2	В			
Arsenic			2.8	U	2.8	U	2.8	U			
Barium			3.7	U	3.7	U	3.7	U			
Beryllium			0.1	U	0.1	U	0.1	U			
Boron			5.3	В	4.3	В	2.9	В			
Cadmium			0.3	В	0.2		0.3	В			
Calcium			5.3	U	5.3	U	5.3	U			
Chromium			0.4	U	0.4	U	0.4	U			
Cobalt			0.4	U	0.4	U	0.4	U			
Copper			1.0	В	-0.8	В	0.4	U			
Iron			3.5	В	1.8		2.1	В			
Lead			1.0	Ũ	-2.3	В	1.0	U			
Magnesium			16.9	U	16.9	U	16.9	U			
Manganese			0.2	В	0.1	U	0.1	U			
Nickel			-0.4	В	0.6		0.6	В			
Potassium			-220.0	В	-150.0		-68.0	В			
Selenium			-4.6	В	2.3		2.3	U			
Silver			-0.5	В	-0.3	В	0.4	В			
Sodium			-92.0	В	67.0		67.0	U			
Thallium			1.9	U	1.9		1.9	U			
Vanadium			0.3	В	0.3		0.3	B			
Zinc			0.3	U	0.3	U	0.3	В			

	Lab Name:	H2M LABS I	NC	Contract:			
<b>u</b>	Lab Code:	<u>H2M</u>	Case No.	SAS No.:		SDG No.:	TOS012F
	Preparatio	n Blank Mat	rix (soil/water):	WATER			
•	Preparatio	n Blank Con	centration Units (u	g/L or mg/kg):	UG/L		

	Initial Calib. Blank	Calib. Continuing Calibration Blank Blank (ug/L)									
Analyte	(ug/L)	С	1	С	2	С	3	C	Blank	С	
Aluminum			128.0	В							
Antimony			-1.4	В							
Arsenic			2.8	U							
Barium			3.7	U							
Beryllium			0.5	В							
Boron		T	2.8	U							
Cadmium		T	0.5	В							
Calcium			126.0	В							
Chromium			0.5	В							
Cobalt			0.4	U							
Copper			1.1	В							
Iron			60.1	В							
Lead			1.0	U							
Magnesium			123.0	В							
Manganese			0.4	В							
Nickel			1.2	В							
Potassium			-140.0	В							
Selenium			2.3	U							
Silver			0.2	U							
Sodium			67.0	U							
Thallium			1.9	U							
Vanadium			0.8	В							
Zinc		T	0.7	В							ļ Ī

U.S.	EPA	-	CLP
r	3 BLANK	· C	
E	линпо	C.	

Lab Name:	H2M LABS	INC	Contract:			
Lab Code:	<u>H2M</u>	Case No.	SAS No.:		SDG No.:	<u>TOS012F</u>
Preparatio	on Blank Ma	trix (soil/water):	WATER			
Preparatio	on Blank Co	ncentration Units (	ug/L or mg/kg):	UG/L		

land	Analyte	Initial Calib. Blank (ug/L) C		inuing Calibrat: Blank (ug/L) C 2 C	ion 3 C	Prepa- ration Blank C	м
	Mercury	0.1 U	0.1	U 0.1 U	0.1 U	0.100 U	CV

			U.S. EP	A - CLP		
			3 BLAN	IKS		
Lab Name:	H2M LABS INC			Contract:		
Lab Code:	H2M	Case No.		SAS No.:	SDG No.:	TOS012F
Preparatio	on Blank Matri	x (soil/wate	r): WAT	ER		

Preparation Blank Concentration Units (ug/L or mg/kg):  $\underline{UG/L}$ 

	Initial Calib. Blank		(	Cont		ling Ca Lank (u			tion		Prepa- ration			
Analyte	(ug/L)	С	1	(	C	2		С	3	С	Blank	С		М
Mercury			C	.1	J		0.1	U			- VPM AND PRO		(	CV

TOS012/012F S202

U.S.	EPA	-	CLP
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INORGANIC ANALYSIS DATA SHEET

SAS No.:

EPA SAMPLE NO

PBWF

Lab Name: <u>H2M LABS INC</u>

SDG No.: TOS012F

Lab Code: <u>H2M</u> Case No.

Matrix (soil/water): WATER

0.0

Date Received:

Lab Sample ID: MB1-39433

Level (low/med): LOW

% Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L

Aluminum				
	9.5	U		Р
Antimony	1.2	U		Р
Arsenic	2.8	U		Р
Barium	3.7	U		Р
Beryllium	0.10	U		Р
Boron	2.8	U		Р
Cadmium	0.10	U		Ρ
Calcium	5.3	U		Р
Chromium	0.60	В		Р
Cobalt	0.50	В		Р
Copper	1.6	В		Ρ
Iron	1.8	U		Р
Lead	1.0	U		Р
Magnesium	16.9	U		Р
Manganese	0.10	U		Р
Nickel	0.30	U		Р
Potassium	49.0	U		Р
Selenium	2.3	U		Ρ
Silver	0.20	U		Р
Sodium	67.0	U		Р
Thallium	1.9	U		Р
Vanadium	0.30	U		Р
Zinc				Р
	Arsenic Barium Beryllium Boron Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Nickel Potassium Selenium Silver Sodium Thallium Vanadium	Arsenic         2.8           Barium         3.7           Beryllium         0.10           Boron         2.8           Cadmium         0.10           Calcium         5.3           Chromium         0.60           Cobalt         0.50           Copper         1.6           Iron         1.8           Lead         1.0           Magnesium         16.9           Manganese         0.10           Nickel         0.30           Potassium         49.0           Selenium         2.3           Silver         0.20           Sodium         67.0           Thallium         1.9           Vanadium         0.30	Arsenic         2.8         U           Barium         3.7         U           Beryllium         0.10         U           Boron         2.8         U           Cadmium         0.10         U           Calcium         5.3         U           Chromium         0.60         B           Cobalt         0.50         B           Cobalt         0.50         B           Copper         1.6         B           Iron         1.8         U           Lead         1.0         U           Magnesium         16.9         U           Nickel         0.30         U           Potassium         49.0         U           Selenium         2.3         U           Sodium         67.0         U           Thallium         1.9         U	Arsenic       2.8       U         Barium       3.7       U         Beryllium       0.10       U         Boron       2.8       U         Cadmium       0.10       U         Cadmium       0.10       U         Cadmium       0.10       U         Cadmium       0.10       U         Calcium       5.3       U         Chromium       0.60       B         Cobalt       0.50       B         Cobalt       0.50       B         Copper       1.6       B         Iron       1.8       U         Lead       1.0       U         Magnesium       16.9       U         Maganese       0.10       U         Nickel       0.30       U         Potassium       2.3       U         Silver       0.20       U         Sodium       67.0       U         Thallium       1.9       U

Comments:

Date Reported 5/3/2013

1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

PBWF

Lab Name: <u>H2M LABS INC</u>

SDG No.: TOS012F

Lab Sample ID: MB1-39468

Date Received:

Matrix (soil/water): <u>WATER</u> Level (low/med): <u>LOW</u>

% Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	М
7439-97-6	Mercury	0.10	U		CV

Lab Code: H2M Case No. SAS No.:

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Comments	
Connients	

Date Reported 5/3/2013

# H2M LABS INC

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Date: 01-May-13

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# QC SUMMARY REPORT

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SDG: TOS012

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Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC		overy nits	RPDRef Value	%RPD	%RP UCI
MB-041713	MB-041713	Alkalinity, Total (As CaCO3)	< 1	MG/L	T			<u> </u>			Τ	
LCS-041713	LCS-041713	Alkalinity, Total (As CaCO3)	24.5	MG/L	25	< 1	98	80	120			
1304917-005FMS	MW-38MS	Alkalinity, Total (As CaCO3)	90.3	MG/L	50	46.3	88	75	125			
1304917-005FDUP	MW-3BDUP	Alkalinity, Total (As CaCO3)	44.8	MG/L			-			46.3	3.3	20
MB-041813	MB-041813	Alkalinity, Total (As CaCO3)	< 1	MG/L	T			1				
LCS-041813	LCS-C41813	Alkalinity, Total (As CaCO3)	24.6	MG/L	25	< 1	98	80	120			
MB-39303	MB-39303	Biochemical Oxygen Demand	< 2	MG/L								
LCS-39303	LCS-39303	Biochemical Oxygen Demand	186	MG/L	198	< 2	94	85	116			
MB-39281	MB-39281	Biochemical Oxygen Demand	< 2	MG/L								
LCS-39281	LCS-39281	Biochemical Oxygen Demand	201	MG/L	198	< 2	102	85	116			
1304917-005FDUP	MW-3BDUP	Biochemical Oxygen Demand	< 2	MG/L						< 2		20
MB-042313	MB-042313	Bromide	< 0.5	MG/L								
LCS-042313	LCS-C42313	Bromide	2.38	MG/L	2.5	< 0.5	95	90	110			1
1304917-005FMS	MW-3BMS	Bromide	0.99	MG/L	1	< 0.5	99	80	120			
1304917-005FDUP	MW-38DUP	Bromide	< 0.5	MG/L						< 0.5		20
MB-042313	MB-042313	Chemical Oxygen Demand	< 10	MG/L								
LCS-042313	LCS-C42313	Chemical Oxygen Demand	100	MG/L	100	< 10	100	90	110			
1304917-005DMS	MW-38MS	Chemical Oxygen Demand	110	MG/L	100	< 10	110	90	110			
1304917-005DDUP	MW-38DUP	Chemical Oxygen Demand	< 10	MG/L						< 10		20
MB-043013	MB-043013	Chemical Oxygen Demand	< 10	MG/L								
LCS-043013	LCS-043013	Chemical Oxygen Demand	103	MG/L	100	< 10	103	90	110			

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SDG: TOS012

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Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Reco	nits	RPDRef Value	%RPD	%RPI UCL
MB-042313	MB-042313	Chloride	< 2	MG/L	T	Γ						
LCS-042313	LCS-042313	Chloride	9.43	MG/L	10	< 2	94	90	110			
1304917-005FMS	MW-3BMS	Chioride	23.2	MG/L	10	13.5	97	80	120			
1304917-005FDUP	MW-3BDUP	Chloride	< 2	MG/L	-					13.5	0.35	20
	· · · · · · · · · · · · · · · · · · ·											
MB-041813	MB-041813	Chromium, Hexavalent	< 0.02	MG/L	1	1	[		[			
LCS-041813	LCS-041813	Chromium, Hexavalent	0.20	MG/L	0.2	< 0.02	100	80	120			
MB-041713	MB-041713	Chromium, Hexavalent	< 0.02	MG/L	1	[	[					
LCS-041713	LCS-041713	Chromium, Hexavalent	0.20	MG/L	0.2	< 0.02	100	80	120			
1304917-005FMS	1304917-005FMS	Chromium, Hexavalent	0.79	MG/L	1	< 0.1	79	75	125			
1304917-005FDUP	1304917-005FDUP	Chromium, Hexavalent	< 0.1	MG/L						< 0.1		20
MB-041713	MB-041713	Color	< 5	Units				1				
LCS-041713	LCS-041713	Color	40	Units	40	< 5	100	80	120			
1304917-005FDUP	MW-3BDUP	Color	125	Units						125		20
MB-041813	MB-041813	Color	< 5	Units								
LCS-041813	LCS-041813	Color	40	Units	40	< 5	100	80	120			
	ey i talana antikaanin aarikiisana ee arikasa araas	<u>uud</u>										
MB-041913	MB-041913	Hardness (As CaCO3)	< 5	MG/L	1				1			1
LCS-041913	LCS-041913	Hardness (As CaCO3)	1020	MG/L	1000	< 5	102	80	120			
1304917-005CMS	MW-3BMS	Hardness (As CaCO3)	480	MG/L	400	84	99	75	125			
1304917-005CDUP	MW-3BDUP	Hardness (As CaCO3)	80	MG/L						84	4.9	20
L												
MB-041713	MB-041713	Nitrate as N	< 0.1	MG/L	1	T	1	1	T	1		1

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SDG: TOS012

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Comple ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Reco Lin	very nits	RPDRef Value	%RPD	%RP UCI
Sample ID:	Chent Sample ID:	Analyte										
MB-041813	MB-041813	Nitrate as N	< 0.1	MG/L								L
LCS-041813	LCS-041813	Nitrate as N	1.13	MG/L	1.13	< 0.1	100	90	110			1
MB-041713	MB-041713	Nitrate as N	< 0.1	MG/L				1			T	1
LCS-041713	LCS-041713	Nitrate as N	1.16	MG/L	1.13	< 0.1	103	90	110		1	
1304917-005DMS	MW-3BMS	Nitrate as N	0.52	MG/L	0.5	< 0.1	104	90	110			
1304917-005DDUP	MW-3BDUP	Nitrate as N	< 0.1	MG/L						< 0.1		20
		· · · · · · · · · · · · · · · · · · ·	/	·								1.00.00
MB-041813	MB-041813	Nitrite as N	< 0.1	MG/L		[		[				
LCS-041813	LCS-041813	Nitrite as N	1.03	MG/L	1	< 0.1	103	90	110			
MB-041713	MB-041713	Nitrite as N	< 0.1	MG/L	Τ		1					
LCS-041713	LCS-041713	Nitrite as N	1.03	MG/L	1	< 0.1	103	90	110			
1304917-005FMS	MW-3BMS	Nitrite as N	0.45	MG/L	0.5	< 0.1	90	90	110			
1304917-005FDUP	MW-3BDUP	Nitrite as N	< 0.1	MG/L						< 0.1		20
MB-042213	MB-042213	Nitrogen, Ammonia (As N)	< 0.1	MG/L		1		1				T
LCS-042213	LCS-042213	Nitrogen, Ammonia (As N)	1.03	MG/L	1	< 0.1	103	90	110			
1304917-005DMS	MW-3BMS	Nitrogen, Ammonia (As N)	5.39	MG/L	2.5	2.82	103	75	125			
1304917-005DDUP	MW-3BDUP	Nitrogen, Ammonia (As N)	2.90	MG/L						2.82	2.5	20
MB1-042513	MB1-042513	Nitrogen, Ammonia (As N)	< 0.1	MG/L				1				
LCS1-042513	LCS1-042513	Nitrogen, Ammonia (As N)	1.03	MG/L	1	< 0.1	103	90	110			
								- <b>-</b>				
MB-042313	MB-042313	Nitrogen, Ammonia (As N)	< 0.1	MG/L	Τ		Ι	Τ				
LCS-042313	LCS-042313	Nitrogen, Ammonia (As N)	1.02	MG/L	1	< 0.1	102	90	110			
L												
MB-39401	MB-39401	Nitrogen, Kjeldahl, Total	< 0.1	MG/L	T		1			[	1	1
LCS-39401	LCS-39401	Nitrogen, Kjeldahl, Total	4.06	MG/L	4	< 0.1	102	90	110			

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Sample ID:	Client Sample ID:	Analyte	Result	Units		Sample Result	%REC		overy nits	RPDRef Value	%RPD	%RP UC
MB-39354	MB-39354	Nitrogen, Kjeldahl, Total	< 0.1	MG/L								
LCS-39354	LCS-39354	Nitrogen, Kjeldahl, Total	3.71	MG/L	4	< 0.1	93	90	110			
1304917-005DMS	1304917-005DMS	Nitrogen, Kjeldahl, Total	7.57	MG/L	4	2.90	117	75	125			
1304917-005DDUP	1304917-005DDUP	Nitrogen, Kjeldahl, Total	2.84	MG/L						2.90	1.9	20
MB-39356	MB-39356	Phenolics, Total Recoverable	< 5	UG/L	1			1				
LCS-39356	LCS-39356	Phenolics, Total Recoverable	26.8	UG/L	30	< 5	89	80	120			
MB-39333	MB-39333	Phenolics, Total Recoverable	< 5	UG/L	1			1	1		т –	T
LCS-39333	LCS-39333	Phenolics, Total Recoverable	30.3	UG/L	30	< 5	101	80	120		-	
1304917-005DMS	MW-3BMS	Phenolics, Total Recoverable	17.5	UG/L	20	< 5	88	75	125			
1304917-005DDUP	MW-3BDUP	Phenolics, Total Recoverable	< 5	UG/L						< 5		20
MB-042313	MB-042313	Sulfate	< 5	MG/L		T	I	1	1	[	1	
LCS-042313	LCS-042313	Sulfate	9.84	MG/L	10	< 5	98	90	110			+
1304917-005FMS	MW-3BMS	Sulfate	20.9	MG/L	10	11.2	97	80	120		+	
1304917-005FDUP	MW-3BDUP	Sulfate	11.2	MG/L	- 10	11.2	31		120	11.2	0.33	20
1304917-0056006		Suilale	11.2					I		11.2	0.00	20
MB-041813	MB-041813	Total Dissolved Solids	< 10	MG/L								
LCS-041813	LCS-041813	Total Dissolved Solids	281	MG/L	300	< 10	94	80	120			
1304917-005FMS	MW-3BMS	Total Dissolved Solids	385	MG/L	300	75	103	75	125			
1304917-005FDUP	MW-3BDUP	Total Dissolved Solids	80	MG/L						75	6.5	20
MB-041713	MB-041713	Total Organic Carbon	< 1	MG/L		1	[	1			1	
LCS-041713	LCS-041713	Total Organic Carbon	26.5	MG/L	25	< 1	106	80	120			
MD 040542	MD 040512	Total Organia Contran	< 1	MG/L		T	I		T		1	1
MB-042513 LCS-042513	MB-042513 LCS-042513	Total Organic Carbon Total Organic Carbon	27.6	MG/L	25	< 1	110	80	120		+	
1304917-005BMS	MW-3BMS	Total Organic Carbon	24.9	MG/L	10	14.2	108	75			+	+
1304917-005BMS	MW-3BDUP	Total Organic Carbon	14.3	MG/L		14.2	100	13	125	14.2	0.99	20
1304917-003000	IVIVY-JBDOP	rotal Organic Califon	14.3	I MO/L	1	1	L.:	L	1	14.2	0.55	120

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575 Broad Hollow Road Melville, NY 11747

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tei 631.694.3040 fax 631.420.8436

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## **10. INTERNAL STANDARD AREA DATA** 10.1 VOLATILES

# TOS012/012F S209

#### 8 INTERNAL STANDARD AREA AND RT SUMMARY

#### H2M LABS INC ib Name:

#### SDG No .: TOS012

Lab Code: <u>H2M</u>

b File ID (Standard)		<u>3\F60369.D</u> Date Analyzed:				4/17/2013				
strument ID:	<u>73-1</u>		Time Analyzed:				<u>18:09</u>			
Column: DB-	<u>624</u> IC	D: <u>0.18</u>	(mm)		Heated Purge: (Y/N)					
<b></b>		IS1		IS2		IS3 (CBZ)		IS4 14DCB		
		AREA #	RT #	AREA #	RT#	AREA #	RT #	AREA #	RT #	
12 HOUR STD		274830	3.830	443724	4.360	250899	6.490	206568	7.960	
UPPER LIMIT		549660	4.330	887448	4.860	501798	6.990	413136	8.460	
LOWER LIMIT		137415	3.330	221862	3.860	125450	5.990	103284	7.460	
SAMPLE										
NO.				,						
1 VBLK041713		269881	3.83	439296	4.36	241696	6.49	186845	7.97	
2 LFB041713		271880	3.84	439490	4.36	249125	6.49	208460	7.97	
3MSB041713		270707	3.84	437651	4.37	243471	6.49	186176	7.97	
DUP001		267297	3.83	429209	4.36	242795	6.49	186753	7.97	
5 MW-3A		263393	3.83	426733	4.36	239869	6.49	182402	7.96	
6 MW-38		261185	3.83	422843	4.36	237858	6.49	183512	7.96	
7 MW-3BMS	MW-3BMS		3.83	425276	4.36	243402	6.49	184580	7.96	
8 MW-3BMSD	MW-3BMSD		3.83	421458	4.36	238131	6.49	181207	7.96	
MW-3C		251998	3.83	413132	4.37	231663	6.49	176308	7.96	
MW-4A		250238	3.83	415196	4.36	234795	6.49	178729	7.96	
1 MW-4B		250190	3.83	407856	4.36	231448	6.49	175827	7.96	
2 MW-4C		247582	3.84	408074	4.37	230822	6.49	175318	7.97	
3 FB001		246649	3.83	407055	4.36	227976	6.49	172106	7.96	
4 TRIP BLANK 001		242839	3.84	399690	4.36	229796	6.49	174018	7.96	
5 STORAGE BLANK		245119	3.84	402351	4.36	229462	6.49	173865	7.96	
6 MW-1A		243144	3.83	403197	4.36	225269	6.49	173382	7.96	
7 MW-18		237783	3.83	396367	4.36	226622	6.49	173607	7.96	
8MW-1C		235890	3.84	387961	4.36	226098	6.49	172097	7.96	
9 MW-11A		234727	3.83	385912	4.36	222920	6.49	170753	7.96	
0 MW-11B		230621	3.83	385879	4.36	221495	6.49	169560	7.96	
1 MW-12A		232087	3.83	383753	4.36	223080	6.49	170728	7.96	
22 MW-12B		231826	3.83	381271	4.36	219893	6.49	166715	7.96	

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

AREA UPPER LIMIT = +100% of internal standard area AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk.

\* Values outside of QC limits.

04/24/13 18:23

FORM VIII

IS3 (CBZ) = Chlorobenzene-d5 IS4 14DCB = 1,4-Dichlorobenzene-d4

# TOS012/012F S210

SW8260B

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#### INTERNAL STANDARD AREA AND RT SUMMARY

. b	Name:	H2M LAB	<u>s inc</u>				SDĠ No.:	TOS012		
Lab	Code:	<u>H2M</u>								
in b	b File ID (Standard):			<u>3\F60</u>	<u>393.D</u>	Date Analyzed:		4/18/2013		
st	strument ID: <u>HP5973-1</u>				r	ime Analyzed:	<u>16:43</u>			
GC	GC Column: <u>DB-624</u> ID: <u>0.18</u>			(mm)	n) Heated Purge: (Y/N) <u>N</u>					
			IS1 AREA #	DT #	IS2 AREA #	RT #	IS3 (CBZ) AREA #	RT #	IS4 14DCB AREA #	RT #
	12 HOUR ST	D	238799	RT # 3.830	395799	4.360	233549	6.490	194692	7.970
	UPPER LIM		477598	4.330	791598	4.860	467098	6.990	389384	8.470
-	LOWER LIMIT SAMPLE NO.		119400	3.330	197900	3.860	116775	5.990	97346	7.470
6.1	VBLK041813		232912	3.83	386368	4.36	223609	6.49	169277	7.96
02	FB002		232037	3.83	388373	4.36	223100	6.49	168442	7.96
03	03 TRIP BLANK 233730		233730	3.84	385326	4.36	221026	6.49	170022	7.97

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

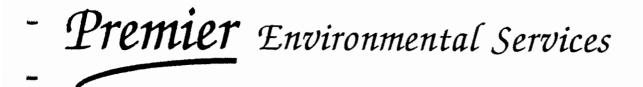
IS4 14DCB = 1,4-Dichlorobenzene-d4

- AREA UPPER LIMIT = +100% of internal standard area AREA LOWER LIMIT = -50% of internal standard area RT UPPER LIMIT = +0.50 minutes of internal standard RT RT LOWER LIMIT = -0.50 minutes of internal standard RT
- # Column used to flag values outside QC limits with an asterisk.
   \* Values outside of QC limits.

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FORM VIII

TOS012/012F S211



DATA VALIDATION REPORT OF THE TOWN OF SOUTHAMPTON NORTH SEA LANDFILL

## ORGANIC AND INORGANIC ANALYSES OF AQUEOUS SAMPLES

H2M LABORATORIES MELVILLE, NEW YORK

> SDG NUMBER: TOS012/TOS012F

> > June, 2013

Prepared for P.W. Grosser Consulting Bohemia, New York

Prepared by Premier Environmental Services 2815 Covered Bridge Road Merrick, New York 11566 (516)223-9761

2815 COVERED BRIDGE ROAD, MERRICK, NEW YORK 11566 (516) 223-9761 • FAX (516) 223-0983

#### NYS DEC Data Usability Summary Report

DATA VALIDATION FOR:Volatile Organic AnalysesSITE:North Sea LandfillCONTRACT LAB:H2M Laboratories<br/>Melville, New YorkREPORT NO.:TOS012/012FREVIEWER:Renee CohenDATE REVIEW COMPLETED:June, 2013MATRIX:Aqueous

The data validation was performed according to the guidelines in the described in the New York State Department of Environmental Conservation, Division of Environmental Remediation, Guidance for the Development of Data Usability Summary Reports (DUSR). In addition the data was been reviewed using the protocol specified in the NYS Analytical Services Protocol ('05).

All data are considered valid and acceptable except those analytes which have been rejected "R" (unusable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material, "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

This data reports includes sixteen (16) aqueous samples, two (2) Field Blank samples and two (2) Trip Blank samples. The samples associated with this data set were collected April 15, 2013 and April 16, 2013. The samples were received at H2M Laboratories located in Melville, New York on April 16, 2013 and April 17, 2013. The cooler temperatures were within QC limits upon receipt. The samples were analyzed for Volatile Organic Analytes (EPA Method 8260B), Total and Dissolved Metals and Miscellaneous Wet Chemistry analytes as specified on the Chain of Custody (COC) documentation that accompanied the samples to the laboratory.

A cross-reference between Field Sample ID and Laboratory Sample ID is located in Table 1 of this report. Copies of the definitions that may be used to qualify data results are located in Appendix A of this report. Copies of qualified data result pages are located in Appendix B of this report and a copy of Chain of Custody (COC) documentation associated with sampling event is located in Appendix C.

This review is for the subset of samples that were marked on the Chain of Custody for Volatile Organic Analytes. These samples were also analyzed for Total and Dissolved Metals as well as miscellaneous wet chemistry analytes. The review of these inorganic analytes is located in the Inorganic Data review section of this report.

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## ORGANIC DATA ASSESSMENT

#### 1. OVERVIEW:

The client requested that five (5) percent (%) of the samples in this data set be reviewed. One (1) discreet sample point was chosen for Volatile Organic Data review. A full review of the holding times and instrument calibration was performed on this data set.

The samples were analyzed using EPA Test Methods for the Evaluation of Solid Waste (SW 846), Method 8260B. The Volatile Organic analytes were reported by the laboratory. Proper custody transfer of the samples was documented in the laboratory reports. Cooler temperatures were within QC limits. Sample preservation was checked prior to analysis. All samples in this data set were properly preserved.

The following aqueous sample was chosen for review in the VOA fraction: MW-1B (1304A27-002).

#### 2. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Preserved volatile organic analyses are required to be analyzed within 10 days of validated time of sample receipt (VTSR) in accordance with the NYSDEC ASP, Rev '95. The technical holding time for properly preserved aqueous samples is 14 days from collection.

Sample MW-1B was collected on April 16, 2013. The sample analysis was completed by April 17, 2013. All QC sample analyses associated with this sample were completed within ten (10) days of VTSR.

#### 3. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate the overall laboratory performance and the efficiency of the analytical technique. If the measured surrogate concentrations are outside the QC limits, qualifiers were applied to the effected samples.

Each of the samples in this data set was spiked with the three (3) surrogate compounds 1,2-Dichloroethane-d4, Toluene-d8 and 4-Bromofluorobenzene. In house-surrogate recovery limits were utilized by the laboratory. The percent recovery of each surrogate met QC criteria in all samples associated with this data set.

4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data. The laboratory used the in-house generated recovery criteria and RPD (precision) data for reporting purposes.

Site specific matrix spike/matrix spike duplicate analysis was performed on sample MW-3B. The Form 3 summary was not included in the laboratory report, however, the raw data was provided for review. A review of this raw data indicated that the percent recovery of the fortified analytes met QC criteria.

### ORGANIC DATA ASSESSMENT

#### 5. BLANK SPIKE ANALYSIS:

The NY ASP protocol requires that a blank spike analysis be performed with each sample batch. The blank spike analysis is used to insure that the analytical system is in control. The laboratory applied in-house recovery limits for each analyte.

The laboratory performed one (1) matrix spike blank sample (Laboratory Fortified Blank/LFB) is associated with this data set. The LFB was fortified with the complete list of target analytes in LFB041713. In-house spike recovery limits were reported for each of target analyte. All spike recoveries met QC criteria in this LFB sample analysis.

#### 6. BLANK CONTAMINATION:

Quality assurance (QA) blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Samples are then qualified based on blank contamination when detected.

#### A) Method Blank contamination

Two (2) aqueous method blank samples are associated with these sample analyses. This method blank samples were free from contamination of all target and non-target (TIC) analytes with the exception of Acetone (1 J ug/l-VBLK041713) and Acetone (2 J ug/l-VBLK0418). Acetone was not detected in the sample chosen for review, therefore no action was taken.

#### **B)** Field Blank contamination

Two (2) Field Blank samples are associated with this data set. Sample FB-001 was free from contamination of target analytes. FB-002 detected Acetone at a concentration of 1 BJ ug/l.

#### C) Trip Blank contamination

Two (2) Trip Blank samples are associated with this data set. Sample TB-001 was free from contamination of target analytes. TB-002 detected Acetone at a concentration of 2 BJ ug/l.

#### C) Storage Blank contamination

The Storage Blank sample contained Acetone at a concentration of 1 BJ ug/l.

#### **ORGANIC DATA ASSESSMENT**

#### 7. GC/MS CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance.

#### A) RESPONSE FACTOR

The response factor measures the instrument's response to specific chemical compounds. Region II data review requires that the response factor of all analytes be greater than or equal to 0.05 in both initial and continuing calibration analyses. A value less than 0.05 indicates a serious detection and quantitation problem (poor sensitivity). Region II data validation criteria states that if the minimum RRF criteria are not met in an initial calibration the positive results are qualified "J". Non-detect results in the initial calibration with a RRF <0.05 are qualified "R", unusable. If RRF criteria is not met in the continuing calibration curve analysis, affected positive analytes will be qualified "J" estimated. Those analytes not detected are not qualified. The SW-846 Methods cite specific analytes known as System Performance Check Compounds (SPCC). Minimum response criteria are set for these analytes. If the minimum criteria are not met, analyses must stop and the source of problems must be found and corrected. Data associated with this set has been reviewed for the criteria in the cited in the EPA Method and the Region II criteria.

One (1) initial calibration curve analysis is associated with the aqueous samples in this data set. The laboratory performed one aqueous initial multilevel calibration on March 18, 2013(Inst. HP5973-1). The RRF of all target compounds met QC criteria in this initial calibration curve analysis.

One (1) continuing calibration standards are associated with the sample chosen for review in this data set. The CCV standard was analyzed April 17, 2013 (3\F60368.D). The RRF of all target compounds met QC criteria in this continuing calibration standard analysis.

#### B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the compounds in the continuing calibration standard to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Region II data validation criteria states that the percent RSD of the initial calibration curve must be less than or equal to 20% (30% CCC compounds). The %D must be <20% in the continuing calibration standard. This criteria has been applied to all target analytes. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects may be flagged "UJ", based on professional judgment. If %RSD and %D grossly exceed QC criteria (>90%), non-detects data may be qualified "R", unusable. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines and the USEPA Region II criteria.

One (1) aqueous initial calibration standard analysis is associated with this data set. The laboratory analyzed an aqueous initial calibration curve on March 18, 2013 (Inst. HP5973-1). The laboratory reported the Relative Standard Deviation (%RSD) of each target compound on a summary form that was included in the report. All target analyte %RSD criteria were met in the initial calibration curve analysis with the exception of Acetone (26.7%), Dibromochloromethane (21.3%) and Bromoform (30.3%). These target analytes have been qualified "UJ/J" estimated in the sample chosen for data review.

Qualified data result pages are located in Appendix B of this report.

#### ORGANIC DATA ASSESSMENT

#### 7. GC/MS CALIBRATION:

# B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D) (cont'd):

One (1) continuing calibration standard analysis is associated with the aqueous samples in this data set. This CCV standard was analyzed April 17, 2013. The % Difference of all target compounds met QC criteria in the continuing calibration standard with the exception of the following:

Date/File ID	Analytes	%Difference
4/17/2013 (3\F60389.D)	Chloromethane	25.6
	Acetone	24.5
	Carbon Tetrachloride	21.1
	cis 1,3-Dichloropropene	21.8
	trans 1,3-Dichloropropene	28.5
	Dibromochloromethane	24.6
	Bromoform	31.4

The associated target analytes in the sample chosen for data review (MW-1B) have been qualified "UJ/J" estimated.

Qualified data result pages are located in Appendix B of this report.

#### 8. GC/MS INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. The method recommends that the internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than ±30 seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non-detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. The internal standard area count evaluation criteria are applied to all field and QC samples.

The samples in this data set were spiked with the internal standards Pentafluorobenzene, 1,4-Difluorobenzene, Chlorobenzene-d5 and 1,4-Dichlorobenzene-d4 prior to analysis. The area counts and retention time of each internal standard met QC criteria in the field samples and QC samples associated with this data set.

#### 9. GC/MS MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

The tune criteria listed in the data report met or exceeded that required by the method. All tuning criteria associated with these sample analyses were met.

#### **ORGANIC DATA ASSESSMENT**

#### **10. FIELD DUPLICATE ANALYSIS:**

Field duplicate samples are taken and analyzed as an indication of overall precision. These measure both field and lab precision, therefore, the results may have more variability than lab duplicate samples. Soil samples are also expected to have a greater variance due to the difficulties associated with collecting exact duplicate soil samples. Data was not qualified based on the results of the field duplicate sample data.

Field duplicate samples were not part of the samples designated for volatile organic analyses.

#### **11. COMPOUND IDENTIFICATION:**

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within  $\pm$  0.06 RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound.

One (1) aqueous sample was chosen for data review and DUSR preparation. Sample MW-1Bwas analyzed for Volatile Organic analytes using EPA Method 8260B. Tentatively Identified Compounds (TIC's) were analyzed for and reported when detected in the samples in this data set. The samples were analyzed in accordance with the cited method.

Sample MW-1B was analyzed without dilution. The laboratory provided the quantitation report, chromatogram and analyte spectra in the New York Sate DEC ASP Category B deliverable that was reported for this data set.

#### 12. OVERALL ASSESSMENT:

The aqueous samples associated with this data set were collected April 15, 2013 and April 16, 2012. The COC documents that accompanied the samples to the laboratory and indicated which samples were to be analyzed Volatile Organic compounds. The data reported agrees with the raw data provided in the final report. The laboratory provided a complete ASP Category B data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package.

One (1) sample was reviewed to meet the Quality Assurance Plan requirements. The Volatile Organic analytes/sample results associated with sample MW-1B are reported to the laboratory reporting limit or LOQ. These Volatile Organic data results are acceptable for use with the noted data qualifiers. Data qualification is described in the above report.

The qualified data result pages associated with sample, MW-11A, is located in Appendix B of this report.

#### NYS DEC Data Usability Summary Report

DATA VALIDATION FOR:	Target Analyte List of Metals (TAL), Boron Filtered Metals (TAL), Filtered Boron
SITE:	North Sea Landfill
CONTRACT LAB:	H2M Laboratories Melville, New York
SDG NO.:	TSO012/TSO012F
REVIEWER:	Renee Cohen
DATE REVIEW COMPLETED:	June, 2013
MATRIX:	Aqueous

The Chain of Custody (COC) documentation associated with this data set listed eighteen (18) aqueous samples and two (2) Field Bank samples. Sample in this data set were analyzed for the Total TAL metals list, Filtered metals and Boron or a subset of metals in accordance with the COC documents that accompanied the samples to the laboratory.

The samples in this data set were collected April 15, 2013 and April 16, 2013 and delivered to H2M Laboratories located in Melville, New York. The samples were received at the laboratory on April 16, 2013 and April 17, 2013.

The data evaluation was performed according to the guidelines noted in the "National Functional Guidelines for Inorganic Data Review", February 1994, SOP HW-2, Evaluation of Metals Data for the Contract Laboratory Program based on ILM05.3 (9/05) and the NYSDEC ASP. A Data Usability Summary Report (DUSR) has been prepared in accordance with the guidelines of the Division of Environmental Remediation.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

Table 1 of this report contains a cross reference between the Field Sample ID's and the Laboratory Sample ID's. Appendix A of this Data Usability Summary Report (DUSR) contains a summary of the data qualifiers that may be used in the report. Appendix B contains the qualified data result pages. Appendix C contains the Chain of Custody (COC) documents associated with this data set.

The samples in this data set were also analyzed for Volatile Organic Analytes and Miscellaneous Wet Chemistry analytes. The data review associated with these analyses are located in stand-alone Data Usability Reports (DUSR). This data review is associated with the Metals (Total and Filtered) Analyses.

#### 1. OVERVIEW

This data report includes the analysis of 5% of the aqueous samples that were collected on April 15, 2013 and April 16, 2013. The samples were received at the laboratory on April 16, 2013 and April 17, 2013 and analyzed for the parameters indicated on the COC documents that accompanied the samples to the laboratory. Table 1 of this report is a cross reference between the Field Sample ID and Laboratory Sample ID.

One (1) sample was chosen for review for each of the Total and Filtered Metals. Sample MW-11A (1304A27-004)/1304A28-001 was reviewed for Total Metals and Filtered Metals.

#### 2. HOLDING TIME

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Metals with the exception of Mercury, is required to be digested and analyzed within 180 days of Verified Time of Sample Receipt (VTSR). Mercury samples are to be digested and analyzed within 26 days of VTSR.

Total and Filtered Metal Analyses - The aqueous samples in this data set were prepared in one (1) batch on April 26, 2013 for both Total and Filtered ICP Metals. These sample digestates were analyzed in one (1) analytical sequence on May 1, 2013. All Total and Filtered ICP digestions and analyses were performed within the method holding time.

Total and Filtered Mercury Analyses - The samples in this data set were prepared and analyzed for Total Mercury and Filtered Mercury on April 30, 2013. The Mercury preparations and analyses were performed within the method holding time.

#### 3. CALIBRATION ANALYSIS

Inductively Coupled Plasma (ICP) was utilized for these analyses. The ICP was calibrated using the calibration standards required by the manufacturer. An initial calibration verification (ICV) standard is then analyzed to verify instrument calibration. One (1) continuing calibration standard was analyzed after each ten (10) field samples.

Total and Filtered Metal Analyses – One (1) analytical sequence is associated with the samples in this data set. The samples were analyzed May 1, 2013. The laboratory reported provided raw data for each of the analytical sequences to review. All ICV and CCV standards associated with this analytical sequence met QC criteria.

Total and Filtered Mercury Analyses - Analysis for Cold Vapor Mercury is calibrated using multi point standards and calculating the correlation coefficient of the curve. One (1) of the calibrations standards must be analyzed at the CRDL. The Total and Filtered Mercury sample digestates associated with this data set were analyzed in one (1) sequence on April 30, 2013. All initial calibration analyses met QC criteria. Continuing calibration standard analysis was performed using a mid point standard and calculating the concentration of the standard in terms of recovery from the initial calibration curve. All continuing calibration analyses associated with this data set met QC criteria.

#### 4. ICP CRDL STANDARD

The CRDL standard is used for the verification of instrument linearity near the CRDL. The CRDL standard control limits are 70%-130% recovery. If the CRDL standard falls outside of the control limits, associated data less than or equal to the 10X the CRDL are qualified estimated (J or UJ) or rejected (R) depending on the recovery of the CRDL standard and the concentration of the analyte in the sample. When the CRDL standard exceeds the control limit, indicating a high bias samples are qualified estimated (J or UJ).

The laboratory analyzed one (1) CRDL standard with each of the Total and Filtered ICP analytical sequence associated with this data set. This validator applied limits of 70-130% to review each target analyte. The recovery of all target analytes met QC criteria in the CRI sample analysis.

All CRDL standard QC criteria were met in the Total and Filtered Mercury analysis associated with this data set.

#### 5. ICP INTERFERENCE CHECK STANDARD

The Interference Check Standard (ICS) is used to verify the laboratory interelement and background correction factors of the ICP. Two solutions comprise the ICS A and ICS AB. Solution A consists of the interferent metals while solution AB is the group of target analytes and the interferent metals. An ICS analysis consists of analyzing both solutions consecutively for all wavelengths used for each analyte reported by ICP. The ICP ICS standards are to be analyzed at the beginning and end of each analytical run. The results are to fall within control limits of +/-20% of the true value.

The laboratory analyzed one (1) ICSA and one (1) ICSAB standard at the beginning and end of the ICP analytical sequence reported with this data set. These QC samples are used to verify the laboratories interelement and background correction factors of the ICP. The recovery of all ICSA/AB standards met QC criteria in the analytical sequence associated with this data set on May 1, 2013.

#### 6. MATRIX SPIKE (MS) ANALYSIS

The spike sample analysis provides information about the effect of the sample matrix upon the digestion and measurement methodology. The spike control limits are 75%-125% when the sample concentration is less than four (4) times the spike added. If the matrix spike recoveries fall in the range of 30%-74%, the sample results are may be biased low and are qualified as estimated (J or UJ). If the matrix spike recoveries fall in the range of 126%-200%, sample results may be biased high. Positive results are qualified estimated (J). If the spike recovery is greater than 125% and the reported sample result is less than the IDL the data point is acceptable for use. If the matrix spike recovery is greater than 200%, the associated sample data are unusable and are rejected (R). If matrix spike results are less than 30%, the associated non-detect results are qualified unusable and rejected (R), and the results reported above the IDL are qualified estimated (J).

Total Metal Analyses - Site specific matrix spike (MS) analysis was performed on Total Metal sample MW-3B (1304917-005) for ICP Metals. The percent recovery of all target analytes met QC criteria in this matrix spike analysis with the exception of Boron (<30%) and Selenium (60.2%). Selenium has been qualified "UJ/J" estimated in the sample chosen for review. Boron was qualified "R" unusable in the sample chosen for review.

Filtered Metal Analyses - Site specific matrix spike (MS) analysis was performed on sample MW-11A (1304A28-001). This sample was utilized for both the ICP and Mercury matrix spike analysis. The percent recovery of all target analytes met QC criteria with the exception of Boron (<30%). Boron has been qualified "R" unusable in the sample chosen for review.

Qualified data result pages are located in Appendix B of this report.

#### 7. POST DIGESTION SPIKE ANALYSIS

The post digestion spike sample analysis provides additional information about the effect of the sample matrix upon the digestion and measurement methodology. The post digestion spike is performed for each analyte that the predigestion spike recovery falls outside the 75-125% control limit.

Total/Filtered Metal Analyses - Post digestion spike analysis was performed with each of these Total Metal and Filtered Metal analyses. Post digestion spike analysis when reported met QC criteria in the Total and Filtered Metal analyses.

#### 8. DUPLICATE SAMPLE ANALYSIS

The laboratory duplicate sample analysis is used to evaluate the laboratory precision of the method for each analyte. If the duplicate sample analysis results for a particular analyte fall outside the control windows of 20% RPD or +/- CRDL, whichever is appropriate depending upon the concentration of the sample, the associated sample results are qualified "J" estimated.

Total Metals Analyses - Site specific duplicate analysis was reported on sample MW-3B. The RPD of all target analytes met QC criteria when the result is above the contract required detection limit.

Filtered Metals - Site specific duplicate analysis was reported on sample MW-11A. The RPD of all target analytes met QC criteria when the result is above the contract required detection limit.

#### 9. ICP SERIAL DILUTION

The serial dilution analysis indicates whether significant physical or chemical interference's exist due to the sample matrix. If the concentration of any analyte in the original sample is greater than 50 times the instrument detection limit (IDL), an analysis of a 5-fold dilution samples must yield results which have a percent difference (%D) of less than or equal to 10 with the original sample results. If the %D of the serial dilution exceeds the 10% (and is not greater than 100%) for a particular analyte, all the associated sample results are qualified estimated (J).

Total Metal Analysis - Serial dilution analysis was performed on sample MW-3B. All %Differences met QC criteria with the exception of Potassium (24.2%) in the serial dilution analysis. Potassium has been qualified J"J estimated in the sample chosen for data review.

Filtered Metal Analysis - Serial dilution analysis was performed on sample MW-11A. The %Difference of all target analytes with the exception of Potassium (23.4%) met QC criteria in the serial dilution analysis. Potassium has been qualified "J" estimated in the sample chosen for review.

Qualified data result pages are located in Appendix B of this report.

#### 10. BLANKS

Blank analyses are assessed to determine the existence and magnitude of contamination problems. The criteria for the evaluation of blanks applies to all blanks, including but not limited to reagent blanks, method blanks and field blanks. The responsibility for action in the case of an unsuitable blank result depends upon the circumstances and the origin of the blank itself. If the problem with any blank exists, then all associated data must be carefully evaluated to determine whether there is inherent variability in the data for that case, or the problem is an isolated occurrence not affecting other data.

The laboratory provided a summary report form for the method blank associated with each of the preparation batches. Each of the ICP preparation blanks (Total and Filtered) was free from contamination of all target analytes above the reporting limit.

The preparation blank associated with both the Total and Filtered Mercury sample analyses was free from contamination above the laboratory reporting limit.

The laboratory provided summary forms to report the ICB and CCB analyses for all of the ICP and Mercury analytical sequences associated with this data set. All QC criteria were met in each of the ICB/CCB analyses reported in this data set.

#### 11. LABORATORY CONTROL SAMPLE ANALYSIS (LCS)

The laboratory control sample (LCS) analysis provides information about the efficiency of the laboratory digestion procedure. If the recovery of any analyte is outside the established control limits, then laboratory performance and method accuracy are in question. Professional judgment is used to determine of data should be qualified or rejected.

One (1) Laboratory Control Sample (LCS) was prepared and analyzed with each preparation batch. Each of the LCS samples was fortified with the associated target analytes. A recovery limit of 80%-120% was applied to each target analyte. The recovery of all target analytes met QC criteria in each of the ICP and Mercury LCS samples associated with this data set.

#### 12. INSTRUMENT OC DATA

The laboratory provided the required annual and semiannual ICP and Mercury Instrument QC summary report forms in this data report. All annual and semiannual QC studies were performed by the laboratory within the proper time frame.

#### 13. COMPOUND IDENTIFICATION

The samples in this data set were reported as Total Metals and Filtered/Dissolved Metals. Samples were filtered upon receipt at the laboratory as per the documentation that accompanied the samples to the laboratory. Samples in this data set were analyzed for a subset of ICP metals specified by the COC documents or the TAL metal data set.

Five (5) percent (%) of these samples were chosen for data review. One (1) sample was chosen for the review of Total Metals (MW-11A/1304A27-004) and Filtered Metals (MW-11A/(1304A28-001).

The samples in this data set were analyzed in accordance with the required methods as specified by the COC documents that accompanied the samples to the laboratory. All sample data was reported in ug/l.

#### 14. FIELD DUPLICATE SAMPLE ANALYSIS

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Soil samples have more variability than aqueous samples due to the non-homogeneity of the soil. The sample chosen for data review (MW-11A) is not the field duplicate sample that was included in this data set. The sample chosen for review was not qualified based on the results of the field duplicate sample analysis.

#### 15. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

This data set included the reporting of Total and Filtered Metals as required by the Chain of Custody Documentation that accompanied the samples to the laboratory. The samples were analyzed for the Total/Filtered TAL Metals and Boron or a subset of metals designated by the associated COC documents. The Chain of Custody documents noted what samples were analyzed for specified analytes. A copy of the Chain of Custody is located in Appendix C of this report. The sample results are reported in accordance with the cited methods.

The sample chosen for Total and Filtered Metal data review in this data set is acceptable for use the noted data qualifiers. The above text details the QC outliers.

Qualified data result pages are located in Appendix B of this report.

#### NYS DEC Data Usability Summary Report

DATA VALIDATION FOR:	Miscellaneous Wet Chemistry
SITE:	North Sea Landfill
CONTRACT LAB:	H2M Laboratories Melville, NY
REVIEWER:	Renee Cohen
DATE REVIEW COMPLETED:	June, 2013
MATRIX:	Aqueous

The Chain of Custody (COC) documentation associated with this data set listed sixteen (16) aqueous samples and two (2) Field Blank samples. The samples in this data set were collected April 15, 2013 and April 16, 2013. The samples were delivered to H2M Laboratories located in Melville, New York. The samples were received at the laboratory on April 16, 2013 and April 17, 2013.

The data evaluation was performed according to the guidelines and QC criteria cited in the miscellaneous wet chemistry methods that were used for this data set. A Data Usability Summary Report (DUSR) has been prepared in accordance with the guidelines of the Division of Environmental Remediation.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

Table 1 of this report contains a cross reference between the Field Sample ID's and the Laboratory Sample ID's. Appendix A of this Data Usability Summary Report (DUSR) contains a summary of the data qualifiers that may be used in the report. Appendix B contains the qualified data result pages. Appendix C contains the Chain of Custody (COC) documents associated with this data set.

The laboratory performed these wet chemistry analyses based on the COC documentation that accompanied the samples to the laboratory. In addition these samples were analyzed for Volatile Organic Analytes and TAL Metals (Total and Filtered). The review of these various analyses are reported in stand-alone DUSR reports. This data review is associated with the Miscellaneous Wet Chemistry Analyses.

#### DATA USABILITY SUMMARY REPORT (DUSR) NORTH SEA LANDFILL

#### 1. OVERVIEW

This data report includes the analysis of 5% of the aqueous samples that were collected April 15, 2013 and April 16, 2013. The samples were received at the laboratory on April 16, 2013 and April 17, 20132 per the COC documents that accompanied the samples to the laboratory. Table 1 of this report is a cross reference between the field sample ID and laboratory sample ID. Eighteen (18) field samples and two (2) Field Blank samples were analyzed for the wet chemistry parameters listed on the COC documents.

One (1) of the samples in this data set was chosen for review. The sample chosen for review was sample MW-1B (1304A27-002).

The samples in this data set were analyzed for the parameters listed on the COC documents. A full data deliverable was generated to report these sample results. The aqueous samples in this data set were analyzed for the Wet Chemistry analytes. These included the following: Alkalinity, Chloride, Sulfate, Bromide, Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Hardness, Nitrogen-Ammonia (as N), Nitrate, Nitrite, Total Recoverable Phenols, Total Dissolved Solids (TDS), Total Kjeldahl Nitrogen (TKN) and Total Organic Carbon (TOC).

#### 2. HOLDING TIME

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid.

The laboratory chronicles lists the date of analysis dates for all samples for the Miscellaneous Wet Chemistry analyses. Based on the laboratory chronicle and the raw data included for review with this data set, all samples were prepared and analyzed for these inorganic analytes within holding time.

#### 3. CALIBRATION ANALYSIS

Miscellaneous Wet Chemistry Analyses – The laboratory summarized the initial and continuing calibration data associated with each of the wet chemistry analytes where applicable. All initial and continuing calibration standard analyses associated with this data set met QC criteria for each of the analytes reported in this data set.

#### 4. MATRIX SPIKE (MS) ANALYSIS

The spike sample analysis provides information about the effect of the sample matrix upon the digestion and measurement methodology. The spike control limits are designated by H2M Laboratories. The in-house recovery limits are cited on the QC summary report pages for each analyte where applicable.

Sample MW-3B (1304917-005) was utilized for the matrix spike analyses where applicable. The percent recovery of the MS sample met QC criteria for all analytes reported.

#### DATA USABILITY SUMMARY REPORT (DUSR) NORTH SEA LANDFILL

#### 5. DUPLICATE SAMPLE ANALYSIS

The laboratory duplicate sample analysis is used to evaluate the laboratory precision of the method for each analyte. If the duplicate sample analysis results for a particular analyte fall outside the control windows of 20% RPD depending upon the concentration of the sample, the associated sample results are qualified "J" estimated.

Sample MW-3B (1304917-005) designated on the COC documents to be utilized for the laboratory duplicate sample where applicable. The RPD% met QC criteria for all duplicate sample analyses.

#### 6. BLANKS

Blank analyses are assessed to determine the existence and magnitude of contamination problems. The criteria for the evaluation of blanks applies to all blanks, including but not limited to reagent blanks, method blanks and field blanks. The responsibility for action in the case of an unsuitable blank result depends upon the circumstances and the origin of the blank itself. If the problem with any blank exists, then all associated data must be carefully evaluated to determine whether there is inherent variability in the data for that case, or the problem is an isolated occurrence not affecting other data.

The laboratory provided Method Blank data results for all the Wet Chemistry analytes. The method blank and/or preparation blank associated with all of the miscellaneous Wet Chemistry methods were free from contamination of the target analyte above the reporting limit. The BOD blank depletion was greater than 2.0 mg/l for the samples received on April 17, 2013. The sample chosen for review (MW-1B) is associated with this blank. BOD has been qualified "UJ" estimated.

Qualified data result pages are located in Appendix B of this report.

Each of the Field Blank samples reported in this data set was free from contamination of all target wet chemistry analytes.

#### 7. LABORATORY CONTROL SAMPLE ANALYSIS (LCS)

The laboratory control sample (LCS) analysis provides information about the efficiency of the laboratory digestion procedure. If the recovery of any analyte is outside the established control limits, then laboratory performance and method accuracy are in question. Professional judgment is used to determine of data should be qualified or rejected.

The laboratory reported LCS recoveries for each of the wet chemistry analyses. The recovery of each of the LCS samples met QC criteria.

#### 8. COMPOUND IDENTIFICATION

All samples results are reported in accordance with the cited methods. A review of the raw data was performed for these wet chemistry analyses. Sample MW-1BA (1304A27-002) was the sample chosen for complete review. All analytes were reported without dilution in this sample analysis.

#### DATA USABILITY SUMMARY REPORT (DUSR) NORTH SEA LANDFILL

#### 9. FIELD DUPLICATE DATA RESULTS:

Field duplicate samples are taken and analyzed as an indication of overall precision. These measure both field and laboratory precision; therefore, the results may have more variability than lab duplicate samples.

The duplicate sample in this data set was not chosen within the 5% sample review. A review of the field duplicate sample results was not performed.

#### 10. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The inorganic analyses associated with this data set included the reporting of eighteen (18) aqueous samples. The samples were analyzed for miscellaneous Wet Chemistry analytes as noted on the COC documents that accompanied the data set. Five percent (5%) of the sample set was to be reviewed. The sample chosen for review was sample MW-1B (1304A27-002). A copy of the Chain of Custody is located in Appendix C of this report. The sample results are reported in accordance with the cited methods.

The miscellaneous wet chemistry analyte results in sample MW-1B are acceptable for use with the noted data qualifiers.

Qualified data result pages are located in Appendix B of this report.

TABLE 1

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## **CLIENT SAMPLE ID**

## **LABORATORYSAMPLE ID**

MW-1B	
MW-11A	
MW-11A	

1304A27-002\* 1304A27-004\*\* 1304A28-001\*\*\*

\* chosen for Volatile Organic Analysis, Wet Chemistry Analysis
\*\* chosen for Total Metal Analyses
\*\*\* chosen for Dissolved Metals

**APPENDIX** A

#### **DATA QUALIFIER DEFINITIONS**

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.

K – The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.

L - The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.

UL – The analyte was not detected, and the reported quantitation limit is probably higher than reported.

**APPENDIX B** 

1A

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-1B

Lab Name: H2M LABS	INC Contr	act:	
Lab Code: H2M	Case No.: TOS SA	5 No.:	SDG No.: TOS012
Matrix: (soil/water)	WATER	Lab Sample ID:	1304A27-002A
Sample wt/vol: 5	(g/mL) ML	Lab File ID:	3\F60386.D
Level: (low/med)	LOW	Date Received:	04/17/13
<pre>% Moisture: not dec.</pre>		Date Analyzed:	04/18/13
GC Column: DB-624	ID: 0.18 (mm)	Dilution Factor:	1.00
Soil Extract Volume:	(µL)	Soil Aliquot Vol	ume (µL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q	
74-87-3	Chloromethane	5	U	
75-01-4	Vinyl chloride	2	U	
74-83-9	Bromomethane	5	U	-1
75-00-3	Chloroethane	5	U	-1
107-13-1	Acrylonitrile	5	U	-
75-69 4	Trichlorofluoromethane	5	U	
75-35-4	1,1-Dichloroethene	5	U	-1
74 - 88 - 4	Iodomethane	5	U	7
108-05-4	Vinyl acetate	5	U	-
67-64-1	Acetone	5	U	10.1
75-15-0	Carbon disulfide	5	U	
75-09-2	Methylene chloride	5	U	-
156-60-5	trans-1,2-Dichloroethene	5	U	-
75-34-3	1,1-Dichloroethane	5	U	
156-59-2	cis-1,2-Dichloroethene	5	U	
78-93-3	2-Butanone	5	U	-1
74 - 97 - 5	Bromochloromethane	5	U	-
67-66-3	Chloroform	3	J	-
71-55-6	1,1,1-Trichloroethane	5	U	-
56-23-5	Carbon tetrachloride	5	U	
71-43-2	Benzene	1	U	
107-06-2	1,2-Dichloroethane	5	U	-
79-01-6	Trichloroethene	5	U	
78-87-5	1,2-Dichloropropane	1	U	1
74-95-3	Dibromomethane	5	U	7
75-27-4	Bromodichloromethane	5	U	
10061-01-5	cis-1,3-Dichloropropene	0.4	U	U
108-10-1	4-Methyl-2-pentanone	5	U	
108-88-3	Toluene	5	U	
10061-02-6	trans-1,3-Dichloropropene	0.4	U	]v]
79-00-5	The second research is not second with the second second second respectively and the second	1	U	
127-18-4	Tetrachloroethene	. 5	U	
591-78-G	2-llexanone	5	U	1
124-48-1	Dibromochloromethane	5	U	101
106-93-4		1	U	- 1

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1B

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

MW-1B

Lab Name: H2M LABS	INC Contr	act:	
Lab Code: <u>H2M</u>	Case No.: TOS SAS	S No.:	SDG No.: TOS012
Matrix: (soil/water)	WATER	Lab Sample ID:	1304A27-002A
Sample wt/vol: 5	(g/mL) <u>ML</u>	Lab File ID:	3\F60386.D
Level: (low/med)	LOW	Date Received:	04/17/13
<pre>% Moisture: not dec.</pre>		Date Analyzed:	04/18/13
GC Column: DB-624	ID: 0.18 (mm)	Dilution Factor:	1.00
Soil Extract Volume:	(µL)	Soil Aliquot Vol	ume (µL)

#### CONCENTRATION UNITS:

CAS NO.	COMPOUND	(µg/L or µg/Kg) <u>UG/L</u>	Q	
108-90-7	Chlorobenzene	5	U	٦
110-57-6	trans-1,4-Dichloro-2-butene	5	U	٦
100-41-4	Ethylbenzene	5	U	
630-20-6	1,1,1,2-Tetrachloroethane	5	U	1
1330-20-7	Xylene (total)	5	υ	1
100-42-5	Styrene	5	υ	
75-25-2	Bromoform	5	Ū	1
79-34-5	1,1,2,2-Tetrachloroethane	5	U	
96-18-4	1,2,3-Trichloropropane	5	U	٦
106-46-7	1,4-Dichlorobenzene	3	υ	
95-50-1	1,2-Dichlorobenzene	3	υ	
96-12-8	1,2-Dibromo-3-chloropropane	1	U	

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			lF			EPA	SAMPLE NO	).
tion				VALYSIS DATA S		MW -	18	
	Lab Name: <u>H2M LABS INC</u>			Contrac	t:			
-	Lab Code: H2M	Case No	TOS	SAS No.:	i	SDG No.:	<u>TOS012</u>	
	Matrix: (soil/water)	WATER			Lab Sample	ID: <u>130</u>	4A27-002A	
(ésan	Sample wt/vol: 5		(g/mL)	ML	Lab File I	D: <u>3\F</u>	<u>60386.D</u>	
	Level: (low/med) LOW				Date Recei	ved: <u>04/</u>	17/13	
	% Moisture: not dec.				Date Analy	zed: <u>04/</u>	18/13	
	GC Column: DB-624	ID: 0.18	(mm)		Dilution F	actor: <u>1.0</u>	<u>o</u>	
	Soil Extract Volume:		(µl)		Soil Aliqu	ot Volume:	<u>o</u>	(μL)
				CONCENT	RATION UNIT	ſS:		
	Number TICs found:	0		(µg/L о	r μg/Kg)	<u>UG/L</u>	!	_
	CAS NUMBER		COMPOUND	NAME	RT	EST.CONC.	Q	]

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EPA SAMPLE NO

Matrix (soil/water): WATER Level (low/med): LOW & Solids: 0.0 Concentration Units (ug/L or mg/kg CAS No. Analyte Concentration 7429-90-5 Aluminum 17.9 7440-36-0 Antimony 1.6 7440-38-2 Arsenic 4.4 7440-39-3 Barium 164 7440-41-7 Beryllium 0.10 7440-42-8 Boron 41.9 7440-42-8 Boron 41.9 7440-42-8 Boron 41.9 7440-42-8 Cobolt 10.7 7440-70-2 Calcium 42600 7440-47-3 Chromium 4.6 7440-47-3 Chromium 4.6 7440-48-4 Cobalt 10.7 7440-50-8 Copper 0.40 57-12-5 Cyanide 10.0 7439-99-6 Iron 22400 7439-99-5 Manganese 2020 7439-97-6 Mercury 0.10 7440-09-7 Potassium 15600 7440-09-7 Potassium 2.3 7440-22-4 Silver 0.20 7440-23-5 Sodium 13900 7440-28-0 Thallium 1.9 7440-28-0 Thallium 1.9 7440-28-0 Thallium 1.9 7440-66-6 Zinc 10.3 Color Before: COLORLESS Clarity Before: CLEA Color After: COLORLESS Clarity After: CLEA			Case No.	<u></u>	Lab Code:
A Solids:         0.0           Concentration Units (ug/L or mg/kg           CAS No.         Analyte         Concentration           7429-90-5         Aluminum         17.9           7440-36-0         Antimony         1.6           7440-38-2         Arsenic         4.4           7440-39-3         Barium         164           7440-41-7         Beryllium         0.10           7440-42-8         Boron         41.9           7440-43-9         Cadmium         0.10           7440-43-9         Cadmium         0.10           7440-43-9         Cabrium         42600           7440-43-9         Cobalt         10.7           7440-50-8         Copper         0.40           57-12-5         Cyanide         10.0           7439-95-4         Magnesium         15600           7439-95-5         Manganese         2020           7439-95-6         Marcury         0.10           7440-02-0         Nickel         4.5           7440-02-0         Nickel         4.5           7440-03-7         Potassium         5050           7782-49-2         Selenium         2.3           7440-22-5	Lab Sample ID: <u>1304A27-004</u>		WATER	il/water):	Matrix (sc
Concentration Units (ug/L or mg/kg           CAS No.         Analyte         Concentration           7429-90-5         Aluminum         17.9           7440-36-0         Antimony         1.6           7440-38-2         Arsenic         4.4           7440-39-3         Barium         164           7440-41-7         Beryllium         0.10           7440-42-8         Boron         41.9           7440-43-9         Cadmium         0.10           7440-43-9         Cadmium         0.10           7440-47-3         Chromium         4.6           7440-48-4         Cobalt         10.7           7440-50-8         Copper         0.40           57-12-5         Cyanide         10.0           7439-92-1         Lead         4.9           7439-95-4         Magnesium         15600           7439-95-5         Manganese         2020           7439-95-6         Iron         22400           7440-02-0         Nickel         4.5           7440-02-0         Nickel         4.5           7440-02-0         Nickel         4.5           7440-02-0         Nickel         4.5           7440-02	Date Received: <u>4/17/2013</u>		LOW	/med):	Level (low
CAS No.         Analyte         Concentration           7429-90-5         Aluminum         17.9           7440-36-0         Antimony         1.6           7440-38-2         Arsenic         4.4           7440-39-3         Barium         164           7440-41-7         Beryllium         0.10           7440-42-8         Boron         41.9           7440-42-8         Boron         41.9           7440-42-8         Boron         41.9           7440-43-9         Cadmium         0.10           7440-43-9         Cadmium         0.10           7440-43-9         Cadmium         0.10           7440-43-9         Cadmium         0.10           7440-48-4         Cobalt         10.7           7440-50-8         Copper         0.40           57-12-5         Cyanide         10.0           7439-89-6         Iron         22400           7439-92-1         Lead         4.9           7439-95-4         Magnesium         15600           7439-97-6         Mercury         0.10           7440-02-0         Nickel         4.5           7440-09-7         Potassium         5050			0.0		Solids:
7429-90-5       Aluminum       17.9         7440-36-0       Antimony       1.6         7440-38-2       Arsenic       4.4         7440-39-3       Barium       164         7440-41-7       Beryllium       0.10         7440-42-8       Boron       41.9         7440-42-8       Boron       41.9         7440-43-9       Cadmium       0.10         7440-43-9       Cadmium       4.6         7440-47-3       Chromium       4.6         7440-48-4       Cobalt       10.0         7439-89-6       Iron       22400         7439-92-1       Lead       4.9         7439-95-4       Magnesium       15600         7439-95-4       Magnesium       15600         7439-96-5       Manganese       2020         7440-02-0       Nickel       4.5         7440-02-0	dry weight): <u>UG/L</u>	s (uç	tion Units	Concentra	
7440-36-0       Antimony       1.6         7440-38-2       Arsenic       4.4         7440-39-3       Barium       164         7440-41-7       Beryllium       0.10         7440-42-8       Boron       41.9         7440-43-9       Cadmium       0.10         7440-43-9       Cadmium       0.10         7440-43-9       Cadmium       0.10         7440-43-9       Cadmium       0.10         7440-47-3       Chromium       42600         7440-47-3       Chromium       4.6         7440-50-8       Copper       0.40         57-12-5       Cyanide       10.0         7439-89-6       Iron       22400         7439-92-1       Lead       4.9         7439-95-4       Magnesium       15600         7439-95-5       Manganese       2020         7439-97-6       Mercury       0.10         7440-02-0       Nickel       4.5         7440-02-7       Potassium       5050         7782-49-2       Selenium       2.3         7440-23-5       Sodium       13900         7440-23-5       Sodium       13900         7440-62-2	C Q M	Co	Analyte	CAS No.	
7440-36-0       Antimony       1.6         7440-38-2       Arsenic       4.4         7440-39-3       Barium       164         7440-41-7       Beryllium       0.10         7440-42-8       Boron       41.9         7440-43-9       Cadmium       0.10         7440-43-9       Cadmium       0.10         7440-43-9       Cadmium       0.10         7440-43-9       Cadmium       0.10         7440-47-3       Chromium       42600         7440-47-3       Chromium       4.6         7440-50-8       Copper       0.40         57-12-5       Cyanide       10.0         7439-89-6       Iron       22400         7439-92-1       Lead       4.9         7439-95-4       Magnesium       15600         7439-95-5       Manganese       2020         7439-97-6       Mercury       0.10         7440-02-0       Nickel       4.5         7440-02-7       Potassium       5050         7782-49-2       Selenium       2.3         7440-23-5       Sodium       13900         7440-23-5       Sodium       13900         7440-62-2	BIP	•	Aluminum	7429-90-5	•
7440-38-2       Arsenic       4.4         7440-39-3       Barium       164         7440-41-7       Beryllium       0.10         7440-42-8       Boron       41.9         7440-42-8       Boron       41.9         7440-42-8       Boron       41.9         7440-42-8       Boron       41.9         7440-43-9       Cadmium       0.10         7440-43-9       Cadmium       42600         7440-47-3       Chromium       4.6         7440-48-4       Cobalt       10.7         7440-50-8       Copper       0.40         57-12-5       Cyanide       10.0         7439-89-6       Iron       22400         7439-92-1       Lead       4.9         7439-95-4       Magnesium       15600         7439-95-5       Manganese       2020         7439-97-6       Mercury       0.10         7440-02-0       Nickel       4.5         7440-09-7       Potassium       5050         7782-49-2       Selenium       2.3         7440-23-5       Sodium       13900         7440-22-4       Silver       0.20         7440-22-2       Van					
7440-39-3       Barium       164         7440-41-7       Beryllium       0.10         7440-42-8       Boron       41.9         7440-43-9       Cadmium       0.10         7440-43-9       Cadmium       0.10         7440-43-9       Cadmium       0.10         7440-43-9       Cadmium       0.10         7440-47-3       Chromium       42600         7440-48-4       Cobalt       10.7         7440-50-8       Copper       0.40         57-12-5       Cyanide       10.0         7439-89-6       Iron       22400         7439-92-1       Lead       4.9         7439-95-4       Magnesium       15600         7439-95-5       Manganese       2020         7439-97-6       Mercury       0.10         7440-02-0       Nickel       4.5         7440-09-7       Potassium       5050         7782-49-2       Selenium       2.3         7440-23-5       Sodium       13900         7440-23-5       Sodium       13900         7440-22-4       Silver       0.20         7440-22-2       Vanadium       0.30         7440-62-2	B P				
7440-41-7       Beryllium       0.10         7440-42-8       Boron       41.9         7440-43-9       Cadmium       0.10         7440-43-9       Cadmium       0.10         7440-70-2       Calcium       42600         7440-47-3       Chromium       4.6         7440-47-3       Chromium       4.6         7440-48-4       Cobalt       10.7         7440-50-8       Copper       0.40         57-12-5       Cyanide       10.0         7439-89-6       Iron       22400         7439-92-1       Lead       4.9         7439-95-4       Magnesium       15600         7439-95-5       Manganese       2020         7439-97-6       Mercury       0.10         7440-02-0       Nickel       4.5         7440-02-0       Nickel       4.5         7440-02-1       Potassium       5050         7782-49-2       Selenium       2.3         7440-23-5       Sodium       13900         7440-22-4       Silver       0.20         7440-22-5       Sodium       13900         7440-62-2       Vanadium       0.30         7440-66-6					
7440-42-8       Boron       41.9         7440-43-9       Cadmium       0.10         7440-70-2       Calcium       42600         7440-47-3       Chromium       4.6         7440-48-4       Cobalt       10.7         7440-50-8       Copper       0.40         57-12-5       Cyanide       10.0         7439-89-6       Iron       22400         7439-92-1       Lead       4.9         7439-95-4       Magnesium       15800         7439-95-5       Manganese       2020         7439-97-6       Mercury       0.10         7440-02-0       Nickel       4.5         7440-02-0       Nickel       4.5         7440-02-1       Selenium       2.3         7440-22-4       Silver       0.20         7440-23-5       Sodium       13900         7440-23-5       Sodium       13900         7440-62-2       Vanadium       0.30         7440-66-6       Zinc       10.3         740-66-6       Zinc       10.3	UP	-			
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7440-47-3       Chromium       4.6         7440-48-4       Cobalt       10.7         7440-50-8       Copper       0.40         57-12-5       Cyanide       10.0         7439-89-6       Iron       22400         7439-92-1       Lead       4.9         7439-95-4       Magnesium       15600         7439-96-5       Manganese       2020         7439-97-6       Mercury       0.10         7440-02-0       Nickel       4.5         7440-09-7       Potassium       5050         7782-49-2       Selenium       2.3         7440-23-5       Sodium       13900         7440-28-0       Thallium       1.9         7440-62-2       Vanadium       0.30         7440-62-2       Vanadium       0.30         7440-66-6       Zinc       10.3	UP		Cadmium	7440-43-9	
7440-48-4       Cobalt       10.7         7440-50-8       Copper       0.40         57-12-5       Cyanide       10.0         7439-89-6       Iron       22400         7439-92-1       Lead       4.9         7439-95-4       Magnesium       15600         7439-95-4       Magnese       2020         7439-95-6       Mercury       0.10         7439-97-6       Mercury       0.10         7440-02-0       Nickel       4.5         7440-09-7       Potassium       5050         7782-49-2       Selenium       2.3         7440-23-5       Sodium       13900         7440-23-5       Sodium       13900         7440-28-0       Thallium       1.9         7440-62-2       Vanadium       0.30         7440-66-6       Zinc       10.3         0       20       7440-66-6					
7440-50-8       Copper       0.40         57-12-5       Cyanide       10.0         7439-89-6       Iron       22400         7439-92-1       Lead       4.9         7439-95-4       Magnesium       15600         7439-95-4       Magnesium       15600         7439-95-6       Marganese       2020         7439-97-6       Mercury       0.10         7440-02-0       Nickel       4.5         7440-09-7       Potassium       5050         7782-49-2       Selenium       2.3         7440-22-4       Silver       0.20         7440-23-5       Sodium       13900         7440-28-0       Thallium       1.9         7440-62-2       Vanadium       0.30         7440-66-6       Zinc       10.3					
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7439-89-6       Ircn       22400         7439-92-1       Lead       4.9         7439-95-4       Magnesium       15600         7439-96-5       Manganese       2020         7439-97-6       Mercury       0.10         7440-02-0       Nickel       4.5         7440-09-7       Potassium       5050         7782-49-2       Selenium       2.3         7440-23-5       Sodium       13900         7440-23-5       Sodium       13900         7440-28-0       Thallium       1.9         7440-62-2       Vanadium       0.30         7440-66-6       Zinc       10.3				protection and the second second second second second second second second second second second second second s	
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7439-95-4       Magnesium       15600         7439-96-5       Manganese       2020         7439-97-6       Mercury       0.10         7440-02-0       Nickel       4.5         7440-09-7       Potassium       5050         7782-49-2       Selenium       2.3         7440-23-5       Sodium       13900         7440-23-5       Sodium       0.30         7440-62-2       Vanadium       0.30         7440-66-6       Zinc       10.3         Color Before:       COLORLESS       Clarity Before:       CLEA	· · · · · · · · · · · · · · · · · · ·				
7439-96-5       Manganese       2020         7439-97-6       Mercury       0.10         7440-02-0       Nickel       4.5         7440-09-7       Potassium       5050         7782-49-2       Selenium       2.3         7440-22-4       Silver       0.20         7440-23-5       Sodium       13900         7440-28-0       Thallium       1.9         7440-62-2       Vanadium       0.30         7440-66-6       Zinc       10.3         color Before:       COLORLESS       Clarity Before:       CLEA	P P	·····			
7439-97-6       Mercury       0.10         7440-02-0       Nickel       4.5         7440-09-7       Potassium       5050         7782-49-2       Selenium       2.3         7440-22-4       Silver       0.20         7440-23-5       Sodium       13900         7440-28-0       Thallium       1.9         7440-62-2       Vanadium       0.30         7440-66-6       Zinc       10.3         Color Before:       COLORLESS       Clarity Before:       CLEA	P				
7440-02-0       Nickel       4.5         7440-09-7       Potassium       5050         7782-49-2       Selenium       2.3         7440-22-4       Silver       0.20         7440-23-5       Sodium       13900         7440-28-0       Thallium       1.9         7440-62-2       Vanadium       0.30         7440-66-6       Zinc       10.3         Color Before: COLORLESS       Clarity Before:       CLEA	As an a part of the second secon				
7782-49-2       Selenium       2.3         7440-22-4       Silver       0.20         7440-23-5       Sodium       13900         7440-28-0       Thallium       1.9         7440-62-2       Vanadium       0.30         7440-66-6       Zinc       10.3         Color Before: COLORLESS       Clarity Before:       CLEA					
7440-22-4       Silver       0.20         7440-23-5       Sodium       13900         7440-28-0       Thallium       1.9         7440-62-2       Vanadium       0.30         7440-66-6       Zinc       10.3         Color Before: COLORLESS       Clarity Before:       CLEA	ЕРЈ		Potassium	7440-09-7	
7440-23-5         Sodium         13900           7440-28-0         Thallium         1.9           7440-62-2         Vanadium         0.30           7440-66-6         Zinc         10.3           olor Before: COLORLESS         Clarity Before:         CLEA	<ul> <li>A state of the sta</li></ul>		and a second s		
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1 INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-11A

Lab Name: <u>H2M LABS INC</u> Lab Code: <u>H2M</u> Case No.

Matrix (soil/water): WATER

0.0

SAS No.:

SDG No.: TOS012F

Lab Sample ID: <u>1304A28-001</u> Date Received: <u>4/17/2013</u>

Level (low/med): LOW

% Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	С	Q	м	
7429-90-5	Aluminum	30.8	В		Р	1
7440-36-0	Antimony	1.3	В		P	J
7440-38-2	Arsenic	2.8	U		P	]
7440-39-3	Barium	141	В		P	]
7440-41-7	Beryllium	0.90	В		Р	
7440-42-8	Boron	50.8	В	N	P	12
7440-43-9	Cadmium	0.80	В		P	]
7440-70-2	Calcium	41200			P	
7440-47-3	Chromium	3.3	В		P	1
7440-48-4	Cobalt	11.3	В		Р	
7440-50-8	Copper	1.6	В		P	
7439-89-6	Iron	4540			P	
7439-92-1	Lead	6.4			P	
7439-95-4	Magnesium	15000			Р	
7439-96-5	Manganese	1830			P	]
7439-97-6	Mercury	0.10	U		CV	]
7440-02-0	Nickel	5.6	В		P	]
7440-09-7	Potassium	5100		E	P	15
7782-49-2	Selenium	2.3	U		P	]
7440-22-4	Silver	0.45	В		P	1
7440-23-5	Sodium	12900			P	1
7440-28-0	Thallium	1.9	U		P	
7440-62-2	Vanadium	0.30	U		P	1
7440-66-6	Zinc	12.9	в		р	

Color Before: COLORLESSClarity Before:CLEARTexture:Color After:COLORLESSClarity After:CLEARArtifacts:

Comments:

Date Reported 5/3/2013

FORM I - IN

ILM04.1

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TOS012F M5



Attn To :

Collected

Received

Town of Southampton

Waste Management Division

Southampton, New York 11968

**Christine Fetten** 

: 4/16/2013 11:00:00 AM : 4/17/2013 10:00:00 AM

#### labs

575 Broad Hollow Rd . Melville, NY 11747 TEL: (631) 694-3040 FAX: (631) 420-8436 NYSDOH ID#10478

#### LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested

Lab No. : 1304A27-002 Client Sample ID: MW-1B Sample Information: Type : Groundwater

Origin:

Collected By : PWG99				
Analytical Method:	SM2320B :			Analyst: HT
Parameter(s)	Results Qualifier	D.F. Units	Analyzeo:	Container.
Alkalinity, Total (As CaCO3)	) 11.0	1 mg/L	04/18/2013 1:54 PM	Container-01 of 0
Analytical Method:	E300.0 :			Analyst: bka
Parameter(s)	Results Qualifier	D.F. Units	Analyzed:	Container:
Bromide	< 0.50	1 mg/L	04/24/2013 12:36 AM	Container-01 of
Chloride	8.72	1 mg/L	04/24/2013 12:36 AM	Container-01 of
Sulfate	7.62	1 mg/L	04/24/2013 12:36 AM	Container-01 of
Analytical Method:	SM5210B Prep Method:	SM5210B	Prep Date: 4/18/2013 7:27:47 AM	Analyst: CN
Parameter(s)	Results Qualifier	D.F. Units	Analyzed:	Container,
Biochemical Oxygen Demar	nd <2 1/.)	1 mg/L	04/18/2013 10:25 AM	Container-01 of
NOTES: Blank depletion exceeds 0.2	? mg/L - average depletion of 0	.65 mg/L		
Analytical Method:	E410.4 :			Analyst: CN
Parameter(s)	Results Qualifier	<u>D.F. Units</u>	Analyzed:	Container:
Chemical Oxygen Demand	< 10	1 mg/L	04/30/2013 8·42 AM	Container-01 of
Analytical Method:	SM2120B : IOC			Analyst: EM
Parameter(s)	Results Qualifier	<u>D.F. Units</u>	Analyzed:	Container:
Color	< 5	1 units	04/18/2013 6:04 AM	Container-01 of
Analytical Method:	M3500-Cr D :			Analyst: EM
Parameter(s)	Results Qualifier	D.F. Units	Analyzed:	Container,
Chromium, Hexavalent	< 0.02	1 mg/L	04/18/2013 5:50 AM	Container-01 of
Analytical Method:	SM2340C :			Analyst: JA
Parameter(s)	Results Qualifier	D.F. Units	Analyzed:	Container:
Hardness (As CaCO3)	16	1 mg/L	04/19/2013 11:45 AM	Container-01 of
Analytical Method:	SM4500-NH3 H :	<u>i i i i i i i i i i i i i i i i i i i </u>		Analyst: bka
Parameter(s)	Results Qualifier	<u>D.F. Units</u>	Analyzed:	Container,
Nitrogen, Ammonia (As N)	< 0.10	1 mg/L	04/22/2013 12:16 PM	Container-01 of
Analytical Method:	E353.2 :	• • • • • • • • • • • • • • • • • • •		Analyst: MJL
Parameter(s)	Results Qualifier	D.F. Units	Analyzed:	Container:
Nitrite as N	< 0.10	1 mg/L	04/18/2013 8:55 AM	Container-01 of

Qualifiers: E = Value above quantitation range B = Found in Blank

D.F. = Dilution Factor D = Results for Dilution

H = Received/analyzed outside of analytical holding time

+ = ELAP / NELAC does not offer certification for this analyte c = Calibration acceptability criteria exceeded for this analyte

r = Reporting limit > MDL and < LOQ

J = Estimated value - below calibration range

s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 5/3

Joann M. Stainin Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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5/3/2013



#### labs

575 Broad Hollow Rd. Melville, NY 11747 TEL: (631) 694-3040 FAX: (631) 420-8436 NY SDOH ID#10478

#### LABORATORY RESULTS

Results for the samples and analytes requested

The lab is not directly responsible for the integrity of the sample before receipt at the lab and is responsible only for the certified tests requested.

#### Town of Southampton

Waste Management Division Southampton, New York 11968

 Attn To
 :
 Christine Felten

 Collected
 : 4/16/2013 11:00:00 AM

 Received
 : 4/17/2013 10:00:00 AM

 Collected By : PWG99

Sample Information: Type : Groundwater

Origin.

Analytical Method:	E353.2							
Parameter(s)							Analyst:	MJL
r unumencity[0]		Results	Qualifier	<u>D.F.</u>	Units	Analyzed:	Centair	her:
Nitrate as N		< 0.10		1	mg/L	04/18/2013 10:32 AM	Container	-01 of 01
Analytical Method:	E420.1 :	1	Prep Method	E42	D 1	Prep Date, 4/22/2013 6:30:00 AM	Analyst:	EM
Parameter(s)		Results	Qualifier	<u>D.F.</u>	<u>Units</u>	Analyzed:	Contair	ner.
Phenolics, Total Recoverable	e	< 5.0		1	µg/L	04/24/2013 8-15 AM	Container	-01 of 01
Analytical Method:	SM2540C	: 100					Analyst:	MM
Parameter(s)		Results	Qualifier	D.F	Units	Analyzed:	Contair	ner:
Total Dissolved Solids		41		1	mg/L	04/18/2013 12:57 PM	Container	-01 of 02
Analytical Method:	E351.2 :	1	Prep Method:	E35	1 2	Prep Date: 4/23/2013 6:45:00 AM	Analyst:	MJL
Parameter(s)		Results	Qualifier	D.F.	Units	Analyzed:	Contair	ier.
Nitrogen, Kjeldahl, Total		< 0.10		1	mg/L	04/23/2013 2:34 PM	Container	-01 of 01
Analytical Method:	SW9060 :						Analyst:	со
Parameter(s)		Results	Qualifier	D.F	Units	Analyzed:	Contair	<u>tér</u>
Total Organic Carbon		3.4		1	mg/L	04/25/2013 11:56 PM	Container	-01 of 62

Lab No. : 1304A27-002

Client Sample ID: MW-1B

Qualifiers: E = Value above quantitation range B = Found in Blank D.F. = Dilution Factor D = Results for Dilution H = Received/analyzed outside of analytical holding time + = ELAP / NELAC does not offer certification for this analyte c = Calibration acceptability criteria exceeded for this analyte r = Reporting limit > MDL and < LOQ J = Estimated value - below calibration range s = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 5/3/2013

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of the laboratory.

TOS012 W26

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Page 4 of 16

**APPENDIX C** 

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dingut	hod	by: (Sig	nature)		Date	G50	Received by:		<b>™</b> ∕∕	5	$\sim$		Alla.	e	Time	Sar	mple L	abels and		2. Ambient or chille	and DeliveredAndiil#
$\square$	N	$\underline{\nabla v}$			416			-	10	2				_	0957		plain:	ord? Yor	N	<ol> <li>Received in good</li> <li>Property preserv</li> </ol>	d condition: Y or N red: Y or N
unquis	ined	by: (Sig	nature)		Date	Time	Received by:	(Signatur	9)				Da	ue	Time				_	COC Tape was:	
					Deta		Beech and him	(Diacot												1. Present on outer	
Retinquished by: (Signature) Date Time Received by: (Signatu		(Signatur	e)				Da	19	Time						ier package: Y or N sent & complete upon sample receipt;						
																				Y or N	

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PINK COPY - LABORATORY

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# H2M LABS, INC.

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# 42055 EXTERNAL CHAIN OF CUSTODY

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		ax: (631) 420-843			CLIE	NT.	260	<u>.</u> .			5	S	· · · · ·			H2M SDG	NO: TOS 012
PROJECT NAM								, <u> </u>	្នាំ						NOTES:	11211 000	Project Contact:
North Sea									Ŗ								
1370 Major						J			Panneles+Asen								Desek Erstrak Phone Number:
-					통출	13			12								Phone Number:
Southempt					88				ğ								631-589-6353
SAMPLERS: (si	gnaturey				Sample Container Description	Re			2								PIS/Quote #
K	RT	<u> </u>				12			r T								
prof	Fall	$\bigcirc$				yow			Routine '								
DELIVERABLES	: ASP	Gategory B		$\gamma_{\epsilon}$	]	5			ď								
				BO-70	0.0 10.0		AN	ALY	SIS R	EQL	JEST	ED					
TURNARQUND		Dandy 1			Total No. of Containers	OR	GANI	c					INO	RG			
		- somoora			۴¢ ۵											······································	
DATE TIME	MATRIX	FIE	LD I.D.			<b>VOA</b>	NB	Pce PC					Metal	N S	LAB I.	D. NO.	REMARKS:
415 865	Leadrate	LEA-PRIM	ARY		9				X						730491-	7 - 02	
415 960		LEA-SECON			9				X						L	603	
	B	TROBLACK		6.0	23	X	5									011	
	~			41613		57											
				11 11-	$\vdash$					_							
																	· · · · · · · · · · · · · · · · · · ·
					)												
Relingvished by: (Sig	veture)/	Date	dine one	Received by (Sign	ature)	l		L	Ca	Le	Tin	ne				ATORY USE ON	
DESE	alt-	- 4 <b>16</b>	192	t_1″∖	n		~		411	6	92	σ	Disc	18091	icles Between	Samoles were:	
Relinquished by: (Sig	nature)	Date 416	120	Received by: (Stan	aturo -		-			-	Tin		Sam	ple L	abels and		and Delivered Airbitit
1/1/N	$\sim$	416	Mor	Heen	S					13	015	50			ord? Y or N	3. Received in good 4. Property preserve	condition: Y or N
Religquished by: (Sig	nature)	Date	Time	Received by: (Sign	ature)				Da		Tin	ne	Expl			4. Property preserve	
																COC Tape was: 1. Present on outer	package: Y or N
Relinquished by: (Sig	nature)	Date	Time	Received by: (Sign	sture)				Da		Tin	ne				2. Unbroken on out	er package: Y or N ent & complete upon sample receipt:
			1													Y or N	ания сонфака абон зенфая (осефс.
				<u> </u>						1							

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TUBIZINA CONTRACTOR CONTRACTOR

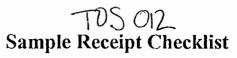
YELLOW COPY - CLIENT

PINK COPY - LABORATORY

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H2M LABS INC 575 Broad Hollow Rd. Melville, NY 11747 TEL. (631) 694-3040 FAX: (631) 420-8436

Website: www.h2mlabs.com



Client Name TOS

Date and Time Received: 4/16/2013 9:50:00 AM

Work Order Number:	1304917	F	cptNo: 1			Received b	y Linda Sicil	lano
Completed by:		· 0 · T	)e		Rev	iewed by:	lempy	ar
	uler -a	alant	n			0		
Completed Date:	4/16/2013 1	1:11:12 AM			Rev	iewed Date:	4/18/2013	3 12:30:22 PM
Carrier name: H2M P	lickup							
Chain of custody prese	nt?			Yes	$\checkmark$	No 🗍		
Chain of custody signe	d when reling	uished and re	ceived?	Yes		No 🗔		
Chain of custody agree	s with sample	e labels?		Yes		No []]		
Are matrices correctly	identified on (	Chain of custo	dy?	Yes	$\checkmark$	No 🗋		
s it clear what analyse	s were reque	sted?		Yes		No		
Custody seals intact or	n sample bott	es?		Yes		No	Not Present	
Samples in proper con	tainer/bottle?			Yes	$\checkmark$	No 🗌		
Were correct preserval	lives used and	d noted?		Yes	$\checkmark$	No 🗔	NA	
Preservative added to	bottles:							
Sample Condition?				Intact	$\checkmark$	Broken	Leaking	
Sufficient sample volur	ne for indicat	ed test?		Yes	$\checkmark$	No 🗔	-	
Were container labels	complete (ID,	Pres, Date)?		Yes		No 🗌		
All samples received w	ithin holding	time?		Yes	$\checkmark$	No		
Was an attempt made	to cool the st	mr.loc?		Yes		No 🗔	NA	( )
All samples received a		•	<u>^</u> 2	Yes			NA	П
Response when tempo				103	()		144	1/
Sample Temp, taken a		-		Yes		No	То	1.2 °
				Yes			No Vials	
Water - Were bubbles				Yes			NA	
Water - Was there Chl						· · ·		
Water - pH acceptable				Yes		No 🗹	No Water	
Are Samples consider	ed acceptable	?		Yes		No		
Custody Seals present	?			Yes		No 🗹		()
Airbill or Sticker?				Air Bil		Sticker	Not Presen	
Airbill No:								
Case Number:		SDG:				SAS:		
		TOS012						
Any No response sho	uld be detaile	d in the comm	ents section	below, if app	licabl	e.		
Client Contacted?	🗌 Yes	No No	Person	Contacted:			JALLAN WALKS	
Contact Mode:	🗌 Phone	: 🗌 F	ax:	Email:		In Person:		
Client Instructions:								
Date Contacled:			Contac	ted By:				
Regarding:								
Comments:								
pH of metals bottle f LEA-Primary and Se for these samples. TBs not listed on CC	condary sam						clude VOC anl	aysis. H2M received VOC v
CorrectiveAction								
CorrectiveAction: Sample was preserv	ed with 1:1 ni	tric acid 4/16/	13 @ 12:20.					
CorrectiveAction: Sample was preserv It is assumed that th								

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# H2M LABS, INC.

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# 42157 EXTERNAL CHAIN OF CUSTODY

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Tel: (631) 694-3040 Fax: (631) 420-8436	CLIEI	NT:	P	NG	C		(10)	5)			H2M SDG	NO: 105012 012F
PROJECT NAME/NUMBER NOC th Sea Laudfill 1370 Major Path Soutvampton, NY SAMPLERS: (signature)/Client And AM DELIVERABLES: ASP Carlegory B.	Sample Container Description				_	Dissolved Metals *				NOTES: -& Lais to: Metals	Filler	Project Contact: Derek Ersback Phone Number: BI-589-6353 PIS/Quote #
Tist Carlegay B.	lo. of Iners		A	NALY	SIS R	EQU	JESTED					
TURNAROUND TIME: Steindard	Total No. of Containers	OR	GAN	IC				INOR	G.			
DATE TIME MATRIX FIELD I.D.		<b>VOA</b>	BNA	Peat/ PCB				Metal	S	۲0 LAB I.C	). NO.	Q2F REMARKS:
411110930 GW FB002	10				$\times$					1304A2	7-018	
1 1025 11 MW-1C					X						Q3	
1100 MW-1B					$\times$						J02	
1120 MW-1A					$\mathbb{X}$						001	
1240 MW-12B	V				Х						007	
1300 MW-12A	11				$\mathbf{V}^{[}$	$\times$					006	1304A28-003
1440 , MW-11B					X.	X					005	U2
V ISOS V MW-IIA	$\checkmark$				X	X					WY	L WI
416/1XX GW TripBlank	3				X					Q,	COG	
Relinguished by: (Signa ture) Date Time Rective by (Sign	nature)				Dat	11	Time			LABORA	TORY USE ON	LY
Relinquished by: (Signatiure) Relinquished by: (Signatiure) Relinquished by: (Signatiure) Relinquished by: (Signatiure) Relinquished by: (Signature) Relinquished by: (Signature) Date Time Received by: (Signature) Date Time Received by: (Signature)	) hature)	Y			Upat Upat Dat	e ( 13 e		Samp	lle La Recc		<ol> <li>Property preserve</li> <li><u>COC Tape was:</u></li> <li>Present on outer</li> <li>Unbroken on outer</li> </ol>	í. s

WHITE COPY - OBIGINAL

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

Client Name TOS       Date and Time Received: 4/17/2013 10:00:00 AN         Work Order Number: 1304A27       Replive: 1       Received by Linda Sticiliano         Completed Date:       4/18/2013 10:51:50 AM       Reviewed Date:       4/18/2013 4:36:44 PM         Carrier name:       H2M Pickup       Reviewed Date:       4/18/2013 4:36:44 PM         Carrier name:       H2M Pickup       Reviewed Date:       4/18/2013 4:36:44 PM         Carrier name:       H2M Pickup       Reviewed Date:       4/18/2013 4:36:44 PM         Carrier name:       H2M Pickup       Reviewed Date:       4/18/2013 4:36:44 PM         Carrier name:       H2M Pickup       Reviewed Date:       4/18/2013 4:36:44 PM         Carrier name:       H2M Pickup       Reviewed Date:       4/18/2013 4:36:44 PM         Carrier name:       H2M Pickup       Reviewed Date:       4/18/2013 4:36:44 PM         Carrier name:       H2M Pickup       Reviewed Date:       4/18/2013 4:36:44 PM         Carrier name:       H2M Pickup       Reviewed Date:       4/18/2013 4:36:44 PM         Carrier name:       H2M Pickup       Reviewed Date:       4/18/2013 4:36:44 PM         Carrier stands       Reviewed Date:       No       No       No         Carrier stands       Repickup       Reviewed Date:       No<	Μ	7	EL: (631) 694-3040 FA	X: (63	1) 420-8436 2mlabs.com	-	eceipt Checkl
Completed by:       Junchester       Reviewed by:       Junchester       Junchester         Completed Date: <u>A172013 10:51:50 AM</u> Reviewed Date: <u>J18/2013 4:36:44 PM</u> Carrier name: <u>H2M Pickup</u> Yes       No       Ano         Chain of custody signed when rolinquished and received?       Yes       No       Ano         Chain of custody signed when rolinquished and received?       Yes       No       Ano         Are matrices correctly identified on Chain of custody?       Yes       No       Ano         Samples in propor container/bottle?       Yes       No       No       No         Ware correct presentaives used and noted?       Yes       No       Na       Presentaive added to bottles:         Sample condition?       Intact       Broken       Leaking       Alsamples received within holding time?         Ware correct presentaives used and neceiv?       Yes       No       NA       Alsamples received at a temp, ol > 0' C to 6.0' C?       Yes       No       Al asamples coeview dittin holding time?         Ware on the ubbits absent in VOC vials?       Yes       No       NA       Al asamples received at a temp, ol > 0' C to 6.0' C?       Yes       No       Na       Al asamples received within holding time?         Ware constance tabelis complete (ID, Pres, Da	Client Name TOS				Date and	Time Received:	4/17/2013 10:00:00 AN
Completed Date:       4/18/2013 d:51:50 AM       Reviewed Date:       4/18/2013 d:36:44 PM         Carrier name:       H2M Pickup         Chain of custody signed when relinquished and received?       Yes       No         Chain of custody signed when relinquished and received?       Yes       No         Chain of custody genes with sample tabels?       Yes       No         Are matrices correctly identified on Chain of custody?       Yes       No         Clastod y genes with sample tabels?       Yes       No         Custody seals ware requested?       Yes       No         Custody seals ware requested?       Yes       No         Custody seals intact on sample botiles?       Yes       No         Samples in proper container/botile?       Yes       No         Preservativa added to bottles:       Intact       Broken       Leaking         Sufficient sample volume for indicated test?       Yes       No       NA         All samples received at a temp, of > 0° C G 6, 0° C?       Yes       No       NA         All samples received at a temp, of > 0° C G 6, 0° C?       Yes       No       NA       Image: Added to bottles         Sample Temp, taken and recorded upon roceipt?       Yes       No       NA       Image: Added teconde in the common tere in the comole on the pr	Work Order Number: 13	04A27 Repti	No: 1		Received	by Linda Sicili	iano
Carrier name: H2M Pickup Carrier name: H2M Pickup Chain of custody present? Chain of custody signed when rolinquished and received? Yes Ø No Chain of custody signed when rolinquished and received? Yes Ø No Chain of custody agrees with sample labels? Yes Ø No Custody seals infact on sample bottles? Yes Ø No Custody seals infact on sample bottles? Yes Ø No Were correctly identified on Chain of custody? Yes Ø No Were correct preservatives used and noted? Yes Ø No Were correct preservatives used and noted? Yes Ø No Were correct preservatives used and noted? Yes Ø No Were correct preservatives used and noted? Yes Ø No Were container fabels complete (f0, Pros, Date)? Was an attempt made to cool the samples? Yes Ø No All samples roceived atta tomp. of > 0 C to 6.0° C? Yes Ø No All samples roceived at a tomp. of > 0 C to 6	Completed by:	- Sili De	i.	Revie	ewed by:	fempy	Car
Chain of custody signed when relinquished and received?       Yes       No         Chain of custody signed when relinquished and received?       Yes       No         Chain of custody agrees with sample labels?       Yes       No         Are matrices correctly identified on Chain of custody?       Yes       No         Is it clear what analyses were requested?       Yes       No         Custody seals intact on sample bottles?       Yes       No         Samples in proper container/bottle?       Yes       No         Ware correct preservatives used and noted?       Yes       No         Preservative added to bottles:       Sample condition?       Intact       Broken         Leaking         Sufficient sample volume for indicated test?       Yes       No       NA       Intact         All samples received within holding time?       Yes       No       NA       Intact         Ware container labels complete (ID, Pros, Date)?       Yes       No       NA       Intact         Response when temperature is outside of range:       Samples received at a temp. ol > 0? C to 6.0° C?       Yes       No       NA       Intact         Water - Ware tubbles absent in VOC vials?       Yes       No       NA       Intact       Intact       No       Na       Intact       Int	Completed Date: 4	/17/2013 10:51:50 AM		Revi	ewed Date:	4/18/201	13 4:36:44 PM
Chain of custody signed when relinquished and received? Yes V No Chain of custody agrees with sample labels? Yes V No Are matrices correctly identified on Chain of custody? Yes No Samples in proper container/bottle? Yes No Samples in proper container/bottle? Yes No No Not Present V So Samples in proper container/bottle? Yes No No No NA Preservative added to bottles: Sample Condition? Yes No Samples condition? Yes No Samples condition? Yes No No No Leaking Samples condition? Yes No At samples received to the samples? Yes No At samples received at them, of > 0° C to 6.0° C? Yes No Na Na Response when temperature is outside of range: Sample Temp. taken and recorded upon receipt? Yes No No Na Na Response when temperature is outside of range: Sample Temp. taken and recorded upon receipt? Yes No No Na Water - Wes tubbles absent in VOC vials? Yes No No Na No No Na No No Na No No Na No No Na No No Na No No Na No No No No No No No No	Carrier name: H2M Pick	up					
Chain of custody agrees with sample labels?       Yes       No         Are matrices correctly identified on Chain of custody?       Yes       No         Is it clear what analyses were requested?       Yes       No         Custody seals intact on sample bottles?       Yes       No         Samples in proper container/bottle?       Yes       No       NA         Preservative added to bottles:       Sample condition?       NA       Preservative added to bottles:         Sample condition?       Intact       Broken       Leaking       NA         All samples received within holding time?       Yes       No       NA         Ware container labels complete (ID, Pres, Date)?       Yes       No       NA         All samples received within holding time?       Yes       No       NA         Ware container labels complete (ID, Pres, Date)?       Yes       No       NA         All samples received at a temp. of > 0° C to 6.0° C?       Yes       No       NA         All samples received at a temp. of > 0° C to 6.0° C?       Yes       No       NA         Water - Ware bubbles absent in VGC vials?       Yes       No       Na       Water - Pit acceptable upon receipt?         Vater - Ware bubbles absent in VGC vials?       Yes       No       No       No	Chain of custody present?	2	Yes		No 🗍		
Are matrices correctly identified on Chain of custody?       Yes       No         Is it clear what analyses were requested?       Yes       No         Custody seals intact on sample bottles?       Yes       No         Samples in proper container/bottle?       Yes       No         Were correct preservatives used and noted?       Yes       No       NA         Preservative added to bottles:       Samples in proper container/bottle?       Yes       No       NA         Sufficient sample volume for indicated test?       Yes       No       NA       Preservative added to bottle:         Sufficient sample volume for indicated test?       Yes       No       NA       Preservative added to bottle:         Sufficient samples received within holding time?       Yes       No       NA       Preservative added to bottle:         Sample Temp. faken and recorded upon receipt?       Yes       No       NA       Preservative added to bottle:         Sample Temp. faken and recorded upon receipt?       Yes       No       NA       Preservative added to	Chain of custody signed w	when relinquished and receiv					
Is it clear what analyses wore requested? Yes Vies Vies No No Not Present Vies Samples in proper container/bottle? Yes Vies No No No Not Present Vies Samples in proper container/bottle? Yes Vies No No No No No Present Vies Samples condition? Intact Vies Vies No No No No Present Vies Samples received within holding time? Yes Vies No No No No No No No No No No No No No							
Custody seals intact on sample bottles? Yes No Not Prosent V Samples in proper container/bottle? Yes No No NA Present V Preservative added to bottles: Sample Condition? Intact V Were container labels complete (ID, Pres, Date)? Yes No No NA Were container labels complete (ID, Pres, Date)? Yes No No NA All samples received within holding time? Yes No No NA All samples received at a temp. of > 0° C to 6.0° C? Yes No NA All samples received at a temp. of > 0° C to 6.0° C? Yes No NA All samples received at a temp. of > 0° C to 6.0° C? Yes No NA All samples received at a temp. of > 0° C to 6.0° C? Yes No NA All samples received at a temp. of > 0° C to 6.0° C? Yes No NA All samples received at a temp. of > 0° C to 6.0° C? Yes No NA All samples received at a temp. of > 0° C to 6.0° C? Yes No NA All samples received at a temp. of > 0° C to 6.0° C? Yes No NA Water - Were bubbles absent in VOC vials? Yes No No NA Water - Was there Chlorine Present? Yes No No NA Water - Was there Chlorine Present? Yes No No NA Water - Was there Chlorine Present? Yes No No Na Water - PH acceptable upon receipt? Yes No No Na Water - PH acceptable upon receipt? Yes No No Yes No No Yes No No Yes No Yes No No Yes Yes No Yes No Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	-	-		_			
Samples in proper container/bottle?       Yes       No       NA         Were correct preservatives used and noted?       Yes       No       NA         Preservative added to bottles:       Intact       Broken       Leaking         Samples focondition?       Intact       Yes       No       NA         Sufficient sample volume for indicated test?       Yes       No       Leaking       Intact         All samples received within holding time?       Yes       No       NA       Intact       Intact       Broken       Leaking       Intact         All samples received within holding time?       Yes       No       NA       Intact		•					[2]
Were correct preservatives used and noted?       Yes       No       NA         Preservative added to bottles:       Sample condition?       Intact       Broken       Leaking         Sample condition?       Intact       Yes       No       No       Leaking         Sufficient sample volume for indicated test?       Yes       No       No       Leaking         Were container labels complete (ID, Pros, Date)?       Yes       No       No       All samples received within holding time?         Was an attempt made to cool the samples?       Yes       Mo       NA       Intact         Response when temperature is outside of range:       Sample received at a temp. of > 0° C to 6.0° C?       Yes       No       NA       Intact         Samples received at a temp. of > 0° C to 6.0° C?       Yes       No       NA       Intact	-					Not Present	
Preservative added to bottles:       Intact       Ø Broken       Leaking         Sample Condition?       Intact       Ø Broken       Leaking         Sufficient sample volume for indicate test?       Yes       No         Were container tabels complete (ID, Pres, Date)?       Yes       No         All samples received within holding time?       Yes       No       NA         Was an attempt made to cool the samples?       Yes       No       NA         All samples received at a temp, o!> 0° C to 6.0° C?       Yes       No       NA         Sample Temp, taken and recorded upon receipt?       Yes       No       NA         Water - Ware bubbles absent in VOC vials?       Yes       No       No       NA         Water - Ware bubbles absent in VOC vials?       Yes       No       NA       Water - Ware bubbles absent in VOC vials?       Yes       No       NA         Water - pH acceptable upon receipt?       Yes       No       No       Na       Water - PH acceptable upon receipt?       Yes       No       No Water         Custody Seals present?       Yes       No       No       Phoe       ToS012       SAS:         Case Number:       SDG:       SAS:       TOS012       SAS:       TOS012       Centacted:       Contacte							٢٠٠٠
Sample Condition?       Intact       Broken       Leaking         Sufficient sample volume for indicated test?       Yes       No         Were container labels complete (ID, Pros, Date)?       Yes       No         All samples received within holding time?       Yes       No         Was an attempt made to cool the samples?       Yes       No       NA         All samples received within holding time?       Yes       No       NA         All samples received at a temp, of > 0° C to 6.0° C?       Yes       No       NA         All samples received at a temp, of > 0° C to 6.0° C?       Yes       No       NA         Response when temperature is outside of range:       Sample Temp, taken and recorded upon receipt?       Yes       No       NA         Water - Was there Chlorine Present?       Yes       No       NA       Mater         Water - Was there Chlorine Present?       Yes       No       No Water       No Water         Water - Was there Chlorine Present?       Yes       No       No Water       No Water         Are Samples considered acceptable?       Yes       No       No Water       No Water         Are Samples considered acceptable?       Yes       No Ø       No In Present Ø       Airbill or Sticker?         Case Number:	•		Yes		No L	NA	
Sufficient sample column?       Yes       No       Column         Were container labels complete (ID, Pros, Date)?       Yes       No       No         All samples received within holding time?       Yes       No       NA         Was an attempt made to cool the samples?       Yes       No       NA         All samples received at a temp. of > 0° C to 6.0° C?       Yes       No       NA         All samples received at a temp. of > 0° C to 6.0° C?       Yes       No       NA         Response when temperature is outside of range:       Sample Temp. taken and recorded upon roceipt?       Yes       No       NA         Water - Were bubbles absent in VOC vials?       Yes       No       No       NA       Mo         Water - PH acceptable upon receipt?       Yes       No       No       NA       Mo         Water - pH acceptable upon receipt?       Yes       No       No       No       No         Custody Seals present?       Yes       No       No       No       Present       Mirbill No:         Case Number:       SDG:       SAS:       TOS012       SAS:       TOS012         Any No response should be detailed in the comments section below, if applicable.       In Person:       Client Instructions:         Date Contacted: <td></td> <td>tles:</td> <td></td> <td></td> <td>B</td> <td>L Li</td> <td></td>		tles:			B	L Li	
Were container tabels complete (ID, Pros, Date)?       Yes       No         All samples received within holding time?       Yes       No         Was an attempt made to cool the samples?       Yes       No       NA         All samples received at a temp, of > 0° C to 6.0° C?       Yes       No       NA         All samples received at a temp, of > 0° C to 6.0° C?       Yes       No       NA         Response when temperature is outside of range:       Sample Temp. taken and recorded upon roceipt?       Yes       No       NA         Sample Temp. taken and recorded upon roceipt?       Yes       No       No       NA       Image:         Water - Were bubbles absent in VOC vials?       Yes       No       No       NA       Image:         Water - Ware bubbles absent in VOC vials?       Yes       No       No       NA       Image:         Water - Ware bubbles absent in VOC vials?       Yes       No       NA       Image:         Water - pH acceptable upon receipt?       Yes       No       No       No Water         Custody Seals present?       Yes       No       No       Present         Arbill or Sticker?       Air Bil       Sticker       Not Present       Image:         Case Number:       SDG:       SAS:       T		for indicated tool?		_		Leaking	
All samples received within holding time? Yes Yes No   Was an attempt made to cool the samples? Yes No NA   All samples received at a temp. of > 0° C to 6.0° C? Yes No NA   All samples received at a temp. of > 0° C to 6.0° C? Yes No NA   Response when temperature is outside of range: Sample Temp. taken and recorded upon receipt? Yes No NA   Water - Were bubbles absent in VOC vials? Yes No No NA Mode to Vials   Water - Was there Chlorine Present? Yes No No NA Mode to Vials   Water - Was there Chlorine Present? Yes No No Na Mode to Vials   Water - Was there Chlorine Present? Yes No No Na Mode to Vials   Water - Was there Chlorine Present? Yes No No No Na Mode to Vials   Water - Was there Chlorine Present? Yes No No No Water to Vials   Water - Was there Chlorine Present? Yes No No No Water to Vials   Are Samples considered acceptable? Yes No No Mode to Vials   Custody Seals present? Yes No No Mode to Vials   Airbill or Sticker? Air Bil Sticker Not Present   Case Number: SDG: SAS: TOS012   Client Contacted? Yes No Prove Contacted: Contacted By: Regarding: Comments:	•						
Was an attempt made to cool the samples?       Yes       No       NA		•					
All samples received at a temp, of > 0° C to 6.0° C? Yes No NA   Response when temperature is outside of range:   Sample Temp, taken and recorded upon receipt? Yes No No   Water - Were bubbles absent in VOC vials? Yes No No No Vials   Water - Was there Chlorine Present? Yes No NA Water   Water - pH acceptable upon receipt? Yes No NA Water   Water - pH acceptable upon receipt? Yes No No No   Water - pH acceptable upon receipt? Yes No No No   Water - pH acceptable upon receipt? Yes No No No   Water - pH acceptable upon receipt? Yes No No No   Water - pH acceptable upon receipt? Yes No No No   Custody Seals present? Yes No No Wo   Arbill or Sticker? Air Bil Sticker Not Present Matrible   Airbill No: Case Number: SDG: TOS012 SAS: SAS:   Client Contacted? Yes No Person Contacted: Contact Mode: Phone: Fax:   Client Instructions: Contacted By: Regarding: Comments: Contacted By: Regarding: Contacted By:		-				N10	Ē
Response when temperature is outside of range:   Sample Temp. taken and recorded upon receipt?   Yes   Water - Were bubbles absent in VOC vials?   Yes   Water - Was there Chlorine Present?   Yes   No   Nater - pH acceptable upon receipt?   Yes   No   No   No   No   No   Nater - PH acceptable upon receipt?   Yes   No   Person   Client<				_	_		
Sample Temp, taken and recorded upon receipt?       Yes       No       1.6 To       2.8 °         Water - Were bubbles absent in VOC vials?       Yes       No       No       No Vials         Water - Was there Chlorine Present?       Yes       No       NA       Vials         Water - pH acceptable upon receipt?       Yes       No       No       No       No         Water - pH acceptable upon receipt?       Yes       No       No       No       No       Water         Are Samples considered acceptable?       Yes       No       No       No       No       Water         Custody Seals present?       Yes       No       No       Yes       No       Present         Airbill or Sticker?       Air Bil       Sticker       Not Present       Yes         Airbill No:       Case Number:       SDG: TOS012       SAS: TOS012       ToS012         Any No response should be detailed in the comments section below, if applicable.       In Person: Client Contacted?       Yes       No       Person Contacted: Contacted:       Contacted By:         Client Instructions:       Date Contacted:       Contacted By: Regarding: Comments:       Contacted By:       Regarding: Contacted By:			Tes		140	110	<u></u>
Water - Were bubbles absent in VOC vials? Yes No No No Vials   Water - Was there Chlorine Present? Yes No NA M   Water - pH acceptable upon receipt? Yes No No Water No   Are Samples considered acceptable? Yes No No Water   Custody Seals present? Yes No No Water   Airbill or Sticker? Air Bil Sticker Not Present M   Airbill No: SDG: TOS012 SAS: TOS012 SAS: TOS012 SAS: TOS012   Client Contacted?   Yes No Person Contacted: Email: In Person:   Client Instructions: Email: In Person:   Date Contacted: Contacted By: Regarding: Comments: Contacted By: Regarding: Comments:		-	Yes	$\checkmark$	No	1.6 To	2.8 °
Water - Was there Chlorine Present? Yes No NA M   Water - pH acceptable upon receipt? Yes No No Water   Are Samples considered acceptable? Yes No No   Custody Seals present? Yes No M   Airbill or Sticker? Air Bil Sticker Not Present   Airbill No: Case Number: SDG: TOS012 SAS: TOS012   Any No response should be detailed in the comments section below, if applicable.   Client Contacted? Yes No   Phone: Fax: Email:   Client Instructions: Contacted By: Regarding: Comments:					No		(T) 11
Are amples considered acceptable? Yes   Are Samples considered acceptable? Yes   Custody Seals present? Yes   Air Bil Sticker   Air Bil Sticker   No Air Bil   SDG: SAS:   TOS012   Any No response should be detailed in the comments section below, if applicable.   Client Contacted? Yes   Ontacted? Phone:   Fax: Email:   In Person:   Client Instructions:   Date Contacted:   Comments:			Yes		No	NA	$\checkmark$
Are Samples considered acceptable? Yes No   Custody Seals present? Yes No   Airbill or Sticker? Air Bil Sticker   Airbill No: SDG: SAS:   Case Number: SDG: SAS:   TOS012 TOS012   Any No response should be detailed in the comments section below, if applicable.   Client Contacted? Yes   Ontacted? Phone:   Email: In Person:   Client Instructions: Contacted By:   Regarding: Contacted By:	Water - pH acceptable up	on receipt?	Yes	V	No 🗍	No Water	[]]
Airbill or Sticker?       Air Bil       Sticker       Not Present       ✓         Airbill No:       SDG:       SAS:         Case Number:       SDG:       SAS:         TOS012       TOS012         Any No response should be detailed in the comments section below, if applicable.         Client Contacted?       Yes       ✓       No       Person Contacted:         Contact Mode:       Phone:       Fax:       Email:       In Person:         Client Instructions:       Date Contacted:       Contacted By:         Regarding:       Comments:			Yes	$\checkmark$	No		
Airbill or Sticker?       Air Bil       Sticker       Not Present       ✓         Airbill No:       SDG:       SAS:         Case Number:       SDG:       SAS:         TOS012       TOS012         Any No response should be detailed in the comments section below, if applicable.         Client Contacted?       Yes       ✓       No       Person Contacted:         Contact Mode:       Phone:       Fax:       Email:       In Person:         Client Instructions:       Date Contacted:       Contacted By:         Regarding:       Comments:	Custody Seals present?		Yes		No 🗹		
Airbill No: Case Number: SDG: TOS012  Any No response should be detailed in the comments section below, if applicable. Client Contacted? Yes No Person Contacted: Contact Mode: Phone: Fax: Email: In Person: Client Instructions: Date Contacted:						Not Presen	it 🗹
Case Number:       SDG:       SAS:         TOS012       Any No response should be detailed in the comments section below, if applicable.         Client Contacted?       Yes       No       Person Contacted:         Contact Mode:       Phone:       Fax:       Email:       In Person:         Client Instructions:       Contacted:       Contacted By:         Regarding:       Comments:       Contacted By:							
TOS012         Any No response should be detailed in the comments section below, if applicable.         Client Contacted?       Yes         Yes       No         Person Contacted:         Contact Mode:       Phone:         Fax:       Email:         In Person:         Client Instructions:         Date Contacted:         Contacted By:         Regarding:         Comments:		600					
Any No response should be detailed in the comments section below, if applicable.         Client Contacted?       Yes         Yes       No         Person Contacted:         Contact Mode:       Phone:         Fax:       Email:         In Person:         Client Instructions:         Date Contacted:         Contacted By:         Regarding:         Comments:	Case Number:			:	545:		
Client Contacted?       Yes       No       Person Contacted:         Contact Mode:       Phone:       Fax:       Email:       In Person:         Client Instructions:       Date Contacted:       Contacted By:         Regarding:       Comments:       Comments:		100012					
Client Contacted? Yes No Person Contacted: Contact Mode: Phone: Fax: Email: In Person: Client Instructions: Date Contacted: Contacted By: Regarding: Comments:	Any No response should						
Client Instructions: Date Contacted: Contacted By: Regarding: Comments:	Client Contacted?						
Date Contacted: Contacted By: Regarding: Comments:	Contact Mode:	Phone: Eax:	Email:		In Person:		
Regarding: Comments:	Client Instructions:						
Comments:	Date Contacted:		Contacted By:				
Comments:	Regarding:						
	CorrectiveAction:						
		an an an an an an an an an an an an an a					

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TOS012/012F S19

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APPENDIX B

## WELL INSPECTION CHECKLISTS

P.W. Grosser Consulting, Inc • P.W. Grosser Consulting Engineer & Hydrogeologist, PC 630 Johnson Avenue, Suite 7 • Bohemia, NY 11716 • Branch Location - Seattle, WA PH 631.589.6353 • FX 631.589.8705 • www.pwgrosser.com

**NEW MARKAN AND ST**ANS AND AND STAN



	WELL INS	PECTION CH	IECKLIST	
Well No.	1A	Da	te	4/16/2013
Inspected By	BB & AR	We	ather Conditions	Overcast/44
	WELL EX	TERIOR CON	DITIONS	
CONCRETE PAD		Yes	No	Remarks
Intact:		X		• • • • • • • • • • • • • • • • • • •
Cracked:			<u> </u>	
Missing:			<u> </u>	and 1949
PONDING OF WATER A	ROUND WELL		X	
PROTECTIVE CASING/	MANHOLE/LOCK	X		
Casing/Manhol	e - Intact:	X		
Lock - Intact:		X		Need Key
WELL CASING (STICKU	P) STRAIGHT	<u> </u>		
DESIGNATED MEASURI	NG POINT	X		
WELL IS PROTECTED		X		••••••••••••••••••••••••••••••••••••••
WELL IS CLEARLY MAR	KED	X		na di tana ang tang tang tang tang tang tang

	DEPTH TO WATER (FEET)	104.53
-	DEPTH TO BOTTOM (FEET)	117.50
	PID (ppm)	0.0



WELL IN	SPECTION CH	IECKLIST	
Well No. 1B	Dat	te	4/16/2013
Inspected By BB & AR	We	ather Conditions	Overcast/44
WELL EX	TERIOR CON	DITIONS	
CONCRETE PAD	Yes	No	<u>Remarks</u>
Intact:	X		11.Xm · · · · · · · · · · · · · · · · · · ·
Cracked:		<u> </u>	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X	<u></u>	
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

DEPTH TO WATER (FEET)	105.77
DEPTH TO BOTTOM (FEET)	164.00
PID (ppm)	0.0



	WELL INSPECTION CHECKLIST				
Well No.	1C	Dat	te	4/16/2013	
Inspected By	BB & AR	We	ather Conditions	Overcast/44	
	WELL EX	TERIOR CON	DITIONS		
CONCRETE PAD		Yes	No	<u>Remarks</u>	
Intact:		X			
Cracked:			X		
Missing:			X		
PONDING OF WATE	R AROUND WELL		<u>X</u>		
PROTECTIVE CASIN	G/MANHOLE/LOCK	X			
Casing/Mant	nole - Intact:	X	<u> </u>		
Lock - Intact	:	X			
WELL CASING (STIC	WELL CASING (STICKUP) STRAIGHT				
DESIGNATED MEAS	URING POINT	X			
WELL IS PROTECTED		X			
WELL IS CLEARLY M	ARKED	X			

	DEPTH TO WATER (FEET)	106.44
-	DEPTH TO BOTTOM (FEET)	205.00
	PID (ppm)	0.0



#### WELL INSPECTION CHECKLIST Well No. 4/15/2013 3A Date Inspected By BB & AR Weather Conditions Overcast/48 WELL EXTERIOR CONDITIONS <u>Remarks</u> CONCRETE PAD Yes No Intact: Х Cracked: Χ. Χ\_\_\_ Missing: PONDING OF WATER AROUND WELL X PROTECTIVE CASING/MANHOLE/LOCK Х Casing/Manhole - Intact: Х X\_\_\_ Lock - Intact: WELL CASING (STICKUP) STRAIGHT X DESIGNATED MEASURING POINT X\_\_\_ WELL IS PROTECTED Х WELL IS CLEARLY MARKED Х

DEPTH TO WATER (FEET)	47.93
DEPTH TO BOTTOM (FEET)	65.00
PID (ppm)	0.0



		WELL INS	PECTION CH	ECKLIST	
Well No		3B	Dat	e	4/15/2013
Inspect	ed By	BB & AR	Weather Conditions		Overcast/48
		WELL EX	TERIOR CON	DITIONS	
CONCR	ETE PAD		Yes	No	<u>Remarks</u>
li	ntact:		<u> </u>		
C	Cracked:			<u> </u>	
Ν	Aissing:			<u>X</u>	
PONDIN	IG OF WATER A	ROUND WELL		<u>X</u>	
PROTEC	TIVE CASING/	MANHOLE/LOCK	X	<u> </u>	
C	Casing/Manhole	e - Intact:	<u> </u>		
L	.ock - Intact:		<u> </u>		
WELL C	ASING (STICKU	P) STRAIGHT	<u> </u>		n. 117
DESIGN	ATED MEASURI	NG POINT	<u> </u>		
WELL IS	PROTECTED		<u> </u>		
WELL IS	CLEARLY MAR	KED	X		

### INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	44.62
DEPTH TO BOTTOM (FEET)	112.00
PID (ppm)	0.0

-



WELL INS	SPECTION CH	<u>IECKLIST</u>	
Well No. 3C	Dat	te	4/15/2013
Inspected By BB & AR	We	ather Conditions	Overcast/48
WELL EX	TERIOR CON	DITIONS	
CONCRETE PAD	Yes	No	<u>Remarks</u>
Intact:	X		
Cracked:		<u> </u>	
Missing:		<u> </u>	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	X		
Casing/Manhole - Intact:	X		
Lock - Intact:	X		
WELL CASING (STICKUP) STRAIGHT	X		
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

DEPTH TO WATER (FEET)	44.22
DEPTH TO BOTTOM (FEET)	180.00
PID (ppm)	0.0



		WELL INS	PECTION CH	IECKLIST	
Well	No.	4A	Dat	te	4/15/2013
Insp	ected By	BB & AR	We	ather Conditions_	Overcast/48
		WELL EX	TERIOR CON	DITIONS	
CON	CRETE PAD		Yes	<u>No</u>	<u>Remarks</u>
	Intact:		<u> </u>		.,
	Cracked:			<u> </u>	
	Missing:			<u> </u>	
PON	DING OF WATE	R AROUND WELL		<u> </u>	
PRO	TECTIVE CASIN	G/MANHOLE/LOCK	X		
	Casing/Man	hole - Intact:	X		
	Lock - Intac	t:	X		
WEL	L CASING (STIC	KUP) STRAIGHT	X		
DES	GNATED MEAS	URING POINT	X		
WEL	L IS PROTECTE	D	X		
WEL	L IS CLEARLY M	IARKED	<u> </u>		

### INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	13.8
DEPTH TO BOTTOM (FEET)	30.90
PID (ppm)	0.0

-



		WELL INS	SPECTION CH	ECKLIST	
	Well No.	4B	Dat	te .	4/15/2013
	Inspected By	BB & AR	We	ather Conditions	Overcast/48
		WELL EX	TERIOR CON	DITIONS	
fanita.	CONCRETE PAD		<u>Yes</u>	No	<u>Remarks</u>
	Intact:		X		
	Cracked:			<u> </u>	
<u></u>	Missing:			<u> </u>	
	PONDING OF WATE	R AROUND WELL		<u> </u>	
	PROTECTIVE CASIN	g/manhole/lock		<u> </u>	Missing J- Plug
	Casing/Man	hole - Intact:	X	·	
	Lock - Intact		X	·	
	WELL CASING (STIC	KUP) STRAIGHT	X		
	DESIGNATED MEAS	URING POINT	X	<u> </u>	
	WELL IS PROTECTED	0	X	<u> </u>	
	WELL IS CLEARLY M	ARKED	X	<u> </u>	

### INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET)	13.89
 DEPTH TO BOTTOM (FEET)	80.37
PID (ppm)	0.0

. 14664



WELL IN	SPECTION CH	IECKLIST	
Well No. 4C	Da	te	4/15/2013
Inspected By BB & AR	We	eather Conditions	Overcast/48
WELL EX	TERIOR CON	IDITIONS	
CONCRETE PAD	Yes	No	<u>Remarks</u>
Intact:	X	<u> </u>	ew each fillen an an
Cracked:		<u>X</u>	
Missing:		<u> </u>	de la company d'Aleman en company de la company de la company de la company de la company de la company de la c
PONDING OF WATER AROUND WELL		X	ali i calanti cana
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>		
Casing/Manhole - Intact:	X		
Lock - Intact:	<u> </u>		
WELL CASING (STICKUP) STRAIGHT	X		- AND - AND
DESIGNATED MEASURING POINT	X		
WELL IS PROTECTED	X		
WELL IS CLEARLY MARKED	X		

DEPTH TO WATER (FEET)	9.40
DEPTH TO BOTTOM (FEET)	153.60
PID (ppm)	5.1



	WELL INSPECTION CHECKLIST				
-	Well No.	6AR	_	Date	4/16/2013
	Inspected By	BB & AR	-	Weather Conditions	Overcast/44
	WELL EXTERIOR CONDITIONS				
	CONCRETE PAD		<u>Yes</u>	No	Remarks
<u></u>	Intact:		X		
	Cracked:			X	
(*****	Missing:			X	
	PONDING OF WATE	R AROUND WELL		X	
	PROTECTIVE CASIN	G/MANHOLE/LOCK	X		
54648	Casing/Man	nole - Intact:	X		
	Lock - Intact	:	X		
i dililini y	WELL CASING (STIC	KUP) STRAIGHT	<u> </u>		
	DESIGNATED MEAS	URING POINT	X		
	WELL IS PROTECTED	)	X		
	WELL IS CLEARLY M	ARKED	X		

DEPTH TO WATER (FEET)	91.99
DEPTH TO BOTTOM (FEET)	111.64
PID (ppm)	0.0



10-10		WELL INS	SPECTION CH	IECKLIST	
	Well No.	6B	Dat	te	4/16/2013
	Inspected By	BB & AR	We	ather Conditions	Overcast/44
		WELL EX	TERIOR CON	DITIONS	
int.	CONCRETE PAD		Yes	No	Remarks
	Intact:		X		
	Cracked:			<u> </u>	
<u> </u>	Missing:			<u> </u>	
	PONDING OF WATE	R AROUND WELL		X	
	PROTECTIVE CASIN	g/manhole/lock	X		
	Casing/Manl	hole - Intact:	X		
	Lock - Intact		X		
	WELL CASING (STIC	KUP) STRAIGHT	X		
	DESIGNATED MEAS		X		
	WELL IS PROTECTED	0	X		
-	WELL IS CLEARLY M	IARKED	X		

DEPTH TO WATER (FEET)	94.32
DEPTH TO BOTTOM (FEET)	145.00
PID (ppm)	0.0



	WELL INS	SPECTION CH	IECKLIST	
Well No.	7A	Dat	te	4/16/2013
Inspected By	BB & AR	We	ather Conditions	Overcast/44
	WELL EX	TERIOR CON	DITIONS	
CONCRETE PAD		Yes	No	<u>Remarks</u>
Intact:		<u> </u>		
Cracked:			<u> </u>	
Missing:			X	
PONDING OF WATER AR	OUND WELL		X	
PROTECTIVE CASING/M	ANHOLE/LOCK	X		
Casing/Manhole	- Intact:	X		
Lock - Intact:		X		
WELL CASING (STICKUP)	STRAIGHT	X		
DESIGNATED MEASURIN	G POINT	X		
WELL IS PROTECTED		X		
WELL IS CLEARLY MARK	ED	X		

	DEPTH TO WATER (FEET)	83.69
tanje	DEPTH TO BOTTOM (FEET)	101.28
	PID (ppm)	0.0



WELL INSPECTION CHECKLIST						
Well No.	7B	Da	ate	4/16/2013		
Inspected By	BB & AR	We	eather Conditions	Overcast/44		
	WELL EXT	ERIOR CON	NDITIONS			
CONCRETE PAD		<u>Yes</u>	No	<u>Remarks</u>		
Intact:		X				
Cracked:			X			
Missing:			<u> </u>			
PONDING OF WATE	ER AROUND WELL		<u> </u>			
PROTECTIVE CASIN	IG/MANHOLE/LOCK	<u> </u>				
Casing/Man	hole - Intact:	<u> </u>				
Lock - Intac	t:	<u> </u>				
WELL CASING (STIC	CKUP) STRAIGHT	<u> </u>				
DESIGNATED MEAS	SURING POINT	<u> </u>		·····		
WELL IS PROTECTE	D	X				
WELL IS CLEARLY N	ARKED	<u> </u>				

DEPTH TO WATER (FEET)	83.82
DEPTH TO BOTTOM (FEET)	148.79
PID (ppm)	0.0



	WELL INS	PECTION CH	<u>IECKLIST</u>	
Well No.	7C	Da	te	4/15/2013
Inspected By	BB & AR	We	ather Conditions	Overcast/48
	WELL EX	TERIOR CON	DITIONS	
CONCRETE PAD		Yes	<u>No</u>	<u>Remarks</u>
Intact:		X		
Cracked:			<u> </u>	
Missing:			<u> </u>	
PONDING OF WATER AF	ROUND WELL		<u> </u>	
PROTECTIVE CASING/M	IANHOLE/LOCK	<u> </u>		
Casing/Manhole	- Intact:	<u> </u>		
Lock - Intact:		<u> </u>		
WELL CASING (STICKUP	) STRAIGHT	<u> </u>	····	
DESIGNATED MEASURIN	NG POINT	<u> </u>		
WELL IS PROTECTED		X	••••••••••	·····
WELL IS CLEARLY MARK	ED	X		

	DEPTH TO WATER (FEET)	85.03
هنگ	DEPTH TO BOTTOM (FEET)	178.65
	PID (ppm)	0.1



#### WELL INSPECTION CHECKLIST Well No. 8 4/16/2013 Date Inspected By BB & AR Weather Condition: Sunny/48 WELL EXTERIOR CONDITIONS CONCRETE PAD **Remarks** <u>Yes</u> No Х Intact: Cracked: Х <u>X</u> Missing: PONDING OF WATER AROUND WELL <u>X</u> PROTECTIVE CASING/MANHOLE/LOCK <u>X</u> <u>X</u> Casing/Manhole - Intact: Lock - Intact: X WELL CASING (STICKUP) STRAIGHT X DESIGNATED MEASURING POINT X WELL IS PROTECTED Х WELL IS CLEARLY MARKED Х

DEPTH TO WATER (FEET)	76.91
DEPTH TO BOTTOM (FEET)	84.00
PID (ppm)	0.0



#### WELL INSPECTION CHECKLIST

	Well No.	9	Da	te _	4/16/2013
ijane	Inspected By	BB & AR	We	ather Conditions	Sunny/48
		WELL EXT	ERIOR CON	DITIONS	
	CONCRETE PAD		Yes	No	<u>Remarks</u>
-	Intact:		<u> </u>		
	Cracked:			X	
Anna.	Missing:			X	
	PONDING OF WATE	R AROUND WELL		<u> </u>	
	PROTECTIVE CASIN	G/MANHOLE/LOCK	X		
-	Casing/Man	hole - Intact:	<u> </u>		
	Lock - Intact		<u> </u>		
-	WELL CASING (STIC	KUP) STRAIGHT	<u> </u>		
See.	DESIGNATED MEAS	URING POINT	<u> </u>		
-	WELL IS PROTECTED	0	X		
	WELL IS CLEARLY M	IARKED	<u> </u>		
	WELL IS CLEARLY M	IARKED	<u> </u>		

	DEPTH TO WATER (FEET)	73.81
inte	DEPTH TO BOTTOM (FEET)	85.83
	PID (ppm)	1.8



WELL INSPECTION CHECKLIST			
Well No. 11A	Da	ate	4/16/2013
Inspected By BB & AR	w	eather Conditions	Sunny/48
WELL E	XTERIOR CO	NDITIONS	
CONCRETE PAD	Yes	No	<u>Remarks</u>
Intact:	<u> </u>		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>		
Casing/Manhole - Intact:	<u> </u>		······································
Lock - Intact:	<u> </u>		
WELL CASING (STICKUP) STRAIGHT	<u> </u>	<u></u>	
DESIGNATED MEASURING POINT	<u> </u>		
WELL IS PROTECTED	<u> </u>		
WELL IS CLEARLY MARKED	X		

DEPTH TO WATER (FEET)	73.59
 DEPTH TO BOTTOM (FEET)	77.71
PID (ppm)	0.0



	WELL INSPE		CHECKLIST	
Well No.	11B	_ [	Date	4/16/2013
Inspected By	BB & AR	_ v	Veather Conditions	Sunny/48
	WELL EXTE		ONDITIONS	
CONCRETE PAD		Yes	No	<u>Remarks</u>
Intact:		<u> </u>		
Cracked:			<u> </u>	
Missing:			<u> </u>	
PONDING OF WATER AROUN	D WELL		<u> </u>	
PROTECTIVE CASING/MANH	DLE/LOCK	<u> </u>		
Casing/Manhole - Int	act:	<u> </u>		
Lock - Intact:			<u> </u>	Bolt Only
WELL CASING (STICKUP) STR	AIGHT	<u> </u>		
DESIGNATED MEASURING PC	NINT	<u> </u>		
WELL IS PROTECTED		<u> </u>		
WELL IS CLEARLY MARKED		<u> </u>		

	DEPTH TO WATER (FEET)	73.59
<b>18</b> 40	DEPTH TO BOTTOM (FEET)	121.40
	PID (ppm)	0.0



	WELL INS	PECTION CH	ECKLIST	
Well No.	12A	Dat	.e	4/16/2013
Inspected By	BB & AR	We	ather Conditions	Sunny/48
	WELL EX	TERIOR CON	DITIONS	
CONCRETE PAD		Yes	No	<u>Remarks</u>
Intact:		<u> </u>		
Cracked:			X	
Missing:			X	
PONDING OF WATE	R AROUND WELL		X	
PROTECTIVE CASIN	G/MANHOLE/LOCK	X		
Casing/Man	hole - Intact:	X		
Lock - Intact	::	<u> </u>	<u> </u>	
WELL CASING (STIC	KUP) STRAIGHT	X		
DESIGNATED MEAS	URING POINT	X	<u> </u>	
WELL IS PROTECTED	0	X		
WELL IS CLEARLY M	ARKED	X		

DEPTH TO WATER (FEET)	79.96
DEPTH TO BOTTOM (FEET)	91.00
PID (ppm)	0.0



	WELL INS	PECTION CH	ECKLIST	
Well No.	12B	Dat		4/16/2013
Inspected By			ather Conditions	Sunny/48
	WELL EX	TERIOR CON	DITIONS	
CONCRETE PAD		Yes	No	<u>Remarks</u>
Intact:		<u> </u>		
Cracked:			X	
Missing:			X	
PONDING OF WAT	ER AROUND WELL		X	
PROTECTIVE CASIN	G/MANHOLE/LOCK	X		
Casing/Man	hole - Intact:	X	<u> </u>	
Lock - Intac	:t:	<u>X</u>		
WELL CASING (STIC	CKUP) STRAIGHT	X		
DESIGNATED MEAS	SURING POINT	X		
WELL IS PROTECTE	D	X		
WELL IS CLEARLY M	MARKED	<u>X</u>		

	DEPTH TO WATER (FEET)	80.57
•	DEPTH TO BOTTOM (FEET)	116
	PID (ppm)	0.0

APPENDIX C

### MONITORING WELL SAMPLING LOGS

P.W. Grosser Consulting, Inc • P.W. Grosser Consulting Engineer & Hydrogeologist, PC 630 Johnson Avenue, Suite 7 • Bohemia, NY 11716 • Branch Location - Seattle, WA PH 631.589.6353 • FX 631.589.8705 • <u>www.pwgrosser.com</u>

**UNITATION DE LA POUSSION DE LA POUS L<b>EVENTE DE LA POUSSION DE LA POUSSION DE LA POUSSION DE LA POUSSION DE LA POUSSION DE LA POUSSION DE LA POUSSIO**N



		WELL	SAMPLING	LOG			
CLIENT/PROJECT N	lo		Town of S	outhhampto	n / SHP1301		
WELL No./OWNER			1A / To	own of South	hampton		
SAMPLE I.D.				MW- 1A			
SAMPLING POINT		тос	SA	MPLED BY		BI	3 & AR
DATE SAMPLED		4/16/2013	TI	ME SAMPLED		1	1:20
WELL USE		Monitoring					
STATIC WATER ELEVATION		104.53	FT	. BELOW MEA	SURING POIN	νт _	то
WELL DIAMETER		4	Inches				
TOTAL WELL DEPT	н	117.50	FT	. BELOW MEA	SURING POIN	NT	ТО
		SAMPLI	NG INFORM	ATION			
PURGE METHOD	Submo	ersible Pump	SA	MPLE METHO	DD	Baile	r
PURGE RATE		5 GPM	PU	PURGE TIME		5	
CASING VOLUMES	REMOVED	3	GALLONS			26	
SAMPLE APPEARAN	ICE	Clear	ODORS OBSERVED			N	o Odor
PID (ppm)		0.0	_				
ANALYSIS	Baselin	e Parameters	DA	TE SHIPPED		4/17/2	013
	Initial	<u>SAMPL</u> 1 Vol	ING PARAMI 2 Vol	<u>ETERS</u> 3 Vol	Pre- sampl	ina	
pН	7.29	7.29	7.17	7.47	7.40	ing	
COND	0.001	0.000	0.188	0.204	0.212		
Т	16.78	17.00	17.11	12.90	12.57		
EH	203	202	195	163	178		
TURB	257	263	15.9	0.0	0.00		
D.O.	7.78	7.72	5.52	6.66	6.37		

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		WELL	SAMPLIN	<u>G LOG</u>			
CLIENT/PROJECT No.		······································	Town of	Southhampton	/ SHP1301		
WELL No./OWNER			1B/	own of South	ampton		
SAMPLE I.D.				MW- 1B			
SAMPLING POINT		тос		AMPLED BY		BB	8 & AF
DATE SAMPLED		4/16/2013	_ 1	TIME SAMPLED		1	1:00
WELL USE		Monitoring	_				
STATIC WATER ELEVA	TION	105.77	F	T. BELOW MEA	SURING POI	NT _	тс
WELL DIAMETER		4	Inches				
TOTAL WELL DEPTH		164.00	_ F	T. BELOW MEA	SURING POI	NT _	тс
********	<del></del>	SAMPLI	NG INFOR	MATION			
PURGE METHOD	Subme	rsible Pump		AMPLE METHO	D	Baile	r
PURGE RATE	5	GPM	PURGE TIME		23		
CASING VOLUMES REP	MOVED	3	GALLONS			116	
SAMPLE APPEARANCE		Clear	ODORS OBSERVED		ED	No Odo	
PID (ppm)		0.0	_				
ANALYSIS	Baseline	e Parameters	[	DATE SHIPPED	- <u></u>	4/17/2	013
		CAMPL					
Ir	nitial	1 Vol	NG PARA 2 Vol	<u>VIETEKS</u> 3 Vol	Pre- sampl	ing	
•	7.57	7.39	7.39	7.42	8.12		
	.090	0.087	0.088	0.088	0.001		
	3.24	11.82	11.77	11.80	12.39		
	171	162	161	164	110		
	2.10	5.40	0.70	4.90	1.24		
D.O. 9	9.20	8.93	8.67	8.60	8.59		



		WELL	SAMPLIN	IG LOG			
CLIENT/PROJECT No.			Town of	Southhampton	/ SHP1301		
WELL No./OWNER			1C /	Town of South	nampton		
SAMPLE I.D.				MW-1C	ahad Br		
SAMPLING POINT		тос	_	SAMPLED BY	-	BB & A	
DATE SAMPLED		4/16/2013		TIME SAMPLED	-	10:25	
WELL USE		Monitoring					
TATIC WATER ELEVATION 106.44			FT. BELOW MEA	SURING POIN	NT		
WELL DIAMETER		4	Inches				
TOTAL WELL DEPTH		205	_	FT. BELOW MEA	SURING POIN	NT <u> </u>	
	4	SAMPLI	NG INFOR	RMATION		29 <b>2000</b>	
PURGE METHOD	Subme	rsible Pump	_	SAMPLE METHC	D	Bailer	
PURGE RATE	-	5 GPM	PURGE TIME			40	
CASING VOLUMES REP	MOVED	3	GALLONS			198	
SAMPLE APPEARANCE		Clear		ODORS OBSERVED		No Odo	
PID (ppm)		0.0					
ANALYSIS	Baselin	e Paramters	_	DATE SHIPPED		4/17/2013	
					5		
Ir	nitial	<u>SAMPL</u> 1 Vol	ING PARA 2 Vol	<u>METERS</u> 3 Vol	Pre- sampli	na	
	5.02	7.15	7.10	7.42	7.24		
•	.152	0.095	0.096	0.095	0.079		
	1.40	11.80	12.14	12.16	12.56		
	191	181	186	187	198		
	21.8	4.60	0.90	0.60	121		
D.O. 9	9.81	9.22	11.72	9.37	8.53		



		WELL :	SAMPLIN	I <u>G LOG</u>			
CLIENT/PROJECT	No		Town of	Southhampton	/ SHP1301	• and 11 1 1 1 1 1 1	
WELL No./OWNER			3A /	Town of South	nampton		
SAMPLE I.D.	_			MW- 3A	2		
SAMPLING POINT		тос	_ :	SAMPLED BY		BB & AR	
DATE SAMPLED	_	4/15/2013	- -	TIME SAMPLED		12:10	
WELL USE		Monitoring	_				
STATIC WATER EL	EVATION	47.93		FT. BELOW MEA	SURING POI	INT <u>TO</u>	
WELL DIAMETER		4	Inches				
TOTAL WELL DEP	ТН	65.00	_	FT. BELOW MEA	SURING POI	INT <u>TO</u>	
	<u>9/81.07.1</u>	SAMPLIN	IG INFOR	MATION			
PURGE METHOD	Subr	nersible Pump	_	SAMPLE METHO	D	Bailer	
PURGE RATE		5 GPM	PURGE TIME			7	
CASING VOLUMES	S REMOVED	3	GALLONS			34	
SAMPLE APPEARA	NCE	Clear	ODORS OBSERVED			No Odo	
PID (ppm)		0.0					
ANALYSIS	Basel	ine Parameters	-	DATE SHIPPED		4/16/2013	
		SAMPLI	NG PARA	METERS			
	Initial	1 Vol	2 Vol	3 Vol	Pre- samp	ling	
pH	7.39	7.26	7.20	7.12	7.10		
COND T	0.294 13.02	0.271 13.19	0.264 13.19	0.260 13.19	0.258 13.18		
ÉH	124	156	163	166	168		
		19.8	7.20	3.00	1.60		
TURB	94.7	IYX	/ ///				

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		WELL	SAMPLIN	<u>G LOG</u>			
CLIENT/PROJECT No			Town of	Southhampton /	SHP1301		
WELL No./OWNER			3B / 1	Fown of Southhar	npton		
SAMPLE I.D.			MW- 3B (	MW- 3B- MS, MW-	3B- MSD)		
SAMPLING POINT		тос		SAMPLED BY	_	BB & A	<u>AR</u>
DATE SAMPLED		4/15/2013	-	TIME SAMPLED		10:2	0
WELL USE		Monitoring	_				
STATIC WATER ELEVATION		44.62		T. BELOW MEASU	RING POIN	т	го
WELL DIAMETER		4	Inches				
TOTAL WELL DEPTH		112.00	_ 1	T. BELOW MEASU	RING POIN	T	го
		SAMPLI	NG INFOR	MATION			- 1/12
PURGE METHOD	Subme	rsible Pump		SAMPLE METHOD		Bailer	
PURGE RATE		5 GPM	PURGE TIME			28	
CASING VOLUMES RE	MOVED	3	GALLONS			135	
SAMPLE APPEARANC	E	Clear	_ (	DORS OBSERVED	) _	No Odor	
PID (ppm)		0.0	_				
ANALYSIS	Baselin	e Paramaters	_ 1	DATE SHIPPED	2	4/16/2013	3
aine aine ann an ann an ann an ann an ann an ann an a		SAMDU		METEDS			
	Initial	1 Vol	NG PARA 2 Vol		re- samplir	ng	
рН	8.44	6.10	5.65	5.99	6.44		
	0.183	0.238	0.234	0.232	0.231		
	12.50	12.64	12.60	12.59	12.58		
EH	16	- 69	- 70	- 69	- 69		
TURB	17.7	6.00	0.40	0.00	0.00		
D.O.	4.29	0.95	0.78	0.70	0.67		

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		WELL	SAMPLIN	<u>G LOG</u>		
CLIENT/PROJECT N	lo		Town of	Southhampton	/ SHP1301	
WELL No./OWNER			3C / 1	own of Southh	ampton	
SAMPLE I.D.	<u></u>			MW- 3C		
SAMPLING POINT		тос	S	AMPLED BY	-	BB & AR
DATE SAMPLED		4/15/2013	т	IME SAMPLED	_	11:40
WELL USE		Monitoring				
STATIC WATER ELEVATION44.22			F	T. BELOW MEAS		NT <u>TO</u>
WELL DIAMETER		4	Inches			
TOTAL WELL DEPT	Ή	180	_ F	T. BELOW MEAS	URING POI	NT <u>TO</u>
		SAMPLI	NG INFOR	MATION	0 <del></del>	
PURGE METHOD	Subm	ersible Pump	s	AMPLE METHO	D	Bailer
PURGE RATE		5 GPM	P	URGE TIME	-	55
CASING VOLUMES	REMOVED	3		GALLONS		270
SAMPLE APPEARAN	NCE	Clear		DORS OBSERVE	D.	No Odoi
PID (ppm)		0.0				
ANALYSIS	Baseli	ne Parameters	C	DATE SHIPPED		4/16/2013
	- <u></u>	SAMPL	ING PARA	METERS		
	Initial	1 Vol	2 Vol	3 Vol	Pre- sampli	ng
pH	7.24	7.35	7.13	6.96	7.15	
COND T	0.205 13.61	0.201 12.62	0.194 12.54	0.193 12.53	0.191 12.57	
EH	- 21	16	69	85	98	
TURB	5.00	0.00	0.00	0.00	0.00	
D.O.	4.55	0.93	3.89	1.67	1.67	



		WELL	SAMPLING	LOG		
CLIENT/PROJECT N	lo		Town of S	outhhampton ,	/ SHP1301	
WELL No./OWNER			4A / T	own of Southha	ampton	
SAMPLE I.D.				MW- 4A		
SAMPLING POINT		тос	S/	AMPLED BY	-	BB & AR
DATE SAMPLED		4/15/2013	_ TI	IME SAMPLED	_	13:15
WELL USE		Monitoring	_			
STATIC WATER ELEVATION 13.8			F	T. BELOW MEAS	URING POIN	NT <u>TO</u>
WELL DIAMETER		4	Inches			
TOTAL WELL DEPT	н	30.90	_ F	T. BELOW MEAS	URING POI	NT <u>TO</u>
		SAMPLI	NG INFORM	IATION		
PURGE METHOD	Subme	ersible Pump	S	AMPLE METHOD	)	Bailer
PURGE RATE		5 GPM	PI	URGE TIME		7
CASING VOLUMES	REMOVED	3	G	ALLONS		34
SAMPLE APPEARAN	ICE	Clear	0	DORS OBSERVE	D_	No Odor
PID (ppm)		0.0				
ANALYSIS	Baselir	e Parameters	_ D	ATE SHIPPED		4/16/2013
		SAMPL	ING PARAN			
	Initial	1 Vol	2 Vol		Pre- sampli	ng
pH COND	6.06 0.255	5.85 0.258	5.87 0.267	5.93 0.268	6.04 0.268	
T	11.72	11.14	11.14	11.13	11.17	
EH	166	225	231	234	235	
TURB	76.4	7.90	3.80	1.60	0.10	
D.O.	12.66	7.53	7.49	7.38	7.33	

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		WELL	SAMPLING	LOG			
CLIENT/PROJECT No.			Town of So	outhhampton /	SHP1301		
WELL No./OWNER	<del></del>		4B / To	wn of Southha	mpton		
SAMPLE I.D.				MW- 4B			
SAMPLING POINT		тос	SA	MPLED BY	-	BB & AR	
DATE SAMPLED	4	/15/2013	TI	ME SAMPLED	-	14:00	
WELL USE	N	Monitoring	_				
STATIC WATER ELEVA	ΓΙΟΝ	13.89	FT	. BELOW MEASU	JRING POIN	NT <u>TOC</u>	
WELL DIAMETER		4	Inches				
TOTAL WELL DEPTH	H <u>80.37</u>		FT. BELOW MEASURING PO			NT <u>TOC</u>	
	hat///	SAMPLI	NG INFORM	ATION			
PURGE METHOD	Submers	sible Pump	SA	MPLE METHOD	·····	Bailer	
PURGE RATE	5	GPM	PURGE TIME			27	
CASING VOLUMES REM	IOVED	3	GALLONS			133	
SAMPLE APPEARANCE		Clear	ODORS OBSERVED			No Odor	
PID (ppm)		0.0					
ANALYSIS	Baseline	Parameters	_ DA	TE SHIPPED	<u></u>	4/16/2013	
In	itial	<u>SAMPLI</u> 1 Vol	NG PARAM 2 Vol		Pre- sampli	na	
	.83	6.87	7.21	7.28	7.36		
	301	0.305	0.327	0.353	0.362		
	3.15	13.12	13.20	13.20	13.19		
	82	161	76	16	10		
	.10	0.00	0.00	0.00	0.00		
	.69	4.37	2.07	1.67	1.44		



		WELL	SAMPLIN	ig log		
CLIENT/PROJECT N	o	and the second second	Town of	Southhampton /	SHP1301	
WELL No./OWNER			4C /	Town of Southha	mpton	
SAMPLE I.D.				MW-4C		
SAMPLING POINT		TOC	_	SAMPLED BY	_	BB & AR
DATE SAMPLED		4/15/2013	_	TIME SAMPLED	_	15:10
WELL USE		Monitoring	_			
STATIC WATER ELE	STATIC WATER ELEVATION9.4			FT. BELOW MEAS	JRING POIN	т <u>то</u>
WELL DIAMETER		4	Inches			
TOTAL WELL DEPTH	4	153.60		FT. BELOW MEAS	JRING POIN	т <u>то</u>
		SAMPLI	NG INFOR	RMATION	<u></u>	
PURGE METHOD	Subme	rsible Pump	_	SAMPLE METHOD		Bailer
PURGE RATE		5 GPM	_	PURGE TIME		58
CASING VOLUMES	REMOVED	3		GALLONS		288
SAMPLE APPEARAN	CE	Clear		ODORS OBSERVE	D _	No Odor
PID (ppm)		5.0				
ANALYSIS	Baselin	e Parameters		DATE SHIPPED	2	4/16/2013
			NG PARA			
pН	Initial 7.93	1 Vol 8.02	2 Vol 8.20	3 Vol 1 8.09	Pre- samplir 8.08	ng
COND	0.322	0.323	0.415	0.393	0.391	
Т	13.12	13.09	12.87	12.85	12.85	
EH	10	86	55	58	59	
TURB	3.40	0.40	7.60	2.20	1.40	
D.O.	5.15	3.39	4.01	3.78	3.80	



			WELL	SAMPLI	NG LOG				
CLIENT/PROJECT No.				Town o	f Southhampto	n / S⊦	IP1301		
WELL No./OWNER				11A,	/ Town of South	nham	pton		
SAMPLE I.D.					MW-11A				
SAMPLING POINT		7	тос		SAMPLED BY		-		BB & AR
DATE SAMPLED		4/16	5/2013	TIME SAMPLED				15:05	
WELL USE		Mon	itoring						
STATIC WATER ELEVATION			73.59		FT. BELOW MEA	ASURI	NG POII	ΝТ	тос
WELL DIAMETER			4	Inches					
TOTAL WELL DEPTH			77.71	FT. BELOW MEASURING POIN		NT	тос		
			SAMPLI	NG INFO	RMATION				
PURGE METHOD	Subr	nersible	Pump	_	SAMPLE METH	DD .		Ba	iler
PURGE RATE		5 GPM			PURGE TIME				5
CASING VOLUMES REM	IOVED		3		GALLONS	-		1	0
SAMPLE APPEARANCE		Τι	urbid	ODORS OBSERVED			-		No Odor
PID (ppm)		0.0							
ANALYSIS	Base	line Para	meters		DATE SHIPPED	-		4/17	/2013
		·	SAMPL	ING PARA	METERS				<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>
	Initial		Vol	2 Vol	3 Vol	Pre	sampli	ng	
pH COND	6.80 0.468		5.76 .468	6.74 0.468	6.71 0.468		6.70 0.469		
	13.86		.408 3.86	13.87	13.86		13.86		
ĒH	23		21	20	18		17		
TURB	285		208	152	108		79.9		
D.O.	0.53		).47	0.46	0.42		0.42		



VA/PER R	CANON	INC	100
WELL	SAMPL	ING	LOG

CLIENT/PROJEC⊤ No.	_	Town of Southhampton / SHP1301					
WELL No./OWNER	-		11B / To	wn of Southha	mpton		
SAMPLE I.D.	_			MW-11B			
SAMPLING POINT	_	тос	SA	MPLED BY	_	BB & AR	
DATE SAMPLED	-	4/16/2013	TIM	1E SAMPLED	-	14:40	
WELL USE	-	Monitoring	onitoring				
STATIC WATER ELEVAT	ION	73.59	FT. BELOW MEASURING POINT		NT <u>TC</u>		
WELL DIAMETER		4	Inches				
TOTAL WELL DEPTH		121.4	FT.	BELOW MEASU	IRING POIN	NT <u>TC</u>	
<u>zogół za sko</u> da za skoda	- /·	SAMPLI	NG INFORMA	TION	<u></u>		
PURGE METHOD	Sub	mersible Pump	SA	MPLE METHOD		Bailer	
PURGE RATE		5 GPM	PUI	PURGE TIME		19	
CASING VOLUMES REM	OVED	3	GA	GALLONS		95.62	
SAMPLE APPEARANCE	_	Turbid	ODORS OBSERVED		) _	No Odo	
PID (ppm)		0.0					
ANALYSIS	Baselir	e Parameters	DA	TE SHIPPED		4/17/2013	
<u></u>		SAMPL	ING PARAME	TERS			
	Initial	1 Vol	2 Vol		re- sampli	ng	
pH	7.89	7.32	7.17	7.36	7.52		
COND T	0.489 14.85	0.514 14.22	0.525 13.88	0.214 13.44	0.167 13.35		
EH	132	158	169	168	170		
TURB	28.6	10.6	10.1	188	126		
	- 0.0		7.93		8.98		



		WELL S	SAMPLIN	IG LOG			
CLIENT/PROJECT N	o	Town of Southhampton / SHP1301					
WELL No./OWNER			12A /	Town of South	hampton		
SAMPLE I.D.	_			MW- 12A			
SAMPLING POINT	_	тос	_	SAMPLED BY			3B & AR
DATE SAMPLED		4/16/2013	_	TIME SAMPLED			13:00
WELL USE		Monitoring	_				
STATIC WATER ELE	VATION	79.96	_	FT. BELOW MEAS	SURING PO	INT	тос
WELL DIAMETER		4	Inches				
TOTAL WELL DEPTH	1	91	_	FT. BELOW MEAS	SURING PO	INT	TOC
		SAMPLIN	IG INFOF	RMATION			
PURGE METHOD	Subm	ersible Pump	_	SAMPLE METHO	D	Bai	ler
PURGE RATE		5 GPM	PURGE TIME			4.5	
CASING VOLUMES F	REMOVED	3	_	GALLONS		2	2
SAMPLE APPEARAN	CE	Clear	_	ODORS OBSERV	ED	N	No Odor
PID (ppm)		0.0	-				
ANALYSIS	Baseli	ne Parameters	_	DATE SHIPPED		4/17/	2013
	Initial			METERS	Pre- comp	ling	
nH	Initial	1 Vol	2 Vol	3 Vol	Pre- samp	ling	
pH	7.57	1 Vol 7.54	2 Vol 7.53	3 Vol 7.53	7.53	ling	
COND	7.57 0.263	1 Vol 7.54 0.282	2 Vol 7.53 0.288	3 Vol 7.53 0.286	7.53 0.286	ling	
COND T	7.57 0.263 14.57	1 Vol 7.54 0.282 12.85	2 Vol 7.53 0.288 12.86	3 Vol 7.53 0.286 12.86	7.53 0.286 12.86	ling	
COND	7.57 0.263	1 Vol 7.54 0.282	2 Vol 7.53 0.288	3 Vol 7.53 0.286	7.53 0.286	ling	

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		WELL	SAMPLING	LOG			
CLIENT/PROJECT N	o		Town of So	outhhamptor	n / SHP1301		
WELL No./OWNER			12B / To	own of South	nhampton		
SAMPLE I.D.				MW- 12B			
SAMPLING POINT		тос	SA	MPLED BY		BE	3 & AR
DATE SAMPLED		4/16/2013	TI	ME SAMPLED		1	2:40
WELL USE		Monitoring					
STATIC WATER ELE	VATION	80.57	FT	. BELOW MEA	ASURING POI	NT _	то
WELL DIAMETER		4	Inches				
TOTAL WELL DEPT	H <u>116</u>		FT. BELOW MEASURING PC			NT _	TO
		SAMPLI	NG INFORM	ATION			. <u></u>
PURGE METHOD	Subme	ersible Pump	SA	MPLE METHO	DD	Baile	er
PURGE RATE		5 GPM	PURGE TIME			14.	5
CASING VOLUMES	REMOVED	3	ĠA	GALLONS		72	
SAMPLE APPEARAN		Clear	O		VED	N	o Odor
PID (ppm)		0.0					
ANALYSIS	Baselin	e Parameters	DA	ATE SHIPPED		4/17/2	2013
	Initial	<u>SAMPL</u> 1 Vol	ING PARAM 2 Vol	<u>ETERS</u> 3 Vol	Pre- samp	lina	
рН	7.30	7.72	7.73	7.73	7.67	5	
COND	0.128	0.320	0.322	0.324	0.002		
Т	14.07	12.62	12.60	12.60	13.85		
	184	168	165	161	176		
EH				-			
EH TURB	5.70	0.10	0.30	0.00	1.32		



	WELL SAN	APLING LOG	
CLIENT/PROJECT No.	То	wn of Southhampton / SHP1	301
WELL No./OWNER	LE	A- PRI / Town of Southhamp	ton
SAMPLE I.D.		LEA- PRI	
SAMPLING POINT	тос	SAMPLED BY	BB & AR
DATE SAMPLED	4/15/2013	TIME SAMPLED	8:55
WELL USE	NA		
STATIC WATER ELEVATIO	N <u>NA</u>	FT. BELOW MEASURING	POINT TOC
WELL DIAMETER	<u>NA</u> In	nches	
TOTAL WELL DEPTH	NA	FT. BELOW MEASURING	POINT TOC
	SAMPLING	INFORMATION	
PURGE METHOD	NA	SAMPLE METHOD	Bailer
PURGE RATE	-	PURGE TIME	-
CASING VOLUMES REMOV	′ED	GALLONS	-
SAMPLE APPEARANCE	Turbid	ODORS OBSERVED	Leachate
PID (ppm)			
	ne Parameters	DATE SHIPPED	4/16/2013

		SAMP	<u>'LING PARAMI</u>	<u>ETERS</u>	
	Initial	1 Vol	2 Vol	3 Vol	Pre- sampling
рН	-	-	-	-	5.42
COND	-	-	-	-	2.620
т	-	-	-	-	13.29
EH	-	-	-	-	- 8
TURB	-	-	-	-	104
D.O.	-	-	-	-	7.62



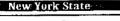
	<u>WELL SA</u>	MPLING LOG				
CLIENT/PROJECT No.	Тс	own of Southhampton / SHP	1301			
WELL No./OWNER	LEA- SEC / Town of Southhampton					
SAMPLE I.D.		LEA- SEC				
SAMPLING POINT	тос	SAMPLED BY	BB & AR			
DATE SAMPLED	4/15/2013	TIME SAMPLED	9:00			
WELL USE	NA					
STATIC WATER ELEVATION	NA	FT. BELOW MEASURING	POINT TOC			
WELL DIAMETER	NA	nches				
TOTAL WELL DEPTH	NA	FT. BELOW MEASURING	POINT TOC			
	SAMPLING	INFORMATION				
PURGE METHOD	NA	SAMPLE METHOD	Bailer			
PURGE RATE		PURGE TIME	-			
CASING VOLUMES REMOVI	ED	GALLONS	-			
	Turbid	ODORS OBSERVED	No Odor			
SAMPLE APPEARANCE						
PID (ppm)	-					

	Initial	1 Vol	2 Vol	3 Vol	Pre- sampling
рН	-	-	-	-	6.53
COND	-	-	-	-	0.639
Т	-	-	-	-	9.82
EH	-	-	-	-	45
TURB	-	-	-	-	21.1
D.O.	-	-	-	-	5.43

APPENDIX D 6 NYCRR Part 360-2: LANDFILLS

**NEW KORV**ANSKE ETANSKE MALANSKE N**EW KORVANSKE** TRANSKE ANDRE SE

P.W. Grosser Consulting, Inc • P.W. Grosser Consulting Engineer & Hydrogeologist, PC 630 Johnson Avenue, Suite 7 • Bohemia, NY 11716 • Branch Location - Seattle, WA PH 631.589.6353 • FX 631.589.8705 • <u>www.pwgrosser.com</u>





**Division of Solid & Hazardous Materials** 

# 6 NYCRR Part 360 Solid Waste Management Facilities

Title 6 of the Official Compilation of Codes, Rules and Regulations

Revised November 24, 1999

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New York State Department of Environmental Conservation

George E. Pataki, Governor

Erin M. Crotty, Acting Commissioner

#### 6 NYCRR PART 360

#### SOLID WASTE MANAGEMENT FACILITIES

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(c) Challenge test		
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#### PREFACE

Organization and Numbering of Statutes and Regulations

The Environmental Conservation Law (ECL) is Chapter 43-B of the Consolidated Laws of New York.

Numbering system in the ECL:

Example

Article 25 Title 19 Section 25-1910 subdivision 25-1910.5 paragraph 25-1910.5(a)

This may be written as ECL 25-1910.5(a)

The regulations of the department are Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (NYCRR).

Numbering system in the department's regulations:

Example

This may be written as 6 NYCRR Part 360-2.13(k)(3)(iii)( $\underline{b}$ )( $\underline{l}$ )( $\underline{i}$ )

This numbering system is described in the preface to the department's regulations, and in the regulations of the Department of State (19 NYCRR 261.4(b)).

#### GENERAL PROVISIONS

service area under local laws or ordinances adopted or to be adopted under section 120-aa of the General Municipal Law.

(e) Supervision and certification of construction. The construction of a solid waste management facility and each stage of one must be undertaken under the supervision of an individual licensed to practice engineering in the State of New York. Upon completion of construction, that individual must certify in writing that the construction is in accordance with the terms of the applicable permit and tested in accordance with generally accepted engineering practices. Except as specified elsewhere in this Part, this certification must be submitted to the department within three months after completion of construction and must include as-built plans. The operator must notify the department, in writing, of the date when solid waste will be first received at the facility.

(f) Cessation of construction or operation activities. If construction or operation activities started under a permit issued pursuant to this Part cease for a period of 12 consecutive months, the permit automatically expires on the last day of the 12th month following cessation of activities. There is no automatic expiration when the cessation of construction or operation is caused by factors beyond the reasonable control of the permittee, as determined by the department, or when such cessation is in accordance with the provisions of the permit.

(g) Department inspection of activities. The permittee must authorize the commissioner or authorized department staff, after presentation of department credentials, to undertake inspections in accordance with subdivision 360-1.4(b) of this Part.

(h) Recyclables recovery. In the case of a permit relating to a landfill (other than one used exclusively for ash residue, clean fill or construction and demolition debris), a solid waste incinerator (other than one used exclusively to incinerate regulated medical waste), a refuse-derived fuel processing facility, a construction and demolition debris processing facility, a mixed solid waste composting facility or a transfer station (other than one used exclusively for transfer of regulated medical waste), the permit must contain a condition that the permittee must not accept at the facility solid waste which was generated within a municipality that has either not completed a comprehensive recycling analysis or is not included in another municipality's comprehensive recycling analysis satisfying the requirements of subdivision 360-1.9(f) of this Part which has been approved by the department and implemented the recyclables recovery program determined to be feasible by the analysis.

(i) Approved design capacity. Every permit must set forth the facility's approved design capacity.

#### Section 360-1.12 Financial assurance,

(a) Applicability.

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(1) In addition to any financial assurance requirements specifically addressed in a Subpart of this Part, the department may require a form of financial assurance, acceptable to the department, from a permit holder, and conditioned upon compliance with the terms of the permit issued to such holder pursuant to this Part.

(2) A form of financial assurance, acceptable to the department, will be required to cover the cost of having the facility properly closed for facilities where the operator and the owner are not the same person.

(3) A form of financial assurance, acceptable to the department, may be required from registered facilities.

(b) Liability coverage. A form of financial assurance for claims arising out of injury to persons or property, relative to either sudden and accidental occurrences or non-sudden and accidental occurrences, may be required for solid waste management facilities. Such financial assurance may be in the form of liability insurance, self-insurance or other form acceptable to the department. The amount of such financial assurance is to be set by the department.

(c) Forms of financial assurance. Section 373-2.8 of this Title provides guidance on the criteria and wording of financial assurance instruments that the department will consider in assessing the acceptability of financial assurance mechanisms.

# Section 360-1.13 Research, development and demonstration permits.

(a) Permit. The department may issue a research, development and demonstration permit for any solid waste management facility proposing to utilize an innovative and experimental solid waste management technology or process, including a beneficial use demonstration project. The application for such permit must clearly demonstrate adequate protection of public health and the environment and be consistent with federal and State laws and regulations and this Part. A permit issued under this section must not be for an activity of a continuing nature. The department may, at its discretion, waive or modify some or all of the application requirements for permits issued under this section.

(b) Permit application. An application for a permit issued under this section must:

(1) describe the proposed activity in detail;

(2) describe how the applicant intends to provide for the receipt and treatment or disposal by the proposed facility of only those types and quantities of solid waste necessary to determine the efficiency and performance capabilities of the technology or process and the effects of such technology or process on human health and the environment; and how the applicant intends to protect human health and the environment in the conduct of the project; and

(3) state that the applicant will provide, on a timely basis, the department with any information obtained as a result of the activity undertaken under the permit. The information must be submitted in accordance with schedules identified in the permit.

(c) Permit restrictions. The permit must:

 provide for the construction of facilities as necessary, and for the operation of the facility for not longer than one year (unless renewed as provided in subdivision (d) of this section);

(2) provide for the receipt and treatment or disposal by the facility of only those types and quantities of solid waste that the department determines necessary to determine, the efficiency and performance capabilities of the technology or process and the effects of such technology or process on human health and the environment;

(3) include such requirements as the department determines necessary to protect human health and the environment (including, but not limited to requirements regarding monitoring, operation, financial assurance and closure, and such requirements as the department deems necessary regarding testing and providing of information to the commissioner about the operation of the facility); and

(4) provide that the commissioner, without affording the permittee a prior opportunity for a hearing, may order an immediate termination of all operations at the facility at any time the commissioner determines that termination is necessary to protect human health and the environment, provided that the permittee is provided an opportunity for a hearing on the termination issue no later than 10 days after the issuance of the order and a decision is rendered no more than 20 days after the close of the hearing record. Nothing in this Part shall preclude or affect the commissioner's authority to issue summary abatement orders under section 71-0301 of the ECL or to take emergency actions summarily suspending a permit under section 401.3 of the State Administrative Procedure Act.

(d) Renewal. Permits issued under this section may be renewed not more than three times, unless the permittee demonstrates to the satisfaction of the department that a longer time period is required to adequately assess the long-term environmental effects of the technology or process being studied under authority of the permit. Each renewal period will not exceed one year and will be conditioned upon compliance with this section.

# Section 360-1.14 Operational requirements for all solid waste management facilities.

(a) Applicability. Except as elsewhere provided in this Part, any person who designs, constructs, maintains or operates any solid waste management facility subject to this Part must do so in conformance with the requirements of this section.

(b) Water.

 Solid waste must not be deposited in, and must be prevented from, entering surface waters or groundwaters.

(2) Leachate. All solid waste management facilities must be constructed, operated and closed in a manner that minimizes the generation of leachate that must be disposed of and prevent the migration of leachate into surface and groundwaters. Leachate must not be allowed to drain or discharge into surface water except pursuant to a State Pollutant Discharge Elimination System permit and must not cause or contribute to contravention of groundwater quality standards established by the department pursuant to ECL section 17-0301.

(c) Public access. Public access to facilities and receipt of solid waste may occur only when an attendant is on duty. This provision does not apply to combustion-powered equipment used at the facility. Sound levels for such equipment must not exceed 80 decibels (A) at a distance of 50 feet from the operating equipment.

(q) Open burning. Open burning at a solid wastc management facility is prohibited, except for the infrequent burning of agricultural wastes, silvicultural wastes, land clearing debris (excluding stumps), diseased trees or debris from emergency cleanup operation, pursuant to a restricted burning permit issued by the department. Measures must be taken immediately to extinguish any non-permitted open burning and the department must be notified that it has occurred.

(r) Department-approved facilities. Solid waste resulting from industrial or commercial operations, sludge, and septage must be processed, disposed, used or otherwise managed only at facilities that the department has specifically approved for such management of that specific waste.

(s) Emergency numbers. Telephone numbers to emergency response agencies such as the local police department, fire department, ambulance and hospital must be conspicuously posted in all areas where telephones are available for use at the facility.

(t) Facilities. Where operating personnel are required, certain facilities must be provided (except in the case of composting facilities using aerated static pile or windrow techniques and land application facilities). These facilities include adequately heated and lighted shelters, a safe drinking water supply, sanitary toilet facilities and radio or telephone communication.

(u) Facility operator requirements.

(1) Except as otherwise specified in a Subpart of this Part pertaining to a specific type of solid waste management facility, the facility operator, during all hours of operation, must have available for use, a copy of the permit issued pursuant to this Part, including conditions, a copy of the operation and maintenance report, the contingency plan and the most recent annual report.

(2) Operation of every landfill, and other solid waste management facilities as directed by the department, must be conducted under the direction of a facility operator. The facility operator must attend and successfully complete within 12 months from their date of employment, a course of instruction in solid waste management procedures relevant to the facility at which the facility operator is employed. The course must be provided or approved by the department. The department will issue a certificate of attendance to each individual successfully completing the course. Attendance at a department-approved course before the effective date of this Part will adequately satisfy these training requirements.

(v) Salvaging. Salvaging, if permitted by the facility owner or operator, must be controlled by the facility owner or operator within a designated salvage area and must not interfere with facility operations or create hazards or nuisances.

(w) Closure. The owner or operator of any active or inactive solid waste management facility must, upon termination of use, properly close that facility and must monitor and maintain such closure so as to minimize the need for further maintenance or corrective actions and to prevent or remedy adverse environmental or health impacts such as, but not limited to, contravention of surface water and groundwater quality standards, gas migration, odors Termination of use includes those and vectors. situations where a facility has not received solid waste for more than one year, unless otherwise provided by permit, or if the permit has expired. Termination of use also results from permit denial or order of the commissioner or of a court. Specific closure measures which may also include corrective actions as specified in this Part are subject to approval by the department.

#### Section 360-1.15 Beneficial use.

(a) Applicability.

(1) This section applies to materials that, before being beneficially used (as determined by the department), were solid waste. This section does not apply to solid wastes subject to regulation under Subpart 360-4 of this Part, except in the manner identified in subdivision 360-1.15(b) of this Part.

(2) Beneficial use determinations granted by the department before the effective date of this section shall remain in effect, subject to all conditions contained therein, unless specifically addressed by subsequent department action.

(b) Solid waste cessation. The following items are not considered solid waste for the purposes of this Part when used as described in this subdivision: (1) materials identified in subparagraphs 371.1(e)(1)(vi)-(viii) of this Title that cease to be solid waste under the conditions identified in those subparagraphs:

(2) compost and other distribution and marketing (D&M) products that satisfy the applicable requirements under Subpart 360-5 of this Part;

(3) unadulterated wood, wood chips, or bark from land clearing, logging operations, utility line clearing and maintenance operations, pulp and paper production, and wood products manufacturing, when these materials are placed in commerce for service as mulch, landscaping, animal bedding, erosion control, wood fuel production, and bulking agent at a compost facility operated in compliance with Subpart 360-5 of this Part;

(4) uncontaminated newspaper or newsprint when used as animal bedding;

(5) uncontaminated glass when used as a substitute for conventional aggregate in asphalt or subgrade applications;

(6) tire chips when used as an aggregate for road base materials or asphalt pavements in accordance with New York State Department of Transportation standard specifications, or whole tires or tire chips when used for energy recovery;

(7) uncontaminated soil which has been excavated as part of a construction project, and which is being used as a fill material, in place of soil native to the site of disposition;

(8) nonhazardous, contaminated soil which has been excavated as part of a construction project, other than a department-approved or undertaken inactive hazardous waste disposal site remediation program, and which is used as backfill for the same excavation or excavations containing similar contaminants at the same stte. Excess materials on these projects are subject to the requirements of this Part. (Note: use of in-place and stockpiled soil from a site being converted to a realty subdivision, as defined by the Public Health Law (10 NYCRR 72), must be approved by the local health department.);

(9) nonhazardous petroleum contaminated soil which has been decontaminated to the satisfaction of the department and is being used in a manner acceptable to the department; (10) solid wastes which are approved in advance, in writing, by the department for use as daily cover material or other landfill liner or final cover system components pursuant to the provisions of subdivision 360-2.13(w) of this Part when these materials are received at the landfill;

(11) recognizable, uncontaminated concrete and concrete products, asphalt pavement, brick, glass, soil and rock placed in commerce for service as a substitute for conventional aggregate;

(12) nonhazardous petroleum contaminated soil when incorporated into asphalt pavement products by a producer authorized by the department;

(13) unadulterated wood combustion bottom ash. fly ash, or combined ash when used as a soil amendment or fertilizer, provided the application rate of the wood ash is limited to the nutrient need of the crop grown on the land on which the wood ash will be applied and does not exceed 16 dry tons per acre per year;

(14) coal combustion bottom ash placed in commerce to serve as a component in the manufacture of roofing shingles or asphalt products; or as a traction agent on roadways, parking lots and other driving surfaces;

(15) coal combustion fly ash or gas scrubbing by-products placed in commerce to serve as an ingredient to produce light weight block, light weight aggregate, low strength backfill material, manufactured gypsum or manufactured calcium chloride; and

(16) coal combustion fly ash or coal combustion bottom ash placed in commerce to serve as a cement or aggregate substitute in concrete or concrete products; as raw feed in the manufacture of cement; or placed in commerce to serve as structural fill within building foundations when placed above the seasonal high groundwater table.

(c) Special reporting requirements. No later than 60 days after the first day of January following cach year of operation, the generator of coal combustion ash must submit a report to the department that identifies the respective quantities of coal combustion bottom ash, fly ash, and gas scrubbing by-products it generated during the calendar year to which it pertains and, with respect to coal combustion bottom ash, how much was sent to a manufacturer of roofing shingles or asphalt products, how much was used as a traction

#### GENERAL PROVISIONS

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agent on roadways, parking lots, and other driving surfaces, how much was sent to a manufacturer of cement, concrete or concrete products, and how much was used as structural fill; and, with respect to coal combustion fly ash and to gas scrubbing by-products, how much was used to produce light weight block, light weight aggregate, low strength backfill material (flowable fill), manufactured gypsum or manufactured calcium chloride.

(d) Case-specific beneficial use determinations.

(1) The generator or proposed user of a solid waste may petition the department, in writing, for a determination that the solid waste under review in the petition may be beneficially used in a manufacturing process to make a product or as an effective substitute for a commercial product. Unless otherwise directed by the department, the department may not consider any such petition unless it provides the following:

(i) a description of the solid waste under review and its proposed use;

(ii) chemical and physical characteristics of the solid waste under review and of each type of proposed product;

(iii) a demonstration that there is a known or reasonably probable market for the intended use of the solid waste under review and of all proposed products by providing one or more of the following:

(a) a contract to purchase the proposed product or to have the solid waste under review used in the manner proposed;

(b) a description of how the proposed product will be used;

(c) a demonstration that the proposed product complies with industry standards and specifications for that product; or

(d) other documentation that a market for the proposed product or use exists; and

(iv) a demonstration that the management of the solid waste under review will not adversely affect human health and safety, the environment, and natural resources by providing:

(a) a solid waste control plan that describes the following:

(1) the source of the solid waste under review, including contractual arrangements with the supplier;

(2) procedures for periodic testing of the solid waste under review and the proposed product to ensure that the proposed product's composition has not changed significantly;

(3) the disposition of any solid waste which may result from the manufacture of the product into which the solid waste under review is intended to be incorporated;

(4) a description of the type of storage (e.g., tank or pile) and the maximum anticipated inventory of the solid waste under review (not to exceed 90 days) before being used;

(1) procedures for run-on and run-off control of the storage areas for the solid waste under review; and

(6) a program and implementation schedule of best management practices designed to minimize uncontrolled dispersion of the solid waste under review before and during all aspects of its storage as inventory and/or during beneficial use; and

(b) a contingency plan that contains the information and is prepared in accordance with subdivision 360-1.9(h) of this Part.

(2) The department will determine in writing, on a case-by-case basis, whether the proposal constitutes a beneficial use based on a showing that all of the following criteria have been met:

(i) the essential nature of the proposed use of the material constitutes a reuse rather than disposal;

 (ii) the proposal is consistent with the solid waste management policy contained in section 27-0106 of the ECL;

(iii) the material under review must be intended to function or serve as an effective substitute for an analogous raw material or fuel. When used as a fuel, the material must meet the requirements of paragraph 360-3.1(c)(4) of this Part and the facility combusting the material must comply with the registration requirements in subdivision 360-3.1(c) of this Part, if appropriate;

(iv) for a material which is proposed for

incorporation into a manufacturing process, the material must not be required to be decontaminated or otherwise specially handled or processed before such incorporation, in order to minimize loss of material or to provide adequate protection, as needed, of public health, safety or welfare, the environment or natural resources;

(v) whether a market is existing or is reasonably certain to be developed for the proposed use of the material under review or the product into which the solid waste under review is proposed to be incorporated; and

(vi) other criteria as the department shall determine in its discretion to be appropriate.

(3) The department will either approve the petition, disapprove it, or allow the proposed use of the solid waste under review subject to such conditions as the department may impose. When granting a beneficial use determination, the department shall determine, on a case-by-case basis, the precise point at which the solid waste under review ceases to be solid waste. Unless otherwise determined for the particular solid waste under review, that point occurs when it is used in a manufacturing process to make a product or used as an effective substitute for a commercial product or used as a fuel for energy recovery. As part of its petition, the petitioner may request that such point occur elsewhere. In such a request, the petitioner must include a demonstration that there is little potential for improper disposal of the material or little potential for the handling, transportation, or storage of the solid waste under review to have an adverse impact upon the public health, safety or welfare, the environment or natural resources.

(4) The department may revoke any determination made under this subdivision if it finds that one or more of the matters serving as the basis for the department's determination was incorrect or is no longer valid or the department finds that there has been a violation of any condition that the department attached to such determination.

#### LANDFILLS

perform in the same manner as the component specified in this section. When the equivalent design involves the substitution of waste materials for components of the landfill's liner or final cover system; and where it can be demonstrated that these material substitutions are within the landfill's environmental containment system (i.e. below the upper most layer of the barrier layer of the final cover and above the secondary composite liner), such equivalency determinations are not subject to the variance requirements of this Part and this use is consistent with the beneficial use provision of paragraph 360-1.15(b)(10) of this Part. It is highly recommended that the applicant discuss equivalent component design proposals with the department in a preapplication conference.

# Section 360-2.14 Industrial/commercial waste monofills and solid waste incinerator ash residue monofills.

(a) Industrial/commercial waste monofills. Monofills used solely for the disposal of solid waste resulting from industrial or commercial operations are subject to all requirements of this Subpart, unless the applicant demonstrates that specific landfill requirements in this Subpart are not necessary for the solid waste to be disposed of at the subject facility. The requirements in this Subpart may be modified on a case-specific basis. The department may impose additional or less stringent requirements on these monofills, based on the pollution potential of the waste. Pollution potential shall be based upon the volume and the physical, chemical, and biological properties of the solid waste, and, its variability. Changes in the monofill's design may include, but not be limited to, modifications to the leachate collection system, low permeability liners, and low permeability cover system designs. For those facilities where the applicant can demonstrate to the department that a specific regulatory requirement contained in either sections 360-2.13, 2.15 or 2.17 of this Subpart are not applicable as discussed in this subdivision, the need for a formal variance is waived. Alternative liner system designs for industrial waste monofills must demonstrate the following:

(1) In the case where an alternative liner system is proposed for an industrial waste monofill, a demonstration must be made as to the proposed liner's ability to adequately prevent a negative impact on groundwater and must address the following factors: the volume and physical and chemical composition of the leachate that will be generated at the disposal facility; the climatological conditions in the vicinity of the proposed site; and the hydrogeologic

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characteristics of the proposed site. The demonstration must include an assessment of leachate quality and quantity, anticipated liner system leakage to the subsurface and related contaminant transport to the closest environmental monitoring point. The demonstration should focus on developing an accurate profile of leachate quality and production rates sufficient to be used in evaluating its fate and transport from the point of release to the first point of environmental monitoring in order to determine whether leachate constituents can be expected to exceed the State's groundwater quality standards. It must be demonstrated that the industrial wastes' chemical characterization be accurately defined and that there are no reasons to anticipate significant changes in the concentrations of compounds that could increase the wastes' pollution potential in the future. The demonstration must include chemical compatibility test data run on the proposed liner and/or leachate collection and removal system materials with representative waste leachate, using an appropriate permeameter test to determine potential changes in the permeability of the proposed liner. The demonstration must include an estimate of the volumetric release of leachate from the proposed liner design based on analytical approaches supported by empirical data and/or be verified from other existing operational facilities of similar design. A dilution calculation must then be modelled to evaluate the impacts of the characterized leachate on groundwater quality based upon the calculated liner system's leakage rate.

(2) Paper mill sludge monofills. The minimum components of the liner system, monofill closure, operation requirements and the environmental monitoring plan for paper mill sludge landfills must consist of the following:

(i) Components of liner system. A single composite liner system is the minimal level of containment that the department will accept for paper mill sludge monofills. The composite liner system must consist of a minimum of two components, an upper geomembrane liner placed directly above a low permeability soil layer. A leachate collection and removal system must be located over the composite liner. The construction of each of the components must be in conformance with the appropriate requirements of section 360-2.13 of this Subpart unless expressly stated otherwise in this paragraph. The department may require additional liner components to the single composite liner or other restrictions depending upon the waste expected to be produced, monitorability of the site and/or other site conditions.

(ii) The soil component of the composite

#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF SOLID & HAZARDOUS MATERIALS ACTIVE SOLID WASTE FACILITIES

NYS DEC REGION 1

<b>Babylon Sout</b>	thern Ashfill		52A01	360 PERMIT NUMBER: 1472000778000	010
OWNER TYPE:	and a summer	Municipa		PERMIT ISSUED: 05/04/97	
REGULATORY	STATUS:	Permit		PERMIT EXPIRES: 05/03/02	
OWNER:	Town of Babylon			CONTACT: Ronald Kluesener	
ADDRESS:	200 East Sunrise Hwy			ADDRESS: Gleam Street	
(MAILING)	Lindenhurst	NY	11757	West Babylon NY 11704	
PHONE:	(516) 957-3072			PHONE: (631) 422-7640	
WASTE TYPE:	RR Ash			UTMEAST: 636645 UTMNO	TH: 4510592
Brookhaven	SLF Cell 5		52A03	360 PERMIT NUMBER: 1472200030000	040
OWNER TYPE:		Municipa	-	PERMIT ISSUED: 11/17/98	
REGULATORY	STATUS:	Permit		PERMIT EXPIRES: 08/31/05	
OWNER:	Town of Brookhaven			CONTACT: Dennis Lynch	
ADDRESS:	3233 Route 112			ADDRESS: 3233 Route 112	
(MAILING)	Medford	NY	11763	Medford NY 1176	I.
PHONE:	(516) 451-6224			PHONE: (516) 451-6224	
WASTE TYPE:	RR Ash			UTMEAST: 674593 UTMNO	RTH: 451809
Northern U			52A39	360 PERMIT NUMBER: 1472000628000	010
OWNER TYPE:		Municipa	1	PERMIT ISSUED: 10/19/94	
REGULATORY	STATUS:	Permit		PERMIT EXPIRES: 04/30/05	
OWNER:	Town of Babylon			CONTACT: Ronald Kluesener	
ADDRESS:	200 East Sunrise High	iway		ADDRESS: 200 East Sunrise Highway	
(MAILING)	Lindenhurst	NY	11757	Lindenhurst NY 1175	
PHONE:	(516) 957-3072			PHONE: (631) 422-7640	
WASTE TYPE:	RR Ash			UTMEAST: 637078 UTMNO	TH: 4510803
NYS DEC RI	EGION 3				
COUNTY W	estchester				
Sprout Brool	k LF		60A20	360 PERMIT NUMBER: 3552200097000	020
OWNER TYPE:	am - mi ia	County		PERMIT ISSUED: 10/01/97	
REGULATORY		Permit		PERMIT EXPIRES: 10/01/02	
OWNER:	Westchester County D	<b>DPW</b>		CONTACT: mario Parise	
ADDRESS:	270 North Avenue			ADDRESS: Old Albany Post Road	
(MAILING)	New Rochelle	NY	10801	Peekskill NY 1060	
PHONE:	(914) 637-3000			PHONE: (914) 637-3000	
WASTE TYPE:	Bottom Ash, Fly Ash,			UTMEAST: 590560 UTMNO	RTH: 457398

#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF SOLID & HAZARDOUS MATERIALS ACTIVE SOLID WASTE FACILITIES

COUNTY Or:	ange							
Central Hude	on Gas & Elec		36N01	360 PERMI	T NUMBER:	3334	500011000018	
OWNER TYPE:		Private	001.01	PERMIT IS	SUED:	05/09	/00	
REGULATORY S	STATUS:	Permit		PERMIT E	KPIRES:	05/09	/05	
OWNER:	Central Hudson Gas	& Elec		CONTACT	Mark McLean			
ADDRESS:	992 River Road			ADDRESS:	992 River Road			
(MAILING)	Newburgh	NY	12550		Newburgh	NY	12550	
PHONE:	(914) 452-2000			PHONE:	(914) 563-4805			
WASTE TYPE:	Coal Ash				UTMEAST:	585953	UTMNORTH:	
COUNTY RO	ckland							
Tomkins Cov	e Ash Facility		44N07	360 PERMI	T NUMBER:	3392	800039000010	
OWNER TYPE:	•	Private		PERMIT IS	SUED:	06/30	/94	
REGULATORY S	STATUS:	None		PERMIT E	XPIRES:	06/30	/99	
OWNER:	Orange & Rockland	Utility			C.A. Herbst			
ADDRESS:	One Blue Hill Plaza			ADDRESS:	One Blue Hill P			
(MAILING)	Pearl River	NY	10965		Pearl River	NY	10965	
PHONE: WASTE TYPE:	(914) 577-2582			PHONE:	(914) 786-8150			
WASTE TIPE:	Coal Ash, Ash Resi	due			UTMEAST:	585526	UTMNORTH:	
Deferict Pape	ferson r	Privata	23N06		T NUMBER:		000030000000	
Deferiet Pape OWNER TYPE: REGULATORY S	r STATUS:	Private Permit	23N06	PERMIT IS PERMIT E	SUED: XPIRES:	6224 02/15 11/01	/94	
Deferict Pape OWNER TYPE: REGULATORY S OWNER:	r STATUS: Deferiet Paper Com	Permit pany	23N06	PERMIT IS PERMIT E CONTACT	SUED: XPIRES: : Todd Furnia	02/15 11/01	/94	
Dcfcrict Pape OWNER TYPE: REGULATORY S OWNER: ADDRESS:	r STATUS: Deferiet Paper Com 400 Anderson Aven	Permit pany ue		PERMIT IS PERMIT E CONTACT	SUED: XPIRES:	02/15 11/01	/94 /03	
Deferict Pape OWNER TYPE: REGULATORY S OWNER: ADDRESS: (MAILING)	r STATUS: Deferiet Paper Com 400 Anderson Aven Deferiet	Permit pany	<b>23N06</b> 13628	PERMIT IS PERMIT E CONTACT	SUED: XPIRES: : Todd Furnia : 400 Anderson A Deferiet	02/15 11/01 Avenue NY	/94 /03	
Dcfcrict Pape OWNER TYPE: REGULATORY S OWNER: ADDRESS:	r Deferiet Paper Com 400 Anderson Aven Deferiet (315) 493-3540	Permit pany nue NY		PERMIT IS PERMIT E CONTACT ADDRESS	SUED: XPIRES: : Todd Furnia : 400 Anderson A	02/15 11/01 Avenue NY	/94 /03	
Dcfcrict Pape OWNER TYPE: REGULATORY S OWNER: ADDRESS: (MAILING) PHONE: WASTE TYPE: DANC Landf	r STATUS: Deferiet Paper Com 400 Anderson Aven Deferiet (315) 493-3540 Caol Ash, Paper Slu	Permit pany nue NY	13628	PERMIT IS PERMIT E CONTACT ADDRESS PHONE: 360 PERMI	SUED: XPIRES: Todd Furnia 400 Anderson A Deferiet (315) 493-3540 UTMEAST: IT NUMBER:	02/15 11/01 Avenue NY 439729 6225	/94 /03 / 13628 UTMNORTH: 200007000006	
Dcfcrict Pape OWNER TYPE: REGULATORY S OWNER: ADDRESS: (MAILING) PHONE: WASTE TYPE: DANC Landf OWNER TYPE:	r STATUS: Deferiet Paper Com 400 Anderson Aven Deferiet (315) 493-3540 Caol Ash, Paper Slu ill	Permit pany ue NY adge, Coal Rej Municip	13628 ects, Wood Yard Debris 23813	PERMIT IS PERMIT E CONTACT ADDRESS PHONE: 360 PERMIT PERMIT IS	SUED: XPIRES: Todd Furnia 400 Anderson A Deferiet (315) 493-3540 UTMEAST: UTMEAST: SUED:	02/15 11/01 Avenue NY 439729 6225 02/27	/94 /03 / 13628 UTMNORTH: 200007000006 /96	
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Deferiet Pape OWNER TYPE: REGULATORY S OWNER: ADDRESS: (MAILING) PHONE: WASTE TYPE: DANC Landf OWNER TYPE: REGULATORY S OWNER:	r STATUS: Deferiet Paper Com 400 Anderson Aven Deferiet (315) 493-3540 Caol Ash, Paper Slu Caol Ash, Paper Slu III STATUS: Develop. Authority	Permit pany ue NY dge, Coal Rej Municip Permit N. Country	13628 ects, Wood Yard Debris 23813	PERMIT IS PERMIT E: CONTACT ADDRESS: PHONE: 360 PERMIT PERMIT IS PERMIT E: CONTACT	SUED: XPIRES: Todd Furnia 400 Anderson A Deferiet (315) 493-3540 UTMEAST: UTMEAST: SUED:	02/15 11/01 Avenue NY 439729 6225 02/27 02/27 rited	/94 /03 / 13628 UTMNORTH: 200007000006 /96	2
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Deferiet Pape OWNER TYPE: REGULATORY S OWNER: ADDRESS: (MAILING) PHONE: WASTE TYPE: DANC Landf OWNER TYPE: REGULATORY S OWNER:	r STATUS: Deferiet Paper Com 400 Anderson Aven Deferiet (315) 493-3540 Caol Ash, Paper Slu Caol Ash, Paper Slu III STATUS: Develop. Authority 317 Washington Sta Watertown	Permit pany ue NY dge, Coal Rej Municip Permit N. Country	13628 ects, Wood Yard Debris 23813	PERMIT IS PERMIT E: CONTACT ADDRESS: PHONE: 360 PERMIT PERMIT IS PERMIT E: CONTACT	SUED: XPIRES: Todd Furnia 400 Anderson A Deferiet (315) 493-3540 UTMEAST: IT NUMBER: SUED: XPIRES: E. William Seif NYS Route 177	02/15 11/01 Venue NY 6225 02/27 02/27 ried NY	/94 /03 / 13628 UTMNORTH: 200007000006 /96 /06	
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Cayuga			55N02		IT NUMBER:	75032	200069000010	
OWNER TYPE:		Private		PERMIT IS		04/17/	/97	
REGULATORY	STATUS:	Permit		PERMIT E	XPIRES:	04/17	/02	
OWNER:	AES Cayuga, L.L.C.			CONTACT	: Daniel Hill			
ADDRESS:	228 Cayuga Drive			ADDRESS	Milliken Road			
(MAILING)	Lansing	NY	14882			NY	, ,	
PHONE:	(607) 533-7913			PHONE:	(607) 533-7913	3		
WASTE TYPE:	Coal Ash, Sludge				UTMEAST:	366998	UTMNORTH:	4718715
NYS DEC RJ	EGION 9							
COUNTY C	hautaugua							
Chautauqua	Landfill		07S12	360 PERM	IT NUMBER:	906	360000600013	
OWNER TYPE:		County		PERMIT IS	SUED:	07/22	/99	
REGULATORY	STATUS:	Permit		PERMIT E	XPIRES:	07/23	/09	
OWNER:	County of Chautauqu	a DPW		CONTACT	: Theodore Osbo	те		
ADDRESS:	Grace Office Building	8		ADDRESS	: 3889 Towervill	le Road		
(MAILING)	Mayville	NY	14757		Jamestown	NY	14701-965	3
PHONE:	(716) 086 4011					-		
	(716) 985-4211			PHONE:	(716) 985-478	5		
		sbestos, Slud	ge, Industrial, Cont.Soil, Coal Ash		(716) 985-478: UTMEAST:		UTMNORTH:	4681819
WASTE TYPE: COUNTY Ni Niagara Rec Owner type: Regulatory Owner:	Residential, C&D, As	sbestos, Slud, Private Permit	ge, Industrial, Cont.Soil, Coal Ash 32S11	360 PERM PERMIT IS PERMIT E CONTACT	UTMEAST: IT NUMBER: SUED: XPIRES: Cavid Hanson 56th St. & Niag	9291 04/25 04/30 gara Falls	100119000050 /95 //US Blvd.	
WASTE TYPE:	Residential, C&D, As aggara ycling Inc. STATUS: BFI (Allied Waste)	Private		360 PERM PERMIT IS PERMIT E CONTACT ADDRESS	UTMEAST: IT NUMBER: SUED: XPIRES: David Hanson : 56th St. & Nia Niagara Falls	9291 04/25 04/30 gara Falls	100119000050 /95 //US Blvd.	
WASTE TYPE: COUNTY Ni Niagara Rec OWNER TYPE: REGULATORY OWNER: ADDRESS:	Residential, C&D, As aggara ycling Inc. STATUS: BFI (Allied Waste) P.O. Box 344 LPO	Private Permit	32S11	360 PERM PERMIT IS PERMIT E CONTACT	UTMEAST: IT NUMBER: SUED: XPIRES: Cavid Hanson 56th St. & Niag	9291 04/25 04/30 gara Falls	100119000050 /95 //US Blvd.	
WASTE TYPE: COUNTY Ni Niagara Rec OWNER TYPE: REGULATORY OWNER: ADDRESS: (MAILING)	Residential, C&D, As aggara ycling Inc. STATUS: BFI (Allied Waste) P.O. Box 344 LPO Niagara Falls (716) 285-3344	Private Permit NY	32S11	360 PERM PERMIT IS PERMIT E CONTACT ADDRESS PHONE:	UTMEAST: IT NUMBER: SUED: XPIRES: David Hanson : 56th St. & Nia Niagara Falls	9291 04/25 04/30 gara Falls NY 4	100119000050 /95 //US Blvd.	4
WASTE TYPE: COUNTY Ni Niagara Rec OWNER TYPE: REGULATORY OWNER: ADDRESS: (MAILING) PHONE:	Residential, C&D, As agara ycling Inc. STATUS: BFI (Allied Waste) P.O. Box 344 LPO Niagara Falls (716) 285-3344 Industrial, C&D, RR	Private Permit NY	<b>32S11</b> 14304-0344	360 PERM PERMIT IS PERMIT E CONTACT ADDRESS PHONE: W 360 PERM	UTMEAST: IT NUMBER: SSUED: XPIRES: David Hanson 56th St. & Niag Niagara Falls (716) 285-3344 UTMEAST: IT NUMBER:	143329 9291 04/25 04/30 gara Falls NY 4 175230 9292	100119000050 795 705 Blvd. 7 14304-034 UTMNORTH: 400016000310	4
WASTE TYPE: COUNTY Ni Niagara Rec OWNER TYPE: REGULATORY OWNER: ADDRESS: (MAILING) PHONE: WASTE TYPE:	Residential, C&D, As agara ycling Inc. STATUS: BFI (Allied Waste) P.O. Box 344 LPO Niagara Falls (716) 285-3344 Industrial, C&D, RR dfill	Private Permit NY	32S11 14304-0344 Sludge, Asbestos, Cont. Soil, MS	360 PERM PERMIT IS PERMIT E CONTACT ADDRESS PHONE: W 360 PERM PERMIT IS	UTMEAST: IT NUMBER: SUED: XPIRES: : David Hanson : 56th St. & Nia; Niagara Falls (716) 285-334 UTMEAST: IT NUMBER: SSUED:	143329 9291 04/25 04/30 gara Falls NY 4 175230 9292 12/29	100119000050 1/95 1/US Blvd. ( 14304-034 UTMNORTH: 400016000310 1/95	4
WASTE TYPE: COUNTY Ni Niagara Rec OWNER TYPE: KEGULATORY OWNER: ADDRESS: (MAILING) PHONE: WASTE TYPE: Modern Lan	Residential, C&D, As agara ycling Inc. STATUS: BFI (Allied Waste) P.O. Box 344 LPO Niagara Falls (716) 285-3344 Industrial, C&D, RR dfill	Private Permit NV & Coal Ash,	32S11 14304-0344 Sludge, Asbestos, Cont. Soil, MS	360 PERM PERMIT IS PERMIT E CONTACT ADDRESS PHONE: W 360 PERM S60 PERMIT IS PERMIT E	UTMEAST: IT NUMBER: SUED: XPIRES: David Hanson 56th SL & Nia; Niagara Falls (716) 285-334 UTMEAST: IT NUMBER: SUED: XPIRES:	143329 9291 04/25 04/30 gara Falls NY 4 175230 9292 12/29 12/31	100119000050 1/95 1/US Blvd. ( 14304-034 UTMNORTH: 400016000310 1/95	4
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WASTE TYPE: COUNTY Ni Niagara Rec OWNER TYPE: KEGULATORY OWNER: ADDRESS: (MAILING) PHONE: WASTE TYPE: Modern Lan OWNER TYPE: REGULATORY	Residential, C&D, As agara ycling Inc. STATUS: BFI (Allied Waste) P.O. Box 344 LPO Niagara Falls (716) 285-3344 Industrial, C&D, RR dfill STATUS:	Private Permit NV & Coal Ash, Private Permit	32S11 14304-0344 Sludge, Asbestos, Cont. Soil, MS	360 PERM PERMIT IS PERMIT E CONTACT ADDRESS PHONE: W 360 PERM PERMIT IS PERMIT E CONTACT	UTMEAST: IT NUMBER: SUED: XPIRES: David Hanson 56th St. & Niag Niagara Falls (716) 285-334 UTMEAST: IT NUMBER: SSUED: XPIRES: James Goehrig Pletcher & Har	9291 04/25 04/30 gara Falls 175230 9292 12/29 12/31 fold Roads	100119000050 1/95 1/U5 Blvd. ( 14304-034 UTMNORTH: 400016000310 1/95 1/05	4 477995
WASTE TYPE: COUNTY Ni Niagara Rec OWNER TYPE: KEGULATORY OWNER: ADDRESS: (MAILING) PHONE: WASTE TYPE: Modern Lan OWNER TYPE: REGULATORY OWNER:	Residential, C&D, As agara ycling Inc. STATUS: BFI (Allied Waste) P.O. Box 344 LPO Niagara Falls (716) 285-3344 Industrial, C&D, RR dfill STATUS: Modern Landfill, Inc	Private Permit NV & Coal Ash, Private Permit	32S11 14304-0344 Sludge, Asbestos, Cont. Soil, MS	360 PERM PERMIT IS PERMIT E CONTACT ADDRESS PHONE: W 360 PERM PERMIT IS PERMIT E CONTACT	UTMEAST: IT NUMBER: SUED: XPIRES: David Hanson 56th St. & Nia; Niagara Falls (716) 285-334 UTMEAST: IT NUMBER: SSUED: XPIRES: James Goehrig	143329 9291 04/25 04/30 gara Falls NY 4 175230 9292 12/29 12/29 12/31	100119000050 1/95 1/U5 Blvd. ( 14304-034 UTMNORTH: 400016000310 1/95 1/05	4 477995
WASTE TYPE: COUNTY Ni Niagara Rec OWNER TYPE: REGULATORY OWNER: ADDRESS: (MAILING) PHONE: WASTE TYPE: Modern Lan OWNER TYPE: REGULATORY OWNER: ADDRESS:	Residential, C&D, As agara ycling Inc. STATUS: BFI (Allied Waste) P.O. Box 344 LPO Niagara Falls (716) 285-3344 Industrial, C&D, RR dfill STATUS: Modern Landfill, Inc P.O. Box 209	Private Permit NV & Coal Ash, Private Permit	32S11 14304-0344 Sludge, Asbestos, Cont. Soil, MS 32S30	360 PERM PERMIT IS PERMIT E CONTACT ADDRESS PHONE: W 360 PERM PERMIT IS PERMIT E CONTACT	UTMEAST: IT NUMBER: SUED: XPIRES: David Hanson 56th St. & Niag Niagara Falls (716) 285-334 UTMEAST: IT NUMBER: SSUED: XPIRES: James Goehrig Pletcher & Har	9291 04/25 04/30 gara Falls 175230 9292 12/29 12/29 12/31 fold Roads	100119000050 1/95 1/U5 Blvd. ( 14304-034 UTMNORTH: 400016000310 1/95 1/05	4 477995:

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	FACILITY			INER	TYPE		
	NUMBER	FACILITY NAME	S	SC	D	DC	
	36N01	Central Hudson Gas & Elec	.F.	.F.	.F.	.т.	
	44N07	Tomkins Cove Ash Facility	.F.	.F.	.F.	.F.	
	23N06	Deferiet Paper	.F.	.т.	.F.	.F.	
State	23513	DANC Landfill	.F.	.F.	.F.	.т.	
	04N08	Weber Ash Disposal Site	.т.	.F.	.F.	.F.	
	55N02	Cayuga	.F.	.F.	.F.	.т.	
	07512	Chautauqua Landfill	.F.	.F.	.F.	.т.	
	32811	Niagara Recycling Inc.	.F.	.F.	. F .	.т.	
	32530	Modern Landfill	.F.	.F.	.F.	.т.	

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(Statutory authority: Environmental Conservation Law, Sections 1-0101, 3-0301, 8-0113, 19-0301, 19-0306, 23-2305, 23-2307, 27-0101, 27-0106, 27-0107, 27-0109, 27-0305, 27-0703, 27-0704, 27-0705, 27-0911, 27-1317, 27-1515, 52-0107, 52-0505, and 70-0107)

[Effective Date December 31, 1988]

[Amendment Dates: Revised Effective March 27, 1990; with promulgation of new Subpart 15: Grants for Comprehensive Solid Waste Management Planning. Revised Effective May 28, 1991; With repeal of existing Subpart 9 and promulgation of new Subpart 9: State Assistance for Municipal Landfill Closure Projects Revised Effective January 25, 1992; With repeal of existing Subpart 10 and promulgation of new Subpart10: Regulated Medical Waste Storage, Transfer, and Disposal, and new Subpart 17 Regulated Medical Waste Treatment Facilities. Revised/Enhanced Effective October 9, 1993; with adoption of amendments to existing Subparts 1 through 17 Revised Effective December 14, 1994; with adoption of amendments to existing Subpart 9: State Assistance for Municipal Landfill Closure Projects Revised Effective January 14, 1995; With repeal of existing Subpart 14 and promulgation of new Subpart 14: Used Oil. Revised Effective November 26, 1996; With adoption of amendments to existing Subparts 1, 2, 3, 7, 11, 14, and 17 Revised Effective September 29, 1997; With adoption of amendments to existing Subpart 9 Revised Effective November 21, 1998; With adoption of amendments to existing Subpart 2 Revised Effective November 24, 1999; With adoption of amendments to existing Subparts 2, 3, 4, 5, 9, 11, 14, and 16]

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# §360-2.11 Hydrogeologic report.

The hydrogeologic report must define the landfill site geology and hydrology and relate these factors to regional and local hydrogeologic patterns; define the critical stratigraphic section for the site; provide an understanding of groundwater and surface water flow at the site sufficient to determine the suitability of the site for a landfill; establish an environmental monitoring system capable of readily detecting a contaminant release from the facility and determining whether the site is contaminating surface or subsurface waters; and form the basis for design of the facility and contingency plans relating to ground or surface water contamination or gas migration as required in section 360-2.10 of this Subpart. The scope and extent of investigations necessary in the hydrogeologic report will vary based upon the hydrogeologic complexity of the site and the ability of the site to restrict contaminant migration. Additionally, the hydrogeologic report must define the engineering properties of the site as necessary for

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proper design and construction of any facilities proposed to be built at the site.

(a) Requirements of the site investigation plan. The site investigation plan must clearly define all methods used in investigating the hydrogeologic conditions of the site, the scope of the intended investigation, and any specific hydrogeologic questions to be addressed. The applicant is strongly encouraged to develop a draft version of the plan for review by the department before starting the hydrogeologic investigation that begins to define the critical stratigraphic section, and to keep the department informed of the findings and subsequent investigative proposals as the study proceeds. The final version of the plan, included in the hydrogeologic report section of the permit application, must fully describe all methods of investigation used. Unless otherwise approved by the department, the plan must comply with the following:

(1) General requirements for all methods used. In obtaining the required hydrogeologic information, the applicant must employ current, standard, and generally accepted procedures. All work must be done in accordance with applicable American Society for Testing Materials standards or current and appropriate U.S. Environmental Protection Agency and department guidance documents. Alternative or innovative methodologies may be approved by the department; however, the department may initially require redundant technologies to prove the reliability of a new methodology. All procedures must be conducted under the supervision of a qualified groundwater scientist having experience in similar hydrogeologic investigations, in a manner that ensures accuracy of the data and precludes environmental degradation. The location of all installations, geophysical and geochemical surveys, and seismic lines for the proposed investigation must be shown on a map with the same scale and coordinate grid system used on the engineering plans (see section 360-1.9[e] of this Part).

(2) Literature search. A comprehensive search must be made for pertinent and reliable information concerning regional and site specific hydrogeologic conditions. The literature search must include, as available, records and reports of the New York State Department of Health, the New York State Department of Transportation, the U.S. Soil Conservation Service, and the New York State Geological Survey; basin planning reports, groundwater bulletins, water supply papers, professional papers and other open file reports of the U.S. Geological Survey; bulletins, circulars, map and chart series, memoirs and other publications of the New York State Geologic Survey; publications and bulletins of the Geological Society of America and other professional organizations; and publications of the U.S. Environmental Protection Agency and the department, college and university reports; and aerial photography or remotely sensed imagery.

(3) Surficial geologic mapping. The site must be mapped to determine the distribution of surficial deposits on and surrounding the site based upon information from the hydrogeologic investigation, field evaluations, and field confirmation of all interpretations made on the site itself.

(4) Test pits. Test pits may be used to determine shallow stratigraphy. The test pits must not create a health or safety hazard and must be logged by a geologist or geotechnical engineer with experience in similar hydrogeologic investigations. Logs must include: elevations; surface features before excavation; depth of the test pit and of all relevant horizons or features; moisture content of units; standard soil classifications (including the Unified Soil Classification System), stratigraphy, soil structure, bedrock lithology, brittle, or secondary structures in soil and bedrock; and a sketch showing these features for each test pit constructed. Test pits must be promptly backfilled and compacted with excavated materials. The department may require that, if a test pit is dug, undisturbed soil samples be taken and tested in accordance with subparagraph (9)(ii) of this subdivision.

(5) Water well surveys. A survey of public and private water wells within one mile downgradient and one-quarter mile upgradient of the proposed site must be conducted. Surveys must obtain, where available, the location of wells, which must be shown on a map with their approximate elevation and depth, name of owner, age and usage of the well; stratigraphic unit screened; well construction; static water levels; well yield; perceived water quality; and any other relevant data which can be obtained.

(6) Geophysical and geochemical surveys. The department may require the use of geophysical and geochemical methods, such as electromagnetic, resistivity, seismic surveys, remote sensing surveys, downhole geophysics, isotope geochemistry, and soil gas analysis, where necessary to justify the interpretations and conclusions of the site investigation report and to provide information between boreholes, and aid in the siting of wells.

(7) Tracer studies. The department may require the use of tracer studies to aid in understanding groundwater flow or to otherwise assist in devising an effective environmental monitoring plan.

(i) Where sites overlie weathered limestone or dolostone bedrock or where karst environments cannot be avoided, the department may require tracer studies before finalizing the bedrock monitoring plan. Tracer studies must identify, in specific detail, areas of groundwater flow from the facility attributed to secondary permeability, recharge and discharge areas on and surrounding the site, storage of groundwater, and variations of water quality seasonally and during high and low flow periods.

(ii) Where a site is otherwise unmonitorable because of existing contamination, the department may allow the use of tracers to aid in monitoring.

(8) Monitoring wells and piezometers.

(i) Construction in general.

(a) Monitoring wells and piezometers must define the three-dimensional flow system within the critical stratigraphic section to justify the interpretations and conclusions of the hydrogeologic report.

(b) Construction techniques must be appropriate to ensure that groundwater samples and head level measurements characterize discrete stratigraphic intervals; and to prevent leakage of groundwater or contaminants along the well annulus. If leakage is detected, it must be corrected or the well abandoned.

(c) Monitoring wells and piezometers may be placed individually or as well clusters. Well clusters consist of individual wells at varying depths in close proximity, each installed in its own boring. Multiple wells placed into one large borehole are prohibited unless prior department approval in writing is obtained.

(d) Soil borings, soil samples, and rock cores must characterize each stratigraphic unit within the critical stratigraphic section to justify the interpretations and conclusions of the hydrogeologic report.

(e) Every precaution must be taken during drilling and construction of monitoring wells to avoid introducing contaminants into a borehole. Only potable water of known chemistry may be used in drilling monitoring wells or piezometers unless otherwise approved by the department.

(f) All equipment placed into the boring must be properly decontaminated before use at the site and between boreholes. The initial cleaning at the site must ensure that no contaminants from the last site drilled will be introduced into the borings. All equipment must be steam cleaned between holes. Where possible, upgradient wells should be drilled first.

(g) Use of drilling muds is to be avoided unless prior department approval in writing is granted. If drilling muds are used, the material used must avoid the introduction of stray contaminants. Drilling muds must not be used within 10 feet of the screened interval.

(h) Air systems and drilling lubricants must not introduce contaminants into the borehole.

(i) Well borings must have an inside diameter at least two inches larger than the outside diameter of the casing and screen to ensure that a tremie may be properly used.

(j) Wells and borings must not be placed through or into waste unless prior department approval has been granted and sufficient safety precautions are employed. If waste is encountered unexpectedly during drilling, drilling of that boring must cease, the hole properly abandoned with cuttings properly disposed of and the department notified.

(ii) Construction of monitoring wells and piezometers.

(a) Well screens and risers must be constructed of materials selected to last for the required monitoring period of the facility without contributing contaminants to, or removing contaminants from, the groundwater. All materials used are subject to department approval. Joints, caps, and end plugs are to be secured by welds, threads with teflon tape, or force fittings. Solvents and glues or other adhesives are prohibited. Caps must be vented to allow for proper pressure equalization. The inside diameter of each well screen or riser pipe must be nominally two inches in diameter and must allow for proper development, survey and sampling equipment to be used within the screen and casing. A permanent mark should be made at the top of the riser pipe to provide a datum for subsequent water level measurements.

(b) Unless otherwise approved by the department, well screens are required for all wells and piezometers. All screens used must be factory constructed non-solvent welded/bonded continuous slot wire wrap screens of a material appropriate for long-term monitoring without contributing contaminants to or removing contaminants from the groundwater. The slot size of the screen must be compatible with the sand pack. Water table variations, site stratigraphy, expected contaminant behavior, and groundwater flow must be considered in determining the screen length, materials, and position. Where existing contamination is suspected or known, down hole geophysical

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techniques may be required by the department to aid in selecting well screen elevations.

(c) The sand pack surrounding the well screen must consist of clean,inert, siliceous material. Grain size must be based upon a representative sieve analysis of the zone to be screened. The sand pack must minimize the amount of fine materials entering the well and must not inhibit water inflow to the well. The sand pack must be placed in the annular space around the well screen and extend two feet or 20 percent of the screen length (whichever is greater) above the top, and six inches below the bottom, of the screen. The sand pack material must be placed using the tremie method or another method approved by the department and must avoid bridging. The sand pack must be checked for proper placement. A finer grained sand pack material (100 percent passing the No. 30 sieve and less than two percent passing the No. 200 sieve) six inches thick must be placed at the top of the sand pack between the sand and the bentonite seal.

(d) Bentonite must be placed above the sand pack using the tremie or other approved method to form a seal at least three feet thick. A 6 to 12 inch fine grained sand pack must be placed above the bentonite seal to minimize grout infiltration. If pellets or chips are used, sufficient time should be allotted to allow for full hydration of the bentonite prior to emplacement of overlying materials.

(e) Grout of cement/bentonite, bentonite alone, or other suitable, low permeability material, if approved by the department, must completely fill the remaining annular space to the surface seal. The grout mixture must set up without being diluted by formation water, and must displace water in the annular space to ensure a continuous seal. The grout mixture must be placed under pressure using a tremie or other method approved by the department. Auger flights or casing must be left in the hole before grouting to prevent caving. The cement used must be appropriate for the groundwater chemistry of the site.

(f) A protective steel casing, at least two inches larger in diameter than the well casing, must be placed over the well casing or riser pipe and secured in a surface well seal to adequately protect the well casing. A distinctive, readily visible marker must be permanently affixed to the protective casing or near the well to identify the well number and ensure visibility even in periods of high snow cover. A drain hole must be drilled at the base of the protective casing. A vent hole must be located near the top of the protective casing to prevent explosive gas build up and to allow water levels to respond naturally to barometric pressure changes. The annulus of the protective casing should be filled with gravel. A locking cap must be installed with one to two inches clearance between the top of the well cap and the bottom of the locking cap when in the locked position and a weather resistant padlock must be placed on the protective casing and duplicate keys provided to the department.

(g) A concrete surface seal designed to last throughout the planned life of the monitoring well must be constructed. The surface seal must extend below the frost depth to prevent potential well damage. The top of the seal must be constructed by pouring the concrete into a pre-built form with a minimum of three foot long sides. The seal must be designed to prevent surface runoff from ponding and entering the well casing. In areas where traffic may cause damage to the well, bumperguards or other

suitable protection for the well is required. Any damaged or deteriorated surface seals must be reported to the department and repaired or replaced in an appropriate manner. The department may allow alternate designs when documentation is presented which demonstrates the intent of the regulations.

(h) Where under the circumstances of a particular situation the department believes that the methods identified in this section are inadequate, it may require that additional measures be taken to prevent migration of contaminants along the annulus of the well or to protect the well.

(i) Alternative construction methods for piezometers and wells which are not to be part of the environmental monitoring plan may be approved by the department if those methods meet the requirements set forth in clause (i)(b) of this paragraph.

(iii) Well and piezometer development. All wells and piezometers must be developed as soon as possible after installation, but not before the well seal and grout have set. Water must not be introduced into the well for development, except with approval of the department. Any contaminated water withdrawn during development must be properly managed. Development must not disturb the strata above the water-bearing zone or damage the well. The entire saturated screened interval must be developed. The department may require multiple attempts at well development to increase the likelihood that sediment free water can be obtained. Development methods should be appropriate for conditions/stratigraphy encountered. Placement of screens in a fine grained strata may require gentle development techniques to avoid pulling sediment into the well. The well.

(iv) Survey. The locations and elevations of all existing and abandoned test pits, soil borings, monitoring wells, and piezometers must be surveyed to obtain their precise location and plotted on a map in the hydrogeologic report. The vertical location of the ground surface and the mark made on the top of the monitoring well and piezometer risers must be accurately measured to the nearest 100th foot.

(v) Replacement of wells. All wells must be properly protected to ensure their integrity throughout the active and post-closure period of the facility. If, in the opinion of the department, water quality or other data show that the integrity of a well is lost, the well must be replaced and sampled within a time period acceptable to the department (but not to exceed 120 days) after written notification by the department. The initial sample for the replacement well must be analyzed for baseline parameters in the Water Quality Analysis Tables in this section.

(vi) Abandonment of wells. All soil borings or rock cores which are not completed as monitoring wells or piezometers and other abandoned wells must be fully sealed in a manner appropriate for the geologic conditions to prevent contaminant migration through the borehole. Generally, such sealing must include:

(a) Overboring or removal of the casing to the greatest extent possible, followed by perforation of any casing left in place. All casing and well installations in the upper five feet of the boring, or within five feet of the proposed level of excavation, must be removed.

(b) Sealing by pressure injection with cement bentonite grout, using a tremie pipe or

other method acceptable to the department, must extend the entire length of the boring to five feet below the ground surface or the proposed excavation level. The screened interval of the borehole must be sealed separately and tested to ensure its adequacy before sealing the remainder of the borehole. Where the surrounding geologic deposits are highly permeable, alternate methods of sealing may be required to prevent the migration of the grout into the surrounding geologic formation. The upper five feet must be backfilled with appropriate native materials compacted to avoid settlement.

(c) The sealed site must be restored to a safe condition. The site must be inspected periodically after sealing for settlement or other conditions which require remediation.

#### (9) Geologic sampling.

(i) All borings and rock cores must be sampled continuously to the base of the critical stratigraphic section. For well clusters, continuous samples must be collected from the surface to the base of the deepest well. Other wells in the cluster must be sampled at all stratigraphic changes, and at the screened interval. At sites where the geology is not of a complex nature the department may allow a reduction in the number of wells requiring continuous sampling. Soil borings must be sampled using the split spoon method and bedrock or boulders must be sampled by coring with standard size NX or larger diameter core bits. Samples must be retained in labeled glass jars or wooden core boxes. All samples must be securely stored and accessible throughout the life of the facility. The location of the storage area must be designated in the operation and maintenance plan for the facility.

(ii) A representative number of undisturbed samples must be collected from test pits and soil borings using appropriate methods to identify the soil characteristics of all cohesive soil units. Such samples must be analyzed in the laboratory for: Atterberg limits; gradation curves by sieve or hydrometer analysis or both, as appropriate; undisturbed permeabilities; and visual descriptions of undisturbed soil structures and lithologies.

(10) Logs.

(i) Complete and accurate drilling logs must be provided to the department for all soil borings. These logs must provide detailed soil classification according to the Unified Soil Classification System (USCS). The USCS visual method must be used on all samples supplemented by the USCS laboratory tests on a representative number of samples from each stratigraphic unit and each screened interval. Logs also must contain a description of materials using an appropriate descriptive system. A clear description of the system used must be included with the logs. When undisturbed samples have been taken, the interval tested and the test results must be clearly shown on the logs. All well logs must contain drilling information as observed in the field including: moisture content, location of the water table during drilling, water loss during drilling; depth to significant changes in material and rock; sample recovery measured in tenths of a foot; hammer blow counts, and other pertinent comments; the method of drilling, anomalous features such as gas in the well, and the use and description of drilling fluids or additives, including the source, and calculated and actual amounts of materials used.

(ii) Rock core logs must describe the lithology, mineralogy, degree of cementation, color, grain size, and any other physical characteristics of the rock; percent recovery and the

rock quality designation (RQD); other primary and secondary features, and contain all drilling observations and appropriate details required for soil boring logs. A clear photograph of all labeled cores must also be taken and submitted with the logs.

(iii) Well completion logs must contain a diagram of the completed well, all pertinent details on well construction, a description of the materials used, and elevations of all well features.

(iv) Copies of original field logs must be submitted to the department upon request.

(11) In situ hydraulic conductivity testing. In situ hydraulic conductivity testing must be done in all monitoring wells and piezometers, unless other methods that are approved by the department, are used. The testing method used must not introduce contaminants into the well. If contamination is known or suspected to exist, all water removed must be properly managed. Hydraulic conductivities may be determined using pump tests, slug tests, packer tests, tracer studies, isotopic geochemistry, thermal detection, or other suitable methods.

(b) Site investigation report. The site investigation report must include a final version of the site investigation plan, raw field data, analytical calculations, maps, flow nets, cross-sections, interpretations (and alternative interpretations where applicable), and conclusions. All maps, drawings and diagrams must have a minimum scale of 1:24,000, unless otherwise acceptable to the department. Such report must comprehensively describe:

(1) Regional geology. The discussion of regional geology must demonstrate how the regional geology relates to the formation of on-site geologic materials, the potential for and effects of off-site contaminant migration, and the location of nearby sensitive environments. This discussion must include available and appropriate information to describe:

(i) bedrock stratigraphy and structural features (represented on maps and columnar diagrams) constructed from field exposures and the geologic literature, describing formation and member names, geologic ages, rock types, thicknesses, the units' mineralogic and geochemical compositions and variabilities, rock fabrics, porosities and bulk permeabilities, including karst development, structural geology, including orientation and density or spacing of folds, faults, joints, and other features;

(ii) glacial geology, including a discussion of the formation, timing, stages, and distribution of glacial deposits, advances and retreats, hydrologic characteristics of the surficial deposits, such as kames, eskers, outwash moraines, etc.;

(iii) major topographic features, their origin and influence upon drainage basin characteristics; and

(iv) surface water and groundwater hydrologic features, including surface drainage patterns, recharge and discharge areas, wetlands and other sensitive environments, inferred regional groundwater flow directions, aquifers, aquitards and aquicludes, known primary water supply and principal aquifers, public water supply wells, and private water supply wells identified in the water supply well survey; any known peculiarities in surface water and groundwater geochemistry, and any other relevant features.

(2) Site-specific geology. The site investigation report must define site hydrogeologic conditions in three dimensions and their relationship to the proposed landfill. The report must define site geology, surface water and groundwater flow, and must relate site-specific conditions to the regional geology. The report must describe the potential impact the landfill

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may have on surface and groundwater resources and other receptors, including future hydrogeologic conditions, which may occur with site development, and it must describe the hydrogeologic conditions in sufficient detail to construct a comprehensive understanding of groundwater flow, which can be quantified and verified through hydrologic, geochemical, and geophysical measurements. The report must provide sufficient data to specify the location and sampling frequency for environmental monitoring points; form the basis for contingency plans regarding groundwater and surface water contamination and explosive gas migration; and support the engineering design of the landfill. The site- specific hydrogeologic evaluation must specifically discuss all units in the critical stratigraphic section. Such evaluation must include maps, cross- sections, other graphical representations, and a detailed written analysis of the following:

(i) all hydrogeologic units such as aquifers, aquitards and aquicludes, and how they relate to surface water and groundwater flow. This must include all hydrogeologic data collected during the site investigation and explain and evaluate the hydrologic and engineering properties of the site and each specific unit; and

(ii) local groundwater recharge and discharge areas, high and low groundwater tables and potentiometric surfaces for each hydrologic unit, vertical and horizontal hydraulic gradients, groundwater flow directions and velocities, groundwater boundary conditions, surface water and groundwater interactions, and an evaluation of existing water quality.

(c) Environmental monitoring plan. The environmental monitoring plan must describe all proposed on-site and off-site monitoring, including the location of all environmental, facility, and other monitoring points, sampling schedule, analyses to be performed, statistical methods, and reporting requirements. The plan must also include a schedule for construction of the groundwater monitoring wells based on site-specific hydrogeology and the sequencing of construction of landfill cells; a schedule for initiation of the existing water quality and operational water quality monitoring programs and a contingency water quality monitoring plan which specifies trigger mechanisms for its initiation. Unless otherwise approved by the department, the plan must comply with the following:

(1) Groundwater sampling. Groundwater monitoring wells must be capable of detecting landfill-derived groundwater contamination within the critical stratigraphic section.

(i) Horizontal well spacing.

(a) Horizontal spacing of wells must be based upon site-specific conditions including groundwater flow rates, estimated longitudinal and transverse dispersivity rates, proximity to or presence of sensitive environments and groundwater users, the nature of contaminants disposed of at the site, and the proposed design and size of the landfill.

(b) In the first water-bearing unit of the critical stratigraphic section, monitoring well spacing must not exceed 500 feet along the downgradient perimeter of the facility. In sensitive environments or geologically complex environments, closer well spacing may be required. Upgradient or crossgradient well spacing must not exceed 1,500 feet and may be less in sensitive environments, or where up-gradient sources of contamination are known to exist. Subsequent water-bearing units must be monitored, as required by the department, based upon the potential for contaminant migration to that unit. Well spacing must provide at least one upgradient and three downgradient

monitoring wells or well clusters for each water- bearing unit of the critical stratigraphic section.

(c) Sensitive environments or areas where public health concerns exist may be subject to more intensive groundwater monitoring requirements. In addition, the department may require the applicant to develop acceptable computer models of contaminant plume behavior from hypothetical leaks in the liner system, if necessary to determine optimum monitoring well spacing.

(d) In areas where waterflow is irregular and unpredictable and where otherwise determined to be appropriate, the applicant may be required to conduct spring, sinkhole, or other sampling to enhance the monitoring.

(e) All downgradient monitoring wells must be located as close as practical to but not more than 50 feet from the waste boundary, unless otherwise approved by the department due to site specific conditions, to ensure early detection of any contaminant plume.

(f) All upgradient and crossgradient monitoring wells must be placed far enough from the waste boundary to avoid any facility derived impacts.

(ii) Well screen placement.

(a) Well screens must be located to readily detect groundwater contamination within the saturated thickness of the first water-bearing unit, and must be installed at a representative number of points at each subsequent permeable unit throughout the critical stratigraphic section. Well screens must not act as conduits through impermeable layers. Wells monitoring the water table should be screened to ensure that the water table can be sampled at all times.

(b) Upgradient and crossgradient wells must monitor the same hydrologic units whenever possible within the critical stratigraphic section as the downgradient monitoring wells.

(iii) Screen length. Well screens must not exceed 20 feet in length, unless otherwise approved by the department. The applicant must provide technical justification for the actual screen length chosen.

(iv) Geophysical and geochemical techniques. Where existing contamination is suspected, the department may require the use of geophysical and geochemical techniques to locate contaminated zones before selecting well locations and screen depths for environmental monitoring points.

 (v) If a groundwater suppression system exists at a facility, the department may require representative sampling points to be designated as environmental monitoring points.
 Existing water quality monitoring at these points may not be required.

(2) Surface water and sediment sampling. The environmental monitoring plan must designate monitoring points, for use in operational or contingency monitoring or both of the facility pursuant to subparagraphs (5)(ii) and (iii) of this subdivision, for all surface water bodies that may be significantly impacted by a contaminant release from the facility. Sampling activities at these monitoring points shall be for surface water and sediment. The department may require the sampling and analysis of surface water and sediment

sampling points during a site investigation to understand site hydrogeology or existing patterns of contamination. In bodies of standing water, these points must be located at the closest point to the facility and must be included in existing water quality monitoring. In flowing water bodies, these points must include sufficient upgradient and downgradient locations to allow the facility's impact to be measured. These points, however, do not require existing water quality analysis. The detailed analysis requirements of these points must be specified in the contingency monitoring plan and the detailed sampling requirements must be specified in the site analytical plan.

(3) Leachate sampling. The environmental monitoring plan must specify the location of facility leachate sampling points and parameters to be analyzed so as to obtain a representative characterization of the leachate composition in the primary leachate collection and removal system and to determine the nature of liquids detected in the secondary leachate collection and removal system. The following must be included:

(i) Sampling points. All sampling points should be located to minimize pumping of leachate before sampling. Sampling points in the secondary leachate collection system should be adequate to sample liquids beneath each discrete leachate collection area or landfill cell.

(ii) Analysis required. Except as allowed by the department when a specific waste stream and its leachate are already well defined, analysis of the leachate in the primary and secondary leachate collection and removal systems must be performed semiannually for expanded parameters. The department may require the use of specific analytical methods in these analyses when minimum detection levels are determined inadequate to fully characterize leachate.

(4) Water supply well sampling. If sampling and analysis of water supply wells is to be performed, the analytical requirements must be in accordance with those specified in the site analytical plan. Sampling frequency and analysis shall be at least quarterly for baseline parameters. Sampling methods must be consistently applied each time a well is sampled and before sampling any residential well, the New York State Department of Health and/or local health department must be notified.

(5) Water quality monitoring program. A water quality monitoring program must be implemented for all environmental monitoring points specified in the environmental monitoring plan. This program must be tailored to the site to establish existing water quality for the site prior to landfilling, operational water quality during operation of the site and the post-closure period, and contingency water quality, if contamination is detected at the site. These programs must meet the following minimum requirements:

(i) Existing water quality. The applicant must establish an existing water quality database to characterize the site geochemistry.

(a) The permit application must contain a preliminary evaluation of water quality, consisting of the first two rounds of sampling and analyses for a representative number of monitoring points at both upgradient and downgradient locations, in each water bearing hydrogeologic unit within the critical stratigraphic section, with a minimum of two samples taken from each well during the first round of sampling, unless otherwise approved by the department. The first round of these samples must be analyzed for the expanded parameters. The second round must be analyzed for the

baseline parameters, except as specified in clause (d) of this subparagraph. These samples should be taken in early spring and late summer, or equivalent, to approximate periods of high and low groundwater flow. The department may require sampling and analysis of additional monitoring points as necessary to define site hydrogeology and geochemistry in support of the interpretations and conclusions of the site investigation report.

(b) Before deposition of waste in the facility, all environmental monitoring points not previously sampled must be sampled and analyzed for four rounds of quarterly sampling. The first of these sampling rounds must be analyzed for expanded parameters and the other three rounds must be analyzed for baseline parameters. Those environmental monitoring points which were sampled in accordance with clause (a) of this subparagraph must be sampled and analyzed for baseline parameters for two rounds of samples. The samples shall be obtained at different times of the year than when the sampling required by clause (a) of this subparagraph was performed. If elevated contaminant levels were detected during the preliminary evaluation of water quality, then the sampling required in this clause shall be as specified in clause (d) of this subparagraph. The department may approve phased sampling, where hydrogeologic conditions warrant, as landfill cells are constructed. The sampling of these phased monitoring points shall commence at least one year prior to solid waste deposition and shall be in conformance with the requirements of clause (b) of this subparagraph or as approved by the department. As these phased monitoring points are added to the monitoring program, the procedures contained in clause (c) of this subparagraph shall be followed to reestablish existing water quality at the facility and recompute the standard deviation.

(c) Prior to facility operation, existing water quality must be established for each hydrogeologic flow regime being monitored at the site. Existing water quality for each hydrogeologic flow regime shall be the arithmetic mean, per parameter, of the analytical results of the samples obtained from those environmental monitoring points within that flow regime prior to deposition of solid waste; provided there is no reason to believe that the distribution of the analytical results was non-uniform. The standard deviation of the analytical results for each parameter within each flow regime shall also be established at that time. Should the department determine that the sampling results are non-representative of existing water quality or do not constitute a normal, uniform distribution, then the department shall specify such additional sampling and analyses as it deems necessary to confidently establish existing water quality at the site. For those facilities where solid waste has been placed previously in other than a contiguous landfill cell, the existing water quality may be based on only some of the environmental monitoring points, subject to the approval of the department.

(d) If elevated contaminant levels are detected and additional detailed information is needed to establish a complete existing water quality database, the department may require one or more rounds of baseline or expanded parameter sampling and analysis in any sampling point, using the procedure specified for contingency monitoring required in subparagraph (iii) of this paragraph when contamination is detected.

(e) Additional sampling and analysis beyond the site boundaries may be required to determine the nature and extent of contamination and the source, if possible. This evaluation may include construction, sampling, and analysis of any additional

monitoring wells, and surface water sampling points required by the department. Based upon the results of this additional data, the department may require analysis for any and all expanded parameters, to be included in quarterly or annual operational water quality sampling.

(ii) Operational water quality. The environmental monitoring plan must include a plan for operational water quality monitoring to be conducted during the operation, closure, and post-closure periods of the facility. The operational water quality monitoring plan must be able to distinguish landfill-derived contamination from the existing water quality at the site. The plan must also describe trigger mechanisms for initiating contingency water quality monitoring. The department may require modification of this plan as additional sampling data becomes available during the life of the facility. The minimum requirements for operational water quality monitoring are:

(a) Except as provided below, in each calendar year sampling and analysis must be performed at least quarterly, once for baseline parameters and three times for routine parameters. The baseline sampling event must be rotated quarterly; one round of baseline parameters to be analyzed in each calendar year will be sufficient unless a pattern of contamination exists which may require the department to change the sampling frequency. For double lined landfills, the department may allow omission of the winter sampling once a complete understanding of water chemistry has been obtained, provided that a demonstration of acceptable liner performance is made to the department. The department will require sampling and analysis on a quarterly basis, alternately analyzing for routine and baseline parameters, at all landfills which do not have a liner system constructed in accordance with section 360-2.13(f) of this Subpart.

(b) The department may approve phased sampling, where hydrogeologic conditions warrant, as landfill cells are constructed or as post-closure monitoring is completed as specified in section 360-2.15(i) of this Subpart. With department approval, sampling of specific environmental monitoring points which are not potentially impacted by the portions of the landfill already constructed, may be deferred, provided that scheduled sampling commences at least one year before landfill construction in the vicinity. The department may withdraw this approval at any time, based upon a change in facility design, operation, or performance.

(c) Operational water quality analysis must include at least those parameters specified in the Water Quality Analysis Tables for routine and baseline parameters. The department may modify these tables before granting a permit for the facility, or during the duration of the permit, if leachate composition so warrants. If subsequent leachate compositions vary or if the waste disposed of at the facility changes, the department may adjust analytical requirements accordingly.

(d) Within 90 days of completing the quarterly field sampling activities, the facility owner/operator must determine whether or not there is a significant increase from existing water quality levels established for each parameter pursuant to clause (c)(5)(i)
(c) of this section.

(1) In determining whether a significant increase has occurred, the facility owner/operator must compare the groundwater quality of each parameter at each monitoring well to the existing water quality value of that parameter.

(2) A significant increase has occurred if:

(i) the groundwater quality for any parameter at any monitoring well exceeds the existing water quality value for that parameter, as established pursuant to clause (c)(5)(i)(c) of this section, by three standard deviations; or

(ii) the groundwater quality for any parameter at any monitoring well exceeds the existing water quality value for that parameter, as established pursuant to clause (c)(5)(i)(c) of this section and exceeds the water quality standards for that parameter as specified in Part 701, 702, or 703 of this Title. (e) If the owner/operator determines, pursuant to clause (d) of this subparagraph, that there is a significant increase from existing water quality levels for one or more of the parameters during field sampling for the routine parameters, excluding the field parameters, at any monitoring well, the facility owner/operator:

(1) must, within 14 days of this finding, notify the department indicating which parameters have shown significant increases from existing water quality levels; and

(2) must sample and analyze all monitoring points for the baseline parameters during the next quarterly sampling event. Subsequent sampling and analysis for baseline parameters must be conducted at least semiannually until the significant increase is determined not to be landfill-derived or the department determines such monitoring is not needed to protect public health or the environment.

(f) If the owner/operator determines, pursuant to clause (d) of this subparagraph, that there is a significant increase from existing water quality levels for one or more of the parameters during field sampling for the baseline parameters, excluding the field parameters, at any monitoring well, the facility owner/operator:

(1) must, within 14 days of this finding, notify the department indicating which parameters have shown significant increases from existing water quality levels; and

(2) must establish a contingency monitoring program meeting the requirements of subparagraph (iii) of this paragraph within 90 days except as provided for in subclause (3) of this clause.

(3) The facility owner/operator may attempt to demonstrate to the department that a source other than the facility caused the contamination or that the significant increase resulted from error in sampling, analysis, or natural variation in groundwater quality. A report documenting this demonstration must be submitted to the department for approval. If a successful demonstration is made, documented and approved by the department, the facility owner/operator may continue operational water quality monitoring as specified in this subparagraph. If, after 90 days, a successful demonstration is not made, the owner/operator must initiate a contingency monitoring program as required in subparagraph (iii) of this paragraph.

(iii) Contingency water quality. The environmental monitoring plan must include a plan for contingency water quality monitoring, as described in this subparagraph, which must be conducted when a significant increase over existing water quality has been detected pursuant to clause (c)(5)(ii)(d) of this section for one or more of the baseline parameters listed in the Water Quality Analysis Tables. All contingency water quality monitoring plans are subject to department approval, may be modified at any time by the department

when necessary to protect public health and the environment, and must include the following:

(a) Within 90 days of triggering a contingency water quality monitoring program, the facility owner/operator must sample and analyze the groundwater for the expanded parameters listed in the Water Quality Analysis Tables. A minimum of one sample from each monitoring well (upgradient and downgradient) must be collected and analyzed during this sampling. If any constituents are detected in the downgradient wells as a result of the expanded parameter analysis, a minimum of two independent samples from each well (upgradient and downgradient) must be collected within 30 days of obtaining the results of the expanded parameter analysis and analyzed for the detected constituents. These samples must be collected within two weeks of each other and then compared to the existing groundwater guality values established pursuant to subparagraph (c)(5)(i) of this section. If an increase in the existing water guality values in the upgradient wells is indicated by this comparison, the existing water quality values for these parameters shall be revised to be the arithmetic mean of the results of each parameter for which analyses were performed in the upgradient wells within each hydrogeologic flow regime. The department may delete any of the expanded parameters if it can be shown that the removed parameters are not reasonably expected to be in, or derived from, the waste contained in the landfill based on the leachate sampling being performed pursuant to paragraph (c)(3) of this section.

(b) After obtaining the results from the initial or subsequent sampling required in clause(a) of this subparagraph, the facility owner/operator must:

(1) within 14 days, notify the department to identify the expanded parameters that have been detected;

(2) within 90 days, and on a quarterly basis thereafter, resample all wells, conduct analyses for all baseline parameters, and for those expanded parameters that are detected in response to clause (a) of this subparagraph. In addition, the facility owner/operator shall sample and conduct analyses annually on all wells for the expanded parameters. At least one sample from each upgradient and downgradient well must be collected and analyzed during these sampling events. The department may reduce the requirements of this subclause based on site specific conditions; and

(3) establish groundwater protection standards for all parameters detected pursuant to clause (a) of this subparagraph. The groundwater protection standards must be established in accordance with clause (f) of this subparagraph.

(c) If the concentrations of any of the expanded parameters are shown to be at or below existing water quality values for two consecutive sampling events, the owner/operator must notify the department of this finding and, if approved by the department, may remove that parameter from the contingency water quality monitoring program. If the concentrations of all the expanded parameters are shown to be at or below existing water quality values for two consecutive sampling events, the owner/operator must notify the department and, if approved by the department, may return to operational water quality monitoring.

(d) If the concentrations of any expanded parameters are above existing water quality values, but all concentrations are below the groundwater protection standard

established under clause (f) of this subparagraph, the owner/operator must continue contingency monitoring in accordance with this subparagraph.

(e) If one or more expanded parameters are detected at significant levels above the groundwater protection standard established under clause (f) of this subparagraph in any sampling event, the facility owner/operator must, within 14 days of this finding, notify the department to identify the expanded parameters that have exceeded the groundwater protection standard, and notify all appropriate local government officials identified in the Contingency Plan, required pursuant to section 360-2.10 of this Subpart, that the notice has been sent to the department. The owner/operator must also:

 characterize the nature and extent of the release by installing additional monitoring wells as necessary;

(2) install at least one additional monitoring well at the facility boundary in the direction of contaminant migration, and sample this well in accordance with subparagraph (c)
 (5)(i) of this section;

(3) notify all persons who own the land or reside on the land that is directly over any part of the plume of contamination if contaminants have migrated off-site as indicated by sampling of wells in accordance with subclause (1) of this clause; and

(4) initiate an assessment of corrective measures as required by section 360-2.20 of this Subpart within 90 days; or

(5) demonstrate that a source other than the landfill caused the contamination, or that the significant increase resulted from error in sampling, analysis, or natural variation in groundwater quality. This report must be submitted for approval by the department. If a successful demonstration is made, the facility owner/operator must continue monitoring in accordance with the contingency water quality monitoring program pursuant to subparagraph (c)(3)(iii) of this section, and may return to operational monitoring if the expanded parameters are at or below existing water quality as specified in subparagraph (c)(5)(i) of this section. Unless and until a successful demonstration is made, the owner/operator must comply with this clause, including initiating an assessment of corrective measures.

(f) The owner/operator must establish a groundwater protection standard for each expanded parameter detected in the groundwater. The groundwater protection standard shall be:

(1) for parameters for which a maximum contaminant level (MCL) has been established in section 1412 of the Safe Drinking Water Act under 40 CFR part 141 (see section 360-1.3 of this Part) or for which standard has been established pursuant to Part 701, 702, or 703 of this Title, whichever is more stringent when the parameters are the same, the MCL or standard for that constituent;

(2) for parameters for which MCLs or standards have not been established, the existing water quality concentration for the parameter established from wells in accordance with subparagraph (c)(5)(i) of this section; or

(3) for parameters for which the existing water quality level is higher than the MCL or standard identified under subclause (1) of this clause, the existing water quality

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concentration.

(iv) Reporting of data. Unless more rapid reporting is required to address an imminent environmental or public health concern, the owner or operator of the facility must report all water quality monitoring results to the department within 90 days of the conclusion of the sample collection. The report must include:

(a) A table showing the sample collection date, the analytical results (including all peaks even if below method detection limits [MDL]), designation of upgradient wells and location number for each environmental monitoring point sampled, applicable water quality standards, and groundwater protection standards if established, MDL's, and Chemical Abstracts Service (CAS) numbers on all parameters.

(b) In addition, tables or graphical representations comparing current water quality with existing water quality and with upgradient water quality must be presented. These comparisons may include Piper diagrams, Stiff diagrams, tables, or other analyses.

(c) A summary of the contraventions of State water quality standards, significant increases in concentrations above existing water quality, any exceedances of groundwater protection standards, and discussion of results, and any proposed modifications to the sampling and analysis schedule necessary to meet the requirements of subparagraphs (i) through (iii) of this paragraph.

(d) All AQA/AQC documentation must be submitted to the department in a form acceptable to the department.

(e) The annual report must contain a summary of the water quality information presented in clauses (b) and (c) of this subparagraph with special note of any changes in water quality which have occurred throughout the year.

(f) The data quality assessment report required pursuant to paragraph (d)(5) of this section.

(d) Site analytical plan. The site analytical plan must describe the method of sample collection and preservation, chain of custody documentation, analyses to be performed, analytical methods, data quality objectives, procedures for corrective actions, and procedures for data reduction, validation and reporting. The site analytical plan will pertain to existing water quality monitoring programs, operational water quality monitoring programs, and a contingency water quality monitoring program which specifies trigger mechanisms for its initiation. Unless otherwise approved by the department, the site analytical plan must comply with the following:

(1) Data quality objectives.

(i) The data quality objectives for the data generation activity must be established prior to the initiation of any sampling.

(ii) The data quality objectives shall define the goals of each phase of the water quality monitoring program, including, but not limited to, the following:

(a) reasons for the analytical program;

(b) identification of any regulatory programs and standards applicable to the analytical program; and

(c) minimum detection limits for each of the parameters listed in the Water Quality Analysis Tables.

(iii) The data quality objectives shall be the basis for the development of all other portions of the site analytical plan.

(2) Analytic quality assurance (AQA)/analytic quality control (AQC).

(i) The site analytical plan must include a discussion of the AQA/AQC for the sampling program associated with the facility and shall be sufficient to ensure that the data generated by the sampling and analysis activities are of a quality commensurate with their intended use and the requirements of the department. The discussion shall detail the AQA/AQC goals and protocols for each type of environmental monitoring to be performed at the facility. Elements must include a discussion of the quality objectives of the project, identification of the qualifications of those persons who will be performing the work and their responsibilities and authorities, enumeration of AQC procedures to be followed, and reference to the specific standard operating procedures that will be followed for all aspects of the environmental monitoring program.

(3) Field sampling procedures.

(i) All field sampling procedures shall be described in detail in the site analytical plan. All field quality control procedures shall be described including types and frequency of field quality control samples to be collected such as field blanks, trip blanks, field duplicates, reference materials and material blanks.

(ii) All samples must be collected and stored in the order of the parameter's volatilization sensitivity using methods, consistently applied, which ensure sample integrity.

(iii) All sampling equipment must be constructed of inert materials designed to obtain samples with minimal agitation and contact with the atmosphere; be cleaned and protected during transport to avoid contamination; and checked before use. Dedicated equipment must be constructed of appropriate inert materials and must be appropriate for the types of sampling to be performed.

(iv) Samples must be properly preserved and delivered to the laboratory with proper chain of custody within all appropriate holding times for the parameters to be analyzed.

(v) The sampling procedures and frequencies must be protective of human health and the environment.

(vi) Monitoring well sampling techniques. Monitoring well sampling techniques must be consistently performed each time a well is sampled, and must comply with the following:

(a) In areas where the presence of explosive or organic vapors is suspected, ambient air in the well must be checked for their presence before the well is evacuated.

(b) For wells with documented contamination, where contamination by non- aqueous phase liquids may be present, standing water in the well must be checked for immiscible layers or other contaminants that are lighter or heavier than water (floaters or sinkers). If present, floaters or sinkers must be sampled and analyzed separately by

a method described in the site analytical plan.

(c) Evacuation of the well must replace stagnant water in the well and the sand pack with fresh water representative of the formation. Evacuation methods, including pumping rate, depth of pump intake, and method of determining sufficiency of evacuation must be consistently applied each time the well is sampled. Evacuation methods must create the least possible turbidity in the well and must not lower the water in the well below the top of the sand pack whenever feasible. Evacuated water must be properly managed.

(d) After evacuation of the well, volatile organic samples must be collected.

(e) analysis must be performed after volatile organic samples have been collected, either within the borehole using a probe or from the next sample collected. All field test equipment must be calibrated at the beginning of each sampling day and checked and recalibrated according to the manufacturer's specifications. Calibration data must be reported with the analytical results.

(f) Groundwater samples shall not be filtered, unless otherwise approved by the department. If, due to site-specific conditions, sample turbidity cannot be reduced to 50 nephelometric turbidity units (NTUs) or less by good sampling technique or well redevelopment, the department may approve collection of both filtered and unfiltered samples for analyses of the inorganic parameters. All other analyses required will be on the unfiltered samples.

(vii) Surface water and sediment sampling techniques. Surface water and sediment sampling methods must be consistently applied to all samples, and must comply with the following:

(a) Surface water samples collected from shallow water should not include bottom sediment. In shallow moving water, downstream samples must be collected first to avoid disturbances from the bottom sediments.

(b) Each water body over three feet deep that is sampled must be checked for stratification, and each stratum must be checked for contamination using field parameters. Each stratum showing evidence of contamination must be separately analyzed. If no stratum shows such evidence, a composite sample having equal parts of water from each stratum must be analyzed.

(c) Sediment samples must be taken at each location from which surface water samples are taken, and should consist of the upper five centimeters of sediment.

(viii) Water supply well sampling techniques. Sampling methods must be consistently applied each time a well is sampled and must comply with the following:

(a) Samples should be collected directly from the well so as to yield water representative of the formations supplying the well. If this is not possible, samples must be collected as near to the well as possible and before the water is softened, filtered, or heated.

(b) If possible, samples must be collected before the water enters the pressure tank, otherwise the water must run long enough to flush water stored in the tank and pipes.

(c) Before sampling, water must be evacuated from the well to ensure a fresh sample

of aquifer water.

(d) If samples are collected from a tap, aerators, filters, or other devices must be removed before sampling.

(ix) Corrective action. Standard operating procedures must be established which describe the procedures used to identify and correct deficiencies in the sample collection process. The standard operating procedure shall specify that each corrective action must be documented in the sampling report submitted to the department, with a description of the deficiency, the corrective action taken, and the persons responsible for implementing the corrective action. Any alterations to the field sampling procedures shall be included as an amendment to the site analytical plan.

(4) Laboratory procedures.

(i) Laboratory analyses must be performed by a laboratory currently certified under the appropriate approval categories by the New York State Department of Health's Environmental Laboratory Approval Program (ELAP).

(ii) The site analytical plan should contain the standard operating procedures of all laboratory activities related to the environmental monitoring plan. Any revisions to these standard operating procedures must be documented. Standard operating procedures should be available for the following, at a minimum:

(a) receipt, storage and handling of samples;

(b) sample scheduling to ensure that holding time requirements are met;

(c) reagent/standard preparation;

(d) general laboratory techniques such as glassware cleaning procedures, operation of analytical balances, pipetting techniques and use of volumetric glassware;

(e) description of how analytical methods are actually to be performed including precise reference to the analytical method used; and not a simple reference to standard methods; and

(f) standard operating procedures for equipment calibration and maintenance to ensure that laboratory equipment and instrumentation are in working order, including, but not limited to procedures and schedules for calibration and maintenance in accordance with manufacturers' specifications; and

(g) for a corrective action, standard operating procedures must be established for identifying and correcting deficiencies in the laboratory procedures. The standard operating procedure shall specify that each corrective action must be documented in the sampling event report submitted to the department with a description of the deficiency, the corrective action taken, and the person responsible for implementing the corrective action. Any alterations to the laboratory procedures shall be included as an amendment to the site analytical plan.

(5) Data quality assessment. At the conclusion of each sampling event and analysis of the samples collected, data quality assessment shall occur. A data quality assessment report must be submitted with the results from each sampling event. Data quality assessment shall occur in two phases.

(i) Data validation.

(a) For those sampling events for which only routine parameters are analyzed, the data validation shall be performed by the laboratory that performed the sample analyses.

(b) For those sampling events for which baseline or expanded parameters are analyzed, the data validation shall be performed by a person other than the laboratory that performed the analyses and that is acceptable to the department.

(c) The data validation shall be performed on all analytical data for the facility at a rate acceptable to the department, but not less than five percent of the data generated, and shall consist, at a minimum, of the following:

(1) field records and analytical data are reviewed to determine whether the data are accurate and defensible. All AQA/AQC information shall be reviewed along with any corrective actions taken during that sampling event; and

(2) all data summaries shall be clearly marked to identify any data that are not representative of environmental conditions at the site, or that were not generated in accordance with the site analytical plan.

(ii) Data usability analysis.

(a) The data usability analysis shall be performed on all analytical data for the facility and shall consist of the following:

(1) an assessment to determine if the data quality objectives were met;

(2) for consistency, comparison of the analytical data with the results from previous sampling events;

(3) evaluation of field duplicate results to indicate the samples are representative;

(4) comparison of the results of all field blanks, trip blanks, equipment rinsate blanks, and method blanks with full data sets to provide information concerning contaminants that may have been introduced during sampling, shipping, or analyzing;

(5) evaluation of matrix effects to assess the performance of the analytical method with respect to the sample matrix, and determine whether the data have been biased high or low due to matrix effects;

(6) integration of the field and laboratory data with geological, hydrogeological, and meteorological data to provide information about the extent of contamination, if it occurs; and

(7) comparison of precision, accuracy, representativeness, comparability, completeness, and defensibility of the data generated with that required to meet the data quality objectives established in the site analytical plan.

(6) The following Water Quality Analysis Tables in this section list the routine, baseline, and expanded parameters for analysis of all monitoring samples.

WATER QUALITY ANALYSIS TABLES

## ROUTINE PARAMETERS<sup>1</sup>

Field Parameters:			
Static water level(in wells and sumps)			
Specific Conductance		9050	
Temperature			
Floaters or Sinkers5			
Temperature			
рН		9040	
Eh		9041	
Dissolved Oxygen6			
Field Observations7			
Turbidity		180.1	
Leachate Indicators:			
Total Kjeldahl Nitrogen		351.1 351.2 351.3	60
Ammonia	7664-41-7	351.4 350.1 350.2	200 60
Nitrate		350.3	100
Chemical Oxygen Demand		9200 410.1 410.2 410.3 410.4	50000 50000 5000 80000
Biochemical Oxygen Demand (BOD <sub>5</sub> )		405.1	2000
Total Organic Carbon			
Total Dissolved Solids		9060	
Sulfate		160.1 9035	40000
Alkalinity		9036 9038	
Phenols		310.1	20000
Chloride	108-95-2	310.2 8040 9250	6000
Bromide		9251	
Total hardness as CaCO <sub>3</sub>		9252 320.1 130.1 130.2	2000 20000 30000
Inorganic Parameters:			
Cadmium	(Total)	3010 7130	40 50
Calcium		7131	1
Iron	(Total) (Total)	7140 7380	40 100
Lead	(Total)	7381 6010	4 400

		7420	1000
Magnesium		7421	10
Manganese	(Total) (Total)	7450 7460	4 40
Potassium		7461	0.8
Sodium	(Total) (Total)	7610 7770	40 8

The department may modify this list as necessary.

### Notes

<sup>1</sup>This list contains parameters for which possible analytical procedures are provided in EPA Report SW-846 *Test Methods for Evaluating Solid Waste*, third edition, November 1986, as revised December 1987, and *Methods for Chemical Analysis of Water and Wastes*, USEPA-600/4-79-020, March, 1979. The regulatory requirements pertain only to the list of parameters; the right hand columns (Methods and PQL) are given for informational purposes only. See also footnote 4.

<sup>2</sup>Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

<sup>3</sup>Chemical Abstracts Service Registry Number. Where "Total" is entered, all species in the groundwater that contain this element are included.

<sup>4</sup>Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in groundwaters that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. PQLs are based on 5 ml samples for volatile organics and 1 L samples for semivolatile organics. CAUTION: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation.

<sup>5</sup>Any floaters or sinkers found must be analyzed separately for baseline parameters.

<sup>6</sup>Surface water only.

<sup>7</sup>Any unusual conditions (colors, odors, surface sheens, etc.) noticed during well development, purging, or sampling must be reported.

Field Parameters:		
Static water level (in wells and sumps)		
Specific Conductance	9050	
Temperature		
Floaters or Sinkers5		
рН	9040 9041	

#### BASELINE PARAMETERS<sup>1</sup>

Eh			
Dissolved Oxygen6			
Field Observations7		180.1	
Turbidity			
Leachate Indicators:			
Total Kjeldahl Nitrogen		351.1 351.2 351.3	60
Ammonia	7664-41- 7	351.4 350.1 350.2	200 30
Nitrate	Makked 8 - 46/5/70 - 100/00/00 - 100/00	350.3	100
Chemical Oxygen Demand		9200 410.1 410.2 410.3	50000 50000 50000
Biochemical Oxygen Demand (BOD <sub>5</sub> )		410.4 405.1	80000 2000
Total Organic Carbon			
Total Dissolved Solids		9060	
Sulfate		160.1 9035	40000
Alkalinity		9036 9038	
Phenols		310.1	20000
Chloride		310.2 9250	6000
Bromide		9251	
Total hardness as CaCO <sub>3</sub>		9252	
Color		320.1 130.1 130.2 110.1 110.2 110.3	2000 20000 30000 80
Boron	7440-42- 8		
Inorganic Parameters:			
Aluminum			
Antimony	(total) (total)	7020 6010 7040	10 300 2000
Arsenic	(total)	7041 6010 7060	30 500 10
Barium	(total)	7061 6010	20 20
Beryllium	(total)	7080 6010 7090	1000 3 50
Cadmium	(total)	7091 6010 7130	2 40 50

Calcium		7131	1
Chromium	(total) (total)	7140 6010 7190	40 70 500
Chromium(Hexavalent)*	18540- 29-9	7191 7195 7196	10 600
Cobalt	(total)	7197 7198 6010	30 70
Copper	(total)	7200 7201 6010	500 10 60
Cyanide		7210	200
Iron	(total)	7211 9010	10 200
Lead	(total) (total)	7380 7381 6010	100 4 400
Magnesium		7420	1000
Manganese	(total)	7421 7450	10 4
Mercury	(total)	7460	40
Nickel	(total)	7461 7470	0.8 2
Potassium	(total) (total)	6010 7520 7610	150 400 40
Selenium	(total)	6010 7740	750 20
Silver	(total)	7741 6010	20 70
Sodium		7760	100
Thallium	(total) (total)	7761 7770 6010	10 8 400
Vanadium	(total)	7840 7841 6010	1000 10 80
Zinc	(total)	7910 7911 6010 7950 7951	2000 40 20 50 0.5
Organic Parameters:			
Acetone	67-64-1	8260	100
Acrylonitrile	107-13-1	8030 8260	5 200
Benzene	71-43-2	8020 8021 8260	2 0.1 5
Bromochloromethane	74-97-5	8021 8260	0.1 5
Bromodichloromethane	75-27-4	8010 8021	1 0.2

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		8260	5
Bromoform; Tribromomethane	75-25-2	8010 8021 8260	2 15 5
Carbon disulfide	75-15-0	8260	100
Carbon tetrachloride	56-23-5	8010 8021 8260	1 0.1 10
Chlorobenzene	108-90-7	8010 8020 8021 8260	2 2 0.1 5
Chloroethane; Ethyl chloride	75-00-3	8010 8021	5 1
Chloroform; Trichloromethane	67-66-3	8010 8021	0.5 0.2
Dibromochloromethane; Chlorodibromomethane	124-48-1	8260 8010 8021	5 1 0.3
1,2-Dibromo-3-chloropro-pane; DBCP	96-12-8	8260 8011 8021	5 0.1 30
1,2-Dibromoethane; Ethyl-ene dibromide; EDB	106-96-4	8260 8011 8021	25 0.1 10
o-Dichlorobenzene; 1,2-Dichlorobenzene	95-50-1	8026 8010 8020 8021 8120 8260	5 2 5 0.5 10 5
p-Dichlorobenzene; 1,4-Dichlorobenzene	106-46-	8270 8010 8020 8021 8120 8260	10 2 5 0.1 15 5
trans-1,4-Dichloro-2-bu- tene		8270	10
1,1-Dichloroethane; Ethylidene chloride	110-57-6 75-34-3	8260 8010 8021	100 1 0.5
1,2-Dichloroethane; Ethylene dichloride	107-06-2	8260 8010 8021	8 0.5 0.3
1,1-Dichloroethylene;		8260	5
1,1-Dichloroethene;		8010	1
Vinylidene chloride	75-35-4	8021	0.5
cis-1,2-Dichloroethylene;		8260	5
cis-1,2-Dichloroethene		8021	0.2
trans-1,2-Dichloroethyl-ene;	156-59-2	8260	5
trans-1,2-Dichloro- ethene	156-60-5	8010 8021	1 0.5
1,2-Dichloropropane;		8260	5
Pro-pylene dichloride	78-87-5	8010 8021	0.5

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		8010	20
trans-1,3-Dichloropropene.	10061- 01-5 10061- 02-6	8260 8010 8260	10 5 10
Ethylbenzene	100-41-4	8020 8221 8260	2 0.05 5
2-Hexanone; Methyl butyl ketone	591-78-6	8260	50
Methyl bromide; Bromo- methane	74-83-9	8010 8021	20 10
Methyl chloride; Chloro- methane	74-87-3	8010 8021	1 0.3
Methylene bromide; Dibro- momethane	74-95-3	8010 8021	15 20
Methylene chloride; Dichloromethane	75-09-02	8260 8010 8021	5 0.2 10
Methyl ethyl ketone; MEK; 2-Butanone	78-93-3	8260 8010	100 40
4-Methyl-2-pentanone; Methyl isobutyl ketone	108-10-1	8260 8015	10 5
Styrene	100-42-5	8260 8020 8021	100 1 0.1
1,1,1,2-Tetrachloroethane.	630-20-6	8260 8010 8021	10 5 5
1,1,2,2-Tetrachloroethane	79-34-5	8260 8010 8021	0.5 0.1 0.05
Tetrachloroethylene; Tet- rachloroethene; Per- chloroethylene	127-18-4	8260 8010 8021	5 0.5 0.5
Toluene	108-88-3	8260 8020 8021	5 2 0.1
1,1,1-Trichloroethane; Methylchloroform	71-55-6	8260 8010 8021	5 0.3 0.3
1,1,2-Trichloroethane	79-00-5	8260 8010	5 0.2
Trichloroethylene; Tri- chloroethene	79-01-6	8260 8010 8021	5 1 0.2
Trichlorofluoromethane; CFC-11	75-69-4	8260 8010 8021 8260	5 10 0.3 5
1,2,3-Trichloropropane	96-18-4	8010 8021 8260	10 5 15
Vinyl acetate	108-05-4	8260	50
Vinyl chloride; Chloro- ethene	75-01-4	810 8021 8260	2 0.4 10
Xylenes	1330-20- 7	8020 8021	5 0.2

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The department may modify this list as necessary.

#### Notes

<sup>1</sup>This list contains 47 volatile organics for which possible analytical procedures provided in EPA Report SW-846 *Test Methods for Evaluating Solid Waste*, third edition, November 1986, as revised December 1987, includes Method 8260; 25 metals for which SW-846 provides either Method 6010 or a method from the 7000 series of methods; and additional parameters for which possible procedures are provided in *Methods for Chemical Analysis of Water and Wastes*, USEPA-600/4-79-020, March, 1979. The regulatory requirements pertain only to the list of parameters; the right hand columns (Methods and PQL) are given for informational purposes only. See also footnote 4.

<sup>2</sup>Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

<sup>3</sup>Chemical Abstracts Service Registry Number. Where "Total" is entered, all species in the groundwater that contain this element are included.

<sup>4</sup>Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in groundwaters that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. PQLs are based on 5 ml samples for volatile organics and 1 L samples for semivolatile organics. CAUTION: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation.

<sup>5</sup>Any floaters or sinkers found must be analyzed separately for baseline parameters.

<sup>6</sup>Surface water only.

<sup>7</sup>Any unusual conditions (colors, odors, surface sheens, etc.) noticed during well development, purging, or sampling must be reported.

The department may waive the requirement to analyze Hexavalent Chromium

provided that Total and Hexavalent and Trivalent Chromium values do not exceed 0 .05 mg/l.

EXPANDED PARAMETERS<sup>1</sup>

Field Parameters:			
Static water level (in wells and sumps)			
Specific Conductance		9050	
Temperature			
Floaters or Sinkers5			
рН		9040 9041	
	1		

Dissolved Oxygen6			
Field Observations7		180.1	
Turbidity			
Leachate Indicators:			
Total Kjeldahl Nitrogen		351.1 351.2 351.3	60
Ammonia	7664-41- 7	351.4 350.1 350.2	200 30
Nitrate		350.3	100
Chemical Oxygen Demand		9200 410.1 410.2 410.3 410.4	50000 50000 50000 80000
Biochemical Oxygen Demand (BOD <sub>5</sub> )		405.1	2000
Total Organic Carbon			
Total Dissolved Solids		9060	
Sulfate		160.1 9035	40000
Alkalinity		9036 9038	
Phenols		310.1	20000
Chloride	108-95-2	310.2 8040 9250	6000
Bromide		9251	
Total hardness as CaCO <sub>3</sub>	24959- 67-9	9252 320.1 130.1 130.2	2000 20000 30000
Color		110.1 110.2 110.3	80
Boron	7440-42- 8		
Inorganic Parameters:			
Aluminum	(total)	7020	10
Antimony	(total)	6010 7040 7041	300 2000 30
Arsenic	(total)	6010 7060 7061	500 10 20
Barium	(total)	6010	20
Beryllium	(total)	7080 6010 7090	1000 3 50
Cadmium	(total)	7091 6010 7130	2 40 50

Calcium		7131	1
Chromium	(total) (total)	7140 6010 7190	40 70 500
Chromium(Hexavalent)*	18540- 29-9	7191 7195 7196 7197	10 600 30
Cobalt	(total)	7198 6010 7200	70 500
Copper	(total)	7201 6010	10 60
Cyanide		7211	10
Iron	(total) (total)	9010 7380	200 100
Lead	(total)	7381 6010 7420	4 400 1000
Magnesium		7421	10
Manganese	(total) (total)	7450 7460	4 40
Mercury	(total)	7461 7470	0.8 2
Nickel	(total)	6010 7520	150 400
Potassium	(total)	7610	40
Selenium	(total)	6010 7740 7741	750 20 20
Silver	(total)	6010 7760 7761	70 100 10
Sodium	(total)	7770	8
Thallium	(total)	6010 7840 7841	400 1000 10
Tin	(total)	6010	40
Vanadium	(total)	6010 7910 7911	80 2000 40
Zinc	(total)	6010 7950 7951	20 50 0.5
Organic Parameters:			
Acenaphthene	83-32-9	8100 8270	200 10
Acemaphthylene	208-96-8	8100 8270	200 10
Acetone	67-64-1	8260	100
Acetonitrile; Methyl cyanide	75-05-8	8015	100
Acetophenone	98-86-2	8270	10
2-Acetylaminofluorene; 2-AAF	53-96-3	8270	20

Acrolein	107-02-8	8030 8260	5 100
Acrylonitrile	107-13-1	8030 8260	5 200
Aldrin	309-00-2	8080 8270	10 5
Ally chloride	107-05-1	8010 8260	5 10
4- aminobiphenyl	92-67-1	8270	20
Anthracene	120-12-7	8100 8270	200 10
Benzene	71-43-2	8020 8021 8260	2 0.1 5
Benzo[a]anthracene; Benzanthracene	56-55-3	8100 8270	200 10
Benzo[b]fluoranthene	205-99-2	8100 8270	200 10
Benzo[k]fluoranthene	207-08-9	8100 8270	200 10
Benzo[ghi]perylene	191-24-2	8100 8270	200 10
Benzo[a]pyrene	50-32-8	8100 8270	200 10
Benzyl alcohoł	100-51-6	8270	20
alpha-BHC	319-84-6	8080 8270	0.05 10
beta-BHC	319-85-7	8080 8270	0.05 10
delta-BHC	319–86- 8	8080 8270	0.1 20
gamma-BHC; Lindane	58-89-9	8080 8270	0.05 20
Bis(2-chloroethoxy)methane	111-91-1	8110 8270	5 10
Bis(2-chloroethyl) ether; Dichloroethyl ether	111-44-4	8110 8270	3 10
Bis-(2-chloro-1-methyl-ethyl) ether; 2,21-Di- chlorodiisopropyl ether	108-60-1	8110 8270	10 10
DCIP, See note 9	10000		
Bis(2-ethylhexyl)phthalate Bromochloromethane; Chlorobromomethane	117-81-7 74-97-5	8060 8021 8260	20 0.1 5
Bromodichloromethane; Dibromochloromethane	75-27-4	8010 8021	1 0.2
Bromoform; Tribromomethane	75-25-2	8260 8010 8021	5 2 15
4-Bromophenyl phenyl ether	101-55-3	8260 8110	5 25
Butyl benzyl phthalate; Benzyl butyl phthalate	85-68-7	8270 8060	10 5
Carbon disulfide		8270	10

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Carbon tetrachloride	75-15-0 56-23-5	8260 8010 8021 8260	100 1 0.1 10
Chlordane	See Note 10	8080 8270	0.1 50
p-Chloroaniline	106-47-8	8270	20
Chlorobenzene	108-90-7	8010 8020 8021 8260	2 2 0.1 5
Chlorobenzilate	510-15-6	8270	10
p-Chloro-m-cresol; 4-Chloro-3-methylphenol	59-50-7	8040 8270	5 20
Chloroethane; Ethyl chloride	75-00-3	8010 8021 8260	5 1 10
Chloroform; Trichloromethane	67-66-3	8010 8021 8260	0.5 0.2 5
2-Chloronaphthalene	91-58-7	8120 8270	10 10
2-Chlorophenol	95-57-8	8040 8270	5 10
4-Chlorophenyl phenyl ether	7005-72- 3	8110 8270	40 10
Chloroprene	126-99-8	8010 8260	50 20
Chrysene	218-01-9	8100 8270	200 10
m-Cresol; 3-methylphenol	108-39-4	8270	10
o-Cresol; 2-methylphenol	95-48-7	8270	10
p-Cresol; 4-methylphenol	106-44-5	8270	10
2,4-D; 2,4-Dichlorophen- oxyacetic acid	94-75-7	8150	10
4,41-DDD	72-54-8	8080	0.1
4,41-DDE		8270	10
4,41-DDT	72-55-9	8080	0.05
Diallate		8270	10
Dibenz[a,h]anthracene	50-29-3	8080 8270	0.1 10
Dibenzofuran	2303-16- 4	8270	10
Dibromochloromethane; Chlorodibromomethane	53-70-3 132-64-9 124-48-1	8100 8270 8270 8010 8021 8260	200 10 10 1 0.3 5
1,2-Dibromo-3-chloro- propane; DBCP	96-12-8	8011 8021 8260	0.1 30 25
1,2-Dibromoethane; Ethylene dibromide; EDB	106-93-4	8011 8021 8260	0.1 10 5

Di-n-butyl phthalate	84-74-2	8060	5
o-Dichlorobenzene; 1,2-Dichlorobenzene	95-50-1	8270 8010 8020 8021 8120 8260	10 2 5 0.5 10 5
m-Dichlorobenzene; 1,3-Dichlorobenzene	541-73-1	8270 8010 8020 8021 8120 8260	10 5 5 0.2 10 5
p-Dichlorobenzene; 1,4-dichlorobenzene	106-46-7	8270 8010 8020 8021 8120 8260	10 2 5 0.1 15 5
3,31-Dichlorobenzidine		8270	10
trans-1,4-Dichloro- 2-butene	91-94-1	8270	10
Dichlorodifluoromethane; CFC 12	110-57-6 75-71-8	8260 8021	100 0.5
1,1-Dichloroethane; Ethyldidene chloride	75-34-3	8260 8010	5 1
1,2-Dichloroethane; Ethylene dichloride	107-06	8021 8260 8010	0.5 5 .05
1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride	75-35-4	8021 8260 8010	0.3 5 1
cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene		8021 8260	0.5 5
trans-1,2-Dichloroethylene	156-59-2	8021 8260	0.2 5
trans-1,2-Dichloroethene	156-60-5	8260 8010	5 1
2,4-Dichlorophenol	120-83-2	8021 8260 8040 8270	0.5 5 5 10
2,6-Dichlorophenol	87-65-0	8270	10
1,2-Dichloropropane; Propylene dichloride	78-87-5	8010 8021 8260	0.5 0.05 5
1,3-Dichloropropane; Trimethylene dichloride.	142-28-9	8021 8260	0.3 5
2,2-Dichloropropane; Isopropylidene chloride.	594-20-7	8021 8260	0.5 15
1,1-Dichloropropene	563-58-6	8021	0.2
cis-1,3-Dichloropropene	10061- 01-5	8260 8010	5 20
trans-1,3-Dichloropropene	10061- 02-6	8260 8010	10 5
Dieldrin	60-57-1	8260	10

		8060	5
0,0-Diethyl 0-2-pyrazinyl phosphorothioate; Thionazin	297-97-2	8270 8141 8270	10 5 20
Dimethoate	60-51-5	8141	3
p-(Dimethylamino)azo- benzene		8270	20
7,12-Dimethylbenz[a]- anthracene	60-11-7	8270	10
3,31-Dimethylbenzidine	57-97-6	8270	10
2,4-Dimethylphenol; m-Xylenol	199-93-7 105-67-9	8270 8040	10 5
Dimethyl phthalate		8270	10
m-Dinitrobenzene	131-11-3	8060	5
4,6-Dinitro-o-cresol 4,6- Dinitro-2-methylphenol	99-65-0	8270 8270	10 20
2,4-Dinitrophenol	534-52-1	8040 8270	150 50
2,4-Dinitrotoluene	51-28-5	8040 8270	150 50
2,6-Dinitrotoluene	121-14-2	8090 8270	0.2 10
Dinoseb; DNBP; 2-sec- Butyl-4,6-dinitrophenol.	606-20-2	8090 8270	0.1 10
Di-n-octyl phthalate	88-85-7 117-84-0	8150 8270 8060 8270	1 20 30 10
11 Diphenylamine	122-39-4	8270	10
Disulfoton	298-04-4	8140 8141	2 0.5
Endosulfan I	959-98-8	8270 8080	10 0.1
Endosulfan II	33213- 65-9	8270 8080	20 005
Endosulfan sulfate		8270	20
Endrin	1031-07- 8	8080 8270	0.5 10
Endrin aldehyde	72-20-8	8080	0.1
Ethylbenzene	7421-93- 4	8270 8080 8270	20 0.2 10
Ethyl methacrylate	100-41-4	8020 8021	2 0.05
Ethyl methanesulfonate		8260	5
Famphur	97-63-2	8015	5
Fluoranthene		8260 8270	10 10
Fluorene	62-50-0 52-85-7	8270 8270	20 20
Heptachlor	206-44-0	8100 8270	200 10
Heptachlor epoxide	86-73-7	8100	200

		8270	10
Hexachlorobenzene	76-44-8	8080 8270	0.05 10
Hexachlorobutadiene	1024-57- 3 118-74-1	8080 8270 8120	1 10 0.5
Hexachlorocyclopentadiene	87-68-3	8270 8021 8120	10 0.5 5
Hexachloroethane	77-47-7	8260 8270 8120	10 10 5
Hexachloropropene		8270	10
2-Hexanone; Methyl butyl ketone	67-72-1	8120 8260	0.5 10
Indeno(1,2,3-cd)pyrene	1888-71- 7 591-78-6 193-39-5	8270 8270 8260 8100 8270	10 10 50 200 10
Isobutyl alcohol	78-83-1	8015 8240	50 100
lsodrin	465-73-6	8270 8260	20 10
Isophorone	78-59-1	8090 8270	60 10
Isosafrole	120-58-1	8270	10
Kepone	143-50-0	8270	20
Methacrylonitrile	126-98-7	8015 8260	5 100
Methapyrilene	91-80-5	8270	100
Methoxychlor	72-43-5	8080 8270	2 10
Methyl bromide; Bromomethane	74-83-9	8010 8021	20 10
Methyl chloride; Chloromethane	74-87-3	8010 8021	1 0.3
3-Methylcholanthrene	56-49-5	8270	10
Methyl ethyl ketone; MEK; 2-Butanone	78-93-3	8015 8260	10 100
Methyl iodide;lodomethane	74-88-4	8010 8260	40 10
Methyl methacrylate	80-62-6	8015 8260	2 30
Methyl methanesulfonate	66-27-3	8270	10
2-MethyInaphthalene	91-57-6	8270	10
Methyl parathion; Parathion methyl	298-00-0	8140 8141 8270	0.5 1 10
4-Methyl-2-pentanone; Methyl isobutyl ketone	108-10-1	8015 8260	5 100
Methylene bromide; Dibromomethane	74-95-3	8010 8021 8260	15 20 10

Methylene chloride; Dichloromethane	75-09-2	8010 8021 8260	5 0.2 10
Naphthalene	91-20-3	8021 8100 8260 8270	0.5 200 5 10
1,4-Naphthoquinone	130-15-4	8270	10
1-Naphthylamine	134-32-7	8270	10
2-Naphthylamine	91-59-8	8270	10
o-Nitroaniline; 2-Nitroaniline	88-74-4	8270	50
m-Nitroaniline;			
3-Nitroaniline	99-09-2	8270	50
p-Nitroaniline; 4-Nitroaniline	100-01-6	8270	20
Nitrobenzene	98-95-3	8090 8270	40 10
o-Nitrophenol; 2-Nitrophenol	88-75-5	8040 8270	5 10
p-Nitrophenol; 4-Nitrophenol	100-02-7	8040 8270	10 50
N-Nitrosodi-n-butylamine.	924-16-3	8270	10
N-Nitrosodiethylamine	55-18-5	8270	20
N-Nitrosodimethylamine	62 <b>-</b> 75-9	8070	2
N-Nitrosodiphenylamine	86-30-6	8070	5
N-Nitrosodipropylamine; N-Nitroso-N-dipropyl- amine; Di-n- propylni- trosamine	621-64-7	8070	10
N-Nitrosomethylethalamine	10595- 95-6	8270	10
N-Nitrosopiperidine	100-75-4	8270	20
N-Nitrosopyrrolidine	930-55-2	8270	40
5-Nitro-o-toluidine	99-55-8	8270	10
Parathion	56-38-2	8141 8270	0.5 10
Pentachlorobenzene	608-93-5	8270	10
Pentachloronitrobenzene	82-68-8	8270	20
Pentachlorophenol	87 <b>-8</b> 6-5	8040 8270	5 50
Phenacetin	62-44-2	8270	20
Phenanthrene	85-01-8	8100 8270	200 10
Phenol	108-95-2	8040	1
p-Phenylenediamine	106-50-3	8270	10
Phorate	298-02-2	8140 8141 8270	2 0.5 10
Polychlorinated biphenyls; PCB's; Aroclors	See Note 11	8080 8270	50 200
Polychlorinated dibenzo-p- dioxins; PCDD's	See Note 12	8280	0.01

Polychlorinated dibenzo- furans; PCDF's	See Note 13	8280	0.01
Pronamide	23950- 58-8	8270	10
Propionitrile; Ethyl cyanide	107-12-0	8015 8260	60 150
Pyrene	129-00-0	8100 8270	200 10
Safrole	94-59-7	8270	10
Silvex; 2,4,5-TP	93-72-1	8150	2
Styrene	100-42-5	8020 8021 8260	1 0.1 10
2,4,5-T; 2,4,5-trichloro- phenoxyacetic acid	93-76-5	8150	2
1,2,4,5-Tetrachlorobenzene 2,3,7,8-Tetrachlorodi- benzo-p-dioxin; 2,3,7,8-TCDD	95-94-3 1746-01- 6 630-20-6	8270 8280	10 0.005
1,1,1,2-Tetrachloroethane.	79-34-5	8010 8021 8260	5 0.05 5
1,1,2,2-Tetrachloroethane.	127-18-4	8010 8021 8260	0.5 0.1 5
Tetrachloroethylene; Tetrachloroethene; Perchloroethylene	58-90-2	8010 8021 8260	0.5 0.5 5
2,3,4,6-Tetrachlorophenol.	108-88-3	8270	10
Toluene	95-53-4	8020 8021 8260	2 01 5
o-Toluidine	See Note 14	8270	10
Toxaphene	120-82-1	8080	2
1,2,4-Trichlorobenzene	71-55-6	8021 8120 8260 8270	0.3 0.5 10 10
1,1,1-Trichloroethane; Methylchloroform	79-00-5	8010 8021 8260	0.3 0.3 5
1,1,2-Trichloroethane	79-01-6	8010 8260	0.2 5
Trichloroethylene; Trichloroethene	75-69-4	8010 8021 8260	1 0.2 5
Trichlorofluoromethane; CFC-11	95-95-4 88-06-2	8010 8021 8260	10 0.3 5
2,4,5-Trichlorophenol		8270	10
2,4,6-Trichlorophenol	96-18-4	8040 8270	5 10
1,2,3-Trichloropropane		8010 8021 8260	10 5 15
0,0,0-Triethyl phosphoro-	126-68-1	8270	10

thioate			
sym-Trinitrobenzene	99-35-4	8270	10
Vinyl acetate	108-05-4	8260	50
Vinyl chloride; Chloroethene	75-01-4	8010 8021 8260	2 0.4 10
Xylene (total)	See Note 15	8020 8021 8260	5 0.2 5

The department may modify this list as necessary. EXPANDED PARAMETERS<sup>1</sup>

#### Notes

<sup>1</sup>The regulatory requirements pertain only to the list of substances, the right hand columns (Methods and PQL) are given for informational purposes only. See also footnotes 4 and 5.

<sup>2</sup>Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

<sup>3</sup>Chemical Abstracts Service registry number. Where "Total" is entered, all species in the groundwater that contain this element are included.

<sup>4</sup>Suggested Methods refer to analytical procedure numbers used in EPA Report SW-846 *Test Methods for Evaluating Solid Waste*, third edition, November 1986, as revised, December 1987 and *Methods for Chemical Analysis of Water and Wastes*, USEPA-600-4/79-020, March, 1979. CAUTION: The methods listed are representative procedures and may not always be the most suitable method(s) for monitoring an analyte under the regulations.

<sup>5</sup>Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in groundwaters that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. PQLs are based on 5 ml samples for volatile organics and 1 L samples for semivolatile organics. CAUTION: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation. <sup>6</sup>Any floaters or sinkers found must be analyzed separately for baseline parameters.

<sup>7</sup>Surface water only.

<sup>8</sup>Any unusual conditions (colors, odors, surface sheens, etc.) noticed during well development, purging, or sampling must be reported.

<sup>9</sup>This substance is often called Bis(2-chloroisopropyl) ether, the name Chemical Abstracts Service applies to its noncommercial isomer, Propane, 2,2"-oxybis[2]-chloro- (CAS RN 39638-32-9).

<sup>10</sup>Chlordane: This entry includes alpha-chlordane (CAS RN 5103-71-9), beta-chlordane (CAS RN 5103-74-2), gamma-chlordane (CAS RN 5566-34-7), and constituents of chlordane (CAS RN 57-74-9 and CAS RN 12789-03-6). PQL shown is for technical chlordane. PQLs of specific isomers are about 20 µg/l by method 8270.

<sup>11</sup>Polychlorinated biphenyls (CAS RN 1336-36-3): This category contains congener chemicals, including constituents of Aroclor 1016 (CAS RN 12674-11-2), Aroclor 1221 (CAS RN 11104-28-2), Aroclor 1232 (CAS RN 11141-16-5), Aroclor 1242 (CAS RN 53469-21-9), Aroclor 1248 (CAS RN 12672-29-6), Aroclor 1254 (CAS RN 11097-69-1), and Aroclor 1260 (CAS RN 11096-82-5). The PQL shown is an average value for PCB congeners.

<sup>12</sup>Polychlorinated dibenzo-p-dioxins: This category contains congener chemicals, including tetrachlorodibenzo-p-dioxins (see also 2,3,7,8-TCDD), pentachlorodibenzo-p-dioxins, and hexachlorodibenzo-p-dioxins. The PQL shown is an average value for PCDD congeners. Upon request of the applicant, the department may waive the requirement to analyze for dioxins, where appropriate.

<sup>13</sup>Polychlorinated dibenzofurans: This category contains congener chemicals, including tetrachlrodibenzofurans, pentachlorodibenzofurans, and hexachlorodibenzofurans. The PQL shown is an average value for PCDF congeners. Upon request of the applicant, the department may waive the requirement to analyze for furans, where appropriate.

<sup>14</sup>Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001-35-2), i.e., chlorinated camphene.

<sup>15</sup>Xylene (total): This entry includes o-xylene (CAS RN 96-47-6), m-xylene (CAS RN 108-38-3), p-xylene (CAS RN 106-42-3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330-20-7). PQLs for method 8021 are 0.2 for o-xylene and 0.1 for m- or p-xylene. The PQL for m-xylene is 2.0  $\mu$ g/L by method 8020 or 8260.

The department may waive the requirement to analyze Hexavalent Chromium provided that Total and Hexavalent and Trivalent Chromium values do not exceed 0.05 mg/l.

# §360-2.12 Landfill siting.

(a) Applicability. New landfills and lateral or vertical expansions of existing active landfills must be located on a site that exhibits the following characteristics unless the requirements of subdivision (b) of this section are met. A site selection study will be required only if the applicant proposes a site that does not exhibit all of the characteristics identified in either paragraph (1) or (2) of this subdivision.

(1) In the case of new landfills and lateral or vertical expansions of existing landfills:

(i) the site is not located in an area identified in section 360-1.7(a)(2) of this Part;

(ii) the site complies with the siting restrictions identified in subdivision (c) of this section;

(iii) bedrock subject to rapid or unpredictable groundwater flow must be avoided, unless it can be demonstrated that a containment failure of the facility would not result in contamination entering the bedrock system;

(iv) the site must not be in proximity of any mines, caves or other anomalous features that may alter groundwater flow;

(v) unconsolidated deposits underlying the proposed landfill must either exist or be constructed to be 20 feet or greater in thickness as measured from the base of the constructed liner system; and

(vi) the upper 20 feet of the unconsolidated deposits on the site must consist

predominantly (greater than 50 percent) of soils throughout the vertical section, with a maximum in situ coefficient of permeability of 5 x 10-6 centimeters per second, with no appreciable continuous deposits having a maximum coefficient of permeability of 5 x 10-4 centimeters per second.

(2) In the case of an existing landfill active on or after November 4, 1992 operating under and in compliance with a current Part 360 permit or order on consent, the department may allow lateral or vertical expansions if the site has less than 20 feet of unconsolidated deposits provided that:

(i) the proposed landfill expansion is identified in the local solid waste management plan approved by the department under Subpart 360-15 of this Part as a component of the integrated solid waste management system for the planning unit in which the facility is located and the proposed landfill expansion must be consistent with the goals and objectives of such plan;

 (ii) the unconsolidated deposits underlying the proposed landfill exist or are constructed to be 10 feet or greater in thickness as measured from the base of the constructed liner system;

(iii) the applicant demonstrates that the expansion site will have no significant adverse impact on human health, safety, or welfare, the environment, or natural resources; and

(iv) the site complies with subparagraphs (1)(i)-(iv) of this subdivision.

(3) Except in Nassau and Suffolk Counties, in the case of ash monofills for the disposal offly ash treated in a manner consistent with section 360- 3.6(g)(3) of this Part, combined ash, or bottom ash, the department may allow ash monofill development at sites that have less than 20 feet of unconsolidated deposits provided that:

(i) the proposed monofill must be identified in the local solid waste management plan approved by the department under Subpart 360-15 of this Part as a component of the integrated solid waste management system for the planning unit in which the facility is located and the proposed monofill must be consistent with the goals and objectives of such plan;

(ii) the unconsolidated deposits underlying the proposed landfill on the site exist or are constructed to be 10 feet or greater in thickness as measured from the base of the constructed liner system;

(iii) the applicant demonstrates that the monofill site will have no significant adverse impact on the public health, safety or welfare, the environment or natural resources; and

(iv) the site complies with subparagraphs (1)(i)-(iv) of this subdivision.

(b) Exceptions. New landfills and lateral or vertical expansions of existing landfills may be located on sites that do not exhibit the characteristics identified in subdivision (a) of this section provided that the requirements of paragraphs (1) and (2) of this subdivision are met. The department may impose additional requirements to assure that the permitted activity will have no significant adverse impact on the public health, safety or welfare, the environment or natural resources for any site selected pursuant to this subdivision.

(1) The proposed landfill must be identified in the local solid waste management plan approved by the department under Subpart 360-15 of this Part as a component of the

integrated solid waste management system for the planning unit in which the facility is located, and the proposed landfill must be consistent with the goals and objectives of such plan.

(2) The applicant must perform a site selection study and submit a site selection report as part of a complete application. This report must describe the factors that prevent the applicant from using a site exhibiting the characteristics identified in subdivision (a) of this section. Such factors may include, but are not limited to, the proximity to receiving waters or proximity to sewer lines or POTWs to ensure proper management of leachate during the operational and post-closure period of the landfill. The site selection report must also demonstrate that the chosen site will have no significant adverse impact on public health, safety, or welfare, the environment or natural resources, and will be consistent with the provisions of the ECL.

(i) The site selection process must be comprehensive and must identify and evaluate a reasonable range of alternative sites which are feasible considering the capabilities and objectives of the applicant. All of the criteria used to eliminate and evaluate the suitability of the potential sites must be clearly defined and consistently applied. A phased approach must be used, in which a more detailed evaluation of sites occurs as the number of potential sites is reduced.

(a) The applicant must exclude inappropriate siting areas by avoiding the prohibited siting areas identified in section 360-1.7(a)(2) of this Part and applying the landfill siting restrictions identified in subdivision (c) of this section.

(b) The applicant must evaluate potential siting areas to identify alternative sites that are suitable for landfill development. When applying the siting criteria, the evaluation must include the use of the type of data listed in section 360-2.11(a)(2) of this Subpart. Field reconnaissance to confirm the published information and a morphologic evaluation of landforms must be performed to identify the areas which are likely to have thick low permeable soils available within the study area. The applicant must use the following criteria in the landfill site selection study:

(1) Unconsolidated deposits on the site must be those most likely to minimize the migration of contaminants from the landfill. In evaluating the sites, preferred sites should have the greatest possible thickness of these materials to provide a barrier to contaminant migration into bedrock;

(2) bedrock subject to rapid or unpredictable groundwater flow must be avoided unless it can be demonstrated that a containment failure of the facility would not result in contamination entering the bedrock system resulting in a contravention of groundwater standards;

(3) probable groundwater flow patterns and water quality must be considered in finding areas where containment failure would do the least environmental damage and would be easiest to correct;

(4) proximity and hydrogeologic relationship to water supply sources;

(5) natural topography and its impacts upon the proposed facility; and

(6) relationship to mines, caves, or other anomalous hydrogeologic features that might alter groundwater flow.

(c) Preliminary field investigations must be conducted at the highest ranking available site or sites, to identify any major obstacles to site development, and to provide sufficient data to differentiate among the preferred sites and support a siting decision.

(ii) The report must describe the process used to select the proposed site, including evaluation criteria, deferral (elimination) criteria, assumptions, data sources, decisionmaking means (such as numerical ranking systems) and other factors used to make the siting decisions. The report must demonstrate that, considering the capabilities and objectives of the applicant, a reasonable range of alternative sites available throughout the planning unit in which the project is proposed were evaluated and that the selected site is the most appropriate alternative. The decisionmaking process must be described to provide a clear understanding of how and why the siting decisions were made, and at a level of detail sufficient to provide for a comparative assessment of the alternatives discussed. The report must also include maps of sites and describe the results of the field investigations, the comparative advantages and disadvantages of the highest ranked sites, and the basis for selecting the proposed sites.

(c) Landfill siting restrictions. In addition to the provisions of section 360-1.7(a)(2) of this Part, the following landfill siting restrictions apply.

(1) Primary water supply, and principal aquifers:

(i) Except in Nassau and Suffolk Counties, and except as provided in subparagraph (ii) of this paragraph, no new landfill and no lateral or vertical expansion of an existing landfill may be constructed over primary water supply aquifers, principal aquifers, within a public water supply stabilized cone of depression area, or within a minimum distance of 100 feet to surface waters that are actively used as sources of municipal supply. Greater separation distances may be required in accordance with subparagraph (iii) of this paragraph.

(ii) The commissioner may allow lateral or vertical expansions of landfills, in operation pursuant to a valid Part 360 permit to operate or Order on Consent as of December 31, 1988, that are on principal aquifers, if there is a demonstrated public need for the capacity provided by the expansion that cannot be reasonably provided elsewhere, and that outweighs the potential risk of contamination to the aquifer. Additionally, the landfill expansion must promote the implementation of the State's solid waste management policy set forth in ECL 27-0106 and must be an integral part of any local solid waste management plan that may be in effect for the planning unit (as defined in ECL 27-0107) within which the facility is located; and the expansion must comply with all other requirements of this Part. However, the maximum time period allocated by the commissioner for any such expansion must not allow operation beyond December 31, 1995. In granting any expansion pursuant to this subparagraph, the department must impose specific conditions that are reasonably necessary to assure that the expansion will, to the extent practicable, have no significant adverse impact on public health or safety, welfare, the environment ornatural resources, and such approval contributes to the proper management of solid waste at the earliest possible time.

(iii) The required horizontal separation between deposited solid waste, and primary water supply aquifers, principal aquifers, public water supply stabilized cone of depression areas, or surface waters that are actively used as sources of municipal supply must be sufficient (based on the rate and direction of groundwater and surface water flow, landfill

design and requirements for corrective action in the event of failure of the landfill's containment system) to preclude contravention of groundwater standards in the aquifer and surface water standards in waters that are currently used as a source of municipal drinking water supply.

(2) Floodplains. Owners or operators of new landfill units, existing landfill units, and lateral expansions located in 100-year floodplains must demonstrate that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment.

(3) Aircraft safety.

(i) A landfill or landfill subcell into which putrescible solid waste is to be disposed must be located no closer than 5,000 feet from any airport runway end used by piston-powered fixed-wing aircraft and no closer than 10,000 feet from any airport runway end used by turbine-powered fixed-wing aircraft.

(ii) A landfill or landfill subcell into which putrescible solid waste is to be disposed, which is located within five miles of any airport runway end, must not, in the opinion of the Federal Aviation Administration, pose a potential bird or obstruction hazard to aircraft.

(iii) The permittee of an existing landfill or landfill subcell that is authorized to dispose of putrescible solid waste and that is located less than 10,000 feet from any airport runway end used by turbine-powered fixed- wing aircraft or less than 5,000 feet from any airport runway end used only by piston-powered fixed-wing aircraft must provide in its permit renewal application documentation that the Federal Aviation Administration believes the landfill or landfill subcell does not pose a bird hazard to aircraft.

(iv) Landfills containing only nonputrescible solid waste may be located less than 10,000 feet from any airport runway end used by turbine-powered fixed-wing aircraft or less than 5,000 feet from any airport runway end used only by piston-powered fixed-wing aircraft, if in the opinion of the Federal Aviation Administration they will not present a safety hazard to air traffic.

(v) The final elevation of a new landfill or expansion of an existing landfill must not extend more than 200 feet above the highest elevation of the land surface that existed prior to landfill development, unless the Federal Aviation Administration believes that the proposed fill height in excess of 200 feet will not present a safety hazard to air traffic.

(4) Unstable areas. A landfill must not be located in unstable areas where inadequate support for the structural components of the landfill exists or where changes in the substrate below or adjacent to the landfill are capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. An application for expansion of an existing landfill must demonstrate that adequate support for the structural components of the landfill exists or can be engineered to support any additional loads that may be generated by continued operation of the facility. For purposes of this paragraph:

(i) Unstable area means a location that is susceptible to natural or human- induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terrains.

(ii) Structural components means liners, leachate collection systems, final covers, runon/run-off systems, and any other component used in the construction and operation of the landfill that is necessary for protection of human health and the environment.

(iii) Poor foundation conditions means those areas where features exist which indicate that a natural or human-induced event may result in inadequate foundation support for the structural components of a landfill.

(iv) Areas susceptible to mass movement means those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the landfill because of natural or human-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluctuation, block sliding and rock fall.

(v) Karst terrains means areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terrains include, but are not limited to sinkholes, sinking streams, caves, large springs and blind valleys.

(5) Unmonitorable or unremediable areas. New landfills must not be located in areas where environmental monitoring and site remediation cannot be conducted. Identification of these areas must be based upon ability to sufficiently characterize groundwater and surface water flow to locate upgradient and downgradient directions; ability to place environmental monitoring points which will detect releases from the landfill; ability to characterize and define a release from the landfill and determine what corrective actions may be necessary; and the ability to carry out those corrective actions. Lateral expansions adjacent to existing landfills which are already contaminating groundwater may be allowed by the department if the proposed expansion area can be constructed in a way that demonstrates compliance with the regulations. This may be demonstrated using remedial actions at the existing site resulting in a demonstrated improvement in groundwater quality; and any additional monitoring requirements that the department needs to ensure the integrity of the expansion area, such as leakage detection lysimeters installed beneath the new liner, statistical triggers of groundwater monitoring, tracers, additional monitoring wells surrounding the entire site, and any other monitoring methods required by the department.

(6) Fault areas. New landfills and lateral expansions shall not be located within 200 feet of a fault that has had displacement in Holocene time unless the owner or operator demonstrates to the department that an alternative setback distance of less than 200 feet will not result in damage to the structural integrity of the landfill unit and will be protective of human health and the environment.

(7) Seismic impact zones. New landfills and lateral expansions shall not be located in seismic impact zones, unless the owner or operator demonstrates to the department that all permanent containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration

in lithified earth material for the site pursuant to the provisions of section 360-2.7(b)(7) of this Subpart.

(8) Federally regulated wetlands. For the purpose of this Subpart, federally regulated wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marsh, bogs and similar areas. New landfills and lateral expansions shall not be located in federally regulated wetlands, unless the appropriate permits are obtained from the U.S. Army Corps of Engineers, and unless the owner or operator can make the following demonstrations to the department, to the extent required under federal or State law.

(i) The presumption that a practicable alternative to the proposed landfill is available, which does not involve federally regulated wetlands, is clearly rebutted.

(ii) The construction and operation of the landfill will not:

(a) cause or contribute to violations of any applicable water quality standard;

(b) violate any applicable toxic effluent standard or prohibition;

(c) jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat; and

(d) violate any requirement for the protection of a marine sanctuary.

(iii) The landfill will not cause or contribute to significant degradation of federally regulated wetlands. The owner or operator must demonstrate the integrity of the landfill and its ability to protect ecological resources by addressing the following factors:

(a) erosion, stability and migration potential of native wetland soils, muds, and deposits used to support the landfill;

(b) erosion, stability and migration potential of dredged and fill materials used to support the landfill;

(c) the volume and chemical nature of the waste managed in the landfill;

(d) impacts from release of the solid waste on fish, wildlife, and other aquatic resources and their habitat;

(e) the potential effects on catastrophic release of waste to the federally regulated wetland and the resulting impacts on the environment; and

(f) any additional factors, as necessary, to demonstrate that ecological resources in the federally regulated wetland are sufficiently protected.

(iv) Steps have been taken to attempt to achieve no net loss of federally regulated wetlands to the extent required under federal or State law (as defined by acreage and function) by first avoiding impacts to federally regulated wetlands to the maximum extent practicable, then minimizing unavoidable impacts to the maximum extent practicable, and finally by offsetting remaining unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions (e.g. restoration of existing degraded wetlands or creation of new wetlands).

(v) Sufficient information is available to make a reasonable determination with respect to these demonstrations.

