Premier Environmental Services

DATA VALIDATION REPORT
OF THE
TOWN OF SOUTHAMPTON
NORTH SEA,LANDFILL

ORGANIC AND INORGANIC ANALYSES
OF AQUEOUS SAMPLES

H2M LABORATORIES
MELVILLE, NEW YORK

SDG NUMBER:
TOS008/TOS008F

July, 2011

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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.:	**TOS008/008F**
REVIEWER:	**Renee Cohen**
DATE REVIEW COMPLETED:	**June, 2011**
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 ('95).

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 the analysis of fifteen (15) aqueous samples, one (1) Field Blank and one (1) Trip Blank sample. The samples associated with this data set were collected on April 13, 2011 and April 14, 2011. The samples were received at H2M Laboratories located in Melville, New York on April 14, 2011. The cooler temperature was 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.

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 8260B. The Volatile Organic analytes were reported by the laboratory. Proper custody transfer of the samples was documented in the laboratory reports. Cooler temperatures were within QC limits. Sample preservation was checked prior to analysis. All samples in this data set were properly preserved.

The following aqueous sample was chosen for review in the VOA fraction: MW-12B (1104657-014).

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.

All sample analyses associated with this data set were completed by April 21, 2011. All field sample and QC sample analyses 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 MS/MSD analysis was performed on sample MW-3B (1104657-007). The sample was spiked with the CLP matrix spike set. The percent recovery and RPD of these spiked analytes met QC criteria.

ORGANIC DATA ASSESSMENT

5. BLANK SPIKE ANALYSIS:

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

The laboratory performed one (1) matrix spike blank sample analyses with each sample batch. The matrix spike blank was fortified/spiked with a subset of target analytes in MSB041911. The % recovery of these target analytes met QC criteria. The Laboratory Fortified Blank (LFB) analyzed on April 21, 2011 was fortified with the full component list of target analytes. In-house spike recovery limits were reported for each of target analyte. All spike recoveries met QC criteria.

6. BLANK CONTAMINATION:

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

A) Method Blank contamination
Two (2) aqueous method blank samples are associated with this data set. Each of the method blank samples was free from contamination of all target and non-target (TIC) analytes.

B) Field Blank contamination
The Field Blank sample (FB-1-1104657-016) was free from contamination of all target and non-target (TIC) analytes.

C) Trip Blank contamination
The Trip Blank sample (TB 4/13-1104657-017) was free from contamination of all target analytes with the exception of Methylene Chloride (1 J ug/l). Methylene Chloride was not detected in the sample chosen for review, therefore no action was taken.

ORGANIC DATA ASSESSMENT

7. GC/MS CALIBRATION:

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

A) RESPONSE FACTOR

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

One (1) initial calibration curve analysis is associated with the aqueous samples in this data set. The laboratory performed one aqueous initial multilevel calibration on March 11, 2011 (Inst. HP5972-2). The RRF of all target compounds met QC criteria in this initial calibration curve analysis.

Two (2) continuing calibration standards are associated with the samples in this data set. The CCV standards were analyzed April 19, 2011 (11\G10550) and April 21, 2011(G\10574). The RRF of all target compounds met QC criteria in each of these continuing calibration standard analyses.

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 30%. The %D must be <25% in the continuing calibration standard. This criteria has been applied to all target analytes. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects may be flagged "UJ", based on professional judgment. If %RSD and %D grossly exceed QC criteria (>90%), non-detects data may be qualified "R", unusable. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines and the USEPA Region II criteria.

One (1) aqueous initial calibration standard analysis is associated with this data set. The laboratory analyzed an aqueous initial calibration curve on March 11, 2011 (Inst. HP5972-2). 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 associated with this data set.

ORGANIC DATA ASSESSMENT

7. GC/MS CALIBRATION:

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

Two (2) continuing calibration standard analyses are associated with the aqueous samples in this data set. This CCV standards were analyzed April 19, 2011 and April 21, 2011. The % Difference of all target compounds met QC criteria in each of these continuing calibration standards with the exception of the following:

Date/File ID	Analytes	%Difference
4/19/11 (G\10550)	Vinyl Acetate	53.4
	2-Hexanone	34.4
	trans 1,4-Dichloro-2-butene	54.6
	1,1,2,2-Tetrachloroethane	25.3
4/21/11 (G\10574)	Chloromethane	28.6
	Tetrachloroethene	26.9
	Vinyl Acetate	72.9
	2-Hexanone	27.7
	trans 1,4-Dichloro-2-butene	48.9
	1,1,2,2-Tetrachloroethane	26.6
	1,2,3-Trichloropropane	26.9
	1,2-Dibromo-3-chloropropane	28.2

The validated sample (MW-12B) was analyzed on April 19, 2011. The associated target analytes in this analysis 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.

ORGANIC DATA ASSESSMENT

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.

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 5% data review. Sample DUP-01 (1104657-015) is associated with the sample MW-1A (1104567-003). Target analytes and Tentatively Identified Compounds (TIC's) were not detected in these field duplicate samples.

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.

One (1) aqueous sample was chosen for data review and DUSR preparation. Sample MW-12B was analyzed for Volatile Organic analytes using EPA Method 8260B. Tentatively Identified Compounds (TIC's) were analyzed for and reported when detected in the samples in this data set. The samples were analyzed in accordance with the cited method.

Sample MW-12B was analyzed without dilution. The laboratory provided the quantitation report, chromatogram and analyte spectra in the New York Sate DEC ASP Category B deliverable that was reported for this data set. All sample data was reported in accordance with the required deliverable.

12. OVERALL ASSESSMENT:

The aqueous samples associated with this data set were collected April 13, 2011 and April 14, 2011. 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-12B are reported to the method detection limit. These Volatile Organic data results are acceptable for use with the noted data qualifiers. Data qualification is described in the above report.

The qualified data result pages associated with sample MW-11B 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
Total Cyanide

SITE: **North Sea Landfill**

CONTRACT LAB: **H2M Laboratories**
Melville, New York

SDG NO.: **TSO008/TSO008F**

REVIEWER: **Renee Cohen**

DATE REVIEW COMPLETED: **July 2011**

MATRIX: **Aqueous**

The Chain of Custody (COC) documentation associated with this data set listed sixteen (16) aqueous samples and one (1) Field Blank sample in this data set were to be analyzed for Total TAL Metals and Boron and Total Cyanide. Two (2) of these samples were to be analyzed for Filtered TAL Metals and Boron. The samples in this data set were collected April 13, 2011 and April 14, 2011 and delivered to H2M Laboratories located in Melville, New York. The samples were received at the laboratory on April 14, 2011.

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 TAL Metal (Total and Filtered) and Total Cyanide 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 April 13, 2011 and April 14, 2011. All samples were received at the laboratory on April 14, 2011 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. One (1) sample was chosen for review for each of the Total and Filtered Metals. Sample MW-4B (1104657-010) was reviewed for Total Metals and Total Cyanide. Sample MW-11A (1104657-001) was reviewed for Filtered Metals.

2. HOLDING TIME

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

The aqueous samples were prepared in one (1) batch on April 19, 2011 for Total and Filtered ICP Metals. The sample, matrix spike and duplicate were re-digested for Boron in a stand-alone batch on April 25, 2011. The sample digestates were analyzed in two (2) analytical sequences. All ICP digestion and analyses were performed within the method holding time.

The samples were prepared for Total and Filtered Mercury analysis on April 22, 2011. These digestates were analyzed in one (1) analytical sequence on April 22, 2011. The preparation and analysis was performed within them method holding time.

The Total samples in this data set were prepared and analyzed for Total Cyanide in two (2) batches on April 18, 2011 and April 19, 2011. All sample preparations and analyses were completed within the method holding time.

3. CALIBRATION ANALYSIS

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

Total and Filtered ICP Metals - One (1) analytical sequence is associated with all target analytes with the exception of Boron on April 21, 2011. Boron was analyzed in an ICP analytical sequence May 3-4, 2011. The laboratory reported provided raw data for this sequence to review. All ICV and CCV standards associated with these analytical sequences 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 Total and Filtered Mercury analyses associated with this data set was analyzed April 22, 2010. The initial calibration 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.

Total Cyanide Analysis - Total Cyanide samples were analyzed in two (2) sequences on April 18, 2011 and April 19, 2011. All initial and continuing calibration standard analyses met QC criteria.

4. ICP CRDL STANDARD

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

The laboratory analyzed one (1) CRDL standard with each of the ICP analytical sequence. This validator applied limits of 70-130% to review each target analyte. The recovery of all target analytes met QC criteria in the ICP sequence analyzed April 21, 2011 for the CRI sample with the exception of Lead (54.5%) and Silver (60%/67%). Lead has been qualified "UJ" estimated in the Total and Filtered validated sample. No action is taken based on the percent recovery of Silver in the CRDL standard.

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

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

All CRDL standard QC criteria were met in the Total Cyanide analyses 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 interferents 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 with each of the ICP analytical sequences. 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 each of the analytical sequences associated with this data set.

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 sample MW-3B for ICP Metals and Mercury. The percent recovery of all target analytes in the MS sample met all QC criteria.

Filtered Metal Analyses - Site specific matrix spike (MS) analysis was performed on sample MW-11A. The percent recovery of all target analytes in the Filtered Metals matrix spike analysis met all QC criteria.

Total Cyanide Analyses - Site specific matrix spike (MS) analysis was performed on sample MW-3B. The percent recovery of Cyanide in the Matrix spike sample met QC criteria.

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/Filtered Metal Analyses - Post digestion spike analysis was not required with this data set.

8. DUPLICATE SAMPLE ANALYSIS

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

Total Metals Analyses - Site specific duplicate analysis was reported on sample MW-3B. All RPD's met QC criteria in both the ICP and Mercury duplicate analyses.

Filtered Metals - Site specific duplicate analysis was reported on sample MW-11A. All RPD's met QC criteria in both the ICP and Mercury laboratory duplicate analysis.

Total Cyanide Analyses – Sample MW-3 was utilized for the sample duplicate analysis in this data set. The RPD of Total Cyanide met QC criteria.

9. ICP SERIAL DILUTION

The serial dilution analysis indicates whether significant physical or chemical interference's exist due to the sample matrix. If the concentration of any analyte in the original sample is greater than 50 times the instrument detection limit (IDL), an analysis of a 5-fold dilution samples must yield results which have a percent difference (%D) of less than or equal to 10 with the original sample results. If the %D of the serial dilution exceeds the 10% (and is not greater than 100%) for a particular analyte, all the associated sample results are qualified estimated (J).

Total Metal Analysis - Serial dilution analysis was performed on sample MW-3B. All %Differences met QC criteria with the exception of Barium (45.4%) and Boron (17.8%) in the serial dilution analysis. Barium and Boron 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.

Filtered Metal Analysis - Serial dilution analysis was performed on sample MW-11A. All %Differences met QC criteria in the serial dilution analysis.

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 was free from contamination of all target analytes above the reporting limit.

The preparation blank associated with the Mercury sample analysis was free from contamination.

The preparation blank associated with the Total Cyanide sample analysis was free from contamination.

The laboratory provided summary forms to report the ICB and CCB analyses for all analytes. All QC criteria were met in each of the ICB/CCB analyses associated with this data set.

Sample FB-1 (1104657-016) was analyzed for Total Metals and Total Cyanide. This Field Blank sample was free from contamination of these target analytes above the reporting limit.

11. LABORATORY CONTROL SAMPLE ANALYSIS (LCS)

The laboratory control sample (LCS) analysis provides information about the efficiency of the laboratory digestion procedure. If the recovery of any analyte is outside the established control limits, then laboratory performance and method accuracy are in question. Professional judgment is used to determine of data should be qualified or rejected.

One (1) Laboratory Control Sample (LCS) was prepared and analyzed with each preparation batch. Each of the ICP LCS samples was fortified with all target analytes. Recovery limits of 80%-120% were applied to each target analyte. The recovery of all target analytes met QC criteria in each of the ICP LCS samples associated with this data set.

The percent recovery of Mercury in each of the Mercury Laboratory Control Samples associated with this data set met QC criteria.

The percent recovery of Cyanide in each of the Cyanide Laboratory Control Sample met QC criteria.

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.

13. COMPOUND IDENTIFICATION

The samples in this data set were reported as Total Metals and Filtered/Dissolved Metals and Total Cyanide. Samples were filtered upon receipt at the laboratory. Seventeen (17) aqueous samples were analyzed for Total TAL Metals, Boron. Two (2) aqueous samples were prepared and analyzed for Filtered Metals. Fifteen (15) samples were analyzed for Total Cyanide. Five (5) percent (%) of these samples were chosen for data review. One (1) sample was chosen for the review of Total Metals and Total Cyanide. This sample was MW-4B (1104657-010). One (1) sample was chosen for the review of Filtered Metals. This sample was MW-11A (1104667-001)

The samples in this data set were analyzed in accordance with the required method 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 samples chosen for data review are not the field duplicate sample.

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. In addition each of the Total samples was analyzed for Total Cyanide.

The samples were analyzed for the Total/Filtered TAL Metals and Boron or a subset of metals designated by the associated COC documents. In addition the Total samples in this data set were analyzed for Total Cyanide. 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 in this data set are acceptable for use with the noted data qualifiers. Sample qualification is detailed/explained 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: **Miscellaneous Wet Chemistry**

SITE: **North Sea Landfill**

CONTRACT LAB: **H2M Laboratories**
Melville, NY

REVIEWER: **Renee Cohen**

DATE REVIEW COMPLETED: **July, 2011**

MATRIX: **Aqueous**

The Chain of Custody (COC) documentation associated with this data set listed seventeen (17) aqueous samples, one (1) Field Blank sample and one (1) Trip Blank sample. The samples in this data set were collected April 13, 2011 and April 14, 2011. The samples were delivered to H2M Laboratories located in Melville, New York. The samples were received at the laboratory on April 14, 2011.

The data evaluation was performed according to the guidelines and QC criteria cited in the miscellaneous wet chemistry methods that were used for this data set. A Data Usability Summary Report (DUSR) has been prepared in accordance with the guidelines of the Division of Environmental Remediation.

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

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

The laboratory performed these wet chemistry analyses based on the COC documentation that accompanied the samples to the laboratory. In addition these samples were analyzed for Volatile Organic Analytes and TAL Metals (Total and Filtered). The review of these various analyses are reported in stand-alone DUSR reports. This data review is associated with the Miscellaneous Wet Chemistry Analyses.

DATA USABILITY SUMMARY REPORT (DUSR)
NORTH SEA LANDFILL

1. OVERVIEW

This data report includes the analysis of 5% of the aqueous samples that were collected on April 13, 2011 and April 14, 2011. All samples were received at the laboratory on April 14, 2011 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. Sixteen (16) field samples and one (1) Field Blank sample were analyzed for these wet chemistry parameters listed on the COC documents. One (1) of the samples in this data set were chosen for review. The sample chosen for review was sample MW-12B (1104657-014).

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), Color, Hexavalent Chromium, 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. All initial and continuing calibration standard analyses associated with this data set met QC criteria.

4. MATRIX SPIKE (MS) ANALYSIS

The spike sample analysis provides information about the effect of the sample matrix upon the digestion and measurement methodology. The spike control limits are designated by H2M Laboratories. The in-house recovery limits are cited on the QC summary report pages for each analyte where applicable.

Sample MW-3B (1104657-007) was utilized for the matrix spike analyses where applicable. The percent recovery of the MS sample met QC criteria for all analytes reported with the exception of Hexavalent Chromium. The percent recovery was below QC limits (17.5%). The laboratory indicated that the sample MS was murky. The same notation was not added to the un-spiked sample. This seems to be an outlier. All other method QC met QC criteria. Sample data has not been flagged due to this QC anomaly.

5. DUPLICATE SAMPLE ANALYSIS

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

Sample MW-3B (1104657-007) designated on the COC documents to be utilized for the laboratory duplicate sample. The RPD% met QC criteria for all analytes reported herein.

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 was free from contamination of the target analyte above the reporting limit.

The Field Blank sample (FB-1/1104657-016) was free from contamination of all target analytes.

7. LABORATORY CONTROL SAMPLE ANALYSIS (LCS)

The laboratory control sample (LCS) analysis provides information about the efficiency of the laboratory digestion procedure. If the recovery of any analyte is outside the established control limits, then laboratory performance and method accuracy are in question. Professional judgment is used to determine of data should be qualified or rejected.

The laboratory reported LCS recoveries for all wet chemistry analyses. The recovery of all LCS samples met QC criteria for all wet chemistry analytes.

8. COMPOUND IDENTIFICATION

All samples results are reported in accordance with the cited methods. The wet chemistry results are acceptable for use without data qualifiers.

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, however a summary of the detected analytes in the field duplicate sample is provided herein. All results are reported in ppm. Sample data has not been qualified based on the results of these field duplicate data points.

Sample MW-1A(1104657-003)/DUP-01 (1104657-015)

Analyte	MW-1A	DUP-01	RPD (%)
Alkalinity	37.7	37.3	1.06
Chloride	27.8	27.4	1.44
Sulfate	141 (1:5)	127 (1:10)	10.4
COD	12.4	ND	NC
Hardness	190 (1:10)	180(1:5)	5.41
Nitrate	8.47(1:10)	6.28 (1:10)	29.7
TDS	356	325	9.10
TOC	4.8	3.7	25.9

10. SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

The inorganic analyses associated with this data set included the reporting of eighteen (18) aqueous samples. The samples were analyzed for Miscellaneous Wet Chemistry analytes as noted on the COC documents that accompanied the data set. 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 are acceptable for use without data qualifiers.

TABLE 1

CLIENT SAMPLE ID	**LABORATORYSAMPLE ID**
LEA-PRI	1104657-001
LEA-SEC	1104657-002
MW-1A	1104657-003
MW-1B	1104657-004
MW-1C	1104657-005
MW-3A	1104657-006
MW-3B	1104657-007
MW-3C	1104657-008
MW-4A	1104657-009
MW-4B	1104657-010
MW-4C	1104657-011
MW-11A	1104657-012
MW-12A	1104657-013
MW-12B	1104657-014***
DUP-01	1104657-015
FB-1	1104657-016
TB 4/13	1104657-017
SB 4/14	1104657-018
MW-11B	1104657-019

** sample chosen for review

APPENDIX A

DATA QUALIFIER DEFINITIONS

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

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

N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

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

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

K – The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.

L - The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.

UL – The analyte was not detected, and the reported quantitation limit is probably higher than reported.

APPENDIX B

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-12B

Lab Name: H2M LABS INC Contract: ______

Lab Code: H2M Case No.: TOS SAS No.: ______ SDG No.: TOS008

Matrix: (soil/water) WATER Lab Sample ID: 1104657-014A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 11\G10568.

Level: (low/med) LOW Date Received: 04/14/11

% Moisture: not dec. Date Analyzed: 04/20/11

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: ______ (µL) Soil Aliquot Volume ______ (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 UJ	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 UJ	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-12B

Lab Name: H2M LABS INC   Contract: ____

Lab Code: H2M   Case No.: TOS   SAS No.: ____   SDG No.: TOS008

Matrix: (soil/water) WATER   Lab Sample ID: 1104657-014A

Sample wt/vol: 5 (g/mL) ML   Lab File ID: 11\G10568.

Level: (low/med) LOW   Date Received: 04/14/11

% Moisture: not dec.   Date Analyzed: 04/20/11

GC Column: Rtx-624 ID: .18 (mm)   Dilution Factor: 1.00

Soil Extract Volume: ____ (µL)   Soil Aliquot Volume ____ (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 UJ	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 UJ	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-12B

Lab Name: H2M LABS INC Contract: ____

Lab Code: H2M Case No.: TOS SAS No.: ____ SDG No.: TOS008

Matrix: (soil/water) WATER Lab Sample ID: 1104657-014A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 11\G10568.

Level: (low/med) LOW Date Received: 04/14/11

% Moisture: not dec. Date Analyzed: 04/20/11

GC Column: Rtx-624 ID: .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

Total Metals
(RC)

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-4B

Lab Name: H2M LABS INC

Lab Code: H2M Case No. SAS No.: SDG No.: TOS008

Matrix (soil/water): WATER Lab Sample ID: 1104657-010

Level (low/med): LOW Date Received: 4/14/2011

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	11.8	B		P	
7440-36-0	Antimony	4.3	B		P	
7440-38-2	Arsenic	4.1	B		P	
7440-39-3	Barium	74.7	B	E	P	J
7440-41-7	Beryllium	0.13	U		P	
7440-42-8	Boron	81.7	B	E	P	J
7440-43-9	Cadmium	0.27	U		P	
7440-70-2	Calcium	17800			P	
7440-47-3	Chromium	16.8			P	
7440-48-4	Cobalt	3.9	B		P	
7440-50-8	Copper	0.55	U		P	
57-12-5	Cyanide	10.0	U		CA	
7439-89-6	Iron	7000			P	
7439-92-1	Lead	1.5	U		P	UJ
7439-95-4	Magnesium	10200			P	
7439-96-5	Manganese	1020			P	
7439-97-6	Mercury	0.10	U		CV	
7440-02-0	Nickel	5.4	B		P	
7440-09-7	Potassium	6210			P	
7782-49-2	Selenium	2.6	U		P	
7440-22-4	Silver	0.52	U		P	
7440-23-5	Sodium	26700			P	
7440-28-0	Thallium	2.7	U		P	
7440-62-2	Vanadium	0.92	B		P	
7440-66-6	Zinc	10	B		P	

Color Before: COLORLESS Clarity Before: CLEAR Texture: ______

Color After: COLORLESS Clarity After: CLEAR Artifacts: ______

Comments:

Date Reported 5/4/2011

Filtered
Metals -RC

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO

MW-11A

Lab Name: H2M LABS INC

Lab Code: H2M Case No. SAS No.: SDG No.: TOS008F

Matrix (soil/water): WATER Lab Sample ID: 1104667-001

Level (low/med): LOW Date Received: 4/14/2011

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	18.7	B		P	
7440-36-0	Antimony	2.1	U		P	
7440-38-2	Arsenic	1.9	U		P	
7440-39-3	Barium	98.9	B		P	
7440-41-7	Beryllium	0.13	U		P	
7440-42-8	Boron	50.0	B		P	
7440-43-9	Cadmium	0.27	U		P	
7440-70-2	Calcium	41400			P	
7440-47-3	Chromium	2.5	B		P	
7440-48-4	Cobalt	4.0	B		P	
7440-50-8	Copper	7.9	B		P	
7439-89-6	Iron	3540			P	
7439-92-1	Lead	1.5	U		P	UJ
7439-95-4	Magnesium	15100			P	
7439-96-5	Manganese	3140			P	
7439-97-6	Mercury	0.10	U		CV	
7440-02-0	Nickel	4.9	B		P	
7440-09-7	Potassium	7560			P	
7782-49-2	Selenium	2.6	U		P	
7440-22-4	Silver	0.71	B		P	
7440-23-5	Sodium	11100			P	
7440-28-0	Thallium	2.7	U		P	
7440-62-2	Vanadium	0.96	B		P	
7440-66-6	Zinc	31.2			P	

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments:
Date Reported 5/4/2011
Dissolved Metals

APPENDIX C

H2M LABS, INC.

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

55088

TOS

EXTERNAL CHAIN OF CUSTODY

CLIENT: P.W. Grosser Consulting

H2M SDG NO: TOS 008/F

PROJECT NAME/NUMBER North Sea Landfill / SHP 1101

SAMPLERS: (signature)/Client /PWGC

DELIVERABLES: ASP Category B

TURNAROUND TIME: Standard

NOTES: VOC's will be compared to NYSDEC, Class GA Groundwater Standards, 6 NYCRR Part 703. MDL must be lower than standards.

Project Contact: Zeb Youngman

Phone Number: 631-584-6353

PIS/Quote #

Dissolved 1104667-001 (008F)

Sample Container Description →

ANALYSIS REQUESTED

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ORGANIC: VOA	BNA	Pest/PCB	Baseline Parameters	Filtered Metals			INORG.: Metal	CN	LAB I.D. NO.	REMARKS:
4/13/11	1035	Liquid	MW-1A	10				X						1104657-003	
	1145		MW-1B					X						004	
	1248		MW-1C					X						005	
	1555		MW-3A					X						006	
	1655		MW-3B MS/MSD					X						007	
4/14/11	0930		MW-3C					X						008	
	1130		MW-4A					X						009	
	1210		MW-4B					X						010	
	1320		MW-4C					X						011	
4/13/11	1415		MW-11A	13				X	X					012	high Turbidity

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	4/14/11	1600		4/14/11	1600
	4/14/11	1636		4/14/11	1636

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N

Explain:

Samples were:

1. Shipped ___ or Hand Delivered ___ Airbill# ___
2. Ambient or [✓ chilled], Temp 5.6, 7.4, 9.15
3. Received in good condition: [✓ Y] or N
4. Properly preserved: [✓ Y] or N

COC Tape was:

1. Present on outer package: [✓ Y] or N
2. Unbroken on outer package: [✓ Y] or N
3. COC record present & complete upon sample receipt: [✓ Y] or N

WHITE COPY - ORIGINAL YELLOW COPY - CLIENT PINK COPY - LABORATORY

H2M LABS, INC.
575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

35[illegible]89

EXTERNAL CHAIN OF CUSTODY

CLIENT: TOS

H2M SDG NO: TOS 008/F

PROJECT NAME/NUMBER
North Sea Landfill / SHP1101

SAMPLERS: (signature)/Client
Brian Booth / P.W. Grosser Consult.

DELIVERABLES:
ASP Category B

TURNAROUND TIME:
Standard

NOTES:
VOCs will be compared to NYSDEC, Class GA groundwater standards, 6NYCRR part 703
MDL must be lower than standards
Dissolved 1104667-002 (008F)

Project Contact: Zeb Youngman

Phone Number: (631) 589-6353

PIS/Quote # 087.TOS07

Sample Container Description →

ANALYSIS REQUESTED

DATE	TIME	MATRIX	FIELD I.D.		Total No. of Containers	ORGANIC VOA	ORGANIC BNA	ORGANIC Pest/PCB	Baseline Parameters	Filtered Metals			INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
4/14/11	1015	liquid	MW-12A		1~~3~~4				X	X					1104657-013	high Turbidity
4/14/11	1045	↓	MW-12B		10				X						014	
4/13/11	1445		Lea-Pri		7				X						001	RT param.
4/13/11	1455	↓	Lea-Sec		6				X						002	↓
4/13/11	1040		DUP-01	LSA 4/14/11	10				X						015	
↓	1630		FB-1	LSA ↓	10				X						016	
4/13	—		TB		2										017	
↓	1355		IIB												~~018~~	019 LSA 4/18/11
															~~019~~	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Brian Booth	4/14/11	1600		4/14/11	1600
	4/14/11	1636		4/14/11	1636

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped ___ or [✓ Hand Delivered] ___ Airbill# ______
2. Ambient or [✓ chilled] Temp 5,6,7,9,14,15
3. Received in good condition: [✓ Y] or N
4. Properly preserved: [✓ Y] or N

COC Tape was:
1. Present on outer package: [✓ Y] or N
2. Unbroken on outer package: [✓ Y] or N
3. COC record present & complete upon sample receipt: [✓ Y] or N

WHITE COPY - ORIGINAL YELLOW COPY - CLIENT PINK COPY - LABORATORY