

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

2nd - Semi-Annual Post-Closure Groundwater Monitoring Report 2013

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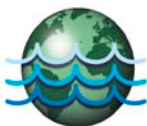
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor, Cell 083
Albany, New York 12233

Prepared For:



Town of Southampton
1370 Majors Path
Southampton, New York 11968

Prepared By:



P.W. Grosser Consulting, Inc.
630 Johnson Avenue, Suite 7
Bohemia, New York 11716
Phone: 631-589-6353
Fax: 631-589-8705

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

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.

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).

Seventeen groundwater monitoring wells, as well as the primary and secondary leachate collection systems were sampled on October 16 and 17, 2013 as part of the Second Half 2013 sampling event. Samples collected as part of the Second Half 2013 sampling event were delivered to H2M Labs, Inc. of Melville, New York and analyzed for the routine parameters. In addition, four samples (MW-6AR, MW-6B, MW-11A, and MW-11B) were analyzed for baseline metals and two samples (MW-11A and MW-11B) were analyzed for baseline volatile organic compounds (VOCs). 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 Second 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. MW-6AR was damaged during September 2013 when it was hit by a pay loader. Upon inspection, it was determined that the casing was bent at surface grade. PWGC removed the portion above grade and replaced the stickup casing with new casing. The well was resurveyed following the completion of repairs. Headspace readings were collected utilizing a photoionization detector (PID). No PID responses were observed. No other 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 line. Primary and secondary leachate collection systems were also sampled using disposable polyethylene bailers and a dedicated polyethylene line.

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-8, MW-11A, and MW-11B.

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 Second Half 2013 (October) groundwater sampling event, samples from seventeen groundwater monitoring wells were collected and submitted for analysis of routine and/or baseline metals and VOC parameters. The inorganic portion of the analysis includes metals, nutrients, and the physical properties of the sample. Routine parameters include a condensed version of the baseline parameters. Routine metals are reduced to cadmium, calcium, iron, lead, magnesium, manganese, potassium, and sodium. In addition, VOCs, color and hexavalent chromium are not analyzed as part of the routine parameters. 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 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 – October 2013

Long Island groundwater generally has a low pH and is typically measured below the NYSDEC standard range of 6.5 to 8.5. Eleven samples had a measured pH level below 6.5 with the largest deviation seen in sample MW-4A where the pH level measured 5.35. 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 four groundwater samples. Ammonia was detected in one of the seventeen groundwater samples (MW-3B) at a concentration exceeding the NYSDEC groundwater standard (2.0 mg/L) indicating that leachate is present. The highest concentration of ammonia, 3.22 mg/L, was measured in sample MW-3B. 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.

Iron (total) was detected above method detection limits in fifteen of the seventeen groundwater samples. Eight of the seventeen groundwater samples exceeded the 0.3 mg/L NYSDEC ambient groundwater standard for iron (total). Iron (total) was not detected above NYSDEC groundwater standards in the up-gradient (MW-1) well cluster. Concentrations of iron (total) ranged from non-detect to 38.1 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-8, MW-11A and MW-11B indicating iron detections are more a function of turbidity than influenced by leachate. The standard for iron is set based upon aesthetic considerations and is not detrimental to health. Iron concentrations in excess of 1.0 mg/L will cause an unpleasant taste in drinking water. Iron (total) concentrations were less than 1.0 mg/L in twelve of the seventeen samples collected and analyzed.

Manganese (total) was detected above method detection limits in each of the seventeen groundwater samples. Five samples (MW-3B, MW-8, MW-11A, MW-11B, and MW-12A) of seventeen showed concentrations of manganese (total) above the NYSDEC groundwater standard (0.3 mg/L). Manganese (dissolved) concentrations in one of the three filtered samples (MW-11A) 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 (total) was 3.78 mg/L measured from sample MW-12A. Manganese is also aesthetically objectionable and not considered a significant health threat.

Sodium (total) was detected above method detection limits in each of the seventeen groundwater samples. Sodium (total) was detected in one of the seventeen groundwater samples (MW-4C) at a concentration exceeding the NYSDEC groundwater standard (20 mg/L). Sodium concentrations ranged from 6.56 mg/L (MW-9) to 23.7 mg/L (MW-4C).

2.7.2 Organic Water Quality Results – October 2013

Groundwater samples collected from two of the wells (MW-11A and MW-11B) were analyzed for VOCs as part of the Second 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-11B which was qualified as (J) estimated (**Table 2**).

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 October 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.

2.9 Leachate Quality

The October 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 higher when compared to concentrations detected during the April 2013 sampling event. Total precipitation was significantly higher during the second half of 2013 which may have attributed to the increase in concentrations. 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 Thallium (141.5%). Thallium has been qualified as estimated (J) in the sample chosen for review.

The CRDL recovery of the target analytes met QC criteria in the opening and closing CRDL standard with the exception of Lead (67.8%/124%) and Thallium (120.8%) in the CRI sample analysis for MW-11A (Filtered Metals Analysis). Detected results for these analytes in the samples in this data set are therefore qualified as estimated (J).

The ICP serial dilution evaluation of MW-1C (Total Metals Analysis) and MW-11A (Filtered Metals Analysis) was acceptable, with the exception of that for magnesium in MW-1C and zinc in MW-11A. 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.

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 (29.9%), Dibromochloromethane (21.1%), Bromoform (31.2%), and 1,2-Dibromo-3-chloropropane (39.1%). 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:

Analytes	% Difference
• Acrylonitrile	20.3
• Trichlorofluoromethane	20.3
• Iodomethane	35.1
• Acetone	30.6
• Carbon Disulfide	29.9
• Trans 1,4-Dichlorobutene	38.7
• Bromoform	22.6

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**.

4.0 SUMMARY

Review of the data for the Second 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 a single organic constituent (chloroform) was detected at an estimated concentration but below groundwater standards in one (MW-11B) of the two 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.

TABLES

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
October 2013

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-1A																		
			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	Oct. 2013
														Unfiltered	Filtered						
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 B	PNA	PNA	0.0156 B	PNA	0.174 B	PNA	0.0129 B	PNA
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	PNA	0.0041 B	PNA	0.0085 B	PNA	0.0012 U	PNA
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	PNA
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	PNA
Beryllium 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	PNA
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	PNA
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	0.00015 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	59.9
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	PNA
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	PNA
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	PNA
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	PNA
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	0.228
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	0.0057
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	26
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	0.0456
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	PNA
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	PNA
Potassium	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	13.7
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	0.0242 B	PNA	0.0025 B	PNA
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	PNA
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	16.9
Thallium as Tl	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	PNA
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	PNA
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	PNA
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	150 D	31	125 D
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	27.7
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	128 D	25.7	123 D
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	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	2 U	2 U	2 U	2 U	PNA	2 U	2 U	2 U	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 U	10.6	PNA	12.4	16.4	10 U	20	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	PNA	5 U	PNA
Chromium hex as Cr	mg/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	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA
Hardness as CaCO3	mg/L	NA	230	170	250	290	230	160	128	144	520	330	460	210 D	PNA	190 D	288 D	152 D	260 D	62	350 D
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 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	0.1 U	0.1 U	PNA	0.1 U	0.1 U	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	6.32 D	2.09 D	6.65 D
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	0.005 U	0.005 U	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	427
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	0.11
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	6.2
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	8.9
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	13.35
pH	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	6.21
Spec. Cond	umho/cm	NA	500	460	570	620	550	PNA	PNA	542	656	950	1,110	432	PNA	490	630	410	690	212	615

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 compounds 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.

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.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM = Not Monitored

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
October 2013

ANALYTICAL PARAMETERS	UNITS	GW STND*	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	Oct. 2011	April 2012	Oct. 2012	April 2013	Oct. 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	0.0241 B	PNA	0.0334 BJ	PNA	0.0438 B	PNA
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	PNA
Arsenic as As	mg/L	0.025	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.007	PNA	0.0029 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	0.0125 B	PNA	0.0105 B	PNA	0.0104 B	PNA	0.0104 BE	PNA	0.012 B	PNA	0.0098 B	PNA
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	0.00017 U	PNA	0.00013 U	PNA	0.00012 U	PNA	0.0001 U	PNA
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	PNA	0.0068 B	PNA	0.0129 B	PNA
Cadmium as Cd	mg/L	0.005	0.005 U	PNA	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	0.00015 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	4.22 B	4.29 BJ	4.26 B	4.31 B	4.66 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	PNA
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	PNA
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	PNA
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	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA
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	0.0751 B
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	0.0071
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	2.06 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	0.0049 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	PNA
Nickel as Ni	mg/L	0.1	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.0124 B	PNA	0.0064 B	PNA	0.0084 B	PNA	0.0055 B	PNA	0.0114 B	PNA	0.0095 B	PNA
Potassium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.642 B	0.631 B	0.628 B	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	1.64 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	0.0026 U	PNA	0.0028 U	PNA	0.0023 U	PNA
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	0.00052 U	PNA	0.0024 B	PNA	0.0002 U	PNA
Sodium as Na	mg/L	20	9.5	PNA	7.7	PNA	7.9	6.65	7.93	8.13	6.78	6.92	7.09	7.41	6.93	7.73	7.04 J	7.16	6.28	8.31
Thallium as Tl	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	0.0032 B	PNA	0.0032 U	PNA	0.0019 U	PNA
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0022 U	PNA	0.00097 U	PNA	0.0012 U	PNA	0.00056 U	PNA	0.00023 U	PNA	0.0003 B	PNA
Zinc as Zn	mg/L	2 #	0.04	PNA	0.02	PNA	0.03	PNA	0.0101 B	PNA	0.0106 B	PNA	0.005 B	PNA	0.0118 B	PNA	0.00044 U	PNA	0.013 B	PNA
Alkalinity tot CaCo3	mg/L	NA	14	18	18	34	16	7.6	26	11.1	11	12	8.8	6.2	6.5	10.1 D	12.9 D	11.5	11	12.2
Chloride as Cl	mg/L	250.0	10	13	6.0	7.0	8.0	9.9	9.8	9.8	9.61	8.54	9.02	8.95	6.6	8.39	9.89	10.8	8.72	10.6
Sulfate as SO4	mg/L	250.0	9.0	8.0	8.0	8.0	5 U	8	9.14	8.5	8.58	7	7.8 J	8.33	6.31	6.15	6.58	8.09	7.62	8.67
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	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BOD5	mg/L	NA	3.4	2.1	2 U	4.1	2 U	2 U	13	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 UJ	2 U
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	10 U
Color	units	NA	5 U	5 U	5 U	5 U	10	PNA	5	PNA	5 U	PNA	5	PNA	5 U	PNA	5	PNA	5 U	PNA
Chromium hex as Cr	mg/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	PNA
Hardness as CaCO3	mg/L	NA	16	19	15	18	19	10	0.1 U	34	28	19	14	21	11	18	22	17	16	20
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 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	0.1 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 U	PNA	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	1.49	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Phenols as Phenol	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	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	62
Tot. Kjeldahl 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	0.27	0.1 U	0.1 U	0.1 U	0.27
Tot Organic Carbon	mg/L	NA	2.5	6.5	3.3	9.5	1.2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5	1.3	1 U	3.4	1.7
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	5
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	12.42
pH	units	6.5-8.5	6.9	7.2	6.0	6.1	7.3	8.51	5.37	6.18	6.43	5.85	6.33	5.2	3.94	7.90	5.75	6.39	8.12	6.63
Spec. Cond	umho/cm	NA	62	77	71	82	73	PNA	PNA	61	59	91	78	53	59	77	91	84	1	92

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October 2013

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												Unfiltered	Filtered									
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 B	PNA	0.0659 B	PNA	0.644	PNA	0.0173 B	PNA	
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	PNA	
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	PNA	
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	PNA	
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	PNA	
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	PNA	
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	0.004 B	0.00024 U	0.00025 U	0.00027 U	0.00017 U	0.00018 U	0.000087 U	0.0001 U	0.00015 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	4.46 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	PNA	
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	PNA	
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	PNA	
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	PNA	
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	0.0619 U	
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	0.0055 J	
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	2.22 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	0.703	0.0125 B	0.0075 B	0.0006 B	0.0121 B	0.0138 BE	0.0424	0.0013 B	0.0026 B	0.0024 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	PNA	
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	PNA	
Potassium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.604 B	0.726 B	0.66 B	0.803 BE	2.55 B	0.856 B	0.947 B	1.17 B	1	0.406 B	1.12 B	0.751 B	0.702 B	1.38 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	PNA	
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	PNA	
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	9.02	
Thallium as Tl	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	PNA	
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	PNA	
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	PNA	
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	12.9	
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	11.2	
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	8.86	
Bromide	mg/L	2 #	PNA	PNA	PNA	PNA	PNA	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	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	2 U	14	2 U	2 U	2 U	PNA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	
COD	mg/L	NA	80	PNA	40 U	PNA	40 U	10 U	14.4	11.9	10 U	10 U	PNA	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	5 U	10	PNA	10	PNA	5	PNA	PNA	5	PNA	5 U	PNA	20	PNA	5 U	PNA	
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	
Hardness as CaCO3	mg/L	NA	28	19	17	19	20	17	26	24	18	64	PNA	18	64 D	18	23	19	19	18	20	
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	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	
Nitrite as N	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.1 U	0.1 U	PNA	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 U	PNA	0.5 U	PNA	0.5 U	0.1	0.11	0.1 U	0.11	0.36	PNA	0.24	0.3	0.13	0.18	0.11	0.27	0.29	0.3	
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	5 U	0.005 U	PNA	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	74	PNA	88	PNA	73	54	63	43	43	374	PNA	46	55	68	34	61	56	56	64	
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	0.33	PNA	1 UJ	0.41	0.5 UD	0.36	0.1 U	0.1 U	0.1 U	0.15	
Tot Organic Carbon	mg/L	NA	4.3	3.6	1.4	2.1	2.9	1 U	1 U	1 U	1 U	1 U	PNA	1 U	1 U	1 U	5	1 U	1 U	3.8	1.1	
Turbidity	NTU	NA	4.3	5	2.7	4.1	2.9	0	34.8	18.5	6.1	642	PNA	0	14.2	96.1	15.20	22.10	0.00	0.6	0.50	
Temperature	deg.C	NA	13	12	12	12	11	12.5	14.44	11.3	10.98	11.45	PNA	11.33	10.96	12.28	12.97	15.74	11.36	12.56	12.18	
pH	units	6.5-8.5	6.3	7.6	6.1	6.1	6.4	8.3	5.9	6.25	6.48	5.2	PNA	6.31	5.47	4.37	6.42	6.05	6.27	7.24	6.97	
Spec. Cond	umho/cm	NA	64	79	70	75	77	PNA	PNA	59	56	100	PNA	92	65	75	86	841	870	79	98	

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 compounds 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.

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.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM = Not Monitored

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
October 2013

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-3A																																										
			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	Oct. 2013																					
										Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered				Unfiltered	Filtered																							
Aluminum as Al	mg/L	NA	0.69	0.64	0.11	0.72	PNA	0.5	PNA	0.0232	B	0.0092	U	PNA	PNA	0.0498	B	0.0196	U	PNA	PNA	PNA	0.0787	B	PNA	0.0311	B	PNA	0.0108	B	PNA														
Antimony as Sb	mg/L	0.003 #	0.01	U	0.005	U	PNA	0.0027	U	PNA	0.0027	U	0.0027	U	PNA	PNA	0.0028	U	PNA	PNA	PNA	0.0109	B	PNA	0.0011	U	PNA	PNA	0.0012	U	PNA														
Arsenic as As	mg/L	0.025	0.004	U	0.005	U	0.005	U	PNA	0.0029	B	PNA	0.0028	U	0.0028	U	PNA	PNA	0.0028	U	0.0028	U	PNA	PNA	0.0019	U	PNA	0.0044	U	PNA	0.0015	U	0.0028	U	PNA										
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	0.111	B	PNA	0.0659	B	0.0586	B	PNA	PNA	0.0393	B	0.0288	B	PNA	PNA	PNA	0.0804	BE	PNA	0.0344	B	PNA	PNA	0.0382	B	PNA												
Beryllium as Be	mg/L	0.003	0.001	U	0.001	U	PNA	0.00016	U	PNA	0.00016	U	0.0002	U	PNA	PNA	0.00017	U	0.0004	B	PNA	PNA	PNA	0.00013	U	PNA	0.00012	U	PNA	PNA	0.0001	U	PNA												
Boron as B	mg/L	1.0	0.07	0.05	PNA	0.04	PNA	0.0588	B	PNA	0.0099	B	0.009	B	PNA	PNA	0.017	B	0.0227	B	PNA	PNA	PNA	0.0318	BE	PNA	0.0274	B	PNA	PNA	0.0257	B	PNA												
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	U	0.0003	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	0.00015	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	14.9	9.77	8.98	18	13.2																				
Chromium as Cr	mg/L	0.05	1.7	2.5	PNA	1.0	PNA	6.5	PNA	0.343	0.0069	B	PNA	PNA	0.553	0.0048	B	PNA	PNA	PNA	1.69	PNA	0.126	PNA	PNA	0.104	PNA																		
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.0397	B	PNA	0.0018	B	0.0012	U	PNA	PNA	0.0034	B	0.0012	U	PNA	PNA	PNA	0.0119	B	PNA	0.0008	B	PNA	PNA	0.0013	B	PNA												
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	B	0.0058	B	PNA	PNA	PNA	0.0333	PNA	0.0058	B	PNA	PNA	0.0059	B	PNA														
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	0.01	U	PNA	PNA	PNA	0.01	U	PNA	0.01	U	PNA																	
Iron as Fe	mg/L	0.3	7.5	11	1.4	6.5	7.67	31.9	39.9	1.63	0.014	B	10.7	0.0091	B	2.4	0.0235	B	0.376	0.0258	B	7.73	4.47	0.509	8.2	0.164	0.441	0.412																	
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	0.0048							
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	B	3.3	B	4.2	B	3.98	B	4.96	B	1.28	B	3.74	B	2.24	B	2.09	B	4.1	B	3.55	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	B	0.0355	0.0089	B	1.04	0.185	E	0.103	2.6	0.0225	0.0866	0.0273																	
Mercury as Hg	mg/L	0.0007	0.00025	U	0.00025	U	0.00025	U	PNA	0.0001	U	PNA	0.0001	U	PNA	PNA	0.0001	U	0.0001	U	PNA	PNA	PNA	0.0001	U	PNA	0.0001	U	PNA																
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	B	0.0134	B	PNA	PNA	PNA	0.151	PNA	0.0351	B	PNA	PNA	0.0408	PNA																
Potassium	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	B	2.7	B	5.8	4.45	B	5.92	3.1	B	0.925	B	3.64	B	4.41	B	4.14	B	2.72	B	4.47	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	U	0.0042	U	PNA	PNA	0.0026	U	PNA	0.0028	U	PNA	PNA	0.0023	U	PNA										
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	U	0.0005	U	PNA	PNA	0.00052	U	PNA	0.00032	U	PNA	PNA	0.0002	U	PNA										
Sodium as Na	mg/L	20	78	34	PNA	140	26.4	32.2	17.1	60.1	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	18.8																					
Thallium as Tl	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	U	0.0056	U	PNA	PNA	0.0027	U	PNA	0.0032	U	PNA	PNA	0.0019	U	PNA										
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	0.0213	B	PNA	0.0015	B	0.0010	U	PNA	PNA	0.0012	U	0.0012	U	PNA	PNA	PNA	0.0064	B	PNA	0.0003	B	PNA	PNA	0.0003	U	PNA												
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	B	0.0039	B	PNA	PNA	PNA	0.0139	B	PNA	PNA	0.0083	B	PNA	PNA	0.008	B	PNA												
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	D	47.8	D	29.5	PNA	38.8	PNA	28.3	46.4	D															
Chloride 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	31.5																				
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	5	U																		
Bromide	mg/L	2 #	PNA	PNA	PNA	PNA	<0.5	0.5	U	0.5	U	0.5	U	PNA	0.5	U	PNA	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	0.5	U	0.5	U			
BOD5	mg/L	NA	2	U	2	U	2	U	2	U	2	U	PNA	2	U	PNA	2	U	PNA	2	U	PNA	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U			
COD	mg/L	NA	40	40	U	PNA	40	U	10	U	16.9	10	U	10	U	PNA	10	U	PNA	10	U	PNA	10	U	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	PNA	40	PNA	5	PNA	PNA	PNA	20	PNA	PNA	PNA	10	PNA	10	PNA	5	PNA	10	PNA	10	PNA	5	PNA														
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	0.02	U	PNA	PNA	PNA	0.02	U	PNA	0.02	U	PNA																	
Hardness as CaCO3	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	60	D															
Ammonia as N	mg/L	2.0	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	U	0.17	0.46	PNA	0.28	0.1	U														
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	U	PNA	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	0.1	U	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	0.2																					
Phenols as Phenol	mg/L	0.001	0.001	U	0.001	U	0.001	U	0.005	U	0.005	U	0.005	U	PNA	5.0	U	PNA	0.005	U	PNA	0.005	U	PNA	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	290	150	PNA	680	169	155	97	307	PNA	120	PNA	86	PNA	128	PNA	291	58	87	85	PNA	145	114																					
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	0.39																				
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																					

NOTES:
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6 NYCRR Part 703
= Guidance value, no standard exists.
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1.0 = Compound at standard.
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TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
October 2013

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-3B																	
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															Unfiltered	Filtered				
Aluminum as Al	mg/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	PNA
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	PNA
Arsenic as As	mg/L	0.025	0.025	0.023	0.019	0.024	PNA	0.0116 U	PNA	0.0128	PNA	0.0125	PNA	0.0134	PNA	PNA	0.0063 B	PNA	0.0125	PNA
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	PNA
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	0.00019 B	PNA	PNA	0.00012 U	PNA	0.0001 U	PNA
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	PNA
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 B	0.00018 U	0.000087 U	0.0001 U	0.00015 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	10.4
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	PNA
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 B	PNA
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	PNA
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	PNA
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	9.64	0.136	11.2	10.8	12.1	14
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	0.00072 U
Magnesium	mg/L	35 #	PNA	PNA	5.3	PNA	3.99 B	4.04 B	4.49 B	5.06	3.26 B	2.09 B	3.8 B	4.45 B	3.09 B	3.18 B	2.51 B	1.9 B	2.96 B	3.54 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	3.59
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	PNA
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	PNA
Potassium	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	4.93 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	PNA
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	PNA
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	10.6
Thallium as Tl	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	PNA
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	PNA
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	PNA
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	57.1 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	17.8
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	10.9
Bromide	mg/L	2 #	PNA	PNA	PNA	PNA	0.5 U	0.5 U	0.5 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	0.5 U
BOD5	mg/L	NA	2 U	6.0	3.0 U	3 U	2 U	12	2 U	2 U	2 U	2 U	2 U	2 U	4	PNA	2 U	2 U	2 U	2 U
COD	mg/L	NA	80	40 U	PNA	40 U	10 U	21.8	26.8	13.3	10 U	10 U	10 U	13.7	10 U	PNA	10 U	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	PNA	200 D	PNA	125 D	PNA
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	PNA	0.02 U	PNA	PNA	0.02 U	PNA	0.0001 UD	PNA
Hardness as CaCO3	mg/L	NA	40	51	60	62	54	60	52	170	48	37	58 D	60 D	64 D	PNA	41	37	84 D	68 D
Ammonia as N	mg/L	2.0	2.4	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	3.22 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	0.1 U	PNA	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	0.12	0.1 U	0.1 U	0.9	PNA	0.1 U	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	0.005 U	PNA	0.005 U	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	102
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	3.62
Tot Organic Carbon	mg/L	NA	1 U	2.4	3.6	1.7	2.6	2.6	2.8	4.1	1.0	1 U	1.7	2.5	13	PNA	1 U	1 U	14.2	2.6
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	4.1
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	10.56
pH	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	6.00
Spec. Cond	umho/cm	NA	170	210	340	350	PNA	PNA	212	258	365	154	152	361	254	PNA	245	165	231	256

NOTES:

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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 compounds 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.

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.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM = Not Monitored

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
October 2013

ANALYTICAL PARAMETERS	UNITS	GW STND*	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	Oct. 2013
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	PNA
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	PNA
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	PNA
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	PNA
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	PNA
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	PNA
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	0.00015 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	11
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	PNA
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	PNA
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	PNA
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	PNA
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	0.0619 U
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	0.0167
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	5.08
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	0.0488
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	PNA
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	PNA
Potassium	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	1.56 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	PNA
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	PNA
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	12.4
Thallium as Tl	mg/L	0.0005 #	0.004 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	0.0032 U	PNA	0.0019 U	PNA
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	PNA
Zinc as Zn	mg/L	2 #	0.01 U	0.02	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	PNA
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	56.1	54.2 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	13.7
Sulfate as SO4	mg/L	250.0	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	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	0.5 U	0.5 U	0.5 U
BOD5	mg/L	NA	2 U	2 U	2 U	3 U	2 U	13	2 U	2 U	2 U	2 U	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	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 U	PNA
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	PNA
Hardness as CaCO3	mg/L	NA	45	70	77	76	91	86	78	150	72	78	86 D	74 D	84 D	64 D	60 D	53	60 D
Ammonia as N	mg/L	2.0	0.05 U	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	0.1 U	0.16	0.1 U	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	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	0.12
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	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	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	0.21
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	1 U
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	2.2
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	11.87
pH	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	6.23	6.98	7.15	6.62
Spec. Cond	umho/cm	NA	150	200	320	260	PNA	PNA	187	170	256	264	195	PNA	210	210	197	191	181

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6 NYCRR Part 703

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NORTH SEA LANDFILL
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October 2013

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Aluminum as Al	mg/L	NA	1.0	0.5	1.3	0.2	0.47	PNA	0.1 B	PNA	0.0092 U	PNA	0.0869 BJ	PNA	0.243	PNA	0.146 B	PNA	0.243	PNA
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	0.0021 U	PNA	0.0011 U	PNA	0.0012 U	PNA
Arsenic as As	mg/L	0.025	0.005 U	0.004 U	0.005 U	0.005 U	0.006	PNA	0.0 U	PNA	0.0028 U	PNA	0.0028 U	PNA	0.00019 U	PNA	0.0044 U	PNA	0.0028 U	PNA
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	PNA	0.0275 B	PNA	0.0304 B	PNA	0.0719 B	PNA	0.0465 BE	PNA	0.12 B	PNA	0.206	PNA
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	PNA	0.00017 U	PNA	0.00013 U	PNA	0.0002 B	PNA	0.0002 B	PNA
Boron as B	mg/L	1.0	0.04	PNA	0.05 U	PNA	0.02	PNA	0.0 B	PNA	0.0022 U	PNA	0.0286 B	PNA	0.0216 BE	PNA	0.0241 B	PNA	0.0212 B	PNA
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	0.0004 B	0.0003 B	0.00015 U
Calcium as Ca	mg/L	NA	4.6	6.4	6.0	6.3	8.3	5.88	4.18 B	7.38	18.1	9.04	11.2	7.06	7.45	7.51	8.36	23.5	13.9	10.3
Chromium as Cr	mg/L	0.05	0.056	PNA	0.064	PNA	0.041	PNA	0.0 B	PNA	0.171	PNA	0.0033 B	PNA	0.0302	PNA	0.0041 B	PNA	0.0046 B	PNA
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0017 U	PNA	0.0028 B	PNA	0.0012 U	PNA	0.00049 U	PNA	0.00052 U	PNA	0.0004 U	PNA
Copper as Cu	mg/L	0.2	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.0 U	PNA	0.0054 B	PNA	0.0068 B	PNA	0.0014 B	PNA	0.0007 U	PNA	0.0004 U	PNA
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	PNA
Iron as Fe	mg/L	0.3	1.7	1.1	2.1	0.29	1.1	0.107	0.176	0.0716 B	0.499	0.0704 B	0.0696 B	0.0196 B	0.535	0.442	0.0571 B	2.2	0.0631 B	0.124
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	0.0213 J	0.008	0.0015 U	0.0061	0.0057	0.0034	0.0063	0.0105
Magnesium	mg/L	35 #	PNA	4.7	PNA	4	PNA	3.28 B	2.75 B	4.52 B	9.31	4.74 B	4.44 B	2.8 B	3.5 B	2.83 B	3.11 B	8.53	4.57 B	3.34 B
Manganese as Mn	mg/L	0.3	0.19	0.08	0.15	0.04	0.01 U	0.0254	0.0137 B	0.0316	0.0278	0.0643	0.137	0.0659	0.0623	0.0712 E	0.0709	0.33	0.133	0.0853
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	PNA	0.0001 U	PNA	0.0001 U	PNA	0.0001 U	PNA
Nickel as Ni	mg/L	0.1	0.01 U	PNA	0.01 U	PNA	0.01 U	PNA	0.0 B	PNA	0.154	PNA	0.0048 B	PNA	0.0026 B	PNA	0.0038 B	PNA	0.0056 B	PNA
Potassium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	1.91 B	1.49 B	2.48 B	1.44 BE	2.53 B	4.23 B	3.59 B	3.4 B	1.77 B	3.56 B	6.69	4.36 B	4.11 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	0.0026 U	PNA	0.0028 U	PNA	0.0023 U	PNA
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	PNA	0.0005 U	PNA	0.00052 U	PNA	0.00032 U	PNA	0.0002 U	PNA
Sodium as Na	mg/L	20	12	PNA	10	PNA	13	10.5	14.2	25.8	19.6	16.1	19.2	14.8	17.9	15.1	15.1	37.5	18.3	15.2
Thallium as Tl	mg/L	0.0005 #	0.004 U	PNA	0.005 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	PNA
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0022 U	PNA	0.00097 U	PNA	0.0012 U	PNA	0.00088 B	PNA	0.00023 U	PNA	0.0003 U	PNA
Zinc as Zn	mg/L	2 #	0.01	PNA	0.01	PNA	0.02	PNA	0.0 B	PNA	0.0148 B	PNA	0.0122 B	PNA	0.0116 B	PNA	0.0005 B	PNA	0.0125 B	PNA
Alkalinity tot CaCo3	mg/L	NA	6.0	20.0	4.0	18.0	8.0	4.4	13.4	13.4	31.5	7.8	6.8	5.5	10.2	4.4	6.55	8.2	2.2	4.85
Chloride as Cl	mg/L	250.0	19	33	16	25	19	19.2	13.9	35.4	47.8	25.5	30.3	20.7	18.2	22.4	25.3	36	31.5	29.8
Sulfate as SO4	mg/L	250.0	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	12	14.9
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	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
BOD5	mg/L	NA	2 U	2.4	2 U	2	2 U	2 U	12	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
COD	mg/L	NA	40 U	PNA	40 U	PNA	40 U	10 U	11.9	10 U	10 U	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	5 U	5 U	PNA	5	PNA	10	PNA	5	PNA	5 U	PNA	5 U	PNA	5 U	PNA
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	PNA
Hardness as CaCO3	mg/L	NA	26	35	31	32	39	29	26	32	140	40	47	30 D	33	33	35	45	52 D	48 D
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	0.12	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	0.1 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	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	12.2 D	5.57 D
Phenols as Phenol	mg/L	0.001	0.004	0.001 U	0.001 U	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	0.005 U
Tot Dissolved Solids	mg/L	NA	84	PNA	110	PNA	130	97	68	111	176	134	133	76	103	79	103	153	175	124
Tot. Kjeldahl Nitrogen	mg/L	NA	0.4	PNA	1.8	PNA	1.4	0.24	0.1 U	0.2	0.18	0.12	0.1 UJ	0.1 U	0.5 UD	0.11	0.1 U	0.1 U	0.1 U	0.14
Tot Organic Carbon	mg/L	NA	1 U	1.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.5	1 U	1 U	1.9	1.6
Turbidity	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	0.1	3.8
Temperature	deg.C	NA	12	15	12	14	12	13.4	12.58	13.33	12.24	13.55	11	13.06	PNA	13.83	11.85	13.3	11.17	13.66
pH	units	6.5-8.5	5.5	5.7	5.6	6.5	5.8	8.46	4.90	5.29	5.17	4.68	5.27	4.62	PNA	5.28	5.42	5.71	6.04	5.35
Spec. Cond	umho/cm	NA	130	200	170	340	210	PNA	PNA	167	137	214	244	124	PNA	181	186	231	268	205

NOTES:

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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

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
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October 2013

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-4B																	
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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	PNA
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	PNA
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	PNA
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	PNA
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	PNA
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	PNA
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	0.0003 B	0.00027 U	0.00017 U	0.00018 U	0.000087 U	0.0001 U	0.00015 U
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	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	PNA
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	PNA
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	PNA
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	PNA
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	0.854
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	0.0131
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	11.3
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	0.212
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	PNA
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	PNA	0.0045 B	PNA	0.0057 B	PNA
Potassium	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	2.72 B	6.3	8.53	4.83 B	2.78 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	0.0026 U	PNA	0.0028 U	PNA	0.0031 B	PNA
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	PNA	0.0005 U	PNA	0.00052 U	PNA	0.00032 U	PNA	0.0002 U	PNA
Sodium as Na	mg/L	20	31	PNA	34	PNA	30	27.6	28.6	27.4	26.6	27.8	29.9	23.6	26.7	23.1	20.9	35	21.3	18.7
Thallium as Tl	mg/L	0.0005 #	0.005 U	PNA	0.005 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	PNA
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0022 U	PNA	0.00097 U	PNA	0.0012 U	PNA	0.00092 B	PNA	0.0005 B	PNA	0.0003 U	PNA
Zinc as Zn	mg/L	2 #	0.02	PNA	0.01	PNA	0.02	PNA	0.0437	PNA	0.0092 B	PNA	0.0136 B	PNA	0.01 B	PNA	0.00044 U	PNA	0.0073 B	PNA
Alkalinity tot CaCo3	mg/L	NA	160	160	150	150	140	135	134	124	130	147	146	120 D	105 D	108 D	119 D	92.2 D	110 D	111 D
Chloride as Cl	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	22
Sulfate as SO4	mg/L	250.0	9.0	7.0	9.0	6.0	5.0	9.2	11.1	11.2	10.8	8.47	9.74 J	9.24	8.26	5.15	9.25	10.3	8.34	7.45
Bromide	mg/L	2 #	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	0.5 U
BOD5	mg/L	NA	7.6	13	4.2	2.5	2.2	2 U	13	0.5 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	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	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	PNA
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	PNA
Hardness as CaCO3	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	130 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	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	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.10 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	0.49
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	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	156
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	0.32
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	2.4
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	1.8
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	13.41
pH	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	6.37
Spec. Cond	umho/cm	NA	440	430	460	440	440	PNA	PNA	298	304	906	452	242	PNA	306	354	316	362	314

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			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	Oct. 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	PNA										
Antimony as Sb	mg/L	0.003 #	0.01	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	PNA										
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	0.0019	U	PNA	0.0044	U	PNA	0.0028	U	PNA									
Barium	mg/L	1	PNA	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	PNA									
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	0.00013	U	PNA	0.00012	U	PNA	0.0001	U	PNA										
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	PNA								
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	0.00015	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	22.5																
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	PNA															
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	PNA										
Copper as Cu	mg/L	0.2	0.01	U	PNA	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	PNA								
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										
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	0.184															
Lead as Pb	mg/L	0.025	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	0.0129							
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	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	0.0048	B														
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	0.01	U	PNA	0.0001	U	PNA	0.0001	U	PNA										
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	PNA															
Potassium	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	1.92	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	PNA							
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	PNA	0.0005	U	PNA	0.00052	U	PNA	0.00032	U	PNA	0.0002	U	PNA							
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	30.8	24.9	23.7																
Thallium as Tl	mg/L	0.0005 #	0.005	U	PNA	0.005	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	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	0.0003	U	PNA										
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	0.00044	U	PNA	0.0129	B	PNA										
Alkalinity tot CaCo3	mg/L	NA	34	42	40	50	40	33.4	36	33.4	6.6	33.8	32	31	D	32.1	30.3	36.1	D	35.2	D	33.2	36.9													
Chloride as Cl	mg/L	250.0	30	32	39	44	53	55.8	54.6	58.4	26.5	55.1	60.9	70	D	60.6	D	64.8	D	72	D	94	D	82.6	D	85.7	D									
Sulfate as SO4	mg/L	250.0	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U								
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	0.5	U	0.5	U	0.5	U									
BOD5	mg/L	NA	2	U	2.8	2	U	2	U	11	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U								
COD	mg/L	NA	60	PNA	40	U	PNA	40	U	10	U	10	U	11.9	10	U	10	U	10	U	10	U	10	U	10	U	10	U								
Color	units	NA	5	U	5	U	5	U	PNA	5	PNA	5	PNA	5	PNA	10	PNA	10	PNA	15	PNA															
Chromium hex as Cr	mg/L	0.05	0.02	U	PNA	0.01	PNA	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	PNA									
Hardness as CaCO3	mg/L	NA	53	53	68	64	65	78	78	64	120	75	80	84	D	90	D	114	D	102	D	106	D	116	D	130	D									
Ammonia as N	mg/L	2.0	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								
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									
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	0.1	U	0.1	U	0.11	0.1	U	0.1	U	0.1	U	0.1	U							
Phenols as Phenol	mg/L	0.001	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	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U								
Tot Dissolved Solids	mg/L	NA	110	PNA	150	PNA	190	178	165	158	117	185	183	211	232	196	223	268	250	234																
Tot. Kjeldahl Nitrogen	mg/L	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	0.1	U	0.2								
Tot Organic Carbon	mg/L	NA	3.2	1	U	1	U	1	U	1	U	1	U	1	U	1	U	8.6	3.2	1	U	9.9	1	U												
Turbidity	NTU	NA	1.8	1.8	1.7	1.5	2.5	1	9.6	31.5	9.4	2	0	12.4	PNA	14.8	7.1	48.5	1.4	1.3																
Temperature	deg.C	NA	13	13	13	13	12	12.8	12.69	12.61	12.43	12.1	12.01	12.49	PNA	13.82	12.55	13.04	12.85	13.27																
pH	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	6.7																
Spec. Cond	umho/cm	NA	180	230	250	300	260	PNA	PNA	207	208	302	315	250	PNA	324	354	414	391	381																

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 compounds 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.

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.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM = Not Monitored

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
October 2013

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-6AR												MW-6B																			
			April 2007	Oct. 2007	Oct. 2008	Oct. 2009	Oct. 2010			Oct. 2011	Oct. 2012			Oct. 2013	Oct. 2007	Oct. 2008	Oct. 2009	Oct. 2010	Oct. 2011	Oct. 2012	Oct. 2013													
							Unfiltered	Filtered			Unfiltered	Filtered																						
Aluminum as Al	mg/L	NA	1.2	6.73	0.0	U	0.339	0.158	B	0.0061	U	0.809	0.966	0.0422	B	0.0767	B	0.114	B	0.0	U	0.247	0.0241	B	0.0044	U	0.0336	B	0.0049	U				
Antimony as Sb	mg/L	0.003 #	0.005	U	0.0023	U	0.0	U	0.0021	U	0.0029	U	0.0029	U	0.0022	U	0.0023	U	0.0	U	0.0021	U	0.0029	U	0.0022	U	0.0018	U	0.002	U				
Arsenic as As	mg/L	0.025	0.005	0.009	B	0.0	U	0.0023	U	0.0027	U	0.0027	U	0.0076	B	0.0015	U	0.0015	U	0.001	U	0.0018	U	0.0	U	0.0023	U	0.0027	U	0.0018	U			
Barium	mg/L	1	PNA	0.128	B	0.1	BE	0.0873	B	0.0783	B	0.0715	B	0.0789	B	0.0507	B	0.0389	B	0.0508	B	0.0122	B	0.0	BE	0.014	B	0.013	B	0.0139	B			
Beryllium as Be	mg/L	0.003	0.001	U	0.00048	B	0.0	U	0.00026	U	0.0002	B	0.00016	U	0.00013	U	0.00012	U	0.00022	U	0.00022	B	0.0	U	0.00026	U	0.00016	U	0.00013	U	0.00012	U		
Boron as B	mg/L	1.0	0.08	0.0297	B	0.0	B	0.0197	B	0.0144	B	0.015	B	0.003	U	0.0161	B	0.0167	B	0.0087	B	0.0086	B	0.0	B	0.0092	B	0.0054	B	0.003	U			
Cadmium as Cd	mg/L	0.005	0.005	U	0.00032	U	0.0	U	0.00034	U	0.0003	B	0.00025	U	0.00017	U	0.000087	U	0.000087	U	0.00015	U	0.00032	U	0.0	U	0.00034	U	0.00025	U	0.0005	B		
Calcium as Ca	mg/L	NA	36	21.6		12.5		25.4		19.8		20.2		13.5		16.1		14.6		17.7		3.35	B	2.9	B	3.22	B	3.01	B	3.35	B	3.99	B	
Chromium as Cr	mg/L	0.05	0.025	0.0338		0.0	B	0.0042	B	0.0008	U	0.0014	B	0.0109		0.0144	E	0.0034	B	0.0014	B	0.0378		0.018		0.164		0.0093	B	0.0933		0.011	E	
Cobalt	mg/L	NA	PNA	0.0055	B	0.0	U	0.003	B	0.0013	U	0.0013	U	0.009	B	0.004	B	0.00028	U	0.00035	U	0.0011	U	0.0	U	0.0016	B	0.0013	U	0.0031	B	0.00028	U	
Copper as Cu	mg/L	0.2	0.01	0.0197	B	0.0	B	0.0022	B	0.0031	U	0.0031	U	0.0054	B	0.0084	B	0.0028	B	0.0007	U	0.00087	U	0.0	B	0.0053	B	0.0045	B	0.0094	B	0.0059	B	
Cyanide as CN	mg/L	0.20	0.02	U	PNA	0.0	U	PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA		0.0	U	PNA		PNA		PNA		PNA		
Iron as Fe	mg/L	0.3	6.8	21.3		0.1	B	1.25		0.297		0.021	B	4.06		2.78		0.0721	B	0.188		0.303		0.195		1.24		0.141		0.464		0.105		
Lead as Pb	mg/L	0.025	0.005	U	0.0105		0.0	U	0.0026	B	0.0117		0.0103		0.0109		0.0023	B	0.00096	U	0.0118		0.0019	B	0.0	U	0.0029	B	0.0087		0.0101		0.00096	U
Magnesium	mg/L	35 #	PNA	9.5		5.7		14.1		7.86		7.74		4.77	B	5.05		4.48	B	7.98		1.93	B	1.9	B	2.04	B	1.82	B	1.65	B	2.21	B	
Manganese as Mn	mg/L	0.3	0.77	0.338		0.1		1.32		0.0684		0.0509		0.927	E	0.301		0.0192		0.0369		0.0253		0.0189		0.0251		0.0079	B	0.0489	E	0.0061	B	
Mercury as Hg	mg/L	0.0007	0.00025	U	0.0001	U	0.0	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U
Nickel as Ni	mg/L	0.1	0.01	0.018	B	0.0	B	0.0091	B	0.0017	B	0.0016	B	0.0071	B	0.0064	B	0.0022	B	0.0023	B	0.0371	B	0.0	B	0.0481		0.0308	B	0.0533		0.0331	B	
Potassium	mg/L	NA	PNA	2.72	B	3.4	B	2.12	B	2.13	B	1.36	B	3.85	B	1.29	B	1.1	B	1.93	B	0.617	B	0.6	B	0.932	B	1.16	B	0.0489	U	0.675	B	
Selenium as Se	mg/L	0.01	0.004	U	0.0024	U	0.0	U	0.0025	U	0.0032	U	0.0032	U	0.0028	U	0.004	B	0.0021	U	0.0018	U	0.0024	U	0.0	U	0.0025	U	0.0032	U	0.0028	U		
Silver as Ag	mg/L	0.05	0.005	U	0.00059	B	0.0	U	0.00083	U	0.00043	U	0.00043	U	0.00042	U	0.0045	B	0.00029	U	0.00043	U	0.00041	U	0.0	U	0.00083	U	0.00043	U	0.00042	U		
Sodium as Na	mg/L	20	33	8.87		9.1		14.7		10.4		9.21		8.36		7.17		6.59		9.41		6.42		7.53		8.1		8.74		8.4		8.3		
Thallium as Tl	mg/L	0.0005 #	0.005	U	0.0023	U	0.0	U	0.0032	U	0.0036	U	0.0036	U	0.0034	U	0.0029	U	0.0029	U	0.0019	U	0.0023	U	0.0	U	0.0032	U	0.0036	U	0.0034	U	0.0029	U
Vanadium	mg/L	NA	PNA	0.0202	B	0.0	U	0.0014	U	0.0013	U	0.0013	U	0.006	B	0.0043	B	0.0002	B	0.0005	B	0.00089	U	0.0	U	0.0014	U	0.0013	U	0.00021	U	0.0002	B	
Zinc as Zn	mg/L	2 #	0.04	0.0429		0.0	B	0.0134	B	0.0137	B	0.0032	B	0.0208		0.0287		0.0198	B	0.0506		0.0056	B	0.0	B	0.0096	B	0.0456		0.0194	B	0.0132	B	
Alkalinity tot CaCo3	mg/L	NA	130	60.8		44.4		105		74	D	PNA		43.4	D	41	D	PNA		56.1		7.8		8.6		8		8.4		10.4		10.2		
Chloride as Cl	mg/L	250.0	30	12.2		11.6		13.6		10.4		PNA		8.82		10.5		PNA		14		10.5		10.7		9.53		10.2		9.01		11.1		
Sulfate as SO4	mg/L	250.0	19	13.9		11.1		16.9		13.2		PNA		7.9		9.97		PNA		12.5		8.3		8.7		7.2		7.72		6.25		8.14		
Bromide	mg/L	2 #	PNA	0.5	U	0.5	U	0.5	U	0.5	U	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	
BOD5	mg/L	NA	2.6	2	U	2.0	U	2	U	2	U	PNA		2	U	2	U	PNA		2	U	2	U	2.0	U	2	U	2	U	2	U	2	U	
COD	mg/L	NA	40	U	147		10.0	U	10	U	10	U	PNA		10	U	10	U	PNA		10	U	10	U	10.0	U	10	U	10	U	10	U	10	U
Color	units	NA	5	U	PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA	
Chromium hex as Cr	mg/L	0.05	0.02	U	PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA		PNA	
Hardness as CaCO3	mg/L	NA	170		86		50.0		126		84	D	PNA		148	D	60	D	PNA		60	D	15		19.0		15		26		23		20	
Ammonia as N	mg/L	2.0	0.05	U	0.1	U	0.1	U	0.1	U	0.1	U	PNA		0.15		0.1	U	PNA		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.12		0.1	U
Nitrite as N	mg/L	NA	PNA		PNA		0.1	U	0.1	U	0.1	U	PNA		0.1	U	0.1	U	PNA		0.1	U	PNA		0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nitrate as N	mg/L	10	1.8		2.48		1.2		1		2.22		PNA		0.55		0.55		PNA		0.82		0.1	U	0.1	U	0.1	U	0.1	U	0.17		0.1	U
Phenols as Phenol	mg/L	0.001	0.002	U	0.005	U	0.0	U	0.005	U	0.005	U	PNA		0.005	U	0.005	U	PNA		0.005	U	0.005	U	0.0	U	0.005	U	0.005	U	0.005	U	0.005	U
Tot Dissolved Solids	mg/L	NA	320		150		87.0		168		134		PNA		69		112		PNA		123		64		41.0		48		36		41		65	
Tot. Kjeldahl Nitrogen	mg/L	NA	3.4		0.19		0.2		0.1	U	0.15		PNA		0.43		0.1	U	PNA		0.3		0.1	U	0.22		0.3		0.26		0.38		0.1	U
Tot Organic Carbon	mg/L	NA	1.2		1	U	1.0	U	1.3		1	U	PNA		11.8		1	U	PNA		2.5		1	U	1.0	U	1	U	1	U	3.7		1	U
Turbidity	NTU	NA	240		50		10.1		34.1		60.2		PNA		33.4		118		PNA		44.7		1		21.2		31.6		1.9		10.5		0	
Temperature	deg.C	NA	12		12.2		11.8		11.07		11.75		PNA		12.34		12.45		PNA		13.09		11.4		11.37		11.2		11.0		11.86		11.51	
pH	units	6.5-8.5	6.2		8.45		5.7		5.74		5.7		PNA		6.00		6.60		PNA		5.82		8.43		5.89		5.73		6.44		6.15		6.47	
Spec. Cond	umho/cm	NA	360		PNA		124		336		167		PNA		145		160		PNA		210		PNA		59		89		63		83		80	

NOTES:

* = 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 compounds 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.

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.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM = Not Monitored

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
October 2013

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-8													
			April 2005	Oct. 2005	April 2006	Oct. 2006	April 2007	Oct. 2007	Oct. 2008		Oct. 2009	Oct. 2010	Oct. 2011	Oct. 2012	Oct. 2013	
									Unfiltered	Filtered					Unfiltered	Filtered
Aluminum as Al	mg/L	NA	1.1	0.63	0.76	0.27	0.16	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Antimony as Sb	mg/L	0.003 #	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Arsenic as As	mg/L	0.025	0.017	0.005 U	0.0078	0.005 U	0.005 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Beryllium as Be	mg/L	0.003	0.001 U	PNA	0.001 U	PNA	0.001 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Boron as B	mg/L	1.0	0.08	PNA	0.05 U	PNA	0.02	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Cadmium as Cd	mg/L	0.005	0.005 U	PNA	0.005 U	PNA	0.005 U	0.00032 U	0.0 U	0.0 U	0.00034 U	0.00025 U	0.00017 U	0.000087 U	0.00015 U	0.00015 U
Calcium as Ca	mg/L	NA	10	8.9	17	20	8.7	9.58	8.13	8.14	9.66	8.1	12.2	10.8	12.7	12
Chromium as Cr	mg/L	0.05	0.01	PNA	0.008	PNA	0.005 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Copper as Cu	mg/L	0.2	0.03	PNA	0.01	PNA	0.02	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Cyanide as CN	mg/L	0.20	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Iron as Fe	mg/L	0.3	11.0	10.0	8.1	41	17	2.57	0.201	0.043 B	0.849	0.249	4.23	0.262	11.4	0.0619 U
Lead as Pb	mg/L	0.025	0.005 U	0.005 U	0.007	0.006	0.005 U	0.0014 U	0.0 U	0.0 U	0.0018 U	0.0102	0.0102	0.00096 U	0.0088	0.0063
Magnesium	mg/L	35 #	PNA	3.6	PNA	5.6	PNA	4.46 B	4.7 B	4.7 B	4.72 B	4.21 B	5.16	4.79 B	4.52 B	4.19 B
Manganese as Mn	mg/L	0.3	0.76	0.63	1.4	1.2	0.41	0.255	0.0441	0.0557	0.209	0.101	0.248 E	0.0249	0.649	0.115
Mercury as Hg	mg/L	0.0007	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.00025 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Nickel as Ni	mg/L	0.1	0.02	PNA	0.02	PNA	0.01 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Potasium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	1.1 B	1.1 B	1.1 B	1.35 B	1.5 B	0.805 B	1.04 B	2.35 B	1.74 B
Selenium as Se	mg/L	0.01	0.004 U	PNA	0.004 U	PNA	0.004 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Silver as Ag	mg/L	0.05	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Sodium as Na	mg/L	20	11	PNA	13	PNA	8.3	7.34	8.02	8.05	7.91	9.03	8.99	8.83	8.15	9.19
Thallium as Tl	mg/L	0.0005 #	0.004 U	PNA	0.005 U	PNA	0.005 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Zinc as Zn	mg/L	2 #	0.04	PNA	0.02	PNA	0.02	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Alkalinity tot CaCo3	mg/L	NA	38	46	52	140	36	31.4	27.1	PNA	32.5	28 D	41.9 D	26.6 D	40.9	PNA
Chloride as Cl	mg/L	250.0	10	8	13	6	8.0	9.3	9.5	PNA	9.02	97.7 D	8.93	11.4	10.5	PNA
Sulfate as SO4	mg/L	250.0	13	12	15	5	6	9.6	9.9	PNA	9.9	98.3 D	5.98	10.2	11.4	PNA
Bromide	mg/L	2 #	PNA	PNA	PNA	PNA	PNA	0.5 U	0.5 U	PNA	0.5 U	5 UD	0.5 U	0.5 U	0.5 U	PNA
BOD5	mg/L	NA	2.9	5.5	2 U	6.5	2 U	2 U	2.0 U	PNA	2 U	2 U	2 U	2 U	2 U	PNA
COD	mg/L	NA	80	PNA	40 U	PNA	40 U	10 U	10.0 U	PNA	10 U	10 U	10 U	10 U	10 U	PNA
Color	units	NA	5 U	5 U	5 U	5 U	10	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Hardness as CaCO3	mg/L	NA	41	37	73	74	34	44	38	PNA	48	19	66 D	40 D	68 D	PNA
Ammonia as N	mg/L	2.0	0.07	0.07	0.05 U	0.3	0.11	0.1 U	0.1 U	PNA	0.1 U	0.1 U	0.13	0.1 U	0.1 U	PNA
Nitrite as N	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.1 U	PNA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	PNA
Nitrate as N	mg/L	10	1.0	PNA	3.2	PNA	0.5 U	0.78	0.7	PNA	1.28	0.48	1.37	1.38	1.45 D	PNA
Phenols as Phenol	mg/L	0.001	0.001 U	0.001	0.003	0.001 U	0.001 U	0.005 U	0.0 U	PNA	0.0005 U	0.005 U	0.005 U	0.005 U	0.005 U	PNA
Tot Dissolved Solids	mg/L	NA	83	PNA	150	PNA	110	82	65	PNA	90	64	73	82	101	PNA
Tot. Kjeldahl Nitrogen	mg/L	NA	1.4	PNA	1.8	PNA	5.2	0.12	0.2	PNA	0.31	0.35	0.44	0.1 U	0.53	PNA
Tot Organic Carbon	mg/L	NA	3.0	1.9	1 U	8.9	1.2	1 U	1.0 U	PNA	1 U	1 U	11.8	1 U	1.1	PNA
Turbidity	NTU	NA	6.9	43	28	280	74	20	54.9	PNA	27.2	26.8	12.4	40.2	530.0	PNA
Temperature	deg.C	NA	15	13	12	13	12	11.7	12.5	PNA	11.3	11.6	12.40	12.10	13.65	PNA
pH	units	6.5-8.5	6.1	6.0	6.1	6.1	7.1	8.37	6.2	PNA	5.31	5.52	5.38	6.08	7.73	PNA
Spec. Cond	umho/cm	NA	100	280	160	150	100	PNA	94	PNA	161	97	151	150	170	PNA

NOTES:

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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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TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
October 2013

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-9												
			April 2005	Oct. 2005	April 2006	Oct. 2006	April 2007	Oct. 2007	Oct. 2008		Oct. 2009	Oct. 2010	Oct. 2011	Oct. 2012	Oct. 2013
									Unfiltered	Filtered					
Aluminum as Al	mg/L	NA	0.74	0.12	1.8	0.83	1.3	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Antimony as Sb	mg/L	0.003 #	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Arsenic as As	mg/L	0.025	0.005	0.005 U	0.014	0.005 U	0.005 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Beryllium as Be	mg/L	0.003	0.001 U	PNA	0.001 U	PNA	0.001 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Boron as B	mg/L	1.0	0.06	PNA	0.05 U	PNA	0.02	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Cadmium as Cd	mg/L	0.005	0.005 U	PNA	0.005 U	PNA	0.005 U	0.00032 U	0.0 U	0.0 BF	0.00034 U	0.00025 U	0.00017 U	0.000087 U	0.00015 U
Calcium as Ca	mg/L	NA	18	7	17	22	21	14.2	3.9	4.2 BF	13.3	6.74	9.38	14.5	5.27
Chromium as Cr	mg/L	0.05	0.011	PNA	0.011	PNA	0.013	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Copper as Cu	mg/L	0.2	0.03	PNA	0.02	PNA	0.03	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Cyanide as CN	mg/L	0.20	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Iron as Fe	mg/L	0.3	7.1	3.3	18	10	9.0	2.47	1.79	0.0209 BF	2.44	0.82	15.8	0.785	0.995
Lead as Pb	mg/L	0.025	0.005 U	0.005 U	0.009	0.005 U	0.005 U	0.0014 U	0.0 U	0.0013 UF	0.0018 U	0.0081	0.0032	0.0021 B	0.0114
Magnesium	mg/L	35 #	PNA	2.7	PNA	9.6	PNA	5.37	2.2 B	2.3 BF	5.77	2.91 B	4.15 B	7.76	2.84 B
Manganese as Mn	mg/L	0.3	3.0	0.59	1	1.2	1.1	0.452	0.122	0.1 F	0.145	0.0728	1.43 E	0.117	0.0506
Mercury as Hg	mg/L	0.0007	0.00025 U	0.00025 U	0.00025 U	0.00025 U	0.00025 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Nickel as Ni	mg/L	0.1	0.02	PNA	0.02	PNA	0.02	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Potasium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	1.2 B	1.1 B	1.1 BF	1.58 B	1.51 B	0.404 B	2.1 B	1.69 B
Selenium as Se	mg/L	0.01	0.004 U	PNA	0.004 U	PNA	0.004 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Silver as Ag	mg/L	0.05	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Sodium as Na	mg/L	20	17	PNA	6.2	PNA	10	7.35	7.1	7.2 F	7.45	7.58	9.37	20.3	6.56
Thallium as Tl	mg/L	0.0005 #	0.005 U	PNA	0.005 U	PNA	0.005 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Zinc as Zn	mg/L	2 #	0.03	PNA	0.13	PNA	0.03	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Alkalinity tot CaCo3	mg/L	NA	78	40	36	110	98	42.3	14	PNA	44.2	20	37.1 D	17.2 D	16
Chloride as Cl	mg/L	250.0	13	13	13	10	11	10.3	6.67	PNA	9.25	10.6	11	13.5	12
Sulfate as SO4	mg/L	250.0	20	8	13	12	10	9.4	9.8	PNA	8.74	10.7	10.2	8.77	7.38
Bromide	mg/L	2 #	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
BOD5	mg/L	NA	2 U	2.4	2 U	3.7	2 U	2 U	2.0 U	PNA	2 U	2 U	2 U	2 U	2 U
COD	mg/L	NA	80	PNA	40 U	PNA	40 U	10 U	10.0 U	PNA	10 U	10 U	10 U	10 U	10 U
Color	units	NA	5 U	5 U	5 U	5 U	40	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Chromium hex as Cr	mg/L	0.05	0.02 U	PNA	0.02 U	PNA	0.02 U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA
Hardness as CaC03	mg/L	NA	94	29	61	95	91	53	0.1 U	PNA	58	34 D	64 D	30 D	48 D
Ammonia as N	mg/L	2.0	0.05 U	0.05 U	0.05 U	0.1 U	0.09	0.1 U	0.1 U	PNA	0.1 U	0.1 U	0.16	0.1 U	0.1 U
Nitrite as N	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.1 U	PNA	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Nitrate as N	mg/L	10	7.1	PNA	0.7	PNA	1.5	0.46	0.17	PNA	1.28	0.17	0.27	0.3	0.46
Phenols as Phenol	mg/L	0.001	0.001 U	0.001 U	0.001	0.001 U	0.001 U	0.005 U	0.0 U	PNA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Tot Dissolved Solids	mg/L	NA	170	PNA	100	PNA	200	86	45	PNA	88	46	75	65	64
Tot. Kjeldahl Nitrogen	mg/L	NA	1.0	PNA	1.6	PNA	2	0.1	0.17	PNA	0.16	0.29	0.22	0.1 U	0.22
Tot Organic Carbon	mg/L	NA	2.8	1 U	2.5	2.7	1.1	1 U	1.0 U	PNA	1 U	1 U	9.1	1 U	1 U
Turbidity	NTU	NA	7.8	6.7	94	32	42	44	74.6	PNA	42.7	27.2	40.2	44.8	44.0
Temperature	deg.C	NA	18	15	15	15	14	13.8	13.84	PNA	13.24	13.11	13.50	13.38	14.52
pH	units	6.5-8.5	6.4	6.2	5.8	6.0	6.4	8.28	5.52	PNA	5.41	6.19	4.86	5.81	6.67
Spec. Cond	umho/cm	NA	180	130	130	170	130	PNA	64	PNA	188	79	136	110	110

NOTES:

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TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
October 2013

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-11A																																																								
			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		Oct. 2013																													
										Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered																										
Aluminum as Al	mg/L	NA	1	0.24	2.1	0.58	0.98	0.15	B	0.0552	B	0.0249	B	0.0087	UF	0.0092	U	0.0	B	0.174	B	0.177	U	0.0348	B	0.0061	U	0.0576	B	0.0187	B	0.0044	U	0.0216	B	0.0865	B	0.0308	B	0.133	B	0.0253	B	0.0179	B	0.0308	B	0.0049	U	0.0049	U								
Antimony as Sb	mg/L	0.003 #	0.01	U	PNA	0.017	PNA	0.009		0.0023	U	0.0051	B	0.0071	B	0.0023	UF	0.0027	U	0.0	B	0.0055	B	0.0021	U	0.0028	U	0.0029	U	0.0056	B	0.0021	U	0.008	B	0.0022	B	0.0011	U	0.0011	U	0.007	B	0.0044	B	0.0016	B	0.0013	B	0.002	U	0.0020	U						
Arsenic as As	mg/L	0.025	0.084		0.024	0.047	0.021	0.033		0.0182		0.0372	0.0331	0.0018	UF	0.0123		0.0	U	0.0431		0.0023	U	0.0071	B	0.0028	U	0.017		0.0027	U	0.0106		0.0019	U	0.0529		0.0018	B	0.0121		0.0044	U	0.0299		0.0015	U	0.0044	B	0.0028	U	0.0038	B	0.0010	U				
Barium	mg/L	1	PNA		PNA	PNA	PNA	PNA		0.221		0.41		0.493	E	0.177	BF	0.194	B	0.1	B	0.36		0.126	B	0.16	B	0.0730	B	0.181	B	0.111	B	0.208	E	0.0989	B	0.851		0.0751	B	0.212		0.1570	B	0.497		0.1470	B	0.16	B	0.0784	B						
Beryllium 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	B	0.000096	UF	0.00016	U	0.0	B	0.00026	U	0.00017	U	0.00016	U	0.00013	U	0.00013	U	0.00013	U	0.00013	U	0.00012	U	0.00012	U	0.00012	U	0.00012	U	0.0001	U	0.00090	B	0.00022	U	0.00022	U							
Boron as B	mg/L	1.0	2.6		PNA	0.05	PNA	0.29		0.0366	B	0.0444	B	0.0406	B	0.0446	BF	0.0416	B	0.0	B	0.0336	B	0.04	B	0.0437	B	0.0461	B	0.0129	B	0.0252	B	0.0391	B	0.0500	B	0.003	U	0.0334	B	0.0194	B	0.0342	B	0.0639	B	0.0319	B	0.0419	BR	0.0508	BR	0.0041	U	0.0041	U		
Cadmium as Cd	mg/L	0.005	0.019		PNA	0.005	U	PNA	0.005	U	0.00032	U	0.00045	B	0.00035	U	0.002	BF	0.00023	U	0.0	B	0.00034	U	0.00034	U	0.00024	U	0.0005	B	0.00025	U	0.00027	U	0.00027	U	0.0032	B	0.00017	U	0.0004	B	0.00020	B	0.000087	U	0.00009	U	0.0001	U	0.00080	B	0.00015	U	0.00015	U			
Calcium as Ca	mg/L	NA	79		44	50		63		17		37.3		39.2		36	F	37.9		33.30		28.5		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		28.8		26.1					
Chromium as Cr	mg/L	0.05	0.012		PNA	0.02	PNA	0.018		0.0031	B	0.005	B	0.0034	B	0.00043	BF	0.0014	B	0.0	B	0.0079	B	0.00044	U	0.0013	B	0.0007	B	0.0008	U	0.0008	U	0.0031	B	0.0025	B	0.0032	B	0.0005	B	0.0283		0.0053	B	0.0149	E	0.0039	B	0.0046	B	0.0033	B	0.0056	B	0.0006	B		
Cobalt	mg/L	NA	PNA		PNA	PNA	PNA	PNA		0.015	B	0.0214	B	0.028	B	0.0141	BF	0.0094	B	0.0	B	0.0302	B	0.0172	B	0.0097	B	0.0074	B	0.0188	B	0.0083	B	0.0040	B	0.0181	B	0.0031	B	0.0166	B	0.0132	B	0.0532		0.0159	B	0.0107	B	0.0113	B	0.025	B	0.0151	B				
Copper as Cu	mg/L	0.2	0.01	U	PNA	0.02		PNA	0.01		0.0039	B	0.0237	B	0.0363		0.0065	BF	0.0057	B	0.0	B	0.0218	B	0.0011	B	0.0028	B	0.0030	B	0.0031	U	0.00055	U	0.0079	B	0.0007	U	0.0007	U	0.0034	B	0.0007	U	0.00052	U	0.0005	U	0.0004	U	0.0016	B	0.0007	U	0.0007	U			
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		PNA		PNA		PNA		0.01	U	PNA		PNA		PNA		0.01	U	PNA		PNA		0.01	U	PNA		PNA		0.01	U	PNA		PNA							
Iron as Fe	mg/L	0.3	480		400	440		200		290		66.9		253		210		0.0443	BF	60.2		9.8		227		4.56		50.9		1.49		60.9		5.59		10.1		3.54		526		8.53		46.1		7.68		120		5.59		22.4		4.54		38.1		0.0619	U
Lead as Pb	mg/L	0.025	0.005	U	0.027	0.033	0.027	0.032		0.0054		0.0023	U	0.0139		0.0013	UF	0.0015	U	0.0	U	0.0238		0.0018	U	0.0019	B	0.0169		0.0173	U	0.0052		0.0251		0.0015	U	0.0327	U	0.0033		0.0132		0.0069		0.00096	U	0.00096	U	0.0049		0.0064		0.00072	U	0.0024	B		
Magnesium	mg/L	35 #	PNA		16	PNA		17		PNA		9.29		12.3		19		18.9	F	16.9		15.2		12.5		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		10.5		9.70			
Manganese as Mn	mg/L	0.3	14		13	16		7.9		20		3.74		5.17		7.44		5.3	F	3.81		3.00		6.43		4.06		2.1		1.31		2.11		1.74		4.6		3.14		18.1	E	3.15		2.56		2.15		7.33		2.27		2.02		1.83		1.85		0.974	
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	UF	0.0001	U	0.0	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	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U	0.0001	U					
Nickel as Ni	mg/L	0.1	0.01		PNA	0.02		PNA	0.02		0.0053	B	0.0127	B	0.011	B	0.0059	B	0.0038	B	0.0	B	0.0199	B	0.0086	B	0.001	U	0.0039	B	0.0045	B	0.0071	B	0.0036	B	0.0049	B	0.00066	U	0.0025	B	0.0107	B	0.0073	B	0.0118	B	0.0056	B	0.0045	B	0.0181	B	0.0150	B			
Potassium	mg/L	NA	PNA		PNA	PNA	PNA	PNA		7.66		6.91		7.92		7.93	F	5.99	E	5.4		5.42		5.25		4.9	B	3.99	B	5.02		3.86	B	6.83		7.56		0.0489	U	6.10	E	6.25		11.2		3.74	B	5.05	J	5.10	J	4.83	B	4.29	B				
Selenium as Se	mg/L	0.01	0.004	U	PNA	0.004	U	PNA	0.004	U	0.0024	U	0.0043	U	0.0019	U	0.0019	UF	0.0027	U	0.0	U	0.0025		0.0025	U	0.0042	U	0.0042	U	0.0032	U	0.0032	U	0.0026	U	0.0282	U	0.0028	U	0.0028	U	0.0022	B	0.0021	U	0.0023	U	0.0023	U	0.0034	B	0.0018	U					
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	B	0.0013	BF	0.00086	B	0.0	B	0.00083	U	0.00083	U	0.0005	U	0.0005	U	0.00043	U	0.00043	U	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	B	0.0023	B	0.00043	U	
Sodium as Na	mg/L	20	17		PNA	15		PNA	14		7.72		11.8		11.2		11.3	F	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		40.5		12.8		13.9		7.79		8.26				
Thallium as Tl	mg/L	0.0005 #	0.004	U	PNA	0.005	U	PNA	0.005	U	0.0023	U	0.0128		0.0131		0.0032	BF	0.0045	B	0.0	U	0.0261		0.0032	U	0.0056	U	0.0036	U	0.0036	U	0.0027</																										

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
October 2013

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-11B																																																			
			April 2005	Oct. 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		Oct. 2013																										
									Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered	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	UF	14.1	0.0	U	1.55	0.0177	U	7.03	J	0.0333	B	3.02	0.0626	B	1.7	5.24	0.0686	B	2.22	0.0457	B	7.48	0.077	B	2.15	0.0095	U	0.797	0.0049	U														
Antimony as Sb	mg/L	0.003 #	0.01	U	PNA	PNA	0.005	U	0.0089	B	0.0044	U	0.0023	U	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	B	0.0052	B	0.0041	B	0.0018	U	0.0012	U	0.0109	B	0.002	U										
Arsenic as As	mg/L	0.025	0.005	U	0.005	U	0.008	0.007	0.121	0.0029	U	0.0056	B	0.0018	UF	0.0115	0.0	U	0.0023	U	0.0023	U	0.0028	U	0.0028	U	0.0019	U	0.0121	0.0018	U	0.0044	U	0.0116	0.0015	U	0.0052	B	0.0028	B	0.001	U	0.0015	B										
Barium	mg/L	1	PNA	PNA	PNA	PNA	0.497	0.0346	B	0.0281	BE	0.0137	BF	0.134	B	0.0	B	0.0203	B	0.0083	B	0.0824	B	0.0104	B	0.0429	B	0.0076	B	0.0516	BE	0.164	B	0.0274	B	0.0297	B	0.0084	B	0.0944	B	0.012	B	0.0293	B	0.0096	B	0.0302	B	0.0137	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	UF	0.00055	B	0.0	U	0.00026	U	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	0.00012	U	0.0001	U	0.0001	U	0.00022	U	0.00022	U				
Boron as B	mg/L	1.0	0.86	PNA	PNA	PNA	0.15	0.0999	B	0.0219	B	0.0139	B	0.0148	BF	0.0219	B	0.0	B	0.0128	B	0.0122	B	0.0112	B	0.0128	B	0.0063	BJ	0.0074	B	0.074	BE	0.0351	BJ	0.0733	B	0.0083	B	0.0113	B	0.0301	B	0.0161	B	0.0151	B	0.0192	B	0.0048	B	0.0041	U	
Cadmium as Cd	mg/L	0.005	0.005	PNA	PNA	PNA	0.005	U	0.00032	U	0.00027	U	0.00035	U	0.00035	UF	0.00023	U	0.0	U	0.00034	U	0.00034	U	0.0003	B	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	0.00015	U	0.00015	U
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	10.1	10.4																							
Chromium as Cr	mg/L	0.05	0.005	PNA	PNA	0.012	0.28	0.0192	0.0137	0.0024	BF	0.0618	0.0	B	0.0156	0.00044	U	0.0276	0.0009	B	0.0147	0.0011	B	0.02	0.0895	0.035	0.0186	0.0017	B	0.074	E	0.0041	B	0.0313	0.0023	B	0.0108	0.002	B															
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	0.026	B	0.002	B	0.00097	B	0.00088	UF	0.009	B	0.0	U	0.0013	B	0.0012	U	0.0042	B	0.0012	U	0.0017	B	0.0013	U	0.0014	B	0.006	B	0.00044	U	0.0011	B	0.00052	U	0.0053	B	0.00028	B	0.0014	B	0.0004	U	0.0009	B	0.0007	B		
Copper as Cu	mg/L	0.2	0.01	U	PNA	PNA	0.01	0.16	0.005	B	0.0053	B	0.00057	BF	0.0574	0.0	B	0.007	B	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	0.0027	B	0.0365	0.0034	B	0.009	B	0.0004	U	0.007	B	0.0007	U					
Cyanide as CN	mg/L	0.20	0.02	U	PNA	PNA	0.02	U	PNA	0.01	U	0.01	U	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	PNA	0.01	U	PNA	PNA	PNA	PNA	PNA	PNA	0.01	U	PNA	PNA	PNA	PNA	0.01	U	PNA	PNA	PNA	PNA	PNA	PNA								
Iron as Fe	mg/L	0.3	140	65	75	44	34.7	16.1	14.3	0.0294	BF	36	0.036	B	5.8	0.231	14.2	0.047	B	5.89	0.188	2.26	50.4	0.433	5.01	0.107	36.2	0.176	12.7	0.0487	B	6.54	0.0619	U																				
Lead as Pb	mg/L	0.025	0.005	U	0.014	0.015	0.011	0.151	0.0051	0.0028	B	0.0137	UF	0.0975	0.0	B	0.0114	0.0018	U	0.106	J	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	0.018	0.0064	U																	
Magnesium	mg/L	35 #	PNA	5.7	17	PNA	14.4	3.48	3.29	B	3.18	BF	9.74	5.3	2.34	B	1.73	4.02	B	1.6	B	2.79	B	1.39	B	12.6	11.8	10.9	2.46	B	1.64	B	8.71	2.18	B	4.49	B	3.8	B	3.75	B	3.58	B											
Manganese as Mn	mg/L	0.3	4.0	0.3	6.1	1.3	2.7	0.442	0.257	0.0223	F	1.09	0.0793	0.137	0.0961	0.545	0.203	0.237	0.0811	0.0936	4.82	EJ	0.0408	0.0953	0.0298	0.774	0.0265	0.0298	0.0273	0.0276	0.281	0.0211																						
Mercury as Hg	mg/L	0.0007	0.00025	U	0.00025	U	0.00025	U	0.0001	U	0.0001	U	0.00013	U	0.00013	UF	0.00028	0.0	U	0.0001	U	0.0001	U	0.00012	B	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	U	0.0001	U							
Nickel as Ni	mg/L	0.1	0.01	U	PNA	PNA	0.01	0.166	0.011	B	0.0053	B	0.0037	BF	0.0352	B	0.0	B	0.009	B	0.0024	B	0.0117	B	0.0010	U	0.0079	B	0.0013	B	0.0072	B	0.0598	0.0051	B	0.0055	B	0.0007	B	0.031	B	0.0022	B	0.0081	B	0.0046	B	0.0078	B	0.0042	B			
Potassium	mg/L	NA	PNA	PNA	PNA	PNA	7.15	2.52	B	2.25	B	2.4	BF	5.2	E	3.66B	1.62	B	1.39	B	3	B	1.7	B	2.32	B	1.2	B	8.19	7.43	7.61	J	1.62	B	1.41	B	3.96	B	1.36	B	2.12	B	2.05	B	2.53	B	2.34	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	UF	0.0027	U	0.0	U	0.0025	U	0.0025	U	0.0042	U	0.0032	U	0.0032	U	0.0026	U	0.0028	U	0.0028	U	0.0028	U	0.0035	B	0.0027	B	0.0021	U	0.0023	U	0.0153	0.0018	U	0.0018	U			
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	UF	0.0006	U	0.0	U	0.00083	U	0.00083	U	0.0005	U	0.0005	U	0.00043	U	0.0006	B	0.00042	U	0.00042	U	0.00032	U	0.00032	U	0.00034	B	0.00029	U	0.0002	U	0.0002	U	0.0054	B	0.00043	U		
Sodium as Na	mg/L	20	12	PNA	PNA	14	9.59	7.63	8.11	8.27	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	7.57	9.44																								
Thallium as Tl	mg/L	0.0005 #	0.004	U	PNA	PNA	0.005	U	0.0141	0.0025	U	0.0019	U	0.0037	BF	0.0033	U	0.0	U	0.0032	U	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	0.0032	U	0.0029	U	0.0029	U	0.0019	U	0.0019	U	0.0019	U	0.0045	B	
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	0.0848	0.0033	B	0.0022	B	0.00074	UF	0.0326	B	0.0	U	0.0037	B	0.0014	U	0.0155	B	0.0012	U	0.0078	B	0.0013	U	0.0058	B	0.0165	B	0.00021	U	0.0052	B	0.0004	B	0.0211	B	0.00018	U	0.006	B	0.0009	B	0.0019	B	0.00028	U			
Zinc as Zn	mg/L	2 #	0.05	PNA	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																							

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
October 2013

ANALYTICAL PARAMETERS	UNITS	GW STND*	MW-12A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
			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		Oct. 2013																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
											Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered		Unfiltered	Filtered		Unfiltered	Filtered		Unfiltered	Filtered		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	0.0	U	PNA	PNA	0.389	0.0196	U	PNA	0.225	0.107	B	PNA	0.0548	B	0.0391	B	PNA	0.09	B	0.0214	B	PNA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Antimony as Sb	mg/L	0.003 #	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	U	PNA	0.0021	U	0.0022	B	PNA	0.0011	U	0.0013	B	PNA	0.0012	U	0.0012	U	PNA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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	U	PNA	0.0141	0.0019	U	PNA	0.0044	U	0.0044	U	PNA	0.0064	B	0.0028	U	PNA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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	B	PNA	0.0747	BE	0.0640	B	PNA	0.0535	B	0.0475	B	PNA	0.0465	B	0.0421	B	PNA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Beryllium as Be	mg/L	0.003	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	PNA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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	B	PNA	0.0721	BE	0.0794	B	PNA	0.0695	B	0.0692	B	PNA	0.0479	B	0.0491	B	PNA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Cadmium as Cd	mg/L	0.005	0.005	U	PNA	0.005	U	PNA	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	U	0.00018	U	0.000087	U	0.0001	U	0.0001	U	0.00015	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	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	2

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 1
INORGANIC GROUNDWATER QUALITY RESULTS
October 2013

ANALYTICAL PARAMETERS	UNITS	GW STND*	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 2012		Oct. 2012	April 2013	Oct. 2013																	
																	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	B	0.34	PNA	0.0656	B	PNA	1.61	0.0362	B	PNA	0.0161	B	PNA												
Antimony as Sb	mg/L	0.003 #	0.005	U	PNA	0.005	U	PNA	0.0	U	0.0027	U	0.0021	U	0.0028	U	0.0041	B	PNA	0.0015	B	0.0011	U	PNA	0.0018	B	PNA											
Arsenic as As	mg/L	0.025	0.005	U	0.005	U	0.005	U	0.005	U	0.0028	U	0.0023	U	0.0028	U	0.0019	U	PNA	0.0044	U	0.0044	U	PNA	0.0028	U	PNA											
Barium	mg/L	1	PNA	PNA	PNA	PNA	PNA	PNA	0.0	B	0.0333	B	0.114	B	0.0286	B	0.0141	BE	PNA	0.16	B	0.137	B	PNA	0.0977	B	PNA											
Beryllium as Be	mg/L	0.003	0.001	U	PNA	0.001	U	PNA	0.0	B	0.00016	U	0.00026	U	0.00017	U	0.00013	U	PNA	0.00012	U	0.00012	U	PNA	0.0001	U	PNA											
Boron as B	mg/L	1.0	0.07	PNA	0.02	PNA	0.01	PNA	0.1	B	0.0591	B	0.106	PNA	0.0188	B	0.0111	BE	PNA	0.103	0.101	PNA	0.0743	B	PNA													
Cadmium as Cd	mg/L	0.005	0.005	U	PNA	0.005	U	PNA	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	0.00015	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		30.6							
Chromium as Cr	mg/L	0.05	0.047	PNA	0.011	PNA	0.022	PNA	0.0029	B	0.0027	B	0.0029	B	0.0086	B	PNA	0.0014	B	PNA	0.0397	0.0013	B	PNA	0.0014	B	PNA											
Cobalt	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0	U	0.0012	U	0.0012	U	0.0012	U	PNA	0.00049	U	PNA	0.0033	B	0.0007	B	PNA	0.0004	U	PNA										
Copper as Cu	mg/L	0.2	0.04	PNA	0.01	PNA	0.03	PNA	0.0	B	0.0015	B	0.0032	B	0.0069	B	PNA	0.00055	U	PNA	0.0109	B	0.002	B	PNA	0.0016	B	PNA										
Cyanide as CN	mg/L	0.20	0.02	U	PNA	0.02	U	PNA	0.0	U	0.01	U	PNA		0.01	U	PNA		0.01	U	PNA		0.01	U	PNA		0.01	U	PNA									
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	0.103	0.0274	B	0.0776	B													
Lead as Pb	mg/L	0.025	0.006	0.009	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	0.0094									
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	8.71													
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	0.4													
Mercury as Hg	mg/L	0.0007	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	0.0001	U	PNA	0.0001	U	PNA											
Nickel as Ni	mg/L	0.1	0.05	PNA	0.01	PNA	0.03	PNA	0.0	B	0.0075	B	0.0096	B	0.0089	B	PNA	0.0014	B	PNA	0.0386	B	0.0181	B	PNA	0.0085	B	PNA										
Potassium	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	12.9								
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	0.0031	BJ	PNA	0.0023	U	PNA								
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	PNA	0.00052	U	PNA	0.00032	U	0.00032	U	PNA	0.00023	B	PNA						
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	15.1											
Thallium as Tl	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	PNA						
Vanadium	mg/L	NA	PNA	PNA	PNA	PNA	PNA	PNA	0.0	B	0.0014	B	0.0014	U	0.0029	B	PNA	0.0014	B	PNA	0.0096	B	0.0008	B	PNA	0.0012	B	PNA										
Zinc as Zn	mg/L	2 #	0.04	PNA	0.01	PNA	0.03	PNA	0.0	B	0.0173	B	0.0095	B	0.0142	B	PNA	0.0128	B	PNA	0.0109	B	0.0035	B	PNA	0.0073	B	PNA										
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	107	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		20										
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		45.5								
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	4.0		7.5	2	U	9.6	4.3		2	U	13	2	U	2	U	2	U	2	U	2	U	PNA		2	U	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	PNA		10	U	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	PNA							
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								
Hardness as CaCO3	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	116	D	
Ammonia as N	mg/L	2.0	0.22		0.05	U	0.05	U	0.1	U	0.1	U	0.1	U	0.14		0.1	U	0.35		0.1	U	0.1	U	0.1	U	0.1	U	2.52		PNA	1.15		2.44		1.08		
Nitrite as N	mg/L	NA	PNA	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	PNA		0.1	U	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		0.1	U	
Phenols as Phenol	mg/L	0.001	0.001	U	0.002	0.006	0.001	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	PNA		0.005	U	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		192		
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		6	D	
Tot Organic Carbon	mg/L	NA	5.5		3.6		2.1		11		3.1		1	U	2		1		2.3		1	U	1	U	11.4		2.4		PNA		1	U	20.6		3.3			
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		0.2
Temperature	deg.C	NA	15		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		13.02	
pH	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		6.17
Spec. Cond	umho/cm	NA	330		120		150		120		190		PNA		PNA		167		224		999		130		82		PNA		195		455		PNA	226				386

NOTES:

* = 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 compounds 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 verified.

1.0 = Compound exceeded standard.

1.0 = Compound at standard.

NM = Not Monitored

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL
TABLE 2
ORGANIC GROUNDWATER QUALITY RESULTS
October 2013

Parameters	Units	GW Standard*	MW-11A		MW-11B	
Chloromethane	mg/L	NA	0.005	U	0.005	U
Vinyl chloride	mg/L	0.002	0.002	U	0.002	U
Bromomethane	mg/L	0.005	0.005	U	0.005	U
Chloroethane	mg/L	0.005	0.005	U	0.005	U
Acrylonitrile	mg/L	0.005	0.005	U	0.005	UJ
Trichlorofluoromethane	mg/L	0.005	0.005	U	0.005	UJ
1,1-Dichloroethene	mg/L	0.005	0.005	U	0.005	U
Iodomethane	mg/L	NA	0.005	U	0.005	UJ
Vinyl acetate	mg/L	0.005	0.005	U	0.005	U
Acetone	mg/L	NA	0.005	U	0.005	UJ
Carbon disulfide	mg/L	NA	0.005	U	0.005	UJ
Methylene chloride	mg/L	0.005	0.005	U	0.005	U
trans-1,2-Dichloroethene	mg/L	0.005	0.005	U	0.005	U
1,1-Dichloroethane	mg/L	0.005	0.005	U	0.005	U
cis-1,2-Dichloroethene	mg/L	0.005	0.005	U	0.005	U
2-Butanone	mg/L	0.005	0.005	U	0.005	U
Bromochloromethane	mg/L	0.005	0.005	U	0.005	U
Chloroform	mg/L	0.007	0.005	U	0.002	J
1,1,1-Trichloroethane	mg/L	0.005	0.005	U	0.005	U
Carbon tetrachloride	mg/L	0.005	0.005	U	0.005	U
Benzene	mg/L	0.001	0.001	U	0.001	U
1,2-Dichloroethane	mg/L	0.005	0.005	U	0.005	U
Trichloroethene	mg/L	0.005	0.005	U	0.005	U
1,2-Dichloropropane	mg/L	0.001	0.005	U	0.005	U
Dibromomethane	mg/L	0.005	0.005	U	0.005	U
Bromodichloromethane	mg/L	NA	0.005	U	0.005	U
cis-1,3-Dichloropropene	mg/L	0.0004	0.0004	U	0.0004	U
4-Methyl-2-pentanone	mg/L	0.005	0.005	U	0.005	U
Toluene	mg/L	0.005	0.005	U	0.005	U
trans-1,3-Dichloropropene	mg/L	0.0004	0.0004	U	0.0004	U
1,1,2-Trichloroethane	mg/L	0.001	0.001	U	0.001	U
Tetrachloroethene	mg/L	0.005	0.005	U	0.005	U
2-Hexanone	mg/L	NA	0.005	U	0.005	U
Dibromochloromethane	mg/L	0.005	0.005	U	0.005	UJ
1,2-Dibromoethane	mg/L	NA	0.001	U	0.001	U
Chlorobenzene	mg/L	0.005	0.005	U	0.005	U
trans-1,4-Dichloro-2-butene	mg/L	0.005	0.005	U	0.005	UJ
Ethylbenzene	mg/L	0.005	0.005	U	0.005	U
1,1,1,2-Tetrachloroethane	mg/L	0.005	0.005	U	0.005	U
Xylene (total)	mg/L	0.005	0.005	U	0.005	U
Styrene	mg/L	0.005	0.005	U	0.005	U
Bromoform	mg/L	NA	0.005	U	0.005	UJ
1,1,2,2-Tetrachloroethane	mg/L	0.005	0.005	U	0.005	U
1,4-Dichlorobenzene	mg/L	0.003	0.003	U	0.003	U
1,2-Dichlorobenzene	mg/L	0.003	0.003	U	0.003	U
1,2-Dibromo-3-chloropropane	mg/L	0.0004	0.001	U	0.001	UJ

NOTES:

@ = 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.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximat

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
October 2013

Analytical Parameter Units mg/L	Leachate Collection (Primary)																		Leachate Detection (Secondary)																		
	April 2005	October 2005	April 2006	October 2006	April 2007	October 2007	April 2008	October 2008	April 2009	October 2009	April 2010	October 2010	April 2011	October 2011	April 2012	October 2012	April 2013	October 2013	April 2005	October 2005	April 2006	October 2006	April 2007	October 2007	April 2008	October 2008	April 2009	October 2009	April 2010	October 2010	April 2011	October 2011	April 2012	October 2012	April 2013	October 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 B	< 0.0044	0.0048 B	<0.0028	0.0052 B	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	<0.001	
Cadmium as Cd	<0.025	<0.005	<0.005	<0.005	<0.005	0.0012B	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	<0.00015	<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	<0.00015	
Calcium as Ca	82	59	160	110	99	115	99.8	73.1	69.8	291	57.4	80.9	68	70.3	72	100	71.6	111	83	61	96	82	75	583	117	111	71.5	142	63	104	67.8	85.5	74.6	150	68.8	71.4	
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	10.5	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	26.7	
Lead as Pb	<0.025	<0.005	0.007	<0.005	<0.005	0.0764	<0.0023	0.0014 B	<0.0015	0.116	0.0071	<0.0017	0.0066	< 0.0033	0.0089	<0.00096	0.0058	0.0072	<0.005	<0.005	<0.005	<0.005	<0.005	0.108	0.0272	0.0044	0.0024B	3.06	0.0173	0.0164	< 0.0015	0.0113	0.0108	0.0024 B	0.0033	<0.00072	
Magnesium as Mg	22	6.8	26	28	21	46.7	20.6	19.1	17.1	37.6	12.6	18.9	17.9	14	17	33.7	21.4	21	14	5.8	9.4	8	11	48.7	11.9	15.3	10	15.5	7.52	12.3	11.3	12.8	10.7	25.9	8.08	17.2	
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	2.89	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	2.32	
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	105	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	65.9	
Sodium as Na	180	10	170	250	170	506	146	141	123	328	99.4	186	137	99.4	148	419	186	236	94	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	151	
Alkalinity total CaCO3	1100	140	980	1300	980	2710	884	778	653	1640	556	820	771	605	808 D	1,860 D	948 D	1,100 D	570	130	300	210	480	2000	438	389	202	489	256	340	350 D	386 D	204 D	986 D	236 D	815 D	
BOD5	NA	NA	NA	NA	NA	68	96	17	53	117	9	47	20	15	< 2	31	21	20	NA	NA	NA	NA	NA	NA	NA	257	42	555	<10	10	16	16	< 2	47	< 2	15	
COD	180	220	210	240	150	629	455	178	69.2	549	62.6	163	125	94.4	141	382 D	148 D	261 D	120	380	<40	50	70	2600	257	138	154	743	<10	56.1	69.3	75.7	35.7	181 D	31.1	142	
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	284 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	206 D	
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	500 D	260	180	280	240	230	1000	330	320	620	440	210	310	230 D	272 D	260 D	460 D	250 D	280 D	
Ammonia as N	140	1.6	110	160	110	263	9.92	107	1.66	179	81.4	99.8	46.7 D	41.4 D	75.3 D	164 D	145 D	180 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	136 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	<0.10	NA	NA	NA	NA	NA	NA	NA	NA	0.29	NA	0.23	<0.10	<0.10	0.21	0.25	0.19	0.2	< 0.10	<0.10
Nitrate 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	<1.00 D	<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	<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	1.74	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	1.2	
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	0.0051	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	<0.005	
Sulfate as SO4	35	74	100	10	19	121	25.5	9.91	16.7	24.5	8.29	39.1	18	< 5.00	7.64	20.3	10.5	46.8	<25	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	14.1	
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	1,380 D	610	280	730	390	480	2350	468	465	332	762	302	559	508	488 D	357	1,550 D	292	904 D	
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	16.6	27	13	14	13	20	122	39.6	27.5	12.2	41.3	8.9	21.2	23.2	96.4 D	14.1	63.3 D	67.1 D	11.9	
Total Kjeldahl Nitrogen	NA	NA	NA	NA	NA	521	38.3	129	5.08	392	86.1	149	113 D	85.5 D	137 D	328 D	171 D	206 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	138 D	
Turbidity NTU	6.5	5.8	440	570	610	NA	NA	NA	NA	1,000	250	815	900	> 1,000	244	187	104	57.6	5.9	5.5	15	2.4	120	NA	NA	NA	NA	976	20.9	77.3	78	55	20.8	5.2	21.1	104	

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

E - This flag identified compounds 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.

UU - The analyte was not detected above the reported sample wuantitation 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.

TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL

TABLE 4

GROUNDWATER ELEVATIONS
October 2013

Monitoring Well Number	* Casing Elevation	April 2005		October 2005		April 2006		October 2006		April 2007		October 2007		April 2008		October 2008		April 2009		October 2009		April 2010		October 2010		April 2011		October 2011		April 2012		October 2012		April 2013		October 2013	
		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	DTW	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	104.80	9.07
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	105.69	9.40
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	106.60	8.39
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	--	NM	--	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	48.19	7.11
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	44.88	7.02
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	44.50	6.90
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	13.34	2.66
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	13.64	2.46
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	9.79	6.21
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	--	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	--	NM	--	NM	--
MW-5C	74.33	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--	NM	--
MW-6A	NS	NM	--	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	92.11	8.83
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	94.40	9.06
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	83.76	9.07
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	83.93	8.79
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	85.52	7.79
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	77.06	8.96
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	74.05	8.51
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	72.66	8.12
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	4.73	73.92	4.40
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	80.24	7.71
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	80.81	7.47

NOTES:

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

FIGURES



PWGC

Strategic Environmental and Engineering Solutions

P.W. GROSSER CONSULTING, INC.

630 Johnson Avenue. • Suite 7
Bohemia • NY • 11716-2618
Phone: (631) 589-6353 • Fax: (631) 589-8705
E-mail: INFO@PWGROSSER.COM

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TOWN OF SOUTHAMPTON
1370 MAJORS PATH
SOUTHAMPTON, NY 11968

DRAWING INFORMATION:

Project:	SHP1301	Designed by:	ICB
Date:	1/15/2014	Drawn by:	JCG
Scale:	AS SHOWN	Approved by:	DE

FIGURE NO:

1

SHEET:

Document Path: Z:\GIS\Projects\32\SHP1301\Mapfiles\2013\Groundwater Contour Map October 2013 11-18-2013.mxd

MW-4B_1
MW-4C_1
2.66'

3.0'

4.0'

5.0'

6.0'

7.0'

7.11'

MW-12A
MW-12B
7.71'

GMW-30B
GMW-30
7.11'

MW-11B
MW-11A
8.12'

LEA-PR1
LEA-SEC
8.12'

MW-7A
MW-7B
9.07'

GMW-7C
9.07'

MW-6A
MW-6B
9.06'

GMW-10
MW-1B
MW-1C
9.07'

GMW-1A
9.07'

GMW-9B
GMW-9
9.06'

MW-8
8.96'

GMW-12B
GMW-12
8.96'

GMW-15B
GMW-15
8.96'

GMW-14
8.96'

GMW-13B
8.96'

GMW-16B
GMW-16
8.96'

GMW-18B
GMW-18
8.96'

GMW-19B
GMW-19
8.96'

GMW-21B
GMW-21
8.96'

GMW-20B
GMW-20
8.96'

GMW-22B
GMW-22
8.96'

GMW-23B
GMW-23
8.96'

GMW-24B
GMW-24
8.96'

GMW-25B
GMW-25
8.96'

GMW-26B
GMW-26
8.96'

GMW-27B
GMW-27
8.96'

GMW-28B
GMW-28
8.96'

GMW-31B
GMW-31
8.96'

GMW-32B
GMW-32
8.96'

GMW-33
8.96'

GMW-35
8.96'

GMW-37
8.96'

GMW-36
8.96'

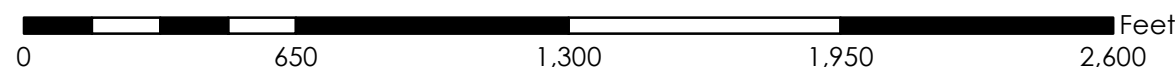
GMW-1B
GMW-1
8.96'

GMW-38
8.96'

Groundwater Flow
Direction

SITE PLAN - OCTOBER 2013

NORTH SEA LANDFILL
SOUTHAMPTON, NY



- Gas Monitoring Well
- Leachate Well
- Monitoring Well
- Actual Groundwater Contour
- Inferred Groundwater Contour
- Landfill Boundary
- Cells

Figure 2
Monitoring Well 11A
(1997 - 2013)

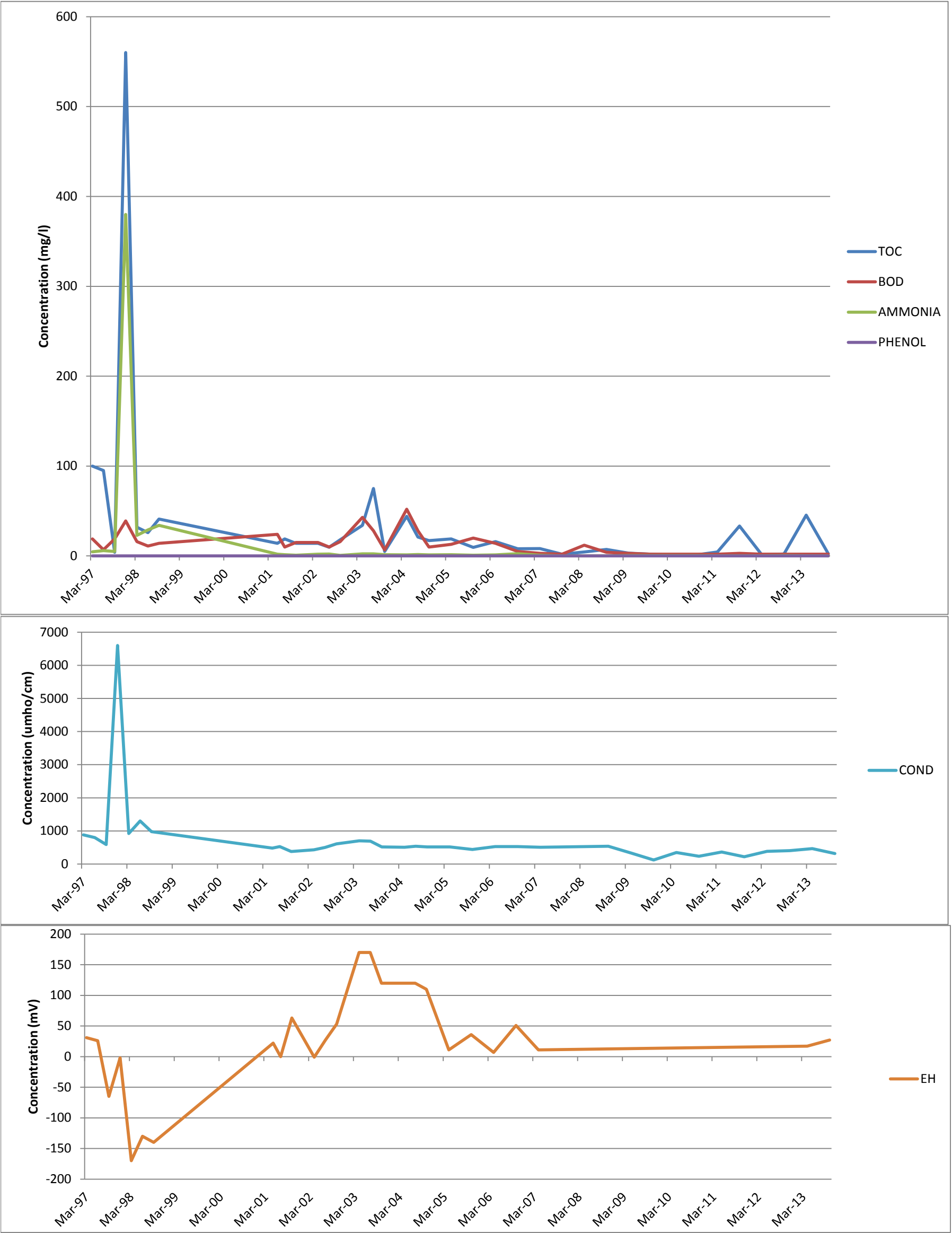
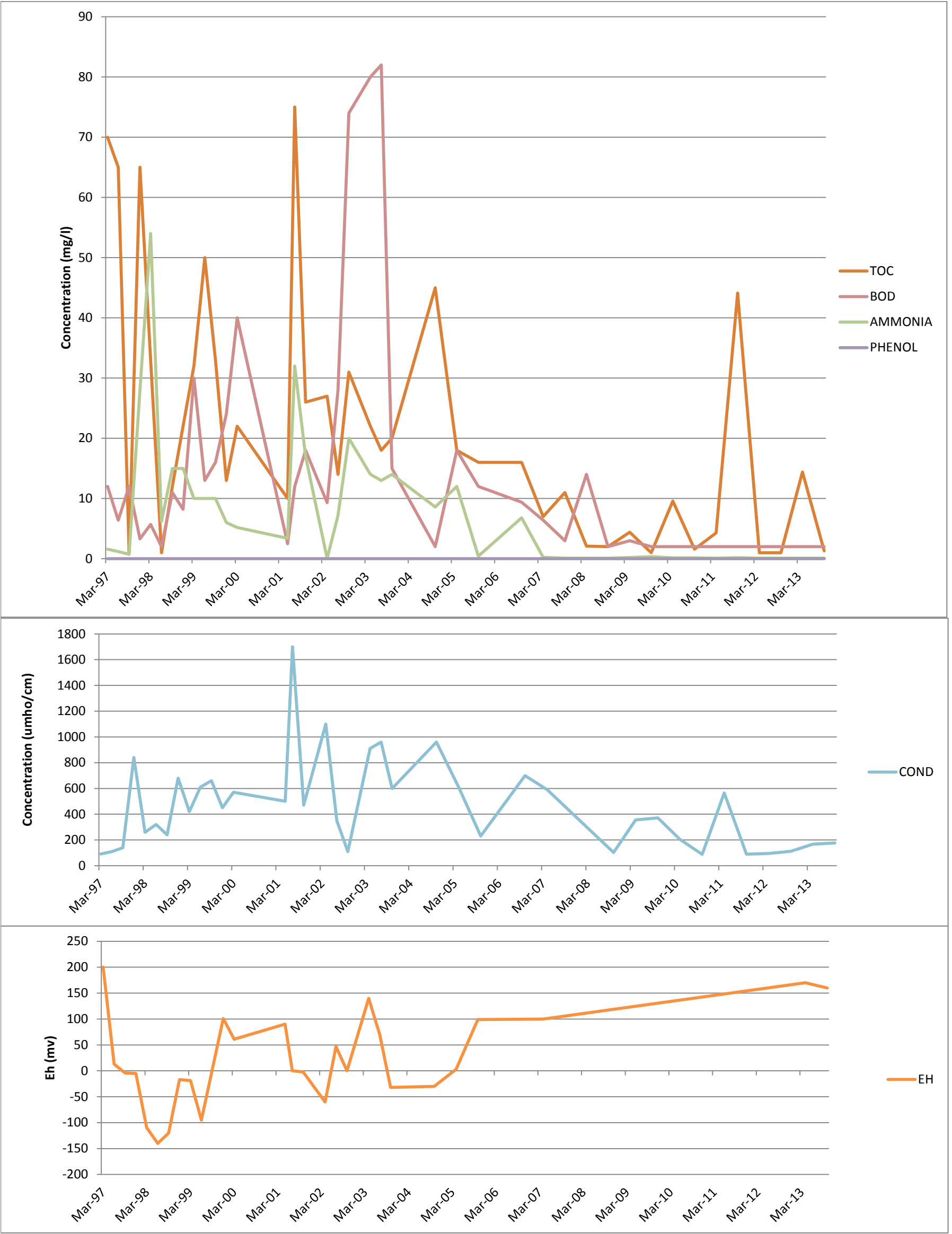


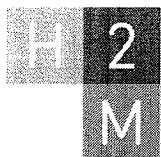
Figure 3
Monitoring Well 11B
(1997 - 2013)



APPENDIX A

LABORATORY ANALYTICAL REPORTS / DATA VALIDATION & USABILITY

REPORT



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575 Broad Hollow Road
Melville, NY 11747

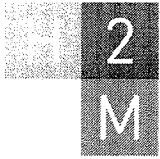
tel 631.694.3040
fax 631.420.8436

SAMPLE DATA SUMMARY PACKAGE

TABLE OF CONTENTS

NORTH SEA LANDFILL
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WATER SAMPLES
SDG NO.: TOS013/013F

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- 2. CHAIN OF CUSTODY DOCUMENTATION**
- 3. SDG NARRATIVES**
- 4. SAMPLE REPORTS**
 - 4.1 VOLATILES
 - 4.2 TOTAL METALS
 - 4.3 FILTERED METALS
 - 4.4 WET CHEMISTRY
- 5. SURROGATE SPIKE ANALYSIS RESULTS**
 - 5.1 VOLATILES
- 6. MATRIX SPIKE / MATRIX SPIKE DUPLICATE SUMMARY**
 - 6.1 VOLATILES
- 7. DUPLICATE SUMMARY RESULTS**
 - 7.1 TOTAL METALS
 - 7.2 FILTERED METALS
 - 7.3 WET CHEMISTRY
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 - 8.1 TOAL METALS
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 - 9.2 TOTAL METALS
 - 9.3 FILTERED METALS
 - 9.4 WET CHEMISTRY
- 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

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: TOS013

Analytical Requirements

Customer Sample Code	Laboratory Sample Code	ME	MSVOA	WC
DUP-001	1310967-001	X		X
MW-1A	1310967-002	X		X
MW-1B	1310967-003	X		X
MW-1C	1310967-004	X		X
MW-6AR	1310967-005	X		X
MW-6B	1310967-006	X		X
MW-7A	1310967-007	X		X
FIELD BLANK	1310967-008	X		X
LEA-PRI	1310A35-001	X		X
LEA-SEC	1310A35-002	X		X
MW-3A	1310A35-003	X		X
MW-3B	1310A35-004	X		X
MW-3C	1310A35-005	X		X
MW-4A	1310A35-006	X		X
MW-4B	1310A35-007	X		X
MW-4C	1310A35-008	X		X
MW-8	1310A35-009	X		X
MW-9	1310A35-010	X		X
MW-11A	1310A35-011	X	X	X
MW-11B	1310A35-012	X	X	X
MW-12A	1310A35-013	X		X
MW-12B	1310A35-014	X		X
TB	1310A35-015		X	

CLP, Non-CLP (Please indicate year of protocol)
TCL/TAL, HSL, Priority Pollutant,

ASP B 2000
CG 11/7/13

TOS013/013F S3

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

SDG: TOS013F

Analytical Requirements

Customer Sample Code	Laboratory Sample Code	ME
MW-8	1310A43-001	X
MW-11A	1310A43-002	X
MW-11B	1310A43-003	X

CLP, Non-CLP (Please indicate year of protocol)
TCL/TAL, HSL, Priority Pollutant,

ASP B 8000
CG 11/7/13

TOS013/013F S4

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

VOLATILE (VOA)

ANALYSES

SDG: TOS013

Laboratory Samp ID	Client Sample ID	Matrix	Analytical Protocol	Date Collected	Date Recd at Lab	Date Extracted	Date Analyzed	Extraction Method	DF	Level	Aux Cleanup
1310A35-011F	MW-11A	Aqueous	ASP8260	17-Oct-13	18-Oct-13		18-Oct-13		1	LOW	
1310A35-012F	MW-11B	Aqueous	ASP8260	17-Oct-13	18-Oct-13		19-Oct-13		1	LOW	
1310A35-015A	TB	Aqueous	ASP8260	14-Oct-13	18-Oct-13		19-Oct-13		1	LOW	

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSIS

SDG: TOS013

Laboratory Samp ID	Client Sample ID	Matrix	Metals Requested	Date Recd at Lab	Date Analyzed
1310967-001	DUP-001	WATER	CA, CD, FE, K, MG, MN, NA, PB,	17-Oct-13	11/13
1310967-002	MW-1A	WATER	CA, CD, FE, K, MG, MN, NA, PB,	17-Oct-13	11/13
1310967-003	MW-1B	WATER	CA, CD, FE, K, MG, MN, NA, PB,	17-Oct-13	11/13
1310967-004	MW-1C	WATER	CA, CD, FE, K, MG, MN, NA, PB,	17-Oct-13	11/13
1310967-004DUP	MW-1CD	WATER	AG, AL, AS, B, BA, BE, CA, CD, CO, CR, CU, FE, K, MG, MN, NA, NI, PB, SB, SE, TL, V, ZN,	17-Oct-13	11/13
1310967-004MS	MW-1CS	WATER	AG, AL, AS, B, BA, BE, CA, CD, CO, CR, CU, FE, K, MG, MN, NA, NI, PB, SB, SE, TL, V, ZN,	17-Oct-13	11/13
1310967-005	MW-6AR	WATER	AG, AL, AS, B, BA, BE, CA, CD, CO, CR, CU, FE, K, MG, MN, NA, NI, PB, SB, SE, TL, V, ZN,	17-Oct-13	11/13
1310967-005DUP	MW-6ARD	WATER	HG,	17-Oct-13	11/13
1310967-005MS	MW-6ARS	WATER	HG,	17-Oct-13	11/13
1310967-006	MW-6B	WATER	AG, AL, AS, B, BA, BE, CA, CD, CO, CR, CU, FE, K, MG, MN, NA, NI, PB, SB, SE, TL, V, ZN,	17-Oct-13	11/13
1310967-007	MW-7A	WATER	CA, CD, FE, K, MG, MN, NA, PB,	17-Oct-13	11/13
1310967-008	FIELD BLANK	WATER	AG, AL, AS, B, BA, BE, CA, CD, CO, CR, CU, FE, K, MG, MN, NA, NI, PB, SB, SE, TL, V, ZN,	17-Oct-13	11/13
1310A35-001	LEA-PRI	WATER	AS, CA, CD, FE, K, MG, MN, NA, PB,	18-Oct-13	11/13
1310A35-002	LEA-SEC	WATER	AS, CA, CD, FE, K, MG, MN, NA, PB,	18-Oct-13	11/13
1310A35-003	MW-3A	WATER	CA, CD, FE, K, MG, MN, NA, PB,	18-Oct-13	11/13
1310A35-004	MW-3B	WATER	CA, CD, FE, K, MG, MN, NA, PB,	18-Oct-13	11/13
1310A35-005	MW-3C	WATER	CA, CD, FE, K, MG, MN, NA, PB,	18-Oct-13	11/13
1310A35-006	MW-4A	WATER	CA, CD, FE, K, MG, MN, NA, PB,	18-Oct-13	11/13
1310A35-007	MW-4B	WATER	CA, CD, FE, K, MG, MN, NA, PB,	18-Oct-13	11/13
1310A35-008	MW-4C	WATER	CA, CD, FE, K, MG, MN, NA, PB,	18-Oct-13	11/13
1310A35-009	MW-8	WATER	CA, CD, FE, K, MG, MN, NA, PB,	18-Oct-13	11/13
1310A35-010	MW-9	WATER	CA, CD, FE, K, MG, MN, NA, PB,	18-Oct-13	11/13
1310A35-011	MW-11A	WATER	AG, AL, AS, B, BA, BE, CA, CD, CO, CR, CU, FE, K, MG, MN, NA, NI, PB, SB, SE, TL, V, ZN,	18-Oct-13	11/13
1310A35-012	MW-11B	WATER	AG, AL, AS, B, BA, BE, CA, CD, CO, CR, CU, FE, K, MG, MN, NA, NI, PB, SB, SE, TL, V, ZN,	18-Oct-13	11/13
1310A35-013	MW-12A	WATER	CA, CD, FE, K, MG, MN, NA, PB,	18-Oct-13	11/13
1310A35-014	MW-12B	WATER	CA, CD, FE, K, MG, MN, NA, PB,	18-Oct-13	11/13

TOS013/013F S6

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY

INORGANIC ANALYSIS

SDG: TOS013F

Laboratory Samp ID	Client Sample ID	Matrix	Metals Requested	Date Recd at Lab	Date Analyzed
1310A43-001	MW-8	WATER	CA,CD,FE,K,MG,MN,NA,PB,	18-Oct-13	11/13
1310A43-002	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,	18-Oct-13	11/13
1310A43-002DUP	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,	18-Oct-13	11/13
1310A43-002MS	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,	18-Oct-13	11/13
1310A43-003	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,	18-Oct-13	11/13

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSIS

SDG : TOS013

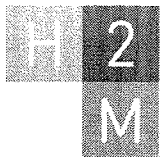
Laboratory Smp ID	Client Sample ID	Matrix	Tests	Date Recd at Lab	Date Analyzed
1310967-001	DUP-001	Groundwater	SELECT WET CHEMISTRY **	10/17/13	10/13
1310967-002	MW-1A	Groundwater	SELECT WET CHEMISTRY **	10/17/13	10/13
1310967-003	MW-1B	Groundwater	SELECT WET CHEMISTRY **	10/17/13	10/13
1310967-004	MW-1C	Groundwater	SELECT WET CHEMISTRY **	10/17/13	10/13
1310967-004DUP	MW-1CDUP	Groundwater	SELECT WET CHEMISTRY **	10/17/13	10/13
1310967-004MS	MW-1CMS	Groundwater	SELECT WET CHEMISTRY **	10/17/13	10/13
1310967-005	MW-6AR	Groundwater	SELECT WET CHEMISTRY **	10/17/13	10/13
1310967-006	MW-6B	Groundwater	SELECT WET CHEMISTRY **	10/17/13	10/13
1310967-007	MW-7A	Groundwater	SELECT WET CHEMISTRY **	10/17/13	10/13
1310967-008	FIELD BLANK	Field Blank	SELECT WET CHEMISTRY **	10/17/13	10/13
1310A35-001	LEA-PRI	Leachate	SELECT WET CHEMISTRY **	10/18/13	10/13
1310A35-002	LEA-SEC	Leachate	SELECT WET CHEMISTRY **	10/18/13	10/13
1310A35-003	MW-3A	Groundwater	SELECT WET CHEMISTRY **	10/18/13	10/13
1310A35-004	MW-3B	Groundwater	SELECT WET CHEMISTRY **	10/18/13	10/13
1310A35-005	MW-3C	Groundwater	SELECT WET CHEMISTRY **	10/18/13	10/13
1310A35-006	MW-4A	Groundwater	SELECT WET CHEMISTRY **	10/18/13	10/13
1310A35-007	MW-4B	Groundwater	SELECT WET CHEMISTRY **	10/18/13	10/13
1310A35-008	MW-4C	Groundwater	SELECT WET CHEMISTRY **	10/18/13	10/13
1310A35-009	MW-8	Groundwater	SELECT WET CHEMISTRY **	10/18/13	10/13
1310A35-010	MW-9	Groundwater	SELECT WET CHEMISTRY **	10/18/13	10/13
1310A35-011	MW-11A	Groundwater	SELECT WET CHEMISTRY **	10/18/13	10/13
1310A35-012	MW-11B	Groundwater	SELECT WET CHEMISTRY **	10/18/13	10/13

** Alkalinity, Total (As CaCO₃) ; Biochemical Oxygen Demand ; Bromide ; Chemical Oxygen Demand ; Chloride ; 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 ;

TOS013/013F S8

Laboratory Samp ID	Client Sample ID	Matrix	Tests	Date Recd at Lab	Date Analyzed
I310A35-013	MW-12A	Groundwater	SELECT WET CHEMISTRY **	10/18/13	10/13
I310A35-014	MW-12B	Groundwater	SELECT WET CHEMISTRY **	10/18/13	10/13

** Alkalinity, Total (As CaCO₃) ; Biochemical Oxygen Demand ; Bromide ; Chemical Oxygen Demand ; Chloride ; 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 ;



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tel 631.694.3040
fax 631.420.8436

2. CHAIN OF CUSTODY DOCUMENTATION



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EXTERNAL CHAIN OF CUSTODY

03604

PROJECT NAME/NUMBER		CLIENT: PWGIC TOS	H2M SDG NO: TOS013
NOANSEN LANDFILL 1370 Majors Park Southampton, NY		NOTES: dereke@progresso.com	Project Contact: Derek Trivette
SAMPLERS: (Signature)/Client <i>ARA</i> (Amanda Rancicello)		Sample Description Baseline Parameters	Phone Number: 631-589-6853
DELIVERABLES: ASP Category B		ANALYSIS REQUESTED	PIS/Quote #
TURNAROUND TIME: Standard			
DATE	TIME	MATRIX	FIELD I.D.
10/16/13	1100	GW	MW-6B
	1135		MW-6AR
	1440		MW-1C
			MW-1C/MS
			MW-1C/MD
			MW-1B
			MW-1A
			DUPED
			Field Blank
			MW-7A
Relinquished by: (Signature)	Date: 10/16/13	Time: 1800	Received by: (Signature)
Relinquished by: (Signature)	Date: 10/17/13	Time: 1800	Received by: (Signature)
Relinquished by: (Signature)	Date: 10/17/13	Time: 1800	Received by: (Signature)
Relinquished by: (Signature)	Date: 10/17/13	Time: 1800	Received by: (Signature)

LAB I.D. NO.	REMARKS:
1310967-006	
005	
004	
003	
002	
001	
007	
008	

LABORATORY USE ONLY

Samples were:
1. Shipped _____ or Hand Delivered _____ Airbill # _____
COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N

WHITE COPY - ORIGINAL
TOS013/013F S11

YELLOW COPY - CLIENT

PINK COPY - LABORATORY



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TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.h2mlabs.com

TOS 013
Sample Receipt Checklist

Client Name **TOS**

Date and Time Received: 10/17/2013 10:05:00 AM

Work Order Number: **1310967**

RcptNo: 1

Received by **Linda Siciliano**

Completed by:

Linda Siciliano

Reviewed by:

Joseph Car

Completed Date: 10/17/2013 11:25:32 AM

Reviewed Date: 10/18/2013 3:51:25 PM

Carrier name: H2M Pickup

Chain of custody present?	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 ☐	Not Present ☒
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 ☐	2 To 5.3 ° ☐
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 ☐	
Custody Seals present?	Yes ☐	No ☒	
Airbill or Sticker?	Air Bil ☐	Sticker ☐	Not Present ☒

Case Number:

SDG:
TOS013

SAS:

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: _____
Sample MW-7A @ 12:25 not listed on external COC
Corrective Action: _____

H2M LABS, INC.

INTERNAL CHAIN OF CUSTODY

CLIENT: TOS DELIVERABLES: BO-TOD TURN AROUND TIME: 21 Days

SDG #: T05013 CASE #: _____ MATRIX: GW pH CHECK ☒ Y or N

REMARKS: PIS 087 T07 07

REMARKS: FD 00110101
RECEIVED BY: USD SIGNATURE: [Signature] DATE: 14/11/13 TIME: 1005

[illegible]

MS/MSD
Baseline
Metals + B
 $\{G(\text{set})$
 $G(\text{set})\}$ Baseline + B

METALS

P 0097

TOS013/013F S13

SDG #: 105013[illegible]

P 0098

TOS013/013F S14

H2M LABS, INC.

INTERNAL CHAIN OF CUSTODY

CLIENT: TOS DELIVERABLES: 80-10D TURN AROUND TIME: 21 Days

SDG #: TOS 013 CASE #: _____ MATRIX: GW pH CHECK ☒ Y or N

REMARKS: PS 087 TOS 07

RECEIVED BY: LSD SIGNATURE: [Signature] DATE: 10/17/13 TIME: 1005

CLIENT ID	H2M LAB # ^{10/1/13} ₍₅₀₎	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED ^{+ 10/21/13} ₍₅₀₎
DUP-001	1310967-001AC	10-16	DS	2	FOC-9000-W, TC-W-SM
↓	001B	↓	HS	1	COD-W, NH ₃ -W, NO ₃ -W, PHOSPH-W, TXN-W
↓	001CD	↓	FN	1	Hard-WC
↓	001DA	↓	E	2	Alk-W, ANION 30-W, (Sep) BOD-W-SM, NO ₂ -A-W, TDS-W
MW-1A	002AD	↓	AS Above	2, 1, 1, 2	AS Above
1B	003	↓	↓	↓	↓
1C	004	↓	↓	6, 3, 3, 6	↓
6AR	005	↓	↓	2, 1, 1, 2	↓
6B	006	↓	↓	↓	↓
7A	007	↓	↓	↓	↓
Field Blank	008V	↓	↓	↓	↓
12					
13					
14					
15					
16					
17					
18					
19					
20					

WET CHEMISTRY

P 0223

TOS013/013F S15

CLIENT: ACTON TOS (T) 10/17/13

SDG #: TOS 013

[illegible]

P 0224

TOS013/013F S16



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03606

EXTERNAL CHAIN OF CUSTODY

PROJECT NAME/NUMBER North Sea Landfill 11 SHP1301 1370 Majors Path Southampton, NY		CLIENT: PNGC		H2M SDG NO: TOS013	
SAMPLERS: (Signature)/Client <i>Andi Rabin</i>		NOTES: derek@purgosser.com * Lab to filter		Project Contact: Derek Erstak Phone Number: 631-589-6353 PIS/Quote #	
DELIVERABLES: ASP Category B		ANALYSIS REQUESTED		LAB I.D. NO.	
TURNAROUND TIME: Standard				REMARKS:	
DATE	TIME	MATRIX	FIELD I.D.		
10/17/13	0830	GLW	Lea-Pri	130ABS-001	
	0840		Lea-Sec	002	
	0955		MW-0	005	
	1045		MW-9	010	
	1215		MW-11A	011	
	1140		MW-11B	012	
	1355		MW-12A	013	
	1315		MW-12B	014	
	1345		MW-3A	003	
	1435	✓	MW-3B	004	
Relinquished by: (Signature) <i>[Signature]</i>		Date: 10/17/13	Time: 945	LABORATORY USE ONLY	
Relinquished by: (Signature) <i>[Signature]</i>		Date: 10/18/13	Time: 1020	Samples were: 1. Shipped _____ or Hand Delivered _____ Airbill # _____ COC Tape was: 1. Present on outer package: Y or N 2. Unbroken on outer package: Y or N	
Relinquished by: (Signature) <i>[Signature]</i>		Date: 10/18/13	Time: 1020		
Relinquished by: (Signature) <i>[Signature]</i>		Date: 10/18/13	Time: 1020		
Relinquished by: (Signature) <i>[Signature]</i>		Date: 10/18/13	Time: 1020		

WHITE COPY - ORIGINAL
TOS013/013F S17

YELLOW COPY - CLIENT

PINK COPY - LABORATORY



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03605

EXTERNAL CHAIN OF CUSTODY

PROJECT NAME/NUMBER Northsea Landfill / SHP1301 1370 Major's Park Southampton, NY		CLIENT: PNGC		H2M SDG NO: TOS013		
SAMPLERS: (Signature)/Client <i>And Raen</i>		NOTES: dereke@progressor.com * lab to filter		Project Contact: Derek ERSBak Phone Number: 631-589-6353 PIS/Quote #		
DELIVERABLES: ASP Category B		ANALYSIS REQUESTED		LAB I.D. NO. 130A35-005 006 007 008		
TURNAROUND TIME: Standard		Containers		REMARKS:		
DATE	TIME	MATRIX	FIELD I.D.			
10/17/13	1535	GW	MW-3C	7	X	
	1620		MW-4A	7	X	
	1700		MW-4B	7	X	
	1810		MW-4C	7	X	
10/14/13	---	---	TB	2	X	
				AR		
Relinquished by: (Signature) <i>AR</i>		Date: 10/16/13	Time: 9:46	Received by: (Signature) <i>[Signature]</i>	Date: 10/18/13	Time: 9:48
Relinquished by: (Signature) <i>[Signature]</i>		Date: 10/18/13	Time: 10:20	Received by: (Signature) <i>[Signature]</i>	Date: 10/18/13	Time: 6:20
Relinquished by: (Signature) <i>[Signature]</i>		Date:	Time:	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)		Date:	Time:	Received by: (Signature)	Date:	Time:

WHITE COPY - ORIGINAL
TOS013/013F S18

YELLOW COPY - CLIENT

PINK COPY - LABORATORY



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TOS013
Sample Receipt Checklist

Client Name **TOS**

Date and Time Received: 10/18/2013 10:20:00 AM

Work Order Number: **1310A35**

RcptNo: 1

Received by **Linda Siciliano**

Completed by:

Linda Siciliano

Reviewed by:

Joseph

Completed Date: 10/18/2013 11:20:17 AM

Reviewed Date: 10/21/2013 3:59:44 PM

Carrier name: H2M Pickup

Chain of custody present?	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 ☐	Not Present	☒
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 ☐	0.7 To 3.8 °	
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 ☐		
Custody Seals present?	Yes ☐	No ☒		
Airbill or Sticker?	Air Bil ☐	Sticker ☐	Not Present	☒

Airbill No:

Case Number:

SDG:
TOS013

SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☒ Yes ☐ No Person Contacted: Derek Ersbak
Contact Mode: ☒ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: 10/18/2013 Contacted By: Linda Siciliano

Regarding: Left message about time discrepancy.

Comments:

Sample LEA-RPI hardness bottle was neutral pH. Sample preserved @ 11:04 to pH2.
MW-12A bottles indicate that the sample was collected at 12:35; paperwork says 13:55

CorrectiveAction:

Paperwork is correct.

TOS013/013F S19

H2M LABS, INC.

INTERNAL CHAIN OF CUSTODY

CLIENT: TOS DELIVERABLES: BO-101D TURN AROUND TIME: 21 Days
SDG #: TOS013 CASE #: _____ MATRIX: GW pH CHECK Y or N

REMARKS:

RECEIVED BY: WJ SIGNATURE: [Signature] DATE: 10/18/13 TIME: 1020

CLIENT ID	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
1. MW-11A	B10A35	10.17	DA	2	8240-W-340B (SEA)
2. ↓ 11B	002F	↓	↓	↓	↓
3. TB	001SA	↓	↓	↓	↓
4.					
5.					
6.					
7.					
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9.					
10.					
11.					
12.					
13.					
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17.					
18.					
19.					
20.					

VOLATILE

P 0235

TOS013/013F S20

H2M LABS, INC.

CLIENT: TOS

SDG #: T05013

INTERNAL CHAIN OF CUSTODY

[illegible]

VOLATILE

P 0236

TOS013/013F S21

H2M LABS, INC.

INTERNAL CHAIN OF CUSTODY

CLIENT: TUS DELIVERABLES: BO-10D TURN AROUND TIME: 21 Days
 SDG #: TOS013 CASE #: _____ MATRIX: GW pH CHECK Y or N
 REMARKS: 087TOS07
 RECEIVED BY: USD SIGNATURE: [Signature] DATE: 10/18/13 TIME: 1020

CLIENT ID	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
1. LEA-PRE	1310A35-001E	10.17	JN	1	6010-W-PKG (set)
2. LEA-SEC	002E				↓
3. MW-3A	003E				6010-W-PKG (set)
4. 3B	004E				
5. 3C	005E				
6. 4A	006E				
7. 24B	007E				
8. 4C	008E				
9. 8	009E				
10. 9	010E				↓
11. 11A	011E				6010-W-PKG (set) HGL-MDOA-W
12. 11B	012E				↓
13. 12A	013E				6010-W-PKG (set)
14. 12B	014E				↓
15.					
16.					
17.					
18.					
19.					
20.					

+ As
+ As

METALS

P C100

TOS013/013F S22

CLIENT: TOS
SDG #: TOS013

CLIENT: 105

SDG #: 105013

[illegible]

P 0101

TOS013/013F S23

H2M LABS, INC.

INTERNAL CHAIN OF CUSTODY

CLIENT: TOS DELIVERABLES: Bo. 10D TURN AROUND TIME: 21 Days

SDG #: TOS013 CASE #: _____ MATRIX: GW pH CHECK Y or N

REMARKS: 087 TOS 07

RECEIVED BY: LSD SIGNATURE: [Signature] DATE: 10/18/13 TIME: 1020

CLIENT ID	H2M LAB # (Exp)	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED (W)
LEA-PRT	130A35- 0013	10.17	DS	2	DOC - GAO - W TOC - W - SM
"	0013	"	HS	1	CO2 - W, NH3 - W, NH4 - W
"	0013D	"	FN	1	Phosphorus - W, IR - W
"	0013A	"	E	2	Hard - WC
LEA-SEC	002A-D	"	AS Above	2, 1, 1, 2	Alk - W, Ammonia - W, (see)
MW-3A	003	"	"	"	DOC - W - SM, ND - W, TDS - W
" 3B	004	"	"	"	"
" 3C	005	"	"	"	"
" 4A	006	"	"	"	"
" 4B	007	"	"	"	"
" 4C	008	"	"	"	"
" 8	009	"	"	"	"
" 9	010	"	"	"	"
" 11A	011	"	"	"	"
" 11B	012	"	"	"	"
" 12A	013	"	"	"	"
" 12B	014	"	"	"	"
"	"	"	"	"	"
"	"	"	"	"	"
"	"	"	"	"	"

WET CHEMISTRY

P 0226

TOS013/013F S24

CLIENT: TCS

SDG #: TOS 013

[illegible]

P 0227

TOS013/013F S25



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EXTERNAL CHAIN OF CUSTODY

03606

PROJECT NAME/NUMBER North Sea Landfill SHP1301 1370 Majors Path Southampton, NY		CLIENT: PNGC		H2M SDG NO: TOS013F	
SAMPLERS: (Signature)/Client <i>Andi Ramin</i>		NOTES: derek@purgosson.com * Lab to filter		Project Contact: Derek Erskine Phone Number: 631-589-6353 PIS/Quote #	
DELIVERABLES: ASP Category B		ANALYSIS REQUESTED		LAB I.D. NO.	
TURNAROUND TIME: Standard		Total No. of Containers		REMARKS:	
DATE	TIME	MATRIX	FIELD I.D.		
10/17/13	0830	GW	Lea-Pri	130A35-001	
	0840		Lea-Sec	002	
	0955		MW-0	009	130A43-001
	1045		MW-9	010	
	1215		MW-11A	011	
	1140		MW-11B	012	-002
	1355		MW-12A	013	-003
	1315		MW-12B	014	
	1545		MW-3A	003	
	1435	↓	MW-3B	004	
Relinquished by: (Signature) <i>[Signature]</i>		Date: 10/17/13		Time: 9:45	
Relinquished by: (Signature) <i>[Signature]</i>		Date: 10/18/13		Time: 10:20	
Relinquished by: (Signature) <i>[Signature]</i>		Date: 10/18/13		Time: 10:20	
Relinquished by: (Signature)		Date:		Time:	
Relinquished by: (Signature)		Date:		Time:	

Samples were: 1. Shipped or Hand Delivered Airbill #

COC Tape was: 1. Present on outer package: Y or N

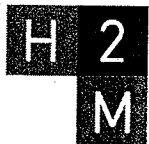
2. Unbroken on outer package: Y or N

LABORATORY USE ONLY

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TOS013/013F S26

YELLOW COPY - CLIENT

PINK COPY - LABORATORY



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Website: www.h2mlabs.com

TOS013F
Sample Receipt Checklist

Client Name **TOS**Date and Time Received: **10/18/2013 10:20:00 AM**Work Order Number: **1310A43**RcptNo: **1**Received by **Linda Siciliano**

Completed by:

Reviewed by:

Completed Date: **10/18/2013 12:59:35 PM**Reviewed Date: **10/21/2013 4:13:39 PM**Carrier name: **H2M Pickup**

Chain of custody present?	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 ☐	Not Present	☒
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 ☐	0.7 To 3.8 °	
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 ☐		
Custody Seals present?	Yes ☐	No ☒		
Airbill or Sticker?	Air Bil ☐	Sticker ☐	Not Present	☒

Case Number:

SDG:
TOS013F

SAS:

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:

CorrectiveAction:

TOS013/013F S27

H2M LABS, INC.

INTERNAL CHAIN OF CUSTODY

CLIENT: TOS DELIVERABLES: BO-100 TURN AROUND TIME: 21 Days
 SDG #: TOS03F CASE #: _____ MATRIX: GW pH CHECK Y (or N) (Y)
 REMARKS: 087TOS07
 RECEIVED BY: LSD SIGNATURE: [Signature] DATE: 10/18/13 TIME: 1020

CLIENT ID	H2M LAB #	DATE COLLECTED	BOTTLE TYPE	# OF BOTTLES	TESTS REQUESTED
1. MW-8	130A43-021A	10.17	J	1	FILTER, LOW-DISS-PKG (SEL)
2. J 11A	02A	↓	↓	↓	16010-DISS-PKG (SEL) HG-7470A-DISS
3. J 11B	03A	↓	↓	↓	↓ ↓
4.					
5.					
6.					
7.					
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9.					
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JSA
10/21/13
T

METALS

P 0103

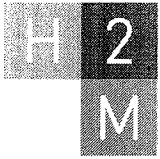
TOS013/013F S28

SDG #: TOS013F

[illegible]

P 0104

TOS013/013F S29

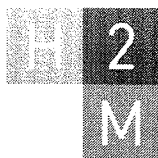


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Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

3. SDG NARRATIVES



labs

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Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

SDG NARRATIVE FOR VOLATILE ANALYSES
SAMPLE RECEIVED: 10/17/13 & 10/18/13
SDG#: TOS013

For Sample(s):

MW-11A

MW-11B

TB

The above sample(s) and blank(s) was/were analyzed for a specific list of volatile organic analytes by EPA method 8260C 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:

No matrix spike/matrix spike duplicate was submitted. A lab fortified blank was analyzed and indicates good method efficiency.

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.

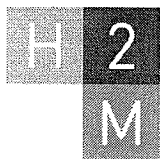
Date Reported: November 7, 2013

* Joann M. Slavin *

Joann M. Slavin
Senior Vice President

NRC

TOS013/013F S31



labs

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

SDG NARRATIVE FOR TOTAL METALS ANALYSES
SAMPLE(S) RECEIVED: 10/17/13 & 10/18/13
SDG #: TOS013

For Sample(s):

DUP-001	MW-7A	MW-3C	MW-9
MW-1A	FIELD BLANK	MW-4A	MW-11A
MW-1B	LEA-PRI	MW-4B	MW-11B
MW-1C	LEA-SEC	MW-4C	MW-12A
MW-6AR	MW-3A	MW-8	MW-12B
MW-6B	MW-3B	FB002	

The above water sample(s) was/were received by H2M Labs, for analysis of the TAL list of metals plus boron or select lists of total metals. Samples were prepared and analyzed using EPA method 6010B with a TS ICAP 6000 Instrument and 7470A with a Leeman HYDRA mercury analyzer.

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-1C was utilized for ICP Q. C. analysis. In addition, Q. C analyses for mercury were performed with sample MW-6AR.

- The sample spike recovery for thallium was below the acceptance limit. Data for this analyte were flagged with the "N" qualifier on Forms 1 and 5A. The post spike recovery was 129%.
- The ICP serial dilution analysis did not meet acceptance criteria for magnesium. Magnesium data were reported flagged "E" on forms 1 and 9.

Sodium and iron were analyzed with one wavelength only: Wavelength 330.23 was used for sodium and 271.44 for iron.

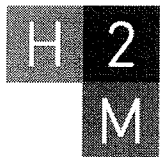
I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee,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

Date Reported: November 5, 2013

* *Ursula Middel* *
*

Ursula Middel
Technical Manager

TOS013/013F S32



labs

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

SDG NARRATIVE FOR DISSOLVED METALS ANALYSES

SAMPLE(S) RECEIVED: 10/18/13

SDG #: TOS013F

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 thallium was below the acceptance limit. Data for the analyte were flagged with the "N" qualifier on Forms 1 and 5A. The post spike recovery of 72% was below QC limit which is 80%.

The ICP serial dilution analysis did not meet acceptance criteria for zinc. Zinc data was reported flagged "E" on forms 1 and 9.

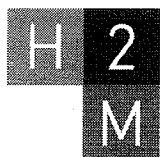
I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee,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

Date Reported: Nov. 7, 2013

*
*

Thomas Powell
Vice President

TOS013/013F S33



labs

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

SDG NARRATIVE FOR WET CHEMISTRY ANALYSES
SAMPLE(S) RECEIVED: 10/17/13 & 10/18/13
SDG #: TOS013

For Sample(s):

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, SO ₄ , 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-1C was utilized for QC analysis and reporting.

BOD blank depletion exceeded 0.2 mg/l for the samples received on 10/18/13. 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.

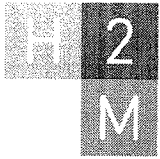
I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee,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

Date Reported: November 7, 2013

*
*
*

Thomas Powell
Vice President

TOS013/013F S34

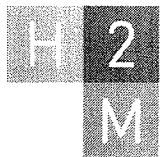


labs

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

- 4. SAMPLE REPORTS**
 - 4.1 VOLATILES
 - 4.2 TOTAL METALS
 - 4.3 FILTERED METALS
 - 4.4 WET CHEMISTRY



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

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

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

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 identification 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, except as noted in Exhibit D, 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 each peak 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" only when they are detected in the sample.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-11A

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478

Case No.: TOS

SAS No. _____

SDG No.: TOS013

Matrix: (soil/water) WATER

Lab Sample ID: 1310A35-011F

Sample wt/vol: 5 (g/mL ML

Lab File ID: 3\F62569.D

Level: (low/med) LOW

Date Received: 10/18/13

% Moisture: not dec.

Date Analyzed: 10/18/13

GC Column: DB-624

ID: 0.18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volu _____ (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	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
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-11A

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478

Case No.: TOS

SAS No. _____

SDG No.: TOS013

Matrix: (soil/water) WATER

Lab Sample ID: 1310A35-011F

Sample wt/vol: 5 (g/mL ML

Lab File ID: 3\F62569.D

Level: (low/med) LOW

Date Received: 10/18/13

% Moisture: not dec.

Date Analyzed: 10/18/13

GC Column: DB-624

ID: 0.18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volu _____ (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	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-11A

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478Case No.: TOS

SAS No.: _____

SDG No.: TOS013

Matrix: (soil/water)

WATERLab Sample ID: 1310A35-011FSample wt/vol: 5(g/mL) MLLab File ID: 3\F62569.DLevel: (low/med) LOWDate Received: 10/18/13

% Moisture: not dec.

Date Analyzed: 10/18/13GC Column: DB-624ID: 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

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-11B

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478

Case No.: TOS

SAS No. _____

SDG No.: TOS013

Matrix: (soil/water) WATER

Lab Sample ID: 1310A35-012F

Sample wt/vol: 5 (g/mL ML

Lab File ID: 3\F62570.D

Level: (low/med) LOW

Date Received: 10/18/13

% Moisture: not dec.

Date Analyzed: 10/19/13

GC Column: DB-624

ID: 0.18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volu _____ (µL)

CONCENTRATION UNITS:

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	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	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

EPA SAMPLE NO.

MW-11B

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478

Case No.: TOS

SAS No. _____

SDG No.: TOS013

Matrix: (soil/water) WATER

Lab Sample ID: 1310A35-012F

Sample wt/vol: 5 (g/mL ML

Lab File ID: 3\F62570.D

Level: (low/med) LOW

Date Received: 10/18/13

% Moisture: not dec.

Date Analyzed: 10/19/13

GC Column: DB-624

ID: 0.18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volu _____ (µL)

CONCENTRATION UNITS:

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

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW-11B

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478Case No.: TOS

SAS No.: _____

SDG No.: TOS013

Matrix: (soil/water)

WATERLab Sample ID: 1310A35-012FSample wt/vol: 5(g/mL) MLLab File ID: 3\F62570.DLevel: (low/med) LOWDate Received: 10/18/13

% Moisture: not dec.

Date Analyzed: 10/19/13GC Column: DB-624ID: 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

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478

Case No.: TOS

SAS No. _____

SDG No.: TOS013

Matrix: (soil/water) WATER

Lab Sample ID: 1310A35-015A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 3\F62571.D

Level: (low/med) LOW

Date Received: 10/18/13

% Moisture: not dec.

Date Analyzed: 10/19/13

GC Column: DB-624

ID: 0.18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volu _____ (µL)

CONCENTRATION UNITS:

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

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478

Case No.: TOS

SAS No. _____

SDG No.: TOS013

Matrix: (soil/water) WATER

Lab Sample ID: 1310A35-015A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 3\F62571.D

Level: (low/med) LOW

Date Received: 10/18/13

% Moisture: not dec.

Date Analyzed: 10/19/13

GC Column: DB-624

ID: 0.18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volu _____ (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	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TB

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478Case No.: TOS

SAS No.: _____

SDG No.: TOS013

Matrix: (soil/water)

WATERLab Sample ID: 1310A35-015ASample wt/vol: 5(g/mL) MLLab File ID: 3\F62571.DLevel: (low/med) LOWDate Received: 10/18/13

% Moisture: not dec.

Date Analyzed: 10/19/13GC Column: DB-624ID: 0.18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

CONCENTRATION UNITS:

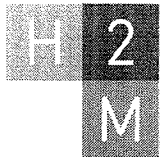
Number TICs found:

0

(μg/L or μg/Kg)

UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	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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1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

DUP-001

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310967-001Level (low/med): LOWDate Received: 10/17/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.60	B		P
7440-70-2	Calcium	56300			P
7439-89-6	Iron	151			P
7439-92-1	Lead	5.7			P
7439-95-4	Magnesium	24300		E	P
7439-96-5	Manganese	32.7			P
7440-09-7	Potassium	13700			P
7440-23-5	Sodium	15500			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-1A

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310967-002Level (low/med): LOWDate Received: 10/17/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	59900			P
7439-89-6	Iron	228			P
7439-92-1	Lead	5.7			P
7439-95-4	Magnesium	26000		E	P
7439-96-5	Manganese	45.6			P
7440-09-7	Potassium	13700			P
7440-23-5	Sodium	16900			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-1B

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310967-003Level (low/med): LOWDate Received: 10/17/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	4660	B		P
7439-89-6	Iron	75.1	B		P
7439-92-1	Lead	7.1			P
7439-95-4	Magnesium	2060	B	E	P
7439-96-5	Manganese	4.9	B		P
7440-09-7	Potassium	1640	B		P
7440-23-5	Sodium	8310			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-1C

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310967-004Level (low/med): LOWDate Received: 10/17/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	4460	B		P
7439-89-6	Iron	61.9	U		P
7439-92-1	Lead	5.5			P
7439-95-4	Magnesium	2220	B	E	P
7439-96-5	Manganese	2.4	B		P
7440-09-7	Potassium	1380	B		P
7440-23-5	Sodium	9020			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-6AR

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310967-005Level (low/med): LOWDate Received: 10/17/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	76.7	B		P
7440-36-0	Antimony	2.0	U		P
7440-38-2	Arsenic	1.0	U		P
7440-39-3	Barium	50.8	B		P
7440-41-7	Beryllium	0.22	U		P
7440-42-8	Boron	8.7	B		P
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	17700			P
7440-47-3	Chromium	1.4	B		P
7440-48-4	Cobalt	0.35	U		P
7440-50-8	Copper	0.70	U		P
7439-89-6	Iron	188			P
7439-92-1	Lead	11.8			P
7439-95-4	Magnesium	7980		E	P
7439-96-5	Manganese	36.9			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	2.3	B		P
7440-09-7	Potassium	1930	B		P
7782-49-2	Selenium	1.8	U		P
7440-22-4	Silver	0.43	U		P
7440-23-5	Sodium	9410			P
7440-28-0	Thallium	1.9	U	N	P
7440-62-2	Vanadium	0.50	B		P
7440-66-6	Zinc	50.6			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-6B

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310967-006Level (low/med): LOWDate Received: 10/17/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4.9	U		P
7440-36-0	Antimony	2.0	U		P
7440-38-2	Arsenic	1.0	U		P
7440-39-3	Barium	9.8	B		P
7440-41-7	Beryllium	0.22	U		P
7440-42-8	Boron	5.4	B		P
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	3450	B		P
7440-47-3	Chromium	6.6	B		P
7440-48-4	Cobalt	0.35	U		P
7440-50-8	Copper	1.0	B		P
7439-89-6	Iron	101			P
7439-92-1	Lead	10.9			P
7439-95-4	Magnesium	1980	B	E	P
7439-96-5	Manganese	13.6	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	35.5	B		P
7440-09-7	Potassium	892	B		P
7782-49-2	Selenium	1.8	U		P
7440-22-4	Silver	0.43	U		P
7440-23-5	Sodium	6820			P
7440-28-0	Thallium	1.9	U	N	P
7440-62-2	Vanadium	0.28	U		P
7440-66-6	Zinc	30.2			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-7A

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310967-007Level (low/med): LOWDate Received: 10/17/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	37500			P
7439-89-6	Iron	669			P
7439-92-1	Lead	5.1			P
7439-95-4	Magnesium	25100		E	P
7439-96-5	Manganese	6610			P
7440-09-7	Potassium	4790	B		P
7440-23-5	Sodium	18000			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

FIELD BLANK

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310967-008Level (low/med): LOWDate Received: 10/17/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4.9	U		P
7440-36-0	Antimony	2.0	U		P
7440-38-2	Arsenic	1.0	U		P
7440-39-3	Barium	4.3	U		P
7440-41-7	Beryllium	0.22	U		P
7440-42-8	Boron	4.1	U		P
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	46.1	B		P
7440-47-3	Chromium	0.70	B		P
7440-48-4	Cobalt	0.35	U		P
7440-50-8	Copper	0.70	U		P
7439-89-6	Iron	61.9	U		P
7439-92-1	Lead	2.9	B		P
7439-95-4	Magnesium	10.5	U	E	P
7439-96-5	Manganese	0.40	B		P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	1.6	B		P
7440-09-7	Potassium	269	B		P
7782-49-2	Selenium	1.8	U		P
7440-22-4	Silver	0.43	U		P
7440-23-5	Sodium	1980	U		P
7440-28-0	Thallium	1.9	U	N	P
7440-62-2	Vanadium	0.28	U		P
7440-66-6	Zinc	17.4	B		P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

LEA-PRI

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310A35-001Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	5.2	B		P
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	111000			P
7439-89-6	Iron	10500			P
7439-92-1	Lead	7.2			P
7439-95-4	Magnesium	21000		E	P
7439-96-5	Manganese	2890			P
7440-09-7	Potassium	105000			P
7440-23-5	Sodium	236000			P

Color Before: YELLOWClarity Before: CLEAR

Texture: _____

Color After: YELLOWClarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

LEA-SEC

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310A35-002Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-38-2	Arsenic	1.0	U		P
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	71400			P
7439-89-6	Iron	26700			P
7439-92-1	Lead	0.72	U		P
7439-95-4	Magnesium	17200		E	P
7439-96-5	Manganese	2320			P
7440-09-7	Potassium	65900			P
7440-23-5	Sodium	151000			P

Color Before: YELLOWClarity Before: CLEAR

Texture: _____

Color After: YELLOWClarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-3A

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310A35-003Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	13200			P
7439-89-6	Iron	412			P
7439-92-1	Lead	4.8			P
7439-95-4	Magnesium	3550	B	E	P
7439-96-5	Manganese	27.3			P
7440-09-7	Potassium	4470	B		P
7440-23-5	Sodium	18800			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-3B

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310A35-004Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	10400			P
7439-89-6	Iron	14000			P
7439-92-1	Lead	0.72	U		P
7439-95-4	Magnesium	3540	B	E	P
7439-96-5	Manganese	3590			P
7440-09-7	Potassium	4930	B		P
7440-23-5	Sodium	10600			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: YELLOW Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-3C

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310A35-005Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	11000			P
7439-89-6	Iron	61.9	U		P
7439-92-1	Lead	16.7			P
7439-95-4	Magnesium	5080		E	P
7439-96-5	Manganese	48.8			P
7440-09-7	Potassium	1560	B		P
7440-23-5	Sodium	12400			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-4A

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310A35-006Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	10300			P
7439-89-6	Iron	124			P
7439-92-1	Lead	10.5			P
7439-95-4	Magnesium	3340	B	E	P
7439-96-5	Manganese	85.3			P
7440-09-7	Potassium	4110	B		P
7440-23-5	Sodium	15200			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-4B

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310A35-007Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	21400			P
7439-89-6	Iron	854			P
7439-92-1	Lead	13.1			P
7439-95-4	Magnesium	11300		E	P
7439-96-5	Manganese	212			P
7440-09-7	Potassium	2780	B		P
7440-23-5	Sodium	18700			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-4C

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310A35-008Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	22500			P
7439-89-6	Iron	184			P
7439-92-1	Lead	12.9			P
7439-95-4	Magnesium	10600		E	P
7439-96-5	Manganese	4.8	B		P
7440-09-7	Potassium	1920	B		P
7440-23-5	Sodium	23700			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-8

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310A35-009Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	12700			P
7439-89-6	Iron	11400			P
7439-92-1	Lead	8.8			P
7439-95-4	Magnesium	4520	B	E	P
7439-96-5	Manganese	649			P
7440-09-7	Potassium	2350	B		P
7440-23-5	Sodium	8150			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: YELLOW Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-9

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310A35-010Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	5270			P
7439-89-6	Iron	995			P
7439-92-1	Lead	11.4			P
7439-95-4	Magnesium	2840	B	E	P
7439-96-5	Manganese	50.6			P
7440-09-7	Potassium	1690	B		P
7440-23-5	Sodium	6560			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

TOS013/013F S67

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-11A

Lab Name: H2M LABS INCLab Code: 10478

Case No.:

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310A35-011Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4.9	U		P
7440-36-0	Antimony	2.0	U		P
7440-38-2	Arsenic	3.8	B		P
7440-39-3	Barium	160	B		P
7440-41-7	Beryllium	0.22	U		P
7440-42-8	Boron	4.1	U		P
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	28800			P
7440-47-3	Chromium	5.6	B		P
7440-48-4	Cobalt	25.0	B		P
7440-50-8	Copper	0.70	U		P
7439-89-6	Iron	38100			P
7439-92-1	Lead	0.72	U		P
7439-95-4	Magnesium	10500		E	P
7439-96-5	Manganese	1850			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	18.1	B		P
7440-09-7	Potassium	4830	B		P
7782-49-2	Selenium	3.4	B		P
7440-22-4	Silver	2.3	B		P
7440-23-5	Sodium	7790			P
7440-28-0	Thallium	4.7	B	N	P
7440-62-2	Vanadium	0.28	U		P
7440-66-6	Zinc	29.9			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: YELLOW Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-11B

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310A35-012Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	797			P
7440-36-0	Antimony	2.0	U		P
7440-38-2	Arsenic	1.0	U		P
7440-39-3	Barium	30.2	B		P
7440-41-7	Beryllium	0.22	U		P
7440-42-8	Boron	4.8	B		P
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	10100			P
7440-47-3	Chromium	10.8			P
7440-48-4	Cobalt	0.90	B		P
7440-50-8	Copper	7.0	B		P
7439-89-6	Iron	6540			P
7439-92-1	Lead	18.0			P
7439-95-4	Magnesium	3750	B	E	P
7439-96-5	Manganese	281			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	7.8	B		P
7440-09-7	Potassium	2530	B		P
7782-49-2	Selenium	1.8	U		P
7440-22-4	Silver	5.4	B		P
7440-23-5	Sodium	7570			P
7440-28-0	Thallium	1.9	U	N	P
7440-62-2	Vanadium	1.9	B		P
7440-66-6	Zinc	44.4			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: YELLOW Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-12A

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310A35-013Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	30500			P
7439-89-6	Iron	5280			P
7439-92-1	Lead	5.7			P
7439-95-4	Magnesium	8500		E	P
7439-96-5	Manganese	3780			P
7440-09-7	Potassium	7270			P
7440-23-5	Sodium	11900			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-12B

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310A35-014Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	30600			P
7439-89-6	Iron	77.6	B		P
7439-92-1	Lead	9.4			P
7439-95-4	Magnesium	8710		E	P
7439-96-5	Manganese	400			P
7440-09-7	Potassium	12900			P
7440-23-5	Sodium	15100			P

Color Before: COLORLESS Clarity Before: CLEAR

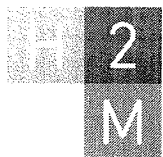
Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013



labs

575 Broad Hollow Road
Melville, NY 11747

tel 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).

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.

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-8

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013FMatrix (soil/water): WATERLab Sample ID: 1310A43-001Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	12000			P
7439-89-6	Iron	61.9	U		P
7439-92-1	Lead	6.3			P
7439-95-4	Magnesium	4190	B		P
7439-96-5	Manganese	115			P
7440-09-7	Potassium	1740	B		P
7440-23-5	Sodium	9190			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013Dissolved Metals

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-11A

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013FMatrix (soil/water): WATERLab Sample ID: 1310A43-002Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4.9	U		P
7440-36-0	Antimony	2.0	U		P
7440-38-2	Arsenic	1.0	U		P
7440-39-3	Barium	78.4	B		P
7440-41-7	Beryllium	0.22	U		P
7440-42-8	Boron	4.1	U		P
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	26100			P
7440-47-3	Chromium	0.60	B		P
7440-48-4	Cobalt	15.1	B		P
7440-50-8	Copper	0.70	U		P
7439-89-6	Iron	61.9	U		P
7439-92-1	Lead	2.4	B		P
7439-95-4	Magnesium	9700			P
7439-96-5	Manganese	974			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	15.0	B		P
7440-09-7	Potassium	4290	B		P
7782-49-2	Selenium	1.8	U		P
7440-22-4	Silver	0.43	U		P
7440-23-5	Sodium	8260			P
7440-28-0	Thallium	4.2	B	N	P
7440-62-2	Vanadium	0.28	U		P
7440-66-6	Zinc	18.8	B	E	P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

Dissolved Metals _____

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-11B

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013FMatrix (soil/water): WATERLab Sample ID: 1310A43-003Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4.9	U		P
7440-36-0	Antimony	2.0	U		P
7440-38-2	Arsenic	1.5	B		P
7440-39-3	Barium	13.7	B		P
7440-41-7	Beryllium	0.22	U		P
7440-42-8	Boron	4.1	U		P
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	10400			P
7440-47-3	Chromium	2.0	B		P
7440-48-4	Cobalt	0.70	B		P
7440-50-8	Copper	0.70	U		P
7439-89-6	Iron	61.9	U		P
7439-92-1	Lead	6.4			P
7439-95-4	Magnesium	3580	B		P
7439-96-5	Manganese	21.1			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	4.2	B		P
7440-09-7	Potassium	2340	B		P
7782-49-2	Selenium	1.8	U		P
7440-22-4	Silver	0.43	U		P
7440-23-5	Sodium	9440			P
7440-28-0	Thallium	4.5	B	N	P
7440-62-2	Vanadium	0.28	U		P
7440-66-6	Zinc	34.7		E	P

Color Before: COLORLESS Clarity Before: CLEAR

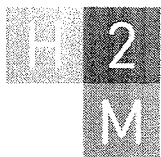
Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013Dissolved Metals

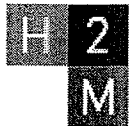


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575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

4.4 WET CHEMISTRY



labs

575 Broad Hollow Road, 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

Lab No. : 1310967-001

Client Sample ID: DUP-001

Sample Information:

Type : Groundwater

Origin:

Attn To : Original
Collected : 10/16/2013
Received : 10/17/2013 10:05:00 AM
Collected By PWG99

Analytical Method: SM2320B :						Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Alkalinity, Total (As CaCO ₃)	126	D	4	mg/L	10/17/2013 3:40 PM	Container-01 of 02
Analytical Method: E300.0 :						Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	10/30/2013 8:06 PM	Container-01 of 02
Chloride	27.7		1	mg/L	10/30/2013 8:06 PM	Container-01 of 02
Sulfate	122	D	5	mg/L	10/31/2013 6:39 PM	Container-01 of 02
Analytical Method: SM5210B :		Prep Method: SM5210B		Prep Date: 10/17/2013 8:16:52 AM		Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/17/2013 11:20 AM	Container-01 of 02
Analytical Method: E410.4 :						Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/28/2013 8:51 AM	Container-01 of 01
Analytical Method: SM2340C :						Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Hardness (As CaCO ₃)	350	D	10	mg/L	10/17/2013 3:00 PM	Container-01 of 01
Analytical Method: SM4500-NH ₃ H :						Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Ammonia (As N)	0.13		1	mg/L	10/30/2013 1:39 PM	Container-01 of 01
Analytical Method: E353.2 :						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrite as N	< 0.10		1	mg/L	10/18/2013 7:52 AM	Container-01 of 02
Analytical Method: E353.2 :						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrate as N	6.63	D	10	mg/L	10/18/2013 9:32 AM	Container-01 of 01
Analytical Method: E420.1 :		Prep Method: E420.1		Prep Date: 10/23/2013 8:00:00 AM		Analyst: EM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:02 AM	Container-01 of 01
Analytical Method: SM2540C : IOC						Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	434		1	mg/L	10/21/2013 1:51 PM	Container-01 of 02

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Laboratory Manager

Test results meet the requirements of NELAC
unless otherwise noted.

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Page 1 of 16

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labs

575 Broad Hollow Road, 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

Lab No. : 1310967-001

Client Sample ID: DUP-001

Sample Information:

Type : Groundwater

Origin:

Attn To : Original
Collected : 10/16/2013
Received : 10/17/2013 10:05:00 AM
Collected By PWG99

<u>Analytical Method:</u> E351.2 :		<u>Prep Method:</u> E351.2		<u>Prep Date:</u> 10/25/2013 4:45:00 AM		<u>Analyst:</u> TF
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Nitrogen, Kjeldahl, Total	0.30		1	mg/L	10/25/2013 11:43 AM	Container-01 of 01
<u>Analytical Method:</u> SM5310B :						<u>Analyst:</u> CO
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Total Organic Carbon	5.8		1	mg/L	10/26/2013 12:55 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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TOS013/013F S79



H2M labs

575 Broad Hollow Road, 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

Attn To : Original

Collected : 10/16/2013 4:00:00 PM

Received : 10/17/2013 10:05:00 AM

Collected By PWG99

Lab No. : 1310967-002

Client Sample ID: MW-1A

Sample Information:

Type : Groundwater

Origin :

Analytical Method: SM2320B :					Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Container:
Alkalinity, Total (As CaCO ₃)	125	D	4	mg/L	Container-01 of 02
Analytical Method: E300.0 :					Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Container:
Bromide	< 0.50		1	mg/L	Container-01 of 02
Chloride	27.7		1	mg/L	Container-01 of 02
Sulfate	123	D	5	mg/L	Container-01 of 02
Analytical Method: SM5210B : Prep Method: SM5210B Prep Date: 10/17/2013 8:16:52 AM					Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	Container-01 of 02
Analytical Method: E410.4 :					Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	Container-01 of 01
Analytical Method: SM2340C :					Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Container:
Hardness (As CaCO ₃)	350	D	10	mg/L	Container-01 of 01
Analytical Method: SM4500-NH ₃ H :					Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	Container-01 of 01
Analytical Method: E353.2 :					Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Container:
Nitrite as N	< 0.10		1	mg/L	Container-01 of 02
Analytical Method: E353.2 :					Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Container:
Nitrate as N	6.65	D	10	mg/L	Container-01 of 01
Analytical Method: E420.1 : Prep Method: E420.1 Prep Date: 10/23/2013 8:00:00 AM					Analyst: EM
Parameter(s)	Results	Qualifier	D.F.	Units	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	Container-01 of 01
Analytical Method: SM2540C : IOC					Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Container:
Total Dissolved Solids	427		1	mg/L	Container-01 of 02

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

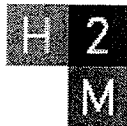
Laboratory Manager

Test results meet the requirements of NELAC
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TOS013/013F S80



labs

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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

Attn To : Original

Lab No. : 1310967-002

Client Sample ID: MW-1A

Sample Information:

Type : Groundwater

Origin:

Collected : 10/16/2013 4:00:00 PM

Received : 10/17/2013 10:05:00 AM

Collected By PWG99

Analytical Method: E351.2 :		Prep Method: E351.2		Prep Date: 10/25/2013 4:45:00 AM		Analyst: TF	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:	
Nitrogen, Kjeldahl, Total	0.11		1	mg/L	10/25/2013 11:44 AM	Container-01 of 01	
Analytical Method: SM5310B :						Analyst: CO	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:	
Total Organic Carbon	6.2		1	mg/L	10/26/2013 1:30 AM	Container-01 of 01	

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Joann M. Stavins

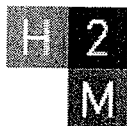
Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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TOS013/013F S81



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575 Broad Hollow Road, 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

Lab No. : 1310967-003

Client Sample ID: MW-1B

Sample Information:

Type : Groundwater

Origin:

Attn To : Original
Collected : 10/16/2013 3:35:00 PM
Received : 10/17/2013 10:05:00 AM
Collected By PWG99

Analytical Method: SM2320B :						Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Alkalinity, Total (As CaCO ₃)	12.2		1	mg/L	10/17/2013 3:54 PM	Container-01 of 02
Analytical Method: E300.0 :						Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	10/30/2013 9:00 PM	Container-01 of 02
Chloride	10.6		1	mg/L	10/30/2013 9:00 PM	Container-01 of 02
Sulfate	8.67		1	mg/L	10/30/2013 9:00 PM	Container-01 of 02
Analytical Method: SM5210B :		Prep Method: SM5210B		Prep Date: 10/17/2013 8:16:52 AM		Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/17/2013 11:30 AM	Container-01 of 02
Analytical Method: E410.4 :						Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/28/2013 8:55 AM	Container-01 of 01
Analytical Method: SM2340C :						Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Hardness (As CaCO ₃)	20		1	mg/L	10/17/2013 3:00 PM	Container-01 of 01
Analytical Method: SM4500-NH ₃ H :						Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	10/30/2013 1:41 PM	Container-01 of 01
Analytical Method: E353.2 :						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrite as N	< 0.10		1	mg/L	10/18/2013 7:54 AM	Container-01 of 02
Analytical Method: E353.2 :						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrate as N	< 0.10		1	mg/L	10/18/2013 9:34 AM	Container-01 of 01
Analytical Method: E420.1 :		Prep Method: E420.1		Prep Date: 10/23/2013 8:00:00 AM		Analyst: EM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:04 AM	Container-01 of 01
Analytical Method: SM2540C : IOC						Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	62		1	mg/L	10/21/2013 1:57 PM	Container-01 of 02

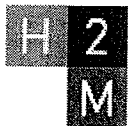
Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
H = Received/analyzed outside of analytical holding time
+ = ELAP / NELAC does not offer certification for this analyte
c = Calibration acceptability criteria exceeded for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

Date Reported : 11/7/2013

Laboratory Manager

Test results meet the requirements of NELAC
unless otherwise noted.

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labs

575 Broad Hollow Road, 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

Lab No. : 1310967-003

Client Sample ID: MW-1B

Sample Information:

Type : Groundwater

Origin:

Attn To : Original
Collected : 10/16/2013 3:35:00 PM
Received : 10/17/2013 10:05:00 AM
Collected By PWG99

Analytical Method: E351.2 :		Prep Method: E351.2		Prep Date: 10/25/2013 4:45:00 AM		Analyst: TF	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:	
Nitrogen, Kjeldahl, Total	0.27		1	mg/L	10/25/2013 11:45 AM	Container-01 of 01	
Analytical Method: SM5310B :						Analyst: CO	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:	
Total Organic Carbon	1.7		1	mg/L	10/26/2013 2:01 AM	Container-01 of 01	

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

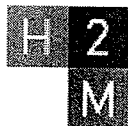
Date Reported : 11/7/2013

Joann M. Starin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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575 Broad Hollow Road, 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

Lab No. : 1310967-004

Client Sample ID: MW-1C

Sample Information:

Type : Groundwater

Origin:

Attn To : Original
Collected : 10/16/2013 2:40:00 PM
Received : 10/17/2013 10:05:00 AM
Collected By PWG99

Analytical Method: SM2320B :						Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Alkalinity, Total (As CaCO ₃)	12.9		1	mg/L	10/17/2013 4:02 PM	Container-01 of 06
Analytical Method: E300.0 :						Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	10/30/2013 9:13 PM	Container-01 of 06
Chloride	11.2		1	mg/L	10/30/2013 9:13 PM	Container-01 of 06
Sulfate	8.86		1	mg/L	10/30/2013 9:13 PM	Container-01 of 06
Analytical Method: SM5210B :		Prep Method: SM5210B		Prep Date: 10/17/2013 8:16:52 AM		Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/17/2013 11:35 AM	Container-01 of 06
Analytical Method: E410.4 :						Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/28/2013 8:57 AM	Container-01 of 03
Analytical Method: SM2340C :						Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Hardness (As CaCO ₃)	20		1	mg/L	10/17/2013 3:00 PM	Container-01 of 03
Analytical Method: SM4500-NH ₃ H :						Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	10/30/2013 1:43 PM	Container-01 of 03
Analytical Method: E353.2 :						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrite as N	< 0.10		1	mg/L	10/18/2013 7:56 AM	Container-01 of 06
Analytical Method: E353.2 :						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrate as N	0.30		1	mg/L	10/18/2013 9:58 AM	Container-01 of 03
Analytical Method: E420.1 :		Prep Method: E420.1		Prep Date: 10/23/2013 8:00:00 AM		Analyst: EM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:05 AM	Container-01 of 03
Analytical Method: SM2540C : IOC						Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	64		1	mg/L	10/21/2013 2:00 PM	Container-01 of 06

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Laboratory Manager

Test results meet the requirements of NELAC
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labs

575 Broad Hollow Road, 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

Attn To : Original

Lab No. : 1310967-004

Client Sample ID: MW-1C

Sample Information:

Type : Groundwater

Origin:

Collected : 10/16/2013 2:40:00 PM

Received : 10/17/2013 10:05:00 AM

Collected By PWG99

<u>Analytical Method:</u> E351.2 :		<u>Prep Method:</u> E351.2		<u>Prep Date:</u> 10/25/2013 4:45:00 AM		<u>Analyst:</u> TF
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Nitrogen, Kjeldahl, Total	0.15		1	mg/L	10/25/2013 11:46 AM	Container-01 of 03
<u>Analytical Method:</u> SM5310B :						<u>Analyst:</u> CO
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Total Organic Carbon	1.1		1	mg/L	10/26/2013 4:12 AM	Container-01 of 03

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

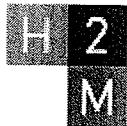
Date Reported : 11/7/2013

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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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

Lab No. : 1310967-005

Client Sample ID: MW-6AR

Sample Information:

Type : Groundwater

Attn To : Original

Collected : 10/16/2013 11:35:00 AM

Received : 10/17/2013 10:05:00 AM

Collected By PWG99

Origin:

Analytical Method: SM2320B :						Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Alkalinity, Total (As CaCO ₃)	56.1	D	2	mg/L	10/17/2013 4:28 PM	Container-01 of 02
Analytical Method: E300.0 :						Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	10/30/2013 9:54 PM	Container-01 of 02
Chloride	14.0		1	mg/L	10/30/2013 9:54 PM	Container-01 of 02
Sulfate	12.5		1	mg/L	10/30/2013 9:54 PM	Container-01 of 02
Analytical Method: SM5210B :		Prep Method: SM5210B		Prep Date: 10/17/2013 8:16:52 AM		Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/17/2013 11:45 AM	Container-01 of 02
Analytical Method: E410.4 :						Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/28/2013 9:03 AM	Container-01 of 01
Analytical Method: SM2340C :						Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Hardness (As CaCO ₃)	60	D	2	mg/L	10/17/2013 3:00 PM	Container-01 of 01
Analytical Method: SM4500-NH ₃ H :						Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	10/30/2013 1:46 PM	Container-01 of 01
Analytical Method: E353.2 :						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrite as N	< 0.10		1	mg/L	10/18/2013 8:01 AM	Container-01 of 02
Analytical Method: E353.2 :						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrate as N	0.82		1	mg/L	10/18/2013 9:39 AM	Container-01 of 01
Analytical Method: E420.1 :		Prep Method: E420.1		Prep Date: 10/23/2013 8:00:00 AM		Analyst: EM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:08 AM	Container-01 of 01
Analytical Method: SM2540C : IOC						Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	123		1	mg/L	10/21/2013 2:09 PM	Container-01 of 02

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

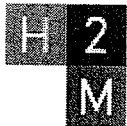
Laboratory Manager

Test results meet the requirements of NELAC
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labs

575 Broad Hollow Road, 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

Lab No. : 1310967-005

Client Sample ID: MW-6AR

Sample Information:

Type : Groundwater

Origin:

Attn To : Original
Collected : 10/16/2013 11:35:00 AM
Received : 10/17/2013 10:05:00 AM
Collected By PWG99

Analytical Method: E351.2 :		Prep Method: E351.2		Prep Date: 10/25/2013 4:45:00 AM		Analyst: TF	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:	
Nitrogen, Kjeldahl, Total	0.30		1	mg/L	10/25/2013 11:48 AM	Container-01 of 01	
Analytical Method: SM5310B :						Analyst: CO	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:	
Total Organic Carbon	2.5		1	mg/L	10/26/2013 2:34 AM	Container-01 of 01	

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Joann M. Slavin

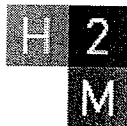
Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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TOS013/013F S87



labs

575 Broad Hollow Road, 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

Attn To : Original

Collected : 10/16/2013 11:00:00 AM

Received : 10/17/2013 10:05:00 AM

Collected By PWG99

Lab No. : 1310967-006

Client Sample ID: MW-6B

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2320B :						Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Alkalinity, Total (As CaCO ₃)	9.90		1	mg/L	10/17/2013 4:53 PM	Container-01 of 02
Analytical Method: E300.0 :						Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	10/30/2013 10:07 PM	Container-01 of 02
Chloride	10.9		1	mg/L	10/30/2013 10:07 PM	Container-01 of 02
Sulfate	8.27		1	mg/L	10/30/2013 10:07 PM	Container-01 of 02
Analytical Method: SM5210B :		Prep Method: SM5210B		Prep Date: 10/17/2013 8:16:52 AM		Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/17/2013 11:50 AM	Container-01 of 02
Analytical Method: E410.4 :						Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/28/2013 9:05 AM	Container-01 of 01
Analytical Method: SM2340C :						Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Hardness (As CaCO ₃)	18		1	mg/L	10/17/2013 3:00 PM	Container-01 of 01
Analytical Method: SM4500-NH ₃ H :						Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	10/30/2013 1:47 PM	Container-01 of 01
Analytical Method: E353.2 :						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrite as N	< 0.10		1	mg/L	10/18/2013 8:03 AM	Container-01 of 02
Analytical Method: E353.2 :						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrate as N	< 0.10		1	mg/L	10/18/2013 9:40 AM	Container-01 of 01
Analytical Method: E420.1 :		Prep Method: E420.1		Prep Date: 10/23/2013 8:00:00 AM		Analyst: EM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:09 AM	Container-01 of 01
Analytical Method: SM2540C : IOC						Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	57		1	mg/L	10/21/2013 2:12 PM	Container-01 of 02

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

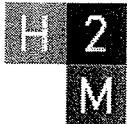
Laboratory Manager

Test results meet the requirements of NELAC
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labs

575 Broad Hollow Road, 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

Lab No. : 1310967-006

Client Sample ID: MW-6B

Sample Information:

Type : Groundwater

Origin:

Attn To : Original

Collected : 10/16/2013 11:00:00 AM

Received : 10/17/2013 10:05:00 AM

Collected By PWG99

<u>Analytical Method:</u> E351.2 :		<u>Prep Method:</u> E351.2		<u>Prep Date:</u> 10/25/2013 4:45:00 AM		<u>Analyst:</u> TF
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Nitrogen, Kjeldahl, Total	0.23		1	mg/L	10/25/2013 11:49 AM	Container-01 of 01
<u>Analytical Method:</u> SM5310B :						<u>Analyst:</u> CO
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Total Organic Carbon	1.6		1	mg/L	10/26/2013 5:58 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Joann M. Stavin

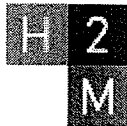
Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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TOS013/013F S89



labs

575 Broad Hollow Road, 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

Attn To : Original

Collected : 10/16/2013 12:25:00 PM

Received : 10/17/2013 10:05:00 AM

Collected By PWG99

Lab No. : 1310967-007

Client Sample ID: MW-7A

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2320B :						Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Alkalinity, Total (As CaCO ₃)	160	D	4	mg/L	10/17/2013 5:00 PM	Container-01 of 02
Analytical Method: E300.0 :						Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	10/30/2013 10:21 PM	Container-01 of 02
Chloride	24.7		1	mg/L	10/30/2013 10:21 PM	Container-01 of 02
Sulfate	24.6		1	mg/L	10/30/2013 10:21 PM	Container-01 of 02
Analytical Method: SM5210B : Prep Method: SM5210B Prep Date: 10/17/2013 8:16:52 AM						Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/17/2013 11:55 AM	Container-01 of 02
Analytical Method: E410.4 :						Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Chemical Oxygen Demand	10.8		1	mg/L	10/28/2013 9:07 AM	Container-01 of 01
Analytical Method: SM2340C :						Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Hardness (As CaCO ₃)	180	D	4	mg/L	10/17/2013 3:00 PM	Container-01 of 01
Analytical Method: SM4500-NH ₃ H :						Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	10/30/2013 1:49 PM	Container-01 of 01
Analytical Method: E353.2 :						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrite as N	< 0.10		1	mg/L	10/18/2013 8:04 AM	Container-01 of 02
Analytical Method: E353.2 :						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrate as N	0.99		1	mg/L	10/18/2013 9:44 AM	Container-01 of 01
Analytical Method: E420.1 : Prep Method: E420.1 Prep Date: 10/23/2013 8:00:00 AM						Analyst: EM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:10 AM	Container-01 of 01
Analytical Method: SM2540C : IOC						Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	237		1	mg/L	10/21/2013 2:15 PM	Container-01 of 02

Qualifiers: E = Value above quantitation range, Value estimated.

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, Value estimated.

J = Estimated value - below calibration range

S = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Laboratory Manager

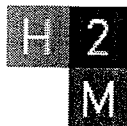
Test results meet the requirements of NELAC
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Date Reported : 11/7/2013

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labs

575 Broad Hollow Road, 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

Lab No. : 1310967-007

Client Sample ID: MW-7A

Sample Information:

Type : Groundwater

Origin:

Attn To : Original

Collected : 10/16/2013 12:25:00 PM

Received : 10/17/2013 10:05:00 AM

Collected By PWG99

Analytical Method: E351.2 :		Prep Method: E351.2		Prep Date: 10/25/2013 4:45:00 AM		Analyst: TF	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:	
Nitrogen, Kjeldahl, Total	0.43		1	mg/L	10/25/2013 11:50 AM	Container-01 of 01	
Analytical Method: SM5310B :						Analyst: CO	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:	
Total Organic Carbon	6.2		1	mg/L	10/26/2013 6:33 AM	Container-01 of 01	

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Joann M. Stavim

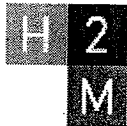
Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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TOS013/013F S91



labs

575 Broad Hollow Road, 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

Lab No. : 1310967-008
Client Sample ID: FIELD BLANK

Sample Information:

Type : Field Blank

Origin:

Attn To : Original
Collected : 10/16/2013 9:20:00 AM
Received : 10/17/2013 10:05:00 AM
Collected By PWG99

Analytical Method: SM2320B :						Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Alkalinity, Total (As CaCO ₃)	< 1.00		1	mg/L	10/17/2013 5:07 PM	Container-01 of 02
Analytical Method: E300.0 :						Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	10/30/2013 10:34 PM	Container-01 of 02
Chloride	< 2.00		1	mg/L	10/30/2013 10:34 PM	Container-01 of 02
Sulfate	< 5.00		1	mg/L	10/30/2013 10:34 PM	Container-01 of 02
Analytical Method: SM5210B :		Prep Method: SM5210B		Prep Date: 10/17/2013 8:16:52 AM		Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/17/2013 12:00 PM	Container-01 of 02
Analytical Method: E410.4 :						Analyst: CN
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/28/2013 9:09 AM	Container-01 of 01
Analytical Method: SM2340C :						Analyst: HT
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Hardness (As CaCO ₃)	< 5		1	mg/L	10/17/2013 3:00 PM	Container-01 of 01
Analytical Method: SM4500-NH ₃ H :						Analyst: bka
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	10/30/2013 1:50 PM	Container-01 of 01
Analytical Method: E353.2 :						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrite as N	< 0.10		1	mg/L	10/18/2013 8:05 AM	Container-01 of 02
Analytical Method: E353.2 :						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrate as N	< 0.10		1	mg/L	10/18/2013 9:45 AM	Container-01 of 01
Analytical Method: E420.1 :		Prep Method: E420.1		Prep Date: 10/23/2013 8:00:00 AM		Analyst: EM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:11 AM	Container-01 of 01
Analytical Method: SM2540C : IOC						Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	10		1	mg/L	10/21/2013 2:18 PM	Container-01 of 02

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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labs

575 Broad Hollow Road, 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

Lab No. : 1310967-008
Client Sample ID: FIELD BLANK

Sample Information:

Type : Field Blank

Origin:

Attn To : Original

Collected : 10/16/2013 9:20:00 AM

Received : 10/17/2013 10:05:00 AM

Collected By PWG99

<u>Analytical Method:</u> E351.2 :		<u>Prep Method:</u> E351.2		<u>Prep Date:</u> 10/25/2013 4:45:00 AM		<u>Analyst:</u> TF
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	10/25/2013 11:51 AM	Container-01 of 01
<u>Analytical Method:</u> SM5310B :						<u>Analyst:</u> CO
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Total Organic Carbon	< 1.0		1	mg/L	10/26/2013 6:59 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Joann M. Stavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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TOS013/013F S93



labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 8:30:00 AM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-001

Client Sample ID: LEA-PRI

Sample Information:

Type : Leachate

Origin:

Analytical Method: SM2320B :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Alkalinity, Total (As CaCO ₃)	1,110	D	10	mg/L	10/21/2013 11:11 AM	Container-01 of 02

Analytical Method: E300.0 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Bromide	1.74		1	mg/L	10/30/2013 10:48 PM	Container-01 of 02
Chloride	284	D	20	mg/L	10/31/2013 7:06 PM	Container-01 of 02
Sulfate	46.8		1	mg/L	10/30/2013 10:48 PM	Container-01 of 02

Analytical Method: SM5210B :

Prep Method: SM5210B

Prep Date: 10/18/2013 9:40:40 AM

Analyst: CN

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	20		1	mg/L	10/18/2013 12:45 PM	Container-01 of 02

NOTES:

Blank depletion exceeds 0.2 mg/L - average depletion of 0.40 mg/L

Analytical Method: E410.4 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: CN Container:
Chemical Oxygen Demand	261	D	4	mg/L	10/29/2013 8:21 AM	Container-01 of 01

Analytical Method: SM2340C :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Hardness (As CaCO ₃)	500	D	20	mg/L	10/21/2013 4:00 PM	Container-01 of 01

Analytical Method: SM4500-NH₃ H :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Nitrogen, Ammonia (As N)	180	D	100	mg/L	10/30/2013 1:53 PM	Container-01 of 01

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrite as N	< 0.10		1	mg/L	10/19/2013 7:45 AM	Container-01 of 02

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrate as N	< 1.00	D	10	mg/L	10/19/2013 9:34 AM	Container-01 of 01

Analytical Method: E420.1 :

Prep Method: E420.1

Prep Date: 10/22/2013 7:00:00 AM

Analyst: EM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	5.1		1	µg/L	10/22/2013 10:59 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.

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, Value estimated.

J = Estimated value - below calibration range

S = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Laboratory Manager

Test results meet the requirements of NELAC
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Date Reported : 11/7/2013

Page 1 of 28

TOS013/013F S94



labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 8:30:00 AM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-001

Client Sample ID: LEA-PRI

Sample Information:

Type : Leachate

Origin:

Analytical Method: SM2540C : IOC

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst:	Container:
Total Dissolved Solids	1,380	D	4	mg/L	10/21/2013 2:39 PM	MLM	Container-01 of 02

Analytical Method: E351.2 :

Prep Method:

E351.2

Prep Date: 10/25/2013 4:45:00 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst:	Container:
Nitrogen, Kjeldahl, Total	206	D	10	mg/L	10/25/2013 12:28 PM	TF	Container-01 of 01

Analytical Method: SM5310B :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst:	Container:
Total Organic Carbon	16.6		1	mg/L	10/26/2013 7:34 AM	CO	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

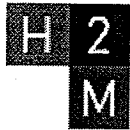
Date Reported : 11/7/2013

Joann M. Slavine

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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labs

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

LABORATORY RESULTS

Results for the samples and analytes requested

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Town of Southampton**Waste Management Division**

Southampton, New York 11968

Attn To : Paul Dimaria

Collected : 10/17/2013 8:40:00 AM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-002

Client Sample ID: LEA-SEC

Sample Information:

Type : Leachate

Origin:

Analytical Method: SM2320B :

Analyst: HT

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Alkalinity, Total (As CaCO ₃)	815	D	10	mg/L	10/21/2013 11:19 AM	Container-01 of 02

Analytical Method: E300.0 :

Analyst: bka

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Bromide	1.20		1	mg/L	10/30/2013 11:28 PM	Container-01 of 02
Chloride	206	D	20	mg/L	10/30/2013 11:42 PM	Container-01 of 02
Sulfate	14.1		1	mg/L	10/30/2013 11:28 PM	Container-01 of 02

Analytical Method: SM5210B :

Prep Method: SM5210B

Prep Date: 10/18/2013 9:40:40 AM

Analyst: CN

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	15		1	mg/L	10/18/2013 12:50 PM	Container-01 of 02

NOTES:

Blank depletion exceeds 0.2 mg/L - average depletion of 0.40 mg/L

Analytical Method: E410.4 :

Analyst: CN

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Chemical Oxygen Demand	142		1	mg/L	10/29/2013 8:23 AM	Container-01 of 01

Analytical Method: SM2340C :

Analyst: HT

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Hardness (As CaCO ₃)	280	D	20	mg/L	10/21/2013 4:00 PM	Container-01 of 01

Analytical Method: SM4500-NH₃ H :

Analyst: bka

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Ammonia (As N)	136	D	100	mg/L	10/30/2013 1:55 PM	Container-01 of 01

Analytical Method: E353.2 :

Analyst: TF

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrite as N	< 0.10		1	mg/L	10/19/2013 7:48 AM	Container-01 of 02

Analytical Method: E353.2 :

Analyst: TF

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrate as N	< 0.10		1	mg/L	10/19/2013 9:35 AM	Container-01 of 01

Analytical Method: E420.1 :

Prep Method: E420.1

Prep Date: 10/22/2013 7:00:00 AM

Analyst: EM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/22/2013 11:00 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.

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, Value estimated.

J = Estimated value - below calibration range

S = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Laboratory Manager

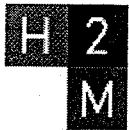
Test results meet the requirements of NELAC
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Date Reported : 11/7/2013

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TOS013/013F S96



labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 8:40:00 AM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-002

Client Sample ID: LEA-SEC

Sample Information:

Type : Leachate

Origin:

Analytical Method: SM2540C : IOC					Analyst: MLM	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	904	D	2	mg/L	10/21/2013 2:42 PM	Container-01 of 02
Analytical Method: E351.2 : Prep Method: E351.2					Prep Date: 10/25/2013 4:45:00 AM	
					Analyst: TF	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Kjeldahl, Total	138	D	10	mg/L	10/25/2013 12:29 PM	Container-01 of 01
Analytical Method: SM5310B :					Analyst: CO	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Organic Carbon	11.9		1	mg/L	10/26/2013 8:09 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Joann M. Slavine

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 3:45:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-003

Client Sample ID: MW-3A

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2320B :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Alkalinity, Total (As CaCO ₃)	46.4	D	2	mg/L	10/21/2013 11:26 AM	Container-01 of 02

Analytical Method: E300.0 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Bromide	< 0.50		1	mg/L	10/30/2013 11:55 PM	Container-01 of 02
Chloride	31.5		1	mg/L	10/30/2013 11:55 PM	Container-01 of 02
Sulfate	< 5.00		1	mg/L	10/30/2013 11:55 PM	Container-01 of 02

Analytical Method: SM5210B :

Prep Method: SM5210B

Prep Date: 10/18/2013 9:40:40 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: CN Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/18/2013 12:55 PM	Container-01 of 02

NOTES:

Blank depletion exceeds 0.2 mg/L - average depletion of 0.40 mg/L

Analytical Method: E410.4 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: CN Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/29/2013 8:25 AM	Container-01 of 01

Analytical Method: SM2340C :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Hardness (As CaCO ₃)	60	D	4	mg/L	10/21/2013 4:00 PM	Container-01 of 01

Analytical Method: SM4500-NH₃ H :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	10/30/2013 1:56 PM	Container-01 of 01

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrite as N	< 0.10		1	mg/L	10/19/2013 7:50 AM	Container-01 of 02

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrate as N	0.20		1	mg/L	10/19/2013 9:39 AM	Container-01 of 01

Analytical Method: E420.1 :

Prep Method: E420.1

Prep Date: 10/22/2013 7:00:00 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: EM Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/22/2013 11:01 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.

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, Value estimated.

J = Estimated value - below calibration range

S = Recovery exceeded control limits for this analyte

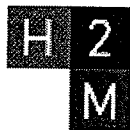
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Laboratory Manager

Test results meet the requirements of NELAC
 unless otherwise noted.

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labs

575 Broad Hollow Road, 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
Attn To : Paul Dimaria

Lab No. : 1310A35-003
Client Sample ID: MW-3A

Sample Information:
Type : Groundwater

Collected : 10/17/2013 3:45:00 PM
Received : 10/18/2013 10:20:00 AM
Collected By PWG99

Origin:

<u>Analytical Method:</u> SM2540C : IOC						<u>Analyst:</u> MLM
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Total Dissolved Solids	114		1	mg/L	10/21/2013 2:45 PM	Container-01 of 02
<u>Analytical Method:</u> E351.2 : <u>Prep Method:</u> E351.2 <u>Prep Date:</u> 10/25/2013 4:45:00 AM						<u>Analyst:</u> TF
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Nitrogen, Kjeldahl, Total	0.39		1	mg/L	10/25/2013 11:55 AM	Container-01 of 01
<u>Analytical Method:</u> SM5310B :						<u>Analyst:</u> CO
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Total Organic Carbon	3.3		1	mg/L	10/26/2013 8:45 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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H2M labs

575 Broad Hollow Road, 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****Attn To :** Paul Dimaria

Collected : 10/17/2013 2:35:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-004**Client Sample ID: MW-3B****Sample Information:**

Type : Groundwater

Origin:

Analytical Method: SM2320B :Analyst: HT

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Alkalinity, Total (As CaCO ₃)	57.1	D	2	mg/L	10/21/2013 11:33 AM	Container-01 of 02

Analytical Method: E300.0 :Analyst: bka

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Bromide	< 0.50		1	mg/L	10/31/2013 12:09 AM	Container-01 of 02
Chloride	17.8		1	mg/L	10/31/2013 12:09 AM	Container-01 of 02
Sulfate	10.9		1	mg/L	10/31/2013 12:09 AM	Container-01 of 02

Analytical Method: SM5210B :Prep Method: SM5210BPrep Date: 10/18/2013 9:40:40 AMAnalyst: CN

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Biochemical Oxygen Demand	< 2		1	mg/L	10/18/2013 1:00 PM	Container-01 of 02

NOTES:

Blank depletion exceeds 0.2 mg/L - average depletion of 0.40 mg/L

Analytical Method: E410.4 :Analyst: CN

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Chemical Oxygen Demand	< 10.0		1	mg/L	10/29/2013 8:27 AM	Container-01 of 01

Analytical Method: SM2340C :Analyst: HT

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Hardness (As CaCO ₃)	68	D	4	mg/L	10/21/2013 4:00 PM	Container-01 of 01

Analytical Method: SM4500-NH₃ H :Analyst: bka

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Nitrogen, Ammonia (As N)	3.22	D	5	mg/L	10/30/2013 1:57 PM	Container-01 of 01

Analytical Method: E353.2 :Analyst: TF

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Nitrite as N	< 0.10		1	mg/L	10/19/2013 7:51 AM	Container-01 of 02

Analytical Method: E353.2 :Analyst: TF

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Nitrate as N	< 0.10		1	mg/L	10/19/2013 9:40 AM	Container-01 of 01

Analytical Method: E420.1 :Prep Method: E420.1Prep Date: 10/22/2013 7:00:00 AMAnalyst: EM

<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Container:</u>
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/22/2013 11:02 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.

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, Value estimated.

J = Estimated value - below calibration range

S = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Laboratory Manager

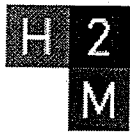
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Date Reported : 11/7/2013

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H2M labs

575 Broad Hollow Road, 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
Attn To : Paul Dimaria
Collected : 10/17/2013 2:35:00 PM
Received : 10/18/2013 10:20:00 AM
Collected By PWG99

Lab No. : 1310A35-004
Client Sample ID: MW-3B

Sample Information:
Type : Groundwater

Origin:

Analytical Method: SM2540C : IOC						Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	102		1	mg/L	10/21/2013 2:48 PM	Container-01 of 02
Analytical Method: E351.2 : Prep Method: E351.2 Prep Date: 10/25/2013 4:45:00 AM						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Kjeldahl, Total	3.62		1	mg/L	10/25/2013 11:56 AM	Container-01 of 01
Analytical Method: SM5310B :						Analyst: CO
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Organic Carbon	2.6		1	mg/L	10/26/2013 9:20 AM	Container-01 of 01

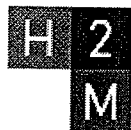
Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
H = Received/analyzed outside of analytical holding time
+ = ELAP / NELAC does not offer certification for this analyte
c = Calibration acceptability criteria exceeded for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

Date Reported : 11/7/2013

Joann M. Slavin
Laboratory Manager

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labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 3:35:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-005

Client Sample ID: MW-3C

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2320B :

Analyst: HT

Container:

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Alkalinity, Total (As CaCO ₃)	54.2	D	2	mg/L	10/21/2013 11:40 AM	Container-01 of 02

Analytical Method: E300.0 :

Analyst: bka

Container:

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	10/31/2013 12:23 AM	Container-01 of 02
Chloride	13.7		1	mg/L	10/31/2013 12:23 AM	Container-01 of 02
Sulfate	< 5.00		1	mg/L	10/31/2013 12:23 AM	Container-01 of 02

Analytical Method: SM5210B :

Prep Method: SM5210B

Prep Date: 10/18/2013 9:40:40 AM

Analyst: CN

Container:

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/18/2013 1:05 PM	Container-01 of 02

NOTES:

Blank depletion exceeds 0.2 mg/L - average depletion of 0.40 mg/L

Analytical Method: E410.4 :

Analyst: CN

Container:

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/29/2013 8:29 AM	Container-01 of 01

Analytical Method: SM2340C :

Analyst: HT

Container:

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Hardness (As CaCO ₃)	60	D	4	mg/L	10/21/2013 4:00 PM	Container-01 of 01

Analytical Method: SM4500-NH₃ H :

Analyst: bka

Container:

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	10/30/2013 1:58 PM	Container-01 of 01

Analytical Method: E353.2 :

Analyst: TF

Container:

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrite as N	< 0.10		1	mg/L	10/19/2013 7:52 AM	Container-01 of 02

Analytical Method: E353.2 :

Analyst: TF

Container:

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrate as N	0.12		1	mg/L	10/19/2013 9:44 AM	Container-01 of 01

Analytical Method: E420.1 :

Prep Method: E420.1

Prep Date: 10/22/2013 7:00:00 AM

Analyst: EM

Container:

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/22/2013 11:03 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.

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, Value estimated.

J = Estimated value - below calibration range

S = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Laboratory Manager

Test results meet the requirements of NELAC
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Date Reported : 11/7/2013

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TOS013/013F S102



H2M labs

575 Broad Hollow Road, 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

Lab No. : 1310A35-005
Client Sample ID: MW-3C

Sample Information:

Type : Groundwater

Origin:

Attn To : Paul Dimaria
Collected : 10/17/2013 3:35:00 PM
Received : 10/18/2013 10:20:00 AM
Collected By PWG99

Analytical Method: SM2540C : IOC					Analyst: MLM	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	97		1	mg/L	10/21/2013 2:51 PM	Container-01 of 02
Analytical Method: E351.2 : Prep Method: E351.2					Prep Date: 10/25/2013 4:45:00 AM	Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Kjeldahl, Total	0.21		1	mg/L	10/25/2013 11:57 AM	Container-01 of 01
Analytical Method: SM5310B :					Analyst: CO	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Organic Carbon	< 1.0		1	mg/L	10/26/2013 10:59 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Joann M. Slavin

Laboratory Manager

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H2M labs

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

LABORATORY RESULTS

Results for the samples and analytes requested

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Town of Southampton
Waste Management Division
Southampton, New York 11968

Attn To : Paul Dimaria

Collected : 10/17/2013 4:20:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-006

Client Sample ID: MW-4A

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2320B :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyst: HT	Container:
Alkalinity, Total (As CaCO ₃)	4.85		1	mg/L	10/21/2013 11:48 AM	Container-01 of 02

Analytical Method: E300.0 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyst: bka	Container:
Bromide	< 0.50		1	mg/L	10/31/2013 12:36 AM	Container-01 of 02
Chloride	29.8		1	mg/L	10/31/2013 12:36 AM	Container-01 of 02
Sulfate	14.9		1	mg/L	10/31/2013 12:36 AM	Container-01 of 02

Analytical Method: SM5210B :

Prep Method: SM5210B

Prep Date: 10/18/2013 9:40:40 AM

Analyst: CN

Parameter(s)	Results	Qualifier	D.F.	Units	Analyst: CN	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/18/2013 1:10 PM	Container-01 of 02

NOTES:

Blank depletion exceeds 0.2 mg/L - average depletion of 0.40 mg/L

Analytical Method: E410.4 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyst: CN	Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/29/2013 8:31 AM	Container-01 of 01

Analytical Method: SM2340C :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyst: HT	Container:
Hardness (As CaCO ₃)	48	D	4	mg/L	10/21/2013 4:00 PM	Container-01 of 01

Analytical Method: SM4500-NH₃ H :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyst: bka	Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	10/30/2013 1:59 PM	Container-01 of 01

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyst: TF	Container:
Nitrite as N	< 0.10		1	mg/L	10/19/2013 7:53 AM	Container-01 of 02

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyst: TF	Container:
Nitrate as N	5.57	D	10	mg/L	10/19/2013 9:45 AM	Container-01 of 01

Analytical Method: E420.1 :

Prep Method: E420.1

Prep Date: 10/22/2013 7:00:00 AM

Analyst: EM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyst: EM	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/22/2013 11:04 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.

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, Value estimated.

J = Estimated value - below calibration range

S = Recovery exceeded control limits for this analyte

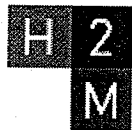
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Laboratory Manager

Test results meet the requirements of NELAC
 unless otherwise noted.

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H2M labs

575 Broad Hollow Road, 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

Lab No. : 1310A35-006
Client Sample ID: MW-4A

Sample Information:

Type : Groundwater

Origin:

Attn To : Paul Dimaria

Collected : 10/17/2013 4:20:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Analytical Method: SM2540C : IOC					Analyst: MLM	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	124		1	mg/L	10/21/2013 2:54 PM	Container-01 of 02
Analytical Method: E351.2 : Prep Method: E351.2					Prep Date: 10/25/2013 4:45:00 AM Analyst: TF	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Kjeldahl, Total	0.14		1	mg/L	10/25/2013 11:58 AM	Container-01 of 01
Analytical Method: SM5310B :					Analyst: CO	
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Organic Carbon	1.6		1	mg/L	10/26/2013 11:35 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Joann M. Slavine

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.

Date Reported : 11/7/2013

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H2M labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 5:00:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-007

Client Sample ID: MW-4B

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2320B :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Alkalinity, Total (As CaCO ₃)	111	D	4	mg/L	10/21/2013 11:54 AM	Container-01 of 02

Analytical Method: E300.0 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Bromide	< 0.50		1	mg/L	10/31/2013 12:50 AM	Container-01 of 02
Chloride	22.0		1	mg/L	10/31/2013 12:50 AM	Container-01 of 02
Sulfate	7.45		1	mg/L	10/31/2013 12:50 AM	Container-01 of 02

Analytical Method: SM5210B :

Prep Method: SM5210B

Prep Date: 10/18/2013 9:40:40 AM

Analyst: CN

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/18/2013 10:30 AM	Container-01 of 02

NOTES:

Blank depletion exceeds 0.2 mg/L - average depletion of 0.40 mg/L

Analytical Method: E410.4 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: CN Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/29/2013 8:33 AM	Container-01 of 01

Analytical Method: SM2340C :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Hardness (As CaCO ₃)	130	D	10	mg/L	10/21/2013 4:00 PM	Container-01 of 01

Analytical Method: SM4500-NH₃ H :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	10/30/2013 2:01 PM	Container-01 of 01

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrite as N	< 0.10		1	mg/L	10/19/2013 7:54 AM	Container-01 of 02

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrate as N	0.49		1	mg/L	10/19/2013 9:46 AM	Container-01 of 01

Analytical Method: E420.1 :

Prep Method: E420.1

Prep Date: 10/23/2013 8:00:00 AM

Analyst: EM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:12 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
 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, Value estimated.
 J = Estimated value - below calibration range
 S = Recovery exceeded control limits for this analyte
 N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Laboratory Manager

Test results meet the requirements of NELAC
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labs

575 Broad Hollow Road, 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

Lab No. : 1310A35-007

Client Sample ID: MW-4B

Sample Information:

Type : Groundwater

Origin:

Attn To : Paul Dimaria

Collected : 10/17/2013 5:00:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Analytical Method: SM2540C : IOC						Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	156		1	mg/L	10/21/2013 2:57 PM	Container-01 of 02
Analytical Method: E351.2 : Prep Method: E351.2 Prep Date: 10/25/2013 4:45:00 AM						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Kjeldahl, Total	0.32		1	mg/L	10/25/2013 11:59 AM	Container-01 of 01
Analytical Method: SM5310B :						Analyst: CO
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Organic Carbon	2.4		1	mg/L	10/26/2013 12:10 PM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 11/7/2013

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H2M labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 6:10:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-008

Client Sample ID: MW-4C

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2320B :

Analyst: HT

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Alkalinity, Total (As CaCO3)	36.9		1	mg/L	10/21/2013 12:02 PM	Container-01 of 02

Analytical Method: E300.0 :

Analyst: bka

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	10/31/2013 1:03 AM	Container-01 of 02
Chloride	85.7	D	5	mg/L	10/31/2013 7:20 PM	Container-01 of 02
Sulfate	< 5.00		1	mg/L	10/31/2013 1:03 AM	Container-01 of 02

Analytical Method: SM5210B :

Prep Method: SM5210B

Prep Date: 10/18/2013 9:40:40 AM

Analyst: CN

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/18/2013 10:35 AM	Container-01 of 02

NOTES:

Blank depletion exceeds 0.2 mg/L - average depletion of 0.40 mg/L

Analytical Method: E410.4 :

Analyst: CN

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/29/2013 8:35 AM	Container-01 of 01

Analytical Method: SM2340C :

Analyst: HT

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Hardness (As CaCO3)	130	D	10	mg/L	10/21/2013 4:00 PM	Container-01 of 01

Analytical Method: SM4500-NH3 H :

Analyst: bka

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	10/30/2013 2:02 PM	Container-01 of 01

Analytical Method: E353.2 :

Analyst: TF

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrite as N	< 0.10		1	mg/L	10/19/2013 7:56 AM	Container-01 of 02

Analytical Method: E353.2 :

Analyst: TF

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrate as N	< 0.10		1	mg/L	10/19/2013 9:47 AM	Container-01 of 01

Analytical Method: E420.1 :

Prep Method: E420.1

Prep Date: 10/23/2013 8:00:00 AM

Analyst: EM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:13 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.

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, Value estimated.

J = Estimated value - below calibration range

S = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Laboratory Manager

Test results meet the requirements of NELAC
unless otherwise noted.

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Date Reported : 11/7/2013

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H2M labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 6:10:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-008

Client Sample ID: MW-4C

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2540C : IOC						Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	234		1	mg/L	10/21/2013 3:00 PM	Container-01 of 02
Analytical Method: E351.2 : Prep Method: E351.2 Prep Date: 10/25/2013 4:45:00 AM						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Kjeldahl, Total	0.20		1	mg/L	10/25/2013 11:59 AM	Container-01 of 01
Analytical Method: SM5310B :						Analyst: CO
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Organic Carbon	< 1.0		1	mg/L	10/26/2013 12:45 PM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

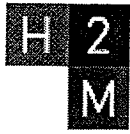
Date Reported : 11/7/2013

Joann M. Slawin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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labs

575 Broad Hollow Road, Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
NYS DOH 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 : Paul Dimaria

Collected : 10/17/2013 9:55:00 AM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-009

Client Sample ID: MW-8

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2320B :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Alkalinity, Total (As CaCO ₃)	40.9		1	mg/L	10/21/2013 12:12 PM	Container-01 of 02

Analytical Method: E300.0 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Bromide	< 0.50		1	mg/L	10/31/2013 1:17 AM	Container-01 of 02
Chloride	10.5		1	mg/L	10/31/2013 1:17 AM	Container-01 of 02
Sulfate	11.4		1	mg/L	10/31/2013 1:17 AM	Container-01 of 02

Analytical Method: SM5210B :

Prep Method: SM5210B

Prep Date: 10/18/2013 9:40:40 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: CN Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/18/2013 10:40 AM	Container-01 of 02

NOTES:

Blank depletion exceeds 0.2 mg/L - average depletion of 0.40 mg/L

Analytical Method: E410.4 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: CN Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/29/2013 8:37 AM	Container-01 of 01

Analytical Method: SM2340C :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Hardness (As CaCO ₃)	68	D	4	mg/L	10/21/2013 4:00 PM	Container-01 of 01

Analytical Method: SM4500-NH₃ H :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	10/30/2013 2:03 PM	Container-01 of 01

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrite as N	< 0.10		1	mg/L	10/19/2013 8:25 AM	Container-01 of 02

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrate as N	1.45	D	5	mg/L	10/19/2013 9:48 AM	Container-01 of 01

Analytical Method: E420.1 :

Prep Method: E420.1

Prep Date: 10/23/2013 8:00:00 AM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: EM Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:14 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Laboratory Manager

Test results meet the requirements of NELAC
unless otherwise noted.

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labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 9:55:00 AM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-009

Client Sample ID: MW-8

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2540C : IOC

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: MLM	Container:
Total Dissolved Solids	101		1	mg/L	10/21/2013 3:03 PM		Container-01 of 02

Analytical Method: E351.2 :

Prep Method: E351.2

Prep Date: 10/25/2013 4:45:00 AM

Analyst: TF

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF	Container:
Nitrogen, Kjeldahl, Total	0.53		1	mg/L	10/25/2013 12:00 PM		Container-01 of 01

Analytical Method: SM5310B :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: CO	Container:
Total Organic Carbon	1.1		1	mg/L	10/26/2013 1:20 PM		Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

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.



labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 10:45:00 AM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-010

Client Sample ID: MW-9

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2320B :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Alkalinity, Total (As CaCO ₃)	16.0		1	mg/L	10/21/2013 12:36 PM	Container-01 of 02

Analytical Method: E300.0 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Bromide	< 0.50		1	mg/L	10/31/2013 2:11 AM	Container-01 of 02
Chloride	12.0		1	mg/L	10/31/2013 2:11 AM	Container-01 of 02
Sulfate	7.38		1	mg/L	10/31/2013 2:11 AM	Container-01 of 02

Analytical Method: SM5210B :

Prep Method: SM5210B

Prep Date: 10/18/2013 9:40:40 AM

Analyst: CN

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/18/2013 10:45 AM	Container-01 of 02

NOTES:

Blank depletion exceeds 0.2 mg/L - average depletion of 0.40 mg/L

Analytical Method: E410.4 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: CN Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/29/2013 8:39 AM	Container-01 of 01

Analytical Method: SM2340C :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Hardness (As CaCO ₃)	48	D	4	mg/L	10/21/2013 4:00 PM	Container-01 of 01

Analytical Method: SM4500-NH₃ H :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	10/30/2013 2:04 PM	Container-01 of 01

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrite as N	< 0.10		1	mg/L	10/19/2013 8:26 AM	Container-01 of 02

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrate as N	0.46		1	mg/L	10/19/2013 9:49 AM	Container-01 of 01

Analytical Method: E420.1 :

Prep Method: E420.1

Prep Date: 10/23/2013 8:00:00 AM

Analyst: EM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:15 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.

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, Value estimated.

J = Estimated value - below calibration range

S = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Laboratory Manager

Test results meet the requirements of NELAC
 unless otherwise noted.

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Date Reported : 11/7/2013

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TOS013/013F S112



H2M labs

575 Broad Hollow Road, 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
Attn To : Paul Dimaria

Lab No. : 1310A35-010

Client Sample ID: MW-9

Sample Information:

Type : Groundwater

Origin:

Collected : 10/17/2013 10:45:00 AM
Received : 10/18/2013 10:20:00 AM
Collected By PWG99

Analytical Method: SM2540C : IOC							Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:	
Total Dissolved Solids	64		1	mg/L	10/21/2013 3:06 PM	Container-01 of 02	
Analytical Method: E351.2 : Prep Method: E351.2 Prep Date: 10/25/2013 4:45:00 AM							Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:	
Nitrogen, Kjeldahl, Total	0.22		1	mg/L	10/25/2013 12:01 PM	Container-01 of 01	
Analytical Method: SM5310B :							Analyst: CO
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:	
Total Organic Carbon	< 1.0		1	mg/L	10/26/2013 1:55 PM	Container-01 of 01	

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Joann M. Slavins

Laboratory Manager

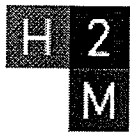
Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 11/7/2013

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TOS013/013F S113



H2M labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 12:15:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-011

Client Sample ID: MW-11A

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2320B :

Analyst: HT

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Alkalinity, Total (As CaCO ₃)	104	D	4	mg/L	10/21/2013 12:41 PM	Container-01 of 02

Analytical Method: E300.0 :

Analyst: bka

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Bromide	< 0.50		1	mg/L	10/31/2013 2:24 AM	Container-01 of 02
Chloride	11.8		1	mg/L	10/31/2013 2:24 AM	Container-01 of 02
Sulfate	18.0		1	mg/L	10/31/2013 2:24 AM	Container-01 of 02

Analytical Method: SM5210B :

Prep Method: SM5210B

Prep Date: 10/18/2013 9:40:40 AM

Analyst: CN

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/18/2013 10:50 AM	Container-01 of 02

NOTES:

Blank depletion exceeds 0.2 mg/L - average depletion of 0.40 mg/L

Analytical Method: E410.4 :

Analyst: CN

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/29/2013 8:41 AM	Container-01 of 01

Analytical Method: SM2340C :

Analyst: HT

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Hardness (As CaCO ₃)	132	D	4	mg/L	10/21/2013 4:00 PM	Container-01 of 01

Analytical Method: SM4500-NH₃ H :

Analyst: bka

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Ammonia (As N)	0.15		1	mg/L	10/30/2013 2:08 PM	Container-01 of 01

Analytical Method: E353.2 :

Analyst: TF

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrite as N	< 0.10		1	mg/L	10/19/2013 8:27 AM	Container-01 of 02

Analytical Method: E353.2 :

Analyst: TF

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrate as N	0.18		1	mg/L	10/19/2013 9:53 AM	Container-01 of 01

Analytical Method: E420.1 :

Prep Method: E420.1

Prep Date: 10/23/2013 8:00:00 AM

Analyst: EM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:16 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.

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, Value estimated.

J = Estimated value - below calibration range

S = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Laboratory Manager

Test results meet the requirements of NELAC
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Date Reported : 11/7/2013

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labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 12:15:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-011

Client Sample ID: MW-11A

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2540C : IOC						Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	166		1	mg/L	10/21/2013 3:09 PM	Container-01 of 02
Analytical Method: E351.2 : Prep Method: E351.2 Prep Date: 10/25/2013 4:45:00 AM						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Kjeldahl, Total	0.70		1	mg/L	10/25/2013 12:04 PM	Container-01 of 01
Analytical Method: SM5310B :						Analyst: CO
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Organic Carbon	2.5		1	mg/L	10/26/2013 2:30 PM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
 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, Value estimated.
 J = Estimated value - below calibration range
 S = Recovery exceeded control limits for this analyte
 N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Laboratory Manager

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 unless otherwise noted.

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labs

575 Broad Hollow Road, 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

Lab No. : 1310A35-012
Client Sample ID: MW-11B

Sample Information:

Type : Groundwater

Origin:

Attn To : Paul Dimaria

Collected : 10/17/2013 11:40:00 AM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Analytical Method: SM2320B :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Alkalinity, Total (As CaCO ₃)	35.0		1	mg/L	10/21/2013 12:48 PM	Container-01 of 02

Analytical Method: E300.0 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Bromide	< 0.50		1	mg/L	10/31/2013 2:38 AM	Container-01 of 02
Chloride	11.7		1	mg/L	10/31/2013 2:38 AM	Container-01 of 02
Sulfate	13.4		1	mg/L	10/31/2013 2:38 AM	Container-01 of 02

Analytical Method: SM5210B :

Prep Method: SM5210B

Prep Date: 10/18/2013 9:40:40 AM

Analyst: CN

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/18/2013 10:55 AM	Container-01 of 02

NOTES:

Blank depletion exceeds 0.2 mg/L - average depletion of 0.40 mg/L

Analytical Method: E410.4 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: CN Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/29/2013 8:43 AM	Container-01 of 01

Analytical Method: SM2340C :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Hardness (As CaCO ₃)	88	D	4	mg/L	10/21/2013 4:00 PM	Container-01 of 01

Analytical Method: SM4500-NH₃ H :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Nitrogen, Ammonia (As N)	< 0.10		1	mg/L	10/30/2013 2:09 PM	Container-01 of 01

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrite as N	< 0.10		1	mg/L	10/19/2013 8:29 AM	Container-01 of 02

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrate as N	0.44		1	mg/L	10/19/2013 9:54 AM	Container-01 of 01

Analytical Method: E420.1 :

Prep Method: E420.1

Prep Date: 10/23/2013 8:00:00 AM

Analyst: EM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:17 AM	Container-01 of 01

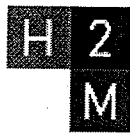
Qualifiers: E = Value above quantitation range, Value estimated.
B = Found in Blank
D.F. = Dilution Factor D = Results for Dilution
H = Received/analyzed outside of analytical holding time
+ = ELAP / NELAC does not offer certification for this analyte
c = Calibration acceptability criteria exceeded for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

Date Reported : 11/7/2013

Laboratory Manager

Test results meet the requirements of NELAC
unless otherwise noted.

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labs

575 Broad Hollow Road, 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
Attn To : Paul Dimaria

Lab No. : 1310A35-012
Client Sample ID: MW-11B

Sample Information:

Type : Groundwater

Origin:

Collected : 10/17/2013 11:40:00 AM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Analytical Method: SM2540C : IOC						Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	94		1	mg/L	10/21/2013 3:12 PM	Container-01 of 02
Analytical Method: E351.2 : Prep Method: E351.2 Prep Date: 10/25/2013 4:45:00 AM						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Kjeldahl, Total	0.67		1	mg/L	10/25/2013 12:05 PM	Container-01 of 01
Analytical Method: SM5310B :						Analyst: CO
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Organic Carbon	1.3		1	mg/L	10/26/2013 3:06 PM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Joann M. Slavine
Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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H2M labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 1:55:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-013

Client Sample ID: MW-12A

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2320B :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Alkalinity, Total (As CaCO ₃)	101	D	4	mg/L	10/21/2013 12:56 PM	Container-01 of 02

Analytical Method: E300.0 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Bromide	< 0.50		1	mg/L	10/31/2013 2:51 AM	Container-01 of 02
Chloride	16.4		1	mg/L	10/31/2013 2:51 AM	Container-01 of 02
Sulfate	27.4		1	mg/L	10/31/2013 2:51 AM	Container-01 of 02

Analytical Method: SM5210B :

Prep Method: SM5210B

Prep Date: 10/18/2013 9:40:40 AM

Analyst: CN

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/18/2013 11:00 AM	Container-01 of 02

NOTES:

Blank depletion exceeds 0.2 mg/L - average depletion of 0.40 mg/L

Analytical Method: E410.4 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: CN Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/29/2013 8:45 AM	Container-01 of 01

Analytical Method: SM2340C :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Hardness (As CaCO ₃)	132	D	4	mg/L	10/21/2013 4:00 PM	Container-01 of 01

Analytical Method: SM4500-NH₃ H :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Nitrogen, Ammonia (As N)	1.31		1	mg/L	10/30/2013 2:10 PM	Container-01 of 01

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrite as N	< 0.10		1	mg/L	10/19/2013 8:30 AM	Container-01 of 02

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrate as N	1.00		1	mg/L	10/19/2013 9:55 AM	Container-01 of 01

Analytical Method: E420.1 :

Prep Method: E420.1

Prep Date: 10/23/2013 8:00:00 AM

Analyst: EM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:18 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.

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, Value estimated.

J = Estimated value - below calibration range

S = Recovery exceeded control limits for this analyte

N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Laboratory Manager

Test results meet the requirements of NELAC
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labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 1:55:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-013

Client Sample ID: MW-12A

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2540C : IOC						Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	176		1	mg/L	10/21/2013 3:15 PM	Container-01 of 02
Analytical Method: E351.2 : Prep Method: E351.2						Analyst: TF
					Prep Date: 10/25/2013 4:45:00 AM	Container:
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Kjeldahl, Total	1.82		1	mg/L	10/25/2013 12:05 PM	Container-01 of 01
Analytical Method: SM5310B :						Analyst: CO
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Organic Carbon	2.7		1	mg/L	10/26/2013 3:41 PM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Joann M. Slavicek

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 11/7/2013

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TOS013/013F S119



labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Lab No. : 1310A35-014

Client Sample ID: MW-12B

Sample Information:

Type : Groundwater

Origin:

Collected : 10/17/2013 1:15:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Analytical Method: SM2320B :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT	Container:
Alkalinity, Total (As CaCO ₃)	107	D	4	mg/L	10/21/2013 1:18 PM		Container-01 of 02

Analytical Method: E300.0 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka	Container:
Bromide	< 0.50		1	mg/L	10/31/2013 3:05 AM		Container-01 of 02
Chloride	20.0		1	mg/L	10/31/2013 3:05 AM		Container-01 of 02
Sulfate	45.5		1	mg/L	10/31/2013 3:05 AM		Container-01 of 02

Analytical Method: SM5210B :

Prep Method: SM5210B

Prep Date: 10/18/2013 9:40:40 AM

Analyst: CN

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/18/2013 11:05 AM	Container-01 of 02

NOTES:

Blank depletion exceeds 0.2 mg/L - average depletion of 0.40 mg/L

Analytical Method: E410.4 :

Analyst: CN

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/29/2013 8:47 AM	Container-01 of 01

Analytical Method: SM2340C :

Analyst: HT

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Hardness (As CaCO ₃)	116	D	4	mg/L	10/21/2013 4:00 PM	Container-01 of 01

Analytical Method: SM4500-NH₃ H :

Analyst: bka

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Ammonia (As N)	1.08		1	mg/L	10/30/2013 2:11 PM	Container-01 of 01

Analytical Method: E353.2 :

Analyst: TF

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrite as N	< 0.10		1	mg/L	10/19/2013 8:31 AM	Container-01 of 02

Analytical Method: E353.2 :

Analyst: TF

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrate as N	< 0.10		1	mg/L	10/19/2013 9:57 AM	Container-01 of 01

Analytical Method: E420.1 :

Prep Method: E420.1

Prep Date: 10/23/2013 8:00:00 AM

Analyst: EM

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:19 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Laboratory Manager

Test results meet the requirements of NELAC
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Date Reported : 11/7/2013

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TOS013/013F S120



labs

575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 1:15:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-014

Client Sample ID: MW-12B

Sample Information:

Type : Groundwater

Origin:

Analytical Method: SM2540C : IOC						Analyst: MLM
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Dissolved Solids	192		1	mg/L	10/21/2013 3:18 PM	Container-01 of 02
Analytical Method: E351.2 : Prep Method: E351.2 Prep Date: 10/25/2013 4:45:00 AM						Analyst: TF
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Nitrogen, Kjeldahl, Total	6.00	D	10	mg/L	10/25/2013 12:30 PM	Container-01 of 01
Analytical Method: SM5310B :						Analyst: CO
Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Total Organic Carbon	3.3		1	mg/L	10/26/2013 4:14 PM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Joann M. Starin

Laboratory Manager

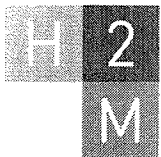
Test results meet the requirements of NELAC unless otherwise noted.

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Date Reported : 11/7/2013

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TOS013/013F S121



labs

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

5. SURROGATE SPIKE ANALYSIS RESULTS
5.1 VOLATILES

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478Case No.: TOS

SAS No.: _____

SDG No.: TOS013

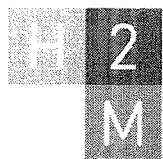
	EPA SAMPLE NO.	SMC1 DCA #	SMC2 TOL #	SMC3 BFB #	OTHER	TOT OUT
01	VBLK101813	97	99	99		0
02	LFB101813	102	102	103		0
03	MW-11A	99	101	99		0
04	MW-11B	98	99	97		0
05	TB	98	100	99		0

QC Limit

SMC 1 DCA = 1,2-Dichloroethane-d4 (76-114)
SMC 2 TOL = Toluene-d8 (88-110)
SMC 3 BFB = 4-Bromofluorobenzene (86-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits



labs

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

3A
SYSTEM MONITORING SPIKE RECOVERY

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: TOS SAS No.: _____ SDG No.: TOS013

Sample ID LFB101813 Level: (low/med) LOW

Column ID DB-624 Column Diam 0.18

Inst. ID HP5973-1 Init. Calib. Date(s) 05/03/13 23:17

Analysis Date: 10/18/13 17:50 05/04/13 2:38

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	SPIKE CONCENTRATION (µg/L)	SPIKE % REC #	QC. LIMITS REC.
Chloromethane	50	0	46	92	46-144
Vinyl chloride	50	0	42	84	43-143
Bromomethane	50	0	50	99	52-147
Chloroethane	50	0	43	86	49-151
Acrylonitrile	50	0	49	98	59-148
Trichlorofluoromethane	50	0	40	80	27-173
1,1-Dichloroethene	50	0	42	85	45-146
Iodomethane	50	0	47	93	61-144
Vinyl acetate	50	0	47	93	20-158
Acetone	50	0	52	104	23-188
Carbon disulfide	50	0	42	84	48-132
Methylene chloride	50	0	46	93	61-142
trans-1,2-Dichloroethene	50	0	45	90	56-142
1,1-Dichloroethane	50	0	45	91	83-151
cis-1,2-Dichloroethene	50	0	46	91	72-121
2-Butanone	50	0	46	92	44-162
Bromochloromethane	50	0	49	97	81-116
Chloroform	50	0	48	95	72-122
1,1,1-Trichloroethane	50	0	43	86	65-118
Carbon tetrachloride	50	0	44	87	59-120
Benzene	50	0	48	96	73-119
1,2-Dichloroethane	50	0	47	95	74-129
Trichloroethene	50	0	46	92	69-117
1,2-Dichloropropane	50	0	49	99	75-117
Dibromomethane	50	0	50	100	75-125
Bromodichloromethane	50	0	48	97	78-117
cis-1,3-Dichloropropene	50	0	48	97	78-116
4-Methyl-2-pentanone	50	0	51	102	69-132
Toluene	50	0	47	94	72-119
trans-1,3-Dichloropropene	50	0	49	98	79-116

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: _____

3A
SYSTEM MONITORING SPIKE RECOVERY

Lab Name: H2M LABS INC Contract: _____

Lab Code: 10478 Case No.: TOS SAS No.: _____ SDG No.: TOS013

Sample ID LFB101813 Level: (low/med) LOW

Column ID DB-624 Column Diam 0.18

Inst. ID HP5973-1 Init. Calib. Date(s) 05/03/13 23:17

Analysis Date: 10/18/13 17:50 05/04/13 2:38

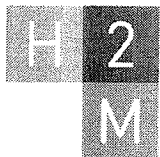
1,1,2-Trichloroethane	50	0	50	101	80-117
Tetrachloroethene	50	0	46	91	60-128
2-Hexanone	50	0	51	101	83-115
Dibromochloromethane	50	0	50	99	70-120
1,2-Dibromoethane	50	0	50	99	83-115
Chlorobenzene	50	0	48	97	75-113
trans-1,4-Dichloro-2-butene	50	0	47	94	71-121
Ethylbenzene	50	0	47	95	70-113
1,1,1,2-Tetrachloroethane	50	0	48	96	74-113
Xylene (total)	150	0	140	96	71-109
Styrene	50	0	49	98	72-118
Bromoform	50	0	50	100	65-122
1,1,2,2-Tetrachloroethane	50	0	49	99	74-121
1,2,3-Trichloropropane	50	0	50	100	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	50	100	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

COMMENTS: _____



labs

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

7. DUPLICATE SUMMARY RESULTS

- 7.1 TOTAL METALS
- 7.2 FILTERED METALS
- 7.3 WET CHEMISTRY

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO

MW-1C

Lab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLevel (low/med): LOW% Solids for Sample: 0.0% Solids for Duplicate: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		4.8858	U	4.8858	U			P
Antimony		1.9791	U	1.9791	U			P
Arsenic	10.0000	1.5320	B	1.6970	B	10.2		P
Barium	200.0000	8.2000	B	8.8000	B	7.1		P
Beryllium		0.2176	U	0.2176	U			P
Boron		4.1422	U	4.1422	U			P
Cadmium		0.1510	U	0.1510	U			P
Calcium	5000.0000	4463.0000	B	4611.0000	B	3.3		P
Chromium	10.0000	1.7000	B	2.2000	B	25.6		P
Cobalt	50.0000	0.8000	B	0.7000	B	13.3		P
Copper	25.0000	9.4000	B	8.7000	B	7.7		P
Iron		61.9000	U	61.9000	U			P
Lead	3.0000	5.5310		6.6450		18.3		P
Magnesium	5000.0000	2218.0000	B	2309.0000	B	4.0		P
Manganese	15.0000	2.4000	B	2.5000	B	4.1		P
Nickel	40.0000	10.0000	B	10.1000	B	1.0		P
Potassium	5000.0000	1384.0000	B	1412.0000	B	2.0		P
Selenium		1.7872	U	1.7872	U			P
Silver		0.4334	U	0.4334	U			P
Sodium	5000.0000	9020.0000		9404.0000		4.2		P
Thallium		1.9091	U	1.9091	U			P
Vanadium		0.2776	U	0.2776	U			P
Zinc	20.0000	37.0000		35.3000		4.7		P

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO

MW-6AR

Lab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids for Sample: 0.0

% Solids for Duplicate: 0.0

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Mercury		0.1000	U	0.1000	U			CV

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO

MW-11A

Lab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013FMatrix (soil/water): WATERLevel (low/med): LOW% Solids for Sample: 0.0% Solids for Duplicate: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		4.8858	U	4.8858	U			P
Antimony		1.9791	U	1.9791	U			P
Arsenic	10.0000	1.0278	U	1.2040	B	200.0		P
Barium	200.0000	78.4000	B	82.0000	B	4.5		P
Beryllium		0.2176	U	0.2176	U			P
Boron		4.1422	U	4.1422	U			P
Cadmium		0.1510	U	0.1510	U			P
Calcium		26110.0000		27420.0000		4.9		P
Chromium	10.0000	0.6000	B	1.5000	B	85.7		P
Cobalt	50.0000	15.1000	B	16.1000	B	6.4		P
Copper		0.7015	U	0.7015	U			P
Iron		61.9000	U	61.9000	U			P
Lead	3.0000	2.3670	B	4.3720		59.5		P
Magnesium	5000.0000	9704.0000		10170.0000		4.7		P
Manganese		974.3000		1027.0000		5.3		P
Mercury		0.1000	U	0.1000	U			CV
Nickel	40.0000	15.0000	B	15.8000	B	5.2		P
Potassium	5000.0000	4291.0000	B	4602.0000	B	7.0		P
Selenium		1.7872	U	1.7872	U			P
Silver		0.4334	U	0.4334	U			P
Sodium	5000.0000	8261.0000		8870.0000		7.1		P
Thallium	10.0000	4.1540	B	1.9091	U	200.0		P
Vanadium		0.2776	U	0.2776	U			P
Zinc	20.0000	18.8000	B	24.3000		25.5		P

H2M LABS INC

Date: 06-Nov-13

QC SUMMARY REPORT

SDG: TOS013

Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Recovery Limits	RPDRef Value	%RPD	UCL
mb-102113	mb-102113	Alkalinity, Total (As CaCO3)	< 1	MG/L							
lcs-102113	lcs-102113	Alkalinity, Total (As CaCO3)	26.5	MG/L	25	< 1	106	80 120			
mb-101713	mb-101713	Alkalinity, Total (As CaCO3)	< 1	MG/L							
lcs-101713	lcs-101713	Alkalinity, Total (As CaCO3)	25.3	MG/L	25	< 1	101	80 120			
1310967-004AMS	MW-1CAMS	Alkalinity, Total (As CaCO3)	37.3	MG/L	25	12.9	98	75 125			
1310967-004ADUP	MW-1CDUP	Alkalinity, Total (As CaCO3)	12.8	MG/L					12.9	0.78	20
MB-41788	MB-41788	Biochemical Oxygen Demand	< 2	MG/L							
LCS-41788	LCS-41788	Biochemical Oxygen Demand	205	MG/L	198	< 2	104	85 116			
MB-41766	MB-41766	Biochemical Oxygen Demand	< 2	MG/L							
LCS-41766	LCS-41766	Biochemical Oxygen Demand	175	MG/L	198	< 2	88	85 116			
1310967-004ADUP	MW-1CDUP	Biochemical Oxygen Demand	< 2	MG/L					< 2		20
MB-103113	MB-103113	Bromide	< 0.5	MG/L							
LCS-103113	LCS-103113	Bromide	2.42	MG/L	2.5	< 0.5	97	90 110			
MB-103013	MB-103013	Bromide	< 0.5	MG/L							
LCS-103013	LCS-103013	Bromide	2.54	MG/L	2.5	< 0.5	102	90 110			
1310967-004AMS	MW-1CAMS	Bromide	0.99	MG/L	1	< 0.5	99	80 120			
1310967-004ADUP	MW-1CDUP	Bromide	< 0.5	MG/L					< 0.5		20
MBLK102913	MBLK102913	Chemical Oxygen Demand	< 10	MG/L							
LCS102913	LCS102913	Chemical Oxygen Demand	100	MG/L	100	< 10	100	90 110			

TOS013/013F S131

QC SUMMARY REPORT

SDG: TOS013

Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Recovery Limits	RPDRef Value	%RPD	UCL
MBLK102813	MBLK102813	Chemical Oxygen Demand	< 10	MG/L							
LCS102813	LCS102813	Chemical Oxygen Demand	99.3	MG/L	100	< 10	99	90 110			
1310967-004BMS	MW-1CMS	Chemical Oxygen Demand	110	MG/L	100	< 10	110	90 110			
1310967-004BDUP	MW-1CDUP	Chemical Oxygen Demand	< 10	MG/L					< 10		20
MB-103113	MB-103113	Chloride	< 2	MG/L							
LCS-103113	LCS-103113	Chloride	9.84	MG/L	10	< 2	98	90 110			
MB-103013	MB-103013	Chloride	< 2	MG/L							
LCS-103013	LCS-103013	Chloride	10.2	MG/L	10	< 2	102	90 110			
1310967-004AMS	MW-1CMS	Chloride	22.0	MG/L	10	11.2	108	80 120			
1310967-004ADUP	MW-1CDUP	Chloride	11.1	MG/L					11.2	0.81	20
MB-101713	MB-101713	Hardness (As CaCO3)	< 5	MG/L							
LCS-101713	LCS-101713	Hardness (As CaCO3)	990	MG/L	1000	< 5	99	80 120			
1310967-004DMS	MW-1CMS	Hardness (As CaCO3)	115	MG/L	100	20	95	75 125			
1310967-004DDUP	MW-1CDUP	Hardness (As CaCO3)	19	MG/L					20	5.1	20
MB-102113	MB-102113	Hardness (As CaCO3)	< 5	MG/L							
LCS-102113	LCS-102113	Hardness (As CaCO3)	990	MG/L	1000	< 5	99	80 120			
MB-101813	MB-101813	Nitrate as N	< 0.1	MG/L							
LCS-101813	LCS-101813	Nitrate as N	1.15	MG/L	1.13	< 0.1	102	90 110			
1310967-004BMS	1310967-004BMS	Nitrate as N	0.84	MG/L	0.5	0.32	103	90 110			
1310967-004BDUP	1310967-004BDUP	Nitrate as N	0.30	MG/L					0.32	8.6	20
MB-101913	MB-101913	Nitrate as N	< 0.1	MG/L							
LCS-101913	LCS-101913	Nitrate as N	1.14	MG/L	1.13	< 0.1	101	90 110			

TOS013/013F S132

QC SUMMARY REPORT

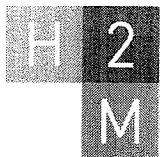
SDG: TOS013

Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Recovery Limits	RPDRef Value	%RPD	UCL
MB-101913	MB-101913	Nitrite as N	< 0.1	MG/L							
LCS-101913	LCS-101913	Nitrite as N	0.99	MG/L	1	< 0.1	99	90 110			
MB-101913	MB-101913	Nitrite as N	< 0.1	MG/L							
LCS-101913	LCS-101913	Nitrite as N	1.00	MG/L	1	< 0.1	100	90 110			
MB-101813	MB-101813	Nitrite as N	< 0.1	MG/L							
LCS-101813	LCS-101813	Nitrite as N	0.99	MG/L	1	< 0.1	99	90 110			
1310967-004AMS	MW-1CMS	Nitrite as N	0.53	MG/L	0.5	< 0.1	106	90 110			
1310967-004ADUP	MW-1CDUP	Nitrite as N	< 0.1	MG/L					< 0.1		20
MB-103013	MB-103013	Nitrogen, Ammonia (As N)	< 0.1	MG/L							
LCS-103013	LCS-103013	Nitrogen, Ammonia (As N)	1.03	MG/L	1	< 0.1	103	90 110			
1310967-004BMS	MW-1CMS	Nitrogen, Ammonia (As N)	0.54	MG/L	0.5	< 0.1	108	75 125			
1310967-004BDUP	MW-1CDUP	Nitrogen, Ammonia (As N)	< 0.1	MG/L					< 0.1		20
MB-41871	MB-41871	Nitrogen, Kjeldahl, Total	< 0.1	MG/L							
LCS-41871	LCS-41871	Nitrogen, Kjeldahl, Total	4.05	MG/L	4	< 0.1	101	90 110			
1310967-004BMS	MW-1CMS	Nitrogen, Kjeldahl, Total	9.05	MG/L	8	0.15	111	75 125			
1310967-004BDUP	MW-1CDUP	Nitrogen, Kjeldahl, Total	0.21	MG/L					0.15	31.0	20
MB-41842	MB-41842	Phenolics, Total Recoverable	< 5	UG/L							
LCS-41842	LCS-41842	Phenolics, Total Recoverable	26.4	UG/L	30	< 5	88	80 120			
1310967-004BMS	MW-1CMS	Phenolics, Total Recoverable	17.5	UG/L	20	< 5	88	75 125			
1310967-004BDUP	MW-1CDUP	Phenolics, Total Recoverable	< 5	UG/L					< 5		20
MB-41820	MB-41820	Phenolics, Total Recoverable	< 5	UG/L							
LCS-41820	LCS-41820	Phenolics, Total Recoverable	27.7	UG/L	30	< 5	92	80 120			

QC SUMMARY REPORT

SDG: TOS013

Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Recovery Limits	RPDRef Value	%RPD	UCL
MB-103113	MB-103113	Sulfate	< 5	MG/L							
LCS-103113	LCS-103113	Sulfate	9.99	MG/L	10	< 5	100	90 110			
MB-103013	MB-103013	Sulfate	< 5	MG/L							
LCS-103013	LCS-103013	Sulfate	10.7	MG/L	10	< 5	107	90 110			
1310967-004AMS	MW-1CMS	Sulfate	18.8	MG/L	10	8.86	99	80 120			
1310967-004ADUP	MW-1CDUP	Sulfate	8.86	MG/L					8.86		20
MB-102113	MB-102113	Total Dissolved Solids	< 10	MG/L							
LCS-102113	LCS-102113	Total Dissolved Solids	281	MG/L	300	< 10	94	80 120			
1310967-004Ams	MW-1CMS	Total Dissolved Solids	344	MG/L	300	64	93	75 125			
1310967-004Adup	MW-1CDUP	Total Dissolved Solids	57	MG/L					64	11.6	20
MB-102513	MB-102513	Total Organic Carbon	< 1	MG/L							
LCS-102513	LCS-102513	Total Organic Carbon	21.1	MG/L	25	< 1	84	80 120			
1310967-004CMS	MW-1CMS	Total Organic Carbon	10.5	MG/L	10	1.1	94	75 125			
1310967-004CDUP	MW-1CDUP	Total Organic Carbon	1.6	MG/L					1.1	39.5	20



labs

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

8. SPIKE SAMPLE RESULTS
8.1 TOTAL METALS
8.2 FILTERED METALS
8.3 WET CHEMISTRY

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

MW-1CS

Lab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLevel (low/med): LOW% Solids for Sample: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2055.0000	4.8858 U	2000.00	102.8		P
Antimony	75-125	482.5000	1.9791 U	500.00	96.5		P
Arsenic	75-125	42.1900	1.5320 B	40.00	101.6		P
Barium	75-125	1785.0000	8.2000 B	2000.00	88.8		P
Beryllium	75-125	51.9000	0.2176 U	50.00	103.8		P
Boron	75-125	1092.0000	4.1422 U	1000.00	109.2		P
Cadmium	75-125	52.3000	0.1510 U	50.00	104.6		P
Chromium	75-125	201.1000	1.7000 B	200.00	99.7		P
Cobalt	75-125	519.6000	0.8000 B	500.00	103.8		P
Copper	75-125	262.9000	9.4000 B	250.00	101.4		P
Iron	75-125	980.4000	61.9000 U	1000.00	98.0		P
Lead	75-125	25.2300	5.5310	20.00	98.5		P
Manganese	75-125	548.3000	2.4000 B	500.00	109.2		P
Nickel	75-125	530.6000	10.0000 B	500.00	104.1		P
Selenium	75-125	10.5300	1.7872 U	10.00	105.3		P
Silver	75-125	43.7200	0.4334 U	50.00	87.4		P
Thallium	75-125	64.3200	1.9091 U	50.00	128.6	N	P
Vanadium	75-125	519.7000	0.2776 U	500.00	103.9		P
Zinc	75-125	548.4000	37.0000	500.00	102.3		P

Comments:

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

MW-6ARS

Lab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013

Matrix (soil/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 %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Mercury	75-125	0.9253	0.1000 U	1.00	92.5		CV

Comments:

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

MW-1CA

Lab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013

Matrix (soil/water): WATER

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Thallium		193.50		1.90	U	150.0	129.0		P

Comments:

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

MW-11AS

Lab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013FMatrix (soil/water): WATERLevel (low/med): LOW% Solids for Sample: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum	75-125	2175.0000	4.8858 U	2000.00	108.7		P
Antimony	75-125	526.2000	1.9791 U	500.00	105.2		P
Arsenic	75-125	45.4700	1.0278 U	40.00	113.7		P
Barium	75-125	2239.0000	78.4000 B	2000.00	108.0		P
Beryllium	75-125	55.4000	0.2176 U	50.00	110.8		P
Boron	75-125	1102.0000	4.1422 U	1000.00	110.2		P
Cadmium	75-125	54.3000	0.1510 U	50.00	108.6		P
Chromium	75-125	212.8000	0.6000 B	200.00	106.1		P
Cobalt	75-125	561.8000	15.1000 B	500.00	109.3		P
Copper	75-125	276.8000	0.7015 U	250.00	110.7		P
Iron	75-125	1026.0000	61.9000 U	1000.00	102.6		P
Lead	75-125	25.0300	2.3670 B	20.00	113.3		P
Manganese	75-125	1595.0000	974.3000	500.00	124.1		P
Mercury	75-125	0.8662	0.1000 U	1.00	86.6		CV
Nickel	75-125	562.6000	15.0000 B	500.00	109.5		P
Selenium	75-125	8.8710	1.7872 U	10.00	88.7		P
Silver	75-125	47.5400	0.4334 U	50.00	95.1		P
Thallium	75-125	74.9200	4.1540 B	50.00	141.5	N	P
Vanadium	75-125	539.5000	0.2776 U	500.00	107.9		P
Zinc	75-125	590.5000	18.8000 B	500.00	114.3		P

Comments:

U.S. EPA - CLP

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO

MW-11AA

Lab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013F

Matrix (soil/water): WATER

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Thallium		148.20		4.15	B	200.0	72.0		P

Comments:

QC SUMMARY REPORT

SDG: TOS013

Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Recovery Limits	RPDRef Value	%RPD	UCL
mb-102113	mb-102113	Alkalinity, Total (As CaCO3)	< 1	MG/L							
lcs-102113	lcs-102113	Alkalinity, Total (As CaCO3)	26.5	MG/L	25	< 1	106	80 120			
mb-101713	mb-101713	Alkalinity, Total (As CaCO3)	< 1	MG/L							
lcs-101713	lcs-101713	Alkalinity, Total (As CaCO3)	25.3	MG/L	25	< 1	101	80 120			
1310967-004AMS	MW-1CAMS	Alkalinity, Total (As CaCO3)	37.3	MG/L	25	12.9	98	75 125			
1310967-004ADUP	MW-1CDUP	Alkalinity, Total (As CaCO3)	12.8	MG/L					12.9	0.78	20
MB-41788	MB-41788	Biochemical Oxygen Demand	< 2	MG/L							
LCS-41788	LCS-41788	Biochemical Oxygen Demand	205	MG/L	198	< 2	104	85 116			
MB-41766	MB-41766	Biochemical Oxygen Demand	< 2	MG/L							
LCS-41766	LCS-41766	Biochemical Oxygen Demand	175	MG/L	198	< 2	88	85 116			
1310967-004ADUP	MW-1CDUP	Biochemical Oxygen Demand	< 2	MG/L					< 2		20
MB-103113	MB-103113	Bromide	< 0.5	MG/L							
LCS-103113	LCS-103113	Bromide	2.42	MG/L	2.5	< 0.5	97	90 110			
MB-103013	MB-103013	Bromide	< 0.5	MG/L							
LCS-103013	LCS-103013	Bromide	2.54	MG/L	2.5	< 0.5	102	90 110			
1310967-004AMS	MW-1CAMS	Bromide	0.99	MG/L	1	< 0.5	99	80 120			
1310967-004ADUP	MW-1CDUP	Bromide	< 0.5	MG/L					< 0.5		20
MBLK102913	MBLK102913	Chemical Oxygen Demand	< 10	MG/L							
LCS102913	LCS102913	Chemical Oxygen Demand	100	MG/L	100	< 10	100	90 110			

QC SUMMARY REPORT

SDG: TOS013

Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Recovery Limits	RPDRef Value	%RPD	UCL
MBLK102813	MBLK102813	Chemical Oxygen Demand	< 10	MG/L							
LCS102813	LCS102813	Chemical Oxygen Demand	99.3	MG/L	100	< 10	99	90 110			
1310967-004BMS	MW-1CMS	Chemical Oxygen Demand	110	MG/L	100	< 10	110	90 110			
1310967-004BDUP	MW-1CDUP	Chemical Oxygen Demand	< 10	MG/L					< 10		20
MB-103113	MB-103113	Chloride	< 2	MG/L							
LCS-103113	LCS-103113	Chloride	9.84	MG/L	10	< 2	98	90 110			
MB-103013	MB-103013	Chloride	< 2	MG/L							
LCS-103013	LCS-103013	Chloride	10.2	MG/L	10	< 2	102	90 110			
1310967-004AMS	MW-1CMS	Chloride	22.0	MG/L	10	11.2	108	80 120			
1310967-004ADUP	MW-1CDUP	Chloride	11.1	MG/L					11.2	0.81	20
MB-101713	MB-101713	Hardness (As CaCO3)	< 5	MG/L							
LCS-101713	LCS-101713	Hardness (As CaCO3)	990	MG/L	1000	< 5	99	80 120			
1310967-004DMS	MW-1CMS	Hardness (As CaCO3)	115	MG/L	100	20	95	75 125			
1310967-004DDUP	MW-1CDUP	Hardness (As CaCO3)	19	MG/L					20	5.1	20
MB-102113	MB-102113	Hardness (As CaCO3)	< 5	MG/L							
LCS-102113	LCS-102113	Hardness (As CaCO3)	990	MG/L	1000	< 5	99	80 120			
MB-101813	MB-101813	Nitrate as N	< 0.1	MG/L							
LCS-101813	LCS-101813	Nitrate as N	1.15	MG/L	1.13	< 0.1	102	90 110			
1310967-004BMS	1310967-004BMS	Nitrate as N	0.84	MG/L	0.5	0.32	103	90 110			
1310967-004BDUP	1310967-004BDUP	Nitrate as N	0.30	MG/L					0.32	8.6	20
MB-101913	MB-101913	Nitrate as N	< 0.1	MG/L							
LCS-101913	LCS-101913	Nitrate as N	1.14	MG/L	1.13	< 0.1	101	90 110			

TOS013/013F S142

QC SUMMARY REPORT

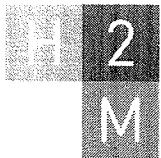
SDG: TOS013

Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Recovery Limits	RPDRef Value	%RPD	UCL
MB-101913	MB-101913	Nitrite as N	< 0.1	MG/L							
LCS-101913	LCS-101913	Nitrite as N	0.99	MG/L	1	< 0.1	99	90 110			
MB-101913	MB-101913	Nitrite as N	< 0.1	MG/L							
LCS-101913	LCS-101913	Nitrite as N	1.00	MG/L	1	< 0.1	100	90 110			
MB-101813	MB-101813	Nitrite as N	< 0.1	MG/L							
LCS-101813	LCS-101813	Nitrite as N	0.99	MG/L	1	< 0.1	99	90 110			
1310967-004AMS	MW-1CMS	Nitrite as N	0.53	MG/L	0.5	< 0.1	106	90 110			
1310967-004ADUP	MW-1CDUP	Nitrite as N	< 0.1	MG/L					< 0.1		20
MB-103013	MB-103013	Nitrogen, Ammonia (As N)	< 0.1	MG/L							
LCS-103013	LCS-103013	Nitrogen, Ammonia (As N)	1.03	MG/L	1	< 0.1	103	90 110			
1310967-004BMS	MW-1CMS	Nitrogen, Ammonia (As N)	0.54	MG/L	0.5	< 0.1	108	75 125			
1310967-004BDUP	MW-1CDUP	Nitrogen, Ammonia (As N)	< 0.1	MG/L					< 0.1		20
MB-41871	MB-41871	Nitrogen, Kjeldahl, Total	< 0.1	MG/L							
LCS-41871	LCS-41871	Nitrogen, Kjeldahl, Total	4.05	MG/L	4	< 0.1	101	90 110			
1310967-004BMS	MW-1CMS	Nitrogen, Kjeldahl, Total	9.05	MG/L	8	0.15	111	75 125			
1310967-004BDUP	MW-1CDUP	Nitrogen, Kjeldahl, Total	0.21	MG/L					0.15	31.0	20
MB-41842	MB-41842	Phenolics, Total Recoverable	< 5	UG/L							
LCS-41842	LCS-41842	Phenolics, Total Recoverable	26.4	UG/L	30	< 5	88	80 120			
1310967-004BMS	MW-1CMS	Phenolics, Total Recoverable	17.5	UG/L	20	< 5	88	75 125			
1310967-004BDUP	MW-1CDUP	Phenolics, Total Recoverable	< 5	UG/L					< 5		20
MB-41820	MB-41820	Phenolics, Total Recoverable	< 5	UG/L							
LCS-41820	LCS-41820	Phenolics, Total Recoverable	27.7	UG/L	30	< 5	92	80 120			

SDG: TOS013

QC SUMMARY REPORT

Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Recovery Limits	RPDRef Value	%RPD	UCL
MB-103113	MB-103113	Sulfate	< 5	MG/L							
LCS-103113	LCS-103113	Sulfate	9.99	MG/L	10	< 5	100	90 110			
MB-103013	MB-103013	Sulfate	< 5	MG/L							
LCS-103013	LCS-103013	Sulfate	10.7	MG/L	10	< 5	107	90 110			
1310967-004AMS	MW-1CMS	Sulfate	18.8	MG/L	10	8.86	99	80 120			
1310967-004ADUP	MW-1CDUP	Sulfate	8.86	MG/L					8.86		20
MB-102113	MB-102113	Total Dissolved Solids	< 10	MG/L							
LCS-102113	LCS-102113	Total Dissolved Solids	281	MG/L	300	< 10	94	80 120			
1310967-004Ams	MW-1CMS	Total Dissolved Solids	344	MG/L	300	64	93	75 125			
1310967-004Adup	MW-1CDUP	Total Dissolved Solids	57	MG/L					64	11.6	20
MB-102513	MB-102513	Total Organic Carbon	< 1	MG/L							
LCS-102513	LCS-102513	Total Organic Carbon	21.1	MG/L	25	< 1	84	80 120			
1310967-004CMS	MW-1CMS	Total Organic Carbon	10.5	MG/L	10	1.1	94	75 125			
1310967-004CDUP	MW-1CDUP	Total Organic Carbon	1.6	MG/L					1.1	39.5	20



labs

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

9. BLANK SUMMARY DATA AND RESULTS

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

4A

EPA SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

VBLK101813

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478Case No.: TOSSAS No.: _____ SDG No.: TOS013Lab File ID: 3\F62556.DLab Sample ID: VBLK101813Date Analyzed: 10/18/13Time Analyzed: 17:21GC Column: DB-624 ID: 0.18 (mm)Heated Purge: (Y/N) NInstrument ID: HP5973-1

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LFB101813	LFB101813	3\F62557.D	17:50
02	MW-11A	1310A35-011F	3\F62569.D	23:36
03	MW-11B	1310A35-012F	3\F62570.D	0:05
04	TB	1310A35-015A	3\F62571.D	0:34

COMMENTS:

page 1 of 1

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBK101813

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478

Case No.: TOS

SAS No. _____

SDG No.: TOS013

Matrix: (soil/water) WATER

Lab Sample ID: VBK101813

Sample wt/vol: 5 (g/mL ML

Lab File ID: 3\F62556.D

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 10/18/13

GC Column: DB-624

ID: 0.18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volu _____ (µL)

CONCENTRATION UNITS:

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

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBK101813

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478

Case No.: TOS

SAS No. _____

SDG No.: TOS013

Matrix: (soil/water) WATER

Lab Sample ID: VBK101813

Sample wt/vol: 5 (g/mL ML

Lab File ID: 3\F62556.D

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 10/18/13

GC Column: DB-624

ID: 0.18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (µL)

Soil Aliquot Volu _____ (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	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK101813

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478Case No.: TOS

SAS No.: _____

SDG No.: TOS013

Matrix: (soil/water)

WATERLab Sample ID: VBLK101813Sample wt/vol: 5(g/mL) MLLab File ID: 3\F62556.DLevel: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 10/18/13GC Column: DB-624ID: 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

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

U.S. EPA - CLP

3
BLANKSLab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
		C	1	C	2	C	3	C		C	
Aluminum	-11.0	B	-22.0	B	-45.0	B	-18.0	B	4.900	U	P
Antimony	-13.0	B	-12.0	B	-21.0	B	-2.1	B	2.000	U	P
Arsenic	2.1	B	2.3	B	1.1	B	1.0	U	1.000	U	P
Barium	4.3	U	4.3	U	4.3	U	4.3	U	4.300	U	P
Beryllium	0.5	B	0.2	U	-0.5	B	-1.0	B	0.220	U	P
Boron	5.5	B	4.6	B	-89.0	B	-4.2	B	4.100	U	P
Cadmium	0.5	B	0.2	U	0.2	U	-0.5	B	0.150	U	P
Calcium	7.4	U	-30.0	B	-110.0	B	-52.0	B	7.400	U	P
Chromium	0.4	U	0.4	U	0.4	U	-0.5	B	0.400	B	P
Cobalt	0.9	B	0.4	U	0.4	U	-0.7	B	0.350	U	P
Copper	0.9	B	0.7	U	-1.1	B	0.7	U	0.700	U	P
Iron	61.9	U	61.9	U	61.9	U	61.9	U	61.900	U	P
Lead	0.7	U	-3.0	B	0.7	U	1.6	B	0.720	U	P
Magnesium	10.5	U	-26.0	B	-170.0	B	-52.0	B	10.500	U	P
Manganese	0.5	B	0.1	U	0.1	U	-0.5	B	0.100	U	P
Nickel	0.5	B	0.5	U	0.5	U	0.5	U	0.480	U	P
Potassium	105.9	U	110.0	B	105.9	U	105.9	U	158.000	B	P
Selenium	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Silver	-0.9	B	-1.3	B	-1.4	B	0.4	U	0.430	U	P
Sodium	1976.3	U	1976.3	U	1976.3	U	1976.3	U	1980.000	U	P
Thallium	4.5	B	4.6	B	-5.6	B	1.9	U	2.100	B	P
Vanadium	0.5	B	0.3	U	0.3	U	-0.4	B	0.280	U	P
Zinc	0.7	B	0.3	U	0.3	U	-0.5	B	0.320	U	P

U.S. EPA - CLP

3
BLANKSLab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Prepa- ration Blank	C	M
			1	C	2	C	3	C			
Aluminum			-15.0	B	-11.0	B	50.4	B			P
Antimony			-2.6	B	-2.1	B	-3.0	B			P
Arsenic			-1.1	B	-1.8	B	-1.6	B			P
Barium			4.3	U	4.3	U	4.3	U			P
Beryllium			-1.0	B	-0.9	B	-0.7	B			P
Boron			-6.1	B	-9.4	B	-4.5	B			P
Cadmium			-0.4	B	-0.2	B	-0.2	B			P
Calcium			-56.0	B	-47.0	B	45.1	B			P
Chromium			0.4	U	0.4	U	0.4	U			P
Cobalt			-0.5	B	-0.4	B	-0.7	B			P
Copper			-2.1	B	0.7	U	0.7	U			P
Iron			61.9	U	61.9	U	61.9	U			P
Lead			1.4	B	1.1	B	2.1	B			P
Magnesium			-47.0	B	-45.0	B	51.1	B			P
Manganese			-0.4	B	-0.2	B	-0.2	B			P
Nickel			0.5	U	0.5	U	0.5	U			P
Potassium			118.0	B	148.0	B	105.9	U			P
Selenium			1.8	U	1.8	U	1.8	U			P
Silver			0.4	U	0.4	U	0.4	U			P
Sodium			1976.3	U	1976.3	U	1976.3	U			P
Thallium			-5.9	B	-8.2	B	2.2	B			P
Vanadium			-0.5	B	0.3	U	0.3	U			P
Zinc			-0.4	B	1.1	B	0.3	U			P

U.S. EPA - CLP

3
BLANKS

Lab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L) C		Continuing Calibration Blank (ug/L)						Prepa- ration Blank C		M
	1	C	2	C	3	C					
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.100	U	CV

U.S. EPA - CLP

3
BLANKS

Lab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
	C		1	C	2	C	3	C	C		
Mercury			0.1	U	0.1	U	0.1	U			CV

U.S. EPA - CLP

3
BLANKS

Lab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
	C		1	C	2	C	3	C	C		
Mercury			0.1	U							CV

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

PBWF

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013FMatrix (soil/water): WATERLab Sample ID: MB1-41952Level (low/med): LOW

Date Received:

% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4.9	U		P
7440-36-0	Antimony	2.0	U		P
7440-38-2	Arsenic	2.1	B		P
7440-39-3	Barium	4.3	U		P
7440-41-7	Beryllium	0.22	U		P
7440-42-8	Boron	4.1	U		P
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	7.4	U		P
7440-47-3	Chromium	0.37	U		P
7440-48-4	Cobalt	0.35	U		P
7440-50-8	Copper	0.70	U		P
7439-89-6	Iron	61.9	U		P
7439-92-1	Lead	0.72	U		P
7439-95-4	Magnesium	10.5	U		P
7439-96-5	Manganese	0.10	U		P
7440-02-0	Nickel	0.48	U		P
7440-09-7	Potassium	106	U		P
7782-49-2	Selenium	1.8	U		P
7440-22-4	Silver	0.43	U		P
7440-23-5	Sodium	1980	U		P
7440-28-0	Thallium	3.5	B		P
7440-62-2	Vanadium	0.28	U		P
7440-66-6	Zinc	0.32	U		P

Comments:

Date Reported 11/4/2013Dissolved Metals

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

PBWF

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013FMatrix (soil/water): WATERLab Sample ID: MB1-41985Level (low/med): LOW

Date Received:

% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-97-6	Mercury	0.10	U		CV

Comments:

Date Reported 11/4/2013Dissolved Metals

U.S. EPA - CLP

3
BLANKSLab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.:

SAS No.:

SDG No.: TOS013FPreparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L) C		Continuing Calibration Blank (ug/L)						Prepa- ration Blank C		M
	1	C	2	C	3	C					
Aluminum	-11.0	B	-22.0	B	-45.0	B	-18.0	B	4.900	U	P
Antimony	-13.0	B	-12.0	B	-21.0	B	-2.1	B	2.000	U	P
Arsenic	2.1	B	2.3	B	1.1	B	1.0	U	4.740	B	P
Barium	4.3	U	4.3	U	4.3	U	4.3	U	4.300	U	P
Beryllium	0.5	B	0.2	U	-0.5	B	-1.0	B	0.220	U	P
Boron	5.5	B	4.6	B	-89.0	B	-4.2	B	4.100	U	P
Cadmium	0.5	B	0.2	U	0.2	U	-0.5	B	0.150	U	P
Calcium	7.4	U	-30.0	B	-110.0	B	-52.0	B	7.400	U	P
Chromium	0.4	U	0.4	U	0.4	U	-0.5	B	0.370	U	P
Cobalt	0.9	B	0.4	U	0.4	U	-0.7	B	0.350	U	P
Copper	0.9	B	0.7	U	-1.1	B	0.7	U	0.700	U	P
Iron	61.9	U	61.9	U	61.9	U	61.9	U	61.900	U	P
Lead	0.7	U	-3.0	B	0.7	U	1.6	B	0.720	U	P
Magnesium	10.5	U	-26.0	B	-170.0	B	-52.0	B	10.500	U	P
Manganese	0.5	B	0.1	U	0.1	U	-0.5	B	0.100	U	P
Nickel	0.5	B	0.5	U	0.5	U	0.5	U	0.480	U	P
Potassium	105.9	U	110.0	B	105.9	U	105.9	U	106.000	U	P
Selenium	1.8	U	1.8	U	1.8	U	1.8	U	1.800	U	P
Silver	-0.9	B	-1.3	B	-1.4	B	0.4	U	0.430	U	P
Sodium	1976.3	U	1976.3	U	1976.3	U	1976.3	U	1980.000	U	P
Thallium	4.5	B	4.6	B	-5.6	B	1.9	U	1.900	U	P
Vanadium	0.5	B	0.3	U	0.3	U	-0.4	B	0.280	U	P
Zinc	0.7	B	0.3	U	0.3	U	-0.5	B	0.320	U	P

U.S. EPA - CLP

3
BLANKS

Lab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013FPreparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
	C		1	C	2	C	3	C	C		
Aluminum			-15.0	B	-11.0	B	50.4	B			P
Antimony			-2.6	B	-2.1	B	-3.0	B			P
Arsenic			-1.1	B	-1.8	B	-1.6	B			P
Barium			4.3	U	4.3	U	4.3	U			P
Beryllium			-1.0	B	-0.9	B	-0.7	B			P
Boron			-6.1	B	-9.4	B	-4.5	B			P
Cadmium			-0.4	B	-0.2	B	-0.2	B			P
Calcium			-56.0	B	-47.0	B	45.1	B			P
Chromium			0.4	U	0.4	U	0.4	U			P
Cobalt			-0.5	B	-0.4	B	-0.7	B			P
Copper			-2.1	B	0.7	U	0.7	U			P
Iron			61.9	U	61.9	U	61.9	U			P
Lead			1.4	B	1.1	B	2.1	B			P
Magnesium			-47.0	B	-45.0	B	51.1	B			P
Manganese			-0.4	B	-0.2	B	-0.2	B			P
Nickel			0.5	U	0.5	U	0.5	U			P
Potassium			118.0	B	148.0	B	105.9	U			P
Selenium			1.8	U	1.8	U	1.8	U			P
Silver			0.4	U	0.4	U	0.4	U			P
Sodium			1976.3	U	1976.3	U	1976.3	U			P
Thallium			-5.9	B	-8.2	B	2.2	B			P
Vanadium			-0.5	B	0.3	U	0.3	U			P
Zinc			-0.4	B	1.1	B	0.3	U			P

U.S. EPA - CLP

3
BLANKS

Lab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013F

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
		C	1	C	2	C	3	C		C	
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.100	U	CV

U.S. EPA - CLP

3
BLANKS

Lab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013F

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
	C		1	C	2	C	3	C	C		
Mercury			0.1	U	0.1	U	0.1	U			CV

U.S. EPA - CLP

3
BLANKS

Lab Name: H2M LABS INC

Contract:

Lab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013F

Preparation Blank Matrix (soil/water): WATER

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

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
	C		1	C	2	C	3	C	C		
Mercury			0.1	U							CV

QC SUMMARY REPORT

SDG: TOS013

Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Recovery Limits	RPDRef Value	%RPD	UCL
mb-102113	mb-102113	Alkalinity, Total (As CaCO3)	< 1	MG/L							
lcs-102113	lcs-102113	Alkalinity, Total (As CaCO3)	26.5	MG/L	25	< 1	106	80 120			
mb-101713	mb-101713	Alkalinity, Total (As CaCO3)	< 1	MG/L							
lcs-101713	lcs-101713	Alkalinity, Total (As CaCO3)	25.3	MG/L	25	< 1	101	80 120			
1310967-004AMS	MW-1CMS	Alkalinity, Total (As CaCO3)	37.3	MG/L	25	12.9	98	75 125			
1310967-004ADUP	MW-1CDUP	Alkalinity, Total (As CaCO3)	12.8	MG/L					12.9	0.78	20
MB-41788	MB-41788	Biochemical Oxygen Demand	< 2	MG/L							
LCS-41788	LCS-41788	Biochemical Oxygen Demand	205	MG/L	198	< 2	104	85 116			
MB-41766	MB-41766	Biochemical Oxygen Demand	< 2	MG/L							
LCS-41766	LCS-41766	Biochemical Oxygen Demand	175	MG/L	198	< 2	88	85 116			
1310967-004ADUP	MW-1CDUP	Biochemical Oxygen Demand	< 2	MG/L					< 2		20
MB-103113	MB-103113	Bromide	< 0.5	MG/L							
LCS-103113	LCS-103113	Bromide	2.42	MG/L	2.5	< 0.5	97	90 110			
MB-103013	MB-103013	Bromide	< 0.5	MG/L							
LCS-103013	LCS-103013	Bromide	2.54	MG/L	2.5	< 0.5	102	90 110			
1310967-004AMS	MW-1CMS	Bromide	0.99	MG/L	1	< 0.5	99	80 120			
1310967-004ADUP	MW-1CDUP	Bromide	< 0.5	MG/L					< 0.5		20
MBLK102913	MBLK102913	Chemical Oxygen Demand	< 10	MG/L							
LCS102913	LCS102913	Chemical Oxygen Demand	100	MG/L	100	< 10	100	90 110			

QC SUMMARY REPORT

SDG: TOS013

Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Recovery Limits	RPDRef Value	%RPD	UCL
MBLK102813	MBLK102813	Chemical Oxygen Demand	< 10	MG/L							
LCS102813	LCS102813	Chemical Oxygen Demand	99.3	MG/L	100	< 10	99	90 110			
1310967-004BMS	MW-1CMS	Chemical Oxygen Demand	110	MG/L	100	< 10	110	90 110			
1310967-004BDUP	MW-1CDUP	Chemical Oxygen Demand	< 10	MG/L					< 10		20
MB-103113	MB-103113	Chloride	< 2	MG/L							
LCS-103113	LCS-103113	Chloride	9.84	MG/L	10	< 2	98	90 110			
MB-103013	MB-103013	Chloride	< 2	MG/L							
LCS-103013	LCS-103013	Chloride	10.2	MG/L	10	< 2	102	90 110			
1310967-004AMS	MW-1CMS	Chloride	22.0	MG/L	10	11.2	108	80 120			
1310967-004ADUP	MW-1CDUP	Chloride	11.1	MG/L					11.2	0.81	20
MB-101713	MB-101713	Hardness (As CaCO3)	< 5	MG/L							
LCS-101713	LCS-101713	Hardness (As CaCO3)	990	MG/L	1000	< 5	99	80 120			
1310967-004DMS	MW-1CMS	Hardness (As CaCO3)	115	MG/L	100	20	95	75 125			
1310967-004DDUP	MW-1CDUP	Hardness (As CaCO3)	19	MG/L					20	5.1	20
MB-102113	MB-102113	Hardness (As CaCO3)	< 5	MG/L							
LCS-102113	LCS-102113	Hardness (As CaCO3)	990	MG/L	1000	< 5	99	80 120			
MB-101813	MB-101813	Nitrate as N	< 0.1	MG/L							
LCS-101813	LCS-101813	Nitrate as N	1.15	MG/L	1.13	< 0.1	102	90 110			
1310967-004BMS	1310967-004BMS	Nitrate as N	0.84	MG/L	0.5	0.32	103	90 110			
1310967-004BDUP	1310967-004BDUP	Nitrate as N	0.30	MG/L					0.32	8.6	20
MB-101913	MB-101913	Nitrate as N	< 0.1	MG/L							
LCS-101913	LCS-101913	Nitrate as N	1.14	MG/L	1.13	< 0.1	101	90 110			

QC SUMMARY REPORT

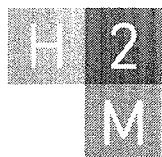
SDG: TOS013

Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Recovery Limits	RPDRef Value	%RPD	UCL
MB-101913	MB-101913	Nitrite as N	< 0.1	MG/L							
LCS-101913	LCS-101913	Nitrite as N	0.99	MG/L	1	< 0.1	99	90 110			
MB-101913	MB-101913	Nitrite as N	< 0.1	MG/L							
LCS-101913	LCS-101913	Nitrite as N	1.00	MG/L	1	< 0.1	100	90 110			
MB-101813	MB-101813	Nitrite as N	< 0.1	MG/L							
LCS-101813	LCS-101813	Nitrite as N	0.99	MG/L	1	< 0.1	99	90 110			
1310967-004AMS	MW-1CMS	Nitrite as N	0.53	MG/L	0.5	< 0.1	106	90 110			
1310967-004ADUP	MW-1CDUP	Nitrite as N	< 0.1	MG/L					< 0.1		20
MB-103013	MB-103013	Nitrogen, Ammonia (As N)	< 0.1	MG/L							
LCS-103013	LCS-103013	Nitrogen, Ammonia (As N)	1.03	MG/L	1	< 0.1	103	90 110			
1310967-004BMS	MW-1CMS	Nitrogen, Ammonia (As N)	0.54	MG/L	0.5	< 0.1	108	75 125			
1310967-004BDUP	MW-1CDUP	Nitrogen, Ammonia (As N)	< 0.1	MG/L					< 0.1		20
MB-41871	MB-41871	Nitrogen, Kjeldahl, Total	< 0.1	MG/L							
LCS-41871	LCS-41871	Nitrogen, Kjeldahl, Total	4.05	MG/L	4	< 0.1	101	90 110			
1310967-004BMS	MW-1CMS	Nitrogen, Kjeldahl, Total	9.05	MG/L	8	0.15	111	75 125			
1310967-004BDUP	MW-1CDUP	Nitrogen, Kjeldahl, Total	0.21	MG/L					0.15	31.0	20
MB-41842	MB-41842	Phenolics, Total Recoverable	< 5	UG/L							
LCS-41842	LCS-41842	Phenolics, Total Recoverable	26.4	UG/L	30	< 5	88	80 120			
1310967-004BMS	MW-1CMS	Phenolics, Total Recoverable	17.5	UG/L	20	< 5	88	75 125			
1310967-004BDUP	MW-1CDUP	Phenolics, Total Recoverable	< 5	UG/L					< 5		20
MB-41820	MB-41820	Phenolics, Total Recoverable	< 5	UG/L							
LCS-41820	LCS-41820	Phenolics, Total Recoverable	27.7	UG/L	30	< 5	92	80 120			

QC SUMMARY REPORT

SDG: TOS013

Sample ID:	Client Sample ID:	Analyte	Result	Units	Spike Amount	Sample Result	%REC	Recovery Limits	RPDRef Value	%RPD	UCL
MB-103113	MB-103113	Sulfate	< 5	MG/L							
LCS-103113	LCS-103113	Sulfate	9.99	MG/L	10	< 5	100	90 110			
MB-103013	MB-103013	Sulfate	< 5	MG/L							
LCS-103013	LCS-103013	Sulfate	10.7	MG/L	10	< 5	107	90 110			
1310967-004AMS	MW-1CMS	Sulfate	18.8	MG/L	10	8.86	99	80 120			
1310967-004ADUP	MW-1CDUP	Sulfate	8.86	MG/L					8.86		20
MB-102113	MB-102113	Total Dissolved Solids	< 10	MG/L							
LCS-102113	LCS-102113	Total Dissolved Solids	281	MG/L	300	< 10	94	80 120			
1310967-004Ams	MW-1CMS	Total Dissolved Solids	344	MG/L	300	64	93	75 125			
1310967-004Adup	MW-1CDUP	Total Dissolved Solids	57	MG/L					64	11.6	20
MB-102513	MB-102513	Total Organic Carbon	< 1	MG/L							
LCS-102513	LCS-102513	Total Organic Carbon	21.1	MG/L	25	< 1	84	80 120			
1310967-004CMS	MW-1CMS	Total Organic Carbon	10.5	MG/L	10	1.1	94	75 125			
1310967-004CDUP	MW-1CDUP	Total Organic Carbon	1.6	MG/L					1.1	39.5	20



labs

575 Broad Hollow Road
Melville, NY 11747

tel 631.694.3040
fax 631.420.8436

10. INTERNAL STANDARD AREA DATA
10.1 VOLATILES

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: H2M LABS INCSDG No.: TOS013Lab Code: 10478Lab File ID (Standard): 3\F62554.DDate Analyzed: 10/18/2013Instrument ID: HP5973-1Time Analyzed: 16:23GC Column: DB-624 ID: 0.18 (mm)Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 (CBZ) AREA #	RT #	IS4 14DCB AREA #	RT #
12 HOUR STD	197107	3.830	296889	4.360	135476	6.490	135067	7.970
UPPER LIMIT	394214	4.330	593778	4.860	270952	6.990	270134	8.470
LOWER LIMIT	98554	3.330	148445	3.860	67738	5.990	67534	7.470
SAMPLE NO.								
01 VBLK101813	198650	3.83	288204	4.36	130907	6.49	131389	7.96
02 LFB101813	199035	3.83	288603	4.36	131580	6.49	136771	7.96
03 MW-11A	193822	3.83	282084	4.36	127400	6.49	130204	7.95
04 MW-11B	191837	3.83	283466	4.36	126930	6.49	125034	7.96
05 TB	186784	3.83	278111	4.36	126642	6.49	127615	7.95

IS1 = Pentafluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

IS2 = 1,4-Difluorobenzene

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.

PREMIER ENVIRONMENTAL
SERVICES, INC.

DATA VALIDATION REPORT
OF THE
TOWN OF SOUTHAMPTON
NORTH SEA LANDFILL

ORGANIC AND INORGANIC ANALYSES
OF AQUEOUS SAMPLES

H2M LABS INC.
MELVILLE, NEW YORK

SDG NUMBER:
TOS013/TOS013F

January, 2014

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

NYS DEC Data Usability Summary Report

DATA VALIDATION FOR: Volatile Organic Analyses

SITE: North Sea Landfill

CONTRACT LAB: H2M Laboratories
Melville, New York

REPORT NO.: TOS013/013F

REVIEWER: Renee Cohen

DATE REVIEW COMPLETED: December, 2013

MATRIX: 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 twenty four (24) aqueous samples, one (1) Field Blank sample and one (1) Trip Blank samples. The samples associated with this data set were collected October 16, 2013 and October 17, 2013. The samples were received at H2M Laboratories located in Melville, New York on October 17, 2013 and October 18, 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.

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 8260C. 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-11B (1310A35-012).

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-11B was collected on October 17, 2013. The sample analysis was completed by October 19, 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 not reported with this data set.

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 LFB101813. 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

One (1) aqueous method blank sample is associated with these sample analyses. This method blank sample was free from contamination of all target and non-target (TIC) analytes.

B) Field Blank contamination

The Field Blank sample was not analyzed for volatile organic analytes.

C) Trip Blank contamination

One (1) Trip Blank sample was collected and analyzed with this data set. The TB samples are associated with this data set was free from contamination of target analytes and non-target analytes.

D) Storage Blank contamination

The Storage Blank sample is not associated with this data set.

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 May 3-4, 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 October 18, 2013 (3\F62554.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 May 4, 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 (29.9%), Dibromochloromethane (21.1%), Bromoform (31.2%) and 1,2-Dibromo-3-chloropropane (39.1%). 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 October 18, 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
10/18/2013 (3\F62554.D)	Acrylonitrile	20.3
	Trichlorofluoromethane	20.3
	Iodomethane	35.1
	Acetone	30.6
	Carbon Disulfide	29.9
	trans 1,4-Dichlorobutene	38.7
	Bromoform	22.6

The associated target analytes in the sample chosen for data review (MW-11B) 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 ± 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.

Three (3) samples on the COC were marked for volatile organic analyses. One (1) aqueous sample was chosen for data review and DUSR preparation. Sample MW-11B was analyzed for Volatile Organic analytes using EPA Method 8260C. Tentatively Identified Compounds (TIC's) were analyzed, none were reported in this sample. The samples were analyzed in accordance with the cited method.

Sample MW-11B was analyzed without dilution. The laboratory provided the quantitation report, chromatogram and analyte spectra in the New York State 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 October 17, 2013 and October 17, 2013. 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-11B 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. Qualified data result pages are 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.:	TOS013/TOS013F
REVIEWER:	Renee Cohen
DATE REVIEW COMPLETED:	December, 2013
MATRIX:	Aqueous

The Chain of Custody (COC) documentation associated with this data set listed twenty one (21) aqueous samples and one (1) Field Bank sample. 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 October 16, 2013 and October 17, 2013 and delivered to H2M Laboratories located in Melville, New York. The samples were received at the laboratory on October 17, 2013 and October 18, 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.

DATA USABILITY SUMMARY REPORT (DUSR)

Inorganic Data Assessment

1. OVERVIEW

This data report includes the analysis of 5% of the aqueous samples that were collected on October 14, 2013, October 16, 2013 and October 17, 2013. The samples were received at the laboratory on October 17, 2013 and October 18, 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-1C (1310967-004) was reviewed for Total Metals. This sample was analyzed for a subset of target metals. Sample MW-11A (1310A43-002) was reviewed for Dissolved/Filtered Metals. This sample was analyzed for the Total Analyte List (TAL) of metals including mercury.

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 Metal Analyses - The total metal aqueous sample chosen for review was prepared for ICP metals in one (1) batch on October 30, 2013. The sample digestate was analyzed in one (1) analytical sequence on November 1, 2013. The Total ICP digestion and analysis was performed within the method holding time. Mercury was prepared and analyzed on November 1, 2013. The sample chosen for review was not analyzed for Mercury.

Filtered Metal Analyses - The filtered metal aqueous sample chosen for review was prepared for ICP metals in one (1) batch on October 30, 2013. The sample digestate was analyzed in one (1) analytical sequence on November 1, 2013. The Total ICP digestion and analysis was performed within the method holding time. The sample was prepared and analyzed for mercury on November 1, 2013.

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 Metal Analyses – One (1) analytical sequence is associated with the samples in this data set. The samples were analyzed November 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.

Filtered Metal Analyses – One (1) analytical sequence is associated with the samples in this data set. The samples were analyzed November 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.

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 Filtered Mercury sample digestates associated with this data set were analyzed in one (1) sequence on November 1, 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.

DATA USABILITY SUMMARY REPORT (DUSR)

Inorganic Data Assessment

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.

Total Metal Analyses –The CRDL recovery of the target analytes met QC criteria in the opening and closing CRDL standard with the exception of Lead (67.8%/124%) and Thallium (120.8%) in the CRI sample analysis. Lead has been estimated “J” qualified in the sample chosen for data review. Thallium is not a target analyte in sample chosen for data review, therefore no action has been taken.

Filtered Metal Analyses - The CRDL recovery of the target analytes met QC criteria in the opening and closing CRDL standard with the exception of Lead (67.8%/124%) and Thallium (120.8%) in the CRI sample analysis. Lead and Thallium have been estimated “J” qualified in the sample chosen for data review.

The 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 November 1, 2013.

DATA USABILITY SUMMARY REPORT (DUSR)

Inorganic Data Assessment

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-1C (1310967-004) for ICP Metals. The percent recovery of all target analytes met QC criteria in this matrix spike analysis with the exception of Thallium (128.6%). Thallium was not reported in the sample chosen for data review, therefore, no action has been taken.

Filtered Metal Analyses - Site specific matrix spike (MS) analysis was performed on sample MW-11A (1310A43-002-002). 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 Thallium (141.5%). Thallium has been qualified estimated "J" qualified 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 pre-digestion spike recovery falls outside the 75-125% control limit.

Total Metal Analyses - Post digestion spike analysis was performed with each of these Total Metal and Filtered Metal analyses. Post digestion spike analysis of Thallium in the Total Metal analysis (129%) confirmed matrix interference. Data was not qualified based on this outlier.

Filtered Metal Analyses - Thallium in the filtered post spike matrix spike analysis was recovered at 72%. This recovery confirms matrix interference for Thallium. Thallium has been previously qualified "J estimated, therefore no additional qualifiers were applied.

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-1C. 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.

DATA USABILITY SUMMARY REPORT (DUSR)

Inorganic Data Assessment

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-1C. All %Differences met QC criteria with the exception of Magnesium (22.4%) in the serial dilution analysis. Magnesium has been estimated "J" qualified 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 Zinc (11.7%) met QC criteria in the serial dilution analysis. Zinc 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 if 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.

DATA USABILITY SUMMARY REPORT (DUSR)

Inorganic Data Assessment

12. INSTRUMENT QC 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-1C (1310967-004) and Filtered Metals – MW-11A (1310A43-002).

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 total metal sample chosen for data review (MW-1C) is not the field duplicate sample that was included in this data set. The filtered metal sample (MW-11A) is not the sample chosen as the field duplicate sample. These samples chosen for review haven been qualified based on the results of the field duplicate sample analyses.

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 samples chosen for Total and Filtered Metal data review in this data set are acceptable for use with the noted data qualifiers. The above text details the QC outliers noted during this review.

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: January, 2013

MATRIX: Aqueous

The Chain of Custody (COC) documentation associated with this data set listed twenty one (21) aqueous samples and one (1) Field Blank sample. The samples in this data set were collected October 16, 2013 and October 17, 2013. The samples were delivered to H2M Laboratories located in Melville, New York. The samples were received at the laboratory on October 17, 2013 and October 18, 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 review of 5% of the aqueous samples that were collected October 16, 2013 and October 17, 2013. The samples were received at the laboratory on October 17, 2013 and October 18, 2013 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. Twenty one (21) field samples and one (1) Field Blank sample was 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-12A (1310A35-013).

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-1C (1310967-004) 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-1C (1310967-004) 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.

Each of the Field Blank samples reported in this data set was free from contamination of all target wet chemistry analytes with the exception of Total Dissolved Solids (TDS) at a concentration of 10 mg/l. TDS was reported in the sample chosen for review (MW-1C) at a concentration higher than that in the field blank sample. No action was taken.

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 if 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-12A (1310A35-013) was the sample chosen for complete review. All analytes were reported in sample MW-12A were reported without dilution with the exception of Alkalinity (DF 1:4) (1010 mg/l) and Hardness (DF 1:4) (132 mg/l).

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 twenty-one (21) 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-12A (1310A35-013). 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-12A are acceptable for use without data qualifiers.

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.

TABLE 1

CLIENT SAMPLE ID

MW-11B

MW-1C

MW-11A

MW-12A

* chosen for Volatile Organic Analyses
** chosen for Total Metal Analyses
*** chosen for Dissolved Metal Analyses
**** chosen for Wet Chemistry Analyses

LABORATORY SAMPLE ID

1310A35-012*

1310967-004**

1310A43-002***

1310A35-013****

APPENDIX B

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-11B

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478

Case No.: TOS

SAS No. _____

SDG No.: TOS013

Matrix: (soil/water) WATER

Lab Sample ID: 1310A35-012F

Sample wt/vol: 5 (g/mL ML

Lab File ID: 3\F62570.D

Level: (low/med) LOW

Date Received: 10/18/13

% Moisture: not dec.

Date Analyzed: 10/19/13

GC Column: DB-624

ID: 0.18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (μL)

Soil Aliquot Volu _____ (μL)

CONCENTRATION UNITS:

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	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	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

HH
HH
HH
HH

HH

TOS013 V23

1B
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-11B

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478

Case No.: TOS

SAS No. _____

SDG No.: TOS013

Matrix: (soil/water) WATER

Lab Sample ID: 1310A35-012F

Sample wt/vol: 5 (g/mL ML

Lab File ID: 3\F62570.D

Level: (low/med) LOW

Date Received: 10/18/13

% Moisture: not dec.

Date Analyzed: 10/19/13

GC Column: DB-624

ID: 0.18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: _____ (μL)

Soil Aliquot Volu _____ (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	3	U
95-50-1	1,2-Dichlorobenzene	3	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-11B

Lab Name: H2M LABS INC

Contract: _____

Lab Code: 10478Case No.: TOS

SAS No.: _____

SDG No.: TOS013

Matrix: (soil/water)

WATERLab Sample ID: 1310A35-012FSample wt/vol: 5(g/mL) MLLab File ID: 3\F62570.DLevel: (low/med) LOWDate Received: 10/18/13

% Moisture: not dec.

Date Analyzed: 10/19/13GC Column: DB-624ID: 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

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-1C

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013Matrix (soil/water): WATERLab Sample ID: 1310967-004Level (low/med): LOWDate Received: 10/17/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	4460	B		P
7439-89-6	Iron	61.9	U		P
7439-92-1	Lead	5.5			P
7439-95-4	Magnesium	2220	B	E	P
7439-96-5	Manganese	2.4	B		P
7440-09-7	Potassium	1380	B		P
7440-23-5	Sodium	9020			P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-11A

Lab Name: H2M LABS INCLab Code: 10478

Case No.

SAS No.:

SDG No.: TOS013FMatrix (soil/water): WATERLab Sample ID: 1310A43-002Level (low/med): LOWDate Received: 10/18/2013% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4.9	U		P
7440-36-0	Antimony	2.0	U		P
7440-38-2	Arsenic	1.0	U		P
7440-39-3	Barium	78.4	B		P
7440-41-7	Beryllium	0.22	U		P
7440-42-8	Boron	4.1	U		P
7440-43-9	Cadmium	0.15	U		P
7440-70-2	Calcium	26100			P
7440-47-3	Chromium	0.60	B		P
7440-48-4	Cobalt	15.1	B		P
7440-50-8	Copper	0.70	U		P
7439-89-6	Iron	61.9	U		P
7439-92-1	Lead	2.4	B		P
7439-95-4	Magnesium	9700			P
7439-96-5	Manganese	974			P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	15.0	B		P
7440-09-7	Potassium	4290	B		P
7782-49-2	Selenium	1.8	U		P
7440-22-4	Silver	0.43	U		P
7440-23-5	Sodium	8260			P
7440-28-0	Thallium	4.2	B	N	P
7440-62-2	Vanadium	0.28	U		P
7440-66-6	Zinc	18.8	B	E	P

Color Before: COLORLESS Clarity Before: CLEAR

Texture: _____

Color After: COLORLESS Clarity After: CLEAR

Artifacts: _____

Comments:

Date Reported 11/4/2013
Dissolved Metals



575 Broad Hollow Road, 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

Attn To : Paul Dimaria

Collected : 10/17/2013 1:55:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-013
Client Sample ID: MW-12A

Sample Information:

Type : Groundwater

Origin:

no data quals applied
(R)

Analytical Method: SM2320B :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Alkalinity, Total (As CaCO ₃)	101	D	4	mg/L	10/21/2013 12:56 PM	Container-01 of 02

Analytical Method: E300.0 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Bromide	< 0.50		1	mg/L	10/31/2013 2:51 AM	Container-01 of 02
Chloride	16.4		1	mg/L	10/31/2013 2:51 AM	Container-01 of 02
Sulfate	27.4		1	mg/L	10/31/2013 2:51 AM	Container-01 of 02

Analytical Method: SM5210B :

Prep Method:

SM5210B

Prep Date: 10/18/2013 9:40:40 AM

Analyst: CN
Container:

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Biochemical Oxygen Demand	< 2		1	mg/L	10/18/2013 11:00 AM	Container-01 of 02

NOTES:

Blank depletion exceeds 0.2 mg/L - average depletion of 0.40 mg/L

Analytical Method: E410.4 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: CN Container:
Chemical Oxygen Demand	< 10.0		1	mg/L	10/29/2013 8:45 AM	Container-01 of 01

Analytical Method: SM2340C :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: HT Container:
Hardness (As CaCO ₃)	132	D	4	mg/L	10/21/2013 4:00 PM	Container-01 of 01

Analytical Method: SM4500-NH3 H :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: bka Container:
Nitrogen, Ammonia (As N)	1.31		1	mg/L	10/30/2013 2:10 PM	Container-01 of 01

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrite as N	< 0.10		1	mg/L	10/19/2013 8:30 AM	Container-01 of 02

Analytical Method: E353.2 :

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Analyst: TF Container:
Nitrate as N	1.00		1	mg/L	10/19/2013 9:55 AM	Container-01 of 01

Analytical Method: E420.1 :

Prep Method:

E420.1

Prep Date: 10/23/2013 8:00:00 AM

Analyst: EM
Container:

Parameter(s)	Results	Qualifier	D.F.	Units	Analyzed:	Container:
Phenolics, Total Recoverable	< 5.0		1	µg/L	10/24/2013 8:18 AM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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labs

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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

Attn To : Paul Dimaria

Collected : 10/17/2013 1:55:00 PM

Received : 10/18/2013 10:20:00 AM

Collected By PWG99

Lab No. : 1310A35-013

Client Sample ID: MW-12A

Sample Information:

Type : Groundwater

Origin:

no data quals applied (re)

<u>Analytical Method:</u> SM2540C : IOC						
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Analyst:</u> MLM <u>Container:</u>
Total Dissolved Solids	176		1	mg/L	10/21/2013 3:15 PM	Container-01 of 02
<u>Analytical Method:</u> E351.2 : <u>Prep Method:</u> E351.2 <u>Prep Date:</u> 10/25/2013 4:45:00 AM						
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Analyst:</u> TF <u>Container:</u>
Nitrogen, Kjeldahl, Total	1.82		1	mg/L	10/25/2013 12:05 PM	Container-01 of 01
<u>Analytical Method:</u> SM5310B :						
<u>Parameter(s)</u>	<u>Results</u>	<u>Qualifier</u>	<u>D.F.</u>	<u>Units</u>	<u>Analyzed:</u>	<u>Analyst:</u> CO <u>Container:</u>
Total Organic Carbon	2.7		1	mg/L	10/26/2013 3:41 PM	Container-01 of 01

Qualifiers: E = Value above quantitation range, Value estimated.
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, Value estimated.
J = Estimated value - below calibration range
S = Recovery exceeded control limits for this analyte
N = Indicates presumptive evidence of compound

Date Reported : 11/7/2013

Joann M. Slavin

Laboratory Manager

Test results meet the requirements of NELAC unless otherwise noted.

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TOS013 W44

APPENDIX C



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575 Broad Hollow Rd., Melville, NY 11747
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www.h2mlabs.com

03604

EXTERNAL CHAIN OF CUSTODY

CLIENT: PWGC TOS

H2M SDG NO: TOS 013

PROJECT NAME/NUMBER

NOA's Landfill
1370 Majors Park
Southampton, NY

SAMPLERS: (Signature)/Client

ARA (Amanda Raccanella)

DELIVERABLES:

ASP Category B

TURNAROUND TIME:

Standard

CLIENT:

PWGC TOS

H2M SDG NO: TOS 013

NOTES:

derek@pwgc.com

Project Contact:

Derek Ershar

Phone Number:

631-589-6353

PIS/Quote

Sample Container
Description

Routine Parameters

Base line Metals

Cooler temp $3.3, 5.3$ °C 122336969/122076478
pH strips (10BDH0431) ≤ 3 $9 \geq 12$
Free Cl₂ strips (041912C) Present/Absent
HNO₃: 52159 H₂SO₄ 52171 HCl: 5231
Na₂S₂O₃: 22800123 NH₄Cl: 47072741
ZnAc: 2107346 NaOH: B0694769

Total No. of
Containers

ANALYSIS REQUESTED

LAB I.D. NO.

REMARKS:

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ANALYSIS REQUESTED	LAB I.D. NO.	REMARKS:
10/16/13	1100	GW	MW-GB	7	X X	1310967-006	
	1135		MW-GBR	1	X X	005	
	1440		MW-IC	1	X	004	
	↓		MW-IC/MS	1	X	↓	
	↓		MW-IC/MSD	1	X	↓	
	1535		MW-IB	1	X	003	
	1600		MW-IA	1	X	002	
	XX		DUP COI	1	X	001	
	0920		Field Blank	1	X	007	
10/16/13	0005		MW-7A	7	X	008	(130) 10/17/13

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

LABORATORY USE ONLY

Samples were:

1. Shipped ___ or Hand Delivered ___ Airbill # _____

COC Tape was:

1. Present on outer package: Y or N

2. Unbroken on outer package: Y or N

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

WHITE COPY - ORIGINAL

YELLOW COPY - CLIENT

PINK COPY - LABORATORY

TOS013/013F A16



H2M LABS INC
575 Broad Hollow Road
Melville, NY 11747
TEL: (631) 694-3040 FAX: (631) 420-8436
Website: www.h2mlabs.com

TOS 013
Sample Receipt Checklist

Client Name TOS

Date and Time Received: 10/17/2013 10:05:00 AM

Work Order Number: 1310967

RcptNo: 1

Received by Linda Siciliano

Completed by:

Reviewed by:

Completed Date: 10/17/2013 11:25:32 AM

Reviewed Date: 10/18/2013 3:51:25 PM

Carrier name: H2M Pickup

Chain of custody present?	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 ☐	Not Present	☒
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 ☐	2 To 5.3 °	
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 ☐		
Custody Seals present?	Yes ☐	No ☒		
Airbill or Sticker?	Air Bil ☐	Sticker ☐	Not Present	☒

Case Number:

SDG:
TOS013

SAS:

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:

Sample MW-7A @ 12:25 not listed on external COC

CorrectiveAction:

TOS013/013F AI7



575 Broad Hollow Rd., Melville, NY 11747
(631) 694-3040 Fax: (631) 420-8436
www.h2mlabs.com

03606

EXTERNAL CHAIN OF CUSTODY

PROJECT NAME/NUMBER				CLIENT: PNGC										H2M SDG NO: TOS013	
SAMPLERS: (Signature)/Client				Sample Container Description	Routine Parameters	Baseline Metals	Baseline VOCs	Dissolved Metals *	Arsenic	ANALYSIS REQUESTED	Total No. of Containers	NOTES:		Project Contact:	
DELIVERABLES:												LAB I.D. NO.		REMARKS:	
TURNAROUND TIME:				LAB I.D. NO.		REMARKS:									
DATE	TIME	MATRIX	FIELD I.D.	Sample Container Description	Routine Parameters	Baseline Metals	Baseline VOCs	Dissolved Metals *	Arsenic	ANALYSIS REQUESTED	Total No. of Containers	LAB I.D. NO.	REMARKS:		
10/17/13	0830	GW	Lea-Pri	9	X			X				130A35-001			
	0840		Lea-Sec	7	X			X				002			
	0955		MW-8	8	X			X				009			
	1045		MW-9	7	X							010			
	1215		MW-11A	10	X	X	X	X				011			
	1140		MW-11B	10	X	X	X	X				012			
	1355		MW-12A	7	X							013			
	1315		MW-12B	7	X							014			
	1545		MW-3A	7	X							003			
✓	1435	✓	MW-3B	7	X							004			
Relinquished by: (Signature)				Date:	Time:	Received by: (Signature)				Date:	Time:	LABORATORY USE ONLY			
Relinquished by: (Signature)				Date:	Time:	Received by: (Signature)				Date:	Time:	Samples were:			
Relinquished by: (Signature)				Date:	Time:	Received by: (Signature)				Date:	Time:	1. Shipped ☐ or Hand Delivered ☐ Airbill # _____			
Relinquished by: (Signature)				Date:	Time:	Received by: (Signature)				Date:	Time:	COC Tape was:			
Relinquished by: (Signature)				Date:	Time:	Received by: (Signature)				Date:	Time:	1. Present on outer package: Y or N			
Relinquished by: (Signature)				Date:	Time:	Received by: (Signature)				Date:	Time:	2. Unbroken on outer package: Y or N			

WHITE COPY - ORIGINAL
TOS013/013F A22

YELLOW COPY - CLIENT

PINK COPY - LABORATORY



labs

575 Broad Hollow Rd., Melville, NY 11747
(631) 694-3040 Fax: (631) 420-8436
www.h2mlabs.com

03605

EXTERNAL CHAIN OF CUSTODY

CLIENT:

PNGC

H2M SDG NO:

TOS013

PROJECT NAME/NUMBER

Northsea Landfill / SHP1301
1370 Major's Park
Southampton, NY

SAMPLERS: (Signature)/Client

And Raen

DELIVERABLES:

ASP Category B

TURNAROUND TIME:

Standard

Sample Container Description

Routine Parameters

Baseline Metals

Baseline VOCs

Dissolved Metals *

Arsenic

Total No. of Containers

ANALYSIS REQUESTED

NOTES:

dereke@pngasser.com

* Lab to filter

Project Contact:

Derek Ersbak

Phone Number:

631-589-6353

PIS/Quote

DATE	TIME	MATRIX	FIELD I.D.
10/17/13	1535	GW	MW-3C
	1620		MW-4A
	1700		MW-4B
	1810		MW-4C
10/14/13	—	—	TB

DATE

TIME

MATRIX

FIELD I.D.

LAB I.D. NO.

REMARKS:

130A35-005

006

007

008

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

LABORATORY USE ONLY

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Samples were:

1. Shipped ___ or Hand Delivered ___ Airbill # ___

COC Tape was:

1. Present on outer package: Y or N

2. Unbroken on outer package: Y or N

WHITE COPY - ORIGINAL

TOS013/013F A23

YELLOW COPY - CLIENT

PINK COPY - LABORATORY



labs

H2M LABS INC

575 Broad Hollow Road

Melville, NY 11747

TEL: (631) 694-3040 FAX: (631) 420-8436

Website: www.h2mlabs.com

TOS 013
Sample Receipt Checklist

Client Name TOS

Date and Time Received: 10/18/2013 10:20:00 AM

Work Order Number: 1310A35

RcptNo: 1

Received by Linda Siciliano

Completed by:

Reviewed by:

Completed Date: 10/18/2013 11:20:17 AM

Reviewed Date: 10/21/2013 3:59:44 PM

Carrier name: H2M Pickup

Chain of custody present?	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 ☐	Not Present	☒
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 ☐	0.7 To 3.8 °	
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 ☐		
Custody Seals present?	Yes ☐	No ☒		
Airbill or Sticker?	Air Bil ☐	Sticker ☐	Not Present	☒

Case Number:

SDG:
TOS013

SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☒ Yes ☐ No Person Contacted: Derek Ersbak
 Contact Mode: ☒ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted: 10/18/2013 Contacted By: Linda Siciliano

Regarding: Left message about time discrepancy.

Comments:

Sample LEA-RPI hardness bottle was neutral pH. Sample preserved @ 11:04 to pH2.
 MW-12A bottles indicate that the sample was collected at 12:35; paperwork says 13:55

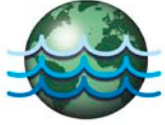
CorrectiveAction:

Paperwork is correct.

TOS013/013F A24

APPENDIX B

WELL INSPECTION CHECKLISTS



P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No. 1A Date 10/16/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

CONCRETE PAD	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
Intact:	<u>X</u>	<u></u>	<u></u>
Cracked:	<u></u>	<u>X</u>	<u></u>
Missing:	<u></u>	<u>X</u>	<u></u>
PONDING OF WATER AROUND WELL	<u></u>	<u>X</u>	<u></u>
PROTECTIVE CASING/MANHOLE/LOCK	<u></u>	<u></u>	<u></u>
Casing/Manhole - Intact:	<u>X</u>	<u></u>	<u></u>
Lock - Intact:	<u>X</u>	<u></u>	<u></u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u></u>	<u></u>
DESIGNATED MEASURING POINT	<u>X</u>	<u></u>	<u></u>
WELL IS PROTECTED	<u>X</u>	<u></u>	<u></u>
WELL IS CLEARLY MARKED	<u>X</u>	<u></u>	<u></u>

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET) 104.80
DEPTH TO BOTTOM (FEET) 109.85
PID (ppm) 0.0



Well No.	<u>1B</u>	Date	<u>10/16/2013</u>
Inspected By	<u>BB & AR</u>	Weather Conditions	<u>Cloudy</u>

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK			
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)	<u>105.69</u>
DEPTH TO BOTTOM (FEET)	<u>164.00</u>
PID (ppm)	<u>2.1</u>



Well No.	1C	Date	10/16/2013
Inspected By	BB & AR	Weather Conditions	Cloudy

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	X		
Cracked:		X	
Missing:		X	
PONDING OF WATER AROUND WELL		X	
PROTECTIVE CASING/MANHOLE/LOCK			
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		

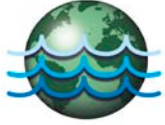
DEPTH TO WATER (FEET)	<u>106.60</u>
DEPTH TO BOTTOM (FEET)	<u>204.00</u>
PID (ppm)	<u>6.8</u>



Well No.	<u>3A</u>	Date	<u>10/17/2013</u>
Inspected By	<u>BB & AR</u>	Weather Conditions	<u>Cloudy</u>

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	<u> </u>	<u>X</u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u> </u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u> </u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

DEPTH TO WATER (FEET)	<u>48.19</u>
DEPTH TO BOTTOM (FEET)	<u>60.49</u>
PID (ppm)	<u>0.0</u>



P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

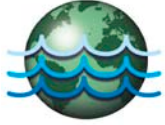
Well No. 3B Date 10/17/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	<u> </u>	<u>X</u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u>Fallen tree over well</u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u> </u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET) 44.88
DEPTH TO BOTTOM (FEET) 112.80
PID (ppm) 5.4



P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

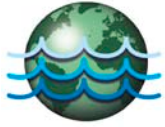
Well No. 3C Date 10/17/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	<u> </u>	<u>X</u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u>Fallen tree over well</u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u> </u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET) 44.50
DEPTH TO BOTTOM (FEET) 180.00
PID (ppm) 3.6



P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

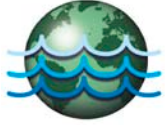
Well No. 4A Date 10/17/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	<u> </u>	<u>X</u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u> </u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u> </u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET) 13.34
DEPTH TO BOTTOM (FEET) 30.86
PID (ppm) 5.7



P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

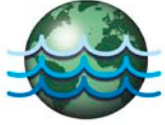
Well No. 4B Date 10/17/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

CONCRETE PAD	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
Intact:	<u> </u>	<u>X</u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u> </u>
Casing/Manhole - Intact:	<u> </u>	<u>X</u>	<u>No J-Plug</u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET) 13.64
DEPTH TO BOTTOM (FEET) 80.50
PID (ppm) 0.0



P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

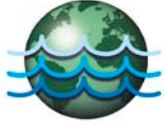
Well No. 4C Date 10/17/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	<u> </u>	<u>X</u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u> </u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u> </u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET) 9.79
DEPTH TO BOTTOM (FEET) 153.00
PID (ppm) 0.0



P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No. 6AR Date 10/16/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	<u>X</u>	<u> </u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u> </u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u>Fixed broken casing</u>
Lock - Intact:	<u> </u>	<u>X</u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

INTERIOR WELL CONDITIONS

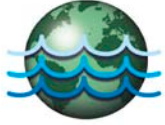
DEPTH TO WATER (FEET) 92.11
DEPTH TO BOTTOM (FEET) 111.45
PID (ppm) NA



Well No.	6B	Date	10/16/2013
Inspected By	BB & AR	Weather Conditions	Cloudy

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	<u> </u>	<u>X</u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u> </u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u> </u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

DEPTH TO WATER (FEET)	<u>94.40</u>
DEPTH TO BOTTOM (FEET)	<u>145.00</u>
PID (ppm)	<u>0.0</u>



P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

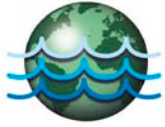
Well No. 7A Date 10/16/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	<u> </u>	<u>X</u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u> </u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u> </u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET) 83.76
DEPTH TO BOTTOM (FEET) 96.30
PID (ppm) 0.0



P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

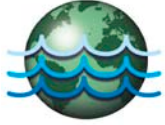
Well No. 7B Date 10/16/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	<u> </u>	<u>X</u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u> </u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u> </u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET) 83.93
DEPTH TO BOTTOM (FEET) 140.46
PID (ppm) 1.1



P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

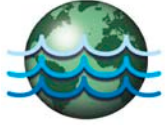
Well No. 7C Date 10/16/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	<u> </u>	<u>X</u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u> </u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u> </u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET) 85.52
DEPTH TO BOTTOM (FEET) 180.29
PID (ppm) 1.2



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WELL INSPECTION CHECKLIST

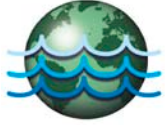
Well No. 8 Date 10/17/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	<u> </u>	<u>X</u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u> </u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u> </u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET) 77.06
DEPTH TO BOTTOM (FEET) 83.91
PID (ppm) 0.0



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WELL INSPECTION CHECKLIST

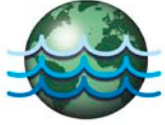
Well No. 9 Date 10/17/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	<u> </u>	<u>X</u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u> </u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u> </u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET) 74.05
DEPTH TO BOTTOM (FEET) 85.71
PID (ppm) 0.0



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WELL INSPECTION CHECKLIST

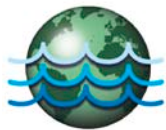
Well No. 11A Date 10/17/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

CONCRETE PAD	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
Intact:	<u> </u>	<u>X</u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u> </u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u> </u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET) 72.66
DEPTH TO BOTTOM (FEET) 77.00
PID (ppm) 0.0



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WELL INSPECTION CHECKLIST

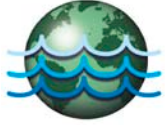
Well No. 11B Date 10/17/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	<u>X</u>	<u> </u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u> </u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u> </u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET) 73.92
DEPTH TO BOTTOM (FEET) 121.44
PID (ppm) 2.1



P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

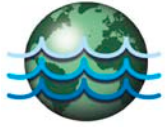
Well No. 12A Date 10/17/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
CONCRETE PAD			
Intact:	<u> </u>	<u>X</u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u> </u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u> </u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET) 80.24
DEPTH TO BOTTOM (FEET) 91.01
PID (ppm) 0.0



P.W. GROSSER CONSULTING, INC.

WELL INSPECTION CHECKLIST

Well No. 12B Date 10/17/2013
Inspected By BB & AR Weather Conditions Cloudy

WELL EXTERIOR CONDITIONS

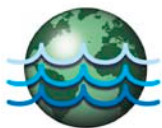
CONCRETE PAD	<u>Yes</u>	<u>No</u>	<u>Remarks</u>
Intact:	<u> </u>	<u>X</u>	<u> </u>
Cracked:	<u> </u>	<u>X</u>	<u> </u>
Missing:	<u> </u>	<u>X</u>	<u> </u>
PONDING OF WATER AROUND WELL	<u> </u>	<u>X</u>	<u> </u>
PROTECTIVE CASING/MANHOLE/LOCK	<u> </u>	<u> </u>	<u> </u>
Casing/Manhole - Intact:	<u>X</u>	<u> </u>	<u> </u>
Lock - Intact:	<u>X</u>	<u> </u>	<u> </u>
WELL CASING (STICKUP) STRAIGHT	<u>X</u>	<u> </u>	<u> </u>
DESIGNATED MEASURING POINT	<u>X</u>	<u> </u>	<u> </u>
WELL IS PROTECTED	<u>X</u>	<u> </u>	<u> </u>
WELL IS CLEARLY MARKED	<u>X</u>	<u> </u>	<u> </u>

INTERIOR WELL CONDITIONS

DEPTH TO WATER (FEET) 80.81
DEPTH TO BOTTOM (FEET) 110.24
PID (ppm) 9.8

APPENDIX C

MONITORING WELL SAMPLING LOGS



P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

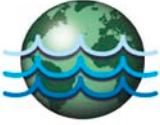
CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	1A / Town of Southhampton		
SAMPLE I.D.	MW-1A / DUP001		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/16/2013	TIME SAMPLED	16:00
WELL USE	Monitoring		
STATIC WATER ELEVATION	104.8	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	109.85	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	2
CASING VOLUMES REMOVED	3	GALLONS	10.1
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	No Odor
PID (ppm)	0.0		
ANALYSIS	Routine Parameters	DATE SHIPPED	10/17/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.40	6.30	6.27	6.23	6.21
COND	0.438	0.544	0.582	0.608	0.615
T	15.06	15.66	14.86	13.61	13.35
EH	178	176	174	173	175
TURB	14.0	14.9	15.1	14.3	8.90
D.O.	7.92	7.01	6.83	7.07	8.01



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WELL SAMPLING LOG

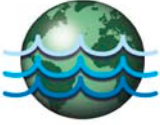
CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	1B / Town of Southhampton		
SAMPLE I.D.	MW-1B		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/16/2013	TIME SAMPLED	15:35
WELL USE	Monitoring		
STATIC WATER ELEVATION	105.69	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	164.00	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	23
CASING VOLUMES REMOVED	3	GALLONS	116.62
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	No Odor
PID (ppm)	2.1		
ANALYSIS	Routine Parameters	DATE SHIPPED	10/17/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	7.09	6.81	6.64	6.63	6.63
COND	0.090	0.093	0.091	0.092	0.092
T	12.82	12.78	12.44	12.42	12.42
EH	151	151	155	156	155
TURB	2.70	63.8	6.00	5.30	5.00
D.O.	12.70	7.56	7.58	7.58	7.58



P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

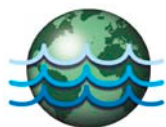
CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	1C / Town of Southhampton		
SAMPLE I.D.	MW-1C / MS / MSD		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/16/2013	TIME SAMPLED	14:40
WELL USE	Monitoring		
STATIC WATER ELEVATION	106.6	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	204	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	39
CASING VOLUMES REMOVED	3	GALLONS	195
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	No Odor
PID (ppm)	6.8		
ANALYSIS	Routine Parameters	DATE SHIPPED	10/17/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	8.42	7.67	7.36	6.97	6.97
COND	0.095	0.099	0.100	0.098	0.098
T	17.26	12.54	12.28	12.27	12.18
EH	112	139	150	166	165
TURB	0.3	0.00	0.00	0.40	0.5
D.O.	7.99	17.47	7.84	7.81	7.86



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WELL SAMPLING LOG

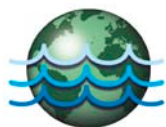
CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	3A / Town of Southhampton		
SAMPLE I.D.	MW-3A		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/17/2013	TIME SAMPLED	15:45
WELL USE	Monitoring		
STATIC WATER ELEVATION	48.19	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	60.49	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	4.9
CASING VOLUMES REMOVED	3	GALLONS	24.62
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	No Odor
PID (ppm)	0.0		
ANALYSIS	Routine Parameters	DATE SHIPPED	10/18/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.57	6.59	6.51	6.40	6.39
COND	0.157	0.189	0.195	0.209	0.211
T	13.19	11.48	11.15	10.82	10.82
EH	100	103	107	117	117
TURB	7.20	4.90	3.50	2.50	2.40
D.O.	7.88	7.80	7.88	7.08	6.98



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WELL SAMPLING LOG

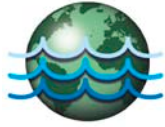
CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	3B / Town of Southhampton		
SAMPLE I.D.	MW - 3B		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/17/2013	TIME SAMPLED	14:35
WELL USE	Monitoring		
STATIC WATER ELEVATION	44.88	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	112.80	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	27.17
CASING VOLUMES REMOVED	3	GALLONS	135.84
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	No Odor
PID (ppm)	5.4		
ANALYSIS	Routine Parameters	DATE SHIPPED	10/18/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.58	6.42	5.88	5.99	6.00
COND	0.149	0.155	0.260	0.257	0.256
T	11.94	10.57	10.12	10.57	10.56
EH	111	102	-20	-37	-43
TURB	3.1	4.00	1.80	1.40	4.10
D.O.	9.09	3.21	1.48	1.26	2.60



P.W. GROSSER CONSULTING, INC.

WELL SAMPLING LOG

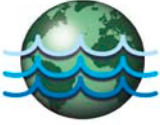
CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	3C / Town of Southhampton		
SAMPLE I.D.	MW-3C		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/17/2013	TIME SAMPLED	15:35
WELL USE	Monitoring		
STATIC WATER ELEVATION	44.5	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	180	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	54.2
CASING VOLUMES REMOVED	3	GALLONS	270
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	No Odor
PID (ppm)	3.6		
ANALYSIS	Routine Parameters	DATE SHIPPED	10/18/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.24	6.54	6.72	6.63	6.62
COND	0.191	0.185	0.185	0.181	0.181
T	11.95	10.70	11.72	11.87	11.87
EH	-23	32	37	70	71
TURB	4.70	4.30	5.90	2.20	2.20
D.O.	5.09	2.22	1.15	1.76	1.77



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WELL SAMPLING LOG

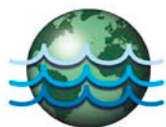
CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	4A / Town of Southhampton		
SAMPLE I.D.	MW-4A		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/17/2013	TIME SAMPLED	16:20
WELL USE	Monitoring		
STATIC WATER ELEVATION	13.34	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	30.86	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	7
CASING VOLUMES REMOVED	3	GALLONS	35.04
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	No Odor
PID (ppm)	5.7		
ANALYSIS	Routine Parameters	DATE SHIPPED	10/18/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	5.93	5.67	5.52	5.35	5.35
COND	0.204	0.203	0.204	0.204	0.205
T	13.80	13.51	13.63	13.66	13.66
EH	172	200	219	246	246
TURB	51.5	12.7	5.90	4.00	3.80
D.O.	17.65	5.95	5.22	4.85	4.81



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WELL SAMPLING LOG

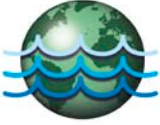
CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	4B / Town of Southhampton		
SAMPLE I.D.	MW-4B		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/17/2013	TIME SAMPLED	17:00
WELL USE	Monitoring		
STATIC WATER ELEVATION	13.64	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	80.5	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	27
CASING VOLUMES REMOVED	3	GALLONS	133.7
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	No Odor
PID (ppm)	0.0		
ANALYSIS	Routine Parameters	DATE SHIPPED	10/18/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	5.59	6.30	6.38	6.38	6.37
COND	0.217	0.314	0.314	0.314	0.314
T	13.84	13.42	13.41	13.42	13.41
EH	161	135	134	133	132
TURB	2.20	1.70	1.90	1.80	1.80
D.O.	3.63	2.00	1.90	1.79	1.72



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WELL SAMPLING LOG

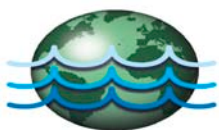
CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	4C / Town of Southhampton		
SAMPLE I.D.	MW-4C		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/17/2013	TIME SAMPLED	18:10
WELL USE	Monitoring		
STATIC WATER ELEVATION	9.79	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	153.00	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	57
CASING VOLUMES REMOVED	3	GALLONS	286.4
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	No Odor
PID (ppm)	0.0		
ANALYSIS	Routine Parameters	DATE SHIPPED	10/18/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.47	6.67	6.66	6.70	6.70
COND	0.319	0.376	0.379	0.381	0.381
T	14.45	13.38	13.39	13.27	13.27
EH	121	103	105	97	96
TURB	7.40	1.50	1.50	1.40	1.30
D.O.	9.21	2.09	2.30	1.78	1.77



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WELL SAMPLING LOG

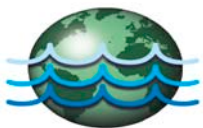
CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	6AR / Town of Southhampton		
SAMPLE I.D.	MW - 6AR		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/16/2013	TIME SAMPLED	11:35
WELL USE	Monitoring		
STATIC WATER ELEVATION	92.11	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	111.45	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	2
CASING VOLUMES REMOVED	3	GALLONS	9.67
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	No Odor
PID (ppm)	NA		
ANALYSIS	Routine Parameters + Baseline Metals	DATE SHIPPED	10/17/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	5.83	5.79	5.81	5.83	5.82
COND	0.101	0.202	0.205	0.207	0.21
T	16.54	13.79	13.39	13.19	13.09
EH	206	197	190	188	187
TURB	60.6	54.3	55.2	48.7	44.7
D.O.	7.20	6.57	6.35	6.20	5.93



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WELL SAMPLING LOG

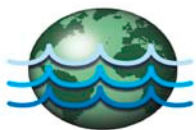
CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	6B / Town of Southhampton		
SAMPLE I.D.	MW - 6B		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/16/2013	TIME SAMPLED	11:00
WELL USE	Monitoring		
STATIC WATER ELEVATION	94.4	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	145.00	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	20
CASING VOLUMES REMOVED	3	GALLONS	102
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	No Odor
PID (ppm)	0.0		
ANALYSIS	Routine Parameters + Baseline Metals	DATE SHIPPED	10/17/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	5.15	5.51	5.66	5.82	5.82
COND	0.124	0.091	0.088	0.087	0.09
T	15.87	12.06	12.01	11.87	11.94
EH	230	213	157	142	142
TURB	0.00	0.00	0.00	0.20	0.00
D.O.	14.20	8.26	8.33	15.79	11.04



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WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	MW-8/ Town of Southhampton		
SAMPLE I.D.	MW-8		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/17/2013	TIME SAMPLED	9:55
WELL USE	Monitoring		
STATIC WATER ELEVATION	77.06	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	83.91	FT. BELOW MEASURING POINT	TOC

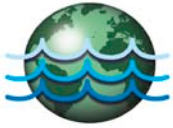
SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	3
CASING VOLUMES REMOVED	3	GALLONS	13.7
SAMPLE APPEARANCE	Turbid	ODORS OBSERVED	No Odor
PID (ppm)	0.0		
ANALYSIS	Routine Parameters	DATE SHIPPED	10/18/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	8.38	8.09	7.85	7.80	7.73
COND	0.199	0.189	0.180	0.175	0.17
T	13.74	13.40	13.44	13.50	13.65
EH	21	48	56	59	62
TURB	1000	975	692	594	530*
D.O.	8.31	7.10	6.96	6.90	6.83

* Collected filtered metals due to high turbidity.



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WELL SAMPLING LOG

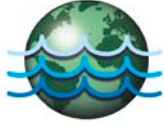
CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	MW-9/ Town of Southhampton		
SAMPLE I.D.	MW-9		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/17/2013	TIME SAMPLED	10:45
WELL USE	Monitoring		
STATIC WATER ELEVATION	74.05	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	85.71	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	5
CASING VOLUMES REMOVED	3	GALLONS	23.32
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	No Odor
PID (ppm)	0.0		
ANALYSIS	Routine Parameters	DATE SHIPPED	10/18/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.99	6.94	6.73	6.73	6.67
COND	0.084	0.024	0.034	0.109	0.11
T	17.57	16.80	17.29	14.61	14.52
EH	76	88	65	92	95
TURB	182	126	136	42.9	44.0
D.O.	6.27	8.00	6.66	5.98	5.83



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WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	11A / Town of Southhampton		
SAMPLE I.D.	MW-11A		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/17/2013	TIME SAMPLED	12:15
WELL USE	Monitoring		
STATIC WATER ELEVATION	72.66	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	77.00	FT. BELOW MEASURING POINT	TOC

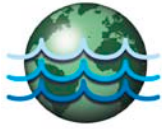
SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	8
CASING VOLUMES REMOVED	3	GALLONS	44
SAMPLE APPEARANCE	Turbid	ODORS OBSERVED	No Odor
PID (ppm)	0.0		
ANALYSIS	Routine Parameters + Baseline Metals and VOCs	DATE SHIPPED	10/18/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.32	6.37	6.30	6.19	6.19
COND	0.487	0.430	0.342	0.315	0.316
T	15.83	14.55	14.29	14.25	14.24
EH	83	53	30	27	27
TURB	0.00	0.00	939	321	292*
D.O.	4.41	5.71	4.68	3.81	3.75

* Collected filtered metals due to high turbidity.



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WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	11B / Town of Southhampton		
SAMPLE I.D.	MW-11B		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/17/2013	TIME SAMPLED	11:40
WELL USE	Monitoring		
STATIC WATER ELEVATION	73.92	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	121.44	FT. BELOW MEASURING POINT	TOC

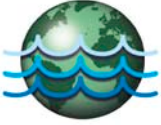
SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	19
CASING VOLUMES REMOVED	3	GALLONS	95.04
SAMPLE APPEARANCE	Turbid	ODORS OBSERVED	No Odor
PID (ppm)	2.1		
ANALYSIS	Routine Parameters + Baseline Metals and VOCs	DATE SHIPPED	10/18/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.16	6.18	6.25	6.26	6.25
COND	0.000	0.442	0.235	0.177	0.176
T	18.39	13.92	13.52	13.57	13.58
EH	107	153	156	159	160
TURB	50.0	4.20	147	130	122*
D.O.	8.50	6.48	6.44	7.02	7.07

* Collected filtered metals due to high turbidity.



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WELL SAMPLING LOG

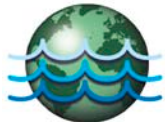
CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	12A / Town of Southhampton		
SAMPLE I.D.	MW-12A		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/17/2013	TIME SAMPLED	13:35
WELL USE	Monitoring		
STATIC WATER ELEVATION	80.24	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4	Inches	
TOTAL WELL DEPTH	91.01	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	4.4
CASING VOLUMES REMOVED	3	GALLONS	22
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	No Odor
PID (ppm)	0.0		
ANALYSIS	Routine Parameters	DATE SHIPPED	10/18/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.37	6.23	6.17	6.13	6.11
COND	0.391	0.330	0.329	0.329	0.328
T	15.96	13.83	13.29	13.23	13.23
EH	120	118	116	115	114
TURB	19.9	32.4	33.2	34.0	29.6
D.O.	3.36	2.10	1.92	1.99	1.73



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WELL SAMPLING LOG

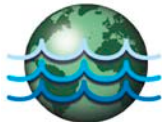
CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	12B / Town of Southhampton		
SAMPLE I.D.	MW-12B		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/17/2013	TIME SAMPLED	13:15
WELL USE	Monitoring		
STATIC WATER ELEVATION	80.81	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	4 Inches		
TOTAL WELL DEPTH	110.24	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	Submersible Pump	SAMPLE METHOD	Bailer
PURGE RATE	5 GPM	PURGE TIME	12
CASING VOLUMES REMOVED	3	GALLONS	58.86
SAMPLE APPEARANCE	Clear	ODORS OBSERVED	No Odor
PID (ppm)	9.8		
ANALYSIS	Routine Parameters	DATE SHIPPED	10/18/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH	6.19	6.20	6.17	6.17	6.17
COND	0.000	0.366	0.389	0.389	0.386
T	18.98	13.46	13.16	13.03	13.02
EH	93	117	127	132	132
TURB	481	3.80	1.20	0.50	0.20
D.O.	9.31	3.6.5	2.30	1.65	1.65



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WELL SAMPLING LOG

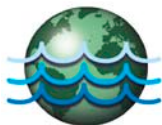
CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	LEA-PRI / Town of Southhampton		
SAMPLE I.D.	LEA-PRI		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/17/2013	TIME SAMPLED	8:30
WELL USE	NA		
STATIC WATER ELEVATION	-	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	NA	Inches	
TOTAL WELL DEPTH	-	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	NA	SAMPLE METHOD	Bailer
PURGE RATE	-	PURGE TIME	-
CASING VOLUMES REMOVED	-	GALLONS	-
SAMPLE APPEARANCE	Turbid	ODORS OBSERVED	Organic
PID (ppm)	-		
ANALYSIS	Routine Parameters + Arsenic	DATE SHIPPED	10/18/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH					6.13
COND					0.055
T					15.68
EH					108
TURB					57.6
D.O.					9.14



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WELL SAMPLING LOG

CLIENT/PROJECT No.	Town of Southhampton / SHP1301		
WELL No./OWNER	LEA-SEC / Town of Southhampton		
SAMPLE I.D.	LEA-SEC		
SAMPLING POINT	TOC	SAMPLED BY	BB & AR
DATE SAMPLED	10/17/2013	TIME SAMPLED	8:40
WELL USE	NA		
STATIC WATER ELEVATION	-	FT. BELOW MEASURING POINT	TOC
WELL DIAMETER	NA	Inches	
TOTAL WELL DEPTH	-	FT. BELOW MEASURING POINT	TOC

SAMPLING INFORMATION

PURGE METHOD	NA	SAMPLE METHOD	Bailer
PURGE RATE	-	PURGE TIME	-
CASING VOLUMES REMOVED	-	GALLONS	-
SAMPLE APPEARANCE	Turbid	ODORS OBSERVED	Organic
PID (ppm)	-		
ANALYSIS	Routine Parameters + Arsenic	DATE SHIPPED	10/18/2013

SAMPLING PARAMETERS

	Initial	1 Vol	2 Vol	3 Vol	Pre-sampling
pH					6.93
COND					2.130
T					15.57
EH					-63
TURB					104
D.O.					6.31

APPENDIX D

6 NYCRR Part 360-2: LANDFILLS



DEC

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

Reprinted March 2001

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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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

Title 6

Part 360

Subpart 360-2

section 360-2.13

subdivision 360-2.13(k)

paragraph 360-2.13(k)(3)

subparagraph 360-2.13(k)(3)(iii)

clause 360-2.13(k)(3)(iii)(b)

subclause 360-2.13(k)(3)(iii)(b)(1)

item 360-2.13(k)(3)(iii)(b)(1)(i)

This may be written as 6 NYCRR Part 360-2.13(k)(3)(iii)(b)(1)(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)).

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.

(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:

(1) 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.

(1) 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 waste 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 and vectors. Termination of use includes those 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 site. 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 each 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

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;

(5) 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.

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

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**

As of December 31, 2000

NYS DEC **REGION 1**

COUNTY	Suffolk

Babylon Southern Ashfill 52A01

OWNER TYPE: Municipal
REGULATORY STATUS: Permit
OWNER: Town of Babylon
ADDRESS: 200 East Sunrise Hwy
(MAILING) Lindenhurst NY 11757
PHONE: (516) 957-3072
WASTE TYPE: RR Ash

360 PERMIT NUMBER: 1472000778000010
PERMIT ISSUED: 05/04/97
PERMIT EXPIRES: 05/03/02
CONTACT: Ronald Kluesener
ADDRESS: Gleam Street
West Babylon NY 11704
PHONE: (631) 422-7640
UTMEAST: 636645 UTMNORTH: 4510592

Brookhaven SLF Cell 5 52A03

OWNER TYPE: Municipal
REGULATORY STATUS: Permit
OWNER: Town of Brookhaven
ADDRESS: 3233 Route 112
(MAILING) Medford NY 11763
PHONE: (516) 451-6224
WASTE TYPE: RR Ash

360 PERMIT NUMBER: 1472200030000040
PERMIT ISSUED: 11/17/98
PERMIT EXPIRES: 08/31/05
CONTACT: Dennis Lynch
ADDRESS: 3233 Route 112
Medford NY 11763
PHONE: (516) 451-6224
UTMEAST: 674593 UTMNORTH: 4518097

Northern U 52A39

OWNER TYPE: Municipal
REGULATORY STATUS: Permit
OWNER: Town of Babylon
ADDRESS: 200 East Sunrise Highway
(MAILING) Lindenhurst NY 11757
PHONE: (516) 957-3072
WASTE TYPE: RR Ash

360 PERMIT NUMBER: 1472000628000010
PERMIT ISSUED: 10/19/94
PERMIT EXPIRES: 04/30/05
CONTACT: Ronald Kluesener
ADDRESS: 200 East Sunrise Highway
Lindenhurst NY 11757
PHONE: (631) 422-7640
UTMEAST: 637078 UTMNORTH: 4510803

NYS DEC **REGION 3**

COUNTY	Westchester

Sprout Brook LF 60A20

OWNER TYPE: County
REGULATORY STATUS: Permit
OWNER: Westchester County DPW
ADDRESS: 270 North Avenue
(MAILING) New Rochelle NY 10801
PHONE: (914) 637-3000
WASTE TYPE: Bottom Ash, Fly Ash, RR Ash

360 PERMIT NUMBER: 3552200097000020
PERMIT ISSUED: 10/01/97
PERMIT EXPIRES: 10/01/02
CONTACT: mario Parise
ADDRESS: Old Albany Post Road
Peekskill NY 10601
PHONE: (914) 637-3000
UTMEAST: 590560 UTMNORTH: 4573986

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS
ACTIVE SOLID WASTE FACILITIES**

As of December 31, 2000

NYS DEC REGION 3

COUNTY Orange

Central Hudson Gas & Elec 36N01
OWNER TYPE: Private
REGULATORY STATUS: Permit
OWNER: Central Hudson Gas & Elec
ADDRESS: 992 River Road
(MAILING) Newburgh NY 12550
PHONE: (914) 452-2000
WASTE TYPE: Coal Ash

360 PERMIT NUMBER: 3334600011000018
PERMIT ISSUED: 05/09/00
PERMIT EXPIRES: 05/09/05
CONTACT: Mark McLean
ADDRESS: 992 River Road
Newburgh NY 12550
PHONE: (914) 563-4805
UTMEAST: 585953 UTMNORTH: 4603521

COUNTY Rockland

Tomkins Cove Ash Facility 44N07
OWNER TYPE: Private
REGULATORY STATUS: None
OWNER: Orange & Rockland Utility
ADDRESS: One Blue Hill Plaza
(MAILING) Pearl River NY 10965
PHONE: (914) 577-2582
WASTE TYPE: Coal Ash, Ash Residue

360 PERMIT NUMBER: 3392800039000010
PERMIT ISSUED: 06/30/94
PERMIT EXPIRES: 06/30/99
CONTACT: C.A. Herbst
ADDRESS: One Blue Hill Plaza
Pearl River NY 10965
PHONE: (914) 786 8150
UTMEAST: 585526 UTMNORTH: 4567869

NYS DEC REGION 6

COUNTY Jefferson

Deferiet Paper 23N06
OWNER TYPE: Private
REGULATORY STATUS: Permit
OWNER: Deferiet Paper Company
ADDRESS: 400 Anderson Avenue
(MAILING) Deferiet NY 13628
PHONE: (315) 493-3540
WASTE TYPE: Coal Ash, Paper Sludge, Coal Rejects, Wood Yard Debris

360 PERMIT NUMBER: 6224000030000000
PERMIT ISSUED: 02/15/94
PERMIT EXPIRES: 11/01/03
CONTACT: Todd Furnia
ADDRESS: 400 Anderson Avenue
Deferiet NY 13628
PHONE: (315) 493-3540
UTMEAST: 439729 UTMNORTH: 4884523

DANC Landfill 23S13
OWNER TYPE: Municipal
REGULATORY STATUS: Permit
OWNER: Develop. Authority N. Country
ADDRESS: 317 Washington Street
(MAILING) Watertown NY 13601
PHONE: (315) 785-2592
WASTE TYPE: Residential, Demo, Asbestos, Indus, Coal Ash, Cont. Soil, Sludge

360 PERMIT NUMBER: 6225200007000006
PERMIT ISSUED: 02/27/96
PERMIT EXPIRES: 02/27/06
CONTACT: E. William Seifried
ADDRESS: NYS Route 177
Rodman NY 13682
PHONE: (315) 252-3236
UTMEAST: 427037 UTMNORTH: 4852232

NYS DEC REGION 7

COUNTY Broome

Weber Ash Disposal Site 04N08
OWNER TYPE: Private
REGULATORY STATUS: Consent Order
OWNER: AES Creative Resources
ADDRESS: 720 Riverside Dr.
(MAILING) Johnson City NY 13790
PHONE: (607) 729-6950
WASTE TYPE: Coal Ash, Sludge

360 PERMIT NUMBER: 7033200020000010
PERMIT ISSUED: 10/01/80
PERMIT EXPIRES: 09/30/83
CONTACT: Peter Huff
ADDRESS: 720 Riverside Dr.
Johnson City NY 13790
PHONE: (607) 729-6950
UTMEAST: 431941 UTMNORTH: 4673115

COUNTY Tompkins**Cayuga****55N02**OWNER TYPE: Private
REGULATORY STATUS: Permit

OWNER: AES Cayuga, L.L.C.

ADDRESS: 228 Cayuga Drive

(MAILING) Lansing NY 14882

PHONE: (607) 533-7913

WASTE TYPE: Coal Ash, Sludge

360 PERMIT NUMBER: 7503200069000010

PERMIT ISSUED: 04/17/97

PERMIT EXPIRES: 04/17/02

CONTACT: Daniel Hill

ADDRESS: Milliken Road

NY

PHONE: (607) 533-7913

UTMEAST: 366998 UTMNORTH: 4718715

NYS DEC **REGION 9****COUNTY Chautauqua****Chautauqua Landfill****07S12**OWNER TYPE: County
REGULATORY STATUS: Permit

OWNER: County of Chautauqua DPW

ADDRESS: Grace Office Building

(MAILING) Mayville NY 14757

PHONE: (716) 985-4211

WASTE TYPE: Residential, C&D, Asbestos, Sludge, Industrial, Cont. Soil, Coal Ash

360 PERMIT NUMBER: 906360000600013

PERMIT ISSUED: 07/22/99

PERMIT EXPIRES: 07/23/09

CONTACT: Theodore Osborne

ADDRESS: 3889 Towerville Road

Jamestown NY 14701-9653

PHONE: (716) 985-4785

UTMEAST: 143329 UTMNORTH: 4681819

COUNTY Niagara**Niagara Recycling Inc.****32S11**OWNER TYPE: Private
REGULATORY STATUS: Permit

OWNER: BFI (Allied Waste)

ADDRESS: P.O. Box 344 LPO

(MAILING) Niagara Falls NY 14304-0344

PHONE: (716) 285-3344

WASTE TYPE: Industrial, C&D, RR & Coal Ash, Sludge, Asbestos, Cont. Soil, MSW

360 PERMIT NUMBER: 9291100119000050

PERMIT ISSUED: 04/25/95

PERMIT EXPIRES: 04/30/05

CONTACT: David Hanson

ADDRESS: 56th St. & Niagara Falls Blvd.

Niagara Falls NY 14304-0344

PHONE: (716) 285-3344

UTMEAST: 175230 UTMNORTH: 4779955

Modern Landfill**32S30**OWNER TYPE: Private
REGULATORY STATUS: Permit

OWNER: Modern Landfill, Inc.

ADDRESS: P.O. Box 209

(MAILING) Model City NY 14107-0209

PHONE: (716) 754-8226

WASTE TYPE: MSW, Industrial, Asbestos, Sludge, RR & Coal Ash, C&D, Cont. Soil

360 PERMIT NUMBER: 9292400016000310

PERMIT ISSUED: 12/29/95

PERMIT EXPIRES: 12/31/05

CONTACT: James Goehrig

ADDRESS: Fletcher & Harold Roads

Model City NY 14107-0209

PHONE: (716) 754-8226

UTMEAST: 176999 UTMNORTH: 4792104

DEC

FACILITY

LINER TYPE

NUMBER	FACILITY NAME	S	SC	D	DC
36N01	Central Hudson Gas & Elec	.F.	.F.	.F.	.T.
44N07	Tomkins Cove Ash Facility	.F.	.F.	.F.	.F.
23N06	Deferiet Paper	.F.	.T.	.F.	.F.
23S13	DANC Landfill	.F.	.F.	.F.	.T.
04N08	Weber Ash Disposal Site	.T.	.F.	.F.	.F.
55N02	Cayuga	.F.	.F.	.F.	.T.
07S12	Chautauqua Landfill	.F.	.F.	.F.	.T.
32S11	Niagara Recycling Inc.	.F.	.F.	.F.	.T.
32S30	Modern Landfill	.F.	.F.	.F.	.T.