DATA USABILITY SUMMARY REPORT NYSEG

WADSWORTH ST. GENEVA

SDG #J895

VOLATILE, SEMIVOLATILE AND MISCELLANEOUS ANALYSES

Analyses performed by:

Severn Trent Laboratories Buffalo, New York

Review performed by:



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REPORT #5489

Summary

The following is an assessment of the data package for sample delivery group (SDG) # J895 for sampling from the NYSEG Wadsworth St. Geneva Site. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

| | | Date | | Analysis | | | |
|--|--|--|--|--|--|--|--|
| 55454 | 1 | Date | voc | svoc | PCB | MET | MISC |
| 691941 | Soil | 12/1/2005 | Х | Х | | | X |
| 691942 | Soil | 12/1/2005 | Х | Х | | | X |
| 691943 | Soil | 12/1/2005 | Х | Х | | | X |
| 691944 | Water | 12/1/2005 | Х | Х | | | X |
| 691945 | Soil | 12/2/2005 | Х | Х | |] | Х |
| 691946 | Soil | 12/2/2005 | Х | Х | | | Х |
| 691947 | Soil | 12/2/2005 | Х | Х | | | Х |
| 691948 | Soil | 12/1/2005 | Х | Х | | | Х |
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^{1.} The matrix spike/matrix (MS/MSD) spike duplicate performed on sample locations SB-7_20.5-21.3, SS-2. SB-6_19.8-21.4 and DUP-1.

^{2.} Sample location DUP-1 is the field duplicate of parent sample location SB-7_14.0-16.5.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 Method 8260 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- E The compound was quantitated above the calibration range.
- D Concentration is based on a diluted sample analysis.
- C Identification confirmed by gas chromatograph/mass spectrometer (GC/MS).
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

| Method | Matrix | Holding Time | Preservation |
|-------------|--------|--|--|
| | Water | 14 days from collection to analysis | Cooled @ 4 °C; preserved to a pH of less than 2. |
| SW-846 8260 | Soil | 48 hours from collection to extraction and 14 days from extraction to analysis | Cooled @ 4 °C. |

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method, trip, and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure contamination of samples during shipment. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with the following sample locations were qualified.

| Sample Locations | Compounds | Sample Result | Qualification |
|--|-----------|--|------------------------------------|
| SB-6_19.8-21.4 TP-2_6.2 TP-1_7.0 | Acetone | Detected sample results >RL and <bal< td=""><td>U at detected sample concentration</td></bal<> | U at detected sample concentration |

RL = reporting limit

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

System performance and column resolution were acceptable.

4. Calibration

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

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

| Initial/Continuing | Sample Locations | Compound | Criteria |
|--|---|---------------------------|----------|
| ALAMA SALAMA AMAMA A | SB-7_20.5-21.3 | Dibromochloromethane | 17.8% |
| ICAL %RSD | SB-7_14.0-16.5 | Methylene Chloride | 19.2% |
| IOAL MIGD | RB-1-12-1-05 | 1,1-Dichloroethane | 15.8% |
| | DUP-1 | Bromoform | 16.3% |
| CCAL %D | SB-7_20.5-21.3 SB-7_14.0-16.5 RB-1-12-1-05 DUP-1 | Bromomethane | -26.6% |
| | | Acetone | 19.8% |
| | | Carbon Disulfide | 18.2% |
| | SB-6_19.8-21.4 | 1,1-Dichloroethene | 19.5% |
| ICAL %RSD | TP-1_7.0 | 2-Butanone | 21.1% |
| ICAL MINOD | TP-2_6.2 | Trichloroethene | 19.8% |
| | TP-3_6.0 | 4-methyl-2-pentanone | 16.1% |
| | | 2-Hexanone | 18.6% |
| | | 1,1,2,2-Tetrachloroethane | 23.8% |
| CCAL 9/D | SB-6_19.8-21.4 TP-1_7.0 | 2-Hexanone | 20.6% |
| CCAL %D | TP-2_6.2 TP-3 6.0 | 1,1,2,2-Tetrachloroethane | -28.6% |

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

| Initial/Continuing | Criteria | Sample Result | Qualification | |
|---------------------------|---------------------------|---------------|---------------|--|
| <u> </u> | DDE 40.05 | Non-detect | R | |
| | RRF <0.05 | Detect | J | |
| Initial and | DDE -0.041 | Non-detect | R | |
| Continuing Calibration | RRF <0.01 ¹ | Detect | J | |
| Cambration | RRF >0.05 or | Non-detect | - No Action | |
| | RRF > 0.01 ¹ | Detect | | |
| Initial Calibration | 0/000 450/ | Non-detect | UJ | |
| | %RSD > 15% | Detect | J | |
| | %D >20% | Non-detect | No Action | |
| Continuing Calibration | (increase in sensitivity) | Detect | J | |
| | %D >20% | Non-detect | UJ | |
| | (decrease in sensitivity) | Detect | J | |

^{1.} RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e. ketones, 1,4-Dioxane, etc.)

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

The internal standard responses and retention times were within acceptable limits.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis exhibited recoveries and RPD results within the control limits.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Results for duplicate samples are summarized in the following table.

| Sample ID / Duplicate ID | Compound | Sample Result | Duplicate Result | RPD |
|--------------------------|------------------|------------------|---------------------|--------|
| | Acetone | 1.2 | 1.3 | AC |
| | Benzene | 22 | 15 | 37.8 % |
| | Carbon Disulfide | 0.12 J | 0.13 J | AC |
| | Ethylbenzene | 9.8 | 3.9 | 86.1 % |
| SB-7_14.0-16.5 / DUP-1 | Styrene | 1.6 | 0.62 J | AC |
| | Toluene | 6.6 | 3.2 | 69.3 % |
| | Total BTEX | 94.4 | 42.1 | 76.6 % |
| | Total VOCs | 97.3 J | 44.2 J | AC |
| | Xylene (Total) | 56 | 20 | 94.7 % |

ND = Not detected.

AC = The field duplicate RPD is acceptable when the RPD between parent sample and field duplicate sample is less than two times the RL and where the parent sample and/or duplicate concentration is less than five times the RL.

The field duplicate RPD exhibited acceptable recoveries.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Volatile Organics Data Validation Checklist

| | YES | NO | NA |
|---|----------|----|--------------|
| Data Completeness and Deliverables | | | |
| Have any missing deliverables been received and added to the data package? | <u></u> | X | |
| Is there a narrative or cover letter present? | <u>X</u> | | |
| Are the sample numbers included in the narrative? | X | | |
| Are the sample chain-of-custodies present? | X | | |
| Do the chain-of-custodies indicate any problems with sample receipt or sample condition? | | X | |
| Holding Times | | | |
| Have any holding times been exceeded? | | X | |
| Surrogate Recovery | | | |
| Are surrogate recovery forms present? | <u>X</u> | | · |
| Are all samples listed on the surrogate recovery form? | <u>X</u> | | |
| Was one or more surrogate recovery outside control limits for any sample or blank? | | X | ·—· |
| If yes, were the samples reanalyzed? | | | X |
| Are there any transcription/calculation errors between the raw data and the summary form? | | X | |
| Matrix Spikes | | | |
| Is there a MS recovery form present? | <u>X</u> | | |
| Were matrix spikes analyzed at the required frequency? | X | | |
| How many spike recoveries were outside of QC limits? | | | |
| <u>0</u> out of <u>15</u> | | | |
| How many RPDs for MS/MSD were outside of QC limits? | | | |
| <u>0</u> out of <u>15</u> | | | |
| <u>Blanks</u> | | | |
| Is a method blank summary form present? | <u>X</u> | | |
| Has a method blank been analyzed for each day or for each 20 samples, whichever is more frequent? | X | | |
| Has a blank been analyzed at least once every 12 hours for each system used? | X | | |
| Do any method/instrument blanks have positive results? | <u>X</u> | | |
| Do any trip/field/rinse blanks have positive results? | | | X |

| | YES | NO | NA |
|--|----------|-------------|----|
| Tuning and Mass Calibration | | | |
| Are the GC/MS tuning forms present for BFB? | X | | |
| Are the bar graph spectrum and mass/charge listing provided for each BFB? | _X_ | | |
| Has a BFB been analyzed for each 12 hours of analysis per instrument? | X | | |
| Have the ion abundance criteria been met for each instrument used? | X | | |
| Target Analytes | | | |
| Is an organics analysis data sheet present for each of the following: | | | |
| Samples | <u>X</u> | | |
| Matrix spikes | | | |
| Blanks | X | | |
| Are the reconstructed ion chromatograms present for each of the following: | | | |
| Samples | X | | |
| Matrix spikes | X | | |
| Blanks | X | | |
| Is the chromatographic performance acceptable? | X | | |
| Are the mass spectra of the identified compounds present? | X | | |
| Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum? | X | | |
| Do the samples and standard relative ion intensities agree within 20%? | X | | |
| Tentatively Identified Compounds | | | |
| Are all the TIC summary forms present? | | X | |
| Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present? | | | X |
| Are any target compounds listed as TICs? | | | X |
| Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum? | | | X |
| Do the TIC and "best match" spectrum agree within 20%? | | | X |
| Quantitation and Detection Limits | | | |
| Are there any transcription/calculation errors in the Form 1 results? | | X | |
| Are the reporting limits adjusted to reflect sample dilutions and, for soils, sample moisture? | X | | |

| | YES | NO | NA |
|--|----------|----|---|
| Standard Data | | | |
| Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards? | <u>X</u> | | |
| Initial Calibration | | | |
| Are the initial calibration forms present for each instrument used? | <u>X</u> | | |
| Are the response factor RSDs within acceptable limits? | | X | |
| Are the average RRFs ≥ minimum requirements? | X | | |
| Are there any transcription/calculation errors in reporting the RRFs or RSDs? | | X | |
| Continuing Calibration | | | |
| Are the continuing calibration forms present for each day and each instrument? | X | | |
| Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument? | _X_ | | |
| All %D within acceptable limits? | | X | |
| Are all RF ≥ minimum requirements? | X | | |
| Are there any transcription/calculation errors in reporting of RF or %D? | | X | C-1-7-11-4-11-11-11-11-11-11-11-11-11-11-11-1 |
| <u>Internal Standards</u> | | | |
| Are internal standard areas of every sample within the upper and lower limits for each continuing calibration? | X | | |
| Are the retention times of the internal standards within 30 seconds of the associated calibration standard? | _X_ | | |
| Field Duplicates | | | |
| Were field duplicates submitted with the samples? | X | | |

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 Method 8270 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- E The compound was quantitated above the calibration range.
- D Concentration is based on a diluted sample analysis.
- C Identification confirmed by gas chromatograph/mass spectrometer (GC/MS).
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

| Method | Matrix | Holding Time | Preservation |
|-------------|--------|--|---------------|
| | Water | 7 days from collection to extraction and 40 days from extraction to analysis | Cooled @ 4 °C |
| SW-846 8270 | Soil | 14 days from collection to extraction and 40 days from extraction to analysis | Cooled @ 4 °C |

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed

No compounds were detected in the associated blanks.

3. Mass Spectrometer Tuning

System performance and column resolution were acceptable.

4. Calibration

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

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) and RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

| Sample Locations | Initial/Continuing | Compound | Criteria |
|--|--------------------|----------------------------|----------|
| SB-7_20.5-21.3 SB-7_14.0-16.5 | | 3,3-Dichlorobenzene | 17.0% |
| SB-6_19.8-21.4 TP-1_7.0 TP-2_6.2 | ICV %RSD | Benzo(k)Fluoranthene | 20.8% |
| | ICV MIGD | Hexachlorocyclopentadiene | 51.9% |
| TP-3_6.0 DUP-1 | | Nitrobenzene | 16.6% |
| | | Bis(2-Ethylhexyl)phthalate | 20.2% |
| DD 1 12 1 05 | ICV %RSD | Hexachlorocyclopentadiene | 40.4% |
| RB-1-12-1-05 | | Naphthalene | 15.3% |
| | | Phenanthrene | 15.1% |
| RB-1-12-1-05 | CCV %D | Hexachlorocyclopentadiene | 29.1% |

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

| Initial/Continuing | Criteria | Sample Result | Qualification | | |
|------------------------|---------------------------|---------------|---------------|--------|---|
| | DDE 40.05 | Non-detect | R | | |
| | RRF <0.05 | Detect | J | | |
| Initial and | RRF <0.01 ¹ | Non-detect | R | | |
| Continuing Calibration | KKF <0.01 | KKF <0.01 | | Detect | J |
| | RRF >0.05 or | Non-detect | No Action | | |
| | RRF >0.01 ¹ | Detect | No Action | | |
| 1 W1. OW | 0/000 > 450/ | Non-detect | UJ | | |
| Initial Calibration | %RSD > 15% | Detect | J | | |
| Continuing | %D >20% | Non-detect | No Action | | |
| Calibration | (increase in sensitivity) | Detect | J | | |

| Initial/Continuing | Criteria | Sample Result | Qualification |
|--------------------|---------------------------|---------------|---------------|
| | %D >20% | Non-detect | UJ |
| | (decrease in sensitivity) | Detect | J |

^{1.} RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e. ketones, 1,4-Dioxane, etc.)

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC to exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) the area counts of the associated continuing calibration standard.

All internal standard response and retention times were acceptable.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compounds concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LSC analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Results for duplicate samples are summarized in the following table.

| Sample ID / Duplicate ID | Compound | Sample Result | Duplicate Result | RPD |
|--------------------------|------------------------|------------------|---------------------|--------|
| | 2-Methylnaphthalene | 57 | 19 | AC |
| | Acenaphthene | 6 J | 2 J | AC |
| | Acenaphthylene | 28 | 9.2 | AC |
| | Anthracene | 30 | 9.5 | AC |
| | Benzo(a)anthracene | 19 | 7.6 | 85.7 % |
| | Benzo(a)pyrene | 13 | 7 | 60.0 % |
| | Benzo(b)fluoranthene | 7.9 | 3.1 | 87.2 % |
| | Benzo(g,h,i)perylene | 3.6 J | 1.9 J | AC |
| | Benzo(k)fluoranthene | 15 | 7.2 | 70.2 % |
| SB-7_14.0-16.5 / DUP-1 | Carbazole | 6.8 J | 2.1 J | AC |
| | Chrysene | 17 | 7.2 | NC |
| | Dibenz(a,h)anthracene | 1.6 | 0.86 | AC |
| | Dibenzofuran | 20 | 7 | 96.2 % |
| | Fluoranthene | 41 | 15 | 92.8 % |
| | Fluorene | 35 | 11 | NC |
| | Indeno(1,2,3-cd)pyrene | 3.8 | 2.4 | 45.1 % |
| | Naphthalene | 160 | 54 | 99.0 % |
| | Phenanthrene | 72 | 25 | 96.9 % |
| | Pyrene | 29 | 12 | AC |

ND = Not detected.

The compounds chrysene and fluorene associated with samples SB-7_14.0-16.5 and DUP-1 exhibited a field duplicate RPD results greater than the control limit. The associated sample results from sample locations for the listed compounds were qualified as estimated.

10. Compound Identification

AC = The field duplicate RPD is acceptable when the RPD between parent sample and field duplicate sample is less than two times the RL and where the parent sample and/or duplicate concentration is less than five times the RL.

NC = Non-compliant.

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Semivolatile Organics Data Validation Checklist

| | YES | NO | NA |
|--|-------------|-------------|----------|
| Data Completeness and Deliverables | | | |
| Have any missing deliverables been received and added to the data package? | | X | |
| Is there a narrative or cover letter present? | X | | |
| Are the sample numbers included in the narrative? | X | | |
| Are the sample chain-of-custodies present? | X | | |
| Do the chain-of-custodies indicate any problems with sample receipt or sample condition? | | X | |
| Holding Times | | | |
| Have any holding times been exceeded? | | X | |
| Surrogate Recovery | | | |
| Are the surrogate recovery forms present? | <u>X</u> | | |
| Are all samples listed on the surrogate recovery form? | X | | |
| Were two or more base-neutral or acid surrogate recoveries outside control limits for any sample or blank? | | X | <u> </u> |
| If yes, were the samples reanalyzed? | | | <u>X</u> |
| Are there any transcription/calculation errors between the raw data and the summary form? | | _X | |
| Matrix Spikes | | | |
| Is there a MS recovery form present? | <u>X</u> | | |
| Were MS analyzed at the required frequency | X | | |
| How many spike recoveries were outside of QC limits? | | | |
| <u>0</u> out of <u>22</u> | | | |
| How many RPDs for MS/MSD were outside of QC limits? | | | |
| <u>0</u> out of <u>22</u> | | | |
| <u>Blanks</u> | | | |
| Is the method blank summary form present? | <u>X</u> | | |
| Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent? | X | <u></u> | |
| Has a blank been analyzed for each system used? | <u>X</u> | | |
| Do any method blanks have positive results? | | <u>X</u> | |
| Are field/rinse blanks associated with every sample? | | | <u>X</u> |

| | YES | NO | NA |
|--|-------------|----------|---|
| Tuning and Mass Calibration | | | ····· |
| Are the GC/MS tuning forms present for DFTPP? | X | <u> </u> | |
| Are the bar graph spectrum and mass/charge listing provided for each DFTPP? | X | | |
| Has a DFTPP been analyzed for each 12 hours of analysis per instrument? | X | | |
| Have the ion abundance criteria been met for each instrument used? | X | | |
| Target Analytes | | | |
| Is an organics analysis data sheet present for each of the following: | | | |
| Samples | X | | |
| Matrix spikes | X | | |
| Blanks | X | | |
| Are the reconstructed ion chromatograms present for each of the following: | | | |
| Samples | X | | |
| Matrix spikes | X | | |
| Blanks | X | | |
| Is the chromatographic performance acceptable? | X | | |
| Are the mass spectra of the identified compounds present? | _X | | |
| Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum? | X | | |
| Do the samples and standard relative ion intensities agree within 20%? | X | | |
| Tentatively Identified Compounds | | | |
| Are all the TIC summary forms present? | | X | |
| Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present? | | | X |
| Are any target compounds listed as TICs? | | | X |
| Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum? | | | X |
| Do the TIC and "best match" spectrum agree within 20%? | | | X |
| Quantitation and Detection Limits | | | |
| Are there any transcription/calculation errors in the Form 1 results? | | X | • |
| Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture? | x | | |

| | YES | NO | NA |
|--|----------|----------|----|
| Standard Data | | | |
| Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards? | <u>X</u> | | |
| Initial Calibration | | | |
| Are the initial calibration forms present for each instrument used? | X | | |
| Are the response factor RSDs within acceptable limits? | | <u>X</u> | |
| Are the average RRF ≥ minimum requirements? | <u>X</u> | | |
| Are there any transcription/calculation error in reporting the RRF or RSD? | | X | |
| Continuing Calibration | | | |
| Are the continuing calibration forms present for each day and each instrument? | <u>X</u> | | |
| Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument? | _X_ | | |
| All %D within acceptable limits? | | X | |
| Are all RF ≥ minimum requirements? | | | |
| Are there any transcription/calculation errors in reporting of RF or %D? | | <u>X</u> | |
| Internal Standards | | | |
| Are internal standard areas of every sample within the upper and lower limits for each continuing calibration? | _X_ | | |
| Are the retention times of the internal standards within 30 seconds of the associated calibration standard? | X | | |
| Field Duplicates | | | |
| Were field duplicates submitted with the samples? | <u>X</u> | | |

MISCELLANEOUS ANALYSES

Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 9012 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1994.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The reported value was obtained from a reading less than the RL but greater than or equal to the IDL.
- M Duplicate injection precision not met.
- N Spiked sample recovery not within control limits.
- * Duplicate analysis not within control limits.
- E The reported value is estimated due to the presence of interference.
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

| Method | Matrix | Holding Time | Preservation |
|---------------|------------|--------------|--|
| Total Cyanide | Water/Soil | 14 Days | Cooled @ 4 °C; preserved to a pH of greater than 12. |

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

No analytes were detected above the reporting limit in the associated blanks.

3. Calibration

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

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995.

All continuing calibration verification standard recoveries were within the control limit.

4. MS/MSD Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit a RPD within the laboratory established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compound's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited recoveries and RPD results within the control limit.

5. LCS Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LSC analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

The laboratory duplicate sample results exhibited RPD within the control limit.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Results for duplicate samples are summarized in the following table.

| Sample ID / Duplicate ID | Analyte | Sample Result | Duplicate Result | RPD |
|--------------------------|---------------|------------------|---------------------|--------|
| SB-7_14.0-16.5 / DUP-1 | Total Cyanide | 9.2 | 13.8 | 39.9 % |

ND = Not detected.

AC = The field duplicate RPD is acceptable when the RPD between parent sample and field duplicate sample is less than two times the RL and where the parent sample and/or duplicate concentration is less than five times the RL.

The field duplicate RPD exhibited acceptable recoveries.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Data Validation Checklist

| | YES | NO | NA |
|--|----------|-------------|-----------------|
| Data Completeness and Deliverables | | | |
| Is there a narrative or cover letter present? | X | | |
| Are the sample numbers included in the narrative? | X | | |
| Are the sample chain-of-custodies present? | X | | |
| Do the chain-of-custodies indicate any problems with sample receipt or sample condition? | | X | |
| Raw Data | | | |
| Are the preparation logs present? | X | • | |
| Are preparation dates present on sample preparation logs/bench sheets? | <u>X</u> | | |
| Are the measurement read out records present? | X | | |
| Is the data legible? | X | | |
| Is the data properly labeled? | X | | |
| Are pH values listed? | X | | |
| Percent solids calculation present for soils/sediments? | | P | X |
| Holding Times | | | |
| Were all analyses performed within the specified holding times? | X | | · |
| Sample Data | | | |
| Are all forms complete? | X | ****** | |
| Are correct units indicated the results sheets? | X | | |
| Are soil sample results for each parameter corrected for percent solids? | X | | |
| Initial Calibration | | | |
| Is a record of an initial calibration present?: | X | | |
| Is correlation coefficient less than .995?: | X | | + |
| Initial and Continuing Calibration Verification | | | |
| Present and complete for all analytes? | <u>X</u> | | |
| Are all calibration standards (initial and continuing) within control limits?: | <u>X</u> | | ** |
| Was continuing calibration performed every 10 samples or every 2 hours? | X | | |
| Was the ICV for cyanides distilled? | | | X |
| Initial and Continuing Calibration Blanks | | | |
| Present and complete? | <u>X</u> | | |
| Was an initial calibration blank analyzed? | X | | , , |
| Was a continuing calibration blank analyzed after every 10 samples or every 2 hours (which ever is more frequent)? | X | | |
| Are all calibration blanks less than or equal to the RL? | X | | |
| Preparation Blank | | | |
| Was one prep. blank analyzed for: | | | |
| each batch of digested samples? | X | | |

| | YES | NO | NA |
|--|----------|-------------|-------------|
| each matrix type? | X | | |
| Are all preparation blanks less than the RL? | X | | |
| If no, is the concentration of the sample with the least concentrated analyte less than 10 times the prep. blank? | | | X |
| Matrix Spike | | | |
| Present and complete for: | | | |
| each batch? | X | | |
| each matrix type? | X | | |
| Was field blank used for spiked sample? | | X | |
| Are all recoveries for analytes with sample concentrations less than four times the spike concentration within control limits? | X | | |
| Are results outside the control limits (75-125%) flagged with "N"? | | | X |
| <u>Laboratory Duplicates</u> | | | |
| Present and complete for: | | | |
| each batch? | <u>X</u> | | |
| each matrix type? | X | | |
| Was field blank used for duplicate analysis? | | <u>X</u> | |
| Are all values within control limits? | X | | |
| If no, are all results outside the control limits flagged with an *? | | | X |
| Field Duplicates | | | |
| Were field duplicates analyzed? | <u>X</u> | | |
| Aqueous | | | |
| is any RPD greater than 50% where sample and duplicate are both greater than or equal to 5 times RL? | | | X |
| Is any difference between sample and duplicate greater than RL where sample and/or duplicate is less than 5 times RL? | | | X |
| Soil/Sediment | | | |
| Is any RPD (where sample and duplicate are both greater than 5 times RL) > 100%? | | X | |
| Is any difference between sample and duplicate (where sample and/or duplicate is less than 5x RL) >2xRL? | *** | X | |
| Laboratory Control Sample | | | |
| Was one LCS prepared and analyzed for: | | | |
| each matrix? | X | | |
| each batch? | <u>X</u> | | |
| Are all recoveries within control limits? | X | | |
| Field Blank | | | |
| Is the field blank concentration less than RL for all analytes? | | | X |
| If no, was field blank value already rejected due to other QC criteria? | | | X |

| | YES | NO | NA |
|---|-----|---------------------------------------|----|
| Percent Solids | | · · · · · · · · · · · · · · · · · · · | |
| Are the percent solids in soil/sediment(s): | | | |
| < 50%? | | X | |
| < 10%? | | X | |

Corrected Sample Analysis Data Sheets

Laboratory Narrative

NYSDEC Sample Identification and Analysis Summary Sheets

Sample Compliance Report

SAMPLE COMPLIANCE REPORT

| Noncompliance | | VOC-ICAL %RSD, CCAL %D SVOC-ICAL %RSD | VOC-ICAL %RSD, CCAL %D SVOC-ICAL %RSD | VOC-Associated Blank, ICAL %RSD, CCAL %D SVOC-ICAL %RSD | VOC-ICAL %RSD, CCAL %D SVOC-ICAL %RSD | VOC-Associated Blank, ICAL %RSD, CCAL %D SVOC-ICAL %RSD | VOC-Associated Blank, ICAL %RSD, CCAL %D SVOC-ICAL %RSD | VOC-ICAL %RSD, CCAL %D SVOC-ICAL %RSD | VOC-ICAL %RSD, CCAL %D SVOC-ICAL %RSD | | | | |
|---------------|-------------------|--|--|---|--|---|---|--|--|--|--|--|--|
| | MISC | yes | yes | yes | yes | yes | yes | yes | yes | | | | |
| | | - | | | | | # | | ł | | | | |
| Complancy | 9. 2. | | 1 | ł | - | | I | # | - | | | | |
| O | SVCC | ou | ou | 0U | ou | ou | ou | ou | OU | | | | |
| | Voc | ou | no | no | 0U | no | no | no | no | | | | |
| | X | Soil | Soil | Soil | Water | Soil | Soil | Soil | Soil | | | | |
| | Sample ID | SB-7_20.5-21.3 | SB-7_14.0-16.5 | SB-6_19.8-21.4 | RB-1-12-1-05 | TP-1_7.0 | TP-2_6.2 | TP-3_6.0 | DUP-1 | | | | |
| | ASP Protocol | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | | | | |
| | Sampling Date | 12/1/2005 | 12/1/2005 | 12/1/2005 | 12/1/2005 | 12/2/2005 | 12/2/2005 | 12/2/2005 | 12/1/2005 | | | | |
| Sample | Delivery Group | 3895 | J895 | J895 | 1895 | J895 | J895 | 1895 | J895 | | | | |

Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

Client ID: SB-7 20.5-21.3

Site: NYSEG-Geneva

Lab Sample No: 691941

Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05 Date Analyzed: 12/12/05 GC Column: DB624 Instrument ID: VOAMS4.i Lab File ID: d50808.d

Sample Weight: 5.2 g Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

% Moisture: 21

Matrix: SOIL Level: HIGH

| | Analytical Results Units: ug/kg | Quantitation Limit |
|---------------------------|------------------------------------|-----------------------|
| <u>Parameter</u> | (Dry Weight) | Units: uq/kq |
| Chloromethane | ND | 600 |
| Bromomethane | ND J | 600 |
| Vinyl Chloride | ND | 600 |
| Chloroethane | ND | 600 |
| Methylene Chloride | ND 3 | 360 |
| Acetone | ND | 600 |
| Carbon Disulfide | ND / | 600 |
| 1,1-Dichloroethene | ND | 240 |
| 1,1-Dichloroethane | ND J | 600 |
| Erans-1,2-Dichloroethene | ND | 600 |
| cis-1,2-Dichloroethene | ND | 600 |
| Chloroform | ND | 600 |
| 1,2-Dichloroethane | ND | 240 |
| 2-Butanone | ND | 600 |
| 1,1,1-Trichloroethane | ND | 600 |
| Carbon Tetrachloride | ND | 240 |
| Bromodichloromethane | ND | 120 |
| 1,2-Dichloropropane | ND | 120 |
| cis-1,3-Dichloropropene | ND | 600 |
| Trichloroethene | ND | 120 |
| Dibromochloromethane | ND J | 600 |
| 1,1,2-Trichloroethane | ND | 360 |
| Benzene | 2200 | 120 |
| trans-1,3-Dichloropropene | ND | 600 |
| Bromoform | ND J | 480 |
| 4-Methyl-2-Pentanone | ND | 600 |
| 2-Hexanone | ND | 600 |
| Tetrachloroethene | ND | 120 |
| 1,1,2,2-Tetrachloroethane | ND | 120 |
| Toluene | 4400 | 600 |
| Chlorobenzene | ND | 600 |
| Ethylbenzene | 1000 | 480 |
| Styrene | 1400 | 600 |
| Xylene (Total) | 5100 | 600 |

Client ID: SB-7 20.5-21.3

Site: NYSEG-Geneva

Lab Sample No: 691941

Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05 Date Analyzed: 12/12/05

MTBE

GC Column: DB624
Instrument ID: VOAMS4.i
Lab File ID: d50808.d

Matrix: SOIL Level: HIGH

Sample Weight: 5.2 q

Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

% Moisture: 21

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Results Units: ug/kg

(Dry Weight)

Quantitation Limit Units: uq/kg

Parameter

ND

600

J895

STL Edison

51

Client ID: SB-7 14.0-16.5

Site: NYSEG-Geneva

Lab Sample No: 691942

Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05 Date Analyzed: 12/13/05

GC Column: Rtx-624

Instrument ID: VOAMS10.i Lab File ID: bb74559.d

Level: HIGH

Sample Weight: 5.2 g

Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

% Moisture: 24

Matrix: SOIL

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---|---|--|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene | ND T ND T ND T ND | 630 630 630 630 630 630 630 630 630 630 |
| Xylene (Total) | 56000 | 630 |

Client ID: SB-7 14.0-16.5

Site: NYSEG-Geneva

Lab Sample No: 691942

Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05 Date Analyzed: 12/13/05

GC Column: Rtx-624

Instrument ID: VOAMS10.i Lab File ID: bb74559.d

Level: HIGH Sample Weight: 5.2 g

Methanol Ext. Volume: 10.0 ml

Ext. Dilution Factor: 50.0

% Moisture: 24

Matrix: SOIL

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Analytical Results

Units: ug/kg (Dry Weight)

Quantitation

Limit

Units: uq/kq

Parameter

MTBE

ND

630

Client ID: SB-6_19.8-21.4 Site: NYSEG-Geneva

Lab Sample No: 691943

Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05 Date Analyzed: 12/09/05 GC Column: DB624 Instrument ID: VOAMS9.i

Lab File ID: k51035.d

Matrix: SOIL Level: LOW

Sample Weight: 5.3 g Purge Volume: 5.0 ml

% Moisture: 16

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---|--|---|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene | ND N | 5.6 5.6 5.6 5.6 5.6 5.6 2.6 5.6 2.6 5.6 2.1 11.1 5.1 5.6 4.5 5.6 4.5 5.6 4.5 5.6 4.5 5.6 4.5 5.6 4.5 5.6 4.5 5.6 4.5 5.6 4.5 5.6 4.5 5.6 4.1 5.6 5.6 4.1 5.6 5.6 5.6 5.6 5.6 5.6 5.6 5.6 5.6 5.6 |
| Styrene Xylene (Total) | ND 3.1J | 5.6 5.6 |

Client ID: SB-6_19.8-21.4

Site: NYSEG-Geneva

Lab Sample No: 691943 Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05

Date Analyzed: 12/09/05

GC Column: DB624

Instrument ID: VOAMS9.i Lab File ID: k51035.d Matrix: SOIL Level: LOW

Sample Weight: 5.3 g Purge Volume: 5.0 ml

% Moisture: 16

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Analytical Results
Units: ug/kg
(Dry Weight)

Quantitation Limit Units: ug/kg

<u>Parameter</u>

MTBE

ND

5.6

Client ID: RB-1-12-1-05

Site: NYSEG-Geneva

Lab Sample No: 691944

Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05

Date Analyzed: 12/03/05 GC Column: RTX-VMS

Instrument ID: VOAMS12.i
Lab File ID: o03459.d

Matrix: WATER Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 1.0

| <u>Parameter</u> | Analytical Result Units: ug/l | Quantitation Limit <u>Units: ug/l</u> |
|--|--|---|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene | ND N | 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 |
| Cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane | ND N | 5.0 5.0 2.0 5.0 2.0 1.0 1.0 5.0 1.0 5.0 |
| Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Xylene (Total) | ND N | 1.0 5.0 4.0 5.0 5.0 1.0 1.0 5.0 5.0 4.0 5.0 |

Client ID: RB-1-12-1-05

Site: NYSEG-Geneva

Lab Sample No: 691944

Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05
Date Analyzed: 12/13/05
GC Column: RTX-VMS

Instrument ID: VOAMS12.i Lab File ID: 003459.d

Matrix: WATER Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Result Units: uq/l

Quantitation Limit Units: uq/l

Parameter

MTBE

ND

5.0

Client ID: TP-1_7.0 Site: NYSEG-Geneva

Lab Sample No: 691945 Lab Job No: J895

Date Sampled: 12/02/05 Date Received: 12/03/05 Date Analyzed: 12/10/05 GC Column: DB 44

Matrix: SOIL Level: LOW

Sample Weight: 5.1 g Purge Volume: 5.0 ml

Instrument ID: VOAMS9.i Lab File ID: k51056.d

% Moisture: 17

| Parameter | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: uq/kq</u> |
|---|--|--|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene | ND N | 99999999999999999999999999999999999999 |
| Xylene (Total) | 1.2J | 5.9 |

Client ID: TP-1 7.0 Site: NYSEG-Geneva

Lab Sample No: 691945 Lab Job No: J895

Date Sampled: 12/02/05 Date Received: 12/03/05 Date Analyzed: 12/10/05 GC Column: DB624 Instrument ID: VOAMS9.i Matrix: SOIL Level: LOW

Sample Weight: 5.1 g Purge Volume: 5.0 ml

Lab File ID: k51056.d

% Moisture: 17

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Analytical Results Units: ug/kg (Dry Weight)

Quantitation Limit Units: ug/kg

<u>Parameter</u>

ND

5.9

MTBE

Client ID: TP-2 6.2 Site: NYSEG-Geneva

Lab Sample No: 691946 Lab Job No: J895

Date Sampled: 12/02/05 Date Received: 12/03/05 Date Analyzed: 12/09/05 Matrix: SOIL Level: LOW

Sample Weight: 5.1 g Purge Volume: 5.0 ml

% Moisture: 21

GC Column: DB624
Instrument ID: VOAMS9.i
Lab File ID: k51039.d

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---|--|--|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane rans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Xylene (Total) | ND N | 6.1 6.1 6.1 6.1 6.1 6.1 6.1 6.1 6.1 6.1 |
| • | | |

Client ID: TP-2 6.2 Site: NYSEG-Geneva

Lab Sample No: 691946 Lab Job No: J895

Date Sampled: 12/02/05 Date Received: 12/03/05 Date Analyzed: 12/09/05 Matrix: SOIL Level: LOW

GC Column: DB624

Sample Weight: 5.1 g Purge Volume: 5.0 ml

Instrument ID: VOAMS9.i Lab File ID: k51039.d

% Moisture: 21

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Results Units: ug/kg (Dry Weight)

Quantitation Limit Units: uq/kq

Parameter

ND

6.1

MTBE

Client ID: TP-3_6.0 Site: NYSEG-Geneva

Lab Sample No: 691947 Lab Job No: J895

Date Sampled: 12/02/05 Date Received: 12/03/05 Date Analyzed: 12/09/05 GC Column: DB624 Instrument ID: VOAMS9.i Matrix: SOIL Level: LOW

Sample Weight: 5.1 g Purge Volume: 5.0 ml

Lab File ID: k51040.d

% Moisture: 24

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---|--|--|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethene trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene | ND N | 4449446446334349342443344424 6666366266662662111616316566116656 |
| Xylene (Total) | 1.5J | 6.4 |

Client ID: TP-3_6.0 Site: NYSEG-Geneva Lab Sample No: 691947 Lab Job No: J895

Date Sampled: 12/02/05 Date Received: 12/03/05 Date Analyzed: 12/09/05 Matrix: SOIL Level: LOW

GC Column: DB624
Instrument ID: VOAMS9.i

Sample Weight: 5.1 g Purge Volume: 5.0 ml

Lab File ID: k51040.d

% Moisture: 24

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Analytical Results
Units: ug/kg
(Dry Weight)

Quantitation Limit Units: uq/kq

<u>Parameter</u>

ND

6.4

MTBE

Client ID: DUP-1 Site: NYSEG-Geneva Lab Sample No: 691948

Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05 Date Analyzed: 12/13/05 GC Column: Rtx-624 Instrument ID: VOAMS10.i

Level: HIGH

Matrix: SOIL

Lab File ID: bb74560.d

Sample Weight: 5.0 g
Methanol Ext. Volume: 10.0 ml
Ext. Dilution Factor: 50.0

% Moisture: 25

| | Analytical Results Units: ug/kg | Quantitation Limit |
|---------------------------|---------------------------------|-----------------------|
| <u>Parameter</u> | (Dry Weight) | <u>Units: ug/kg</u> |
| Chloromethane | ND | 660 |
| Bromomethane | ND J | 660 |
| Vinyl Chloride | ND | 660 |
| Chloroethane | ND | 660 |
| Methylene Chloride | ND J | 400 |
| Acetone | 1300 | - 660 66 0 |
| Carbon Disulfide | 130 Ј | 660 |
| 1,1-Dichloroethene | ND | 260 |
| 1,1-Dichloroethane | ND 2 | 660 |
| trans-1,2-Dichloroethene | ND | 660 |
| cis-1,2-Dichloroethene | ND | 660 |
| Chloroform | ND | 660 |
| 1,2-Dichloroethane | ND | 260 |
| 2-Butanone | ND | 660 |
| 1,1,1-Trichloroethane | ND | 660 |
| Carbon Tetrachloride | ND | 260 |
| Bromodichloromethane | ND | 130 |
| 1,2-Dichloropropane | ND | 130 |
| cis-1,3-Dichloropropene | ND | 660 |
| Trichloroethene | ND | 130 |
| Dibromochloromethane | ND T | 660 |
| 1,1,2-Trichloroethane | ND | 400 |
| Benzene | 15000 | 130 |
| trans-1,3-Dichloropropene | ND | 660 |
| Bromoform | ND J | 530 |
| 4-Methyl-2-Pentanone | ND | 660 |
| 2-Hexanone | ND | 660 |
| Tetrachloroethene | ND | 130 |
| 1,1,2,2-Tetrachloroethane | ND | 130 |
| Toluene | 3200 | 660 |
| Chlorobenzene | ND | 660 |
| Ethylbenzene | 3900 | 530 |
| Styrene | 620 J | 660 |
| Xylene (Total) | 20000 | 660 |

Client ID: DUP-1 Site: NYSEG-Geneva Lab Sample No: 691948

Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05 Date Analyzed: 12/13/05

GC Column: Rtx-624

Instrument ID: VOAMS10.i Lab File ID: bb74560.d

Matrix: SOIL Level: HIGH

Sample Weight: 5.0 g

Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

% Moisture: 25

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Results Units: ug/kg (Dry Weight)

Quantitation Limit Units: uq/kq

Parameter

MTBE

ND

660

Client ID: SB-7_20.5-21.3

Site: NYSEG-Geneva

Lab Sample No: 691941

Lab Job No: J895

Date Sampled: 12/01/05
Date Received: 12/03/05
Date Extracted: 12/07/05

Date Analyzed: 12/17/05 GC Column: DB-5 Instrument ID: BNAMS1.i Lab File ID: r25961.d

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Dilution Factor: 50.0

% Moisture: 21

Matrix: SOIL Level: LOW

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit Units: ug/kg |
|---|--|---|
| bis (2-Chloroethyl) ether 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene bis (2-chloroisopropyl) ether N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone bis (2-Chloroethoxy) methane 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorobutadiene 2-Methylnaphthalene Hexachlorocyclopentadiene 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene 3-Nitroaniline Acenaphthene Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline N-Nitrosodiphenylamine | ND N | 2100 21000 |
| 4-Bromophenyl-phenylether Hexachlorobenzene Phenanthrene Anthracene | ND ND 180000 76000 | 21000 2100 21000 21000 |
| | | |

Client ID: SB-7 20.5-21.3

Site: NYSEG-Geneva

Lab Sample No: 691941 Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05

Date Extracted: 12/07/05 Date Analyzed: 12/17/05 GC Column: DB-5

Instrument ID: BNAMS1.i Lab File ID: r25961.d

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Dilution Factor: 50.0

% Moisture: 21

| Parameter | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|----------------------------|--|--|
| Carbazole | 5100 J | 21000 |
| Di-n-butylphthalate | ND | 21000 |
| Fluoranthene | 92000 | 21000 |
| Pyrene | 65000 | 21000 |
| Butylbenzylphthalate | ND | 21000 |
| 3,3'-Dichlorobenzidine | ND J | 42000 |
| Benzo(a) anthracene | 45000 | 2100 |
| Chrysene | 39000 | 21000 |
| bis(2-Ethylhexyl)phthalate | ND | 21000 |
| Di-n-octylphthalate | ND | 21000 |
| Benzo(b) fluoranthene | 14000 | 2100 |
| Benzo(k) fluoranthene | 28000 5 | 2100 |
| Benzo(a) pyrene | 26000 | 2100 |
| Indeno(1,2,3-cd)pyrene | 6100 | 2100 |
| Dibenz(a,h)anthracene | 2300 | 2100 |
| Benzo(g,h,i)perylene | 5300 J | 21000 |

Client ID: SB-7_14.0-16.5

Site: NYSEG-Geneva

Lab Sample No: 691942

Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05 Date Extracted: 12/07/05

Date Analyzed: 12/17/05 GC Column: DB-5 Instrument ID: BNAMS1.i Lab File ID: r25962.d

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Dilution Factor: 25.0

% Moisture: 24

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: uq/kq</u> |
|--|--|--|
| bis(2-Chloroethyl)ether | ND | 1100 |
| 1,3-Dichlorobenzene | ND | 11000 |
| 1,4-Dichlorobenzene | ND | 11000 |
| | ND | 11000 |
| 1,2-Dichlorobenzene | ND ND | 11000 |
| bis (2-chloroisopropyl) ether | ND ND | 1100 |
| N-Nitroso-di-n-propylamine Hexachloroethane | ND ND | 1100 |
| | ND IT | 1100 |
| Nitrobenzene | ND | 11000 |
| Isophorone bis(2-Chloroethoxy)methane | ND ND | 11000 |
| | ND | 1100 |
| 1,2,4-Trichlorobenzene | 160000 | 11000 |
| Naphthalene 4-Chloroaniline | | 11000 |
| Hexachlorobutadiene | ND | 2200 |
| • | ND | |
| 2-Methylnaphthalene | 57000 ND ゴ | 11000 |
| Hexachlorocyclopentadiene | | 11000 |
| 2-Chloronaphthalene 2-Nitroaniline | ND ND | 11000 22000 |
| | ND ND | 11000 |
| Dimethylphthalate | | |
| Acenaphthylene 2,6-Dinitrotoluene | 28000 ND | 11000 2200 |
| 3-Nitroaniline | ND | 22000 |
| Acenaphthene | 6000 J | 11000 |
| Dibenzofuran | 20000 | 11000 |
| 2,4-Dinitrotoluene | ND | 2200 |
| Diethylphthalate | ND | 11000 |
| 4-Chlorophenyl-phenylether | ND | 11000 |
| Fluorene | 35000 | 11000 |
| 4-Nitroaniline | ND | 22000 |
| N-Nitrosodiphenylamine | ND | 11000 |
| 4-Bromophenyl-phenylether | ND | 11000 |
| Hexachlorobenzene | ND | 1100 |
| Phenanthrene | 72000 | 11000 |
| | | |
| Anthracene | 30000 | 11000 |

Client ID: SB-7 14.0-16.5

Site: NYSEG-Geneva

Lab Sample No: 691942

Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05 Date Extracted: 12/07/05 Date Analyzed: 12/17/05

GC Column: DB-5

Instrument ID: BNAMS1.i Lab File ID: r25962.d

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 25.0

% Moisture: 24

| | · · · · · · · · · · · · · · · · · · · | |
|----------------------------|--|--|
| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
| Carbazole | 6800 J | 11000 |
| Di-n-butylphthalate | ND | 11000 |
| Fluoranthene | 41000 | 11000 |
| Pyrene | 29000 | 11000 |
| Butylbenzylphthalate | ND | 11000 |
| 3,3'-Dichlorobenzidine | ND J | 22000 |
| Benzo(a) anthracene | 19000 | 1100 |
| Chrysene | 17000 | |
| bis(2-Ethylhexyl)phthalate | | 11000 |
| Di-n-octylphthalate | ND | 11000 |
| Benzo(b) fluoranthene | ND | 11000 |
| Benzo(k) fluoranthene | 7900 | 1100 |
| Benzo (a) pyrene | 15000 T | 1100 |
| Indeno(1,2,3-cd)pyrene | 13000 | 1100 |
| Dibong (2, b) anti- | 3800 | 1100 |
| Dibenz(a,h)anthracene | 1600 | 1100 |
| Benzo(g,h,i)perylene | 3600 Ј | 11000 |

Client ID: SB-6 19.8-21.4

Site: NYSEG-Geneva

Lab Sample No: 691943 Lab Job No: J895

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

% Moisture: 16

Date Analyzed: 12/15/05

GC Column: DB-5 Instrument ID: BNAMS1.i Lab File ID: r25928.d

Date Sampled: 12/01/05 Date Received: 12/03/05

Date Extracted: 12/07/05

| | Analytical Results | Quantitation |
|-----------------------------|--------------------|---------------------|
| | Units: ug/kg | Limit |
| <u>Parameter</u> | (Dry Weight) | <u>Units: ug/kg</u> |
| bis(2-Chloroethyl)ether | ND | 40 |
| 1,3-Dichlorobenzene | ND | 400 |
| 1,4-Dichlorobenzene | ND | 400 |
| 1,2-Dichlorobenzene | ND | 400 |
| bis(2-chloroisopropyl)ether | ND | 400 |
| N-Nitroso-di-n-propylamine | ND | 40 |
| Hexachloroethane | ND | 40 |
| Nitrobenzene | ND \mathcal{J} | 40 |
| Isophorone | ND | 400 |
| bis(2-Chloroethoxy)methane | ND | 400 |
| 1,2,4-Trichlorobenzene | ND | 40 |
| Naphthalene | 110 J | 400 |
| 4-Chloroaniline | ND | 400 |
| Hexachlorobutadiene | ND | 79 |
| 2-Methylnaphthalene | 22 J | 400 |
| Hexachlorocyclopentadiene | ND . | 400 |
| 2-Chloronaphthalene | ND | 400 |
| 2-Nitroaniline | ND | 790 |
| Dimethylphthalate | ND | 400 |
| Acenaphthylene | 23 Ј | 400 |
| 2,6-Dinitrotoluene | ND | 79 |
| 3-Nitroaniline | ND | 790 |
| Acenaphthene | ND | 400 |
| Dibenzofuran | 16 J | 400 |
| 2,4-Dinitrotoluene | ND | 79 |
| Diethylphthalate | ND | 400 |
| 4-Chlorophenyl-phenylether | ND | 400 |
| Fluorene | 31 J | 400 |
| 4-Nitroaniline | ND | 790 |
| N-Nitrosodiphenylamine | ND | 400 |
| 4-Bromophenyl-phenylether | ND | 400 |
| Hexachlorobenzene | _ ND _ | 40 |
| Phenanthrene | 58 J | 400 |
| Anthracene | 27 Ј | 400 |

Client ID: SB-6_19.8-21.4

Site: NYSEG-Geneva

Date Sampled: 12/01/05
Date Received: 12/03/05
Date Extracted: 12/07/05
Date Analyzed: 12/15/05
GC Column: DB-5
Instrument ID: BNAMS1.i

Lab File ID: r25928.d

Lab Sample No: 691943 Lab Job No: J895

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

% Moisture: 16

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|----------------------------|--|--|
| Carbazole | ND | 400 |
| Di-n-butylphthalate | ND | 400 |
| Fluoranthene | 30 J | 400 |
| Pyrene | 25 J | 400 |
| Butylbenzylphthalate | ND | 400 |
| 3,3 -Dichlorobenzidine | ND 5 | 790 |
| Benzo(a) anthracene | 16 J | 40 |
| Chrysene | 15 J | 400 |
| bis(2-Ethylhexyl)phthalate | ND | 400 |
| Di-n-octylphthalate | $\mathbf{N} D$ | 400 |
| Benzo(b) fluoranthene | ND | 40 |
| Benzo(k) fluoranthene | ND) | 40 |
| Benzo(a)pyrene | 11 J | 40 |
| Indeno(1,2,3-cd)pyrene | , ND | 40 |
| Dibenz(a,h)anthracene | ND | 40 |
| Benzo(g,h,i)perylene | ND | 400 |

Client ID: RB-1-12-1-05

Site: NYSEG-Geneva

Lab Sample No: 691944 Lab Job No: J895

Date Sampled: 12/01/05

Date Received: 12/03/05

Date Extracted: 12/05/05 Date Analyzed: 12/12/05

GC Column: DB-5

Instrument ID: BNAMS4.i Lab File ID: u26905.d

Matrix: WATER Level: LOW

Sample Volume: 1000 ml

Extract Final Volume: 2.0 ml

Dilution Factor: 1.0

| Parameter | Analytical Result Units: ug/l | Quantitation Limit Units: ug/l |
|-----------------------------|-------------------------------|--------------------------------------|
| bis(2-Chloroethy1)ether | ND | 1.0 |
| 1,3-Dichlorobenzene | ND | 10 |
| 1,4-Dichlorobenzene | ND | 10 |
| 1,2-Dichlorobenzene | ND | 10 |
| bis(2-chloroisopropyl)ether | ND | 10 |
| N-Nitroso-di-n-propylamine | ND | 1.0 |
| Hexachloroethane | ND | 1.0 |
| Nitrobenzene | ND | 1.0 |
| Isophorone | ND | 10 |
| bis(2-Chloroethoxy)methane | ND | 10 |
| 1,2,4-Trichlorobenzene | ND | 1.0 |
| Naphthalene | ND J | 10 |
| 4-Chloroaniline | ND | 10 |
| Hexachlorobutadiene | ND | 2.0 |
| 2-Methylnaphthalene | NĎ | 10 |
| Hexachlorocyclopentadiene | ND J | 10 |
| 2-Chloronaphthalene | ND | 10 |
| 2-Nitroaniline | ND | 20 |
| Dimethylphthalate | ND | 10 |
| Acenaphthylene | ND | 10 |
| 2,6-Dinitrotoluene | ND | 2.0 |
| 3-Nitroaniline | ЙD | 20 |
| Acenaphthene | ND | 10 |
| Dibenzofuran | ND | 10 |
| 2,4-Dinitrotoluene | ND | 2.0 |
| Diethylphthalate | ND | 10 |
| 4-Chlorophenyl-phenylether | ND | 10 |
| Fluorene | ND | 10 |
| 4-Nitroaniline | ND | 20 |
| N-Nitrosodiphenylamine | ND | 10 |
| 4-Bromophenyl-phenylether | ND | 1.0 |
| Hexachlorobenzene | ND | 1.0 |
| Phenanthrene | ND J | 10 |
| Anthracene | ND | 10 |
| | | |

Client ID: RB-1-12-1-05

Site: NYSEG-Geneva

Lab Sample No: 691944

Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05

Date Extracted: 12/05/05 Date Analyzed: 12/12/05

GC Column: DB-5 Instrument ID: BNAMS4.i Lab File ID: u26905.d

Matrix: WATER Level: LOW

Sample Volume: 1000 ml

Extract Final Volume: 2.0 ml

Dilution Factor: 1.0

| <u>Parameter</u> | Analytical Result Units: ug/l | Quantitation Limit <u>Units: ug/l</u> |
|-------------------------------------|----------------------------------|---|
| Carbazole | ND | 10 |
| Di-n-butylphthalate | ND | 10 |
| Fluoranthene | ND | 10 |
| Pyrene | ND | 10 |
| Butylbenzylphthalate | ND | 10 |
| 3,3 [†] -Dichlorobenzidine | ND | 20 |
| Benzo(a) anthracene | ND | 1.0 |
| Chrysene | ND | 10 |
| bis(2-Ethylhexyl)phthalate | ND 7 | 10 |
| Di-n-octylphthalate | ND | 10 |
| Benzo(b) fluoranthene | ND | 1,0 |
| Benzo(k)fluoranthene | ND | 1.0 |
| Benzo(a)pyrene | ND | 1.0 |
| Indeno(1,2,3-cd)pyrene | ND | 1.0 |
| Dibenz(a,h)anthracene | ND | 1.0 |
| Benzo(g,h,i)perylene | ND | 10 |

Client ID: TP-1 7.0 Site: NYSEG-Geneva

Lab Sample No: 691945 Lab Job No: J895

Date Sampled: 12/02/05 Date Received: 12/03/05 Date Extracted: 12/07/05 Matrix: SOIL Level: LOW

Date Analyzed: 12/16/05

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

GC Column: DB-5 Instrument ID: BNAMS1.i Lab File ID: r25952.d

% Moisture: 17

| | Analytical Results Units: ug/kg | Quantitation Limit |
|-----------------------------|------------------------------------|-----------------------|
| <u>Parameter</u> | (Dry Weight) | <u>Units: ug/kg</u> |
| bis(2-Chloroethyl)ether | ND | 40 |
| 1,3-Dichlorobenzene | ND | 400 |
| 1,4-Dichlorobenzene | ND | 400 |
| 1,2-Dichlorobenzene | ND | 400 |
| bis(2-chloroisopropyl)ether | ND | 400 |
| N-Nitroso-di-n-propylamine | ND | 40 |
| Hexachloroethane | ND | 40 |
| Nitrobenzene | ND 3 | 40 |
| Isophorone | ND | 400 |
| bis(2-Chloroethoxy)methane | ND | 400 |
| 1,2,4-Trichlorobenzene | ND . | 40 |
| Naphthalene | ND | 400 |
| 4-Chloroaniline | ND | 400 |
| Hexachlorobutadiene | ND | . 80 |
| 2-Methylnaphthalene | ND | 400 |
| Hexachlorocyclopentadiene | ND J | 400 |
| 2-Chloronaphthalene | ND | 400 |
| 2-Nitroaniline | ND | 800 |
| Dimethylphthalate | ND | 400 |
| Acenaphthylene | ND | 400 |
| 2,6-Dinitrotoluene | ND | 80 |
| 3-Nitroaniline | ND | 800 |
| Acenaphthene | 11 J | 400 |
| Dibenzofuran | ND | 400 |
| 2,4-Dinitrotoluene | ND | 80 |
| Diethylphthalate | ND | 400 |
| 4-Chlorophenyl-phenylether | ND | 400 |
| Fluorene | ND | 400 |
| 4-Nitroaniline | ND | 800 |
| N-Nitrosodiphenylamine | ND | 400 |
| 4-Bromophenyl-phenylether | ND | 400 |
| Hexachlorobenzene | ND | 40 |
| Phenanthrene | ND | 400 |
| Anthracene | ND | 400 |

Client ID: TP-1 7.0 Site: NYSEG-Geneva

Lab Sample No: 691945 Lab Job No: J895

Date Sampled: 12/02/05 Date Received: 12/03/05 Date Extracted: 12/07/05 Date Analyzed: 12/16/05

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

GC Column: DB-5

Extract Final Volume: 1.0 ml

Instrument ID: BNAMS1.i Lab File ID: r25952.d

Dilution Factor: 1.0

% Moisture: 17

| Parameter | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|----------------------------|--|--|
| Carbazole | ND | 400 |
| Di-n-butylphthalate | ND | 400 |
| Fluoranthene | ND | 400 |
| Pyrene | ND | 400 |
| Butylbenzylphthalate | ND | 400 |
| 3,3'-Dichlorobenzidine | ND 7 | 800 |
| Benzo(a)anthracene | ND | 40 |
| Chrysene | ND | 400 |
| bis(2-Ethylhexyl)phthalate | ND | 400 |
| Di-n-octylphthalate | ND | 400 |
| Benzo(b) fluoranthene | ND | 40 |
| Benzo(k) fluoranthene | ND J | 40 |
| Benzo(a)pyrene | ND | 40 |
| Indeno(1,2,3-cd)pyrene | ND | 40 |
| Dibenz(a,h)anthracene | ND | 40 |
| Benzo(g,h,i)perylene | ND | 400 |

Client ID: TP-2 6.2 Site: NYSEG-Geneva

Lab Sample No: 691946 Lab Job No: J895

Date Sampled: 12/02/05 Date Received: 12/03/05 Date Extracted: 12/07/05 Date Analyzed: 12/16/05

Level: LOW

Sample Weight: 15.0 g

GC Column: DB-5

Extract Final Volume: 1.0 ml

Instrument ID: BNAMS1.i Lab File ID: r25953.d

Dilution Factor: 1.0

% Moisture: 21

Matrix: SOIL

| | Analytical Results Units: ug/kg | Quantitation Limit |
|-----------------------------|------------------------------------|-----------------------|
| Parameter | (Dry Weight) | <u>Units: uq/kq</u> |
| bis(2-Chloroethyl)ether | ND | 42 |
| 1,3-Dichlorobenzene | ND | 420 |
| 1,4-Dichlorobenzene | ND | 420 |
| 1,2-Dichlorobenzene | ND | 420 |
| bis(2-chloroisopropyl)ether | ND | 420 |
| N-Nitroso-di-n-propylamine | ND | 42 |
| Hexachloroethane | ND | 42 |
| Nitrobenzene | ND 3 | 42 |
| Isophorone | ND | 420 |
| bis(2-Chloroethoxy)methane | ND | 420 |
| 1,2,4-Trichlorobenzene | ND | 42 |
| Naphthalene | ND | 420 |
| 4-Chloroaniline | ND | 420 |
| Hexachlorobutadiene | ND | 84 |
| 2-Methylnaphthalene | ND | 420 |
| Hexachlorocyclopentadiene | ND J | 420 |
| 2-Chloronaphthalene | ND | 420 |
| 2-Nitroaniline | ND | 840 |
| Dimethylphthalate | ND | 420 |
| Acenaphthylene | ND | 420 |
| 2,6-Dinitrotoluene | ND | 84 |
| 3-Nitroaniline | ND | 840 |
| Acenaphthene | ND | 420 |
| Dibenzofuran | ND | 420 |
| 2,4-Dinitrotoluene | ND | 84 |
| Diethylphthalate | ND | 420 |
| 4-Chlorophenyl-phenylether | ND | 420 |
| Fluorene | ND | 420 |
| 4-Nitroaniline | ND | 840 |
| N-Nitrosodiphenylamine | ND | 420 |
| 4-Bromophenyl-phenylether | ND | 420 |
| Hexachlorobenzene | ND | 42 |
| Phenanthrene | 10 J | 420 |
| Anthracene | ND | 420 |
| Allelitacelle | TATA | 4 44 O |

Client ID: TP-2 6.2 Site: NYSEG-Geneva

Lab Sample No: 691946 Lab Job No: J895

Date Sampled: 12/02/05 Date Received: 12/03/05 Date Extracted: 12/03/05
Date Extracted: 12/07/05
Date Analyzed: 12/16/05
GC Column: DB-5
Instrument ID: BNAMS1.i Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

Lab File ID: r25953.d

% Moisture: 21

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit Units: ug/kq |
|----------------------------|--|---------------------------------------|
| Carbazole | ND | 420 |
| Di-n-butylphthalate | ND | 420 |
| Fluoranthene | 20 Ј | 420 |
| Pyrene | 16 J | 420 |
| Butylbenzylphthalate | ND | 420 |
| 3,3'-Dichlorobenzidine | ND J | 840 |
| Benzo(a)anthracene | 16 J | 42 |
| Chrysene | · 17 J | 420 |
| bis(2-Ethylhexyl)phthalate | ND | 420 |
| Di-n-octylphthalate | ND | 420 |
| Benzo(b)fluoranthene | · 13 J | 42 |
| Benzo(k)fluoranthene | 27 Ј | 42 |
| Benzo(a)pyrene | 30 J | 42 |
| Indeno(1,2,3-cd)pyrene | 16 J | 42 |
| Dibenz(a,h)anthracene | ND | 42 |
| Benzo(g,h,i)perylene | 16 J | 420 |

Client ID: TP-3 6.0 Site: NYSEG-Geneva

Lab Sample No: 691947 Lab Job No: J895

Date Sampled: 12/02/05 Date Received: 12/03/05 Date Extracted: 12/07/05 Date Analyzed: 12/16/05 Matrix: SOIL Level: LOW

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

GC Column: DB-5 Instrument ID: BNAMS1.i Lab File ID: r25954.d

Dilution Factor: 1.0

% Moisture: 24

| | Analytical Results | Quantitation |
|-----------------------------|--------------------|---------------------|
| | Units: ug/kg | Limit |
| <u>Parameter</u> | (Dry Weight) | <u>Units: uq/kq</u> |
| bis(2-Chloroethyl)ether | ND | 44 |
| 1,3-Dichlorobenzene | ND | 440 |
| 1,4-Dichlorobenzene | ND | 440 |
| 1,2-Dichlorobenzene | ND | 440 |
| bis(2-chloroisopropyl)ether | N D | 440 |
| N-Nitroso-di-n-propylamine | ND | 44 |
| Hexachloroethane | ИD | 44 |
| Nitrobenzene | ND J | 44 |
| Isophorone | ND | 440 |
| bis(2-Chloroethoxy)methane | ND | 440 |
| 1,2,4-Trichlorobenzene | ND | 44 |
| Naphthalene | ND | 440 |
| 4-Chloroaniline | ND | 440 |
| Hexachlorobutadiene | ND | 87 |
| 2-Methylnaphthalene | ND | 440 |
| Hexachlorocyclopentadiene | ND J | 440 |
| 2-Chloronaphthalene | ND | 440 |
| 2-Nitroaniline | ND | 870 |
| Dimethylphthalate | ND | 440 |
| Acenaphthylene | ND. | 440 |
| 2,6-Dinitrotoluene | ND | 87 |
| 3-Nitroaniline | ND | 870 |
| Acenaphthene | ND | 440 |
| Dibenzofuran | ND | 440 |
| 2,4-Dinitrotoluene | ND | 87 |
| Diethylphthalate | ND | 440 |
| 4-Chlorophenyl-phenylether | ИD | 440 |
| Fluorene | ND | 440 |
| 4-Nitroaniline | ND | 870 |
| N-Nitrosodiphenylamine | ND | 440 |
| 4-Bromophenyl-phenylether | ND | 440 |
| Hexachlorobenzene | ND | 44 |
| Phenanthrene | 25 J | 440 |
| Anthracene | 11 J | 440 |

Client ID: TP-3 6.0 Site: NYSEG-Geneva

Date Sampled: 12/02/05 Date Received: 12/03/05 Date Extracted: 12/03/05
Date Extracted: 12/07/05
Date Analyzed: 12/16/05
GC Column: DB-5
Instrument ID: BNAMS1.i

Lab File ID: r25954.d

Lab Sample No: 691947 Lab Job No: J895

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

% Moisture: 24

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|----------------------------|--|--|
| Carbazole | ND | 440 |
| Di-n-butylphthalate | ND | 440 |
| Fluoranthene | 66 J | 440 |
| Pyrene | 48 J | 440 |
| Butylbenzylphthalate | ND | 440 |
| 3,3'-Dichlorobenzidine | ND 📆 | 870 |
| Benzo(a)anthracene | 42 J | 44 |
| Chrysene | 46 J | 440 |
| bis(2-Ethylhexyl)phthalate | ND | 440 |
| Di-n-octylphthalate | ND | 440 |
| Benzo(b) fluoranthene | 26 J | 44 |
| Benzo(k)fluoranthene | 48 5 | 44 |
| Benzo(a)pyrene | 48 | 44 |
| Indeno(1,2,3-cd)pyrene | 27 J | 44 |
| Dibenz(a,h)anthracene | ND | 44 |
| Benzo(g,h,i)perylene | 30 J | 440 |

Client ID: DUP-1 Site: NYSEG-Geneva

Lab Sample No: 691948 Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05 Date Extracted: 12/03/05
Date Extracted: 12/07/05
Date Analyzed: 12/17/05
GC Column: DB-5
Instrument ID: BNAMS1.i
Lab File ID: r25963.d

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Dilution Factor: 10.0

% Moisture: 25

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|-----------------------------|--|--|
| bis(2-Chloroethyl)ether | ND | 440 |
| 1,3-Dichlorobenzene | · ND | 4400 |
| 1,4-Dichlorobenzene | ND | 4400 |
| 1,2-Dichlorobenzene | ND | 4400 |
| bis(2-chloroisopropyl)ether | ND | 4400 |
| N-Nitroso-di-n-propylamine | ND . | 440 |
| Hexachloroethane | ND . | 440 |
| Nitrobenzene | ND J | 440 |
| Isophorone | ND | 4400 |
| bis(2-Chloroethoxy)methane | ND | 4400 |
| 1,2,4-Trichlorobenzene | ND | 440 |
| Naphthalene | 54000 | 4400 |
| 4-Chloroaniline | ир | 4400 |
| Hexachlorobutadiene | ND | 890 |
| 2-Methylnaphthalene | 19000 | 4400 |
| Hexachlorocyclopentadiene | ND J | 4400 |
| 2-Chloronaphthalene | ND | 4400 |
| 2-Nitroaniline | ND | 8900 |
| Dimethylphthalate | ND | 4400 |
| Acenaphthylene | 9200 | 4400 |
| 2,6-Dinitrotoluene | ND | 890 |
| 3-Nitroaniline | ND | 8900 |
| Acenaphthene | 2000 Ј | 4400 |
| Dibenzofuran | . 7000 | 4400 |
| 2,4-Dinitrotoluene | ND | 890 |
| Diethylphthalate | ND | 4400 |
| 4-Chlorophenyl-phenylether | ND | 4400 |
| Fluorene | 11000 | 4400 |
| 4-Nitroaniline | ND | 8900 |
| N-Nitrosodiphenylamine | ND | 4400 |
| 4-Bromophenyl-phenylether | ND | 4400 |
| Hexachlorobenzene | ND | 440 |
| Phenanthrene | 25000 | 4400 |
| Anthracene | 9500 | 4400 |

Client ID: DUP-1 Site: NYSEG-Geneva

Lab Sample No: 691948 Lab Job No: J895

Date Sampled: 12/01/05 Date Received: 12/03/05 Date Extracted: 12/07/05 Date Analyzed: 12/17/05 GC Column: DB-5

Matrix: SOIL

Level: LOW Sample Weight: 15.0 g

Instrument ID: BNAMS1.i Lab File ID: r25963.d

Extract Final Volume: 1.0 ml Dilution Factor: 10.0

% Moisture: 25

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: uq/kq</u> |
|--|--|--|
| Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene | 2100 J ND 15000 12000 ND ND 7600 7200 ND ND 3100 7200 7200 7000 2400 | 4400 4400 4400 4400 8900 440 4400 4400 4 |
| Benzo(g, h, i) perylene | 860 1900 j J | 440 4400 |

Site: NYSEG-Geneva

Matrix: WATER

Lab Job No: J895

QA Batch: 1943

Total Cyanide

 STL Edison Client ID
 Date
 Date
 Date
 Date
 Date
 Date
 Dilution
 Analytical

 Sample #
 Sampled Extracted Analyzed
 Factor
 Result

 Units: mg/l

 691944 RB-1-12-1-05
 12/01/05 12/08/05 12/08/05
 12/08/05
 1.0
 ND

Quantitation Limit for Total Cyanide is 0.01 mg/l.

Site: NYSEG-Geneva

Matrix: SOIL

Lab Job No: J895

QA Batch: 1943

Total Cyanide

| | · · | | | | | | |
|---------|----------------|-------------|-----------|----------|----------|----------|--------------|
| STL Edi | son Client ID | <u>Date</u> | Date | Date | Percent | Dilution | Analytical |
| Sample | <u>#</u> | Sampled | Extracted | Analyzed | Moisture | Factor | Result |
| | | | | | * V | | Units: mg/kg |
| | | | | | | • | |
| | • . | | | • | | | |
| 691941 | SB-7_20.5-21.3 | 12/01/05 | 12/08/05 | 12/08/05 | 20.8 | 1.0 | ND |
| 691942 | SB-7_14.0-16.5 | 12/01/05 | 12/08/05 | 12/08/05 | 23.5 | 1.0 | 9.2 |
| 691943 | SB-6_19.8-21.4 | 12/01/05 | 12/08/05 | 12/08/05 | 15.9 | 1.0 | ND |
| 691945 | TP-1_7.0 | 12/02/05 | 12/08/05 | 12/08/05 | 17.1 | 1.0 | ND · |
| 691946 | TP-2_6.2 | 12/02/05 | 12/08/05 | 12/08/05 | 20.6 | 1.0 | ND |
| 691947 | TP-3_6.0 | 12/02/05 | 12/08/05 | 12/08/05 | 23.5 | 1.0 | 1.7 |
| 691948 | DUP-1 | 12/01/05 | 12/08/05 | 12/08/05 | 24.8 | 1.0 | 13.8 |
| | | | | | | | |

Quantitation Limit for Total Cyanide is 0.5 mg/kg.



SDG NARRATIVE

STL EDISON

SDG No. J895

| STL Edison Sample | Client ID | | |
|-------------------|-------------------|--|--|
| 691941 | SB-7 20.5-21.3 | | |
| 691941MS | SB-7 20.5-21.3MS | | |
| 691941SD | SB-7 20.5-21.3MSD | | |
| 691942 | SB-7 14.0-16.5 | | |
| 691943 | SB-6 19.8-21.4 | | |
| 691943MS | SB-6 19.8-21.4MS | | |
| 691943SD | SB-6 19.8-21.4MSD | | |
| 691944 | RB-1-12-1-05 | | |
| 691945 | TP-1 7.0 | | |
| 691946 | TP-2 6.2 | | |
| 691947 | TP-3 6.0 | | |
| 691948 | 691948 DUP-1 | | |
| 691948MS | DUP-1MS | | |
| 691948SD | 591948SD DUP-1MSD | | |

Sample Receipt:

Sample delivery conforms with requirements.

Volatile Organic Analysis (GC/MS):

Soil blank KV343 contains 3.0 ppb of Acetone. Sample results are flagged with a B qualifier.

Soil blank KV344 contains 6.0 ppb of Acetone. Sample results are flagged with a B qualifier.

Base/Neutral and/or Acid Extractable Organics (GC/MS):

All data conforms with method requirements.

Chemistry \ Microbiology:

All data conforms with method requirements.

I certify that this data package is in compliance with the protocols in NYSDEC ASP B both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this package has been authorized by the Laboratory Manager or his designee

Michael J.Urban

Michael J. Uben

Laboratory Manager

SAMPLE PREPARATION AND ANALYSIS SUMMARY VOLATILE (VOA) ANALYSES

| Laboratory Sample ID | Matrix | Date Collected | Date Rec'd Date at Lab Extracted | Date d Analyzed |
|-------------------------|--------|-------------------|----------------------------------|--------------------|
| 691941 | SOLID | 12/1/05 | 12/3/05 | 12/12/05 |
| 691941MS | SOLID | 12/1/05 | 12/3/05 | 12/12/05 |
| 691941SD | SOLID | 12/1/05 | 12/3/05 | 12/12/05 |
| 691942 | SOLID | 12/1/05 | 12/3/05 | 12/13/05 |
| 691943 | SOLID | 12/1/05 | 12/3/05 | 12/9/05 |
| 691943MS | SOLID | 12/1/05 | 12/3/05 | 12/9/05 |
| 691943SD | SOLID | 12/1/05 | 12/3/05 | 12/9/05 |
| 691944 | WATER | 12/1/05 | 12/3/05 | 12/13/05 |
| 691945 | SOLID | 12/2/05 | 12/3/05 | 12/10/05 |
| 691946 | SOLID | 12/2/05 | 12/3/05 | 12/9/05 |
| 691947 | SOLID | 12/2/05 | 12/3/05 | 12/9/05 |
| 691948 | SOLID | 12/1/05 | 12/3/05 | 12/13/05 |
| 691948MS | SOLID | 12/1/05 | 12/3/05 | 12/13/05 |
| 691948SD | SOLID | 12/1/05 | 12/3/05 | 12/13/05 |



SAMPLE PREPARATION AND ANALYSIS SUMMARY SEMIVOLATILE (BNA) ANALYSES

| Laboratory Sample ID | Matrix | Date Collected | Date Rec'd at Lab | Date Extracted | Date Analyzed |
|-------------------------|--------|-------------------|----------------------|----------------|------------------|
| 691941 | SOLID | 12/1/05 | 12/3/05 | 12/7/05 | 12/17/05 |
| 691942 | SOLID | 12/1/05 | 12/3/05 | 12/7/05 | 12/17/05 |
| 691943 | SOLID | 12/1/05 | 12/3/05 | 12/7/05 | 12/15/05 |
| 691943MS | SOLID | 12/1/05 | 12/3/05 | 12/7/05 | 12/15/05 |
| 691943SD | SOLID | 12/1/05 | 12/3/05 | 12/7/05 | 12/15/05 |
| 691944 | WATER | 12/1/05 | 12/3/05 | 12/5/05 | 12/12/05 |
| 691945 | SOLID | 12/2/05 | 12/3/05 | 12/7/05 | 12/16/05 |
| 691946 | SOLID | 12/2/05 | 12/3/05 | 12/7/05 | 12/16/05 |
| 691947 | SOLID | 12/2/05 | 12/3/05 | 12/7/05 | 12/16/05 |
| 691948 | SOLID | 12/1/05 | 12/3/05 | 12/7/05 | 12/17/05 |

SAMPLE PREPARATION AND ANALYSIS SUMMARY SEMIVOLATILE (BNA) ANALYSES

| Laboratory Sample ID | Matrix | Analytical Protocol | Extraction Method | Auxiliary Cleanup | Dil/Conc Factor |
|-------------------------|--------|----------------------------------|----------------------|-------------------------------------|--------------------|
| 691941 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 50.00 |
| 691942 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 25.00 |
| 691943 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 691943MS | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | · vo. com an organical and grandens | 1.00 |
| 691943SD | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 691944 | WATER | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 691945 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 691946 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | e e eservenes e e | 1.00 |
| 691947 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 691948 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 10.00 |

SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSES

| Laboratory Sample ID | Matrix | Parameters | Date Rec'd at Lab | Date Analyzed |
|-------------------------|---------|---------------|----------------------|---------------|
| 691941 | SOLID | % SOLIDS | 12/3/05 | 12/8/05 |
| 691941 | SOLID | TOTAL CYANIDE | 12/3/05 | 12/8/05 |
| 691942 | SOLID , | % SOLIDS | 12/3/05 | 12/8/05 |
| 691942 | SOLID | TOTAL CYANIDE | 12/3/05 | 12/8/05 |
| 691943 | SOLID | % SOLIDS | 12/3/05 | 12/9/05 |
| 691943 | SOLID | TOTAL CYANIDE | 12/3/05 | 12/8/05 |
| 691944 | WATER | TOTAL CYANIDE | 12/3/05 | 12/8/05 |
| 691945 | SOLID | % SOLIDS | 12/3/05 | 12/8/05 |
| 691945 | SOLID | TOTAL CYANIDE | 12/3/05 | 12/8/05 |
| 691946 | SOLID | % SOLIDS | 12/3/05 | 12/8/05 |
| 691946 | SOLID | TOTAL CYANIDE | 12/3/05 | 12/8/05 |
| 691947 | SOLID | % SOLIDS | 12/3/05 | 12/8/05 |
| 691947 | SOLID | TOTAL CYANIDE | 12/3/05 | 12/8/05 |
| 691948 | SOLID | % SOLIDS | 12/3/05 | 12/8/05 |
| 691948 | SOLID | TOTAL CYANIDE | 12/3/05 | 12/8/05 |

DATA USABILITY SUMMARY REPORT NYSEG WADSWORTH ST. GENEVA

SDG #K740

VOLATILE, SEMIVOLATILE AND MISCELLANEOUS ANALYSES

Analyses performed by:

Severn Trent Laboratories Buffalo, New York

Review performed by:



Blasland, Bouck & Lee, Inc. Syracuse, New York

REPORT #5481

Summary

The following is an assessment of the data package for sample delivery group (SDG) # K740 for sampling from the NYSEG Wadsworth St. Geneva Site. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

| Sample ID | Lab ID | Matrix | Sample | Analysis | | | T : | |
|--------------|--------|--------|------------|--------------|----------|----------------|-----|--------------|
| | | | Date | VOC | svoc | РСВ | MET | MISC |
| MW-5 | 696449 | Water | 12/20/2005 | Х | Х | | | Х |
| MW-6 | 696450 | Water | 12/20/2005 | Х | Х | | | Х |
| MW-1 | 696451 | Water | 12/20/2005 | Х | Х | | | X |
| MW-2 | 696452 | Water | 12/20/2005 | Х | Х | | | X |
| MW-3 | 696453 | Water | 12/20/2005 | Х | Х | | | Х |
| MW-4 | 696454 | Water | 12/20/2005 | Х | Х | | | Х |
| DUP-12-20-05 | 696455 | Water | 12/20/2005 | Х | X | | | X |
| TANK | 696456 | Water | 12/20/2005 | Х | Х | | | X |
| TRIPBLANK | 696457 | Water | 12/20/2005 | Х | | | l | <u> </u> |
| 417. | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | <u> </u> | | | |
| | | | | | | - | | |

^{1.} The matrix spike/matrix spike duplicate (MS/MSD) performed on sample location MW-5.

^{2.} Sample location DUP-12-20-05 is the field duplicate of parent sample location MW-3.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 Method 8260 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- E The compound was quantitated above the calibration range.
- D Concentration is based on a diluted sample analysis.
- C Identification confirmed by gas chromatograph/mass spectrometer (GC/MS).
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

| Method | Matrix | Holding Time | Preservation |
|------------------|--|-------------------------------------|--|
| SW-846 8260 Soil | Water | 14 days from collection to analysis | Cooled @ 4 °C; preserved to a pH of less than 2. |
| | 48 hours from collection to extraction and 14 days from extraction to analysis | Cooled @ 4 °C. | |

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method, trip, and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure contamination of samples during shipment. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with the following sample locations were qualified.

| Sample Locations | Compounds | Sample Result | Qualification |
|--|-----------|---|---------------|
| MW-5 MW-6 MW-1 MW-2 MW-3 MW-4 DUP-12-20-05 TANK | Toluene | Detected sample results >RL and >BAL or Non- detect sample result | № Action |

RL = reporting limit

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

System performance and column resolution were acceptable.

4. Calibration

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

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

| Sample Locations | Initial/Continuing | Compound | Criteria |
|------------------|--------------------|-------------------|----------|
| MW-5 | | | |
| MW-6 | | Acatona | 19.5% |
| MVV-1 | l l | Acetone | 19.570 |
| MW-2 | | | |
| MVV-3 | ICV %RSD | | |
| MVV-4 | | | |
| DUP-12-20-05 | | Tetrachloroethene | 26.5% |
| TANK | | | |
| TRIPBLANK | | | |
| MW-5 | | | |
| MW-6 | | Acetone | 38.4% |
| MW-1 | | Acetone | JU.770 |
| MW-2 | | | |
| MW-3 | CCV %D | | |
| MW-4 | | | |
| DUP-12-20-05 | | Chloroethane | 27.5% |
| TANK | | | |
| TRIPBLANK | | | |

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

| Initial/Continuing | Criteria | Sample Result | Qualification | |
|------------------------|------------------------------|---------------|---------------|--|
| | | Non-detect | R | |
| | RRF <0.05 | Detect | J | |
| Initial and | nuing RRF <0.01 ¹ | Non-detect | R | |
| Continuing Calibration | | Detect | J | |
| Calibration | RRF >0.05 or | Non-detect | No Action | |
| | RRF >0.01 ¹ | Detect | No Action | |
| | | Non-detect | UJ | |
| Initial Calibration | %RSD > 15% | Detect | J | |
| | %D >20% | Non-detect | No Action | |
| Continuing | (increase in sensitivity) | Detect | J | |
| Calibration | %D >20% | Non-detect | ΟĴ | |
| | (decrease in sensitivity) | Detect | J | |

^{1.} RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e. ketones, 1,4-Dioxane, etc.)

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

The internal standard responses and retention times were within acceptable limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis exhibited recoveries and RPD results within the control limits.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Results for duplicate samples are summarized in the following table.

| Sample ID / Duplicate ID | Compound | Sample Result | Duplicate Result | RPD |
|--------------------------|----------------|------------------|---------------------|------|
| | Benzene | 7100 | 7000 | 2.0% |
| | Toluene | 4300 | 4300 | 0.0% |
| MW-3 / DUP-12-20-05 | Ethylbenzene | 680 | 730 | 7.1% |
| | Styrene | 320 J | 360 | AC |
| | Xylene (Total) | 7900 | 8100 | 2.5% |

ND = Not detected.

AC = The field duplicate RPD is acceptable when the RPD between parent sample and field duplicate sample is less than two times the RL and where the parent sample and/or duplicate concentration is less than five times the RL.

The field duplicate RPD exhibited acceptable recoveries.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Volatile Organics Data Validation Checklist

| | YES | NU | <u>NA</u> |
|---|-------------|----------|--------------|
| Data Completeness and Deliverables | | | |
| Have any missing deliverables been received and added to the data package? | | X | |
| Is there a narrative or cover letter present? | <u>X</u> | | |
| Are the sample numbers included in the narrative? | <u>X</u> | | |
| Are the sample chain-of-custodies present? | <u>X</u> | | |
| Do the chain-of-custodies indicate any problems with sample receipt or sample condition? | | X | |
| Holding Times | | | |
| Have any holding times been exceeded? | | X | |
| Surrogate Recovery | | | |
| Are surrogate recovery forms present? | <u>X</u> | | |
| Are all samples listed on the surrogate recovery form? | <u>X</u> | | |
| Was one or more surrogate recovery outside control limits for any sample or blank? | | <u>X</u> | |
| If yes, were the samples reanalyzed? | | | X |
| Are there any transcription/calculation errors between the raw data and the summary form? | | X | |
| Matrix Spikes | | | |
| Is there a MS recovery form present? | <u>X</u> | | |
| Were matrix spikes analyzed at the required frequency? | <u>X</u> | | |
| How many spike recoveries were outside of QC limits? | | | |
| <u>0</u> out of <u>5</u> | | | |
| How many RPDs for MS/MSD were outside of QC limits? | | | |
| <u>0</u> out of <u>5</u> | | | |
| <u>Blanks</u> | | | |
| Is a method blank summary form present? | <u>X</u> | | |
| Has a method blank been analyzed for each day or for each 20 samples, whichever is more frequent? | <u>X</u> | | |
| Has a blank been analyzed at least once every 12 hours for each system used? | <u>X</u> | | |
| Do any method/instrument blanks have positive results? | | <u>X</u> | |
| Do any trip/field/rinse blanks have positive results? | <u>X</u> | | |

| | YES | NO | NA_ |
|--|----------|----------|----------|
| Tuning and Mass Calibration | | | |
| Are the GC/MS tuning forms present for BFB? | <u>X</u> | | |
| Are the bar graph spectrum and mass/charge listing provided for each BFB? | X | | |
| Has a BFB been analyzed for each 12 hours of analysis per instrument? | <u>X</u> | | |
| Have the ion abundance criteria been met for each instrument used? | <u>X</u> | | |
| Target Analytes | | | |
| Is an organics analysis data sheet present for each of the following: | | | |
| Samples | X | | |
| Matrix spikes | <u>X</u> | | |
| Blanks | <u>X</u> | | |
| Are the reconstructed ion chromatograms present for each of the following: | | | |
| Samples | X | | |
| Matrix spikes | <u>X</u> | | |
| Blanks | <u>X</u> | | |
| Is the chromatographic performance acceptable? | X | • | |
| Are the mass spectra of the identified compounds present? | <u>X</u> | | |
| Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum? | <u>X</u> | | |
| Do the samples and standard relative ion intensities agree within 20%? | X | | |
| Tentatively Identified Compounds | | | |
| Are all the TIC summary forms present? | | <u>X</u> | |
| Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present? | | | X |
| Are any target compounds listed as TICs? | | | <u>X</u> |
| Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum? | | | <u>X</u> |
| Do the TIC and "best match" spectrum agree within 20%? | | | X |
| Quantitation and Detection Limits | | | |
| Are there any transcription/calculation errors in the Form 1 results? | | X | |
| Are the reporting limits adjusted to reflect sample dilutions and, for soils, sample moisture? | X | | |

| | YES | NO | NA |
|--|----------|----------|----|
| Standard Data | | | |
| Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards? | <u>X</u> | | |
| Initial Calibration | | | |
| Are the initial calibration forms present for each instrument used? | <u>X</u> | | |
| Are the response factor RSDs within acceptable limits? | | X | |
| Are the average RRFs ≥ minimum requirements? | <u>X</u> | | |
| Are there any transcription/calculation errors in reporting the RRFs or RSDs? | | <u>X</u> | |
| Continuing Calibration | | | |
| Are the continuing calibration forms present for each day and each instrument? | X | | |
| Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument? | <u>X</u> | | |
| All %D within acceptable limits? | | X | |
| Are all RF ≥ minimum requirements? | <u>X</u> | | |
| Are there any transcription/calculation errors in reporting of RF or %D? | | <u>X</u> | |
| Internal Standards | | | |
| Are internal standard areas of every sample within the upper and lower limits for each continuing calibration? | <u>X</u> | | |
| Are the retention times of the internal standards within 30 seconds of the associated calibration standard? | <u>X</u> | | , |
| Field Duplicates | | | |
| Were field duplicates submitted with the samples? | <u>X</u> | | |

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 Method 8270 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- E The compound was quantitated above the calibration range.
- D Concentration is based on a diluted sample analysis.
- C Identification confirmed by gas chromatograph/mass spectrometer (GC/MS).
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

| Method | Matrix | Holding Time | Preservation |
|------------------|--|--|---------------|
| SW-846 8270 Soil | 7 days from collection to extraction and 40 days from extraction to analysis | Cooled @ 4 °C | |
| | Soil | 14 days from collection to extraction and 40 days from extraction to analysis | Cooled @ 4 °C |

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed

No compounds were detected in the associated blanks.

3. Mass Spectrometer Tuning

System performance and column resolution were acceptable.

4. Calibration

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

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) and RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

| Sample Locations | Initial/Continuing | Compound | Criteria |
|------------------------------|--------------------|---------------------------|----------|
| MW-5 MW-6 | | Bis (2-chloroethyl)ether | 16.7% |
| MW-1 MW-2 | 10) / 4/ 505 | benzo(b)fluoranthene | 16.9% |
| MW-3 MW-4 DUP-12-20-05 | ICV %RSD | benzo(k)fluoranthene | 22.3% |
| TANK TRIPBLANK | | Hexachlorocyclopentadiene | 19.8% |

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

| Initial/Continuing | Criteria | Sample Result | Qualification |
|---------------------------|---------------------------|---------------|---------------|
| · | DDE <0.05 | Non-detect | R |
| | RRF <0.05 | Detect | J |
| Initial and | RRF <0.01 ¹ | Non-detect | R |
| Continuing Calibration | RRF <0.01 | Detect | J |
| Gallipration | RRF >0.05 or | Non-detect | NI- A-ti |
| | RRF >0.01 ¹ | Detect | No Action |
| | 0/ 000 - 450/ | Non-detect | UJ |
| Initial Calibration | %RSD > 15% | Detect | J |
| | %D >20% | Non-detect | No Action |
| Continuing | (increase in sensitivity) | Detect | J |
| Calibration | %D >20% | Non-detect | UJ |
| (decrease in sensitivity) | | Detect | J |

^{1.} RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e. ketones, 1,4-Dioxane, etc.)

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC to exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) the area counts of the associated continuing calibration standard.

All internal standard response and retention times were acceptable.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compounds concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis exhibited recoveries and RPD results within the control limits.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LSC analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Results for duplicate samples are summarized in the following table.

| Sample ID / Duplicate ID | Compound | Sample Result | Duplicate Result | RPD |
|--------------------------|---------------------|------------------|---------------------|-------|
| | Naphthalene | 3600 | 4000 | 10.5% |
| | 2-Methylnaphthalene | 290 | 320 | 9.8% |
| | Acenaphthylene | 54 J | 66 J | AC |
| | Acenaphthene | 16 J | 19 J | AC |
| MW-3 / DUP-12-20-05 | Dibenzofuran | 50 J | 55 J | AC |
| | Fluorene | 48 J | 55 J | AC |
| | Phenanthrene | 28 J | 30 J | AC |
| | Anthracene | ND(210) | 11 J | AC |
| | Carbazole | 88 J | 11 J | AC |

ND = Not detected.

The field duplicate RPD is acceptable when the RPD between parent sample and field duplicate AC = sample is less than two times the RL and where the parent sample and/or duplicate concentration is less than five times the RL.

The field duplicate RPD exhibited acceptable recoveries

10. **Compound Identification**

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

System Performance and Overall Assessment 11.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Semivolatile Organics Data Validation Checklist

| | YES | NO | NA_ |
|--|----------|----------|--------------|
| Data Completeness and Deliverables | | | |
| Have any missing deliverables been received and added to the data package? | | <u>X</u> | |
| Is there a narrative or cover letter present? | <u>X</u> | | |
| Are the sample numbers included in the narrative? | <u>X</u> | | |
| Are the sample chain-of-custodies present? | <u>X</u> | | |
| Do the chain-of-custodies indicate any problems with sample receipt or sample condition? | | X | |
| Holding Times | | | |
| Have any holding times been exceeded? | | <u>X</u> | |
| Surrogate Recovery | | | |
| Are the surrogate recovery forms present? | <u>X</u> | | |
| Are all samples listed on the surrogate recovery form? | <u>X</u> | | |
| Were two or more base-neutral or acid surrogate recoveries outside control limits for any sample or blank? | | X | |
| If yes, were the samples reanalyzed? | | | <u>X</u> |
| Are there any transcription/calculation errors between the raw data and the summary form? | | X | , |
| Matrix Spikes | | | |
| Is there a MS recovery form present? | <u>X</u> | | |
| Were MS analyzed at the required frequency | <u>X</u> | | |
| How many spike recoveries were outside of QC limits? | | | |
| <u>0</u> out of <u>11</u> | | | |
| How many RPDs for MS/MSD were outside of QC limits? | | | |
| <u>0</u> out of <u>11</u> | | | |
| <u>Blanks</u> | | | |
| Is the method blank summary form present? | X | | |
| Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent? | <u>X</u> | | |
| Has a blank been analyzed for each system used? | <u>X</u> | | |
| Do any method blanks have positive results? | | <u>X</u> | |
| Are field/rinse blanks associated with every sample? | | <u>X</u> | |

| | YES | NO | NA_ |
|--|----------|---------|--------------|
| Tuning and Mass Calibration | | | |
| Are the GC/MS tuning forms present for DFTPP? | X | | |
| Are the bar graph spectrum and mass/charge listing provided for each DFTPP? | _X_ | | |
| Has a DFTPP been analyzed for each 12 hours of analysis per instrument? | <u>X</u> | | |
| Have the ion abundance criteria been met for each instrument used? | X | | |
| Target Analytes | | | |
| Is an organics analysis data sheet present for each of the following: | | | |
| Samples | X | | |
| Matrix spikes | _X_ | | |
| Blanks | X | | |
| Are the reconstructed ion chromatograms present for each of the following: | | | |
| Samples | <u>X</u> | | |
| Matrix spikes | _X | | |
| Blanks | X | | |
| Is the chromatographic performance acceptable? | X | | |
| Are the mass spectra of the identified compounds present? | <u>X</u> | | |
| Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum? | X | | |
| Do the samples and standard relative ion intensities agree within 20%? | <u>X</u> | | |
| Tentatively Identified Compounds | | | |
| Are all the TIC summary forms present? | | X | |
| Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present? | | | X |
| Are any target compounds listed as TICs? | ····· | | <u>X</u> |
| Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum? | | | X |
| Do the TIC and "best match" spectrum agree within 20%? | | | <u>X</u> |
| Quantitation and Detection Limits | | | |
| Are there any transcription/calculation errors in the Form 1 results? | | X | |
| Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture? | X | | |

| | YES | NO | NA |
|--|----------|---|----------------------------------|
| Standard Data | | | |
| Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards? | _X_ | | |
| Initial Calibration | | | |
| Are the initial calibration forms present for each instrument used? | <u>X</u> | | |
| Are the response factor RSDs within acceptable limits? | | X | |
| Are the average RRF ≥ minimum requirements? | <u>X</u> | | |
| Are there any transcription/calculation error in reporting the RRF or RSD? | | X | |
| Continuing Calibration | | | |
| Are the continuing calibration forms present for each day and each instrument? | X | | |
| Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument? | <u>X</u> | *************************************** | ter was feldillenne for best and |
| All %D within acceptable limits? | X | | |
| Are all RF ≥ minimum requirements? | <u>X</u> | *************************************** | |
| Are there any transcription/calculation errors in reporting of RF or %D? | | X | |
| Internal Standards | | | |
| Are internal standard areas of every sample within the upper and lower limits for each continuing calibration? | X | | |
| Are the retention times of the internal standards within 30 seconds of the associated calibration standard? | X | | |
| Field Duplicates | | | |
| Were field duplicates submitted with the samples? | <u>X</u> | | |

MISCELLANEOUS ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 methodologies, USEPA Methods for Chemical Analyses of Water and Waste methodologies, and each method's respective protocols as referenced in NYSDEC-ASP. Data were reviewed in accordance with each method's respective guidance.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The reported value was obtained from a reading less than the RL but greater than or equal to the IDL.
- M Duplicate injection precision not met.
- N Spiked sample recovery not within control limits.
- * Duplicate analysis not within control limits.
- E The reported value is estimated due to the presence of interference.
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

| Method | Matrix | Holding Time | Preservation |
|-------------------------|------------|--------------|----------------|
| Corrosivity (pH) | Water/Soil | ASAP | Cooled @ 4 °C. |
| Ignitability | Water/Soil | 14 Days | Cooled @ 4 °C. |
| H2S Released from Waste | Water/Soil | 7 days | Cooled @ 4 °C. |
| HCN Released from Waste | Water/Soil | 14 Days | Cooled @ 4 °C. |

The analyses that exceeded the holding time are presented in the following table.

| Sample Locations | Holding Time | Criteria |
|------------------|-------------------------|----------|
| TANK | Extraction Completed | 7 Days |

Sample results associated with sample locations analyzed by analytical method H2S Released from Waste were qualified, as specified in the table below. All other holding times were met.

| | | Qualification | | |
|------------|--|----------------------|------------------------|--|
| Sample IDs | Criteria | Detected Analytes | Non-detect Analytes | |
| TANK | Analysis completed less than two times holding time | J | UJ | |
| | Analysis completed greater than two times holding time | J | R | |

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

No analytes were detected above the reporting limit in the associated blanks.

3. Calibration

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

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within control limits.

All continuing calibration verification standard recoveries were within the control limit.

4. MS/MSD Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit a RPD within the laboratory established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compound's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited recoveries within the control limit.

5. LCS Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LSC analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

The laboratory duplicate sample results exhibited RPD within the control limit.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Results for duplicate samples are summarized in the following table.

| Sample ID / Duplicate ID | Compound | Sample Result | Duplicate Result | RPD |
|--------------------------|-----------------|------------------|---------------------|------|
| MW-3 / DUP-12-20-05 | Cyanide (Total) | 0.6 | 0.58 | 3.4% |

ND = Not detected.

AC = The field duplicate RPD is acceptable when the RPD between parent sample and field duplicate sample is less than two times the RL and where the parent sample and/or duplicate concentration is less than five times the RL.

The field duplicate RPD exhibited acceptable recoveries.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Data Validation Checklist

| | YES | NO | NA |
|--|----------|---------------------------------------|----|
| Data Completeness and Deliverables | | | |
| Is there a narrative or cover letter present? | X | | |
| Are the sample numbers included in the narrative? | X | | |
| Are the sample chain-of-custodies present? | X | | |
| Do the chain-of-custodies indicate any problems with sample receipt or sample condition? | | X | |
| Raw Data | | | |
| Are the preparation logs present? | X | | |
| Are preparation dates present on sample preparation logs/bench sheets? | X | | |
| Are the measurement read out records present? | X | | |
| Is the data legible? | <u>X</u> | | |
| Is the data properly labeled? | X | | |
| Are pH values listed? | <u>X</u> | | |
| Percent solids calculation present for soils/sediments? | | | X |
| Holding Times | | | |
| Were all analyses performed within the specified holding times? | | X | |
| Sample Data | | | |
| Are all forms complete? | X | | |
| Are correct units indicated the results sheets? | X | | |
| Are soil sample results for each parameter corrected for percent solids? | X | · · · · · · · · · · · · · · · · · · · | |
| Initial Calibration | | | |
| Is a record of an initial calibration present?: | X | | |
| Is correlation coefficient less than .995?: | X | | |
| Initial and Continuing Calibration Verification | | | |
| Present and complete for all analytes? | X | | |
| Are all calibration standards (initial and continuing) within control limits?: | X | | |
| Was continuing calibration performed every 10 samples or every 2 hours? | <u>X</u> | | |
| Was the ICV for cyanides distilled? | X | | |
| Initial and Continuing Calibration Blanks | | | |
| Present and complete? | X | | |
| Was an initial calibration blank analyzed? | <u>X</u> | | |
| Was a continuing calibration blank analyzed after every 10 samples or every 2 hours (which ever is more frequent)? | X | | |
| Are all calibration blanks less than or equal to the RL? | X | | |
| Preparation Blank | | | |
| Was one prep. blank analyzed for: | | | |
| each batch of digested samples? | X | | |
| 5481 | | | |

| | YES | NO | NA |
|--|------|-------------|-------------|
| each matrix type? | X | | |
| Are all preparation blanks less than the RL? | X | | |
| If no, is the concentration of the sample with the least concentrated analyte less than 10 times the prep. blank? | ···· | | X |
| Matrix Spike | | | |
| Present and complete for: | | | |
| each batch? | X | | |
| each matrix type? | X | | |
| Was field blank used for spiked sample? | | <u>X</u> | |
| Are all recoveries for analytes with sample concentrations less than four times the spike concentration within control limits? | x_ | | |
| Are results outside the control limits (75-125%) flagged with "N"? | | | X |
| <u>Laboratory Duplicates</u> | | | |
| Present and complete for: | | | |
| each batch? | X | | |
| each matrix type? | X | | |
| Was field blank used for duplicate analysis? | | <u>X</u> | |
| Are all values within control limits? | X | | |
| If no, are all results outside the control limits flagged with an *? | | | X |
| Field Duplicates | | | |
| Were field duplicates analyzed? | X | | |
| Aqueous | | | |
| is any RPD greater than 50% where sample and duplicate are both greater than or equal to 5 times RL? | | X | |
| Is any difference between sample and duplicate greater than RL where sample and/or duplicate is less than 5 times RL? | | X | |
| Soil/Sediment | | | |
| Is any RPD (where sample and duplicate are both greater than 5 times RL) > 100%? | | | X |
| Is any difference between sample and duplicate (where sample and/or duplicate is less than 5x RL) >2xRL? | | | X |
| Laboratory Control Sample | | | |
| Was one LCS prepared and analyzed for: | | | |
| each matrix? | X | <u> </u> | |
| each batch? | X | | |
| Are all recoveries within control limits? | X | | |
| Field Blank | | | |
| Is the field blank concentration less than RL for all analytes? | | | X |
| If no, was field blank value already rejected due to other QC criteria? | | | X |

| | YEŞ | NO | NA |
|---|---|-----|----|
| Percent Solids | | | |
| Are the percent solids in soil/sediment(s): | | | |
| < 50%? | | *** | X |
| < 10%? | *************************************** | | X |

Corrected Sample Analysis Data Sheets

Laboratory Narrative

NYSDEC Sample Identification and Analysis Summary Sheets

Sample Compliance Report

SAMPLE COMPLIANCE REPORT

| Sample | | | | | · | Compliancy ¹ | | Noncompliance | | |
|-------------------|------------------|-----------------|--------------|--------|-------------|-------------------------|-----|---------------|------|---|
| Delivery Group | Sampling Date | ASP Protocol | Sample ID | Matrix | voc | svoc | РСВ | MET | MISC | |
| K740 | 12/20/2005 | 2000 | MW-5 | Water | no | no | | | yes | VOC - ICAL %RSD, CCAL %D SVOC - ICAL %RSD |
| K740 | 12/20/2005 | 2000 | MW-6 | Water | no | no | | | yes | VOC - ICAL %RSD, CCAL %D SVOC - ICAL %RSD |
| K740 | 12/20/2005 | 2000 | MW-1 | Water | no | no | - | | yes | VOC - ICAL %RSD, CCAL %D SVOC - ICAL %RSD |
| K740 | 12/20/2005 | 2000 | MW-2 | Water | no | no | - | | yes | VOC - ICAL %RSD, CCAL %D SVOC - ICAL %RSD |
| K740 | 12/20/2005 | 2000 | MW-3 | Water | no | no | | | yes | VOC - ICAL %RSD, CCAL %D SVOC - ICAL %RSD |
| K740 | 12/20/2005 | 2000 | MW-4 | Water | no | no | | | yes | VOC - ICAL %RSD, CCAL %D SVOC - ICAL %RSD |
| K740 | 12/20/2005 | 2000 | DUP-12-20-05 | Water | no | no | - | | yes | VOC - ICAL %RSD, CCAL %D SVOC - ICAL %RSD |
| K740 | 12/20/2005 | 2000 | TANK | Water | no | no | - | | no | VOC - ICAL %RSD, CCAL %D SVOC - ICAL %RSD MISC - Holding time |
| K740 | 12/20/2005 | 2000 | TRIPBLANK | Water | no | no | | ~- | yes | VOC - ICAL %RSD, CCAL %D SVOC - ICAL %RSD |
| | | | | | | | | | | |
| | | | - | | _ | | | | | |
| | | | | | | | | | | |
| | | <u> </u> | | | | | | | - | |
| | | | | | | | | | | |

¹ Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

Site: NYSEG Wadsworth St

Lab Sample No: 696449 Lab Job No: K740

Date Sampled: 12/20/05

Date Received: 12/21/05

Date Analyzed: 12/28/05 GC Column: RTX-VMS Instrument ID: VOAMS12.i Lab File ID: 003782.d

Matrix: WATER

Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 1.0

| <u>Parameter</u> | Analytical Result <u>Units: ug/l</u> | Quantitation Limit Units: ug/l |
|--|--------------------------------------|--------------------------------|
| Chloromethane Bromomethane | ND ND | 5.0 5.0 5.0 |
| Vinyl Chloride | ND | 5.0 |
| Chloroethane | ND | 3.0 |
| Methylene Chloride | ND | 5.0 |
| Acetone | ND J | 5.0 |
| Carbon Disulfide | ND | 2.0 |
| 1,1-Dichloroethene | ND | 5.0 |
| ≥ 1 1-Dichloroethane | ND | 5.0 |
| trans-1,2-Dichloroethene | ND ND | 5.0 |
| cis-1,2-Dichloroethene | ND | 5.0 |
| Chloroform | ND | 2.0 |
| 1,2-Dichloroethane | ND | 5.0 |
| 2-Butanone | ND | 5.0 |
| 1,1,1-Trichloroethane | ND | 2.0 |
| Carbon Tetrachloride | ND | 1.0 |
| Bromodichloromethane | ND | 1.0 |
| 1,2-Dichloropropane | ND | 5.0 |
| cis-1,3-Dichloropropene | ND | 1.0 |
| Trichloroethene | ND | 5.0 |
| Dibromochloromethane | ND | 3.0 |
| 1,1,2-Trichloroethane | ND | 1.0 |
| Benzene | ND | 5.0 |
| trans-1,3-Dichloropropene | ND | 4.0 5.0 |
| Bromoform 4-Methyl-2-Pentanone | ND | 5.0 |
| 4-Methyr-z-Fentanono | ND | 1.0 |
| 2-Hexanone Tetrachloroethene | ND J | 1.0 |
| 1,1,2,2-Tetrachloroethane | ND | 5.0 |
| Toluene | ND | 5.0 |
| Chlorobenzene | ND | 4.0 |
| Ethylbenzene | ND. | 5.0 |
| Styrene | ND | 5.0 |
| Xylene (Total) | ND | |
| The second secon | | |

Site: NYSEG Wadsworth St

Lab Sample No: 696449 Lab Job No: K740

Date Sampled: 12/20/05 Date Received: 12/21/05 Date Analyzed: 12/28/05 GC Column: RTX-VMS

Instrument ID: VOAMS12.i Lab File ID: o03782 d

Matrix: WATER

Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Result Units: ug/l

Ouantitation Limit Units: uq/l

Parameter

MTBE

ND

5.0

Site: NYSEG Wadsworth St

Lab Sample No: 696450 Lab Job No: K740

Date Sampled: 12/20/05

Date Received: 12/21/05 Date Analyzed: 12/28/05 GC Column: RTX-VMS

Instrument ID: VOAMS12.i Lab File ID: 003783.d

Matrix: WATER Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 1.0

| <u>Parameter</u> | | Analytical Rest | ult | Quantitation Limit <u>Units: ug/l</u> |
|---|---|-----------------|-----|---|
| Chloromethane Bromomethane Vinyl Chloride | • | ND ND ND | | 5.0 5.0 5.0 |
| Chloroethane Methylene Chloride Acetone | | ND ND 68 | J | 3.0 5.0 |
| Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane | · | ND ND | | 5.0 2.0 5.0 |
| trans-1,2-Dichloroethene cis-1,2-Dichloroethene | • | ND ND | | 5.0 5.0 |
| Chloroform 1,2-Dichloroethane 2-Butanone | | ND ND ND | | 5.0 2.0 5.0 |
| 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane | | ND ND | • | 5.0 2.0 |
| 1,2-Dichloropropane cis-1,3-Dichloropropene | • | ND ND | | 1.0 1.0 5.0 |
| Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane | | ND ND ND | | 1.0 5.0 3.0 |
| Benzene trans-1,3-Dichloropropene | | ND ND | | 1.0 5.0 |
| Bromoform 4-Methyl-2-Pentanone 2-Hexanone | | ND ND ND | | 4.0 5.0 5.0 |
| Tetrachloroethene 1,1,2,2-Tetrachloroethane | | ND ND | . 5 | 1.0 |
| Toluene Chlorobenzene Ethylbenzene | | ND ND ND | | 5.0 5.0 4.0 |
| Styrene Xylene (Total) | | ND ND | | 5.0 y 5.0 |

Site: NYSEG Wadsworth St

Lab Sample No: 696450 Lab Job No: K740

Date Sampled: 12/20/05 Date Received: 12/21/05

Date Analyzed: 12/28/05

GC Column: RTX-VMS

Instrument ID: VOAMS12.i

Lab File ID: 003783.d

Matrix: WATER Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Result Units: ug/l

Quantitation Limit Units: uq/l

5.0

MTBE

Parameter

Site: NYSEG Wadsworth St

Lab Sample No: 696451 Lab Job No: K740

Date Sampled: 12/20/05
Date Received: 12/21/05
Date Analyzed: 12/28/05
GC Column: RTX-VMS
Instrument ID: VOAMS12.i Lab File ID: o03784.d

Matrix: WATER Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 1.0

| | <u>Parameter</u> | 2 | Analytical <u>Units: u</u> | | , | Lim: | itation it : uq/l |
|-----|---------------------------|-----|-------------------------------|------|-----|------|-------------------------|
| | Chloromethane | | | ND | ÷ . | | 5.0 |
| | Bromomethane | | | ND | • | | 5.0 |
| | Vinyl Chloride | | | ND . | | | 5.0 |
| | Chloroethane | | 1.0 | ND | | | 5.0 |
| ٠ | Methylene Chloride | | • | ND | | | 3.0 |
| . ' | Acetone | | | ND J | | | 5.0 |
| Ĭ. | Carbon Disulfide | | • | ND | | | 5.0 |
| | 1,1-Dichloroethene | | | ND | | | 2.0 |
| | 1,1-Dichloroethane | | | ND | | | 5.0 |
| | trans-1,2-Dichloroethene | | | ND | | | 5.0 |
| لين | cis-1,2-Dichloroethene | . * | | ND: | | | 5.0 |
| | Chloroform | , | | ND | | | 5.0 |
| | 1,2-Dichloroethane | | | ND | | | 2.0 |
| | 2-Butanone | | | ND | | | 5.0 |
| , | 1,1,1-Trichloroethane | | | ND | | | 5.0 |
| | Carbon Tetrachloride | | . , | ND | | | 2.0 |
| | Bromodichloromethane | | | ND | | | 1.0 |
| | 1,2-Dichloropropane | | | ND | - | | 1.0 |
| | cis-1,3-Dichloropropene | | | ND | | | 5.0 |
| | Trichloroethene | | | ND | | | 1.0 |
| | Dibromochloromethane | | | ND | | | 5.0 |
| | 1,1,2-Trichloroethane | | | ND | : | | 3.0 |
| | Benzene | | | ND | | | 1.0 |
| . : | trans-1,3-Dichloropropene | | | ND | | | 5.0 |
| | Bromoform | | | ND | | | 4.0 |
| | 4-Methyl-2-Pentanone | | | ND | | | 5.0 |
| | 2-Hexanone | | | ND _ | | | 50 |
| | Tetrachloroethene | | | ND 7 | | | 1.0 |
| | 1,1,2,2-Tetrachloroethane | | | ND | | | 1.0 |
| | Toluene | | | ND | | | 5.0 |
| | Chlorobenzene | | *. | ND | | | 5.0 |
| | Ethylbenzene | 100 | * | ND | | | 4.0 |
| | Styrene | | | ND . | | | 5.0 |
| | Xylene (Total) | | v | ND | | A | 5.0 |

Site: NYSEG Wadsworth St

Lab Sample No: 696451

Lab Job No: K740

Date Sampled: 12/20/05

Date Received: 12/21/05 Date Analyzed: 12/28/05

GC Column: RTX-VMS

Instrument ID: VOAMS12.i

Lab File ID: 003784.d

Matrix: WATER

Level: LOW

ND

Purge Volume: 5.0 ml

Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Result <u>Units: uq/l</u>

Quantitation
Limit
Units: ug/l

5.0

<u>Parameter</u>

MTBE

35

Site: NYSEG Wadsworth St

Lab Sample No: 696452

Lab Job No: K740

Date Sampled: 12/20/05

Date Received: 12/21/05 Date Analyzed: 12/28/05 GC Column: RTX-VMS Instrument ID: VOAMS12.i

Lab File ID: o03785.d

Matrix: WATER

Level: LOW Purge Volume: 5.0 ml Dilution Factor: 1.0

| Bromomethane ND 5.0 Vinyl Chloride ND 5.0 Chloroethane ND 5.0 Methylene Chloride ND 3.0 Acetone ND 5.0 Carbon Disulfide ND 5.0 1,1-Dichloroethene ND 2.0 21,1-Dichloroethane ND 5.0 | : | <u>Parameter</u> | | Ana | alytical <u>Únits:</u> | | t | Li | titation mit <u>s: uq/l</u> | 1 |
|--|---|--------------------------|-----|-----|---------------------------|------|-----|-----|-----------------------------------|---|
| Vinyl Chloride ND 5.0 Chloroethane ND 5.0 Methylene Chloride ND 3.0 Acetone ND 5.0 Carbon Disulfide ND 5.0 1,1-Dichloroethene ND 5.0 1,1-Dichloroethane ND 5.0 trans-1,2-Dichloroethene ND 5.0 Chloroform ND 5.0 Chloroform ND 5.0 1,2-Dichloroethane ND 5.0 2-Butanone ND 5.0 1,1,1-Trichloroethane ND 5.0 2-Dichloroprotane ND 5.0 Carbon Tetrachloride ND 1.0 Bromodichloromethane ND 1.0 1,2-Dichloropropane ND 1.0 Cis-1,3-Dichloropropene ND 1.0 Trichloroethane ND 5.0 Trichloroethane ND 5.0 Bromoform ND 5.0 Bromoform ND 5.0< | | Chloromethane | | | | ND | | | 5.0 | |
| Chloroethane ND 5.0 Methylene Chloride ND 3.0 Acetone ND 5.0 Carbon Disulfide ND 5.0 1,1-Dichloroethene ND 5.0 1,1-Dichloroethane ND 5.0 trans-1,2-Dichloroethene ND 5.0 cis-1,2-Dichloroethene ND 5.0 Chloroform ND 5.0 1,2-Dichloroethane ND 5.0 2-Butanone ND 5.0 1,1,1-Trichloroethane ND 5.0 2-Butanone ND 5.0 1,1,1-Trichloroethane ND 5.0 Bromodichloromethane ND 1.0 1,2-Dichloropropane ND 1.0 cis-1,3-Dichloropropene ND 1.0 Trichloroethane ND 5.0 Trichloroethane ND 5.0 Benzene ND 5.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND | | Bromomethane | | | | ND | | • | 5.0 | |
| Methylene Chloride ND 3.0 Acetone ND 5.0 Carbon Disulfide ND 5.0 1,1-Dichloroethene ND 2.0 1,1-Dichloroethane ND 5.0 trans-1,2-Dichloroethene ND 5.0 cis-1,2-Dichloroethene ND 5.0 Chloroform ND 5.0 1,2-Dichloroethane ND 5.0 2-Butanone ND 5.0 1,1,1-Trichloroethane ND 5.0 Carbon Tetrachloride ND 5.0 Bromodichloromethane ND 1.0 1,2-Dichloropropane ND 1.0 cis-1,3-Dichloropropene ND 5.0 Trichloroethane ND 5.0 Dibromochloromethane ND 5.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND 5.0 4-Methyl-2-Pentanone ND 5.0 Tetrachloroethene ND 5.0 1,1,2,2-Tetrach | | Vinyl Chloride | , | | | ND | | | 5.0 | |
| Acetone ND | | Chloroethane | | | | ND | 100 | | 5.0 | , |
| Acetone ND | | Methylene Chloride | | | | ND · | | | 3.0 | |
| Carbon Disulfide ND 5.0 1,1-Dichloroethene ND 2.0 1,1-Dichloroethane ND 5.0 trans-1,2-Dichloroethene ND 5.0 cis-1,2-Dichloroethene ND 5.0 Chloroform ND 5.0 1,2-Dichloroethane ND 5.0 1,1-Trichloroethane ND 5.0 2-Butanone ND 5.0 1,1-Trichloroethane ND 5.0 Carbon Tetrachloride ND 1.0 Bromodichloromethane ND 1.0 1,2-Dichloropropane ND 1.0 cis-1,3-Dichloropropene ND 5.0 Trichloroethene ND 5.0 1,1,2-Trichloroethane ND 3.0 Benzene ND 1.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND 5.0 Hexanone ND 5.0 Tetrachloroethene ND 5.0 1,1,2,2-Tetrachloroethane </td <td></td> <td></td> <td>10,</td> <td>7</td> <td></td> <td>ND J</td> <td></td> <td></td> <td></td> <td></td> | | | 10, | 7 | | ND J | | | | |
| 1,1-Dichloroethane | | Carbon Disulfide | | | | ND | | | 5.0 | |
| trans-1,2-Dichloroethene ND 5.0 cis-1,2-Dichloroethene ND 5.0 Chloroform ND 5.0 1,2-Dichloroethane ND 2.0 2-Butanone ND 5.0 1,1-Trichloroethane ND 5.0 Carbon Tetrachloride ND 5.0 Bromodichloromethane ND 1.0 Bromodichloromethane ND 1.0 1,2-Dichloropropane ND 1.0 cis-1,3-Dichloropropene ND 5.0 Trichloroethene ND 1.0 1,1,2-Trichloroethane ND 3.0 Benzene ND 3.0 trans-1,3-Dichloropropene ND 1.0 Bromoform ND 4.0 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 5.0 1,1,2,2-Tetrachloroethane ND 5.0 Toluene ND 5.0 Chlorobenzene | | 1,1-Dichloroethene | | | | ND | | • • | 2.0 | |
| cis-1,2-Dichloroethene ND 5.0 Chloroform ND 5.0 1,2-Dichloroethane ND 2.0 2-Butanone ND 5.0 1,1-Trichloroethane ND 5.0 Carbon Tetrachloride ND 2.0 Bromodichloromethane ND 1.0 1,2-Dichloropropane ND 1.0 cis-1,3-Dichloropropene ND 5.0 Trichloroethane ND 5.0 Dibromochloromethane ND 3.0 Benzene ND 3.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND 5.0 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 5.0 1,1,2,2-Tetrachloroethane ND 5.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 5.0 Styrene ND <td< td=""><td></td><td></td><td></td><td>•</td><td></td><td>ND</td><td>•</td><td></td><td>5.0</td><td></td></td<> | | | | • | | ND | • | | 5.0 | |
| Chloroform ND 5.0 1,2-Dichloroethane ND 2.0 2-Butanone ND 5.0 1,1,1-Trichloroethane ND 5.0 1,2-Dichloroptoide ND 2.0 Bromodichloromethane ND 1.0 1,2-Dichloroptopane ND 1.0 cis-1,3-Dichloroptopene ND 5.0 Trichloroethane ND 5.0 1,1,2-Trichloroethane ND 3.0 Benzene ND 1.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND 5.0 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 5.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 4.0 Styrene ND 5.0 | | trans-1,2-Dichloroethene | | | | ND | | | 5.0 | |
| 1,2-Dichloroethane ND 2.0 2-Butanone ND 5.0 1,1,1-Trichloroethane ND 5.0 Carbon Tetrachloride ND 2.0 Bromodichloromethane ND 1.0 Bromodichloromethane ND 1.0 1,2-Dichloropropene ND 5.0 Trichloroethene ND 5.0 Trichloroethane ND 3.0 Biromochloromethane ND 3.0 Benzene ND 3.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND 5.0 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 5.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 5.0 Styrene ND 5.0 | | cis-1,2-Dichloroethene | | • | | ND | | | 5.0 | |
| 2-Butanone ND 5.0 1,1,1-Trichloroethane ND 5.0 Carbon Tetrachloride ND 2.0 Bromodichloromethane ND 1.0 1,2-Dichloropropane ND 1.0 cis-1,3-Dichloropropene ND 5.0 Trichloroethene ND 5.0 Dibromochloromethane ND 3.0 Benzene ND 3.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND 5.0 d-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 1.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 5.0 Styrene ND 5.0 | | | | | | ND | • | | 5.0 | |
| 1,1,1-Trichloroethane ND 5.0 Carbon Tetrachloride ND 2.0 Bromodichloromethane ND 1.0 1,2-Dichloropropane ND 1.0 cis-1,3-Dichloropropene ND 5.0 Trichloroethene ND 1.0 Dibromochloromethane ND 5.0 1,1,2-Trichloroethane ND 3.0 Benzene ND 1.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND 4.0 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 5.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 4.0 Styrene ND 5.0 | | 1,2-Dichloroethane | | | | ND | 1 | | 2.0 | |
| Carbon Tetrachloride ND 2.0 Bromodichloromethane ND 1.0 1,2-Dichloropropane ND 1.0 cis-1,3-Dichloropropene ND 5.0 Trichloroethene ND 1.0 Dibromochloromethane ND 5.0 1,1,2-Trichloroethane ND 3.0 Benzene ND 1.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND 4.0 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 1.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 4.0 Styrene ND 5.0 | | 2-Butanone | | | | ND | | | 5.0 | |
| Bromodichloromethane ND 1.0 1,2-Dichloropropane ND 1.0 cis-1,3-Dichloropropene ND 5.0 Trichloroethene ND 1.0 Dibromochloromethane ND 5.0 1,1,2-Trichloroethane ND 3.0 Benzene ND 1.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND 4.0 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 1.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 4.0 Styrene ND 5.0 | | 1,1,1-Trichloroethane | | | | ND · | • | | 5.0 | |
| 1,2-Dichloropropane ND 1.0 cis-1,3-Dichloropropene ND 5.0 Trichloroethene ND 1.0 Dibromochloromethane ND 5.0 1,1,2-Trichloroethane ND 3.0 Benzene ND 1.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND 4.0 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 1.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 4.0 Styrene ND 5.0 | | | | | | ND | | | 2.0 | |
| cis-1,3-Dichloropropene ND 5.0 Trichloroethene ND 1.0 Dibromochloromethane ND 5.0 1,1,2-Trichloroethane ND 3.0 Benzene ND 1.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND 4.0 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 1.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 4.0 Styrene ND 5.0 | | | | | | ND | | | 1.0 | |
| Trichloroethene ND 1.0 Dibromochloromethane ND 5.0 1,1,2-Trichloroethane ND 3.0 Benzene ND 1.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND 4.0 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 1.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 4.0 Styrene ND 5.0 | | 1,2-Dichloropropane | | | | | | | | |
| Dibromochloromethane ND 5.0 1,1,2-Trichloroethane ND 3.0 Benzene ND 1.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND 4.0 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 5.0 1,1,2,2-Tetrachloroethane ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 5.0 Styrene ND 5.0 | | | *, | | | | - | | | |
| 1,1,2-Trichloroethane ND 3.0 Benzene ND 1.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND 4.0 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 1.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 4.0 Styrene ND 5.0 | | | | Α, | • | | | | | |
| Benzene ND 1.0 trans-1,3-Dichloropropene ND 5.0 Bromoform ND 4.0 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 1.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 4.0 Styrene ND 5.0 | | | | | * . | | | | | |
| trans-1,3-Dichloropropene ND 5.0 Bromoform ND 4.0 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 1.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 5.0 Styrene ND 5.0 | | 1,1,2-Trichloroethane | | | | | | | | |
| Bromoform ND 4.0 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 1.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 4.0 Styrene ND 5.0 | | | • | | | | | | | |
| 4-Methyl-2-Pentanone ND 5.0 2-Hexanone ND 5.0 Tetrachloroethene ND 1.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 4.0 Styrene ND 5.0 | | | | • | | · · | - | | | |
| 2-Hexanone ND 5.0 Tetrachloroethene ND 1.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 4.0 Styrene ND 5.0 | | | | | · · | | | | | |
| Tetrachloroethene ND J 1.0 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 4.0 Styrene ND 5.0 | | | | | 100 | | | | | |
| 1,1,2,2-Tetrachloroethane ND 1.0 Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 4.0 Styrene ND 5.0 | | | | | | | | | | |
| Toluene ND 5.0 Chlorobenzene ND 5.0 Ethylbenzene ND 4.0 Styrene ND 5.0 | | | | | | | | | | |
| ChlorobenzeneND5.0EthylbenzeneND4.0StyreneND5.0 | | | | | | | • | • | | |
| Ethylbenzene ND 4.0 Styrene ND 5.0 | | | | | • | | • | | | |
| Styrene ND 5.0 | | | | _ | | | | | | |
| | | | | • | | | • | • | | |
| Xylene (Total) ND 5.0 | | | | v | | | | _ | | |
| | | Xylene (Total) | | | | ND | | | 5.0 | |

Site: NYSEG Wadsworth St

Lab Sample No: 696452

Lab Job No: K740

Date Sampled: 12/20/05 Date Received: 12/21/05
Date Analyzed: 12/28/05
GC Column: RTX-VMS
Instrument ID: VOAMS12.i

Lab File ID: o03785.d

Matrix: WATER Level: LOW Purge Volume: 5.0 ml Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Result Units: uq/l

Quantitation Limit Units: uq/l

Parameter

MTBE

ND

5.0

Site: NYSEG Wadsworth St

Lab Sample No: 696453

Lab Job No: K740

Date Sampled: 12/20/05

Date Received: 12/21/05 Date Analyzed: 12/28/05 GC Column: RTX-VMS Instrument ID: VOAMS12.i

Lab File ID: o03786.d

Matrix: WATER Level: LOW

Purge Volume: 5.0 ml

Dilution Factor: 100.0

| <u>Parameter</u> | | cal Result s: ug/l | Quantitation Limit <u>Units: ug/l</u> | | | |
|---------------------------|----|-----------------------|---|--|--|--|
| Chloromethane | | ND | 500 | | | |
| Bromomethane | | ND | 500 | | | |
| Vinyl Chloride | · | ND | 500 | | | |
| Chloroethane | | ND | 500 | | | |
| Methylene Chloride | | ND | 300 | | | |
| Acetone | | ND J | 500 | | | |
| Carbon Disulfide | | ND | 500 | | | |
| 1,1-Dichloroethene | | ND | 200 | | | |
| 1,1-Dichloroethane | | ND | 500 | | | |
| trans-1,2-Dichloroethene | | ND | 500 | | | |
| cis-1,2-Dichloroethene | | ND | 500 | | | |
| Chloroform | • | ND | 500 | | | |
| 1,2-Dichloroethane | | ND | 200 | | | |
| 2-Butanone | • | ND | 500 | | | |
| 1,1,1-Trichloroethane | | ND | 500 | | | |
| Carbon Tetrachloride | | ND | 200 | | | |
| Bromodichloromethane | | ND | 100 | | | |
| 1,2-Dichloropropane | | ND | 100 | | | |
| cis-1,3-Dichloropropene | | ND | 500 | | | |
| Trichloroethene | | ND | 100 | | | |
| Dibromochloromethane | | ND | 500 | | | |
| 1,1,2-Trichloroethane | | ND | 300 | | | |
| Benzene | | 7100 | 100 | | | |
| trans-1,3-Dichloropropene | | ND | 500 | | | |
| Bromoform | • | ND | 400 | | | |
| 4-Methyl-2-Pentanone | | ND | 500 | | | |
| 2-Hexanone | | ND | 500 | | | |
| Tetrachloroethene | | ND 7 | 100 | | | |
| 1,1,2,2-Tetrachloroethane | • | ND | 100 | | | |
| Toluene | | 4300 | 5.00 | | | |
| Chlorobenzene | | ND | 500 | | | |
| Ethylbenzene | • | 680 | 400 | | | |
| Styrene | v. | 320 J | 500 | | | |
| Xylene (Total) | • | 7900 | 500 | | | |

Site: NYSEG Wadsworth St

Lab Sample No: 696453

Lab Job No: K740

Date Sampled: 12/20/05 Date Received: 12/21/05 Date Analyzed: 12/28/05

GC Column: RTX-VMS

Instrument ID: VOAMS12.i Lab File ID: 003786.d

Matrix: WATER

Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 100.0

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Result Units: ug/l

Quantitation Limit Units: uq/l

Parameter

MTBE

ND

500

Site: NYSEG Wadsworth St

Lab Sample No: 696454

Lab Job No: K740

Date Sampled: 12/20/05 Date Received: 12/21/05 Date Analyzed: 12/28/05

GC Column: RTX-VMS Instrument ID: VOAMS12.i Lab File ID: 003787.d

Matrix: WATER Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 1.0

| <u>Parameter</u> | Analytical Result <u>Units: uq/l</u> | Quantitation Limit <u>Units: ug/l</u> |
|---------------------------|---|---|
| Chloromethane | ND | 5.0 |
| Bromomethane | ND | 5.0 |
| Vinyl Chloride | ND | 5.0 |
| Chloroethane | ND | 5.0 |
| Methylene Chloride | ND | 3.0 |
| Acetone | ND J | 5.0 |
| Carbon Disulfide | ND | 5.0 " |
| 1,1-Dichloroethene | ND | 2.0 |
| ୍ରୀ,1-Dichloroethane | ND | 5.0 |
| trans-1,2-Dichloroethene | ND | 5.0 |
| cis-1,2-Dichloroethene | ND | 5.0 |
| Chloroform | ND | 5.0 |
| 1,2-Dichloroethane | ND | 2.0 |
| 2-Butanone | ND | 5.0 |
| 1,1,1-Trichloroethane | ND | 5.0 |
| Carbon Tetrachloride | ND | 2.0 |
| Bromodichloromethane | ND | 1.0 |
| 1,2-Dichloropropane | ND | 1.0 |
| cis-1,3-Dichloropropene | ND | 5.0 |
| Trichloroethene | ND | 1.0 |
| Dibromochloromethane | ND | 5.0 |
| 1,1,2-Trichloroethane | ND | 3.0 |
| Benzene | ND | 1.0 |
| trans-1,3-Dichloropropene | ND | 5.0 |
| Bromoform | ND | 4.0 |
| 4-Methyl-2-Pentanone | ND | 5.0 |
| 2-Hexanone | ND | 5.0 |
| Tetrachloroethene | ND Z | 1.0 |
| 1,1,2,2-Tetrachloroethane | ND | 1.0 |
| Toluene | ND | 5.0 |
| Chlorobenzene | ND | 5.0 |
| Ethylbenzene | ND | 4.0 |
| Styrene | ND - | 5.0 |
| Xylene (Total) | , ND | 5.0 |

Site: NYSEG Wadsworth St

Lab Sample No: 696454

Lab Job No: K740

Date Sampled: 12/20/05 Date Received: 12/21/05

Date Analyzed: 12/28/05

GC Column: RTX-VMS

Instrument ID: VOAMS12.i Lab File ID: o03787.d

Matrix: WATER

Level: LOW

Purge Volume: 5.0 ml

Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Result Units: uq/l

Quantitation Limit Units: ug/l

Parameter

MTBE

5.0

Client ID: DUP-12-20-05 Site: NYSEG Wadsworth St

Lab Sample No: 696455 Lab Job No: K740

Date Sampled: 12/20/05 Date Received: 12/21/05 Date Analyzed: 12/28/05

Matrix: WATER Level: LOW

GC Column: RTX-VMS

Purge Volume: 5.0 ml Dilution Factor: 50.0

Instrument ID: VOAMS12.i Lab File ID: 003788.d

| Parameter | Analytical Result <u>Units: uq/l</u> | Quantitation Limit <u>Units: uq/l</u> |
|---------------------------|--------------------------------------|---|
| Chloromethane | ND | 250 |
| Bromomethane | ND | 250 |
| Vinyl Chloride | ND · | 250 |
| Chloroethane | ND | 250 |
| Methylene Chloride | ND | 150 |
| Acetone | ND 3 | 250 |
| Carbon Disulfide | ND | 250 |
| 1,1-Dichloroethene | ND | 100 |
| 1,1-Dichloroethane | ND | 250 |
| trans-1,2-Dichloroethene | ND | 250 |
| cis-1,2-Dichloroethene | ND | 250 |
| Chloroform | ND | 250 |
| 1,2-Dichloroethane | ND | 100 |
| 2-Butanone | ND | 250 |
| 1,1,1-Trichloroethane | ND | 250 |
| Carbon Tetrachloride | ND | 100 |
| Bromodichloromethane | ND | 50 |
| 1,2-Dichloropropane | ND | 50 |
| cis-1,3-Dichloropropene | ND | 250 |
| Trichloroethene | ND | 50 |
| Dibromochloromethane | ND | 250 _ |
| 1,1,2-Trichloroethane | ND | 150 |
| Benzene | 7000 | 50 |
| trans-1,3-Dichloropropene | ND | 250 |
| Bromoform | ND . | 200 |
| 4-Methyl-2-Pentanone | ND | 250 |
| 2-Hexanone | ND | 250 |
| Tetrachloroethene | ND 1 | 50 |
| 1,1,2,2-Tetrachloroethane | | 50 |
| Toluene | 4300 | 250 |
| Chlorobenzene | ND | 250 |
| Ethylbenzene | 730 | 200 |
| Styrene | 360 | 250 |
| Xylene (Total) | 8100 | 250 |

Client ID: DUP-12-20-05 Site: NYSEG Wadsworth St

Lab Sample No: 696455 Lab Job No: K740

Date Sampled: 12/20/05 Date Received: 12/21/05 Date Analyzed: 12/28/05 GC Column: RTX-VMS

Matrix: WATER
Level: LOW
Purge Volume: 5 (

Instrument ID: VOAMS12.i

Purge Volume: 5.0 ml Dilution Factor: 50.0

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Analytical Result Units: ug/l

Quantitation Limit Units: uq/l

Parameter

ND

250

MTBE

Client ID: TANK

Site: NYSEG Wadsworth St

Lab Sample No: 696456

Lab Job No: K740

Date Sampled: 12/20/05 Date Received: 12/21/05 Date Analyzed: 12/28/05 GC Column: RTX-VMS

Instrument ID: VOAMS12.i Lab File ID: o03789.d

Matrix: WATER Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 1.0

| <u>Parameter</u> | Analytical Result <u>Units: ug/l</u> | Quantitation Limit <u>Units: ug/l</u> |
|--|--------------------------------------|---|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone | ND ND ND ND ND | 5.0 5.0 5.0 5.0 5.0 |
| Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene | ND ND ND ND | 5.0 2.0 5.0 5.0 |
| cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane | ND ND ND | 5.0 5.0 2.0 |
| 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane | 1.6J ND ND ND ND | 5.0 5.0 2.0 1.0 1.0 |
| cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane | ND ND ND ND | 5.0 1.0 5.0 3.0 |
| Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone | 170 ND ND ND | 1.0 5.0 4.0 5.0 |
| 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene | ND ND ND 170 | 5.0 1.0 1.0 5.0 |
| Chlorobenzene Ethylbenzene Styrene Xylene (Total) | ND 24 17 260 | 5.0 4.0 5.0 5.0 |

Client ID: TANK

Site: NYSEG Wadsworth St

Lab Sample No: 696456

Lab Job No: K740

Date Sampled: 12/20/05

Date Received: 12/21/05 Date Analyzed: 12/28/05

GC Column: RTX-VMS Instrument ID: VOAMS12.i Lab File ID: 003789.d

Matrix: WATER Level: LOW

Purge Volume: 5.0 ml Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Result Units: uq/l

Quantitation Limit Units: ug/l

Parameter MTBE

ND

5.0

Client ID: TRIPBLANK Site: NYSEG Wadsworth St Lab Sample No: 696457 Lab Job No: K740

Date Sampled: 12/20/05 Date Received: 12/21/05 Date Analyzed: 12/28/05

21/05 Level: LOW 28/05 Purge Volum

GC Column: RTX-VMS Instrument ID: VOAMS12.i Lab File ID: 003790.d Purge Volume: 5.0 ml Dilution Factor: 1.0

Matrix: WATER

| | Parameter | Ana | alytical Re Units: ug/ | | | Lim: | itation it : ug/l | n |
|-----|---------------------------|---------|--|--|---|------|-------------------------|---|
| | Chloromethane | | · N | D . | | | 5.0 | |
| | Bromomethane | | N | D | | | 5.0 | |
| | Vinyl Chloride | | N | D | | | 5.0 | |
| | Chloroethane | | N | | | | 5.0 | |
| | Methylene Chloride | | N | | | | 3.0 | |
| | Acetone | | N. | | | | 5.0 | |
| | Carbon Disulfide | | N. | | | | 5.0 | |
| | 1,1-Dichloroethene | | N | and the second s | | | 2.0 | |
| | 1,1-Dichloroethane | | N. | | | | 5.0 | |
| | trans-1,2-Dichloroethene | | N. | | | | 5.0 | |
| 400 | cis-1,2-Dichloroethene | | N | | | | 5.0 | |
| | Chloroform | | N. | | | | 5.0 | |
| | 1,2-Dichloroethane | | . N | | , | | 2.0 | |
| | 2-Butanone | | N | | | | 5.0 | |
| | 1,1,1-Trichloroethane | | N | D | | | 5.0 | |
| | Carbon Tetrachloride | | N | D | | | 2.0 | |
| | Bromodichloromethane | | N. | D. | | | 1.0 | |
| | 1,2-Dichloropropane | | N. | D | | | 1.0 | |
| | cis-1,3-Dichloropropene | | N | D . | | | 5.0 | |
| | Trichloroethene | | N | D | | | 1.0 | |
| | Dibromochloromethane | | N | D. | | | 5.0 | |
| | 1,1,2-Trichloroethane | | N | D | | | 3.0 | |
| | Benzene | | N | D . | | | 1.0 | |
| | trans-1,3-Dichloropropene | | N | | | | 5.0 | |
| | Bromoform | | N | | | | 4.0 | |
| | 4-Methyl-2-Pentanone | | N | · · | • | | 5.0 | |
| | 2-Hexanone | | N | | | | 5.0 | |
| | Tetrachloroethene | | and the second s | D 5 | | - | 1.0 | |
| | 1,1,2,2-Tetrachloroethane | | N | | | | 1.0 | |
| | Toluene | | | 4J | | | 5.0 | |
| | Chlorobenzene | | | D | | | 5.0 | * |
| | Ethylbenzene | | | D | , | | 4.0 | |
| | Styrene | | • | D - | | | 5.0 | |
| | Xylene (Total) | | N | ID . | | | 5.0 | |

Client ID: TRIPBLANK Site: NYSEG Wadsworth St Lab Sample No: 696457 Lab Job No: K740

Date Sampled: 12/20/05 Date Received: 12/21/05 Date Analyzed: 12/28/05 Matrix: WATER Level: LOW

GC Column: RTX-VMS Instrument ID: VOAMS12.i Purge Volume: 5.0 ml Dilution Factor: 1.0

Instrument ID: VOAMS12. Lab File ID: o03790.d

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Analytical Result Units: ug/l

Quantitation Limit <u>Units: ug/l</u>

Parameter
MTBE

ND

5.0

Site: NYSEG Wadsworth St

Lab Sample No: 696449

Lab Job No: K740

Date Sampled: 12/20/05

Date Received: 12/21/05

Date Extracted: 12/22/05

Date Analyzed: 12/29/05

GC Column: DB-5

Instrument ID: BNAMS4.i
Lab File ID: u27107.d

Matrix: WATER Level: LOW

Sample Volume: 950 ml

Extract Final Volume: 2.0 ml

Quantitation

Dilution Factor: 1.0

| | <u>Parameter</u> | | Analytica <u>Units:</u> | | t | Li | mit s: ug/l |
|----|-----------------------------|---|----------------------------|------|---|----|----------------|
| | bis(2-Chloroethyl)ether | | | ND T | 5 | | 1.0 |
| | 1,3-Dichlorobenzene | | | ND | • | | 10 |
| | 1,4-Dichlorobenzene | | • | ND | | | 10 |
| | 1,2-Dichlorobenzene | | | ND | | | 10 |
| | bis(2-chloroisopropyl)ether | | | ND | • | | 10 |
| | N-Nitroso-di-n-propylamine | | • | ND | | | 1.0 |
| ٠. | Hexachloroethane | | | ND | | | 1.0 |
| | Nitrobenzene | | | ND | | | 1.0 |
| Š | Isophorone | | - ' | ND | | | 10 |
| | bis(2-Chloroethoxy)methane | | | ND | | | 10 |
| | 1,2,4-Trichlorobenzene | | • | ND | | | 1.0 |
| | Naphthalene | | | ND | | | 10 |
| | 4-Chloroaniline | | | ND | · | | 10 |
| | Hexachlorobutadiene | | | ND | | | 2.1 |
| | 2-Methylnaphthalene | | | ND | | | 10 |
| | Hexachlorocyclopentadiene | | | ND " | J | | 10 |
| | 2-Chloronaphthalene | | | ND | | | 10 |
| | 2-Nitroaniline | | | · ND | | | 21 |
| | Dimethylphthalate | | | ND | • | | 10 |
| | Acenaphthylene | | | ND | | | 10, |
| ٠ | 2,6-Dinitrotoluene | * | * * | ND | | • | 2.1 |
| | 3-Nitroaniline | | | ND | | | 21 |
| | Acenaphthene | | | ND | • | | 10 |
| | Dibenzofuran | | • | ND | | | 10 |
| | 2,4-Dinitrotoluene | | | ND | • | | 2.1 |
| | Diethylphthalate | | | ND | | • | 10 |
| | 4-Chlorophenyl-phenylether | | | ND . | | | 10 |
| | Fluorene | | | ND | • | | 10 |
| | 4-Nitroaniline | | | ND | | | 21 |
| | N-Nitrosodiphenylamine | | • | ND | | | 10 |
| | 4-Bromophenyl-phenylether | | | ND | | • | 10 |
| | Hexachlorobenzene | | v | ND | | | 1.0 |
| | Phenanthrene | | | ND | | | 10 |
| • | Anthracene | | | ND | | | 10 |
| | | | | | | | |

Site: NYSEG Wadsworth St

Lab Sample No: 696449

Lab Job No: K740

Date Sampled: 12/20/05

Date Received: 12/21/05 Date Extracted: 12/22/05

Date Analyzed: 12/29/05

GC Column: DB-5

Instrument ID: BNAMS4.i
Lab File ID: u27107.d

Matrix: WATER Level: LOW

Sample Volume: 950 ml

Extract Final Volume: 2.0 ml

Dilution Factor: 1.0

| <u>Parameter</u> | Analytical Result <u>Units: ug/l</u> | Quantitation Limit Units: ug/l |
|----------------------------|--------------------------------------|--------------------------------------|
| Carbazole | ND | 10 |
| Di-n-butylphthalate | ND | 10 |
| Fluoranthene | ND | 1.0. |
| Pyrene | ND | 10 |
| Butylbenzylphthalate | ND | 10 |
| 3,3'-Dichlorobenzidine | ND | 21 |
| Benzo(a) anthracene | ND | 1.0 |
| Chrysene | N D | 10 |
| bis(2-Ethylhexyl)phthalate | ND | 10 |
| Di-n-octylphthalate | ND | 10 |
| Benzo(b) fluoranthene | ND J | 1.0 |
| Benzo(k)fluoranthene | ND J | 1.0 |
| Benzo(a)pyrene | ND . | 1.0 |
| Indeno(1,2,3-cd)pyrene | ND | 1.0 |
| Dibenz(a,h)anthracene | ND | 1.0 |
| Benzo(g,h,i)perylene | ND | 10 |
| | | |

Site: NYSEG Wadsworth St

Lab Sample No: 696450

Lab Job No: K740

Matrix: WATER

Date Sampled: 12/20/05

Date Received: 12/21/05
Date Extracted: 12/22/05
Date Analyzed: 12/29/05
GC Column: DB-5

Instrument ID: BNAMS4.i Lab File ID: u27110.d

Level: LOW Sample Volume: 980 ml

Extract Final Volume: 2.0 ml

Dilution Factor: 1.0

| <u>Parameter</u> | Analytical Result <u>Units: ug/l</u> | Quantitation Limit <u>Units: ug/l</u> |
|-----------------------------|---|---|
| bis(2-Chloroethyl)ether | ND J | 1.0 |
| 1,3-Dichlorobenzene | ND | 10 |
| 1,4-Dichlorobenzene | ND | 10 |
| 1,2-Dichlorobenzene | ND | 10 |
| bis(2-chloroisopropyl)ether | ND | 10 |
| N-Nitroso-di-n-propylamine | ND | 1.0 |
| Hexachloroethane | ND | 1.0 |
| Nitrobenzene | ND | 1.0 |
| Isophorone | ND | 10 |
| bis(2-Chloroethoxy)methane | ND | 10 |
| 1,2,4-Trichlorobenzene | ND | 1.0 |
| Naphthalene | 1.3J | 10 |
| 4-Chloroaniline | ND | 10 |
| Hexachlorobutadiene | ND | 2.0 |
| 2-Methylnaphthalene | ND | 10 |
| Hexachlorocyclopentadiene | D D | 10 |
| 2-Chloronaphthalene | ND | 10 |
| 2-Nitroaniline | ND | 20 ⁻ |
| Dimethylphthalate | ND | 10 |
| Acenaphthylene | ND | 10 |
| 2,6-Dinitrotoluene | ND | 2.0 |
| 3-Nitroaniline | ${f N}{f D}$ | 20 |
| Acenaphthene | ND | 10 |
| Dibenzofuran | ND | 10 |
| 2,4-Dinitrotoluene | ND | 2.0 |
| Diethylphthalate | ND | 10 |
| 4-Chlorophenyl-phenylether | ND | 10 |
| Fluorene | ND | 10 |
| 4-Nitroaniline | ND | 20 |
| N-Nitrosodiphenylamine | ND | 10 |
| 4-Bromophenyl-phenylether | ND . | 10 |
| Hexachlorobenzene | , ND | 1.0 |
| Phenanthrene | ND . | 10 |
| Anthracene | ND | 10 |

Site: NYSEG Wadsworth St

Lab Sample No: 696450

Lab Job No: K740

Date Sampled: 12/20/05

Date Received: 12/21/05 Date Extracted: 12/22/05

Date Analyzed: 12/29/05

GC Column: DB-5

Instrument ID: BNAMS4.i

Lab File ID: u27110.d

Matrix: WATER Level: LOW

Sample Volume: 980 ml

Extract Final Volume: 2.0 ml

Dilution Factor: 1.0

| <u>Parameter</u> | Analytical Result <u>Units: ug/l</u> | Quantitation Limit <u>Units: ug/l</u> |
|----------------------------|---|---|
| Carbazole | ND | 10 |
| Di-n-butylphthalate | ND | 10 |
| Fluoranthene | ND | 10 |
| Pyrene | ND | 10 |
| Butylbenzylphthalate | ND | 10 |
| 3,3'-Dichlorobenzidine | ND | 20 |
| Benzo (a) anthracene | ND | 1.0 |
| Chrysene | ND | 10 |
| bis(2-Ethylhexyl)phthalate | ND | 10 |
| Di-n-octylphthalate | ND | 10 |
| Benzo(b) fluoranthene | ND 3 | 1.0 |
| Benzo(k) fluoranthene | ND J | 1.0 |
| Benzo(a)pyrene | ND | 1.0 |
| Indeno(1,2,3-cd)pyrene | ND | 1.0 |
| Dibenz (a, h) anthracene | ND | 1.0 |
| Benzo(g,h,i)perylene | ND . | 10 |

Site: NYSEG Wadsworth St

Lab Sample No: 696451

Lab Job No: K740

Date Sampled: 12/20/05

Date Received: 12/21/05
Date Extracted: 12/22/05

Date Analyzed: 12/29/05

GC Column: DB-5

Instrument ID: BNAMS4.i
Lab File ID: u27111.d

Matrix: WATER
Level: LOW

Sample Volume: 950 ml

Extract Final Volume: 2.0 ml

Dilution Factor: 1.0

| <u>Parameter</u> | Α | nalyti <u>Unit</u> | | | lt | | Li | titatí mit s: ug/ | |
|------------------------------|---|-----------------------|---|----|-----|---|----|-------------------------|---|
| bis(2-Chloroethyl)ether | | | | ND | 5 | | | 1.0 | |
| 1,3-Dichlorobenzene | | | | ND | | | | 10 | , |
| 1,4-Dichlorobenzene | | + | | ND | | | , | 10 | |
| 1,2-Dichlorobenzene | | | | ND | | | | 10 | |
| bis(2-chloroisopropyl)ether | | | | ND | | | | 10 | |
| N-Nitroso-di-n-propylamine | | | | ND | | | | 1.0 | - |
| Hexachloroethane | | | | ND | | | | 1.0 | |
| Nitrobenzene | | | | ND | | | | 1.0 | |
| Isophorone | , | | | ND | | | • | 10 | |
| bis (2-Chloroethoxy) methane | | | | ND | | | | 10 | |
| 1,2,4-Trichlorobenzene | | | | ND | | • | | 1.0 | |
| Naphthalene | | | | ND | | | | 10 | |
| 4-Chloroaniline | | | | ND | | • | | 10 | |
| Hexachlorobutadiene | | | | ND | 100 | | | 2.1 | |
| 2-Methylnaphthalene | | | • | ND | | | | 10 | |
| Hexachlorocyclopentadiene | | | | ND | J | | | 10 | |
| 2-Chloronaphthalene | | | | ND | | | | 10 | |
| 2-Nitroaniline | | • | | ND | | | | 21 | |
| Dimethylphthalate | | | | ND | | | | 10 | |
| Acenaphthylene | | | | ND | | | | 10 | |
| 2,6-Dinitrotoluene | | | 4 | ND | | | | 2.1 | |
| 3-Nitroaniline | | | | ND | | | | 21 | |
| Acenaphthene | | | | ND | | | | 10 | |
| Dibenzofuran | | | | ND | | | | 10 | |
| 2,4-Dinitrotoluene | | | | ND | | | | 2.1 | |
| Diethylphthalate | | | | ND | | | | 10 | |
| 4-Chlorophenyl-phenylether | | | | ND | | | | 10 | |
| Fluorene | | | | ND | | | | 10 | |
| 4-Nitroaniline | | | | ND | | | | 21 | |
| N-Nitrosodiphenylamine | - | | | ND | | | | 10 | * |
| 4-Bromophenyl-phenylether | • | | | ND | | | ` | 10 | |
| Hexachlorobenzene | | v | | ND | • | | | 1.0 | |
| Phenanthrene | | | | ND | ` | | | 10 | |
| Anthracene | | | | ND | | | | - 10. | |
| | | | | | | | | | |

Site: NYSEG Wadsworth St

Lab Sample No: 696451

Lab Job No: K740

Date Sampled: 12/20/05 Date Received: 12/21/05

Date Extracted: 12/22/05

Date Analyzed: 12/29/05

GC Column: DB-5

Instrument ID: BNAMS4.i
Lab File ID: u27111.d

Matrix: WATER Level: LOW

Sample Volume: 950 ml

Extract Final Volume: 2.0 ml

Dilution Factor: 1.0

| <u>Parameter</u> | Analytical Result <u>Units: uq/l</u> | Quantitation Limit Units: ug/l |
|---|--|--|
| Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene | ND N | 10 10 10 10 10 21 1.0 10 10 10 1.0 1.0 1.0 |
| | • | |

Site: NYSEG Wadsworth St

Lab Sample No: 696452 Lab Job No: K740

Date Sampled: 12/20/05
Date Received: 12/21/05
Date Extracted: 12/22/05
Date Analyzed: 12/29/05
GC Column: DB-5

Instrument ID: BNAMS4.i Lab File ID: u27112.d

Matrix: WATER Level: LOW

Sample Volume: 950 ml

Extract Final Volume: 2.0 ml

Dilution Factor: 1.0

| <u>Parameter</u> | Analytical Result <u>Units: uq/l</u> | Quantitation Limit <u>Units: ug/l</u> |
|-----------------------------|--------------------------------------|---|
| bis(2-Chloroethyl)ether | ND J | 1.0 |
| 1,3-Dichlorobenzene | ND | 10 |
| 1,4-Dichlorobenzene | ND | 10 |
| 1,2-Dichlorobenzene | ND | 10 |
| bis(2-chloroisopropyl)ether | ND | 10 |
| N-Nitroso-di-n-propylamine | ND | 1.0 |
| <pre>Hexachloroethane</pre> | ND | 1.0 |
| Nitrobenzene | ND | 1.0 |
| Isophorone | ND | 10 |
| bis(2-Chloroethoxy)methane | ND | 10 |
| 1,2,4-Trichlorobenzene | ND | 1.0 |
| Naphthalene | ND | 10 |
| 4-Chloroaniline | ND | 10 |
| Hexachlorobutadiene | ND | 2.1 |
| 2-Methylnaphthalene | ND | 10 |
| Hexachlorocyclopentadiene | ND J | 10 |
| 2-Chloronaphthalene | ND | 10 |
| 2-Nitroaniline | ND | 21 |
| Dimethylphthalate | ND | 10 |
| Acenaphthylene | ND | 10 |
| 2,6-Dinitrotoluene | ND | 2.1 |
| 3-Nitroaniline | ND | 21 |
| Acenaphthene | ND | 10 |
| Dibenzofuran | ND | 10 |
| 2,4-Dinitrotoluene | ND | 2.1 |
| Diethylphthalate | ND ND | 10 |
| 4-Chlorophenyl-phenylether | ND | 10 |
| Fluorene | ND | 10 |
| 4-Nitroaniline | ND | 21 |
| N-Nitrosodiphenylamine | ND | 10 |
| 4-Bromophenyl-phenylether | ND | 10 |
| Hexachlorobenzene | ND | 1.0 |
| Phenanthrene | ND | 10 |
| Anthracene | ND | 10 |
| | | |

Site: NYSEG Wadsworth St

Lab Sample No: 696452

Lab Job No: K740

Date Sampled: 12/20/05

Date Received: 12/21/05 Date Extracted: 12/22/05 Date Analyzed: 12/29/05

GC Column: DB-5

Instrument ID: BNAMS4.i Lab File ID: u27112.d

Matrix: WATER Level: LOW

Sample Volume: 950 ml Extract Final Volume: 2.0 ml

Dilution Factor: 1.0

| <u>Parameter</u> | Analytical Result <u>Units: ug/l</u> | Quantitation Limit <u>Units: ug/l</u> |
|----------------------------|---|---|
| Carbazole | ND | 10 |
| Di-n-butylphthalate | ND | 10 |
| Fluoranthene | ND | 10 |
| Pyrene | ND | 10 |
| Butylbenzylphthalate | ND | 10 |
| 3,3'-Dichlorobenzidine | ND | 21 |
| Benzo (a) anthracene | ND | 1.0 |
| Chrysene | ND | 10 |
| bis(2-Ethylhexyl)phthalate | ND | 10 |
| Di-n-octylphthalate | ND | 10 |
| Benzo(b)fluoranthene | ND J | 1.0 |
| Benzo(k)fluoranthene | ND J | 1.0 |
| Benzo(a)pyrene | ND | 1.0 |
| Indeno(1,2,3-cd)pyrene | ND | 1.0 |
| Dibenz(a,h)anthracene | ND | 1.0 |
| Benzo(g,h,i)perylene | ND | 10 |

Site: NYSEG Wadsworth St

Lab Sample No: 696453

Lab Job No: K740

Date Sampled: 12/20/05

Date Received: 12/21/05 Date Extracted: 12/22/05

Date Analyzed: 12/29/05 GC Column: DB-5

Instrument ID: BNAMS4.i Lab File ID: u27114.d

Matrix: WATER Level: LOW

Sample Volume: 950 ml

Extract Final Volume: 2.0 ml

Dilution Factor: 20.0

| <u>Parameter</u> | Analytical Result <u>Units: ug/l</u> | Quantitation Limit <u>Units: ug/l</u> |
|---------------------------------------|--------------------------------------|---|
| bis(2-Chloroethyl)ether | ND J | 21 |
| 1,3-Dichlorobenzene | ND | 210 |
| 1,4-Dichlorobenzene | ND | 210 |
| 1,2-Dichlorobenzene | ND | 210 |
| bis(2-chloroisopropyl)ether | ND | 210 |
| N-Nitroso-di-n-propylamine | ND | 21 |
| Hexachloroethane | ND | 21 |
| Nitrobenzene | ND | 21 |
| Isophorone | ND | 210 |
| bis(2-Chloroethoxy)methane | ND | 210 |
| 1,2,4-Trichlorobenzene | ND | 21 |
| Naphthalene | 3600 | 210 |
| 4-Chloroaniline | ND | 210 |
| Hexachlorobutadiene | ND | 42 |
| 2-Methylnaphthalene | 290 | 210 |
| Hexachlorocyclopentadiene | ND 3 | 210 |
| 2-Chloronaphthalene | ND | 210 |
| 2-Nitroaniline | ND | 420 |
| Dimethylphthalate | ND | 210 |
| Acenaphthylene | 54 J | 210 |
| 2,6-Dinitrotoluene | ND | 42 |
| 3-Nitroaniline | ND . | 420 |
| Acenaphthene | 16 J | 210 |
| Dibenzofuran | 50 J | 210 |
| 2,4-Dinitrotoluene | ND | 42 |
| Diethylphthalate | ND | 210 |
| 4-Chlorophenyl-phenylether | ND. | 210 |
| Fluorene 4-Nitroaniline | 48 J | 210 |
| N-Nitrosodiphenylamine | ND | 420 |
| 4-Bromophenyl-phenylether | ND ND | 210 210 |
| Hexachlorobenzene | ND . | 210 |
| · · · · · · · · · · · · · · · · · · · | | |
| Phenanthrene | 28 J | 210 |
| Anthracene | ND | 210 |

Site: NYSEG Wadsworth St

Lab Sample No: 696453

Lab Job No: K740

Date Sampled: 12/20/05

Date Received: 12/21/05 Date Extracted: 12/22/05

Date Analyzed: 12/29/05

GC Column: DB-5

Instrument ID: BNAMS4.i Lab File ID: u27114.d

Matrix: WATER Level: LOW

Sample Volume: 950 ml

Extract Final Volume: 2.0 ml

Dilution Factor: 20.0

| <u>Parameter</u> | Analytical Result <u>Units: ug/l</u> | Quantitation Limit <u>Units: ug/l</u> |
|----------------------------|---|---|
| Carbazole | 88 J | 210 |
| Di-n-butylphthalate | ND | 210 |
| Fluoranthene | ND | 210 |
| Pyrene | ND | 210 |
| Butylbenzylphthalate | ND | 210 |
| 3,3'-Dichlorobenzidine | ND | 420 |
| Benzo (a) anthracene | ND | 21 |
| Chrysene | ND | 210 |
| bis(2-Ethylhexyl)phthalate | ND | 23.0 |
| Di-n-octylphthalate | ND | 210 |
| Benzo(b)fluoranthene | ND 3 | 21 |
| Benzo(k)fluoranthene | D D | 21 |
| Benzo(a)pyrene | ND | 21 |
| Indeno(1,2,3-cd)pyrene | ND | 21 |
| Dibenz(a,h)anthracene | ND | 21 |
| Benzo(g,h,i)perylene | ND | 210 |

Site: NYSEG Wadsworth St

Lab Sample No: 696454

Lab Job No: K740

Date Sampled: 12/20/05

Date Received: 12/21/05

Date Extracted: 12/22/05

Date Analyzed: 12/29/05 GC Column: DB-5 Instrument ID: BNAMS4.i Lab File ID: u27113.d

Matrix: WATER Level: LOW

Sample Volume: 950 ml

Extract Final Volume: 2.0 ml

Dilution Factor: 1.0

| <u>Parameter</u> | Analytical Result <u>Units: ug/l</u> | Quantitation Limit <u>Units: ug/l</u> |
|--|---|---|
| bis(2-Chloroethyl)ether 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene | ND J ND ND ND | 1.0 10 10 10 |
| bis (2-chloroisopropyl) ether N-Nitroso-di-n-propylamine Hexachloroethane | ND ND ND | 10 1.0 1.0 |
| Nitrobenzene Isophorone bis(2-Chloroethoxy)methane | ND ND ND | 1.0 10 10 |
| 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline | ND ND ND | 1.0 10 10 |
| Hexachlorobutadiene 2-Methylnaphthalene Hexachlorocyclopentadiene 2-Chloronaphthalene | ND IND | 2.1 10 10 10 |
| 2-Nitroaniline Dimethylphthalate Acenaphthylene | ND ND ND | 21 10 10 |
| 2,6-Dinitrotoluene 3-Nitroaniline Acenaphthene | ND ND ND | 2.1 21 10 |
| Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate | ND ND ND | 10 2.1 10 |
| 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline N-Nitrosodiphenylamine | ND ND ND ND | 10 10 21 10 |
| 4-Bromophenyl-phenylether Hexachlorobenzene Phenanthrene | ND ND ND | 10 1.0 10 |
| Anthracene | ND | 10 |

Site: NYSEG Wadsworth St

Lab Sample No: 696454

Lab Job No: K740

Date Sampled: 12/20/05

Date Received: 12/21/05 Date Extracted: 12/22/05

Date Analyzed: 12/29/05

GC Column: DB-5

Instrument ID: BNAMS4.i Lab File ID: u27113.d

Matrix: WATER Level: LOW

Sample Volume: 950 ml

Extract Final Volume: 2.0 ml

Dilution Factor: 1.0

| <u>Parameter</u> | Analytical Result <u>Units: uq/l</u> | Quantitation Limit <u>Units: uq/l</u> |
|----------------------------|--------------------------------------|---|
| Carbazole | ND | 10 |
| Di-n-butylphthalate | ND | 10 |
| Fluoranthene | ND | 10 |
| Pyrene | ND | 10 |
| Butylbenzylphthalate | ND | 10 |
| 3,3'-Dichlorobenzidine | ND | 21 |
| Benzo(a) anthracene | ND | 1.0 |
| Chrysene | ND · | 10 |
| bis(2-Ethylhexyl)phthalate | 3.3J | 10 |
| Di-n-octylphthalate | ND | 10 |
| Benzo(b)fluoranthene | ND J | 1.0 |
| Benzo(k)fluoranthene | ND J | 1.0 |
| Benzo(a)pyrene | ND | 1.0 |
| Indeno(1,2,3-cd)pyrene | ND | 1.0 |
| Dibenz(a,h)anthracene | ND | 1.0 |
| Benzo(g,h,i)perylene | N D | 10 |

Client ID: DUP-12-20-05 Site: NYSEG Wadsworth St

Lab Sample No: 696455 Lab Job No: K740

Date Sampled: 12/20/05 Date Received: 12/21/05 Matrix: WATER Level: LOW

Date Extracted: 12/22/05

Sample Volume: 970 ml

Extract Final Volume: 2.0 ml

Dilution Factor: 20.0

Date Analyzed: 12/29/05 GC Column: DB-5 Instrument ID: BNAMS4.i Lab File ID: u27115.d

| <u>Parameter</u> | Analytical Result <u>Units: ug/l</u> | Quantitation Limit Units: uq/l |
|-----------------------------|---|--------------------------------|
| bis(2-Chloroethyl)ether | ND J | 21 |
| 1,3-Dichlorobenzene | ND | 210 |
| 1,4-Dichlorobenzene | ND | 210 |
| 1,2-Dichlorobenzene | ND | 210 |
| bis(2-chloroisopropyl)ether | ND | 210 |
| N-Nitroso-di-n-propylamine | ND | 21 |
| Hexachloroethane | ND | 21 |
| Nitrobenzene | ND | 21 |
| /Isophorone | ND | 210 |
| bis(2-Chloroethoxy)methane | ND | 210 |
| 1,2,4-Trichlorobenzene | ND | 21 |
| Naphthalene | 4000 | 210 |
| 4-Chloroaniline | ND | 210 |
| Hexachlorobutadiene | ND | 41 |
| 2-Methylnaphthalene | 320 | 210 |
| Hexachlorocyclopentadiene | ND J | 210 |
| 2-Chloronaphthalene | ND | 210 |
| 2-Nitroaniline | ND | 410 |
| Dimethylphthalate ' | ND | 210 |
| Acenaphthylene | 66 J | 210 |
| 2,6-Dinitrotoluene | ND | 41 |
| 3-Nitroaniline | ND | 410 |
| Acenaphthene | 19 J | 210 |
| Dibenzofuran | 55 J | 210 |
| 2,4-Dinitrotoluene | ND | 41 |
| Diethylphthalate | ND | 210 |
| 4-Chlorophenyl-phenylether | ND | 210 |
| Fluorene | 55 J | 210 |
| 4-Nitroaniline | ND | 410 |
| N-Nitrosodiphenylamine | ND | 210 |
| 4-Bromophenyl-phenylether | ND | 210 |
| Hexachlorobenzene | ND | ~ 21 |
| Phenanthrene | 30 J | 210 |
| Anthracene | 11 J | 210 |
| | | |

Client ID: DUP-12-20-05 Site: NYSEG Wadsworth St Lab Sample No: 696455

Lab Job No: K740

Date Sampled: 12/20/05 Date Received: 12/21/05

Date Extracted: 12/21/05
Date Extracted: 12/22/05
Date Analyzed: 12/29/05
GC Column: DB-5
Instrument ID: BNAMS4.i

Lab File ID: u27115.d

Matrix: WATER Level: LOW

Sample Volume: 970 ml

Extract Final Volume: 2.0 ml Dilution Factor: 20.0

SEMI-VOLATILE ORGANICS - GC/MS METHOD 8270C

| <u>Parameter</u> | Analytical Result Units: ug/l | Quantitation Limit <u>Units: ug/l</u> |
|----------------------------|----------------------------------|---|
| Carbazole | 100 J | 210 |
| Di-n-butylphthalate | ND | 210 |
| Fluoranthene | ND | 210 |
| Pyrene | ND | 210 |
| Butylbenzylphthalate | ND | 210 |
| 3,3'-Dichlorobenzidine | ND | 410 |
| Benzo(a) anthracene | ND | 21 |
| Chrysene | ND | 210 |
| bis(2-Ethylhexyl)phthalate | ND | 210 |
| Di-n-octylphthalate | ND | 210 |
| Benzo(b) fluoranthene | ND T | 21 |
| Benzo(k)fluoranthene | ND J | 2.1 |
| Benzo(a)pyrene | ND | 21 |
| Indeno(1,2,3-cd)pyrene | ND | · 21 |
| Dibenz(a,h)anthracene | ND | 21 |
| Benzo(g,h,i)perylene | ND | 210 |
| | | |

Matrix: WATER

Lab Job No: K740

QA Batch: 1947

Ignitability

| STL Edison Client ID Sample # | <u>Date</u> Sampled | <u>Date</u> Analyzed | <u>Flashpoint</u> Units: deg F |
|-------------------------------|------------------------|-------------------------|-----------------------------------|
| | | | |
| • | | | |
| 696456 TANK | 12/20/05 | 12/29/05 | >160 |

Matrix: WATER

Lab Job No: K740

OA Batch: 2822

рН

| STL Edison Client ID | Date | Date | <u>Analytical</u> |
|----------------------|----------|----------|-------------------|
| Sample # | Sampled | Analyzed | Result |
| , . | | Y | <u>Units: std</u> |
| | • | • | unit |
| • | • | | |
| | • | | , |
| 696456 TANK | 12/20/05 | 12/21/05 | 9.19 |

X - The maximum holding time specified in 40 CFR 136.3(e) for Chlorine (total residual), Hydrogen Ion (pH) Dissolved Oxygen (probe), Sulfite and Temperature is "Analyze immediately". The NJDEP Office of Quality Assurance interprets this to mean within 15 minutes. Analysis outside holding time may not be reported to NJDEP for water pollution or drinking water programs.

Matrix: WATER

Lab Job No: K740

QA Batch: 1826

Reactive Cyanide

STL Edison Client ID

Sample #

Sampled Extracted Analyzed

Date

Dilution Factor

Analytical Result

Units: mg/l

696456 TANK 12/20/05 12/30/05 12/30/05

2.0

ND

Quantitation Limit for Reactive Cyanide is 25.0 mg/l for an undiluted sample.

Matrix: WATER

Lab Job No: K740

'- QA Batch: 1831-

Reactive Sulfide

STL Edison Client ID

Sample #

Date Date Sampled Extracted Analyzed

Date

Dilution Factor

Analytical Result

Units: mg/l

696456 TANK 12/20/05 12/30/05 12/30/05

D DN

Quantitation Limit for Reactive Sulfide is 20.0 mg/l for an undiluted sample.

Matrix: WATER

Lab Job No: K740

QA Batch: 1952

Total Cyanide

| STL Edisc Sample # | on <u>Client ID</u> | Date Sampled | <u>Date</u> Extracted | <u>Date</u> Analyzed | | Dilution Factor | Analytical Result Units: mg/l |
|-----------------------|---------------------|-----------------|--------------------------|-------------------------|---|--------------------|-------------------------------|
| ÷ | | | | | | | |
| 696449 | MW-5 | 12/20/05 | 12/30/05 | 01/03/06 | | 1.0 | ND . |
| 696450 | MW-6 | 12/20/05 | 12/30/05 | 01/03/06 | | 1.0 | ND |
| 696451 | MW-1 | 12/20/05 | 12/30/05 | 01/03/06 | | 1.0 | 0.14 |
| 696452 | MW-2 | 12/20/05 | 12/30/05 | 01/03/06 | | 1.0 | 0.34 |
| 696453 | MW - 3 | 12/20/05 | 12/30/05 | 01/03/06 | | 2.0 | 0.6 |
| 696454 | MW-4 | 12/20/05 | 12/30/05 | 01/03/06 | | 1.0 | ND |
| 696455 | DUP-12-20-05 | 12/20/05 | 12/30/05 | 01/03/06 | • | 2.0 | 0.58 |

Quantitation Limit for Total Cyanide is 0.01 mg/l.

SAMPLE PREPARATION AND ANALYSIS SUMMARY VOLATILE (VOA) ANALYSES

| Laboratory Sample ID | Matrix | Date Collected | Date Rec'd at Lab | Date Extracted | Date Analyzed |
|-------------------------|--------|-------------------|----------------------|-------------------|------------------|
| 696449 | WATER | 12/20/05 | 12/21/05 | | 12/28/05 |
| 696449 M S | WATER | 12/20/05 | 12/21/05 | | 12/28/05 |
| 696449SD | WATER | 12/20/05 | 12/21/05 | | 12/28/05 |
| 696450 | WATER | 12/20/05 | 12/21/05 | | 12/28/05 |
| 696451 | WATER | 12/20/05 | 12/21/05 | | 12/28/05 |
| 696452 | WATER | 12/20/05 | 12/21/05 | | 12/28/05 |
| 696453 | WATER | 12/20/05 | 12/21/05 | | 12/28/05 |
| 696454 | WATER | 12/20/05 | 12/21/05 | | 12/28/05 |
| 696455 | WATER | 12/20/05 | 12/21/05 | | 12/28/05 |
| 696456 | WATER | 12/20/05 | 12/21/05 | | 12/28/05 |
| 696457 | WATER | 12/20/05 | 12/21/05 | | 12/28/05 |

SAMPLE PREPARATION AND ANALYSIS SUMMARY SEMIVOLATILE (BNA) ANALYSES

| Laboratory Sample ID | Matrix | Date Collected | Date Rec'd at Lab | Date Extracted | Date Analyzed |
|-------------------------|--------|-------------------|----------------------|-------------------|------------------|
| 696449 | WATER | 12/20/05 | 12/21/05 | 12/22/05 | 12/29/05 |
| 696449MS | WATER | 12/20/05 | 12/21/05 | 12/22/05 | 12/29/05 |
| 696449SD | WATER | 12/20/05 | 12/21/05 | 12/22/05 | 12/29/05 |
| 696450 | WATER | 12/20/05 | 12/21/05 | 12/22/05 | 12/29/05 |
| 696451 | WATER | 12/20/05 | 12/21/05 | 12/22/05 | 12/29/05 |
| 696452 | WATER | 12/20/05 | 12/21/05 | 12/22/05 | 12/29/05 |
| 696453 | WATER | 12/20/05 | 12/21/05 | 12/22/05 | 12/29/05 |
| 696454 | WATER | 12/20/05 | 12/21/05 | 12/22/05 | 12/29/05 |
| 696455 | WATER | 12/20/05 | 12/21/05 | 12/22/05 | 12/29/05 |

SAMPLE PREPARATION AND ANALYSIS SUMMARY SEMIVOLATILE (BNA) ANALYSES

| Laboratory Sample ID | Matrix | Analytical Protocol | Extraction Method | Auxiliary Cleanup | Dil/Conc Factor |
|-------------------------|--------|----------------------------------|----------------------|----------------------|--------------------|
| 696449 | WATER | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 696449MS | WATER | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 696449SD | WATER | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 696450 | WATER | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 696451 | WATER | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 696452 | WATER | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 696453 | WATER | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 20.00 |
| 696454 | WATER | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | · | 1.00 |
| 696455 | WATER | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 20.00 |

SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSES

| Laboratory Sample ID | Matrix | Parameters | Date Rec'd at Lab | Date Analyzed |
|-------------------------|--------|---------------|----------------------|------------------|
| 696449 | WATER | TOTAL CYANIDE | 12/21/05 | 1/3/06 |
| 696450 | WATER | TOTAL CYANIDE | 12/21/05 | 1/3/06 |
| 696451 | WATER | TOTAL CYANIDE | 12/21/05 | 1/3/06 |
| 696452 | WATER | TOTAL CYANIDE | 12/21/05 | 1/3/06 |
| 696453 | WATER | TOTAL CYANIDE | 12/21/05 | 1/3/06 |
| 396454 | WATER | TOTAL CYANIDE | 12/21/05 | 1/3/06 |
| 396455 | WATER | TOTAL CYANIDE | 12/21/05 | 1/3/06 |
| 696456 | WATER | CN REACTIVITY | 12/21/05 | 12/30/05 |
| 396456 | WATER | IGNITABILITY | 12/21/05 | 12/29/05 |
| 696456 | WATER | рН | 12/21/05 | 12/21/05 |
| 396456 | WATER | S REACTIVITY | 12/21/05 | 12/30/05 |

10/95



SDG NARRATIVE

STL EDISON

SDG No. K740

| STL Edison Sample | <u>Client_ID</u> |
|-------------------|------------------|
| 696449 | MW-5 |
| 696449MS | MW-5MS |
| 696449SD | MW-5MSD |
| 696450 | MW-6 |
| 696451 | MW-1 |
| 696452 | MW-2 |
| 696453 | MW-3 |
| 696454 | MW-4 |
| 696455 | DUP-12-20-05 |
| 696456 | TANK |
| 696457 | TRIPBLANK |

Sample Receipt:

Sample delivery conforms with requirements.

Volatile Organic Analysis (GC/MS):

All data conforms with method requirements.

Base/Neutral and/or Acid Extractable Organics (GC/MS):

All data conforms with method requirements.

Wet Chemistry \ Microbiology:

pH analyzed outside the 15 minute hold time.

Reactive Cyanide spike recovery biased low (low recovery expected with this test procedure.)

rtify that this data package is in compliance with the protocols in NYSDEC ASP B both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this package has been authorized by the Laboratory Manager or his designee

Michael J. Ubes

Michael J.Urban Laboratory Manager

DATA USABILITY SUMMARY REPORT NYSEG WADSWORTH ST.GENEVA

SDG #K245

VOLATILE, SEMIVOLATILE AND MISCELLANEOUS ANALYSES

Analyses performed by:

Severn Trent Laboratories Buffalo, New York

Review performed by:



Blasland, Bouck & Lee, Inc. Syracuse, New York

REPORT #5488

Summary

The following is an assessment of the data package for sample delivery group (SDG) # K245 for sampling from the NYSEG Wadsworth St. Geneva Site. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

| Sample ID | Lab ID Mati | Matrix | Sample | Analysis | | | | |
|--------------|-------------|--------|-----------|----------|------|-----|-----|------|
| | | | Date | voc | svoc | PCB | MET | MISC |
| SS-1 | 693542 | Soil | 12/7/2005 | Х | Х | | | Х |
| SS-2 | 693543 | Soil | 12/7/2005 | Х | Х | | | Х |
| SS-3 | 693544 | Soil | 12/7/2005 | Х | Х | | | Х |
| SS-4 | 693545 | Soil | 12/7/2005 | Х | Х | | | Х |
| SS-5 | 693546 | Soil | 12/7/2005 | Х | Х | | | Х |
| SS-6 | 693547 | Soil | 12/7/2005 | Х | Х | | | Х |
| MW-3_19.5-20 | 693548 | Soil | 12/8/2005 | Х | Х | | | Х |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

^{1.} The matrix spike/matrix (MS/MSD) spike duplicate performed on sample location SS-2.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 Method 8260 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- E The compound was quantitated above the calibration range.
- D Concentration is based on a diluted sample analysis.
- C Identification confirmed by gas chromatograph/mass spectrometer (GC/MS).
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

| Method | Matrix | Holding Time | Preservation |
|-------------|--------|--|--|
| | Water | 14 days from collection to analysis | Cooled @ 4 °C; preserved to a pH of less than 2. |
| SW-846 8260 | Soil | 48 hours from collection to extraction and 14 days from extraction to analysis | Cooled @ 4 °C. |

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method, trip, and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure contamination of samples during shipment. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with the following sample locations were qualified.

| Sample Locations | Compounds | Sample Result | Qualification |
|--|--------------------|--|---------------|
| SS-1 SS-2 SS-3 SS-4 SS-5 SS-6 | Methylene Chloride | QA blank sample results >MDL, Sample results <rl< td=""><td>No Action</td></rl<> | No Action |

RL = reporting limit

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

System performance and column resolution were acceptable.

4. Calibration

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

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

| Initial/Continuing | Sample Locations | Compound | Criteria |
|--------------------|------------------|---------------------------|----------|
| | SS-1 | Methylene Chloride | 19.2% |
| | SS-2 | 1,1-Dichloroethane | 15.8% |
| | SS-3 | Bromoform | 16.3% |
| ICAL %RSD | SS-4 | 2-Hexanone | 29.9% |
| | SS-5 | Chlorobenzene | 17.0% |
| | SS-6 | Sytrene | 17.6% |
| | MW-3_19.5-20 | Xylene (Total) | 17.6% |
| • | SS-1 | 2-Butanone | 33.2% |
| | SS-3 | 4-Methyl-2-pentanone | 33.5% |
| | SS-4 | 2-Hexanone | 25.4% |
| CCAL %D | SS-5 | 1,1,2,2-Tetrachloroethane | -35.2% |
| | SS-6 | MTBE | 24.9% |
| | SS-2 | MTBE | 22.4% |
| | MW-3 19.5-20 | Chloromethane | 21.3% |

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

| Initial/Continuing | Criteria | Sample Result | Qualification |
|------------------------|------------------------|---------------|---------------|
| Initial and | DDE 40.05 | Non-detect | R |
| Continuing Calibration | RRF <0.05 | Detect | J |
| Cambration | | Non-detect | R |
| | RRF <0.01 ¹ | Detect | J |

| Initial/Continuing | Criteria | Sample Result | Qualification |
|---------------------|---------------------------|---------------|---------------|
| | RRF >0.05 or | Non-detect | No Action |
| | RRF >0.01 ¹ | Detect | - NO ACION |
| | 0/ DOD > 450/ | Non-detect | UJ |
| Initial Calibration | %RSD > 15% | Detect | J |
| | %D >20% | Non-detect | No Action |
| Continuing | (increase in sensitivity) | Detect | J |
| Calibration | %D >20% | Non-detect | UJ |
| | (decrease in sensitivity) | Detect | J |

^{1.} RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e. ketones, 1,4-Dioxane, etc.)

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

The internal standard responses and retention times were within acceptable limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis exhibited recoveries and RPD results within the control limits.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Field duplicate were not included within this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Volatile Organics Data Validation Checklist

| | YES | NO | NA |
|---|----------|-------------|----------|
| Data Completeness and Deliverables | | | |
| Have any missing deliverables been received and added to the data package? | | <u>X</u> | |
| Is there a narrative or cover letter present? | <u>X</u> | | |
| Are the sample numbers included in the narrative? | <u>X</u> | | |
| Are the sample chain-of-custodies present? | <u>X</u> | | |
| Do the chain-of-custodies indicate any problems with sample receipt or sample condition? | | <u> </u> | |
| Holding Times | | | |
| Have any holding times been exceeded? | | <u>X</u> | |
| Surrogate Recovery | | | |
| Are surrogate recovery forms present? | <u>X</u> | | |
| Are all samples listed on the surrogate recovery form? | <u>X</u> | | |
| Was one or more surrogate recovery outside control limits for any sample or blank? | | <u> X</u> | |
| If yes, were the samples reanalyzed? | | | <u>X</u> |
| Are there any transcription/calculation errors between the raw data and the summary form? | | X | |
| Matrix Spikes | | | |
| Is there a MS recovery form present? | <u>X</u> | <u></u> | |
| Were matrix spikes analyzed at the required frequency? | <u>X</u> | | |
| How many spike recoveries were outside of QC limits? | | | |
| <u>0</u> out of <u>5</u> | | | |
| How many RPDs for MS/MSD were outside of QC limits? | | | |
| <u>0</u> out of <u>5</u> | | | |
| Blanks | | | |
| Is a method blank summary form present? | <u>X</u> | | |
| Has a method blank been analyzed for each day or for each 20 samples, whichever is more frequent? | <u> </u> | | |
| Has a blank been analyzed at least once every 12 hours for each system used? | <u>X</u> | | |
| Do any method/instrument blanks have positive results? | <u>X</u> | | |
| Do any trip/field/rinse blanks have positive results? | | | X |

| | YES | NO | NA |
|--|-----------|----------|--------------|
| Tuning and Mass Calibration | | | * |
| Are the GC/MS tuning forms present for BFB? | X | | |
| Are the bar graph spectrum and mass/charge listing provided for each BFB? | X | | |
| Has a BFB been analyzed for each 12 hours of analysis per instrument? | <u>X</u> | | |
| Have the ion abundance criteria been met for each instrument used? | <u>X</u> | | |
| Target Analytes | | | |
| Is an organics analysis data sheet present for each of the following: | | | |
| Samples | <u>X</u> | | |
| Matrix spikes | <u>X</u> | | |
| Blanks | <u> </u> | | |
| Are the reconstructed ion chromatograms present for each of the following: | | | |
| Samples | <u>X</u> | | |
| Matrix spikes | X | | |
| Blanks | <u> X</u> | | |
| Is the chromatographic performance acceptable? | <u>X</u> | <u></u> | |
| Are the mass spectra of the identified compounds present? | <u>X</u> | | |
| Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum? | X | | |
| Do the samples and standard relative ion intensities agree within 20%? | X | | |
| Tentatively Identified Compounds | | | |
| Are all the TIC summary forms present? | | X | |
| Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present? | | | X |
| Are any target compounds listed as TICs? | | | <u>X</u> |
| Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum? | | | X |
| Do the TIC and "best match" spectrum agree within 20%? | | | X |
| Quantitation and Detection Limits | | | |
| Are there any transcription/calculation errors in the Form 1 results? | | <u>X</u> | |
| Are the reporting limits adjusted to reflect sample dilutions and, for soils, sample moisture? | X | | |

| | YES | NO | NA |
|--|----------|----------|----|
| Standard Data | | | |
| Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards? | X | | |
| Initial Calibration | | | |
| Are the initial calibration forms present for each instrument used? | <u>X</u> | | |
| Are the response factor RSDs within acceptable limits? | | <u>X</u> | |
| Are the average RRFs ≥ minimum requirements? | <u>X</u> | | |
| Are there any transcription/calculation errors in reporting the RRFs or RSDs? | | X | |
| Continuing Calibration | | | |
| Are the continuing calibration forms present for each day and each instrument? | _X_ | | |
| Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument? | X | | |
| All %D within acceptable limits? | | X | |
| Are all RF ≥ minimum requirements? | <u>X</u> | | |
| Are there any transcription/calculation errors in reporting of RF or %D? | | X | |
| Internal Standards | | | |
| Are internal standard areas of every sample within the upper and lower limits for each continuing calibration? | <u>X</u> | | |
| Are the retention times of the internal standards within 30 seconds of the associated calibration standard? | X | | |
| Field Duplicates | | | |
| Were field duplicates submitted with the samples? | | <u>X</u> | |

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 Method 8270. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

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- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- E The compound was quantitated above the calibration range.
- D Concentration is based on a diluted sample analysis.
- C Identification confirmed by gas chromatograph/mass spectrometer (GC/MS).
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

| Method | Matrix | Holding Time | Preservation |
|--------------|--------|--|---------------|
| SW-846 8270 | Water | 7 days from collection to extraction and 40 days from extraction to analysis | Cooled @ 4 °C |
| 300-040-0270 | Soil | 14 days from collection to extraction and 40 days from extraction to analysis | Cooled @ 4 °C |

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed

No compounds were detected in the associated blanks.

3. Mass Spectrometer Tuning

System performance and column resolution were acceptable.

4. Calibration

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

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) and RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

| Sample Locations | Initial/Continuing | Compound | Criteria |
|----------------------|--------------------|---------------------------|----------|
| SS-1 SS-2 | | 3,3-Dichlorobenzene | 17.0% |
| SS-3 | ICV %RSD | Benzo(k)Fluoranthene | 20.8% |
| SS-4 SS-5 | ICV %RSD | Hexachlorocyclopentadiene | 51.9% |
| SS-6 MW-3_19.5-20 | | Nitrobenzene | 16.6% |

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

| Initial/Continuing | Criteria | Sample Result | Qualification |
|------------------------|---------------------------|---------------|---------------|
| | DDC <0.05 | Non-detect | R |
| | RRF <0.05 | Detect | J |
| Initial and | RRF <0.01 ¹ | Non-detect | R |
| Continuing Calibration | RRF <0.01 | Detect | J |
| | RRF >0.05 or | Non-detect | No Antion |
| | RRF >0.01 ¹ | Detect | - No Action |
| | 0/000 - 450/ | Non-detect | UJ |
| Initial Calibration | %RSD > 15% | Detect | J |
| | %D >20% | Non-detect | No Action |
| Continuing | (increase in sensitivity) | Detect | J |
| Calibration | %D >20% | Non-detect | UJ |
| | (decrease in sensitivity) | Detect | J |

^{1.} RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e. ketones, 1,4-Dioxane, etc.)

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits are presented in the following table.

| Sample Locations | Surrogate | Recovery |
|------------------|----------------------|----------|
| | Phenol-d5 | D |
| | 2-Fluorophenol | D |
| SS-1 | 2,4,6-Tribromophenol | D |
| 33-1 | Nitrobenzene-d5 | D |
| | 2-Fluorobiphenyl | D |
| | Terphenyl-d14 | D |
| | Phenol-d5 | D |
| | 2-Fluorophenol | D |
| MNA/ 2 10 5 20 | 2,4,6-Tribromophenol | D |
| MW-3_19.5-20 | Nitrobenzene-d5 | D |
| | 2-Fluorobiphenyl | D |
| | Terphenyl-d14 | D |

Diluted (D)

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

| Control Limit | Sample Result | Qualification |
|---|------------------|---------------|
| > the upper central limit (III.) | Non-detect | No Action |
| > the upper control limit (UL) | Detect | J |
| 4 th a large and a start (t) brok > 400/ | Non-detect | J |
| < the lower control limit (LL) but > 10% | Detect | J |
| . 400/ | Non-detect | R |
| < 10% | Detect | J |
| One of three surrogate exhibiting recovery outside the control limits but | Non-detect | No Action |
| greater than 10%. | Detect | |
| Surrogates diluted (D) below the | Non-detect | |
| calibration curve due to the high concentration of a target compounds | Detect | No Action |

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC to exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) the area counts of the associated continuing calibration standard.

All internal standard response and retention times were acceptable.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compounds concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis exhibited recoveries within the control limit. Sample locations associated with MS/MSD recoveries exhibiting an RPD outside of the control limit are presented in the following table.

| Sample Locations | Compound | RPD |
|------------------|----------|-----|
| SS-2 | Pyrene | 45% |

The criteria used to evaluate the RPD between the MS/MSD recoveries are presented in the following table. In the case of an RPD deviation, the sample results are qualified as documented in the table below.

| Control Limit | Sample Result | Qualification | |
|---------------|------------------|---------------|--|
| > UL | Non-detect | J | |
| | Detect | J | |

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LSC analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Field duplicates were not performed within this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Semivolatile Organics Data Validation Checklist

| | YES | NO | NA |
|--|----------|------------------------|--|
| Data Completeness and Deliverables | | | |
| Have any missing deliverables been received and added to the data package? | | X | |
| Is there a narrative or cover letter present? | X | | |
| Are the sample numbers included in the narrative? | <u>X</u> | | |
| Are the sample chain-of-custodies present? | <u>X</u> | | |
| Do the chain-of-custodies indicate any problems with sample receipt or sample condition? | | X | et |
| Holding Times | | | |
| Have any holding times been exceeded? | | X | |
| Surrogate Recovery | | | |
| Are the surrogate recovery forms present? | <u>X</u> | | · |
| Are all samples listed on the surrogate recovery form? | <u>X</u> | u | |
| Were two or more base-neutral or acid surrogate recoveries outside control limits for any sample or blank? | | <u> </u> | |
| If yes, were the samples reanalyzed? | | | X |
| Are there any transcription/calculation errors between the raw data and the summary form? | | X | |
| Matrix Spikes | | | |
| Is there a MS recovery form present? | <u>X</u> | | |
| Were MS analyzed at the required frequency | <u>X</u> | | |
| How many spike recoveries were outside of QC limits? | | | |
| <u>0</u> out of <u>11</u> | | | |
| How many RPDs for MS/MSD were outside of QC limits? | | | |
| <u>1</u> out of <u>11</u> | | | |
| <u>Blanks</u> | | | |
| Is the method blank summary form present? | <u>X</u> | | ······································ |
| Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent? | X | ,,, , , , = | 14,1-1-, 11-4 |
| Has a blank been analyzed for each system used? | <u>X</u> | | |
| Do any method blanks have positive results? | | <u>X</u> | |
| Are field/rinse blanks associated with every sample? | | | <u>X</u> |

| | YES | NO | NA |
|--|----------|---------------------------------------|----------|
| Tuning and Mass Calibration | | | |
| Are the GC/MS tuning forms present for DFTPP? | <u>X</u> | | |
| Are the bar graph spectrum and mass/charge listing provided for each DFTPP? | X | | |
| Has a DFTPP been analyzed for each 12 hours of analysis per instrument? | | | |
| Have the ion abundance criteria been met for each instrument used? | X | | <u> </u> |
| Target Analytes | | | |
| Is an organics analysis data sheet present for each of the following: | | | |
| Samples | X | | |
| Matrix spikes | | | |
| Blanks | X | | |
| Are the reconstructed ion chromatograms present for each of the following: | | | |
| Samples | X | | |
| Matrix spikes | X | · · · · · · · · · · · · · · · · · · · | |
| Blanks | X | | |
| Is the chromatographic performance acceptable? | X | | |
| Are the mass spectra of the identified compounds present? | X | | |
| Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum? | X | | |
| Do the samples and standard relative ion intensities agree within 20%? | X | | |
| Tentatively Identified Compounds | | | |
| Are all the TIC summary forms present? | | X | |
| Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present? | | | X |
| Are any target compounds listed as TICs? | | | _X |
| Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum? | | | X |
| Do the TIC and "best match" spectrum agree within 20%? | | | X |
| Quantitation and Detection Limits | · | | |
| Are there any transcription/calculation errors in the Form 1 results? | | X | |
| Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture? | X | | |

| | YES | NO | NA |
|--|----------|-------------------|--|
| Standard Data | | | _ |
| Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards? | X | b-1 | |
| Initial Calibration | | | |
| Are the initial calibration forms present for each instrument used? | <u>X</u> | | |
| Are the response factor RSDs within acceptable limits? | <u> </u> | <u>X</u> | **************** |
| Are the average RRF ≥ minimum requirements? | <u>X</u> | | |
| Are there any transcription/calculation error in reporting the RRF or RSD? | | X | |
| Continuing Calibration | | | |
| Are the continuing calibration forms present for each day and each instrument? | _X_ | | |
| Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument? | X | | |
| All %D within acceptable limits? | <u>X</u> | *** | |
| Are all RF ≥ minimum requirements? | <u>X</u> | | |
| Are there any transcription/calculation errors in reporting of RF or %D? | | X | |
| Internal Standards | | | |
| Are internal standard areas of every sample within the upper and lower limits for each continuing calibration? | X | ***************** | 18-11-14-18-18-18-18-18-18-18-18-18-18-18-18-18- |
| Are the retention times of the internal standards within 30 seconds of the associated calibration standard? | _X_ | | |
| Field Duplicates | | | |
| Were field duplicates submitted with the samples? | | <u>X</u> | |

MISCELLANEOUS ANALYSES

Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 9012. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1994.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The reported value was obtained from a reading less than the RL but greater than or equal to the IDL.
- M Duplicate injection precision not met.
- N Spiked sample recovery not within control limits.
- * Duplicate analysis not within control limits.
- E The reported value is estimated due to the presence of interference.
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

| Method | Matrix | Holding Time | Preservation |
|---------------|------------|--------------|--|
| Total Cyanide | Water/Soil | 14 Days | Cooled @ 4 °C; preserved to a pH of greater than 12. |

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

No analytes were detected above the reporting limit in the associated blanks.

3. Calibration

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

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995.

All continuing calibration verification standard recoveries were within the control limit.

4. MS/MSD Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit a RPD within the laboratory established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compound's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited recoveries and RPD results within the control limit.

5. LCS Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LSC analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

The laboratory duplicate sample results exhibited RPD within the control limit.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Field duplicates were not performed within this SDG.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Data Validation Checklist

| | YES | NO | NA_ |
|--|----------|-------|---------------------------------------|
| Data Completeness and Deliverables | | | |
| Is there a narrative or cover letter present? | X | | |
| Are the sample numbers included in the narrative? | X | | |
| Are the sample chain-of-custodies present? | X | **** | |
| Do the chain-of-custodies indicate any problems with sample receipt or sample condition? | | X | |
| Raw Data | | | |
| Are the preparation logs present? | X | | · · · · · · · · · · · · · · · · · · · |
| Are preparation dates present on sample preparation logs/bench sheets? | X | | |
| Are the measurement read out records present? | X | ····· | |
| Is the data legible? | <u>X</u> | | |
| Is the data properly labeled? | <u>X</u> | | ····· |
| Are pH values listed? | <u>X</u> | | |
| Percent solids calculation present for soils/sediments? | | | X |
| Holding Times | | | |
| Were all analyses performed within the specified holding times? | X | | |
| Sample Data | | | |
| Are all forms complete? | X | | |
| Are correct units indicated the results sheets? | X | | |
| Are soil sample results for each parameter corrected for percent solids? | X | | |
| Initial Calibration | | | |
| Is a record of an initial calibration present?: | X | | |
| Is correlation coefficient less than .995?: | X | | |
| Initial and Continuing Calibration Verification | | | |
| Present and complete for all analytes? | X | | |
| Are all calibration standards (initial and continuing) within control limits?: | X | | |
| Was continuing calibration performed every 10 samples or every 2 hours? | X | | |
| Was the ICV for cyanides distilled? | | | X |
| Initial and Continuing Calibration Blanks | | | |
| Present and complete? | X | | |
| Was an initial calibration blank analyzed? | <u>X</u> | | |
| Was a continuing calibration blank analyzed after every 10 samples or every 2 hours (which ever is more frequent)? | X | | |
| Are all calibration blanks less than or equal to the RL? | X | | |
| Preparation Blank | | | |
| Was one prep. blank analyzed for: | | | |
| each batch of digested samples? | X | | |
| 5488 | | | |

| | YES | NO | NA_ |
|--|--|--------------|--------------|
| each matrix type? | X | | |
| Are all preparation blanks less than the RL? | X | | |
| If no, is the concentration of the sample with the least concentrated analyte less than 10 times the prep. blank? | | | X |
| Matrix Spike | | | |
| Present and complete for: | | | |
| each batch? | X | | |
| each matrix type? | X | | |
| Was field blank used for spiked sample? | | X | · |
| Are all recoveries for analytes with sample concentrations less than four times the spike concentration within control limits? | X | | |
| Are results outside the control limits (75-125%) flagged with "N"? | | | X |
| <u>Laboratory Duplicates</u> | | | |
| Present and complete for: | | | |
| each batch? | X | | |
| each matrix type? | X | | |
| Was field blank used for duplicate analysis? | | X | |
| Are all values within control limits? | X | | |
| If no, are all results outside the control limits flagged with an *? | | | <u> </u> |
| Field Duplicates | | | |
| Were field duplicates analyzed? | | <u>X</u> | |
| Aqueous | | | |
| is any RPD greater than 50% where sample and duplicate are both greater than or equal to 5 times RL? | | | X |
| Is any difference between sample and duplicate greater than RL where sample and/or duplicate is less than 5 times RL? | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | X |
| <u>Soil/Sediment</u> | | | |
| Is any RPD (where sample and duplicate are both greater than 5 times RL) > 100%? | | | X |
| Is any difference between sample and duplicate (where sample and/or duplicate is less than 5x RL) >2xRL? | | | X |
| Laboratory Control Sample | | | |
| Was one LCS prepared and analyzed for: | | | |
| each matrix? | X | | |
| each batch? | X | | |
| Are all recoveries within control limits? | X | | |
| Field Blank | | | |
| Is the field blank concentration less than RL for all analytes? | | | X |
| If no, was field blank value already rejected due to other QC criteria? | | | X |

| | YES | NO | NA |
|---|-----|----|----|
| Percent Solids | | | |
| Are the percent solids in soil/sediment(s): | | | |
| < 50%? | | X | |
| < 10%? | | X | |

Corrected Sample Analysis Data Sheets

Laboratory Narrative

NYSDEC Sample Identification and Analysis Summary Sheets

Sample Compliance Report

SAMPLE COMPLIANCE REPORT

| Noncompliance | | VOC-ICAL %RSD, CCAL %RSD SVOC-ICAL %RSD | VOC-ICAL %RSD, CCAL %RSD SVOC-ICAL %RSD, MS/MSD %RPD | VOC-ICAL %RSD, CCAL %RSD SVOC-ICAL %RSD | | | | | | |
|-------------------------|-------------------|--|---|--|--|--|--|--|--|--|--|--|--|--|
| | MISC | yes | yes | yes | yes | yes | yes | yes | | | | | | |
| | MET | 1 | ŀ | ! | ŧ | ; | ŀ | - | | | | | | |
| Compliancy ¹ | PCB | ł | 1 | l | ł | ı | I | I | | | | | | |
| Ö | SVOC | ou | <u>و</u> | 2 | OL | OU | οu | no | | | | | | |
| | VOC | ou | ОП | ou | on | 01 | و <u>ر</u> | no | | | | | | |
| | Matrix | Soil | Soil | Soil | Soil | Soil | Soil | Soil | | | | | | |
| | Sample ID | SS-1 | SS-2 | SS-3 | SS-4 | SS-5 | SS-6 | MW-3_19.5-20 | | | | | | |
| | ASP Protocol | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 | | | | | | |
| | Sampling Date | 12/7/2005 | 12/7/2005 | 12/7/2005 | 12/7/2005 | 12/7/2005 | 12/7/2005 | 12/8/2005 | | | | | | |
| Sample | Delivery Group | K245 | K245 | K245 | K245 | K245 | K245 | K245 | | | | | | |

Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

Client ID: SS-1 Site: NYSEG-Geneva Lab Sample No: 693542 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Analyzed: 12/15/05 GC Column: DB624 Instrument ID: VOAMS9.i Lab File ID: k51165.d

Matrix: SOIL Level: LOW

Sample Weight: 5.2 g Purge Volume: 5.0 ml

% Moisture: 24

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit Units: ug/kg |
|---|--|--|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene | ND N | 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 |
| Xylene (Total) | ND 3 | 6.3 |

Client ID: SS-1 Site: NYSEG-Geneva Lab Sample No: 693542

Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Analyzed: 12/15/05 GC Column: DB624

Matrix: SOIL Level: LOW

Sample Weight: 5.2 g Purge Volume: 5.0 ml

Instrument ID: VOAMS9.i Lab File ID: k51165.d

% Moisture: 24

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Results Units: ug/kg (Dry Weight)

Quantitation Limit Units: ug/kg

Parameter

ND I

6.3

MTBE

Client ID: SS-2 Site: NYSEG-Geneva Lab Sample No: 693543 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05

Date Analyzed: 12/16/05 GC Column: DB624 Instrument ID: VOAMS9.i Lab File ID: k51123.d

Matrix: SOIL Level: LOW

Sample Weight: 5.2 g Purge Volume: 5.0 ml

% Moisture: 17

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---|--|---|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethane 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene | | Units: ug/kg 5.8 5.8 5.8 5.8 5.8 5.8 5.8 5.8 5.8 5. |
| Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Xylene (Total) | ND ND ND 1.1J ND | 1.2 5.8 5.2 5.8 4.6 5.8 1.2 15.8 4.6 5.8 5.8 5.8 5.8 5.8 |

Client ID: SS-2 Site: NYSEG-Geneva

Lab Sample No: 693543 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Analyzed: 12/16/05 GC Column: DB624 Instrument ID: VOAMS9.i

Lab File ID: k51123.d

Matrix: SOIL Level: LOW

Sample Weight: 5.2 g Purge Volume: 5.0 ml

% Moisture: 17

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Analytical Results Units: ug/kg (Dry Weight)

Quantitation Limit Units: uq/kq

Parameter

MTBE

ND J

5.8

Client ID: SS-3 Site: NYSEG-Geneva Lab Sample No: 693544 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Analyzed: 12/15/05

GC Column: DB624

Instrument ID: VOAMS9.i Lab File ID: k51167.d Matrix: SOIL Level: LOW

Sample Weight: 5.3 g Purge Volume: 5.0 ml

% Moisture: 16

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|--|--|---|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Xylene (Total) | ND N | 5. 66664662666626662116164165661166566 55555555555521151531545551155455 |

Client ID: SS-3 Site: NYSEG-Geneva Lab Sample No: 693544

Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Analyzed: 12/15/05 GC Column: DB624 Instrument ID: VOAMS9.i

Level: LOW

Sample Weight: 5.3 g Purge Volume: 5.0 ml

Lab File ID: k51167.d

% Moisture: 16

Matrix: SOIL

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Analytical Results Units: ug/kg (Dry Weight)

Quantitation Limit Units: ug/kg

Parameter

ND J

5.6

MTBE

Client ID: SS-4

Site: NYSEG-Geneva

Lab Sample No: 693545 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Analyzed: 12/15/05 GC Column: DB624

Instrument ID: VOAMS9.i Lab File ID: k51168.d

Matrix: SOIL Level: LOW

Sample Weight: 5.3 g Purge Volume: 5.0 ml

% Moisture: 23

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---|--|--|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene | ND N | 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 |
| Xylene (Total) | ND 3 | 6.2 |

Client ID: SS-4 Site: NYSEG-Geneva

Lab Sample No: 693545 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Analyzed: 12/15/05

GC Column: DB624

Instrument ID: VOAMS9.i Lab File ID: k51168.d Matrix: SOIL Level: LOW

Sample Weight: 5.3 g Purge Volume: 5.0 ml

% Moisture: 23

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Analytical Results Units: ug/kg (Dry Weight) Quantitation Limit Units: ug/kg

<u>Parameter</u>

MTBE

ND J

6.2

Client ID: SS-5 Site: NYSEG-Geneva

Lab Sample No: 693546 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Analyzed: 12/15/05 GC Column: DB624 Instrument ID: VOAMS9.i

Matrix: SOIL Level: LOW

Sample Weight: 5.2 g Purge Volume: 5.0 ml

Lab File ID: k51169.d

% Moisture: 24

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit Units: ug/kg |
|---|--|--|
| Parameter Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone | Units: ug/kg | Limit |
| Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene Xylene (Total) | ND 7 ND 3 ND 3 ND 3 ND 3 ND 3 | 1.3 1.3 6.4 6.4 5.1 6.4 |

Client ID: SS-5 Site: NYSEG-Geneva Lab Sample No: 693546

Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Analyzed: 12/15/05

GC Column: DB624 Instrument ID: VOAMS9.i Lab File ID: k51169.d

Matrix: SOIL Level: LOW

Sample Weight: 5.2 g Purge Volume: 5.0 ml

% Moisture: 24

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Results Units: ug/kg (Dry Weight)

Quantitation Limit Units: ug/kg

Parameter

MTBE

ND J

6.4

Client ID: SS-6 Site: NYSEG-Geneva

Lab Sample No: 693547 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Analyzed: 12/15/05 GC Column: DB624 Instrument ID: VOAMS9.i Lab File ID: k51170.d

Matrix: SOIL Level: LOW Sample Weight: 5.2 g Purge Volume: 5.0 ml

% Moisture: 24

| | Analytical Results Units: ug/kg | Quantitation Limit |
|-------------------------------------|------------------------------------|-----------------------|
| Parameter | (Dry Weight) | <u>Units: uq/kq</u> |
| Chloromethane Bromomethane | ND ND | 6.3 6.3 |
| Vinyl Chloride | ND | 6.3 |
| Chloroethane | ND | 6.3 |
| Methylene Chloride | ND .1 | 3.8 |
| Acetone | 43 | 6.3 |
| Carbon Disulfide | ND | 6.3 |
| 1,1-Dichloroethene | ND | 2.5 |
| 1,1-Dichloroethane | ND J | 6.3 |
| trans-1,2-Dichloroethene | ND | 6.3 |
| cis-1,2-Dichloroethene | ND | 6.3 |
| Chloroform | ND | 6.3 2.5 |
| 1,2-Dichloroethane | ∼ ND ND 7 | 6.3 6.3 |
| 2-Butanone 1,1,1-Trichloroethane | ND ND | 6.3 |
| Carbon Tetrachloride | ND | 2.5 |
| Bromodichloromethane | ND ND | 1.2 |
| 1,2-Dichloropropane | ND | 1.2 |
| cis-1,3-Dichloropropene | ND | 6.3 |
| Trichloroethene | ND | 1.2 |
| Dibromochloromethane | ND | 6.3 |
| 1,1,2-Trichloroethane | ND | 3.8 |
| Benzene | 1.8 | 1.2 |
| trans-1,3-Dichloropropene | ND | 6.3 |
| Bromoform | ND J | 5.0 |
| 4-Methyl-2-Pentanone | ND 3 | 6.3 |
| 2-Hexanone | ND J | 6.3 |
| Tetrachloroethene | ND | 1.2 |
| 1,1,2,2-Tetrachloroethane | ND J | 1.2 |
| Toluene | ND | 6.3 |
| Chlorobenzene | ND J | 6.3 |
| Ethylbenzene | ND | 5.0 |
| Styrene | ND 3 | 6.3 |
| Xylene (Total) | ND J | 6.3 |

Client ID: SS-6 Site: NYSEG-Geneva

Lab Sample No: 693547 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Analyzed: 12/15/05 GC Column: DB624

Level: LOW

Sample Weight: 5.2 g Purge Volume: 5.0 ml % Moisture: 24

Matrix: SOIL

Instrument ID: VOAMS9.i Lab File ID: k51170.d

> VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> > Analytical Results Units: ug/kg (Dry Weight)

Quantitation Limit Units: uq/kq

Parameter

MTBE

ND J

6.3

Client ID: MW-3 Site: NYSEG-Geneva Lab Sample No: 693548 Lab Job No: K245

Date Sampled: 12/08/05 Date Received: 12/10/05 Date Analyzed: 12/16/05

Matrix: SOIL Level: HIGH

GC Column: DB624

Sample Weight: 5.0 g

Instrument ID: VOAMS4.i Lab File ID: d50895.d Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

% Moisture: 17

| <u>Parameter</u> | | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---------------------------|---|--|--|
| Chloromethane | | ND | 600 |
| Bromomethane | | , ND | 600 |
| Vinyl Chloride | | ND | 600 |
| Chloroethane | | ND | 600 |
| Methylene Chloride | | ND J | 360 |
| Acetone | • | 1600 | 600 |
| Carbon Disulfide | | ND | 600 |
| 1,1-Dichloroethene | | ND | 240 |
| 1,1-Dichloroethane | | ND J | . 600 |
| trans-1,2-Dichloroethene | | ND | 600 |
| cis-1,2-Dichloroethene | | ND | 600 |
| Chloroform | | ND | 600 |
| 1,2-Dichloroethane | | ND | 240 |
| 2-Butanone | • | C dy dw | -600 600° |
| 1,1,1-Trichloroethane | | ND | 600 |
| Carbon Tetrachloride | | ND | 240 |
| Bromodichloromethane | | ND | 120 |
| 1,2-Dichloropropane | | ND | 120 |
| cis-1,3-Dichloropropene | • | ND | 600 |
| Trichloroethene | | ND | 120 |
| Dibromochloromethane | | ND | 600 |
| 1,1,2-Trichloroethane | | ND | 360 |
| Benzene | | 150 | 120 |
| trans-1,3-Dichloropropene | | ND | 600 |
| Bromoform | | ND 3 | 480 |
| 4-Methyl-2-Pentanone | | ND | 600 |
| 2-Hexanone | | ND 3 | 600 |
| Tetrachloroethene | | ND | 120 |
| 1,1,2,2-Tetrachloroethane | | ND | 120 |
| Toluene | | 77 J | 600 |
| Chlorobenzene | | ND J | 600 |
| Ethylbenzene | | 370 J | 480 |
| Styrene | | ND 3 | 600 |
| Xylene (Total) | | 1400 J | 600 |

Client ID: MW-3 Site: NYSEG-Geneva Lab Sample No: 693548

Lab Job No: K245

Date Sampled: 12/08/05 Date Received: 12/10/05 Date Analyzed: 12/16/05

GC Column: DB624

Instrument ID: VOAMS4.i Lab File ID: d50895.d Matrix: SOIL Level: HIGH

Sample Weight: 5.0 g

Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

% Moisture: 17

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Analytical Results
Units: ug/kg
(Dry Weight)

Quantitation Limit Units: uq/kq

<u>Parameter</u>

MTBE

ND

600 ...

Client ID: SS-1 Site: NYSEG-Geneva

Lab Sample No: 693542 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Extracted: 12/12/05 Date Analyzed: 12/23/05

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

GC Column: DB-5

Dilution Factor: 200.0

Instrument ID: BNAMS1.i Lab File ID: r26069.d

% Moisture: 24

Matrix: SOIL Level: LOW

| | Analytical Results Units: ug/kg | Quantitation Limit |
|-----------------------------|------------------------------------|-----------------------|
| <u>Parameter</u> | (Dry Weight) | Units: ug/kg |
| bis(2-Chloroethyl)ether | ND | 8700 |
| 1,3-Dichlorobenzene | ND | 87000 |
| 1,4-Dichlorobenzene | ND | 87000 |
| 1,2-Dichlorobenzene | ND | 87000 |
| bis(2-chloroisopropyl)ether | ND | 87000 |
| N-Nitroso-di-n-propylamine | ND | 8700 |
| Hexachloroethane | ND | 8700 |
| Nitrobenzene | ND J | 8700 |
| Isophorone | ND | 87000 |
| bis(2-Chloroethoxy)methane | ND | 87000 |
| 1,2,4-Trichlorobenzene | ND | 8700 |
| Naphthalene | 6600 J | 87000 |
| 4-Chloroaniline | ND | 87000 |
| Hexachlorobutadiene | ND | 17000 |
| 2-Methylnaphthalene | 15000 J | 87000 |
| Hexachlorocyclopentadiene | ND 2 | 87000 |
| 2-Chloronaphthalene | ND | 87000 |
| 2-Nitroaniline | ND | 170000 |
| Dimethylphthalate | ND | 87000 |
| Acenaphthylene | 110000 | 87000 |
| 2,6-Dinitrotoluene | ND | 17000 |
| 3-Nitroaniline | ND | 170000 |
| Acenaphthene | 26000 J | 87000 |
| Dibenzofuran | 30000 J | 87000 |
| 2,4-Dinitrotoluene | ND | 17000 |
| Diethylphthalate | ND | 87000 |
| 4-Chlorophenyl-phenylether | ND | 87000 |
| Fluorene | 120000 | 87000 |
| 4-Nitroaniline | ND | 170000 |
| N-Nitrosodiphenylamine | ND | 87000 |
| 4-Bromophenyl-phenylether | ND | 87000 |
| Hexachlorobenzene | ND | 8700 |
| Phenanthrene | 720000 | 87000 |
| Anthracene | 1,90000 | 87000 |
| 55.7 | | |

Client ID: SS-1 Site: NYSEG-Geneva

Lab Sample No: 693542 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Extracted: 12/12/05 Matrix: SOIL Level: LOW

Date Analyzed: 12/23/05

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

GC Column: DB-5 Instrument ID: BNAMS1.i Lab File ID: r26069.d

Dilution Factor: 200.0 % Moisture: 24 N

| Parameter | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---|--|---|
| Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a) anthracene Chrysene bis(2-Ethylhexyl)phthalate | ND ND 360000 500000 ND ND 3 130000 140000 | 87000 87000 87000 87000 87000 170000 8700 87 |
| Di-n-octylphthalate Benzo(b) fluoranthene Benzo(k) fluoranthene Benzo(a) pyrene Indeno(1,2,3-cd) pyrene Dibenz(a,h) anthracene Benzo(g,h,i) perylene | ND 66000 98000 140000 37000 1800 J 46000 J | 87000 8700 8700 8700 8700 8700 8700 |

Client ID: SS-2 Site: NYSEG-Geneva

Lab Sample No: 693543 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Extracted: 12/12/05 Date Analyzed: 12/23/05

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

GC Column: DB-5

Dilution Factor: 1.0

Instrument ID: BNAMS1.i Lab File ID: r26074.d

% Moisture: 17

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|-----------------------------|--|--|
| bis(2-Chloroethyl)ether | ND | 40 |
| 1,3-Dichlorobenzene | ND | 400 |
| 1,4-Dichlorobenzene | ND | 400 |
| 1,2-Dichlorobenzene | ND | 400 |
| bis(2-chloroisopropyl)ether | ND | 400 |
| N-Nitroso-di-n-propylamine | ND | 40 |
| Hexachloroethane | ND | 40 |
| Nitrobenzene | ND J | 40 |
| Isophorone | ND | 400 |
| bis(2-Chloroethoxy)methane | ND | 400 |
| 1,2,4-Trichlorobenzene | ND | 40 |
| Naphthalene | 160 J | 400 |
| 4-Chloroaniline | ND | 400 |
| Hexachlorobutadiene | ND | 80 |
| 2-Methylnaphthalene | 68 J | 400 |
| Hexachlorocyclopentadiene | ND J | 400 |
| 2-Chloronaphthalene | ND | 400 |
| 2-Nitroaniline | ND | 800 |
| Dimethylphthalate | ND | 400 |
| Acenaphthylene | 150 J | 400 |
| 2,6-Dinitrotoluene | ND | 80 |
| 3-Nitroaniline | ND | 800 |
| Acenaphthene | 77 J | 400 |
| Dibenzofuran | 49 J | 400 |
| 2,4-Dinitrotoluene | ND | 80 |
| Diethylphthalate | ND | 400 |
| 4-Chlorophenyl-phenylether | ND | 400 |
| Fluorene | 100 | 400 |
| 4-Nitroaniline | ND | 800 |
| N-Nitrosodiphenylamine | ND | 400 |
| 4-Bromophenyl-phenylether | ND | 400 |
| Hexachlorobenzene | ND | 40 |
| Phenanthrene | 1100 | 400 |
| Anthracene | 270 J | 400 |

Client ID: SS-2 Site: NYSEG-Geneva

Date Sampled: 12/07/05
Date Received: 12/10/05
Date Extracted: 12/12/05

Date Analyzed: 12/23/05

GC Column: DB-5

Instrument ID: BNAMS1.i Lab File ID: r26074.d Lab Sample No: 693543

Lab Job No: K245

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

% Moisture: 17

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit Units: uq/kq |
|----------------------------|--|---------------------------------------|
| Carbazole | 94 J | 400 |
| Di-n-butylphthalate | ND | 400 |
| Fluoranthene | 1600 | 400 |
| Pyrene | 1500 ত | 400 |
| Butylbenzylphthalate | ND | 400 |
| 3,3'-Dichlorobenzidine | ND J | 800 |
| Benzo(a) anthracene | 760 | 40 |
| Chrysene | 820 | 400 |
| bis(2-Ethylhexyl)phthalate | 91 J | 400 |
| Di-n-octylphthalate | ND | 400 |
| Benzo(b) fluoranthene | 640 | 40 |
| Benzo(k)fluoranthene | 860 J | 40 |
| Benzo(a)pyrene | 840 | 40 |
| Indeno(1,2,3-cd)pyrene | 220 | 40 |
| Dibenz(a,h)anthracene | 30 Ј | 40 |
| Benzo(g,h,i)perylene | 240 J | 400 |

Client ID: SS-3 Site: NYSEG-Geneva

Lab Sample No: 693544 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Extracted: 12/12/05 Date Analyzed: 12/23/05

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

GC Column: DB-5

Dilution Factor: 1.0

Instrument ID: BNAMS1.i Lab File ID: r26071.d

% Moisture: 16

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit Units: ug/kg |
|--|--|---------------------------------------|
| bis(2-Chloroethyl)ether | ND | 39 |
| 1,3-Dichlorobenzene | ND | 390 |
| 1,4-Dichlorobenzene | | |
| 1,2-Dichlorobenzene | ND | 390 |
| | ND | 390 |
| bis (2-chloroisopropyl) ether | ND | 390 |
| N-Nitroso-di-n-propylamine Hexachloroethane | ND | 39 |
| Nitrobenzene | ND | 39 |
| | ND 5 | 39 |
| Isophorone | ND | 390 |
| bis(2-Chloroethoxy)methane | ND | 390 |
| 1,2,4-Trichlorobenzene | ND | 39 |
| Naphthalene | 33 Ј | 390 |
| 4-Chloroaniline | ND | 390 |
| Hexachlorobutadiene | ND | 79 |
| 2-Methylnaphthalene | 19 Ј | 390 |
| Hexachlorocyclopentadiene | ND J | 390 |
| 2-Chloronaphthalene | ND | 390 |
| 2-Nitroaniline | ND | 790 · |
| Dimethylphthalate | ND | 390 |
| Acenaphthylene | 30 J | 390 |
| 2,6-Dinitrotoluene | ND | 79 |
| 3-Nitroaniline | ND | 790 |
| Acenaphthene | 15 J | 390 |
| Dibenzofuran | 13 J | 390 |
| 2,4-Dinitrotoluene | ND | . 79 |
| Diethylphthalate | ND | 390 |
| 4-Chlorophenyl-phenylether | ND | 390 |
| Fluorene | 17 J | 390 |
| 4-Nitroaniline | ND | 790 |
| N-Nitrosodiphenylamine | ND | 390 |
| 4-Bromophenyl-phenylether | ND | 390 |
| Hexachlorobenzene | ND | 39 |
| Phenanthrene | 240 J | 390 |
| Anthracene | 53 J | 390 |
| | 33 Q | 370 |

Client ID: SS-3 Site: NYSEG-Geneva

Lab Sample No: 693544 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Extracted: 12/12/05 Date Analyzed: 12/23/05 Matrix: SOIL Level: LOW

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

GC Column: DB-5 Instrument ID: BNAMS1.i Lab File ID: r26071.d

Dilution Factor: 1.0

% Moisture: 16

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: uq/kq</u> |
|----------------------------|--|--|
| Carbazole | 41 J | 390 |
| Di-n-butylphthalate | . ND | 390 |
| Fluoranthene | 440 | 390 |
| Pyrene | 410 | 390 |
| Butylbenzylphthalate | ND | 390 |
| 3,3'-Dichlorobenzidine | ND J | 790 |
| Benzo(a)anthracene | 210 | 39 |
| Chrysene | 290 J | 390 |
| bis(2-Ethylhexyl)phthalate | 91 J | 390 |
| Di-n-octylphthalate | ND | 390 |
| Benzo(b)fluoranthene | 310 | 39 |
| Benzo(k)fluoranthene | 360 丁 | 39 |
| Benzo(a)pyrene | 340 | 39 |
| Indeno(1,2,3-cd)pyrene | 140 | . 39 |
| Dibenz(a,h)anthracene | 16 J | 39 |
| Benzo(g,h,i)perylene | 130 Ј | 390 |

Client ID: SS-4 Site: NYSEG-Geneva

Lab Sample No: 693545 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Extracted: 12/12/05 Date Analyzed: 12/23/05

Level: LOW Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

GC Column: DB-5 Instrument ID: BNAMS1.i Lab File ID: r26075.d

% Moisture: 23

Matrix: SOIL

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitatión Limit <u>Units: ug/kg</u> |
|-----------------------------|--|--|
| bis(2-Chloroethyl)ether | ND | 43 |
| 1,3-Dichlorobenzene | ND | 430 |
| 1,4-Dichlorobenzene | ND | 430 |
| 1,2-Dichlorobenzene | ND | 430 |
| bis(2-chloroisopropyl)ether | ND | 430 |
| N-Nitroso-di-n-propylamine | ND | 43 |
| Hexachloroethane | ND | 43 |
| Nitrobenzene | ND J | 43 |
| Isophorone | ND | 430 |
| bis(2-Chloroethoxy)methane | ND | 430 |
| 1,2,4-Trichlorobenzene | ND | 430 |
| Naphthalene | 32 J | 430 |
| 4-Chloroaniline | ND ND | 430 |
| Hexachlorobutadiene | ND | 87 |
| 2-Methylnaphthalene | 28 J | 430 |
| Hexachlorocyclopentadiene | ND 3 | 430 |
| 2-Chloronaphthalene | ND | 430 |
| 2-Nitroaniline | ND | 870 |
| Dimethylphthalate | ND | 430 |
| Acenaphthylene | 26 J | 430 |
| 2,6-Dinitrotoluene | ND | 87 |
| 3-Nitroaniline | ND | 870 |
| Acenaphthene | 36 J | 430 |
| Dibenzofuran | 20 J | 430 |
| 2,4-Dinitrotoluene | ND | 87 |
| Diethylphthalate | ND | 430 |
| 4-Chlorophenyl-phenylether | ND | 430 |
| Fluorene | 24 Ј | 430 |
| 4-Nitroaniline | ND | 870 |
| N-Nitrosodiphenylamine | ND | 430 |
| 4-Bromophenyl-phenylether | ND | 430 |
| Hexachlorobenzene | ND. | 43 |
| Phenanthrene | 280 Ј | 430 |
| Anthracene | 75 J | 430 |

Client ID: SS-4 Site: NYSEG-Geneva

Date Sampled: 12/07/05 Date Received: 12/10/05

Date Extracted: 12/12/05 Date Analyzed: 12/23/05

GC Column: DB-5

Instrument ID: BNAMS1.i Lab File ID: r26075.d

Lab Sample No: 693545

Lab Job No: K245

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

% Moisture: 23

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: uq/kq</u> |
|-------------------------------------|--|--|
| Carbazole | 44 J | 430 |
| Di-n-butylphthalate | ND | 430 |
| Fluoranthene | 460 | 430 |
| Pyrene | 420 J | 430 |
| Butylbenzylphthalate | ND | 430 |
| 3,3 ¹ -Dichlorobenzidine | ND J | 870 |
| Benzo(a) anthracene | 320 | 43 |
| Chrysene | 350 J | 430 |
| bis(2-Ethylhexyl)phthalate | 89 J | 430 |
| Di-n-octylphthalate | ND | 430 |
| Benzo(b) fluoranthene | 380 | 43 |
| Benzo(k) fluoranthene | 560 5 | 43 |
| Benzo(a) pyrene | 500 | 43 |
| Indeno(1,2,3-cd)pyrene | 140 | . 43 |
| Dibenz (a, h) anthracene | ND | 43 |
| Benzo(g,h,i)perylene | 120 J | 430 |

Client ID: SS-5 Site: NYSEG-Geneva

Lab Sample No: 693546 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Extracted: 12/12/05 Date Analyzed: 12/27/05

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

GC Column: DB-5 Instrument ID: BNAMS1.i

Dilution Factor: 1.0

Lab File ID: r26096.d

% Moisture: 24

Matrix: SOIL Level: LOW

| | Analytical Results Units: ug/kg | Quantitation Limit |
|-----------------------------|------------------------------------|-----------------------|
| Parameter | (Dry Weight) | <u>Units: uq/kq</u> |
| bis(2-Chloroethyl)ether | ND | 44 |
| 1,3-Dichlorobenzene | ND | 440 |
| 1,4-Dichlorobenzene | ND | 440 |
| 1,2-Dichlorobenzene | ND | 440 |
| bis(2-chloroisopropyl)ether | ND | 440 |
| N-Nitroso-di-n-propylamine | ND | 44 |
| Hexachloroethane | ND | 44 |
| Nitrobenzene | ND J | 44 |
| Isophorone | ND | 440 |
| bis(2-Chloroethoxy)methane | ND | 440 |
| 1,2,4-Trichlorobenzene | ND | 44 |
| Naphthalene | 340 J | 440 |
| 4-Chloroaniline | ND | 440 |
| Hexachlorobutadiene | ND | 88 |
| 2-Methylnaphthalene | 200 J | 440 |
| Hexachlorocyclopentadiene | ND 2 | 440 |
| 2-Chloronaphthalene | ND | 440 |
| 2-Nitroaniline | ND | 880 |
| Dimethylphthalate | ND | 440 |
| Acenaphthylene | 580 | 440 |
| 2,6-Dinitrotoluene | ND | 88 |
| 3-Nitroaniline | ND | 880 |
| Acenaphthene | 150 J | 440 |
| Dibenzofuran | 150 J | 440 |
| 2,4-Dinitrotoluene | ND | 88 |
| Diethylphthalate | ND | 440 |
| 4-Chlorophenyl-phenylether | ND | 440 |
| Fluorene | 240_J | 440 |
| 4-Nitroaniline | ND . | 880 |
| N-Nitrosodiphenylamine | ND | 440 |
| 4-Bromophenyl-phenylether | ND | 440 |
| Hexachlorobenzene | ND | 44 |
| Phenanthrene | 3000 | 440 |
| Anthracene | 860 | 440 |

Client ID: SS-5 Site: NYSEG-Geneva

Lab Sample No: 693546 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Extracted: 12/12/05 Matrix: SOIL Level: LOW

Date Analyzed: 12/27/05

GC Column: DB-5

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

Instrument ID: BNAMS1.i Lab File ID: r26096.d

% Moisture: 24

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|----------------------------|--|--|
| Carbazole | 320 J | 440 |
| Di-n-butylphthalate | ND | 440 |
| Fluoranthene | 5000 | 440 |
| Pyrene | 5200 | 440 |
| Butylbenzylphthalate | ND | 440 |
| 3,3'-Dichlorobenzidine | ND 2 | 880 |
| Benzo(a) anthracene | 2800 | 44 |
| Chrysene | 3100 | 440 |
| bis(2-Ethylhexyl)phthalate | 510 | 440 |
| Di-n-octylphthalate | ND | 440 |
| Benzo(b)fluoranthene | 3000 | 44 |
| Benzo(k) fluoranthene | 3400 J | 44 |
| Benzo(a)pyrene | 3400 | 44 |
| Indeno(1,2,3-cd)pyrene | 1000 | 44 |
| Dibenz(a,h)anthracene | 88 | 44 |
| Benzo(g,h,i)perylene | 900 | 440 |

Client ID: SS-6 Site: NYSEG-Geneva

Lab Sample No: 693547 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Extracted: 12/12/05 Date Analyzed: 12/23/05 GC Column: DB-5

Level: LOW

Matrix: SOIL

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

Instrument ID: BNAMS1.i Lab File ID: r26070.d

% Moisture: 24

| Analytical Results Units: ug/kg | Quantitation Limit |
|------------------------------------|-----------------------|
| Parameter (Dry Weight) | <u>Units: ug/kg</u> |
| bis(2-Chloroethyl)ether ND | 44 |
| 1,3-Dichlorobenzene ND | 440 |
| 1,4-Dichlorobenzene ND | 440 |
| 1,2-Dichlorobenzene ND | 440 |
| bis(2-chloroisopropyl)ether ND | 440 |
| N-Nitroso-di-n-propylamine ND | 44 |
| Hexachloroethane ND | 44 |
| Nitrobenzene ND J | 44 |
| Isophorone ND | 440 |
| bis(2-Chloroethoxy)methane ND | 440 |
| 1,2,4-Trichlorobenzene ND | 44 |
| Naphthalene 260 J | 440 |
| 4-Chloroaniline ND | 440 |
| Hexachlorobutadiene ND | 88 |
| 2-Methylnaphthalene 63 J | 440 |
| Hexachlorocyclopentadiene ND 5 | 440 |
| 2-Chloronaphthalene ND | 440 |
| 2-Nitroaniline ND | 880 |
| Dimethylphthalate | 440 |
| Acenaphthylene 170 J | 440 |
| 2,6-Dinitrotoluene ND | 88 |
| 3-Nitroaniline ND | 880 |
| Acenaphthene 60 J | 440 |
| Dibenzofuran 70 J | 440 |
| 2,4-Dinitrotoluene ND | 88 |
| Diethylphthalate | 440 |
| 4-Chlorophenyl-phenylether ND | 440 |
| Fluorene 83 J | 440 |
| 4-Nitroaniline ND | 880 |
| N-Nitrosodiphenylamine ND | 440 |
| 4-Bromophenyl-phenylether ND | 440 |
| Hexachlorobenzene ND | 44 |
| Phenanthrene 1200 | 440 |
| Anthracene 380 J | 440 |

Client ID: SS-6 Site: NYSEG-Geneva

Lab Sample No: 693547 Lab Job No: K245

Date Sampled: 12/07/05 Date Received: 12/10/05 Date Extracted: 12/12/05 Date Analyzed: 12/23/05 GC Column: DB-5

Level: LOW

Instrument ID: BNAMS1.i

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Lab File ID: r26070.d

Dilution Factor: 1.0

% Moisture: 24

Matrix: SOIL

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|----------------------------|--|--|
| Carbazole | 110 Ј | 440 |
| Di-n-butylphthalate | ND | 440 |
| Fluoranthene | 2100 | 440 |
| Pyrene | 1800 | 440 |
| Butylbenzylphthalate | ND | 440 |
| 3,3'-Dichlorobenzidine | ND J | 880 |
| Benzo(a)anthracene | 1400 | 44 |
| Chrysene | 1500 | 440 |
| bis(2-Ethylhexyl)phthalate | ND | 440 |
| Di-n-octylphthalate | ND | 440 |
| Benzo(b) fluoranthene | 1300 | 44 |
| Benzo(k)fluoranthene | 1800 5 | 44 |
| Benzo(a)pyrene | 1700 | 44 |
| Indeno(1,2,3-cd)pyrene | 660 | 44 |
| Dibenz(a,h)anthracene | 71 | 44 |
| Benzo(g,h,i)perylene | 630 | 440 |

Client ID: MW-3 Site: NYSEG-Geneva

Lab Sample No: 693548 Lab Job No: K245

Date Sampled: 12/08/05 Date Received: 12/10/05 Date Extracted: 12/12/05 Date Analyzed: 12/27/05

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

GC Column: DB-5 Instrument ID: BNAMS1.i Lab File ID: r26089.d

Extract Final Volume: 1.0 ml

Dilution Factor: 25.0

% Moisture: 17

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|--------------------------------------|--|--|
| bis(2-Chloroethyl)ether | . ATTO | 1000 |
| 1,3-Dichlorobenzene | ND | 1000 |
| 1,4-Dichlorobenzene | ND | 10000 |
| 1,2-Dichlorobenzene | ND | 10000 |
| | ND | 10000 |
| bis(2-chloroisopropyl)ether | ND | 10000 |
| N-Nitroso-di-n-propylamine | ND | 1000 |
| Hexachloroethane | ND | 1000 |
| Nitrobenzene | ND 5 | 1000 |
| Isophorone | ND | 10000 |
| bis (2-Chloroethoxy) methane | ND | 10000 |
| 1,2,4-Trichlorobenzene | ND | 1000 |
| Naphthalene | 7000 J | 10000 |
| 4-Chloroaniline | ND | 10000 |
| Hexachlorobutadiene | ND | 2000 |
| 2-Methylnaphthalene | 1100 Ј | 10000 |
| Hexachlorocyclopentadiene | ND .= | 10000 |
| 2-Chloronaphthalene | ND | 10000 |
| 2-Nitroaniline | ND | 20000 |
| Dimethylphthalate | ND | 10000 |
| Acenaphthylene | 33000 | 10000 |
| 2,6-Dinitrotoluene 3-Nitroaniline | ND | 2000 |
| Acenaphthene | ND | 20000 |
| Dibenzofuran | 6700 J | 10000 |
| 2,4-Dinitrotoluene | 29000 | 10000 |
| Diethylphthalate | ND | 2000 |
| 4-Chlorophenyl-phenylether | ND | 10000 |
| Fluorene | ND | 10000 |
| 4-Nitroaniline | 47000 | 10000 |
| N-Nitrosodiphenylamine | ND | 20000 |
| 4-Bromophenyl-phenylether | ND | 10000 |
| Hexachlorobenzene | ND | 10000 |
| | ND | 1000 |
| Phenanthrene | 95000 | 10000 |
| Anthracene | 40000 | 10000 |

Client ID: MW-3 Site: NYSEG-Geneva

Lab Sample No: 693548 Lab Job No: K245

Date Sampled: 12/08/05 Date Received: 12/10/05 Date Extracted: 12/12/05 Date Analyzed: 12/27/05

Matrix: SOIL Level: LOW

GC Column: DB-5

Sample Weight: 15.0 g

Instrument ID: BNAMS1.i Lab File ID: r26089.d

Extract Final Volume: 1.0 ml Dilution Factor: 25.0

% Moisture: 17

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|--|--|---|
| Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a) anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene | 2200 J ND 53000 38000 ND ND ND S 24000 22000 ND ND ND 19000 19000 18000 7000 1200 6600 J | 10000 10000 10000 10000 20000 1000 1000 |
| | | |

Site: NYSEG-Geneva

Matrix: SOIL

Lab Job No: K245

QA Batch: 1946

Total Cyanide

| STL Edison Client ID Sample # | <u>Date</u> Sampled | <u>Date</u> Extracted | <u>Date</u> Analyzed | Percent Moisture | Dilution Factor | Analytical Result |
|-------------------------------|------------------------|--------------------------|-------------------------|---------------------|--------------------|----------------------|
| | | | | | | Units: mg/kg |
| • | | | | | | |
| 693542 SS-1 | 12/07/05 | 12/14/05 | 12/15/05 | 23.5 | 1.0 | 1.4 |
| 693543 SS-2 | 12/07/05 | 12/14/05 | 12/15/05 | 16.6 | 1.0 | ND |
| 693544 SS~3 | 12/07/05 | 12/14/05 | 12/15/05 | 15.6 | 1.0 | ND |
| 693545 SS-4 | 12/07/05 | 12/14/05 | 12/15/05 | 23.1 | 1.0 | ND |
| 693546 SS-5 | 12/07/05 | 12/14/05 | 12/15/05 | 24.0 | 1.0 | 2.9 |
| 693547 SS-6 | 12/07/05 | 12/14/05 | 12/15/05 | 24.0 | 1.0 | ND |
| 693548 MW-3 | 12/08/05 | 12/14/05 | 12/15/05 | 17.4 | 1.0 | ND |

Quantitation Limit for Total Cyanide is 0.5 mg/kg.

SAMPLE PREPARATION AND ANALYSIS SUMMARY VOLATILE (VOA) ANALYSES

| Laboratory Sample ID | Matrix | Date Collected | Date Rec'd at Lab | Date Extracted | Date Analyzed |
|-------------------------|--------|-------------------|----------------------|-------------------|------------------|
| 693542 | SOLID | 12/7/05 | 12/10/05 | | 12/15/05 |
| 693543 | SOLID | 12/7/05 | 12/10/05 | | 12/16/05 |
| 693544 | SOLID | 12/7/05 | 12/10/05 | | 12/15/05 |
| 693545 | SOLID | 12/7/05 | 12/10/05 | | 12/15/05 |
| 693546 | SOLID | 12/7/05 | 12/10/05 | | 12/15/05 |
| 693547 | SOLID | 12/7/05 | 12/10/05 | | 12/15/05 |
| 693548 | SOLID | 12/8/05 | 12/10/05 | | 12/16/05 |

SAMPLE PREPARATION AND ANALYSIS SUMMARY SEMIVOLATILE (BNA) ANALYSES

| Laboratory Sample ID | Matrix | Date Collected | Date Rec'd at Lab | Date Extracted | Date Analyzed |
|-------------------------|--------|-------------------|----------------------|-------------------|------------------|
| 693542 | SOLID | 12/7/05 | 12/10/05 | 12/12/05 | 12/23/05 |
| 693543 | SOLID | 12/7/05 | 12/10/05 | 12/12/05 | 12/23/05 |
| 693543MS | SOLID | 12/7/05 | 12/10/05 | 12/12/05 | 12/23/05 |
| 693543SD | SOLID | 12/7/05 | 12/10/05 | 12/12/05 | 12/27/05 |
| 693544 | SOLID | 12/7/05 | 12/10/05 | 12/12/05 | 12/23/05 |
| 693545 | SOLID | 12/7/05 | 12/10/05 | 12/12/05 | 12/23/05 |
| 693546 | SOLID | 12/7/05 | 12/10/05 | 12/12/05 | 12/27/05 |
| 693547 | SOLID | 12/7/05 | 12/10/05 | 12/12/05 | 12/23/05 |
| 693548 | SOLID | 12/8/05 | 12/10/05 | 12/12/05 | 12/27/05 |

SAMPLE PREPARATION AND ANALYSIS SUMMARY SEMIVOLATILE (BNA) ANALYSES

| Laboratory Sample ID | Matrix | Analytical Protocol | Extraction Method | Auxiliary Cleanup | Dil/Conc Factor |
|-------------------------|--------|----------------------------------|----------------------|----------------------|--------------------|
| 693542 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 200.00 |
| 693543 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 693543MS | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 693543SD | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 693544 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 693545 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 693546 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 693547 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 693548 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 25.00 |

SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSES

| Laboratory Sample ID | Matrix | Parameters | Date Rec'd at Lab | Date Analyzed |
|-------------------------|--------|---------------|----------------------|------------------|
| 693542 | SOLID | % SOLIDS | 12/10/05 | 12/12/05 |
| 693542 | SOLID | TOTAL CYANIDE | 12/10/05 | 12/15/05 |
| 693543 | SOLID | % SOLIDS | 12/10/05 | 12/12/05 |
| 693543 | SOLID | TOTAL CYANIDE | 12/10/05 | 12/15/05 |
| 693544 | SOLID | % SOLIDS | 12/10/05 | 12/12/05 |
| 693544 | SOLID | TOTAL CYANIDE | 12/10/05 | 12/15/05 |
| 693545 | SOLID | % SOLIDS | 12/10/05 | 12/12/05 |
| 693545 | SOLID | TOTAL CYANIDE | 12/10/05 | 12/15/05 |
| 693546 | SOLID | % SOLIDS | 12/10/05 | 12/12/05 |
| 693546 | SOLID | TOTAL CYANIDE | 12/10/05 | 12/15/05 |
| 693547 | SOLID | % SOLIDS | 12/10/05 | 12/12/05 |
| | SOLID | TOTAL CYANIDE | 12/10/05 | 12/15/05 |
| 693547 | | % SOLIDS | 12/10/05 | 12/12/05 |
| 693548 | SOLID | | 12/10/05 | 12/15/05 |
| 693548 | SOLID | TOTAL CYANIDE | 1 200 | |



SDG NARRATIVE

STL EDISON

SDG No. K245

| STL Edison Sample | Client ID |
|-------------------|-----------|
| 693542 | SS-1 |
| 693543 | SS-2 |
| 693543MS | SS-2MS |
| 693543SD | SS-2MSD |
| 693544 | SS-3 |
| 693545 | SS-4 |
| 693546 | SS-5 |
| 693547 | SS-6 |
| 693548 | MW-3 |

anple Receipt:

Sample delivery conforms with requirements.

Volatile Organic Analysis (GC/MS):

All data conforms with method requirements.

Base/Neutral and/or Acid Extractable Organics (GC/MS):

QA batch # 3396: MS/MSD RPDs of Pentachlorophenol and Pyrene are biased high.

Sample #s 693542 and 693548 all surrogate std recoveries are diluted out.

Chemistry \ Microbiology:

All data conforms with method requirements.

I certify that this data package is in compliance with the protocols in NYSDEC ASP B both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this package has been authorized by the Laboratory Manager or his designee

Michael J.Urban

Michael S. Ubas

Laboratory Manager

DATA USABILITY SUMMARY REPORT NYSEG WADSWORTH ST.GENEVA

SDG #K434

VOLATILE, SEMIVOLATILE AND MISCELLANEOUS ANALYSES

Analyses performed by:

Severn Trent Laboratories Buffalo, New York

Review performed by:



Blasland, Bouck & Lee, Inc. Syracuse, New York

REPORT #5486

Summary

The following is an assessment of the data package for sample delivery group (SDG) # K434 for sampling from the NYSEG Wadsworth St. Geneva Site. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

| Sample ID | Lab ID | Matrix | Sample | | | Analysis | | 1 |
|---------------------------------------|--------|--------|------------|----------|----------|----------|----------|----------|
| | | | Date | voc | svoc | РСВ | MET | MISC1 |
| SB-2-8-10 ^{2, 3} | 694675 | Soil | 12/13/2005 | Х | Х | | | Х |
| SB-9-6-6.8 | 694676 | Soil | 12/13/2005 | Х | Х | | | Х |
| SB-5-16-16.8 | 694677 | Soil | 12/14/2005 | Х | Х | | | Х |
| SB-5-17.8-19.4 ² | 694678 | Soil | 12/14/2005 | Х | Х | | | Х |
| SB-5-23-23.3 | 694679 | Soil | 12/14/2005 | Х | Х | | | Х |
| SB-10A-9.2-10.7 | 694680 | Soil | 12/14/2005 | Х | Х | | | Х |
| Dup-2 | 694681 | Soil | 12/13/2005 | Х | Х | | | Х |
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- 1. Miscellaneous parameters include total cyanide only.
- 2. The matrix spike/matrix (MS/MSD) spike duplicate performed on sample.
- 3. Sample location Dup-2 is the field duplicate of parent sample location SB-2-8-10.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 Method 8260 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- E The compound was quantitated above the calibration range.
- D Concentration is based on a diluted sample analysis.
- C Identification confirmed by gas chromatograph/mass spectrometer (GC/MS).
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

| Method | Matrix | Holding Time | Preservation |
|-------------|--------|--|--|
| | Water | 14 days from collection to analysis | Cooled @ 4 °C; preserved to a pH of less than 2. |
| SW-846 8260 | Soil | 48 hours from collection to extraction and 14 days from extraction to analysis | Cooled @ 4 °C. |

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method, trip, and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure contamination of samples during shipment. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with the following sample locations were qualified.

| Sample Locations | Compounds | Sample Result | Qualification |
|------------------|--------------------|--|---------------|
| SB-10A-9.2-10.7 | Methylene Chloride | QA blank sample results >MDL, Sample results <rl< td=""><td>No Action</td></rl<> | No Action |

RL = reporting limit

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

System performance and column resolution were acceptable.

4. Calibration

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

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

| Sample Locations | Initial/Continuing | Compound | Criteria |
|--|--------------------|--------------------------|----------|
| | | Methylene Chloride | 19.2% |
| SB-2-8-10 | | 1,1-Dichloroethane | 15.8% |
| SB-9-6-6.8 | | Bromoform | 16.3% |
| SB-5-16-16.8 | ICV %RSD | 2-Hexanone | 29.9% |
| SB-5-23-23.3 | | Chlorobenzene | 17.0% |
| Dup-2 | | Sytrene | 17.6% |
| | | Xylene (Total) | 17.6% |
| SB-2-8-10 SB-9-6-6.8 SB-5-16-16.8 SB-5-23-23.3 Dup-2 | CCV %D | Bromomethane | -33.2% |
| | | Bromomethane | 26.3% |
| | | Methylene chloride | 17.1% |
| | | Acetone | 18.8% |
| | | Carbon Disulfide | 23.0% |
| 07.5.47.0.40.4 | | 1,1-Dichloroethene | 15.4% |
| SB-5-17.8-19.4 | ICV %RSD | Trans-1,2-dichloroethene | 19.0% |
| SB-10A-9.2-10.7 | | Dibromochloromethane | 15.9% |
| | | Bromoform | 18.9% |
| | | 2-Hexanone | 27.2% |
| | | Styrene | 15.6% |
| | | MTBE | 20.5% |

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

| Initial/Continuing | Criteria | Sample Result | Qualification |
|---------------------------|---|---------------|---------------|
| | 555 | Non-detect | R |
| | RRF <0.05 | Detect | J |
| Initial and | DDE 40.041 | Non-detect | R |
| Continuing Calibration | RRF <0.01 ¹ | Detect | J |
| Sall Di asioni | RRF >0.05 or RRF >0.01 ¹ | Non-detect | No Action |
| | | Detect | NO ACTION |
| | %RSD > 15% | Non-detect | UJ |
| Initial Calibration | | Detect | J |
| | %D >20% (increase in sensitivity) | Non-detect | No Action |
| Continuing Calibration | | Detect | J |
| | %D >20% | Non-detect | UJ |
| | (decrease in sensitivity) | Detect | J |

^{1.} RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e. ketones, 1,4-Dioxane, etc.)

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

The internal standard responses and retention times were within acceptable limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis exhibited recoveries and RPD results within the control limits.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Results for duplicate samples are summarized in the following table.

| Sample ID / Duplicate ID | Compound | Sample Result | Duplicate Result | RPD |
|--------------------------|------------|------------------|---------------------|-----|
| | Benzene | 0.001 J | 0.0018 | AC |
| SD 2 9 40 / Dun 2 | Toluene | 0.001 J | 0.002 J | AC |
| SB-2-8-10 / Dup-2 | Total BTEX | 0.002 J | 0.0038 J | AC |
| | Total VOCs | 0.002 J | 0.0038 J | AC |

ND = Not detected.

AC = The field duplicate RPD is acceptable when the RPD between parent sample and field duplicate sample is less than two times the RL and where the parent sample and/or duplicate concentration is less than five times the RL.

The field duplicate RPD exhibited acceptable recoveries.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Volatile Organics Data Validation Checklist

| | YES | NO | NA_ |
|---|----------|-------------|---------|
| Data Completeness and Deliverables | | | |
| Have any missing deliverables been received and added to the data package? | | <u>X</u> | |
| Is there a narrative or cover letter present? | <u>X</u> | | |
| Are the sample numbers included in the narrative? | <u>X</u> | | |
| Are the sample chain-of-custodies present? | <u>X</u> | | |
| Do the chain-of-custodies indicate any problems with sample receipt or sample condition? | | <u>x</u> | |
| Holding Times | | | |
| Have any holding times been exceeded? | | <u>X</u> | |
| Surrogate Recovery | | | |
| Are surrogate recovery forms present? | <u>X</u> | | 4 |
| Are all samples listed on the surrogate recovery form? | <u>X</u> | | |
| Was one or more surrogate recovery outside control limits for any sample or blank? | | <u> x</u> | <u></u> |
| If yes, were the samples reanalyzed? | | | X |
| Are there any transcription/calculation errors between the raw data and the summary form? | | X | |
| Matrix Spikes | | | |
| Is there a MS recovery form present? | <u>X</u> | | |
| Were matrix spikes analyzed at the required frequency? | <u>X</u> | | |
| How many spike recoveries were outside of QC limits? | | | |
| <u>0</u> out of <u>10</u> | | | |
| How many RPDs for MS/MSD were outside of QC limits? | | | |
| <u>0</u> out of <u>10</u> | | | |
| <u>Blanks</u> | | | |
| Is a method blank summary form present? | <u>X</u> | | |
| Has a method blank been analyzed for each day or for each 20 samples, whichever is more frequent? | <u>X</u> | | |
| Has a blank been analyzed at least once every 12 hours for each system used? | <u>X</u> | | |
| Do any method/instrument blanks have positive results? | <u>X</u> | | |
| Do any trip/field/rinse blanks have positive results? | | | X |

| | YES | NO | NA |
|--|----------|-------------|-------------|
| Tuning and Mass Calibration | | | |
| Are the GC/MS tuning forms present for BFB? | <u>X</u> | | |
| Are the bar graph spectrum and mass/charge listing provided for each BFB? | _X_ | | |
| Has a BFB been analyzed for each 12 hours of analysis per instrument? | <u>X</u> | | |
| Have the ion abundance criteria been met for each instrument used? | <u>X</u> | | |
| Target Analytes | | | |
| Is an organics analysis data sheet present for each of the following: | | | |
| Samples | X | · · · | |
| Matrix spikes | X | | |
| Blanks | X | | |
| Are the reconstructed ion chromatograms present for each of the following: | | | |
| Samples | X | | |
| Matrix spikes | <u>x</u> | <u> </u> | |
| Blanks | X | | |
| Is the chromatographic performance acceptable? | X | | |
| Are the mass spectra of the identified compounds present? | X | | |
| Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum? | X | | |
| Do the samples and standard relative ion intensities agree within 20%? | X | | |
| Tentatively Identified Compounds | | | |
| Are all the TIC summary forms present? | | X | |
| Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present? | | | X |
| Are any target compounds listed as TICs? | | | X |
| Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum? | | | X |
| Do the TIC and "best match" spectrum agree within 20%? | | | X |
| Quantitation and Detection Limits | | | |
| Are there any transcription/calculation errors in the Form 1 results? | | <u>X</u> | . ——— |
| Are the reporting limits adjusted to reflect sample dilutions and, for soils, sample moisture? | <u>X</u> | | |

| | YES | NO | NA |
|--|----------|----------|--|
| Standard Data | | | |
| Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards? | <u>X</u> | | |
| Initial Calibration | | | |
| Are the initial calibration forms present for each instrument used? | <u>X</u> | | |
| Are the response factor RSDs within acceptable limits? | | X | |
| Are the average RRFs ≥ minimum requirements? | <u>X</u> | | |
| Are there any transcription/calculation errors in reporting the RRFs or RSDs? | | X | |
| Continuing Calibration | | | |
| Are the continuing calibration forms present for each day and each instrument? | X | | |
| Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument? | <u>X</u> | | |
| All %D within acceptable limits? | | X | |
| Are all RF ≥ minimum requirements? | <u>X</u> | | |
| Are there any transcription/calculation errors in reporting of RF or %D? | | <u>X</u> | ************************************** |
| Internal Standards | | | |
| Are internal standard areas of every sample within the upper and lower limits for each continuing calibration? | X | | ************************* |
| Are the retention times of the internal standards within 30 seconds of the associated calibration standard? | _X_ | | |
| Field Duplicates | | | |
| Were field duplicates submitted with the samples? | <u>X</u> | | |

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 Method 8270 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- E The compound was quantitated above the calibration range.
- D Concentration is based on a diluted sample analysis.
- C Identification confirmed by gas chromatograph/mass spectrometer (GC/MS).
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

| Method | Matrix | Holding Time | Preservation |
|--------------|--------|--|---------------|
| SW-846 8270 | Water | 7 days from collection to extraction and 40 days from extraction to analysis | Cooled @ 4 °C |
| 377-040 0270 | Soil | 14 days from collection to extraction and 40 days from extraction to analysis | Cooled @ 4 °C |

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed

No compounds were detected in the associated blanks.

3. Mass Spectrometer Tuning

System performance and column resolution were acceptable.

4. Calibration

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

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) and RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

| Sample Locations | Initial/Continuing | Compound | Criteria |
|--|--------------------|---------------------------|----------|
| | | Bis (2-chloroethyl)ether | 15.6% |
| am a a 4a | | Nitrobenzene | 21.4% |
| SB-2-8-10 | IOV W DOD | N-nitrosodiphenylamine | 16.1% |
| SB-9-6-6.8 SB-5-16-16.8 SB-5-17.8-19.4 | | Anthracene | 15.1% |
| | | Di-n-butylphthalate | 15.7% |
| | ICV %RSD | Fluoranthene | 16.8% |
| SB-5-23-23.3 SB-10A-9.2-10.7 | | 3,3-Dichlorobenzene | 22.0% |
| Dup-2 | | Bis(2-Ethylhexl)phthalate | 16.2% |
| | | Benzo(k)Fluoranthene | 22.5% |
| | | Benzo(g,h,i)perylene | 15.2% |

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

| Initial/Continuing | Criteria | Sample Result | Qualification |
|---------------------------|---|---------------|---------------|
| | DDE 405 | Non-detect | R |
| | RRF <0.05 | Detect | J |
| Initial and | DDE 40.041 | Non-detect | R |
| Continuing Calibration | RRF <0.01 ¹ | Detect | J |
| | RRF >0.05 or RRF >0.01 ¹ | Non-detect | No Antion |
| | | Detect | No Action |
| | %RSD > 15% | Non-detect | υJ |
| Initial Calibration | | Detect | J |
| | %D >20% (increase in sensitivity) | Non-detect | No Action |
| Continuing Calibration | | Detect | J |
| | %D >20% | Non-detect | UJ |
| | (decrease in sensitivity) | Detect | J |

^{1.} RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e. ketones, 1,4-Dioxane, etc.)

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

Sample locations associated with surrogates exhibiting recoveries outside of the control limits are presented in the following table.

| Sample Locations | Surrogate | Recovery |
|----------------------|----------------------|----------|
| , | Phenol-d5 | D |
| | 2-Fluorophenol | D |
| SB-5-23-23.3 | 2,4,6-Tribromophenol | D |
| ∂D- ∂-23-23.3 | Nitrobenzene-d5 | D |
| | 2-Fluorobiphenyl | D |
| | Terphenyl-d14 | D |

Diluted (D)

The criteria used to evaluate the surrogate recoveries are presented in the following table. In the case of a surrogate deviation, the sample results associated with the deviant fraction are qualified as documented in the table below.

| Control Limit | Sample Result | Qualification | |
|--|------------------|---------------|--|
| > the upper central limit (LIL) | Non-detect | No Action | |
| > the upper control limit (UL) | Detect | J | |
| < the lower central limit (LL) but > 100/ | Non-detect | J | |
| < the lower control limit (LL) but > 10% | Detect | J | |
| < 10% | Non-detect | R | |
| < 10% | Detect | J | |
| Two surrogate exhibiting recovery outside the control limits but greater | Non-detect | No Action | |
| than 10%. | Detect | | |
| Surrogates diluted (D) below the | Non-detect | | |
| calibration curve due to the high concentration of a target compounds | Detect | No Action | |

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC to exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) the area counts of the associated continuing calibration standard.

All internal standard response and retention times were acceptable.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compounds concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis exhibited recoveries and RPD results within the control limits.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LSC analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Results for duplicate samples are summarized in the following table.

| Sample ID / Duplicate ID | Compound | Sample Duplicate Result Result | | RPD |
|--------------------------|---------------|--------------------------------|----|-----|
| SB-2-8-10 / Dup-2 | All Compounds | ND | ND | AC |

ND = Not detected.

AC = The field duplicate RPD is acceptable when the RPD between parent sample and field duplicate sample is less than two times the RL and where the parent sample and/or duplicate concentration is less than five times the RL.

The field duplicate RPD exhibited acceptable recoveries

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Semivolatile Organics Data Validation Checklist

| | YES | NO | NA |
|--|----------|----------|----------|
| Data Completeness and Deliverables | | | |
| Have any missing deliverables been received and added to the data package? | | X | |
| Is there a narrative or cover letter present? | <u>X</u> | | |
| Are the sample numbers included in the narrative? | <u>X</u> | | |
| Are the sample chain-of-custodies present? | <u>X</u> | | |
| Do the chain-of-custodies indicate any problems with sample receipt or sample condition? | | X | |
| Holding Times | | | |
| Have any holding times been exceeded? | | X | |
| Surrogate Recovery | | | |
| Are the surrogate recovery forms present? | <u>X</u> | | |
| Are all samples listed on the surrogate recovery form? | <u>X</u> | | |
| Were two or more base-neutral or acid surrogate recoveries outside control limits for any sample or blank? | | X | |
| If yes, were the samples reanalyzed? | | | X |
| Are there any transcription/calculation errors between the raw data and the summary form? | | <u>X</u> | 6 |
| Matrix Spikes | | | |
| Is there a MS recovery form present? | X | | |
| Were MS analyzed at the required frequency | <u>X</u> | | |
| How many spike recoveries were outside of QC limits? | | | |
| <u>0</u> out of <u>11</u> | | | |
| How many RPDs for MS/MSD were outside of QC limits? | | | |
| <u>0</u> out of <u>11</u> | | | |
| Blanks | | | |
| Is the method blank summary form present? | <u>X</u> | | |
| Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent? | _X_ | | |
| Has a blank been analyzed for each system used? | <u>X</u> | | |
| Do any method blanks have positive results? | | <u>X</u> | |
| Are field/rinse blanks associated with every sample? | | | X |

| | YES | NO | NA |
|--|-------------|-------------|-------------|
| Tuning and Mass Calibration | | | |
| Are the GC/MS tuning forms present for DFTPP? | <u>X</u> | | |
| Are the bar graph spectrum and mass/charge listing provided for each DFTPP? | X | | |
| Has a DFTPP been analyzed for each 12 hours of analysis per instrument? | <u>X</u> | | |
| Have the ion abundance criteria been met for each instrument used? | X | | |
| Target Analytes | | | |
| Is an organics analysis data sheet present for each of the following: | | | |
| Samples | <u>X</u> | | |
| Matrix spikes | X | | |
| Blanks | X | | |
| Are the reconstructed ion chromatograms present for each of the following: | | | |
| Samples | X | | |
| Matrix spikes | X | | |
| Blanks | <u>X</u> | | |
| Is the chromatographic performance acceptable? | <u>X</u> | | |
| Are the mass spectra of the identified compounds present? | X | | |
| Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum? | <u>X</u> | | |
| Do the samples and standard relative ion intensities agree within 20%? | <u>X</u> | | |
| Tentatively Identified Compounds | | | |
| Are all the TIC summary forms present? | | X | |
| Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present? | | | _X_ |
| Are any target compounds listed as TICs? | | www | X |
| Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum? | | | _X |
| Do the TIC and "best match" spectrum agree within 20%? | | | X |
| Quantitation and Detection Limits | | | |
| Are there any transcription/calculation errors in the Form 1 results? | | X | |
| Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture? | <u> </u> | | |

| | YES | NO | NA |
|--|-----------|----|---------------------------------------|
| Standard Data | | | |
| Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards? | X | | |
| Initial Calibration | | | |
| Are the initial calibration forms present for each instrument used? | <u>X</u> | | |
| Are the response factor RSDs within acceptable limits? | | X | |
| Are the average RRF ≥ minimum requirements? | <u>X</u> | | |
| Are there any transcription/calculation error in reporting the RRF or RSD? | | X | |
| Continuing Calibration | | | |
| Are the continuing calibration forms present for each day and each instrument? | <u>X</u> | • | · · · · · · · · · · · · · · · · · · · |
| Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument? | X | | |
| All %D within acceptable limits? | <u>X</u> | | |
| Are all RF ≥ minimum requirements? | <u>X</u> | | |
| Are there any transcription/calculation errors in reporting of RF or %D? | | X | |
| Internal Standards | | | |
| Are internal standard areas of every sample within the upper and lower limits for each continuing calibration? | <u>x</u> | | |
| Are the retention times of the internal standards within 30 seconds of the associated calibration standard? | X | | |
| Field Duplicates | | | |
| Were field duplicates submitted with the samples? | <u> X</u> | | |

MISCELLANEOUS ANALYSES

Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 9012 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1994.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The reported value was obtained from a reading less than the RL but greater than or equal to the IDL.
- M Duplicate injection precision not met.
- N Spiked sample recovery not within control limits.
- * Duplicate analysis not within control limits.
- E The reported value is estimated due to the presence of interference.
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

| Method | Matrix | Holding Time | Preservation |
|---------------|------------|--------------|--|
| Total Cyanide | Water/Soil | 14 Days | Cooled @ 4 °C; preserved to a pH of greater than 12. |

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

No analytes were detected above the reporting limit in the associated blanks.

3. Calibration

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

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995.

All continuing calibration verification standard recoveries were within the control limit.

4. MS/MSD Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit a RPD within the laboratory established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compound's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited recoveries and RPD results within the control limits.

5. LCS Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LSC analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

The laboratory duplicate sample results exhibited RPD within the control limit.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Results for duplicate samples are summarized in the following table.

| Sample ID / Duplicate ID | Compound | Sample Result | Duplicate Result | RPD |
|--------------------------|---------------|------------------|---------------------|--------|
| SB-2-8-10 / Dup-2 | Total Cyanide | 1.6 | 0.96 | 50.0 % |

ND = Not detected.

The field duplicate RPD is acceptable when the RPD between parent sample and field duplicate sample is less than two times the RL and where the parent sample and/or duplicate concentration is less than five times the RL.

The field duplicate RPD exhibited acceptable recoveries.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Data Validation Checklist

| | YES | NO | NA |
|--|----------|----------|----|
| Data Completeness and Deliverables | | | |
| Is there a narrative or cover letter present? | <u>X</u> | | |
| Are the sample numbers included in the narrative? | X | | |
| Are the sample chain-of-custodies present? | X | | |
| Do the chain-of-custodies indicate any problems with sample receipt or sample condition? | | X | |
| Raw Data | | | |
| Are the preparation logs present? | X | | |
| Are preparation dates present on sample preparation logs/bench sheets? | X | | |
| Are the measurement read out records present? | <u>X</u> | | |
| Is the data legible? | <u>X</u> | | |
| Is the data properly labeled? | <u>X</u> | <u> </u> | |
| Are pH values listed? | <u>X</u> | | |
| Percent solids calculation present for soils/sediments? | | | X |
| Holding Times | | | |
| Were all analyses performed within the specified holding times? | _X_ | | |
| Sample Data | | | |
| Are all forms complete? | <u>X</u> | | |
| Are correct units indicated the results sheets? | X | | |
| Are soil sample results for each parameter corrected for percent solids? | X | | |
| Initial Calibration | | | |
| Is a record of an initial calibration present?: | X | | |
| Is correlation coefficient less than .995?: | X | | |
| Initial and Continuing Calibration Verification | | | |
| Present and complete for all analytes? | X | | |
| Are all calibration standards (initial and continuing) within control limits?: | X | | |
| Was continuing calibration performed every 10 samples or every 2 hours? | X | | |
| Was the ICV for cyanides distilled? | | | X |
| Initial and Continuing Calibration Blanks | | | |
| Present and complete? | X | | |
| Was an initial calibration blank analyzed? | X | | |
| Was a continuing calibration blank analyzed after every 10 samples or every 2 hours (which ever is more frequent)? | X | | |
| Are all calibration blanks less than or equal to the RL? | X | | |
| Preparation Blank | | | |
| Was one prep. blank analyzed for: | | | |
| each batch of digested samples? | X | | |
| 5486 | | | |

| | YES | NO | NA |
|--|----------|-------------|----------|
| each matrix type? | X | | |
| Are all preparation blanks less than the RL? | X | | |
| If no, is the concentration of the sample with the least concentrated analyte less than 10 times the prep. blank? | | | X |
| Matrix Spike | | | |
| Present and complete for: | | | |
| each batch? | X | | |
| each matrix type? | X | | |
| Was field blank used for spiked sample? | | X | |
| Are all recoveries for analytes with sample concentrations less than four times the spike concentration within control limits? | X | | |
| Are results outside the control limits (75-125%) flagged with "N"? | | | <u>X</u> |
| Laboratory Duplicates | | | |
| Present and complete for: | | | |
| each batch? | X | ***** | |
| each matrix type? | <u>X</u> | | |
| Was field blank used for duplicate analysis? | | X | |
| Are all values within control limits? | <u>X</u> | | |
| If no, are all results outside the control limits flagged with an *? | | | X |
| Field Duplicates | | | |
| Were field duplicates analyzed? | <u>X</u> | | |
| Aqueous | | | |
| is any RPD greater than 50% where sample and duplicate are both greater than or equal to 5 times RL? | | | X |
| Is any difference between sample and duplicate greater than RL where sample and/or duplicate is less than 5 times RL? | | | X |
| Soil/Sediment | | | |
| Is any RPD (where sample and duplicate are both greater than 5 times RL) > 100%? | | X | |
| Is any difference between sample and duplicate (where sample and/or duplicate is less than 5x RL) >2xRL? | | X | |
| Laboratory Control Sample | | | |
| Was one LCS prepared and analyzed for: | | | |
| each matrix? | X | | |
| each batch? | X | | |
| Are all recoveries within control limits? | X | | |
| Field Blank | | | |
| Is the field blank concentration less than RL for all analytes? | | | X |
| If no, was field blank value already rejected due to other QC criteria? | | | X |

| | YES | NO | NA_ |
|---|-----|----------|-----|
| Percent Solids | | | |
| Are the percent solids in soil/sediment(s): | | | |
| < 50%? | | <u>X</u> | |
| < 10%? | | X | |

Corrected Sample Analysis Data Sheets

Laboratory Narrative

NYSDEC Sample Identification and Analysis Summary Sheets

Sample Compliance Report

SAMPLE COMPLIANCE REPORT

| Sample | | | | | | С | omplianc | y ¹ | | Noncompliance |
|-------------------|------------------|-----------------|-----------------|--------|-----|------|----------|----------------|------|--|
| Delivery Group | Sampling Date | ASP Protocol | Sample ID | Matrix | VOC | svoc | PCB | MET | MISC | |
| K434 | 12/13/2005 | 2000 | SB-2-8-10 | Soil | no | no | | | yes | VOC-ICAL %RSD, CCAL %D SVOC-ICAL %RSD |
| K434 | 12/13/2005 | 2000 | SB-9-6-6.8 | Soil | no | no | | | yes | VOC-ICAL %RSD, CCAL %D SVOC-ICAL %RSD |
| K434 | 12/14/2005 | 2000 | SB-5-16-16.8 | Soil | no | no | | | yes | VOC-ICAL %RSD, CCAL %D SVOC-ICAL %RSD |
| K434 | 12/14/2005 | 2000 | SB-5-17.8-19.4 | Soil | no | no | | | yes | VOC-ICAL %RSD, CCAL %D SVOC-ICAL %RSD |
| K434 | 12/14/2005 | 2000 | SB-5-23-23.3 | Soil | no | no | | | yes | VOC-ICAL %RSD, CCAL %D SVOC-ICAL %RSD |
| K434 | 12/14/2005 | 2000 | SB-10A-9.2-10.7 | Soil | no | no | | | yes | VOC-ICAL %RSD, CCAL %D SVOC-ICAL %RSD |
| K434 | 12/13/2005 | 2000 | Dup-2 | Soil | no | no | qui opa | * | yes | VOC-ICAL %RSD, CCAL %D SVOC-ICAL %RSD |
| | | | | | | | | | | |
| | | | | | - | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

¹ Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

Client ID: SB-2-8-10 Site: NYSEG-Geneva

Lab Sample No: 694675 Lab Job No: K434

Date Sampled: 12/13/05 Date Received: 12/14/05 Date Analyzed: 12/20/05 GC Column: DB624

Matrix: SOIL Level: LOW

GC Column: DB624
Instrument ID: VOAMS9.i

Sample Weight: 5.0 g Purge Volume: 5.0 ml

Lab File ID: k51217.d

% Moisture: 17

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---|--|---|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane rans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene | DO T T Z Z Z DO DO T T T DO DO T T T T T T T T T T T | 000004000040004 666636626666266211.631.646611.66666666666666666666666666 |
| Ethylbenzene Styrene Xylene (Total) | ND 3 ND 3 ND 0 | 4.8 6.0 6.0 |

Client ID: SB-2-8-10 Site: NYSEG-Geneva

Lab Sample No: 694675 Lab Job No: K434

Date Sampled: 12/13/05 Date Received: 12/14/05 Date Analyzed: 12/20/05

Matrix: SOIL Level: LOW

Sample Weight: 5.0 g Purge Volume: 5.0 ml

GC Column: DB624 Instrument ID: VOAMS9.i Lab File ID: k51217.d

% Moisture: 17

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Analytical Results Quantitation Limit Units: ug/kg Units: uq/kq (Dry Weight)

Parameter

ΝĎ

6.0

MTBE

Client ID: SB-9-6-6.8

Site: NYSEG-Geneva

Lab Sample No: 694676

Lab Job No: K434

Date Sampled: 12/13/05

Date Received: 12/14/05 Date Analyzed: 12/20/05

GC Column: DB624
Instrument ID: VOAMS9.i
Lab File ID: k51218.d

Matrix: SOIL Level: LOW

Sample Weight: 5.1 g Purge Volume: 5.0 ml

% Moisture: 17

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|--|--|--|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene Cis-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene | ND Weight) ND N | 999959939999399322929552555555555555555 |
| Styrene Xylene (Total) | ND J. | 5.9 5.9 |

Client ID: SB-9-6-6.8

Site: NYSEG-Geneva

Lab Sample No: 694676

Lab Job No: K434

Date Sampled: 12/13/05 Date Received: 12/14/05 Date Analyzed: 12/20/05

GC Column: DB624
Instrument ID: VOAMS9.i Lab File ID: k51218.d

Matrix: SOIL Level: LOW

Sample Weight: 5.1 g Purge Volume: 5.0 ml

% Moisture: 17

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Results Units: ug/kg

(Dry Weight)

Ouantitation Limit

Units: ug/kg

ND

5.9

Parameter

MTBE

Client ID: SB-5-16-16.8

Site: NYSEG-Geneva

Lab Sample No: 694677

Lab Job No: K434

Date Sampled: 12/14/05
Date Received: 12/14/05

Date Analyzed: 12/21/05

GC Column: DB624

Instrument ID: VOAMS4.i
Lab File ID: d50974.d

Matrix: SOIL Level: HIGH

Sample Weight: 5.2 g

Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

% Moisture: 19

| Parameter | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|--|--|--|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane Prans-1,2-Dichloroethene Cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene | ND N | 600 600 600 600 360 600 600 600 600 600 |
| Ethylbenzene Styrene Xylene (Total) | 1400 ND J 19000 | 480 600 600 |

Client ID: SB-5-16-16.8

Site: NYSEG-Geneva

Lab Sample No: 694677

Lab Job No: K434

Date Sampled: 12/14/05 Date Received: 12/14/05 Date Analyzed: 12/21/05

GC Column: DB624 Instrument ID: VOAMS4.i Lab File ID: d50974.d

Matrix: SOIL Level: HIGH

Sample Weight: 5.2 g

Methanol Ext. Volume: 10.0 ml

Ext. Dilution Factor: 50.0

% Moisture: 19

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Results Units: ug/kg

(Dry Weight)

Quantitation

Limit

Units: uq/kg

Parameter

MTBE

600

Client ID: SB-5-17.8-19.4

Site: NYSEG-Geneva

Lab Sample No: 694678

Lab Job No: K434

Date Sampled: 12/14/05 Date Received: 12/14/05 Date Analyzed: 12/22/05

GC Column: DB624

Instrument ID: VOAMS4.i

Lab File ID: d51000.d

Matrix: SOIL Level: HIGH

Sample Weight: 5.0 g
Methanol Ext. Volume: 10.0 ml
Ext. Dilution Factor: 50.0

% Moisture: 18

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|-----------------------------------|---|--|
| Chloromethane | ND | . 600 |
| Bromomethane | ND 5 | 600 |
| Vinyl Chloride | ND | 600 |
| Chloroethane | ND | 600 |
| Methylene Chloride | ND J | 360 |
| Acetone | ND J | 600 |
| Carbon Disulfide | D T | 600 |
| 1,1-Dichloroethene | ND J | 240 |
| 1,1-Dichloroethane | ND | 600 |
| trans-1,2-Dichloroethene | ND J | 600 |
| cis-1,2-Dichloroethene | ND | 600 |
| Chloroform | ND | 600 |
| 1,2-Dichloroethane | ND | 240 |
| 2-Butanone | ND · | 600 |
| 1,1,1-Trichloroethane | ND | 600 |
| Carbon Tetrachloride | ND | 240 |
| Bromodichloromethane | ND | 120 |
| 1,2-Dichloropropane | ND · | 120 |
| cis-1,3-Dichloropropene | ND | 600 |
| Trichloroethene | ND | 120 |
| Dibromochloromethane | ND 2 | 600 |
| 1,1,2-Trichloroethane | ND | 360 |
| Benzene | 1500 | 120 |
| trans-1,3-Dichloropropene | ND | 600 |
| Bromoform | ND 2 | 480 |
| 4-Methyl-2-Pentanone | ND | 600 |
| 2-Hexanone Tetrachloroethene | ND J | 600 |
| | ND | 120 |
| 1,1,2,2-Tetrachloroethane Toluene | ND | 120 |
| Chlorobenzene | 1500 | 600 |
| Ethylbenzene | ND | 600 |
| Styrene | 200 J ND J | 480 600 |
| - | i de la companya de | |
| Xylene (Total) | 2200 | 600 |

Client ID: SB-5-17.8-19.4

Site: NYSEG-Geneva

Lab Sample No: 694678

Lab Job No: K434

Date Sampled: 12/14/05 Date Received: 12/14/05 Date Analyzed: 12/22/05

GC Column: DB624

Instrument ID: VOAMS4.i Lab File ID: d51000.d Matrix: SOIL Level: HIGH

Sample Weight: 5.0 g

Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

% Moisture: 18

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Analytical Results Units: ug/kg

(Dry Weight)

Quantitation Limit

Units: ug/kg

ND -3

600

MTBE

Parameter

Client ID: SB-5-23-23.3

Site: NYSEG-Geneva

Lab Sample No: 694679

Lab Job No: K434

Date Sampled: 12/14/05 Date Received: 12/14/05

Date Analyzed: 12/21/05

GC Column: DB624

Instrument ID: VOAMS4.i Lab File ID: d50976.d

Level: HIGH

Sample Weight: 5.1 g Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

% Moisture: 19 .

Matrix: SOIL

| | | Analytical Results | Quantitation |
|--|-----|------------------------------|------------------------------|
| Parameter | | Units: ug/kg (Dry Weight) | Limit <u>Units: ug/kg</u> |
| 4. Ct 2. Ct 111 Ca | | (DIY HOLGHE) | onres. ug/kg |
| Chloromethane | | ND | 600 |
| Bromomethane | | ND J | . 600 |
| Vinyl Chloride | - | ND . | . 600 |
| Chloroethane | | ND | 600 |
| Methylene Chloride | * | ND Z | 360 |
| Acetone | | ND | 600 |
| Carbon Disulfide | | ND | 600 |
| 1,1-Dichloroethene | × . | ND 5 | 240 |
| 1,1-Dichloroethane | | ND | 600 |
| rans-1,2-Dichloroethene | | ND | 600 |
| cis-1,2-Dichloroethene | | ND | 600 |
| Chloroform | • | ND | 600 |
| 1,2-Dichloroethane | | ND | 240 |
| 2-Butanone | | ~ND ND | 600-600 |
| 1,1,1-Trichloroethane | | ND | . 600 |
| Carbon Tetrachloride | | ND | 240 |
| Bromodichloromethane | | ND | 120 |
| 1,2-Dichloropropane | | ND. | 120 |
| cis-1,3-Dichloropropene | | ND | 600 |
| Trichloroethene | | ND | 120 |
| Dibromochloromethane | | ND | 600 |
| 1,1,2-Trichloroethane | | ND | 360 |
| Benzene | | 3400 | 120 |
| trans-1,3-Dichloropropene | | ND | 600 |
| Bromoform | | ND J | 480 |
| 4-Methyl-2-Pentanone | | ND | 600 |
| 2-Hexanone | | ND T | 600 |
| Tetrachloroethene | | ND | 120 |
| 1,1,2,2-Tetrachloroethane | | ИD | 120 |
| Toluene | | 5600 | 600 |
| Chlorobenzene | | ND J | 600 |
| Ethylbenzene | | 580 | 480 |
| Styrene | | 1300 5. | 600 |
| Xylene (Total) | | 7700 ゴ | 600 |
| | | · | |

Client ID: SB-5-23-23.3

Site: NYSEG-Geneva

Lab Sample No: 694679

Lab Job No: K434

Date Sampled: 12/14/05 Date Received: 12/14/05 Date Analyzed: 12/21/05

GC Column: DB624

Parameter

Instrument ID: VOAMS4.i Lab File ID: d50976.d

Matrix: SOIL Level: HIGH

Sample Weight: 5.1 g
Methanol Ext. Volume: 10.0 ml
Ext. Dilution Factor: 50.0

% Moisture: 19

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Results Units: ug/kg

(Dry Weight)

Quantitation Limit

Units: ug/kg

MTBE

600

Client ID: SB-10A-9.2-10.7

Site: NYSEG-Geneva

Lab Sample No: 694680

Lab Job No: K434

Date Sampled: 12/14/05 Date Received: 12/14/05 Date Analyzed: 12/22/05 GC Column: DB624 Instrument ID: VOAMS9.i Lab File ID: k51262.d

Matrix: SOIL Level: LOW

Sample Weight: 5.2 g Purge Volume: 5.0 ml

% Moisture: 15

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: uq/kq</u> |
|---------------------------|--|--|
| Chloromethane | ND | 5.6 |
| Bromomethane | ND J | 5.6 |
| Vinyl Chloride | ND | 5.6 |
| Chloroethane | ND | 5.6 |
| Methylene Chloride | ND 3 | 3.4 |
| Acetone | 39 J | 5.6 |
| Carbon Disulfide | ND 3 | 5.6 |
| 1,1-Dichloroethene | ND T | 2.2 |
| 1-Dichloroethane | ND | 5.6 |
| rans-1,2-Dichloroethene | ND J | 5.6 |
| cis-1,2-Dichloroethene | ND | 5.6 |
| Chloroform | ND | 5.6 |
| 1,2-Dichloroethane | ND | 2.2 |
| 2-Butanone | ND | 5.6 |
| 1,1,1-Trichloroethane | ND | 5.6 |
| Carbon Tetrachloride | ND | 2.2 |
| Bromodichloromethane | ND | 1.1 |
| 1,2-Dichloropropane | ND | 1.1 |
| cis-1,3-Dichloropropene | ND | 5.6 |
| Trichloroethene | ND | 1.1 |
| Dibromochloromethane | ND 5 | 5 .6 . |
| 1,1,2-Trichloroethane | ${f n}{f D}$ | 3.4 |
| Benzene | 1.5 | 1.1 |
| trans-1,3-Dichloropropene | ND | 5.6 |
| Bromoform | ND J | 4.5 |
| 4-Methyl-2-Pentanone | ND | 5.6 |
| 2-Hexanone | ND J | 5.6 |
| Tetrachloroethene | ND | 1.1 |
| 1,1,2,2-Tetrachloroethane | ND | 1.1 |
| Toluene | 2.4J | 5.6 |
| Chlorobenzene | ND | 5.6 |
| Ethylbenzene | ND | . 4.5 |
| Styrene | ND J. | 5.6 |
| Xylene (Total) | 1.8J | 5.6 |

Client ID: SB-10A-9.2-10.7

Site: NYSEG-Geneva

Lab Sample No: 694680

Lab Job No: K434

Date Sampled: 12/14/05 Date Received: 12/14/05

Date Analyzed: 12/22/05

GC Column: DB624

Parameter

MTBE

Instrument ID: VOAMS9.i
Lab File ID: k51262.d

Matrix: SOIL Level: LOW

Sample Weight: 5.2 g Purge Volume: 5.0 ml

% Moisture: 15

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Results Units: ug/kg

(Dry Weight)

Quantitation Limit Units: ug/kq

ND

5.6

48

Client ID: Dup-2 Site: NYSEG-Geneva

Lab Sample No: 694681

Lab Job No: K434

Date Sampled: 12/13/05 Date Received: 12/14/05 Date Analyzed: 12/20/05

Matrix: SOIL

GC Column: DB624

Level: LOW Sample Weight: 5.2 g Purge Volume: 5.0 ml

Instrument ID: VOAMS9.i Lab File ID: k51221.d

% Moisture: 19

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---------------------------|--|--|
| Chloromethane | ND | 5.9 |
| Bromomethane | ND J | 5.9 |
| Vinyl Chloride | ND | 5.9 |
| Chloroethane | ND | 5.9 |
| Methylene Chloride | ND J | 3.6 |
| Acetone | ND | 5.9 |
| Carbon Disulfide | ND | 5.9 |
| 1,1-Dichloroethene | ND Z | 2.4 |
| 1,1-Dichloroethane | ND | 5.9 |
| rans-1,2-Dichloroethene | ND | 5.9 |
| cis-1,2-Dichloroethene | ND | 5.9 |
| Chloroform | ND | 5.9 |
| 1,2-Dichloroethane | ND | 2 4 |
| 2-Butanone | —ND ND | _ 5.9 _5.9 |
| 1,1,1-Trichloroethane | ND | 5.9 |
| Carbon Tetrachloride | ND | 2.4 |
| Bromodichloromethane | ND | 1.2 |
| 1,2-Dichloropropane | ND | 1.2 |
| cis-1,3-Dichloropropene | ND | 5.9 |
| Trichloroethene | ND | 1.2 |
| Dibromochloromethane | ND | 5.9 |
| 1,1,2-Trichloroethane | ND | 3.6 |
| Benzene | 1.8 | 1.2 |
| trans-1,3-Dichloropropene | ND | 5.9 |
| Bromoform | ND J | 4.8 |
| 4-Methyl-2-Pentanone | ND | 5.9 |
| 2-Hexanone | ND T | 5.9 |
| Tetrachloroethene | ND | 1.2 |
| 1,1,2,2-Tetrachloroethane | ND | 1.2 |
| Toluene | 2.0J | 5.9 |
| Chlorobenzene | ND T | 5.9 |
| Ethylbenzene | ND | . 4.8 |
| Styrene | ND 3 | 5.9 |
| Xylene (Total) | ND J | 5.9 |
| | · · · · · · · · · · · · · · · · · · · | |

Client ID: Dup-2 Site: NYSEG-Geneva

Lab Sample No: 694681 Lab Job No: K434

Date Sampled: 12/13/05 Date Received: 12/14/05 Date Analyzed: 12/20/05

Matrix: SOIL Level: LOW

GC Column: DB624 Instrument ID: VOAMS9.i Sample Weight: 5.2 g Purge Volume: 5.0 ml

Lab File ID: k51221.d

% Moisture: 19

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Analytical Results
Units: ug/kg
(Dry Weight)

Quantitation Limit <u>Units: ug/kq</u>

<u>Parameter</u>

ND

5.9

MTBE

Client ID: SB-2-8-10 Site: NYSEG-Geneva

Lab Sample No: 694675 Lab Job No: K434

Date Sampled: 12/13/05 Date Received: 12/14/05 Date Extracted: 12/27/05 Date Analyzed: 12/28/05

Matrix: SOIL Level: LOW

GC Column: DB-5

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Instrument ID: BNAMS3.i Lab File ID: t23625.d

Dilution Factor: 1.0

% Moisture: 17

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|-----------------------------|--|--|
| bis(2-Chloroethyl)ether | ND 1 | 40 |
| 1,3-Dichlorobenzene | ND | 400 |
| 1,4-Dichlorobenzene | ND | 400 |
| 1,2-Dichlorobenzene | ND | 400 |
| bis(2-chloroisopropyl)ether | ND | 400 |
| N-Nitroso-di-n-propylamine | ND | 40 |
| Hexachloroethane | ND | 40 |
| Nitrobenzene | ND 3 | 40 |
| Isophorone | ND | 400 |
| bis(2-Chloroethoxy)methane | ND | 400 |
| 1,2,4-Trichlorobenzene | ND | 40 |
| Naphthalene | ND | 400 |
| 4-Chloroaniline | ND | 400 |
| Hexachlorobutadiene | ND | 80 |
| 2-Methylnaphthalene | ND | 400 |
| Hexachlorocyclopentadiene | ND | 400 |
| 2-Chloronaphthalene | ND | 400 |
| 2-Nitroaniline | ND | 800 |
| Dimethylphthalate | ND | 400 |
| Acenaphthylene | ND | 400 |
| 2,6-Dinitrotoluene | ND | . 80 |
| 3-Nitroaniline | ND | 800 |
| Acenaphthene | ND | 400 |
| Dibenzofuran | ND | 400 |
| 2,4-Dinitrotoluene | ND | 80 |
| Diethylphthalate | ND | 400 |
| 4-Chlorophenyl-phenylether | ND | 400 |
| Fluorene | ND | 400 |
| 4-Nitroaniline | ND | 800 |
| N-Nitrosodiphenylamine | ND J | 400 |
| 4-Bromophenyl-phenylether | ND | 400 |
| Hexachlorobenzene | ND | 40 |
| Phenanthrene | ND | 400 |
| Anthracene | ND J | 400 |

Client ID: SB-2-8-10 Site: NYSEG-Geneva

Lab Sample No: 694675 Lab Job No: K434

Date Sampled: 12/13/05 Date Received: 12/14/05 Date Extracted: 12/27/05 Date Analyzed: 12/28/05

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

GC Column: DB-5 Instrument ID: BNAMS3.i

Extract Final Volume: 1.0 ml

Lab File ID: t23625.d

Dilution Factor: 1.0

% Moisture: 17

| <u>Parameter</u> | Unita | cal Results s: ug/kg <u>Weight)</u> | Quantitation Limit Units: ug/kg |
|---|-------|---|--|
| Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene | | ND N | 400 400 400 400 400 800 400 400 400 400 |

Client ID: SB-9-6-6.8 Site: NYSEG-Geneva

Lab Sample No: 694676 Lab Job No: K434

Date Sampled: 12/13/05 Date Received: 12/14/05 Date Extracted: 12/27/05 Date Analyzed: 12/28/05

Matrix: SOIL Level: LOW

GC Column: DB-5 Instrument ID: BNAMS3.i

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

Lab File ID: t23635.d

% Moisture: 17

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|-----------------------------|--|--|
| bis(2-Chloroethyl)ether | ND J | 40 |
| 1,3-Dichlorobenzene | ND 3 | 400 |
| 1,4-Dichlorobenzene | ND | 400 |
| 1,2-Dichlorobenzene | ND | 400 |
| bis(2-chloroisopropyl)ether | ND | |
| N-Nitroso-di-n-propylamine | ND | 400 |
| Hexachloroethane | | 40 |
| Nitrobenzene | ND | : 40 |
| Isophorone | ND J | 40 |
| bis(2-Chloroethoxy)methane | ND | 400 |
| 1,2,4-Trichlorobenzene | ND ND | 400 |
| Naphthalene | 470 | <u>.40</u> |
| 4-Chloroaniline | the contract of the contract o | 400 |
| Hexachlorobutadiene | ND ND | 400 |
| 2-Methylnaphthalene | | 80 |
| Hexachlorocyclopentadiene | • | 400 |
| 2-Chloronaphthalene | ND | 400 |
| 2-Nitroaniline | ND | 400 |
| Dimethylphthalate | ND | 800 |
| Acenaphthylene | ND | 400 |
| 2,6-Dinitrotoluene | 930 | 400 |
| 3-Nitroaniline | ND ND | 80 |
| Acenaphthene | 410 | 800 |
| Dibenzofuran | 460 | 400 |
| 2,4-Dinitrotoluene | ND | 400 |
| Diethylphthalate | ND | 80 |
| 4-Chlorophenyl-phenylether | ND | 400 |
| Fluorene | 1000 | |
| 4-Nitroaniline | ND | 400 |
| N-Nitrosodiphenylamine | ND Z | 800 400 |
| 4-Bromophenyl-phenylether | ND 3 | 400 |
| Hexachlorobenzene | , ND | 400 |
| Phenanthrene | 4600 | 400 |
| Anthracene | 1900 J | 400 |
| | #700 A | 700 |

Client ID: SB-9-6-6.8 Site: NYSEG-Geneva

Date Sampled: 12/13/05 Date Received: 12/14/05 Date Extracted: 12/27/05 Date Analyzed: 12/28/05

GC Column: DB-5 Instrument ID: BNAMS3.i Lab File ID: t23635.d

Lab Sample No: 694676 Lab Job No: K434

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

% Moisture: 17

| Parameter | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kq</u> |
|--|--|--|
| Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a) anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene | 540 ND J 7200 J 6700 ND ND J 5200 4700 ND ND J 4000 3700 J 4900 2100 760 1700 J | 400 400 400 400 800 40 400 400 400 400 4 |
| | · | the state of the s |

Client ID: SB-5-16-16.8 Site: NYSEG-Geneva

Lab Sample No: 694677 Lab Job No: K434

Date Sampled: 12/14/05 Date Received: 12/14/05 Date Extracted: 12/27/05 Date Analyzed: 12/28/05

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 20.0

GC Column: DB-5 Instrument ID: BNAMS3.i

% Moisture: 19

Lab File ID: t23632.d

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|-----------------------------|--|--|
| bis(2-Chloroethyl)ether | ND J | 820 |
| 1,3-Dichlorobenzene | ND | [^] 8200 |
| 1,4-Dichlorobenzene | ND | 8200 |
| 1,2-Dichlorobenzene | ND | 8200 |
| bis(2-chloroisopropyl)ether | ND | 8200 |
| N-Nitroso-di-n-propylamine | ND | 820 |
| Hexachloroethane | ND | 820 |
| Nitrobenzene | ND 3 | 820 |
| #Isophorone | ND | 8200 |
| bis(2-Chloroethoxy)methane | ND | 8200 |
| 1,2,4-Trichlorobenzene | ND | 820 |
| Naphthalene | 100000 | 8200 |
| 4-Chloroaniline | ND | 8200 |
| Hexachlorobutadiene | ND | 1600 |
| 2-Methylnaphthalene | 53000 | 8200 |
| Hexachlorocyclopentadiene | , ND | 8200 |
| 2-Chloronaphthalene | ND | 8200 |
| 2-Nitroaniline | ND | 16000 |
| Dimethylphthalate | ND | 8200 |
| Acenaphthylene | 26000 | 8200 |
| 2,6-Dinitrotoluene | ND | 1600 |
| 3-Nitroaniline | ND | 16000 |
| Acenaphthene | 4500 J (| 8200 |
| Dibenzofuran | 16000 | 8200 |
| 2,4-Dinitrotoluene | ND | 1600 |
| Diethylphthalate | ND | 8200 |
| 4-Chlorophenyl-phenylether | ND | 8200 |
| Fluorene | 28000 | 8200 |
| 4-Nitroaniline | ND | 16000 |
| N-Nitrosodiphenylamine | ND J | 8200 |
| 4-Bromophenyl-phenylether | ND | 8200 |
| Hexachlorobenzene | ND · | 820 |
| Phenanthrene | 51000 | 8200 |
| Anthracene | 24000 ブ | 8200 |

Client ID: SB-5-16-16.8 Site: NYSEG-Geneva

Lab Sample No: 694677 Lab Job No: K434

Date Sampled: 12/14/05 Date Received: 12/14/05 Date Extracted: 12/27/05 Date Analyzed: 12/28/05

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

GC Column: DB-5

Extract Final Volume: 1.0 ml

Instrument ID: BNAMS3.i Lab File ID: t23632.d Dilution Factor: 20.0

% Moisture: 19

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---|--|---|
| Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a) anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b) fluoranthene Benzo(k) fluoranthene | 5200 J ND 3 25000 J 20000 ND ND ND 15000 12000 ND ND ND 4900 8800 T | 8200 8200 8200 8200 8200 16000 8200 8200 8200 8200 8200 8200 |
| Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene | 9000 3500 1300 3200 J | 820 820 820 8200 |

Client ID: SB-5-17.8-19.4

Site: NYSEG-Geneva

Lab Sample No: 694678

Lab Job No: K434

Date Sampled: 12/14/05
Date Received: 12/14/05
Date Extracted: 12/27/05

Date Analyzed: 12/28/05 GC Column: DB-5 Instrument ID: BNAMS3.i

Lab File ID: t23633.d

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

% Moisture: 18

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|--|--|--|
| bis(2-Chloroethyl)ether 1,3-Dichlorobenzene | ND J | 40 |
| 1,4-Dichlorobenzene | ND | 400 |
| 1,2-Dichlorobenzene | ND | 400 |
| bis(2-chloroisopropyl)ether | ND | 400 |
| N-Nitroso-di-n-propylamine | ND | 400 |
| Hexachloroethane | ND | 40 |
| Nitrobenzene | ND | 40 |
|) Isophorone | ND J | 40 |
| bis(2-Chloroethoxy)methane | ND | 400 |
| 1,2,4-Trichlorobenzene | ND | 400 |
| Naphthalene | ND | 40 |
| 4-Chloroaniline | 4900 | 400 |
| Hexachlorobutadiene | ND | 400 |
| 2-Methylnaphthalene | ND | 81 |
| Hexachlorocyclopentadiene | 2200 . | 400 |
| 2-Chloronaphthalene | ND | 400 |
| 2-Nitroaniline | ND | 400 |
| Dimethylphthalate | ND | 810 |
| Acenaphthylene | ND | 400 |
| 2,6-Dinitrotoluene | 1300 ND | 400 |
| 3-Nitroaniline | ND | 81 810 |
| Acenaphthene | 320 J | 400 |
| Dibenzofuran | 1000 | 400 |
| 2,4-Dinitrotoluene | ND | 81 |
| Diethylphthalate | ND | 400 |
| 4-Chlorophenyl-phenylether | ND | 400 |
| Fluorene | 1600 | 400 |
| 4-Nitroaniline | ND | 810 |
| N-Nitrosodiphenylamine | ND J | 400 |
| 4-Bromophenyl-phenylether | ND | 400 |
| Hexachlorobenzene | ND - | 40 |
| Phenanthrene | 4600 | 400 |
| Anthracene | | |
| | 2100 5 | 400 |

Client ID: SB-5-17.8-19.4

Site: NYSEG-Geneva

Lab Sample No: 694678 Lab Job No: K434

Date Sampled: 12/14/05 Date Received: 12/14/05

Date Extracted: 12/27/05 Date Analyzed: 12/28/05

GC Column: DB-5 Instrument ID: BNAMS3.i Lab File ID: t23633.d

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

% Moisture: 18

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---|--|--|
| Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)fluoranthene | 430 ND 3 4700 3 3900 ND ND 3 2800 2300 ND 3 ND 3 ND 3 | 400 400 400 400 400 810 40 400 400 400 400 |
| Benzo(k) fluoranthene Benzo(a) pyrene Indeno(1,2,3-cd) pyrene Dibenz(a,h) anthracene Benzo(g,h,i) perylene | 2100 J 2300 1200 400 1100 J | 40 40 40 40 40 |

Client ID: SB-5-23-23.3 Site: NYSEG-Geneva

Lab Sample No: 694679 Lab Job No: K434

Date Sampled: 12/14/05 Date Received: 12/14/05
Date Extracted: 12/27/05
Date Analyzed: 12/29/05
GC Column: DB-5
Instrument ID: BNAMS3.i

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

Extract Final Volume: 5.0 ml

Lab File ID: t23652.d

Dilution Factor: 50.0

% Moisture: 19

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---|---|--|
| bis(2-Chloroethyl)ether 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene bis(2-chloroisopropyl)ether N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone bis(2-Chloroethoxy)methane 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorobutadiene 2-Methylnaphthalene Hexachlorocyclopentadiene 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene 3-Nitroaniline Acenaphthene Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline N-Nitrosodiphenylamine 4-Bromophenyl-phenylether Hexachlorobenzene | ND T ND ND ND ND ND ND ND ND ND 120000 ND | 10000 100000 |
| Phenanthrene Anthracene | 2100000 1100000 | 10000 100000 100000 |

Client ID: SB-5-23-23.3

Site: NYSEG-Geneva

Lab Sample No: 694679

Lab Job No: K434

Date Sampled: 12/14/05 Date Received: 12/14/05 Date Extracted: 12/27/05 Date Analyzed: 12/29/05

GC Column: DB-5

Instrument ID: BNAMS3.i Lab File ID: t23652.d

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

Extract Final Volume: 5.0 ml

Dilution Factor: 50.0

% Moisture: 19

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | | Quantitation Limit <u>Units: ug/kg</u> |
|----------------------------|--|---|--|
| Carbazole | 44000 J | | 100000 |
| Di-n-butylphthalate | ND J | | 100000 |
| Fluoranthene | 1100000 5 | | 100000 |
| Pyrene | 870000 | | 100000 |
| Butylbenzylphthalate | ND | | 100000 |
| 3,3'-Dichlorobenzidine | ND J | | 200000 |
| Benzo(a) anthracene | 710000 | | 10000 |
| Chrysene | 580000 | | 100000 |
| bis(2-Ethylhexyl)phthalate | ND J | • | 100000 |
| Di-n-octylphthalate | ND | | 100000 |
| Benzo(b)fluoranthene | 240000 | | 10000 |
| Benzo(k)fluoranthene | 420000 | | 10000 |
| Benzo(a)pyrene | 400000 | | 10000 |
| Indeno(1,2,3-cd)pyrene | 100000 | | 10000 |
| Dibenz(a,h) anthracene | 46000 | | 10000 |
| Benzo(g,h,i)perylene | L 00088 | | 100000 |

Client ID: SB-10A-9.2-10.7

Site: NYSEG-Geneva

Lab Sample No: 694680 Lab Job No: K434

Date Sampled: 12/14/05 Date Received: 12/14/05 Date Extracted: 12/14/05
Date Extracted: 12/27/05
Date Analyzed: 12/28/05
GC Column: DB-5
Instrument ID: BNAMS3.i

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

Lab File ID: t23629.d

Extract Final Volume: 1.0 ml Dilution Factor: 1.0

% Moisture: 15

| Parameter | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|-----------------------------|--|--|
| bis(2-Chloroethyl)ether | ND J | 39 |
| 1,3-Dichlorobenzene | ND | 390 |
| 1,4-Dichlorobenzene | ND | 390 |
| 1,2-Dichlorobenzene | ND | 390 |
| bis(2-chloroisopropyl)ether | ND | 390 |
| N-Nitroso-di-n-propylamine | ND | 39 |
| Hexachloroethane | ND | 39 |
| Nitrobenzene | ND J | 39 |
|) Isophorone | ND | 390 |
| bis(2-Chloroethoxy)methane | ND | 390 |
| 1,2,4-Trichlorobenzene | ND | 39 |
| Naphthalene | ND | 390 |
| 4-Chloroaniline | ND | 390 |
| Hexachlorobutadiene | ND | 78 |
| 2-Methylnaphthalene | 20 ັ ປ | 390 |
| Hexachlorocyclopentadiene | ND | 390 |
| 2-Chloronaphthalene | ND | 390 |
| 2-Nitroaniline | ND | 780 |
| Dimethylphthalate | ND | 390 |
| Acenaphthylene | 25 J | 390 |
| 2,6-Dinitrotoluene | ND | 78 |
| 3-Nitroaniline | ND | 780 |
| Acenaphthene | 43 J | 390 |
| Dibenzofuran | 16 J | 390 |
| 2,4-Dinitrotoluene | ND | 78 |
| Diethylphthalate | ND | 390 |
| 4-Chlorophenyl-phenylether | ND | 390 |
| Fluorene | 59 J | 390 |
| 4-Nitroaniline | ND | 780 |
| N-Nitrosodiphenylamine | ND J | 390 |
| 4-Bromophenyl-phenylether | ND | 390 |
| Hexachlorobenzene | , ND . | 39 |
| Phenanthrene | 83 J | 390 |
| Anthracene | 43 J | 390 |

Client ID: SB-10A-9.2-10.7

Site: NYSEG-Geneva

Lab Sample No: 694680 Lab Job No: K434

Date Sampled: 12/14/05 Date Received: 12/14/05 Date Extracted: 12/27/05 Date Analyzed: 12/28/05

GC Column: DB-5 Instrument ID: BNAMS3.i Lab File ID: t23629.d

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

% Moisture: 15

| Carbazole ND 390 Di-n-butylphthalate ND 390 Fluoranthene 60 J 390 Pyrene 46 J 390 Butylbenzylphthalate ND 390 | <u>ameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---|---|---|--|
| 3,3'-Dichlorobenzidine Benzo(a) anthracene 31 J 39 Chrysene 25 J 390 Dis(2-Ethylhexyl) phthalate Di-n-octylphthalate Benzo(b) fluoranthene Benzo(b) fluoranthene Benzo(k) fluoranthene Benzo(a) pyrene Indeno(1,2,3-cd) pyrene Dibenz(a,h) anthracene Benzo(g,h,i) perylene ND 39 Benzo(g,h,i) perylene | n-butylphthalate oranthene ene ylbenzylphthalate '-Dichlorobenzidine zo(a) anthracene ysene (2-Ethylhexyl) phthalate n-octylphthalate zo(b) fluoranthene zo(k) fluoranthene zo(a) pyrene eno(1,2,3-cd) pyrene enz(a,h) anthracene | ND 7 60 J 46 J ND ND 7 31 J 25 J ND 7 ND 9.6J 16 J 19 J ND ND | 390 390 390 390 780 390 390 390 39 39 |

Client ID: Dup-2 Site: NYSEG-Geneva

Lab Sample No: 694681 Lab Job No: K434

Date Sampled: 12/13/05 Date Received: 12/14/05 Date Extracted: 12/27/05 Date Analyzed: 12/28/05

Matrix: SOIL Level: LOW

GC Column: DB-5

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Instrument ID: BNAMS3.i

Dilution Factor: 1.0

Lab File ID: t23628.d

% Moisture: 19

SEMI-VOLATILE ORGANICS - GC/MS METHOD 8270C

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---------------------------------------|--|--|
| bis(2-Chloroethyl)ether | ND 5 | 41 |
| 1,3-Dichlorobenzene | ND | 410 |
| 1,4-Dichlorobenzene | ND | 410 |
| 1,2-Dichlorobenzene | ND | 410 |
| bis(2-chloroisopropyl)ether | ND | 410 |
| N-Nitroso-di-n-propylamine | ND | 41 |
| Hexachloroethane | ND | 41 |
| Nitrobenzene | ND J | 41 |
| 1 Isophorone | ND | 410 |
| bis(2-Chloroethoxy)methane | ND | 410 |
| 1,2,4-Trichlorobenzene | ND | 41 |
| Naphthalene | ND | 410 |
| 4-Chloroaniline | ND | 410 |
| Hexachlorobutadiene | ND | 8,3 |
| 2-Methylnaphthalene | ND | 410 |
| Hexachlorocyclopentadiene | ND | 410 |
| 2-Chloronaphthalene 2-Nitroaniline | ND | 410 |
| Dimethylphthalate | ND | 830 |
| Acenaphthylene | ND | 410 |
| 2,6-Dinitrotoluene | ND | 410 |
| 3-Nitroaniline | ND | 83 |
| Acenaphthene | ND | 830 |
| Dibenzofuran | ND | 410 |
| 2,4-Dinitrotoluene | ND | 410 |
| Diethylphthalate | ND | 83 |
| 4-Chlorophenyl-phenylether | ND | 410 |
| Fluorene | ND | 410 |
| 4-Nitroaniline | ND ND | 410 |
| N-Nitrosodiphenylamine | ND T | 830 |
| 4-Bromophenyl-phenylether | ND 3 | 410 |
| Hexachlorobenzene | , ND . | ` 410 |
| Phenanthrene | ND ND | 41 |
| Anthracene | 3 4424 | 410 |
| | ND J | 410 |

Client ID: Dup-2 Site: NYSEG-Geneva

Lab Sample No: 694681 Lab Job No: K434

Date Sampled: 12/13/05 Date Received: 12/14/05 Date Extracted: 12/27/05 Date Analyzed: 12/28/05

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

GC Column: DB-5 Instrument ID: BNAMS3.i

Extract Final Volume: 1.0 ml

Lab File ID: t23628.d

Dilution Factor: 1.0 % Moisture: 19

SEMI-VOLATILE ORGANICS - GC/MS METHOD 8270C

| | <u>/kg</u> |
|--|------------|
| Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate Benzo(a) anthracene Chrysene Chrysene Di-n-octylphthalate Benzo(b) fluoranthene Benzo(b) fluoranthene Benzo(a) pyrene Indeno(1,2,3-cd) pyrene Dibenz(a,h) anthracene Benzo(g,h,i) perylene ND 410 410 410 410 410 410 410 41 | |

Site: NYSEG-Geneva

Matrix: SOIL

Lab Job No: K434

QA Batch: 1947

Total Cyanide

| STL Edis | | Date Sampled | <u>Date</u> Extracted | <u>Date</u> Analyzed | Percent Moisture | Dilution Factor | Analytical Result |
|----------|-----------------|-----------------|--------------------------|-------------------------|---------------------|--------------------|----------------------|
| | | | | | | | Units: mg/kg |
| | | | | | | • | |
| • | | • | | | | | |
| 694675 | SB-2-8-10 | 12/13/05 | 12/20/05 | 12/21/05 | 16.6 | 1.0 | 1.6 |
| 694676 | SB-9-6-6.8 | 12/13/05 | 12/20/05 | 12/21/05 | 17.2 | 1.0 | 15.3 |
| 694677 | SB-5-16-16.8 | 12/14/05 | 12/20/05 | 12/21/05 | 19.2 | 1.0 | 15.2 |
| 694678 | SB-5-17.8-19.4 | 12/14/05 | 12/20/05 | 12/21/05 | 17.5 | 1.0 | 1.2 |
| 694679 | SB-5-23-23.3 | 12/14/05 | 12/20/05 | 12/21/05 | 18.9 | 1.0 | ND |
| 694680 | SB-10A-9.2-10.7 | 12/14/05 | 12/20/05 | 12/21/05 | 14.8 | 1.0 | ND |
| 694681 | Dup-2 | 12/13/05 | 12/20/05 | 12/21/05 | 19.4 | 1.0 | 0.96 |

Quantitation Limit for Total Cyanide is 0.5 mg/kg.

SAMPLE PREPARATION AND ANALYSIS SUMMARY VOLATILE (VOA) ANALYSES

| Laboratory Sample ID | Matrix | Date Collected | Date Rec'd at Lab | Date Extracted | Date Analyzed |
|-------------------------|--------|-------------------|----------------------|-------------------|------------------|
| 694675 | SOLID | 12/13/05 | 12/14/05 | | 12/20/05 |
| 694675MS | SOLID | 12/13/05 | 12/14/05 | | 12/21/05 |
| 694675SD | SOLID | 12/13/05 | 12/14/05 | | 12/21/05 |
| 694676 | SOLID | 12/13/05 | 12/14/05 | * | 12/20/05 |
| 694677 | SOLID | 12/14/05 | 12/14/05 | | 12/21/05 |
| 694678 | SOLID | 12/14/05 | 12/14/05 | | 12/22/05 |
| 694678MS | SOLID | 12/14/05 | 12/14/05 | | 12/21/05 |
| 694678SD | SOLID | 12/14/05 | 12/14/05 | | 12/21/05 |
| 694679 | SOLID | 12/14/05 | 12/14/05 | | 12/21/05 |
| 694680 | SOLID | 12/14/05 | 12/14/05 | | 12/22/05 |
| 694681 | SOLID | 12/13/05 | 12/14/05 | | 12/20/05 |

SAMPLE PREPARATION AND ANALYSIS SUMMARY SEMIVOLATILE (BNA) ANALYSES

| Laboratory Sample ID | Matrix | Date Collected | Date Rec'd at Lab | Date Extracted | Date Analyzed |
|-------------------------|--------|-------------------|----------------------|-------------------|------------------|
| 694675 | SOLID | 12/13/05 | 12/14/05 | 12/27/05 | 12/28/05 |
| 694675MS | SOLID | 12/13/05 | 12/14/05 | 12/27/05 | 12/28/05 |
| 694675SD | SOLID | 12/13/05 | 12/14/05 | 12/27/05 | 12/28/05 |
| 694676 | SOLID | 12/13/05 | 12/14/05 | 12/27/05 | 12/28/05 |
| 694677 | SOLID | 12/14/05 | 12/14/05 | 12/27/05 | 12/28/05 |
| 694678 | SOLID | 12/14/05 | 12/14/05 | 12/27/05 | 12/28/05 |
| 694679 | SOLID | 12/14/05 | 12/14/05 | 12/27/05 | 12/29/05 |
| 694680 | SOLID | 12/14/05 | 12/14/05 | 12/27/05 | 12/28/05 |
| 694681 | SOLID | 12/13/05 | 12/14/05 | 12/27/05 | 12/28/05 |

SAMPLE PREPARATION AND ANALYSIS SUMMARY SEMIVOLATILE (BNA) ANALYSES

| Laboratory Sample ID | Matrix | Analytical · Protocol | Extraction Method | Auxiliary Cleanup | Dil/Conc Factor |
|-------------------------|--------|----------------------------------|----------------------|---------------------------------------|--------------------|
| 694675 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | · | 1.00 |
| 694675MS | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 694675SD | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | · · · · · · · · · · · · · · · · · · · | 1.00 |
| 694676 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 694677 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 20.00 |
| 694678 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 694679 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | , | 50.00 |
| 694680 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 694681 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | · | 1.00 |

SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSES

| Laboratory Sample ID | Matrix | Parameters | Date Rec'd at Lab | Date Analyzed |
|-------------------------|--------|---------------|----------------------|------------------|
| 694675 | SOLID | % SOLIDS | 12/14/05 | 12/17/05 |
| 694675 | SOLID | TOTAL CYANIDE | 12/14/05 | 12/21/05 |
| 694676 | SOLID | % SOLIDS | 12/14/05 | 12/17/05 |
| 694676 | SOLID | TOTAL CYANIDE | 12/14/05 | 12/21/05 |
| 694677 | SOLID | % SOLIDS | 12/14/05 | 12/17/05 |
| 694677 | SOLID | TOTAL CYANIDE | 12/14/05 | 12/21/05 |
| 694678 | SOLID | % SOLIDS | 12/14/05 | 12/17/05 |
| 694678 | SOLID | TOTAL CYANIDE | 12/14/05 | 12/21/05 |
| 694679 | SOLID | % SOLIDS | 12/14/05 | 12/17/05 |
| 694679 | SOLID | TOTAL CYANIDE | 12/14/05 | 12/21/05 |
| 694680 | SOLID | % SOLIDS | 12/14/05 | 12/17/05 |
| 694680 | SOLID | TOTAL CYANIDE | 12/14/05 | 12/21/05 |
| 694681 | SOLID | % SOLIDS | 12/14/05 | 12/17/05 |
| 694681 | SOLID | TOTAL CYANIDE | 12/14/05 | 12/21/05 |



SDG NARRATIVE

STL EDISON

SDG No. K434

| STL Edison Sample | Client ID |
|-------------------|-------------------|
| 694675 | SB-2-8-10 |
| 694675MS | SB-2-8-10MS |
| 694675SD | SB-2-8-10MSD |
| 694676 | SB-9-6-6.8 |
| 694677 | SB-5-16-16.8 |
| 694678 | SB-5-17.8-19.4 |
| 694678MS | SB-5-17.8-19.4MS |
| 694678SD | SB-5-17.8-19.4MSD |
| 694679 | SB-5-23-23.3 |
| 694680 | SB-10A-9.2-10.7 |
| 694681 | Dup-2 |

Sample Receipt:

Sample delivery conforms with requirements.

Volatile Organic Analysis (GC/MS):

All data conforms with method requirements.

Base/Neutral and/or Acid Extractable Organics (GC/MS):

Sample # 694679: Surrogate standard recoveries are diluted out.

t Chemistry \ Microbiology:

All data conforms with method requirements.

I certify that this data package is in compliance with the protocols in NYSDEC ASP B both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this package has been authorized by the Laboratory Manager or his designee

Michael J.Urban

Michael J. Ubas

Laboratory Manager

DATA USABILITY SUMMARY REPORT NYSEG

WADSWORTH ST. GENEVA

SDG #K008

VOLATILE, SEMIVOLATILE AND MISCELLANEOUS ANALYSES

Analyses performed by:

Severn Trent Laboratories Buffalo, New York

Review performed by:



Blasland, Bouck & Lee, Inc. Syracuse, New York

REPORT #5492

Summary

The following is an assessment of the data package for sample delivery group (SDG) # K008 for sampling from the NYSEG Wadsworth St. Geneva Site. Included with this assessment are the data review check sheets used in the review of the package and corrected sample results. Analyses were performed on the following samples:

| Sample ID | Lab ID | Matrix | Sample | Analysis | | | _ | |
|---|--------|--------|-----------|----------|------|-------------|-----|------|
| | | | Date | voc | svoc | PCB | MET | MISC |
| SB-4-10-12 | 692410 | Soil | 12/5/2005 | Х | Х | · | | Х |
| SB-4-18-20 | 692411 | Soil | 12/5/2005 | Х | Х | | | Х |
| SB-8-6-8 | 692412 | Soil | 12/5/2005 | Х | Х | | | Х |
| SB-8-14-16 | 692413 | Soil | 12/5/2005 | Х | Х | | | Х |
| SB-3-10.0-11.8 | 692414 | Soil | 12/6/2005 | Х | Х | | | Х |
| SB-1-4.0-6.5 | 692415 | Soil | 12/6/2005 | Х | Х | | | Х |
| | | | | | | | | |
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^{1.} The matrix spike/matrix (MS/MSD) spike duplicate performed on sample locations SB-4-18-20 and SB-3-10.0-11.8.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 Method 8260 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- E The compound was quantitated above the calibration range.
- D Concentration is based on a diluted sample analysis.
- C Identification confirmed by gas chromatograph/mass spectrometer (GC/MS).
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

| Method | Matrix | Holding Time | Preservation |
|-------------|--------|---|--|
| | Water | 14 days from collection to analysis | Cooled @ 4 °C; preserved to a pH of less than 2. |
| SW-846 8260 | Soil | 48 hours from collection to extraction and 14 days from extraction to analysis | Cooled @ 4 °C. |

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method, trip, and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure contamination of samples during shipment. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results associated with the following sample locations were qualified.

| Compounds | Sample Locations | Sample Result | Qualification |
|--------------------|--|--|------------------------------------|
| Methylene Chloride | SB-4-10-12 SB-8-6-8 SB-3-10.0-11.8 SB-1-4.0-6.5 | QA blank sample results >MDL, Sample results <rl< td=""><td>No Action</td></rl<> | No Action |
| Acetone | SB-3-10.0-11.8 SB-1-4.0-6.5 | QA blank sample results >MDL, Sample results <rl< td=""><td>No Action</td></rl<> | No Action |
| | SB-4-10-12 SB-8-6-8 | Detected sample results >RL and <bal< td=""><td>U at detected sample concentration</td></bal<> | U at detected sample concentration |

RL = reporting limit

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable.

System performance and column resolution were acceptable.

4. Calibration

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

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

| Initial/Continuing | Sample Locations | Compound | Criteria |
|--------------------|----------------------------|---------------------------|----------|
| | | 1,1-Dichloroethane | 15.8% |
| | | 2-Hexanone | 29.9% |
| | | Bromoform | 16.3% |
| ICAL %RSD 12/11 | SB-4-18-20 | Chlorobenzene | 17.0% |
| 10/12 /01(0D 12/11 | SB-8-14-16 | Dibromochloromethane | 17.8% |
| | | Methylene Chloride | 19.2% |
| | | Styrene | 17.6% |
| | | Xylene (Total) | 17.6% |
| CCAL %D | SB-4-18-20 SB-8-14-16 | Chloromethane | 21.3% |
| ICAL %RSD 12/08 | SB-4-10-12 | 1,1,2,2-Tetrachloroethane | 23.8% |
| | SB-8-6-8 SB-3-10.0-11.8 | 1,1-Dichloroethene | 19.5% |
| | | 1,2-Dichloropropane | 19.1% |
| | SB-1-4.0-6.5 | 2-Butanone | 21.1% |
| | | 2-Hexanone | 20.6% |
| | | 4-methyl-2-pentanone | 16.1% |
| | | Acetone | 19.8% |
| | | Carbon Disulfide | 18.2% |
| | | MTBE | 18.7% |

| Initial/Continuing | Sample Locations | Compound | Criteria |
|--------------------|--------------------------------|---------------------------|----------|
| | | Trichloroethene | 19.8% |
| CCAL %D | SB-4-10-12 SB-8-6-8 | 1,1,2,2-Tetrachloroethane | -28.6% |
| CCAL %D | SB-3-10.0-11.8 SB-1-4.0-6.5 | 2-Hexanone | 20.6% |

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

| Initial/Continuing | Criteria | Sample Result | Qualification | |
|---------------------------|---------------------------|---------------|----------------------------------|--|
| | RRF <0.05 | Non-detect | R | |
| | KKF ~0.05 | Detect | R J R J No Action UJ J No Action | |
| Initial and Continuing | RRF <0.01 ¹ | Non-detect | R | |
| Calibration | KKF <0.01 | Detect | J | |
| | RRF >0.05 or | Non-detect | NI- A-4: | |
| | RRF >0.01 ¹ | Detect | No Action | |
| Initial Calibration | %RSD > 15% | Non-detect | ΟΊ | |
| Illidai Calibration | 70KSD > 1570 | Detect | J | |
| | %D >20% | Non-detect | No Action | |
| Continuing Calibration | (increase in sensitivity) | Detect | J | |
| | %D >20% | Non-detect | ΠΊ | |
| | (decrease in sensitivity) | Detect | J | |

^{1.} RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e. ketones, 1,4-Dioxane, etc.)

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

The internal standard responses and retention times were within acceptable limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis exhibited recoveries and RPD results within the control limits.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

All compounds associated with the LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Field duplicates were not performed within this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Volatile Organics Data Validation Checklist

| | YES | NO | NA |
|---|----------|-------------|----------|
| Data Completeness and Deliverables | | | |
| Have any missing deliverables been received and added to the data package? | | X | |
| Is there a narrative or cover letter present? | <u>X</u> | <u> </u> | |
| Are the sample numbers included in the narrative? | <u>X</u> | | |
| Are the sample chain-of-custodies present? | <u>X</u> | | |
| Do the chain-of-custodies indicate any problems with sample receipt or sample condition? | | X | |
| Holding Times | | | |
| Have any holding times been exceeded? | | X | |
| Surrogate Recovery | | | |
| Are surrogate recovery forms present? | <u>X</u> | | |
| Are all samples listed on the surrogate recovery form? | X | | |
| Was one or more surrogate recovery outside control limits for any sample or blank? | | X | |
| If yes, were the samples reanalyzed? | | | X |
| Are there any transcription/calculation errors between the raw data and the summary form? | | X | |
| Matrix Spikes | | | - |
| Is there a MS recovery form present? | X | | |
| Were matrix spikes analyzed at the required frequency? | <u>X</u> | | |
| How many spike recoveries were outside of QC limits? | | | |
| <u>0</u> out of <u>5</u> | | | |
| How many RPDs for MS/MSD were outside of QC limits? | | | |
| <u>0</u> out of <u>5</u> | | | |
| Blanks | | | |
| Is a method blank summary form present? | <u>X</u> | | |
| Has a method blank been analyzed for each day or for each 20 samples, whichever is more frequent? | X | | - |
| Has a blank been analyzed at least once every 12 hours for each system used? | X | | |
| Do any method/instrument blanks have positive results? | <u>X</u> | | |
| Do any trip/field/rinse blanks have positive results? | | <u></u> | <u>X</u> |

| | YES | NO | NA |
|--|----------|----|----------|
| Tuning and Mass Calibration | | | |
| Are the GC/MS tuning forms present for BFB? | X | | |
| Are the bar graph spectrum and mass/charge listing provided for each BFB? | X | | |
| Has a BFB been analyzed for each 12 hours of analysis per instrument? | X | | |
| Have the ion abundance criteria been met for each instrument used? | <u> </u> | | |
| Target Analytes | | | |
| Is an organics analysis data sheet present for each of the following: | | | |
| Samples | X | | - |
| Matrix spikes | X | | |
| Blanks | X | | |
| Are the reconstructed ion chromatograms present for each of the following: | | | |
| Samples | X | | |
| Matrix spikes | X | | |
| Blanks | X | | |
| Is the chromatographic performance acceptable? | X | | |
| Are the mass spectra of the identified compounds present? | X | | |
| Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum? | _ X | | <u> </u> |
| Do the samples and standard relative ion intensities agree within 20%? | X | | |
| Tentatively Identified Compounds | | | |
| Are all the TIC summary forms present? | | X | |
| Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present? | | | _x |
| Are any target compounds listed as TICs? | | | X |
| Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum? | | | X |
| Do the TIC and "best match" spectrum agree within 20%? | | | X |
| Quantitation and Detection Limits | | | |
| Are there any transcription/calculation errors in the Form 1 results? | | X | |
| Are the reporting limits adjusted to reflect sample dilutions and, for soils, | | | |
| sample moisture? | X | | |

| | YES | NO | NA |
|--|-----|----------|-------------|
| Standard Data | | | |
| Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards? | _X_ | | |
| Initial Calibration | | | |
| Are the initial calibration forms present for each instrument used? | _X | | |
| Are the response factor RSDs within acceptable limits? | | X | |
| Are the average RRFs ≥ minimum requirements? | X | | |
| Are there any transcription/calculation errors in reporting the RRFs or RSDs? | | X | |
| Continuing Calibration | | | |
| Are the continuing calibration forms present for each day and each instrument? | X | | |
| Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument? | X | | |
| All %D within acceptable limits? | | X | |
| Are all RF ≥ minimum requirements? | X | | |
| Are there any transcription/calculation errors in reporting of RF or %D? | | X | |
| Internal Standards | | | |
| Are internal standard areas of every sample within the upper and lower limits for each continuing calibration? | X | | |
| Are the retention times of the internal standards within 30 seconds of the associated calibration standard? | X | | |
| Field Duplicates | | _ | |
| Were field duplicates submitted with the samples? | | <u>X</u> | |

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) ANALYSES

Introduction

Analyses were performed according to (United Stated Environmental Protection Agency) USEPA SW-846 Method 8270 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
- JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
- E The compound was quantitated above the calibration range.
- D Concentration is based on a diluted sample analysis.
- C Identification confirmed by gas chromatograph/mass spectrometer (GC/MS).
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

| Method | Matrix | Holding Time | Preservation |
|-------------|--------|--|---------------|
| SW-846 8270 | Water | 7 days from collection to extraction and 40 days from extraction to analysis | Cooled @ 4 °C |
| | Soil | 14 days from collection to extraction and 40 days from extraction to analysis | Cooled @ 4 °C |

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed

No compounds were detected in the associated blanks.

3. Mass Spectrometer Tuning

System performance and column resolution were acceptable.

4. Calibration

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

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (15%) and RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less then the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

| Sample Locations | Initial/Continuing | Compound | Criteria |
|--------------------------------|--------------------|---------------------------|----------|
| SB-4-10-12 SB-4-18-20 | | Bis(2-Chloroethyl) ether | 17.3% |
| SB-8-6-8 SB-8-14-16 | ICV %RSD | Hexachlorocyclopentadiene | 51.9% |
| SB-3-10.0-11.8 SB-1-4.0-6.5 | | Nitrobenzene | 16.6% |

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

| Initial/Continuing | Criteria | Sample Result | Qualification | | |
|---------------------------|---------------------------|---------------|---------------------------|--|--|
| | RRF <0.05 | Non-detect | R | | |
| | KKF <0.05 | Detect | J | | |
| Initial and | RRF <0.01 ¹ | Non-detect | R | | |
| Continuing Calibration | KKF <0.01 | Detect | J No Action UJ J | | |
| | RRF >0.05 or | Non-detect | NI - A - Li | | |
| | RRF >0.01 ¹ | Detect | No Action | | |
| Initial Calibration | 0/ DCD > 450/ | Non-detect | UJ | | |
| Initial Calibration | %RSD > 15% | Detect | J | | |
| | %D >20% | Non-detect | No Action | | |
| Continuing Calibration | (increase in sensitivity) | Detect | J | | |
| | %D >20% | Non-detect | ΟĴ | | |
| | (decrease in sensitivity) | Detect | J | | |

^{1.} RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e. ketones, 1,4-Dioxane, etc.)

5. Surrogates / System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the SVOC to exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) the area counts of the associated continuing calibration standard.

All internal standard response and retention times were acceptable.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compounds concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited acceptable recoveries and RPD between the MS/MSD recoveries.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LSC analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

Sample locations associated with LCS analysis exhibiting recoveries outside of the control limits presented in the following table.

| Sample Locations | Compound | Recovery |
|--|-----------------|---------------------|
| SB-4-10-12 SB-4-18-20 SB-8-6-8 SB-8-14-16 SB-3-10.0-11.8 SB-1-4.0-6.5 | 4-Chloroaniline | <ll but="">10%</ll> |

The criteria used to evaluate the LCS recoveries are presented in the following table. In the case of an LCS deviation, the sample results are qualified as documented in the table below.

| Control Limit | Sample Result | Qualification | |
|---|------------------|---------------|--|
| > the upper control limit (UL) | Non-detect | No Action | |
| > the appeal control limit (OE) | Detect | J | |
| < the lower central limit (LL) but > 100/ | Non-detect | J | |
| < the lower control limit (LL) but > 10% | Detect | J | |
| < 10% | Non-detect | R | |
| ~ 1070 | Detect | J | |

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Field duplicates were not performed within this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Semivolatile Organics Data Validation Checklist

| | YES | NO | NA |
|--|----------|-------------|--------------------------|
| Data Completeness and Deliverables | | | |
| Have any missing deliverables been received and added to the data package? | | X | |
| Is there a narrative or cover letter present? | <u>X</u> | | |
| Are the sample numbers included in the narrative? | <u>X</u> | | |
| Are the sample chain-of-custodies present? | <u>X</u> | | |
| Do the chain-of-custodies indicate any problems with sample receipt or sample condition? | | X | <u></u> |
| Holding Times | | | |
| Have any holding times been exceeded? | | X | |
| Surrogate Recovery | | | |
| Are the surrogate recovery forms present? | <u>X</u> | | |
| Are all samples listed on the surrogate recovery form? | <u>X</u> | | |
| Were two or more base-neutral or acid surrogate recoveries outside control limits for any sample or blank? | | _X | |
| If yes, were the samples reanalyzed? | | | X |
| Are there any transcription/calculation errors between the raw data and the summary form? | | X | |
| Matrix Spikes | | | |
| Is there a MS recovery form present? | <u>X</u> | | |
| Were MS analyzed at the required frequency | <u>X</u> | | |
| How many spike recoveries were outside of QC limits? | | | |
| <u>0</u> out of <u>11</u> | | | |
| How many RPDs for MS/MSD were outside of QC limits? | | | |
| <u>0</u> out of <u>11</u> | | | |
| Blanks | | | |
| Is the method blank summary form present? | <u>X</u> | | |
| Has a method blank been analyzed for each set of samples or for each 20 samples, whichever is more frequent? | X | | ************************ |
| Has a blank been analyzed for each system used? | X | • | |
| Do any method blanks have positive results? | | <u>X</u> | |
| Are field/rinse blanks associated with every sample? | | | X |

| | YES | NO | NA |
|--|----------|----|----------|
| Tuning and Mass Calibration | | | |
| Are the GC/MS tuning forms present for DFTPP? | X | | |
| Are the bar graph spectrum and mass/charge listing provided for each DFTPP? | X | | |
| Has a DFTPP been analyzed for each 12 hours of analysis per instrument? | <u>X</u> | | |
| Have the ion abundance criteria been met for each instrument used? | X | | |
| Target Analytes | | | |
| Is an organics analysis data sheet present for each of the following: | | | |
| Samples | X | | |
| Matrix spikes | X | | |
| Blanks | X | | |
| Are the reconstructed ion chromatograms present for each of the following: | | | |
| Samples | X | | |
| Matrix spikes | X | | |
| Blanks | | | |
| Is the chromatographic performance acceptable? | X | | |
| Are the mass spectra of the identified compounds present? | <u>X</u> | | |
| Are all ions present in the standard mass spectrum at a relative intensity of 10% or greater also present in the sample spectrum? | X | | |
| Do the samples and standard relative ion intensities agree within 20%? | X | | |
| Tentatively Identified Compounds | | | |
| Are all the TIC summary forms present? | | X | |
| Are the mass spectra for the tentatively identified compounds and their associated "best match" spectra present? | | | X |
| Are any target compounds listed as TICs? | | | X |
| Are all ions present in the reference mass spectrum with a relative intensity greater than 10% also present in the sample mass spectrum? | | | X |
| Do the TIC and "best match" spectrum agree within 20%? | | | <u>X</u> |
| Quantitation and Detection Limits | | | |
| Are there any transcription/calculation errors in the Form 1 results? | | X | |
| Are the reporting limits adjusted to reflect sample dilutions, and for soils, sample moisture? | X | | |

| | YES | NO | NA |
|--|----------|-------------|----|
| Standard Data | | | |
| Are the quantitation reports and reconstructed ion chromatograms present for the initial and continuing calibration standards? | X | | |
| Initial Calibration | | | |
| Are the initial calibration forms present for each instrument used? | X | | |
| Are the response factor RSDs within acceptable limits? | | X | |
| Are the average RRF ≥ minimum requirements? | <u>X</u> | | |
| Are there any transcription/calculation error in reporting the RRF or RSD? | | X | |
| Continuing Calibration | | | |
| Are the continuing calibration forms present for each day and each instrument? | _X | | |
| Has a continuing calibration standard been analyzed for each 12 hours of analysis per instrument? | X | | |
| All %D within acceptable limits? | <u>X</u> | | |
| Are all RF ≥ minimum requirements? | <u>X</u> | | |
| Are there any transcription/calculation errors in reporting of RF or %D? | | <u>X</u> | |
| Internal Standards | | | |
| Are internal standard areas of every sample within the upper and lower limits for each continuing calibration? | X | | |
| Are the retention times of the internal standards within 30 seconds of the associated calibration standard? | <u>X</u> | | |
| Field Duplicates | | | |
| Were field duplicates submitted with the samples? | | X | |

MISCELLANEOUS ANALYSES

Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 9012 as referenced in NYSDEC-ASP. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1994.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with National Functional Guidelines:

- U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
- J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
- B The reported value was obtained from a reading less than the RL but greater than or equal to the IDL.
- M Duplicate injection precision not met.
- N Spiked sample recovery not within control limits.
- * Duplicate analysis not within control limits.
- E The reported value is estimated due to the presence of interference.
- UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Data Assessment

1. Holding Times

The specified holding times for the following methods are presented in the following table.

| Method | Matrix | Holding Time | Preservation |
|---------------|------------|--------------|--|
| Total Cyanide | Water/Soil | 14 Days | Cooled @ 4 °C; preserved to a pH of greater than 12. |

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

No analytes were detected above the reporting limit in the associated blanks.

3. Calibration

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

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995.

All continuing calibration verification standard recoveries were within the control limit.

4. MS/MSD Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit a RPD within the laboratory established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations were the compound's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD exhibited recoveries and RPD results within the control limit.

5. LCS Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LSC analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

The laboratory duplicate sample results exhibited RPD within the control limit.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method.

Field duplicates were not performed within this SDG.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist

Data Validation Checklist

| | YES | NO | NA |
|--|----------|----|---------|
| Data Completeness and Deliverables | ••• | | |
| Is there a narrative or cover letter present? | X | | |
| Are the sample numbers included in the narrative? | X | | |
| Are the sample chain-of-custodies present? | X | | |
| Do the chain-of-custodies indicate any problems with sample receipt or sample condition? | | X | |
| Raw Data | | | |
| Are the preparation logs present? | X | | |
| Are preparation dates present on sample preparation logs/bench sheets? | X | | |
| Are the measurement read out records present? | X | | |
| Is the data legible? | X | | |
| Is the data properly labeled? | X | | |
| Are pH values listed? | <u>X</u> | | |
| Percent solids calculation present for soils/sediments? | | | X |
| Holding Times | | | |
| Were all analyses performed within the specified holding times? | X | | |
| Sample Data | | | |
| Are all forms complete? | X | | |
| Are correct units indicated the results sheets? | X | | |
| Are soil sample results for each parameter corrected for percent solids? | X | | |
| Initial Calibration | | | |
| Is a record of an initial calibration present?: | X | | |
| Is correlation coefficient less than .995?: | X | | |
| Initial and Continuing Calibration Verification | | | |
| Present and complete for all analytes? | X | | |
| Are all calibration standards (initial and continuing) within control limits?: | X | | |
| Was continuing calibration performed every 10 samples or every 2 hours? | <u>X</u> | | |
| Was the ICV for cyanides distilled? | | | X |
| Initial and Continuing Calibration Blanks | | | |
| Present and complete? | X | | |
| Was an initial calibration blank analyzed? | X | | |
| Was a continuing calibration blank analyzed after every 10 samples or every 2 hours (which ever is more frequent)? | X | | |
| Are all calibration blanks less than or equal to the RL? | <u>X</u> | | |
| Preparation Blank | | | |
| Was one prep. blank analyzed for: | | | |
| each batch of digested samples? | X | | |
| 5492 | | | |

| | YES | NO | NA |
|--|-------------|--------------|----|
| each matrix type? | X | | |
| Are all preparation blanks less than the RL? | X | | |
| If no, is the concentration of the sample with the least concentrated analyte less than 10 times the prep. blank? | | • | X |
| Matrix Spike | | | |
| Present and complete for: | | | |
| each batch? | X | | |
| each matrix type? | X | | |
| Was field blank used for spiked sample? | | X | |
| Are all recoveries for analytes with sample concentrations less than four times the spike concentration within control limits? | X | | |
| Are results outside the control limits (75-125%) flagged with "N"? | | | X |
| Laboratory Duplicates | | | |
| Present and complete for: | | | |
| each batch? | X | | |
| each matrix type? | X | | |
| Was field blank used for duplicate analysis? | | X | |
| Are all values within control limits? | X | | |
| If no, are all results outside the control limits flagged with an *? | | | X |
| Field Duplicates | | | |
| Were field duplicates analyzed? | | X | |
| Aqueous | | | |
| is any RPD greater than 50% where sample and duplicate are both greater than or equal to 5 times RL? | | | X |
| Is any difference between sample and duplicate greater than RL where sample and/or duplicate is less than 5 times RL? | | | X |
| Soil/Sediment | | | |
| Is any RPD (where sample and duplicate are both greater than 5 times RL) > 100%? | | } | X |
| Is any difference between sample and duplicate (where sample and/or duplicate is less than 5x RL) >2xRL? | | | X |
| Laboratory Control Sample | | | |
| Was one LCS prepared and analyzed for: | | | |
| each matrix? | X | | |
| each batch? | X | | |
| Are all recoveries within control limits? | X | | |
| Field Blank | | | |
| Is the field blank concentration less than RL for all analytes? | | | X |
| If no, was field blank value already rejected due to other QC criteria? | | | X |

| | YES | NO | NA |
|---|-------------|-------|----|
| Percent Solids | | · ··· | |
| Are the percent solids in soil/sediment(s): | | | |
| < 50%? | | X | |
| < 10%? | | X | |

Corrected Sample Analysis Data Sheets

Laboratory Narrative

NYSDEC Sample Identification and Analysis Summary Sheets

Sample Compliance Report

SAMPLE COMPLIANCE REPORT

| | | | | | Compliancy ¹ | | Noncompliance | | |
|------------------|---|--|---|---|--|--|---|---|---|
| Sampling Date | ASP Protocol | Sample ID | Matrix | VOC | svoc | PCB | MET | MISC | |
| 12/5/2005 | 2000 | SB-4-10-12 | Soil | no | no | | | yes | VOC – Associated Blank, ICAL %RSD, CCAL %D SVOC – ICAL %RSD, LCS %R |
| 12/5/2005 | 2000 | SB-4-18-20 | Soil | no | no | | | yes | VOC – ICAL %RSD SVOC – ICAL %RSD, LCS %R |
| 12/5/2005 | 2000 | SB-8-6-8 | Soil | no | no | | | yes | VOC – Associated Blank, ICAL %RSD, CCAL %D SVOC – ICAL %RSD, LCS %R |
| 12/5/2005 | 2000 | SB-8-14-16 | Soil | no | no | | | yes | VOC – ICAL %RSD SVOC – ICAL %RSD, LCS %R |
| 12/6/2005 | 2000 | SB-3-10.0-11.8 | Soil | no | no | | | yes | VOC – ICAL %RSD, CCAL %D SVOC – ICAL %RSD, LCS %R |
| 12/6/2005 | 2000 | SB-1-4.0-6.5 | Soil | no | no | | | yes | VOC – ICAL %RSD, CCAL %D SVOC – ICAL %RSD, LCS %R |
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| | Date 12/5/2005 12/5/2005 12/5/2005 12/5/2005 12/6/2005 | Date Protocol 12/5/2005 2000 12/5/2005 2000 12/5/2005 2000 12/5/2005 2000 12/6/2005 2000 | Date Protocol Sample ID 12/5/2005 2000 SB-4-10-12 12/5/2005 2000 SB-4-18-20 12/5/2005 2000 SB-8-6-8 12/5/2005 2000 SB-8-14-16 12/6/2005 2000 SB-3-10.0-11.8 | Date Protocol Sample ID Matrix 12/5/2005 2000 SB-4-10-12 Soil 12/5/2005 2000 SB-4-18-20 Soil 12/5/2005 2000 SB-8-6-8 Soil 12/5/2005 2000 SB-8-14-16 Soil 12/6/2005 2000 SB-3-10.0-11.8 Soil | Date Protocol Sample ID Matrix VOC 12/5/2005 2000 SB-4-10-12 Soil no 12/5/2005 2000 SB-4-18-20 Soil no 12/5/2005 2000 SB-8-6-8 Soil no 12/5/2005 2000 SB-8-14-16 Soil no 12/6/2005 2000 SB-3-10.0-11.8 Soil no 12/6/2005 2000 SB-1-4.0-6.5 Soil no | Sampling Date ASP Protocol Sample ID Matrix VOC SVOC 12/5/2005 2000 SB-4-10-12 Soil no no 12/5/2005 2000 SB-4-18-20 Soil no no 12/5/2005 2000 SB-8-6-8 Soil no no 12/5/2005 2000 SB-8-14-16 Soil no no 12/6/2005 2000 SB-3-10.0-11.8 Soil no no 12/6/2005 2000 SB-1-4.0-6.5 Soil no no | Sampling Date ASP Protocol Sample ID Matrix VOC SVOC PCB 12/5/2005 2000 SB-4-10-12 Soil no no 12/5/2005 2000 SB-4-18-20 Soil no no 12/5/2005 2000 SB-8-6-8 Soil no no 12/5/2005 2000 SB-8-14-16 Soil no no 12/6/2005 2000 SB-3-10.0-11.8 Soil no no 12/6/2005 2000 SB-1-4.0-6.5 Soil no no | Sampling Date ASP Protocol Sample ID Matrix VOC SVOC PCB MET 12/5/2005 2000 SB-4-10-12 Soil no no 12/5/2005 2000 SB-4-18-20 Soil no no 12/5/2005 2000 SB-8-6-8 Soil no no 12/5/2005 2000 SB-8-14-16 Soil no no 12/6/2005 2000 SB-3-10.0-11.8 Soil no no 12/6/2005 2000 SB-1-4.0-6.5 Soil no no 12/6/2005 2000 SB-1-4.0-6.5 Soil no no | Sampling Date ASP Protocol Sample ID Matrix VOC SVOC PCB MET MISC 12/5/2005 2000 SB-4-10-12 Soil no no yes 12/5/2005 2000 SB-4-18-20 Soil no no yes 12/5/2005 2000 SB-8-6-8 Soil no no yes 12/5/2005 2000 SB-8-14-16 Soil no no yes 12/6/2005 2000 SB-3-10.0-11.8 Soil no no yes 12/6/2005 2000 SB-1-4.0-6.5 Soil no no yes |

¹ Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable.

Client ID: **SB-4-10-12** Site: NYSEG-GENEVA

Lab Sample No: 692410 Lab Job No: K008

Date Sampled: 12/05/05 Date Received: 12/07/05 Date Analyzed: 12/10/05 GC Column: DB624 Instrument ID: VOAMS9.i

Matrix: SOIL

Level: LOW Sample Weight: 5.3 g Purge Volume: 5.0 ml

Lab File ID: k51063.d

% Moisture: 23

VOLATILE ORGANICS - GC/MS METHOD 8260B

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---|--|--|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene | ND NDD NDD NDD NDD NDD NDD NDD NDD NDD | 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 6.2 |
| Xylene (Total) | ND | 6.2 |

Client ID: **SB-4-10-12** Site: NYSEG-GENEVA

Lab Sample No: 692410

Lab Job No: K008

Date Sampled: 12/05/05 Date Received: 12/07/05 Date Analyzed: 12/10/05

GC Column: DB624 Instrument ID: VOAMS9.i Lab File ID: k51063.d

Matrix: SOIL Level: LOW

Sample Weight: 5.3 g Purge Volume: 5.0 ml

% Moisture: 23

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Analytical Results

Units: ug/kg (Dry Weight)

Quantitation Limit Units: ug/kg

ND

6.2

MTBE

Parameter

Client ID: SB-4-18-20 Site: NYSEG-GENEVA

Lab Sample No: 692411 Lab Job No: K008

Date Sampled: 12/05/05 Date Received: 12/07/05 Date Analyzed: 12/16/05

Level: HIGH Sample Weight: 5.1 g

GC Column: DB624

Instrument ID: VOAMS4.i Lab File ID: d50891.d

Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

% Moisture: 21

Matrix: SOIL

VOLATILE ORGANICS - GC/MS METHOD 8260B

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | 1 | Quantitation Limit <u>Units: ug/kq</u> |
|---------------------------|--|---|--|
| Chloromethane | ND | | 620 |
| Bromomethane | ND | | 620 |
| Vinyl Chloride | ND | | 620 |
| Chloroethane | ND | | 620 |
| Methylene Chloride | ND 3 | | 370 |
| Acetone | ND | | 620 |
| Carbon Disulfide | ND | | 620 |
| 1,1-Dichloroethene | ND | | 250 |
| 1,1-Dichloroethane | ND T | | 620 |
| trans-1,2-Dichloroethene | ND | | 620 |
| cis-1,2-Dichloroethene | ND | | 620 |
| Chloroform | ND | | 620 |
| 1,2-Dichloroethane | ND | | 250 |
| 2-Butanone | ND | | 620 |
| 1,1,1-Trichloroethane | ND | | 620 |
| Carbon Tetrachloride | ND | | 250 |
| Bromodichloromethane | . ND | | 120 |
| 1,2-Dichloropropane | ND | | 120 |
| cis-1,3-Dichloropropene | ND | | 620 |
| Trichloroethene | ND | | 120 |
| Dibromochloromethane | ND J | | 620 |
| 1,1,2-Trichloroethane | ND | | 370 |
| Benzene | 4500 | | 120 |
| trans-1,3-Dichloropropene | ND | | 620 |
| Bromoform | ND J | | 500 |
| 4-Methyl-2-Pentanone | ND | | 620 |
| 2-Hexanone | ND J | | 620 |
| Tetrachloroethene | ND | | 120 |
| 1,1,2,2-Tetrachloroethane | ND | | 120 |
| Toluene | ND | | 620 |
| Chlorobenzene | ND 3 | | 620 |
| Ethylbenzene | 330 J | | 500 |
| Styrene | ND 3 | | 620 |
| Xylene (Total) | 190 Ј | | 620 |

Client ID: SB-4-18-20 Site: NYSEG-GENEVA

Lab Sample No: 692411

Lab Job No: K008

Matrix: SOIL

Date Sampled: 12/05/05 Date Received: 12/07/05 Date Analyzed: 12/16/05

Level: HIGH

GC Column: DB624 Instrument ID: VOAMS4.i Sample Weight: 5.1 g Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

% Moisture: 21

Lab File ID: d50891.d

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Results Units: ug/kg

Quantitation

(Dry Weight) Parameter

Limit Units: uq/kq

MTBE

620

Client ID: SB-8-6-8 Site: NYSEG-GENEVA

Lab Sample No: 692412 Lab Job No: K008

Date Sampled: 12/05/05 Date Received: 12/07/05 Date Analyzed: 12/10/05

Matrix: SOIL Level: LOW

GC Column: DB624

Sample Weight: 5.0 g Purge Volume: 5.0 ml

% Moisture: 18

Instrument ID: VOAMS9.i Lab File ID: k51064.d

VOLATILE ORGANICS - GC/MS METHOD 8260B

| Parameter | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|--|--|--|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane rans-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene | ND N | 6.1 6.1 6.1 6.1 6.1 6.1 6.1 6.1 6.1 6.1 |
| Xylene (Total) | ND | |

Client ID: SB-8-6-8 Site: NYSEG-GENEVA

Lab Sample No: 692412

Lab Job No: K008

Date Sampled: 12/05/05 Date Received: 12/07/05 Date Analyzed: 12/10/05

Level: LOW

GC Column: DB624 Instrument ID: VOAMS9.i Lab File ID: k51064.d

Sample Weight: 5.0 g Purge Volume: 5.0 ml

% Moisture: 18

Matrix: SOIL

VOLATILE ORGANICS - GC/MS (contid) METHOD 8260B

> Analytical Results Units: ug/kg (Dry Weight)

Quantitation Limit Units: ug/kg

Parameter MTBE

ND

6.1

Client ID: SB-8-14-16 Site: NYSEG-GENEVA

Lab Sample No: 692413 Lab Job No: K008

Date Sampled: 12/05/05 Date Received: 12/07/05 Date Analyzed: 12/16/05 GC Column: DB624 Instrument ID: VOAMS4.i

Matrix: SOIL Level: HIGH

Lab File ID: d50892.d

Sample Weight: 5.1 g Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

% Moisture: 24

VOLATILE ORGANICS - GC/MS METHOD 8260B

| | Analytical Results | Quantitation |
|---------------------------|--------------------|---------------------|
| | Units: ug/kg | Limit |
| <u>Parameter</u> | (Dry Weight) | <u>Units: uq/kq</u> |
| Chloromethane | ND | 640 |
| Bromomethane | ND | 640 |
| Vinyl Chloride | ND | 640 |
| Chloroethane | ND | 640 |
| Methylene Chloride | ND J | 380 |
| Acetone | ND | 640 |
| Carbon Disulfide | ND | 640 |
| 1,1-Dichloroethene | ND | 260 |
| 1,1-Dichloroethane | ND 2 | 640 |
| trans-1,2-Dichloroethene | ND | 640 |
| cis-1,2-Dichloroethene | ND | 640 |
| Chloroform | ND | 640 |
| 1,2-Dichloroethane | ND | 260 |
| 2-Butanone | ND | 640 |
| 1,1,1-Trichloroethane | ND | 640 |
| Carbon Tetrachloride | ND | 260 |
| Bromodichloromethane | ND | 130 |
| 1,2-Dichloropropane | ND _. | 130 |
| cis-1,3-Dichloropropene | ND | 640 |
| Trichloroethene | ND | 1.30 |
| Dibromochloromethane | ND J | 640 |
| 1,1,2-Trichloroethane | ND | 380 |
| Benzene | 600 | 130 |
| trans-1,3-Dichloropropene | ND | 6.40 |
| Bromoform | ND 2 | 510 |
| 4-Methyl-2-Pentanone | ND | 640 |
| 2-Hexanone | ND J | 640 |
| Tetrachloroethene | ND | 130 |
| 1,1,2,2-Tetrachloroethane | ND | 130 |
| Toluene | ND | 640 |
| Chlorobenzene | ND .2 | 640 |
| Ethylbenzene | 3600 | 510 |
| Styrene | ND 3 | 640 |
| Xylene (Total) | 4800 | 640 |

Client ID: SB-8-14-16 Site: NYSEG-GENEVA

Lab Sample No: 692413 Lab Job No: K008

Date Sampled: 12/05/05 Date Received: 12/07/05 Date Analyzed: 12/16/05

Level: HIGH

GC Column: DB624

Sample Weight: 5.1 g

Instrument ID: VOAMS4.i Lab File ID: d50892.d

Methanol Ext. Volume: 10.0 ml Ext. Dilution Factor: 50.0

% Moisture: 24

Matrix: SOIL

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Results Units: ug/kg (Dry Weight)

Quantitation Limit Units: ug/kg

Parameter

ND

640

MTBE

Client ID: SB-3-10-0-11-8

Site: NYSEG-GENEVA

Lab Sample No: 692414

Lab Job No: K008

Date Sampled: 12/06/05 Date Received: 12/07/05 Date Analyzed: 12/10/05

GC Column: DB624
Instrument ID: VOAMS9.i
Lab File ID: k51065.d

Matrix: SOIL Level: LOW

Sample Weight: 5.0 g Purge Volume: 5.0 ml

% Moisture: 18

VOLATILE ORGANICS - GC/MS METHOD 8260B

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|--|--|--|
| Chloromethane Bromomethane Vinyl Chloride Chloroethane Methylene Chloride Acetone Carbon Disulfide 1,1-Dichloroethene 1,1-Dichloroethane trans-1,2-Dichloroethene cis-1,2-Dichloroethene cis-1,2-Dichloroethene Chloroform 1,2-Dichloroethane 2-Butanone 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane cis-1,3-Dichloropropene Trichloroethene Dibromochloromethane 1,1,2-Trichloroethane Benzene trans-1,3-Dichloropropene Bromoform 4-Methyl-2-Pentanone 2-Hexanone Tetrachloroethene 1,1,2,2-Tetrachloroethane Toluene Chlorobenzene Ethylbenzene Styrene | ND N | 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 6.0 |
| Xylene (Total) | 1.6J · | 6.0 |

Client ID: SB-3-10-0-11-8

Site: NYSEG-GENEVA

Lab Sample No: 692414 Lab Job No: K008

Date Sampled: 12/06/05 Date Received: 12/07/05

Date Analyzed: 12/10/05

GC Column: DB624

Instrument ID: VOAMS9.i Lab File ID: k51065.d Matrix: SOIL Level: LOW

Sample Weight: 5.0 g Purge Volume: 5.0 ml

% Moisture: 18

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

Analytical Results
Units: ug/kg
(Dry Weight)

Quantitation Limit Units: uq/kq

<u>Parameter</u>

MTBE

-ND J

6.0

Client ID: SB-1-4-0-6-5

Site: NYSEG-GENEVA

Lab Sample No: 692415

Lab Job No: K008

Date Sampled: 12/06/05 Date Received: 12/07/05 Date Analyzed: 12/10/05 GC Column: DB624

Instrument ID: VOAMS9.i Lab File ID: k51066.d

Matrix: SOIL Level: LOW

Sample Weight: 5.0 g Purge Volume: 5.0 ml

% Moisture: 17

VOLATILE ORGANICS - GC/MS METHOD 8260B

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: uq/kq</u> |
|---------------------------|--|--|
| Chloromethane | ND | 6.0 |
| Bromomethane | ND | 6.0 |
| Vinyl Chloride | ND | 6.0 |
| Chloroethane | ND | 6.0 |
| Methylene Chloride | ND | 3.6 |
| Acetone | ND J | 6.0 |
| Carbon Disulfide | 2.0J | 6.0 |
| 1,1-Dichloroethene | ND I | 2.4 |
| 1,1-Dichloroethane | ND | 6.0 |
| rans-1,2-Dichloroethene | ND | 6.0 |
| cis-1,2-Dichloroethene | ND | 6.0 |
| Chloroform | ND | 6.0 |
| 1,2-Dichloroethane | ND | 2.4 |
| 2-Butanone | ND 3 | 6.0 |
| 1,1,1-Trichloroethane | ND | 6.0 |
| Carbon Tetrachloride | ND | 2.4 |
| Bromodichloromethane | ND | 1.2 |
| 1,2-Dichloropropane | ND :2 | 1.2 |
| cis-1,3-Dichloropropene | ND | 6.0 |
| Trichloroethene | ND T | 1.2 |
| Dibromochloromethane | ND | 6.0 |
| 1,1,2-Trichloroethane | ND | 3.6 |
| Benzene | 2.2 | 1.2 |
| trans-1,3-Dichloropropene | ND | 6.0 |
| Bromoform | ND | 4.8 |
| 4-Methyl-2-Pentanone | ND I | 6.0 |
| 2-Hexanone | ND ユ | 6.0 |
| Tetrachloroethene | ND _ | 1.2 |
| 1,1,2,2-Tetrachloroethane | ND 3 | 1.2 |
| Toluene | 3.4Д | 6.0 |
| Chlorobenzene | ND | 6.0 |
| Ethylbenzene | ND | 4.8 |
| Styrene | ND | 6.0 |
| Xylene (Total) | 3.1J | 6.0 |

Client ID: SB-1-4-0-6-5

Site: NYSEG-GENEVA

Lab Sample No: 692415

Lab Job No: K008

Date Sampled: 12/06/05 Date Received: 12/07/05 Date Analyzed: 12/10/05

GC Column: DB624 Instrument ID: VOAMS9.i Lab File ID: k51066.d

Matrix: SOIL Level: LOW

Sample Weight: 5.0 g Purge Volume: 5.0 ml

% Moisture: 17

VOLATILE ORGANICS - GC/MS (cont'd) METHOD 8260B

> Analytical Results Units: ug/kg (Dry Weight)

Quantitation Limit Units: uq/kq

Parameter

MTBE

ND J

6.0

Client ID: SB-4-10-12 Site: NYSEG-GENEVA

Lab Sample No: 692410 Lab Job No: K008

Date Sampled: 12/05/05 Date Received: 12/07/05 Date Extracted: 12/10/05 Date Analyzed: 12/21/05

Level: LOW

Matrix: SOIL

GC Column: DB-5

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

Instrument ID: BNAMS1.i Lab File ID: r26022.d

% Moisture: 23

| <u>Parameter</u> | Units: ug/kg (Dry Weight) | Limit <u>Units: ug/kq</u> |
|---|--|---|
| bis(2-Chloroethyl)ether 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene bis(2-chloroisopropyl)ether N-Nitroso-di-n-propylamine Hexachloroethane Nitrobenzene Isophorone bis(2-Chloroethoxy)methane 1,2,4-Trichlorobenzene Naphthalene 4-Chloroaniline Hexachlorobutadiene 2-Methylnaphthalene 4-Chloronaphthalene 2-Chloronaphthalene 2-Nitroaniline Dimethylphthalate Acenaphthylene 2,6-Dinitrotoluene 3-Nitroaniline Acenaphthene Dibenzofuran 2,4-Dinitrotoluene Diethylphthalate 4-Chlorophenyl-phenylether Fluorene 4-Nitroaniline N-Nitrosodiphenylamine 4-Bromophenyl-phenylether | ND TO ND | 43 430 430 430 43 43 43 430 430 |
| Hexachlorobenzene Phenanthrene Anthracene | ND ND ND | 43 430 430 |

Client ID: SB-4-10-12 Site: NYSEG-GENEVA

Lab Sample No: 692410 Lab Job No: K008

Date Sampled: 12/05/05 Date Received: 12/07/05

Level: LOW Sample Weight: 15.0 g

Date Extracted: 12/10/05 Date Analyzed: 12/21/05 GC Column: DB-5

Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

Instrument ID; BNAMS1.i Lab File ID: r26022.d

% Moisture: 23

Matrix: SOIL

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: uq/kg</u> |
|----------------------------|--|--|
| Carbazole | ND | 430 |
| Di-n-butylphthalate | ND | 430 |
| Fluoranthene | ND | 430 |
| Pyrene | ND | 430 |
| Butylbenzylphthalate | ND | 430 |
| 3,3'-Dichlorobenzidine | ND | 860 |
| Benzo(a)anthracene | ND | 43 |
| Chrysene | ND | 430 |
| bis(2-Ethylhexyl)phthalate | ND | 430 |
| Di-n-octylphthalate | ND | 430 |
| Benzo(b)fluoranthene | ND | 43 |
| Benzo(k) fluoranthene | ND | 43 |
| Benzo(a)pyrene | ND | 43 |
| Indeno(1,2,3-cd)pyrene | ND | 4.3 |
| Dibenz(a,h)anthracene | ND | 43 |
| Benzo(g,h,i)perylene | ND | 430 |

Client ID: SB-4-18-20 Site: NYSEG-GENEVA

Lab Sample No: 692411 Lab Job No: K008

Date Sampled: 12/05/05 Date Received: 12/07/05 Date Extracted: 12/10/05

Level: LOW Sample Weight: 15.0 g

Date Analyzed: 12/20/05 GC Column: DB-5

Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

% Moisture: 21

Matrix: SOIL

Instrument ID: BNAMS1.i Lab File ID: r26011.d

| | Analytical Results | Quantitation |
|-----------------------------|--------------------|---------------------|
| · | Units: ug/kg | Limit |
| <u>Parameter</u> | (Dry Weight) | <u>Units: uq/kq</u> |
| Mid = (0, 0)=1 | | |
| bis(2-Chloroethyl)ether | ND 3 | 42 |
| 1,3-Dichlorobenzene | ND | 420 |
| 1,4-Dichlorobenzene | ND | 420 |
| 1,2-Dichlorobenzene | ND | 420 |
| bis(2-chloroisopropyl)ether | ND | 420 |
| N-Nitroso-di-n-propylamine | ND | . 42 |
| Hexachloroethane | ND | 42 |
| Nitrobenzene | ND J | 42 |
| Isophorone | ND | 420 |
| bis(2-Chloroethoxy)methane | ND | 420 |
| 1,2,4-Trichlorobenzene | ND | ·42 |
| Naphthalene | 5,6 J | 420 |
| 4-Chloroaniline | ND J | 420 |
| Hexachlorobutadiene | ND | 85 |
| 2-Methylnaphthalene | ND | 420 |
| Hexachlorocyclopentadiene | ND 3 | 420 |
| 2-Chloronaphthalene | ND | 420 |
| 2-Nitroaniline | , ND | 850 |
| Dimethylphthalate | ND | 420 |
| Acenaphthylene | ND | 420 |
| 2,6-Dinitrotoluene | ND | 85 |
| 3-Nitroaniline | ND | 850 |
| Acenaphthene | ND | 420 |
| Dibenzofuran | ND | 420 |
| 2,4-Dinitrotoluene | ND | 85 . |
| Diethylphthalate | ND | 420 |
| 4-Chlorophenyl-phenylether | ND | 420 |
| Fluorene | ND | 420 |
| 4-Nitroaniline | ND | 850 |
| N-Nitrosodiphenylamine | ND | 420 |
| 4-Bromophenyl-phenylether | ND | 420 |
| Hexachlorobenzene | ND | 42 |
| Phenanthrene | ND | 420 |
| Anthracene | ND | 420 |

Client ID: SB-4-18-20 Site: NYSEG-GENEVA

Lab Sample No: 692411 Lab Job No: K008

Date Sampled: 12/05/05 Date Received: 12/07/05 Date Extracted: 12/10/05

Level: LOW Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Date Analyzed: 12/20/05 GC Column: DB-5 Instrument ID: BNAMS1.i

Dilution Factor: 1.0

Lab File ID: r26011.d

% Moisture: 21

Matrix: SOIL

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|--|--|--|
| Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a) anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene | ND N | 420 420 420 420 420 420 420 420 420 420 |
| Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene | ND ND | 42 42 |
| Benzo(g,h,i)perylene | ND | 420 |

Client ID: SB-8-6-8 Site: NYSEG-GENEVA

Lab Sample No: 692412 Lab Job No: K008

Date Sampled: 12/05/05 Date Received: 12/07/05 Date Extracted: 12/10/05

Level: LOW

Date Analyzed: 12/21/05 GC Column: DB-5

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

Instrument ID: BNAMS1.i Lab File ID: r26017.d

% Moisture: 18

Matrix: SOIL

| Dawamakar | Analytical Results Units: ug/kg | Quantitation Limit |
|-----------------------------|---------------------------------|-----------------------|
| <u>Parameter</u> | (Dry Weight) | <u>Units: ug/kg</u> |
| bis(2-Chloroethyl)ether | ND J | 41 |
| 1,3-Dichlorobenzene | ND | 410 |
| 1,4-Dichlorobenzene | ND | 410 |
| 1,2-Dichlorobenzene | ND | 410 |
| bis(2-chloroisopropyl)ether | ND | 410 |
| N-Nitroso-di-n-propylamine | ND | 41 |
| Hexachloroethane | ND | 41 |
| Nitrobenzene | ND J | 41 |
| Isophorone | ND | 410 |
| bis(2-Chloroethoxy)methane | ND | 410 |
| 1,2,4-Trichlorobenzene | ND | 41 |
| Naphthalene | 13 J | 410 |
| 4-Chloroaniline | ND 3 | 410 |
| Hexachlorobutadiene | ND | 82 |
| 2-Methylnaphthalene | ND | 410 |
| Hexachlorocyclopentadiene | ND 2 | 410 |
| 2-Chloronaphthalene | ND | 410 |
| 2-Nitroaniline | ND | 820 |
| Dimethylphthalate | ND | 410 |
| Acenaphthylene | 8.6J | 410 |
| 2,6-Dinitrotoluene | ND | 82 |
| 3-Nitroaniline | ND | 820 |
| Acenaphthene | 14 J | 410 |
| Dibenzofuran | , 10 J | 410 |
| 2,4-Dinitrotoluene | ND | 82 |
| Diethylphthalate | ND | 410 |
| 4-Chlorophenyl-phenylether | ND | 410 |
| Fluorene | . 18 J | 410 |
| 4-Nitroaniline | ND | 820 |
| N-Nitrosodiphenylamine | ND | 410 |
| 4-Bromophenyl-phenylether | · ND | 410 |
| Hexachlorobenzene | ND | 41 |
| Phenanthrene | 120 J | 410 |
| Anthracene | 32 J | 410 |

Client ID: SB-8-6-8 Site: NYSEG-GENEVA

Lab Sample No: 692412 Lab Job No: K008

Date Sampled: 12/05/05 Date Received: 12/07/05 Date Received: 12/07/05 Date Extracted: 12/10/05 Date Analyzed: 12/21/05 GC Column: DB-5 Instrument ID: BNAMS1.i

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

Lab File ID: r26017.d

% Moisture: 18

| Parameter | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|-------------------------------------|--|--|
| Carbazole | ND | 410 |
| Di-n-butylphthalate | ND | 410 |
| Fluoranthene | 150 J | 410 |
| Pyrene | 150 J | 410 |
| Butylbenzylphthalate | ND | 410 |
| 3,3 ¹ -Dichlorobenzidine | ND | 820 |
| Benzo(a)anthracene | 76 | 41 |
| Chrysene | · 95 J | 410 |
| bis(2-Ethylhexyl)phthalate | 230 Ј | 410 |
| Di-n-octylphthalate | ND | 410 |
| Benzo(b)fluoranthene | 60 | 41 |
| Benzo(k) fluoranthene | 72 | 41 |
| Benzo(a)pyrene | 79 | 41 |
| Indeno(1,2,3-cd)pyrene | 32 Ј | 41 |
| Dibenz(a,h)anthracene | ND | 41 |
| Benzo(g,h,i)perylene | 37 J | 410 |

Client ID: SB-8-14-16 Site: NYSEG-GENEVA

Lab Sample No: 692413 Lab Job No: K008

Date Sampled: 12/05/05
Date Received: 12/07/05
Date Extracted: 12/10/05
Date Analyzed: 12/21/05
GC Column: DB-5

Level: LOW Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

Instrument ID: BNAMS1.i
Lab File ID: r26012.d

% Moisture: 24

Matrix: SOIL

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|-----------------------------|--|--|
| bis(2-Chloroethyl)ether | ND J | 44 |
| 1,3-Dichlorobenzene | ND | 440 |
| 1,4-Dichlorobenzene | ND | 440 |
| 1,2-Dichlorobenzene | ND | 440 |
| bis(2-chloroisopropyl)ether | ND | 440 |
| N-Nitroso-di-n-propylamine | ND | 44 |
| Hexachloroethane | ND | 44 |
| Nitrobenzene | ND J | $4\overline{4}$ |
| Isophorone | ND | 440 |
| bis(2-Chloroethoxy)methane | ND | 440 |
| 1,2,4-Trichlorobenzene | ND | 44 |
| Naphthalene | 7200 | 440 |
| 4-Chloroaniline | ND J | 440 |
| Hexachlorobutadiene | ND | 87 |
| 2-Methylnaphthalene | 120 J | 440 |
| Hexachlorocyclopentadiene | ND J | 440 |
| 2-Chloronaphthalene | ND | 440 |
| 2-Nitroaniline | ND | 870 |
| Dimethylphthalate | ND | 440 |
| Acenaphthylene | ND | 440 |
| 2,6-Dinitrotoluene | ND | 87 |
| 3-Nitroaniline | ND | 870 |
| Acenaphthene | 36 J | 440 |
| Dibenzofuran | 21 J | 440 |
| 2,4-Dinitrotoluene | ND | 87 |
| Diethylphthalate | ND | 440 |
| 4-Chlorophenyl-phenylether | ND | 440 |
| Fluorene | 28 J | 440 |
| 4-Nitroaniline | ND | 870 |
| N-Nitrosodiphenylamine | ND | 440 |
| 4-Bromophenyl-phenylether | ND | 440 |
| Hexachlorobenzene | ND | 44 |
| Phenanthrene | 32 Ј | 440 |
| Anthracene | 8.8J | 440 |

Client ID: SB-8-14-16 Site: NYSEG-GENEVA

Lab Sample No: 692413 Lab Job No: K008

Date Sampled: 12/05/05 Date Received: 12/07/05 Date Extracted: 12/10/05 Date Analyzed: 12/21/05 GC Column: DB-5

Level: LOW

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

Instrument ID: BNAMS1.i Lab File ID: r26012.d

% Moisture: 24

Matrix: SOIL

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|--|--|--|
| Carbazole Di-n-butylphthalate Fluoranthene Pyrene Butylbenzylphthalate 3,3'-Dichlorobenzidine Benzo(a)anthracene Chrysene bis(2-Ethylhexyl)phthalate Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene | 16 J ND 23 J 17 J ND ND 10 J 15 J ND | 440 440 440 440 870 44 440 440 440 440 440 440 440 |
| Benzo(g,h,i)perylene | ND | 440 |

Client ID: SB-3-10-0-11-8

Site: NYSEG-GENEVA

Lab Sample No: 692414 Lab Job No: K008

Date Sampled: 12/06/05
Date Received: 12/07/05
Date Extracted: 12/10/05
Date Analyzed: 12/21/05
GC Column: DB-5
Instrument ID: BNAMS1.i

Lab File ID: r26013.d

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

% Moisture: 18

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit Units: uq/kq |
|-----------------------------|--|---------------------------------------|
| | | |
| bis(2-Chloroethyl)ether | ND 3 | 40 |
| 1,3-Dichlorobenzene | ND | 400 |
| 1,4-Dichlorobenzene | , ND | 400 |
| 1,2-Dichlorobenzene | ND | 400 |
| bis(2-chloroisopropyl)ether | ND | 400 |
| N-Nitroso-di-n-propylamine | ND | 40 |
| Hexachloroethane | ND | 40 |
| Nitrobenzene | ND J | 40 |
| Isophorone | ND | 400 |
| bis(2-Chloroethoxy)methane | ND | 400 |
| 1,2,4-Trichlorobenzene | ND | 40 |
| Naphthalene | ND | 400 |
| 4-Chloroaniline | ND J | 400 |
| Hexachlorobutadiene | ND | 81 |
| 2-Methylnaphthalene | ND | 400 |
| Hexachlorocyclopentadiene | ND J | 400 |
| 2-Chloronaphthalene | ND | 400 |
| 2-Nitroaniline | ND | 810 |
| Dimethylphthalate | ND | 400 |
| Acenaphthylene | ND | 400 |
| 2,6-Dinitrotoluene | ND | 8.1 |
| 3-Nitroaniline | ND | 810 |
| Acenaphthene | ND | 400 |
| Dibenzofuran | ND | 400 |
| 2,4-Dinitrotoluene | ND | 81 |
| Diethylphthalate | ND | 400 |
| 4-Chlorophenyl-phenylether | ND | 400 |
| Fluorene | ND | 400 |
| 4-Nitroaniline | ND | 810 |
| N-Nitrosodiphenylamine | ND | 400 |
| 4-Bromophenyl-phenylether | ND | 400 |
| Hexachlorobenzene | ND | 40 |
| Phenanthrene | 29 J | 400 |
| Anthracene | ND | 400 |

Client ID: SB-3-10-0-11-8

Site: NYSEG-GENEVA

Lab Sample No: 692414 Lab Job No: K008

Date Sampled: 12/06/05 Date Received: 12/07/05 Date Extracted: 12/10/05

Date Analyzed: 12/21/05 GC Column: DB-5

Instrument ID: BNAMS1.i Lab File ID: r26013.d

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

% Moisture: 18

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: ug/kg</u> |
|---------------------------------------|--|--|
| Carbazole | ND | 400 |
| Di-n-butylphthalate | ND | 400 |
| Fluoranthene | 42 J | 400 |
| Pyrene | 32 Ј | 400 |
| Butylbenzylphthalate | ND | 400 |
| 3,3 ¹ -Dichlorobenzidine | ND | 810 |
| Benzo(a) anthracene | . 18 J | 40 |
| Chrysene | 18 J | 400 |
| bis(2-Ethylhexyl)phthalate | ND | 400 |
| Di-n-octylphthalate | ND | 400 |
| Benzo(b) fluoranthene | 11 J | 40 |
| Benzo(k)fluoranthene | 20 J | 40 |
| Benzo(a) pyrene | 17 J | 40 |
| Indeno(1,2,3-cd)pyrene | ND | 40 |
| Dibenz (a, h) anthracene | ND | 40 |
| Benzo(g,h,i)perylene | ND | |
| · · · · · · · · · · · · · · · · · · · | រោក | 400 |

Client ID: SB-1-4-0-6-5

Site: NYSEG-GENEVA

Lab Sample No: 692415

Lab Job No: K008

Date Sampled: 12/06/05 Date Received: 12/07/05 Date Extracted: 12/10/05

Date Analyzed: 12/21/05

GC Column: DB-5

Instrument ID: BNAMS1.i Lab File ID: r26016.d

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

% Moisture: 17

| | Analytical Results | Quantitation |
|-----------------------------|--------------------|---------------------|
| | Units: ug/kg | Limit |
| <u>Parameter</u> | (Dry Weight) | <u>Units: uq/kq</u> |
| 1 1 10 017 | | |
| bis(2-Chloroethyl)ether | ND J | 40 |
| 1,3-Dichlorobenzene | ND | 400 |
| 1,4-Dichlorobenzene | ND | 400 |
| 1,2-Dichlorobenzene | ND | 400 |
| bis(2-chloroisopropyl)ether | · ND | 400 |
| N-Nitroso-di-n-propylamine | ND | 40 |
| Hexachloroethane | ND | 40 |
| Nitrobenzene | ND J | 40 |
| Isophorone | ND | 400 " |
| bis(2-Chloroethoxy)methane | ND | 400 |
| 1,2,4-Trichlorobenzene | ND | 40 |
| Naphthalene | 17 Ј | 400 |
| 4-Chloroaniline | ND J | 400 |
| Hexachlorobutadiene | ND | 80 |
| 2-Methylnaphthalene | ND | 400 |
| Hexachlorocyclopentadiene | ND J | 400 |
| 2-Chloronaphthalene | ND | 400 |
| 2-Nitroaniline | ND | 800 |
| Dimethylphthalate | ND | 400 |
| Acenaphthylene | 30 J | 400 |
| 2,6-Dinitrotoluene | ND | 80 |
| 3-Nitroaniline | ND | 800 |
| Acenaphthene | ND | 400 |
| Dibenzofuran | ND | 400 |
| 2,4-Dinitrotoluene | ND | 80 |
| Diethylphthalate | ND | 400 |
| 4-Chlorophenyl-phenylether | ND | 400 |
| Fluorene | ND | 400 |
| 4-Nitroaniline | ND | 800 |
| N-Nitrosodiphenylamine | ND | 400 |
| 4-Bromophenyl-phenylether | ND | 400 |
| Hexachlorobenzene | ND | 40 |
| Phenanthrene | 64 J | 400 |
| Anthracene | 28 J | 400 |
| | | 100 |

Client ID: SB-1-4-0-6-5

Site: NYSEG-GENEVA

Lab Sample No: 692415 Lab Job No: K008

Date Sampled: 12/06/05

Date Received: 12/07/05 Date Extracted: 12/10/05 Date Analyzed: 12/21/05 GC Column: DB-5

Instrument ID: BNAMS1.i Lab File ID: r26016.d

Matrix: SOIL Level: LOW

Sample Weight: 15.0 g

Extract Final Volume: 1.0 ml

Dilution Factor: 1.0

% Moisture: 17

| <u>Parameter</u> | Analytical Results Units: ug/kg (Dry Weight) | Quantitation Limit <u>Units: uq/kq</u> |
|----------------------------|--|--|
| Carbazole | ND | 400 |
| Di-n-butylphthalate | ND | 400 |
| Fluoranthene | 200 J | 400 |
| Pyrene | 190 J | 400 |
| Butylbenzylphthalate | ND | 400 |
| 3,3'-Dichlorobenzidine | ND | 800 |
| Benzo(a)anthracene | 130 | 40 |
| Chrysene | 140 J | 400 |
| bis(2-Ethylhexyl)phthalate | ND | 400 |
| Di-n-octylphthalate | ND | 400 |
| Benzo(b) fluoranthene | 98 | 40 |
| Benzo(k)fluoranthene | 150 | 40 |
| Benzo(a)pyrene | 140 | 40 |
| Indeno(1,2,3-cd)pyrene | 85 | 40 |
| Dibenz(a,h)anthracene | 30 J | 40 |
| Benzo(g,h,i)perylene | 91 J | 400 |

Site: NYSEG-GENEVA

Matrix: SOIL

Lab Job No: K008

QA Batch: 1943

Total Cyanide

| STL Edis Sample # | on Client ID | <u>Date</u> Sampled | <u>Date</u> Extracted | <u>Date</u> <u>Analyzed</u> | Percent Moisture | Dilution Factor | Analytical Result Units: mg/kg |
|----------------------|----------------|------------------------|--------------------------|--------------------------------|---------------------|--------------------|--------------------------------------|
| 692410 | SB-4-10-12 | 12/05/05 | 12/12/05 | 12/13/05 | 22.8 | 1.0 | ИД |
| 692411 | SB-4-18-20 | 12/05/05 | 12/12/05 | 12/13/05 | 21.3 | 1.0 | ND . |
| 692412 | SB-8-6-8 | 12/05/05 | 12/12/05 | 12/13/05 | 18.4 | 1.0 | ND |
| 692413 | SB-8-14-16 | 12/05/05 | 12/12/05 | 12/13/05 | 23.7 | 1.0 | 0.87 |
| 692414 | SB-3-10-0-11-8 | 12/06/05 | 12/12/05 | 12/13/05 | 17.8 | 1.0 | ND |
| 692415 | SB-1-4-0-6-5 | 12/06/05 | 12/12/05 | 12/13/05 | 16.8 | 1.0 | 1.4 |

Quantitation Limit for Total Cyanide is 0.5 mg/kg.

SAMPLE PREPARATION AND ANALYSIS SUMMARY VOLATILE (VOA) ANALYSES

| Laboratory Sample ID | Matrix | Date Collected | Date Rec'd at Lab | Date Extracted | Date Analyzed |
|-------------------------|--------|-------------------|----------------------|-------------------|------------------|
| 692410 | SOLID | 12/5/05 | 12/7/05 | | 12/10/05 |
| 692411 | SOLID | 12/5/05 | . 12/7/05 | | 12/16/05 |
| 692411MS | SOLID | 12/5/05 | 12/7/05 | | 12/16/05 |
| 692411SD | SOLID | 12/5/05 | 12/7/05 | | 12/16/05 |
| 692412 | SOLID | 12/5/05 | 12/7/05 | | 12/10/05 |
| 692413 | SOLID | 12/5/05 | 12/7/05 | | 12/16/05 |
| 692414 | SOLID | 12/6/05 | 12/7/05 | | 12/10/05 |
| 692415 | SOLID | 12/6/05 | 12/7/05 | | 12/10/05 |

SAMPLE PREPARATION AND ANALYSIS SUMMARY SEMIVOLATILE (BNA) ANALYSES

| Laboratory Sample ID | Matrix | Date Collected | Date Rec'd at Lab | Date Extracted | Date Analyzed |
|-------------------------|--------|-------------------|----------------------|-------------------|------------------|
| 692410 | SOLID | 12/5/05 | 12/7/05 | 12/10/05 | 12/21/05 |
| 692411 | SOLID | 12/5/05 | 12/7/05 | 12/10/05 | 12/20/05 |
| 692412 | SOLID | 12/5/05 | 12/7/05 | 12/10/05 | 12/21/05 |
| 692413 | SOLID | 12/5/05 | 12/7/05 | 12/10/05 | 12/21/05 |
| 692414 | SOLID | 12/6/05 | - 12/7/05 | 12/10/05 | 12/21/05 |
| 692414MS | SOLID | 12/6/05 | 12/7/05 | 12/10/05 | 12/21/05 |
| 692414SD | SOLID | 12/6/05 | 12/7/05 | 12/10/05 | 12/21/05 |
| 692415 | SOLID | 12/6/05 | 12/7/05 | 12/10/05 | 12/21/05 |

SAMPLE PREPARATION AND ANALYSIS SUMMARY SEMIVOLATILE (BNA) ANALYSES

| Laboratory Sample ID | Matrix | Analytical Protocol | Extraction Method | Auxiliary Cleanup | Dil/Conc Factor |
|-------------------------|---------|----------------------------------|----------------------|----------------------|--------------------|
| 692410 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 692411 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 692412 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 692413 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 692414 | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 692414MS | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | · | 1,00 |
| 692414SD | SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |
| 692415 | . SOLID | 1989 NYSDEC ASP - Revision 10/95 | Liquid-Liquid | | 1.00 |

SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSES

| Laboratory Sample ID | Matrix | Matrix Parameters | | Date Analyzed | |
|-------------------------|--------|-----------------------|------------------|------------------|--|
| 692410 | SOLID | % SOLIDS | 12/7/05 | 12/8/05 | |
| 692410 | SOLID | TOTAL CYANIDE | 12/7/05 | 12/13/05 | |
| 692411 | SOLID | % SOLIDS | 12/7/05 | 12/8/05 | |
| 692411 | SOLID | TOTAL CYANIDE 12/7/0 | | 12/13/05 | |
| 692412 | ŞOLID | % SOLIDS | 12/7/05 | 12/8/05 | |
| 692412 | SOLID | TOTAL CYANIDE | 12/7/05 | 12/13/05 | |
| 692413 | SOLID | % SOLIDS 12/7/05 | | 12/8/05 | |
| 692413 | SOLID | TOTAL CYANIDE 12/7/05 | | 12/13/05 | |
| 692414 | SOLID | % SOLIDS | 12/7/05 12/8 | | |
| 692414 | SOLID | TOTAL CYANIDE | 12/7/05 12/13/05 | | |
| 692415 | SOLID | % SOLIDS | 12/7/05 12/8/05 | | |
| 692415 | SOLID | TOTAL CYANIDE | 12/7/05 | 12/13/05 | |



SDG NARRATIVE

STL EDISON

SDG No. K008

| STL Edison Sample | Client ID |
|-------------------|-------------------|
| 692410 | SB-4-10-12 |
| 692411 | SB-4-18-20 |
| 692411MS | SB-4-18-20MS |
| 692411SD | SB-4-18-20MSD |
| 692412 | SB-8-6-8 |
| 692413 | SB-8-14-16 |
| 692414 | SB-3-10-0-11-8 |
| 692414MS | SB-3-10-0-11-8MS |
| 692414SD | SB-3-10-0-11-8MSD |
| 692415 | SB-1-4-0-6-5 |

Sample Receipt:

Sample delivery conforms with requirements.

Volatile Organic Analysis (GC/MS):

Soil blank KV344 contains 6.0 ppb of Acetone. Sample results are flagged with a B qualifier.

Base/Neutral and/or Acid Extractable Organics (GC/MS):

All data conforms with method requirements.

Wet Chemistry \ Microbiology:

All data conforms with method requirements.

rtify that this data package is in compliance with the protocols in NYSDEC ASP B both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this package has been authorized by the Laboratory Manager or his designee

Michael J. Ubas

Michael J.Urban Laboratory Manager