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December 3, 2007

Mr. Keith Cowan
Clough, Harbour, & Associates LLP
III Winners Circle
P.O. Box 5269
Albany, New York 12205-0269

Re: Data Validation Report
SI Group-Congress St. Remedial Investigation
Soil and Ground Water Sampling Events

Dear Mr. Cowan:

The data usability summary reports and data validation summaries are attached to this letter for SI Group-Congress St. Remedial Investigation, soil and ground water sampling events. The data for the following TestAmerica Connecticut, SDG numbers, were mostly acceptable with some issues that are identified and discussed in the validation summaries.

220-3051	220-3087	220-3105	220-3171
220-3193	220-3231	220-3302	

There were volatile data that were qualified as unusable (R) in data packs 220-3087 and 220-3105. The data is rejected based solely on the validation guidance criteria. The rejected data may be determined to be acceptable to the user based on additional information that is not contained in the data validation criteria. A list of common data validation acronyms is attached to this letter to assist you in interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Clough, Harbour, & Associates LLP.

Sincerely,
Alpha Geoscience

Donald Anné
Senior Chemist

DCA:dca
attachments

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Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.

R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.

N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.

J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

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Data Usability Summary Report for
TestAmerica Connecticut, SDG No. 220-3051

5 Ground Water Samples,
5 Soil Samples, and 1 Trip Blank
Collected October 10 and 11, 2007

Prepared by: Donald Anné
December 3, 2007

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 5 ground water and 5 soil samples analyzed for volatiles and semivolatiles, and the results for 1 trip blank analyzed for volatiles only.

The overall performances of the analyses are acceptable. TestAmerica Connecticut did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive volatile results for methylene chloride and acetone were flagged as "not detected" (U) for the following soil samples because the levels reported in the samples were not significantly greater (more than 10 times) than the highest associated blank level.

  S-101007-SDN-001 S-101107-SDN-005 S-101107-SDN-007 S-101107-SDN-010

All data that are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Volatiles Data for
TestAmerica Connecticut, SDG No. 220-3051

5 Ground Water Samples,
5 Soil Samples, and 1 Trip Blank
Collected October 10 and 11, 2007

Prepared by: Donald Anné
December 3, 2007

Holding Times: Samples were analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8260B criteria.

The average RRFs for target compounds were above the allowable minimum (0.050), as required.

The %RSD for acetone (44.7%) was above the allowable maximum (30%) for MSN on 10-11-07. Positive results for acetone should be considered estimated (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF50s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

Blanks: Method blank MB 220-10317/3 contained traces of acetone (9.6 ug/kg) and methylene chloride (3.3 ug/kg). Method blank MB 220-10317/3 contained traces of acetone (170 ug/kg) and methylene chloride (45 ug/kg). The trip blank contained a trace of methylene chloride (5.9 ug/L). Positive results for acetone and methylene chloride that are less than ten times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

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Matrix Spike/Matrix Spike Duplicate: MS/MSD data was not provided in this SDG. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries (%Rs) for target compounds were within QC limits for sample LCS 220-10317/2.

The %Rs for chloroethane, chloromethane, and vinyl chloride were above QC limits for samples LCS 220-10418/2 and LCS 220-10469/2. Positive results for these compounds should be considered estimated (J) in associated samples.

Compound ID: Checked compounds were within GC/MS quantitation and qualitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

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QA/QC Review of Semi-Volatile Data for
TestAmerica Connecticut, SDG No. 220-3051

5 Ground Water Samples and 5 Soil Samples
Collected October 10 and 11, 2007

Prepared by: Donald Anné
December 3, 2007

Holding Times: Samples were extracted and analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF40s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of method blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: Five of 65 relative percent differences were above the allowable maximum and 6 of 130 percent recoveries were outside QC limits for MS/MSD sample S-101007-SDN-001. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries (%Rs) for target compounds were within QC limits for sample LCS 220-10392/2-A.

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The %R for 4-nitrophenol was above QC limits for samples LCS 220-10547/2-A and LCS 10585/2-A. The %R for bis(2-chloroethyl)ether was above QC limits for sample LCS 220-10359/2-A. Positive results for these 2 compounds should be considered estimated (J) in associated samples.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

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Data Usability Summary Report for
TestAmerica Connecticut, SDG No. 220-3087

2 Ground Water Samples, 5 Soil Samples,
1 Soil Field Duplicate, and 1 Trip Blank
Collected October 12, 2007

Prepared by: Donald Anné
December 3, 2007

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 2 ground water, 5 soil samples, and 1 soil field duplicate analyzed for volatiles and semivolatiles, and the results for 1 trip blank analyzed for volatiles only.

The overall performances of the analyses are acceptable. TestAmerica Connecticut did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive volatile results for acetone were flagged as "not detected" (U) for soil samples S-101207-SDN-011, S-101207-SDN-012, and S-101207-SDN-013 because the levels reported in the samples were not significantly greater (more than 10 times) than the highest associated blank level.

- Positive volatile results for methylene chloride were flagged as "not detected" (U) for the following soil samples because the levels reported in the samples were not significantly greater (more than 10 times) than the highest associated blank level.

S-101207-SDN-011	S-101207-SDN-012	S-101207-SDN-013
S-101107-SDN-014	S-101207-SDN-018	

- The "not detected" volatile results for bromomethane were flagged as "unusable" (R) in samples S-101207-SDN-015, GW-101207-SDN-016, and TRIP BLANK because the RRF50 for bromomethane was below the allowable minimum in the associated continuing calibration.

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- The positive volatile result for carbon disulfide was flagged as "estimated" (J) in sample GW-101207-SDN-019 because the %R for carbon disulfide was below the QC limits in the laboratory control sample.

- The positive volatile result for acetone was flagged as "estimated" (J) in samples S-101207-SDN-014 and S-101207-SDN-018 because the %RSD for acetone was above the allowable maximum in the associated initial calibration.

- The positive volatile result for acetone was flagged as "estimated" (J) in sample S-101207-SDN-015 and GW-101207-SDN-016 because the %D for acetone was above the allowable maximum in the associated continuing calibration.

- The positive semi-volatile result for bis(2-ethylhexyl)phthalate was flagged as "not detected" (U) for soil sample S-101207-SDN-018 because the level reported in the sample was not significantly greater (more than 10 times) than the associated method blank level.

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Volatiles Data for
TestAmerica Connecticut, SDG No. 220-3087

2 Ground Water Samples, 5 Soil Samples,
1 Soil Field Duplicate, and 1 Trip Blank
Collected October 12, 2007

Prepared by: Donald Anné
December 3, 2007

Holding Times: Samples were analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8260B criteria.

The average RRFs for target compounds were above the allowable minimum (0.050), as required.

The %RSD for acetone (30.6%) was above the allowable maximum (30%) for MSO on 10-15-07. The %RSD for bromomethane (30.6%) was above the allowable maximum (30%) for MSL on 10-23-07. Positive results for these compounds should be considered estimated (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF50 for bromomethane (0.0396) was below the allowable minimum (0.050) on 10-19-07 (L1408.D). Positive results for bromomethane should be considered estimated (J) and negative results unusable (R) in associated samples.

The %Ds for bromomethane (35.3%), acetone (32.0%), 2-butanone (33.0%), 4-methyl-2-pentanone (29.1%), and 2-hexanone (27.3%) were above the allowable maximum (25%) on 10-19-07 (L1408.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: Method blank MB 220-10515/3 contained traces of acetone (3.1 ug/kg) and methylene chloride (6.8 ug/kg). Method blank MB 220-10516/3 contained a trace of methylene chloride (2.2 ug/kg). The trip blank contained a trace of methylene chloride (6.2 ug/L).

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Positive results for acetone and methylene chloride that are less than ten times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: Twenty-four of 34 relative percent differences were above the allowable maximum and 8 of 68 percent recoveries were outside QC limits for MS/MSD sample GW-101207-SDN-019. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries (%Rs) for target compounds were within QC limits for the following samples:

LCS 220-10515/2	LCS 220-10516/2	MSB 220-10436/5
MSB 220-10515/5	MSB 220-10540/5	

The %Rs for chloroethane, chloromethane, and vinyl chloride were above QC limits for samples LCS 220-10436/2 and LCS 220-10438/2. Positive results for these compounds should be considered estimated (J) in associated samples.

The %R for carbon disulfide was below QC limits for sample LCS 220-10540/2. All results for carbon disulfide should be considered estimated (J) in associated samples.

Field Duplicates: The analyses of field duplicates S-101207-SDN-012 and S-101207-SDN-013 reported target compounds as either not detected or below the reporting limits; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds were within GC/MS quantitation and qualitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

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QA/QC Review of Semi-Volatile Data for
TestAmerica Connecticut, SDG No. 220-3087

2 Ground Water Samples, 5 Soil Samples,
and 1 Soil Field Duplicate
Collected October 12, 2007

Prepared by: Donald Anné
December 3, 2007

Holding Times: Samples were extracted and analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF40s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

Blanks: Method blank MB 220-10617/3 contained a trace of bis(2-ethylhexyl)phthalate (490 ug/kg). Positive results for bis(2-ethylhexyl)phthalate that are less than ten times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: Two of 65 relative percent differences were above the allowable maximum and 7 of 130 percent recoveries were outside QC limits for MS/MSD sample GW-101207-SDN-019. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

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Laboratory Control Sample: The percent recoveries (%Rs) for target compounds were within QC limits for sample LCS 220-10431/2-A.

The %R for 4-nitrophenol was above QC limits for sample LCS 10617/2-A. Positive results for 2,4-dinitrophenol should be considered estimated (J) in associated samples.

Field Duplicates: The analyses of field duplicates S101207-SDN-012 and S101207-SDN-013 reported target compounds as either not detected or below the reporting limits; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

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Data Usability Summary Report for
TestAmerica Connecticut, SDG No. 220-3105

4 Ground Water Samples, 4 Soil Samples,
1 GW Field Duplicate, 1Equipment Blank, and 1 Trip Blank
Collected October 15, 2007

Prepared by: Donald Anné
December 3, 2007

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 4 ground water, 4 soil samples, 1 ground water field duplicate, and 1 equipment blank analyzed for volatiles and semivolatiles, and the results for 1 trip blank analyzed for volatiles only.

The overall performances of the analyses are acceptable. TestAmerica Connecticut did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive volatile results for acetone were flagged as "not detected" (U) for samples GW-101507-SDN-024 and GW-101507-SDN-025 because the levels reported in the samples were not significantly greater (more than 10 times) than the highest associated blank level.

- Positive volatile results for methylene chloride were flagged as "not detected" (U) for samples S-101507-SDN-017, S-101507-SDN-026, and TRIP BLANK because the levels reported in the samples were not significantly greater (more than 10 times) than the highest associated blank level.

- The "not detected" volatile results for bromomethane were flagged as "unusable" (R) in samples S-101507-SDN-023 and S-101507-SDN-027 because the RRF50 for bromomethane was below the allowable minimum in the associated continuing calibration.

- The positive volatile result for acetone was flagged as "estimated" (J) in samples S-101507-SDN-017 and S101507-SDN-026 because the %RSD for acetone was above the allowable maximum in the associated initial calibration.

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- The positive volatile result for acetone was flagged as "estimated" (J) in sample S-101507-SDN-027 because the %D for acetone was above the allowable maximum in the associated continuing calibration.

- The "not detected" semi-volatile results for 3,3'-dichlorobenzidine were flagged as "estimated" (J) for all 4 ground water samples, ground water field duplicate, and equipment blank because the %R for 3,3'-dichlorobenzidine was below QC limits in the associated laboratory control sample.

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Volatiles Data for
TestAmerica Connecticut, SDG No. 220-3105

4 Ground Water Samples, 4 Soil Samples,
1 GW Field Duplicate, 1 Equipment Blank, and 1 Trip Blank
Collected October 15, 2007

Prepared by: Donald Anné
December 3, 2007

Holding Times: Samples were analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8260B criteria.

The average RRFs for target compounds were above the allowable minimum (0.050), as required.

The %RSD for acetone (44.7%) was above the allowable maximum (30%) for MSN on 10-11-07. The %RSD for acetone (30.6%) was above the allowable maximum (30%) for MSO on 10-15-07. The %RSD for bromomethane (30.6%) was above the allowable maximum (30%) for MSL on 10-23-07. Positive results for these compounds should be considered estimated (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF50 for bromomethane (0.0396) was below the allowable minimum (0.050) on 10-19-07 (L1408.D). Positive results for bromomethane should be considered estimated (J) and negative results unusable (R) in associated samples.

The %Ds for bromomethane (35.3%), acetone (32.0%), 2-butanone (33.0%), 4-methyl-2-pentanone (29.1%), and 2-hexanone (27.3%) were above the allowable maximum (25%) on 10-19-07 (L1408.D. Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: Method blank MB 220-10516/3 contained a trace of methylene chloride (2.2 ug/kg). Method blank MB 220-10563/3 contained a trace of toluene (0.80 ug/kg).

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Method blank MB 220-10442/3 contained traces of acetone (2.5 ug/L) and methylene chloride (3.7 ug/L). Equipment blank EB-1 contained a trace of methylene chloride (0.66 ug/L). Positive results for acetone and methylene chloride that are less than ten times the highest blank level should be reported as not detected (U) in associated samples. Positive results for toluene that are less than five times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum, but 1 of 68 percent recoveries was above QC limits for MS/MSD sample S-101507-SDN-017. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries (%Rs) for target compounds were within QC limits for the following samples:

LCS 220-10516/2	LCS 220-10542/2	LCS 220-10563/2
MSB 220-10542/12	MSB 220-10563/7	

The %Rs for chloroethane, chloromethane, and vinyl chloride were above QC limits for sample LCS 220-10438/2. The %Rs for bromomethane, chloroethane, chloromethane, and vinyl chloride were above QC limits for sample LCS 220-10442/2. Positive results for these compounds should be considered estimated (J) in associated samples.

Field Duplicates: The analyses of field duplicates GW-101507-SDN-024 and GW-101507-SDN-025 reported target compounds as either not detected or below the reporting limits; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds were within GC/MS quantitation and qualitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

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QA/QC Review of Semi-Volatile Data for
TestAmerica Connecticut, SDG No. 220-3105

4 Ground Water Samples, 4 Soil Samples,
1 GW Field Duplicate, and 1 Equipment Blank
Collected October 15, 2007

Prepared by: Donald Anné
December 3, 2007

Holding Times: Samples were extracted and analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target compounds were above the allowable minimum (0.050), as required.

The %RSD for 4-nitroaniline (46.4%) was above the allowable maximum (30%) for MSA on 10-24-07. Positive results for 4-nitroaniline should be considered estimated (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF40s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

Blanks: Method blank MB 220-10617/3 contained a trace of bis(2-ethylhexyl)phthalate (490 ug/kg). Positive results for bis(2-ethylhexyl)phthalate that are less than ten times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: Two surrogates for sample S-101507-SDN-027 were diluted beyond detection limits. One of three base/neutral surrogate recoveries for sample GW-101507-SDN-022 was above control limits. No action is taken on either surrogates diluted beyond detection limits or one surrogate per fraction outside control limits, provided the recovery is not below 10%.

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Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum, but 3 of 130 percent recoveries were outside QC limits for MS/MSD sample S-101507-SDN-017. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recovery (%R) for 4-nitrophenol was above QC limits for samples LCS 220-10617/2-A and LCS 220-10619/2-A. Positive results for 2,4-dinitrophenol should be considered estimated (J) in associated samples.

The %R for 3,3'-dichlorobenzidine was below QC limits for sample LCS 220-10462/2-A. All results for 3,3'-dichlorobenzidine should be considered estimated (J) in associated samples.

Field Duplicates: The analyses of field duplicates S101207-SDN-012 and S101207-SDN-013 reported target compounds as either not detected or below the reporting limits; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

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Data Usability Summary Report for
TestAmerica Connecticut, SDG No. 220-3171

2 Soil Samples
Collected October 22 and 23, 2007

Prepared by: Donald Anné
December 3, 2007

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 2 soil samples analyzed for volatiles and semivolatiles.

The overall performances of the analyses are acceptable. TestAmerica Connecticut did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The positive semi-volatile result for bis(2-ethylhexyl)phthalate was flagged as "not detected" (U) for soil sample S-102207-SDN-028 because the level reported in the sample was not significantly greater (more than 10 times) than the associated method blank level.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Volatiles Data for
TestAmerica Connecticut, SDG No. 220-3171

2 Soil Samples
Collected October 22 and 23, 2007

Prepared by: Donald Anné
December 3, 2007

Holding Times: Samples were analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8260B criteria.

The average RRFs for target compounds were above the allowable minimum (0.050), as required.

The %RSD for bromomethane (47.5%) was above the allowable maximum (30%) for MSL on 11-01-07. Positive results for bromomethane should be considered estimated (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF50s for target compounds were above the allowable minimum (0.050), as required.

The %D for acetone (32.9%) were above the allowable maximum (25%) on 10-28-07 (N5460.D. Positive results for acetone should be considered estimated (J) in associated samples.

Blanks: Method blank MB 220-10670/3 contained a trace of toluene (0.66 ug/kg). Positive results for toluene that are less than five times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

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Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data was not provided in this SDG. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries (%Rs) for target compounds were within QC limits for samples LCS 220-10670/2 and MSB 220-10771/10-A.

The %Rs for chloromethane and vinyl chloride were above QC limits for sample LCS 220-10886/2. The %R for cis-1,3-dichloropropene was above QC limits for sample MSB 220-10670/23. Positive results for these compounds should be considered estimated (J) in associated samples.

Compound ID: Checked compounds were within GC/MS quantitation and qualitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

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QA/QC Review of Semi-Volatile Data for
TestAmerica Connecticut, SDG No. 220-3171

2 Soil Samples
Collected October 22 and 23, 2007

Prepared by: Donald Anné
December 3, 2007

Holding Times: Samples were extracted and analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF40s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (30%), as required.

Blanks: Method blank MB 220-10838/12-A contained a trace of bis(2-ethylhexyl)phthalate (150 ug/kg). Positive results for bis(2-ethylhexyl)phthalate that are less than ten times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum, but 11 of 130 percent recoveries were outside QC limits for MS/MSD sample S-102407-SDN-031. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

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Laboratory Control Sample: The percent recovery for 4-nitrophenol was above QC limits for samples LCS 10838/13-A and LCS 220-10866/2-A. Positive results for 2,4-dinitrophenol should be considered estimated (J) in associated samples.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

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Data Usability Summary Report for
TestAmerica Connecticut, SDG No. 220-3193

3 Soil Samples
Collected October 24 and 25, 2007

Prepared by: Donald Anné
December 3, 2007

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 3 soil samples analyzed for volatiles and semivolatiles.

The overall performances of the analyses are acceptable. TestAmerica Connecticut did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The positive volatile result for toluene was flagged as "not detected" (U) for soil sample S-102507-SDN-032 because the level reported in the sample was not significantly greater (more than 10 times) than the associated method blank level.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Volatiles Data for
TestAmerica Connecticut, SDG No. 220-3193

3 Soil Samples
Collected October 24 and 25, 2007

Prepared by: Donald Anné
December 3, 2007

Holding Times: Samples were analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8260B criteria.

The average RRFs for target compounds were above the allowable minimum (0.050), as required.

The %RSD for bromomethane (47.5%) was above the allowable maximum (30%) for MSL on 11-01-07. Positive results for bromomethane should be considered estimated (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF50s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

Blanks: Method blank MB 220-10714/3 contained a trace of toluene (0.73 ug/kg). Positive results for toluene that are less than five times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

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Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for MS/MSD sample S-102407-SDN-031.

Laboratory Control Sample: The percent recoveries (%Rs) for target compounds were within QC limits for samples LCS 220-10714/2 and MSB 220-10771/10-A.

The %Rs for chloromethane and vinyl chloride were above QC limits for sample LCS 220-10886/2. Positive results for these 2 compounds should be considered estimated (J) in associated samples.

Compound ID: Checked compounds were within GC/MS quantitation and qualitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

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QA/QC Review of Semi-Volatile Data for
TestAmerica Connecticut, SDG No. 220-3193

3 Soil Samples
Collected October 24 and 25, 2007

Prepared by: Donald Anné
December 3, 2007

Holding Times: Samples were extracted and analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF40s for target compounds were above the allowable minimum (0.050), as required.

The %D for 3,3'-dichlorobenzidine (31.7%) was above the allowable maximum (25%) on 11-07-07 (A7436.D). Positive results for 3,3'-dichlorobenzidine should be considered estimated (J) in associated samples.

Blanks: Method blank MB 220-10901/1-A contained a trace of diethylphthalate (100 ug/kg). Positive results for diethylphthalate that are less than ten times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

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Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum, but 11 of 130 percent recoveries were outside QC limits for MS/MSD sample S-102407-SDN-031. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recovery for 4-nitrophenol was above QC limits for sample LCS 220-10901/2-A. Positive results for 2,4-dinitrophenol should be considered estimated (J) in associated samples.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

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Data Usability Summary Report for
TestAmerica Connecticut, SDG No. 220-3231

3 Soil Samples and 1Field Duplicate
Collected October 29 and 30, 2007

Prepared by: Donald Anné
December 3, 2007

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 3 soil samples and 1 field duplicate for volatiles and semivolatiles.

The overall performances of the analyses are acceptable. TestAmerica Connecticut did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive volatile results for methylene chloride were flagged as "not detected" (U) for samples S-102907-SDN-035 and S-103007-SDN-036 because the levels reported in the samples were not significantly greater (more than 10 times) than the highest associated blank level.

- Positive semi-volatile results for bis(2-ethylhexyl)phthalate were flagged as "not detected" (U) for samples S-102907-SDN-033, S-102907-SDN-035, and S-103007-SDN-036 because the levels reported in the samples were not significantly greater (more than 10 times) than the highest associated blank level.

- Positive semi-volatile results for fluoranthene and indeno(1,2,3-cd)pyrene were flagged as "not detected" (U) for samples S-102907-SDN-033, S-102907-SDN-035, and S-103007-SDN-036 because the levels reported in the samples were not significantly greater (more than 5 times) than the highest associated blank level.

- Positive semi-volatile results for pyrene were flagged as "not detected" (U) for samples S-102907-SDN-033 and S-103007-SDN-036 because the levels reported in the samples were not significantly greater (more than 5 times) than the highest associated blank level.

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- The positive semi-volatile result for naphthalene and 2-methylnaphthalene were flagged as "estimated" (J) in samples S-102907-SDN-033 and S-102907-SDN-034 because the RPDs for naphthalene and 2-methylnaphthalene were above the allowable maximum (35%) in field duplicate pair S-102907-SDN-033 and S-102907-SDN-034.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Volatiles Data for
TestAmerica Connecticut, SDG No. 220-3231

3 Soil Samples and 1 Field Duplicate
Collected October 29 and 30, 2007

Prepared by: Donald Anné
December 3, 2007

Holding Times: Samples were analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8260B criteria.

The average RRFs for target compounds were above the allowable minimum (0.050), as required.

The %RSD for bromomethane (47.5%) was above the allowable maximum (30%) for MSL on 11-01-07. Positive results for bromomethane should be considered estimated (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF50s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

Blanks: Method blank MB 220-10936/3 contained a trace of methylene chloride (1.4 ug/kg). Positive results for methylene chloride that are less than ten times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data was not provided in this SDG. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

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Laboratory Control Sample: The percent recoveries (%Rs) for target compounds were within QC limits for samples LCS 220-10936/2 and MSB 220-10936/12.

The %Rs for chloroethane, chloromethane, and vinyl chloride were above QC limits for sample LCS 220-10983/2. Positive results for these compounds should be considered estimated (J) in associated samples.

Field Duplicates: The relative percent difference for xylene was below the allowable maximum (35%) for field duplicate pair S-102907-SDN-033 and S-102907-SDN-034 (attached table), as required.

Compound ID: Checked compounds were within GC/MS quantitation and qualitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 220-3231

S1= s-102907-sdn-033 **S2=** s-102907-sdn-034

Analyte	S1	S2	RPD (%)
ethylbenezene	**250**	**310**	NC
xylenes	5100	5700	11%

Bold numbers were values that were quantitated below the lowest standard.
NC - Not calculated, both results must be above the reporting limit for valid RPDs to be calculated or within quantitation limits (above the low standard).

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QA/QC Review of Semi-Volatile Data for
TestAmerica Connecticut, SDG No. 220-3231

3 Soil Samples and 1 Field Duplicate
Collected October 29 and 30, 2007

Prepared by: Donald Anné
December 3, 2007

Holding Times: Samples were extracted and analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF40s for target compounds were above the allowable minimum (0.050), as required.

The %D for benzyl alcohol (31.9%) was above the allowable maximum (25%) on 11-16-07 (Z3201.D). Positive results for benzyl alcohol should be considered estimated (J) in associated samples.

Blanks: Method blank MB 220-11024/1-A contained traces of fluoranthene (61 ug/kg), pyrene (54 ug/kg), bis(2-ethylhexyl)phthalate (140 ug/kg), and indeno(1,2,3-cd)pyrene (190 ug/kg). Positive results for bis(2-ethylhexyl)phthalate that are less than ten times the highest blank level should be reported as not detected (U) in associated samples. Positive results for fluoranthene, pyrene, and indeno(1,2,3-cd)pyrene that are less than five times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

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Matrix Spike/Matrix Spike Duplicate: MS/MSD data was not provided in this SDG. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recovery (%R) for 4-nitrophenol was above QC limits for sample LCS 220-11024/2-A. Positive results for 2,4-dinitrophenol should be considered estimated (J) in associated samples.

Field Duplicates: The relative percent differences for naphthalene and 2-methylnaphthalene were above the allowable maximum (35%) for field duplicate pair S-102907-SDN-033 and S-102907-SDN-034 (attached table). Results for naphthalene and 2-methylnaphthalene should be considered estimated (J) in samples S-102907-SDN-033 and S-102907-SDN-034.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 220-3231

S1= s-102907-sdn-033 **S2=** s-102907-sdn-034

Analyte	S1	S2	RPD (%)
naphthalene	9900	25000	87%
2-methylnaphthalene	1400	4000	96%
benzo(b)fluoranthene	**230**	ND	NC
benzo(a)pyrene	**120**	ND	NC
benzo(g,h,I)perylene	**180**	ND	NC

Bold numbers were values that were quantitated below the lowest standard.
ND - Not detected.
NC - Not calculated, both results must be above the reporting limit for valid RPDs to be calculated or within quantitation limits (above the low standard).

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Data Usability Summary Report for
TestAmerica Connecticut, SDG No. 220-3302

1 Equipment Blank
Collected November 6, 2007

Prepared by: Donald Anné
December 3, 2007

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 1 equipment blank analyzed for volatiles and semivolatiles.

The overall performances of the analyses are acceptable. TestAmerica Connecticut did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The positive semoi-volatile result for bis(2-ethylhexyl)phthalate was flagged as "not detected" (U) for sample EB-1 because the level reported in the sample was not significantly greater (more than 10 times) than the associated method blank level.

All data are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Volatiles Data for
TestAmerica Connecticut, SDG No. 220-3302

1 Equipment Blank
Collected November 6, 2007

Prepared by: Donald Anné
December 3, 2007

Holding Times: Sample EB-1 was analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8260B criteria.

The average RRFs for target compounds were above the allowable minimum (0.050), as required.

The %RSD for bromomethane (35.3%) was above the allowable maximum (30%) for MSL on 11-12-07. Positive results for bromomethane should be considered estimated (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF50s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analysis of the method blank reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for sample EB-1.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data was not provided in this SDG. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

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Laboratory Control Sample: The percent recoveries for target compounds were within QC limits for sample LCS 220-11087/2.

Compound ID: Checked compounds were within GC/MS quantitation and qualitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

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QA/QC Review of Semi-Volatile Data for
TestAmerica Connecticut, SDG No. 220-3302

1 Equipment Blannk
Collected November 6, 2007

Prepared by: Donald Anné
December 3, 2007

Holding Times: Sample EB-1 was extracted and analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF40s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (30%), as required.

Blanks: Method blank MB 220-10956/1-A contained traces of 2-nitroaniline (2.6 ug/L) and bis(2-ethylhexyl)phthalate (2.1 ug/L). Positive results for bis(2-ethylhexyl)phthalate that are less than ten times the highest blank level should be reported as not detected (U) in associated samples. Positive results for 2-nitroaniline that are less than five times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for sample EB-1.

Matrix Spike/Matrix Spike Duplicate: MS/MSD data was not provided in this SDG. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

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Laboratory Control Sample: The percent recoveries for target compounds were within QC limits for sample LCS 220-10956/2-A.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

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January 8, 2008

Mr. Keith Cowan
Clough, Harbour, & Associates LLP
III Winners Circle
P.O. Box 5269
Albany, New York 12205-0269

Re: Data Validation Report
SI Group-Congress St. Remedial Investigation
November 2007 Ground Water Sampling Event

Dear Mr. Cowan:

The data usability summary report and data validation summaries are attached to this letter for SI Group-Congress St. Remedial Investigation, November 2007 ground water sampling event. The data for TestAmerica Connecticut, SDG number 220-3482, were acceptable with some minor issues that are identified and discussed in the validation summaries. There were no data that were qualified as unusable (R) in the data pack.

A list of common data validation acronyms is attached to this letter to assist you in interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Clough, Harbour, & Associates LLP.

Sincerely,
Alpha Geoscience

Donald Anné

Donald Anné
Senior Chemist

DCA:dca
attachments

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Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.

R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.

N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.

J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

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Data Usability Summary Report for
TestAmerica Connecticut, SDG No. 220-3482

21 Ground Water Samples,
1 Field Duplicate, and 1 Trip Blank
Collected November 27 and 28, 2007

Prepared by: Donald Anné
January 8, 2008

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results for 21 ground water samples and 1 field duplicate analyzed for volatiles and semivolatiles, and the results for 1 trip blank analyzed for volatiles only.

The overall performances of the analyses are acceptable. TestAmerica Connecticut did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The "not detected" semi-volatile results were flagged as "estimated" (J) in sample OW-9ARE because the sample was re-extracted beyond SW-846 holding times.
- The 4 positive and 10 "not detected" semi-volatile results for acid extractable compounds were flagged as "estimated" (J) in sample OW-22 because 2 of 3 acid extractable surrogate recoveries were below control limits, but were not less than 10% for the sample OW-22.
- The "not detected" semi-volatile results were flagged as "estimated" (J) in sample OW-9A because 2 of 3 base/neutral and 2 of 3 acid extractable surrogate recoveries were below control limits, but were not less than 10% for the sample OW-9A.

All data that are not flagged rejected (R) are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Volatiles Data for
TestAmerica Connecticut, SDG No. 220-3482

21 Ground Water Samples,
1 Field Duplicate, and 1 Trip Blank
Collected November 27 and 28, 2007

Prepared by: Donald Anné
January 8, 2008

Holding Times: Samples were analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8260B criteria.

The average RRFs for target compounds were above the allowable minimum (0.050), as required.

The %RSD for bromomethane (42.7%) was above the allowable maximum (30%) for MSL on 11-23-07. Positive results for bromomethane should be considered estimated (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF50s for target compounds were above the allowable minimum (0.050), as required.

The %D for bromomethane (38.0%) was above the allowable maximum (25%) on 11-29-07 (L2549.D). Positive results for bromomethane should be considered estimated (J) in associated samples.

Blanks: The analyses of method and trip blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

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Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for MS/MSD sample OW-15B.

Laboratory Control Sample: The percent recoveries for target compounds were within QC limits for samples LCS 220-11484/2, LCS 220-11522/2, LCS 220-11562/2, and MSB 220-11522/20.

Field Duplicates: The relative percent differences for applicable compounds were below the allowable maximum (20%) for field duplicate pair OW-19A and CHA-4 (attached table), as required.

Compound ID: Checked compounds were within GC/MS quantitation and qualitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 220-3482

S1= ow-19a **S2=** cha-4

Analyte	S1	S2	RPD (%)
benzene	**31**	**31**	NC
ethylbenzene	460	460	0%
toluene	380	390	3%
xylenes	5300	5000	6%

Bold numbers were values that were quantitated below the lowest standard.
NC - Not calculated, both results must be above the reporting limit for valid RPDs to be calculated or within quantitation limits (above the low standard).

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QA/QC Review of Semi-Volatile Data for
TestAmerica Connecticut, SDG No. 220-3482

21 Ground Water Samples and 1 Field Duplicate
Collected November 27 and 28, 2007

Prepared by: Donald Anné
January 8, 2008

Holding Times: Sample OW-9ARE was re-extracted beyond SW-846 holding times. All results for sample OW-9ARE should be considered estimated (J).

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF40s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of method blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: One of three acid extractable surrogate recoveries for samples OW-16A and OW-17A was below control limits, but was not below 10%. One of three base/neutral surrogate recoveries for sample OW-8A was below control limits, but was not below 10%. One of three base/neutral surrogate recoveries for sample OW-17A was above control limits. No action is taken on one surrogate per fraction outside control limits, provided no recovery is less than 10%.

Two of three acid extractable surrogate recoveries for samples OW-22 and OW-9A were below control limits, but were not below 10%. All results for acid extractable compounds should be considered estimated (J) in samples OW-22 and OW-9A.

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Two of three base/neutral surrogate recoveries for sample OW-9A were below control limits, but were not below 10%. All results for base/neutral compounds should be considered estimated (J) in sample OW-9A.

Matrix Spike/Matrix Spike Duplicate: Two of 65 relative percent differences were above the allowable maximums and 1 of 130 percent recoveries was above QC limits for MS/MSD sample OW-15B. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries for target compounds were within QC limits for samples LCS 220-11582/2-A, LCS 220-11633/2-A, and LCS 220-11844/2-A.

Field Duplicates: The relative percent differences for applicable compounds were below the allowable maximum (20%) for field duplicate pair OW-19A and CHA-4 (attached table), as required.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 220-3482

S1= ow-19a **S2=** cha-4

Analyte	S1	S2	RPD (%)
phenol	140	160	13%
2-methylphenol	180	190	5%
4-methylphenol	420	430	2%
2,4-dimethylphenol	760	790	4%
naphthalene	130	130	0%
2-methylnaphthalene	**34**	**36**	NC

Bold numbers were values that were quantitated below the lowest standard.
NC - Not calculated, both results must be above the reporting limit for valid RPDs to be calculated or within quantitation limits (above the low standard).

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January 14, 2008

Mr. Keith Cowan
Clough, Harbour, & Associates LLP
III Winners Circle
P.O. Box 5269
Albany, New York 12205-0269

Re: Data Validation Report
Schenectady International
November 2007 Surface and Ground Water Sampling Event

Dear Mr. Cowan:

The data usability summary reports and data validation summaries are attached to this letter for Schenectady International, November 2007 ground and surface water sampling event. The data for TestAmerica Connecticut, SDG number 220-35511, were acceptable with some minor issues that are identified and discussed in the validation summaries. There were no data that were qualified as unusable (R) in data pack 220-3511.

A list of common data validation acronyms is attached to this letter to assist you in interpreting the validation summaries. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for the opportunity to assist Clough, Harbour, & Associates LLP.

Sincerely,
Alpha Geoscience

Donald Anné

Donald Anné
Senior Chemist

DCA:dca
attachments

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Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.

R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.

N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.

J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.

UJ = Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

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Data Usability Summary Report for
TestAmerica Connecticut, SDG No. 220-3511

13 Ground/Surface Water Samples,
1 Field Duplicate, and 1 Trip Blank
Collected November 29 and 30, 2007

Prepared by: Donald Anné
January 14, 2008

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data packs contained the results for 13 ground/surface water samples and 1 field duplicate analyzed for volatiles and semivolatiles, and the results for 1 trip blank analyzed for volatiles only.

The overall performances of the analyses are acceptable. TestAmerica Connecticut did fulfill the requirements of the analytical methods.

The data are acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- The "not detected" volatile results for carbon disulfide were flagged as "estimated" (J) in samples PW-2 and PW-3 because the percent recovery for carbon disulfide was below QC limits for the associated laboratory control sample.

- The 2 positive and 12 "not detected" semi-volatile results for acid extractable compounds were flagged as "estimated" (J) in sample CHA-3 because 2 of 3 acid extractable surrogate recoveries were below control limits, but were not less than 10% for the sample CHA-3.

- The positive semi-volatile results naphthalene were flagged as "estimated" (J) in samples OW-7A and CHA-3 because relative percent difference for naphthalene was above the allowable maximum for field duplicate pair OW-7A and CHA-3.

All data that are considered usable, with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

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QA/QC Review of Volatiles Data for
TestAmerica Connecticut, SDG No. 220-3511

13 Ground/Surface Water Samples,
1 Field Duplicate, and 1 Trip Blank
Collected November 29 and 30, 2007

Prepared by: Donald Anné
January 14, 2008

Holding Times: Samples were analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8260B criteria.

The average RRFs for target compounds were above the allowable minimum (0.050), as required.

The %RSD for bromomethane (42.7%) was above the allowable maximum (30%) for MSL on 11-23-07. Positive results for bromomethane should be considered estimated (J) in associated samples.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF20s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of method blanks reported target compounds as not detected. The trip blank contained a trace of methylene chloride (1.3 ug/L). Positive results for methylene chloride that are less than ten times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for environmental samples.

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Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximum and the percent recoveries were within QC limits for MS/MSD sample OW-6A.

Laboratory Control Sample: The percent recoveries (%Rs) for target compounds were within QC limits for samples LCS 220-11611/2 (L2676.D)and MSB 220-11611/8.

The %R for carbon disulfide was below QC limits for sample LCS 220-11611/2 (l2713.D). All results for carbon disulfide should be considered estimated (J) in associated samples.

Field Duplicates: The relative percent differences for applicable compounds were below the allowable maximum (20%) for field duplicate pair OW-7A and CHA-3 (attached table), as required.

Compound ID: Checked compounds were within GC/MS quantitation and qualitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)

SDG No. 220-3511

S1= ow-7a **S2=** cha-3

Analyte	S1	S2	RPD (%)
ethylbenzene	1000	1000	0%
toluene	**27**	**30**	NC
xylenes	1800	1700	6%

Bold numbers were values that were quantitated below the lowest standard.
NC - Not calculated, both results must be above the reporting limit for valid RPDs to be calculated or within quantitation limits (above the low standard).

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QA/QC Review of Semi-Volatile Data for
TestAmerica Connecticut, SDG No. 220-3511

13 Ground/Surface Water Samples and 1 Field Duplicate
Collected November 29 and 30, 2007

Prepared by: Donald Anné
January 14, 2008

Holding Times: Samples were extracted and analyzed within SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within method 8270C criteria.

The average RRFs for target compounds were above the allowable minimum (0.050) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within method 8260B criteria.

The RRF40s for target compounds were above the allowable minimum (0.050) and the %Ds were below the allowable maximum (25%), as required.

Blanks: The analyses of method blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: Two of three acid extractable surrogate recoveries for sample CHA-3 were below control limits, but were not below 10%. All results for acid extractable compounds should be considered estimated (J) in sample CHA-3.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences were below the allowable maximums and the percent recoveries were within QC limits for MS/MSD sample OW-6A.

Laboratory Control Sample: The percent recoveries for target compounds were within QC limits for samples LCS 220-11633/2-A and LCS 220-11640/2-A.

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Field Duplicates: The relative percent difference for naphthalene was above the allowable maximum (20%) for field duplicate pair OW-7A and CHA-3 (attached table). Results for naphthalene should be considered estimated in samples OW-7A and CHA-3.

Compound ID: Checked compounds were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in SW846.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. 220-3511

S1= ow-7a **S2=** cha-3

Analyte	S1	S2	RPD (%)
4-methylphenol	**15**	**7.9**	NC
2,4-dimethylphenol	**45**	**26**	NC
naphthalene	1300	700	60%
2-methylnaphthalene	**180**	110	NC
acenaphthene	**100**	**68**	NC
dibenzofuran	**58**	**41**	NC
fluorene	**9.8**	**7.4**	NC

Bold numbers were values that were quantitated below the lowest standard.
NC - Not calculated, both results must be above the reporting limit for valid RPDs to be calculated or within quantitation limits (above the low standard).

SOIL VAPOR INTRUSION INVESTIGATION REPORT

Congress Street Facility of SI Group, Inc.
1460 Tenth Avenue
Schenectady, New York

Addendum to the Updated Remedial Investigation Report

Prepared for:

SI Group, Inc.
2750 Balltown Road
Schenectady, NY 12301

Prepared by:

CLOUGH HARBOUR & ASSOCIATES LLP
III Winners Circle
Albany, New York, 12205
(518) 453-4500

CHA Project Number: 15091.2010.1102

December 2008

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FIGURES

TABLES

APPENDICES

1.0 INTRODUCTION

SI Group has completed a Soil Vapor Intrusion Investigation of the Congress Street Facility in accordance with the Soil Vapor Intrusion Investigation Work Plan submitted to the New York State Department of Environmental Conservation (NYSDEC) on September 23, 2008 and included as Appendix A. This report is considered an addendum to the Updated Remedial Investigation Report (URIR) submitted in February 2008 and describes the investigation completed and results obtained. Clough, Harbour & Associates LLP (CHA) was retained by SI Group, Inc. (SI Group) to complete the investigation.

1.1 Report Organization

This Addendum to the Updated Remedial Investigation Report is organized as follows:

- Section 2.0 presents the background;
- Section 3.0 presents the details of field activities conducted as part of this investigation;
- Section 4.0 presents the analytical results of soil vapor sampling;
- Section 5.0 provides a discussion of the quality assurance and quality control associated with analytical results; and
- Section 6.0 presents the recommendations for further soil vapor investigation at the Site.

2.0 BACKGROUND

The Soil Vapor Intrusion Investigation was completed in response to comments received from the New York State Department of Health (NYSDOH) concerning the Updated Remedial Investigation that was completed in 2007. NYSDOH recommended that a soil vapor intrusion investigation be completed along the Site perimeter to determine if contaminated soil vapor was present at the Site perimeter and, if so, whether that contamination was possibly migrating in the direction of nearby commercial and residential buildings. In response to NYSDOH's comment, a Soil Vapor Intrusion Investigation Work Plan was prepared and submitted to NYSDEC on September 23, 2008.

The Work Plan was prepared based on NYSDOH's "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (NYSDOH, 2006), NYSDEC's "DER13/Strategy for Evaluating Soil Vapor Intrusion at Remedial Sites in New York" (NYSDEC, 2006) and United States Environmental Protection Agency (USEPA) "Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils" (USEPA, 2002). The Work Plan is included as Appendix A. Based on verbal acceptance of the Work Plan, the Soil Vapor Investigation was completed in October 2008.

This Report has been prepared as an Addendum to the Updated Remedial Investigation Report (URIR) that was submitted to NYSDEC on February 25, 2008. The Report describes the scope of the recent site investigation activities, a summary of the soil vapor sampling activities, a discussion of the laboratory analytical results, a description of the nature and extent of those results, and recommendations concerning additional soil vapor investigation.

3.0 FIELD ACTIVITIES

3.1 Soil Vapor Probe Installation

On October 14, 2008, five soil vapor sampling implants (SV-1 through SV-5) were installed on-site to determine if soil vapor contamination is present along the Site's border with 10th Avenue, Congress Street and Oak Street. Figure 2 shows the Congress Street site as it existed in the late 1990's prior to removal of the buildings. The buildings were removed but the building foundations, ground floors, and building walls used to retain site soils were left in place. The sampling locations were selected to avoid building foundations and associated slabs that remain on site within the sampling area. As shown on Figure 2, the former Administration Building was located at the corner of 10th Avenue and Congress Street. Sample locations SV-4 and SV-5 are located on either side of the former Administration Building's foundation and floor slab that were left in place. The area above the slab was backfilled with soil to help maintain the slope adjacent to 10th Avenue.

Vapor implants at locations SV-1, SV-2 and SV-5 were installed using direct-push technology (DPT) by advancing a 2 ¼ -inch stainless-steel rod to a depth of approximately seven (7) feet below ground surface (bgs). This depth was selected to avoid dilution by entrained surface air, for greatest relevancy to potential vapor intrusion and to avoid potential pore water interference. The soil vapor probes were installed as permanent probes to ensure that outdoor air infiltration does not occur. Soil vapor implant construction details are presented on well construction diagrams included in Appendix B.

Due to steep slopes that prevented the DPT rig from being used, soil vapor implants at locations SV-3 and SV-4 were installed using a 2 ½ inch hand auger. Vapor implant SV-3 was only installed to a depth of 6.5 feet bgs due to large cobbles being encountered which prevented further augering. Vapor implant SV-4 was installed to a depth of 7 feet bgs.

For each soil vapor implant, a six-inch long stainless steel screen was fitted with ¼ inch inert Teflon tubing and placed in the borehole at depth. Porous, inert backfill material (#0 clean sand) was placed such that it created a two (2)-foot sampling interval. This interval was from seven (7) to five (5) feet bgs in all vapor implants except SV-3, as mentioned above, which had a sampling interval of 6.5 feet to 4.5 feet bgs.

All soil vapor probes were sealed above the sampling zone with bentonite slurry to approximately 0.5 feet bgs. Vapor implants were finished with a flush-mount protective cover and a 0.5 feet thick concrete surface seal. The sampling tubing was sealed at the end to prevent surface water from flowing into the implant.

3.2 Soil Vapor Sampling Protocol

3.2.1 Site Conditions

Weather conditions as reported by the National Weather Service at the Albany International Airport during the 48 hours prior to the sampling event and during the sampling event itself are documented in the table below:

Date	Maximum Temperature (°F)	Minimum Temperature (°F)	Precipitation (inches)	Average Relative Humidity (%)	Average Wind Speed (mph)	Wind Direction
October 15, 2008	65	47	0.00	71	3.1	North to
October 16, 2008	63	49	0.43	83	10.4	West
October 17, 2008	56	37	0.00	64	6.5	North

During the sampling event, no site activities occurred within the sampling area with the exception of those activities associated with the sampling. No odors were observed. Weather conditions during the entire sampling event were moderate; the sky was clear and sunny with temperatures ranging from 40 °F to 55°F.

3.2.2 Tracer Gas Study

Approximately seventy two hours after the installation and sealing of the subsurface vapor probes, a tracer gas study was completed at each location to verify the integrity of the subsurface vapor probe seal. In order to facilitate the use of a tracer gas (helium) in the field, a bentonite slurry was spread in a circle around the vapor probe and a five-gallon bucket was placed over the bentonite slurry creating an enclosure. The sampling tubing was placed through a hole in the top of the bucket enclosure. Two additional holes were made in the bucket enclosure in order to introduce the tracer gas to the enclosure and to provide pressure relief. Next, the tracer gas was released in the enclosure while a helium detector was inserted into the sampling tubing to detect potential leaks prior to sample collection.

CHA field personnel noted that when the helium was introduced at a very fast rate, higher concentrations of helium could be detected in the sampling tubing. As such, field personnel maintained a slow but steady influx of helium during the tracer gas study. In no instance was helium detected at 10 percent or greater during the tracer gas studies. As such, no implants required re-sealing prior to sample collection.

3.2.3 Soil Vapor Sample Collection

After the tracer gas study was performed and before the samples were collected, three implant volumes (volume of the sample probe and tube) were purged to ensure that the samples collected were representative of the soil vapor conditions.

Soil vapor samples were collected by a qualified scientist using methods consistent with NYSDOH soil vapor sampling guidance. Soil gas samples were collected in six-liter Summa canisters that

were individually certified clean by the laboratory. Laboratory-certified clean flow controllers were set to 167 mL/min during sample collection to minimize outdoor air infiltration during sampling. The actual duration of the sampling period for each sample is provided in Table 1. Helium was introduced during the sampling event to displace any ambient air within the enclosure and to enable further verification that a leak did not occur. The data and time of sample collection, sampling depth, sample volume, length of sampling time, and the vacuum of the Summa canisters before and after samples were collected are also included in Table 1.

3.3 Sample Analysis and Analytical Quality Assurance

The Summa canister samples were transmitted to Air Toxics, Ltd. located in Folsom, California under a signed and dated chain of custody. Samples were analyzed for the presence of volatile organic compounds via EPA Method Modified TO-15. Air Toxics, Ltd. is a NYSDOH-Environmental Laboratory Approval Program (ELAP) certified laboratory. The samples were also analyzed for the presence of the tracer gas (helium) via method Modified ASTM D-1946 (excluding the Trip Blank).

Analytical quality assurance for soil vapor samples included one trip blank and one duplicate sample. The trip blank was prepared using laboratory grade ultra pure air and analyzed for the target compounds. The duplicate sample was collected in the field during sampling, concurrent to collecting the respective primary sample, by using a Swagelok® duplicate sampling "T".

4.0 RESULTS

A copy of the laboratory analytical report is included as Appendix C. The soil vapor analytical results are summarized in Table 2. To evaluate the results, the soil vapor analytical results were compared to the screening levels identified in EPA's "Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils" (November, 2002) (EPA Screening Levels). EPA Screening Levels presented in Table 2 are the "Target Deep Soil Gas Concentration" which corresponds to a target indoor air concentration where the soil gas to indoor air attenuation factor is 0.01. EPA considers this attenuation factor reasonably conservative. NYSDOH does not have screening or action levels for contaminants in soil vapor.

As shown in Table 2, a number of VOCs were detected in each soil vapor sample. Across the site, a total of 21 different VOCs were detected. However, all parameters were detected at concentrations well below the EPA Screening Levels. In addition, most parameters were detected at concentrations only slightly higher than the reporting limit. No significant concentration of any chlorinated compound was detected in any of the soil vapor samples analyzed.

Of note is that most parameters detected were detected in multiple (or all) samples collected at the Site. These data would suggest that those detections are more representative of background soil concentrations rather than of site-associated contamination. The samples were collected from locations adjacent to urban residential and commercial areas that have been developed and in use for many years.

A number of compounds were detected at concentrations slightly higher than the majority of other detected compounds. In particular, m,p-xylene and ethanol were detected at concentrations ranging from 2.0 $\mu g/m^3$ to 12 $\mu g/m^3$ and 8.6 $\mu g/m^3$ to 24 $\mu g/m^3$, respectively. The parameter m,p-xylene is a contaminant whose presence at the site has been established during previous remedial investigations, but was detected well below its associated EPA Screening Level of 700,000 $\mu g/m^3$. In addition, the samples were collected adjacent to 10^{th} Avenue, which has been in use for many years, and xylene is a component of gasoline. The source of ethanol is currently unknown. Ethanol does not have an EPA Screening Level established.

5.0 QUALITY ASSURANCE/QUALITY CONTROL

As discussed above, each soil vapor sample was analyzed for the presence of the tracer gas (helium) in order to verify the integrity of the subsurface vapor probe seal. Analytical results (Table 2, Attachment A) indicate that helium was not detected in any of the samples collected. These data suggest that the subsurface vapor probe was correctly sealed with no infiltration of surface air.

Field quality control (QC) samples and select laboratory quality assurance (QA) data were evaluated to assess the acceptability of the analytical data. Laboratory QC results are included with the laboratory analytical reports in Attachment A. Holding times and internal laboratory QC data, including surrogate and matrix spike recoveries; and method blank results were also reviewed to evaluate the acceptability of the laboratory data.

Field Quality Control Samples - QC samples included one duplicate sample and one trip blank. The trip blank was prepared using laboratory grade ultra-pure air and was stored and shipped to the laboratory in the same containers as the field-collected samples. The duplicate sample was collected in the field during sampling, concurrent to collecting the respective primary sample, by using a Swagelok® duplicate sampling "T". Duplicate samples were analyzed for VOCs by EPA Method TO-15. The duplicate sample was stored and shipped to the laboratory in the same containers as the primary sample.

- All RPDs for VOCs in sample SV-5 and its associated duplicate sample (CHA-1) were less than the precision goal of 20% (Table 3) with the exception of two parameters: 1,2,4-Trimethylbenzene and 2-Butanone.

- The RPDs for 1,2,4-Trimethylbenzene and 2-Butanone are only slightly above the precision goal and do not necessarily suggest a problem with the samples or sampling techniques. However, as a conservative measure, the higher of the two values will be considered where applicable. The RPDs for all other detected compounds fell within the 20% precision range.

- No VOCs were detected in the Trip Blank.

Based on the QC evaluation, the analytical data contained herein are of acceptable quality.

Laboratory Quality Control Samples - Laboratory QA procedures included analysis of laboratory blanks, laboratory control samples (LCSs), continuous calibration verification (CCV) samples, and surrogate spikes for the VOC analyses. The laboratory blanks were analyzed to assess the effect of the laboratory environment on the analytical result. The LCSs consist of blank spikes that are used to determine the accuracy of the analytical procedures. LCS and LCSD samples were analyzed to assess analytical accuracy and precision. VOC surrogate standards were added to each soil gas and QC sample. Surrogates are compounds similar to the VOC analytes of interest in chemical composition, extraction, and chromatography, but not normally found in the soil vapor samples.

Surrogate recoveries were used to determine if the analytical instruments were operating within acceptable control limits. Surrogate recoveries were compared to control limits established and

updated by the laboratory based on its historical operation, or EPA-specified control limits, or both. The QA/QC evaluation revealed the following:

- All samples were analyzed within the holding time of 30 days and had surrogate recoveries within specifications;
- Percent recoveries for compounds analyzed in the LCS were within the acceptable range;
- Percent recoveries for compounds analyzed in the CCV were within range with the exception of tert-butyl alcohol (TBA), which had a recovery of slightly less (68%) than the quality control limit (70%);
- For samples SV-2, SV-3, SV-4, SV-5 and CHA-1, TBA is a non-detected, estimated value due to the low recovery in the CCV; and
- No VOCs were detected in the associated laboratory blank.

Based on the above review, the laboratory analytical data meets the data quality objectives and are of acceptable quality.

6.0 CONCLUSIONS/RECOMMENDATIONS

The objective of the soil vapor intrusion investigation was to determine if contaminated soil vapor was present along portions of the property boundary at the Site and possibly migrating in the direction of nearby commercial and residential buildings. Based on the soil vapor results obtained, low levels of soil vapor contamination were identified. These levels are believed to be representative of background levels in the area. In addition, the levels detected do not indicate that they present any potential off-site environmental or health effects.

Therefore, it is recommended that no further action be taken concerning the investigation of potential migration of soil vapor contamination off-site. Should any buildings be constructed on-Site in the future, a vapor intrusion evaluation should be performed under a site-specific work plan or a Site Management Plan as part of the Institutional Controls established for the Site. . If contaminant levels in the groundwater are at levels above standards and the groundwater collection trench is taken off-line or becomes inoperable in the future, the need for a soil vapor intrusion investigation downgradient and potentially off-Site should be evaluated at that time.

FIGURES

CLOUGH HARBOUR & ASSOCIATES LLP
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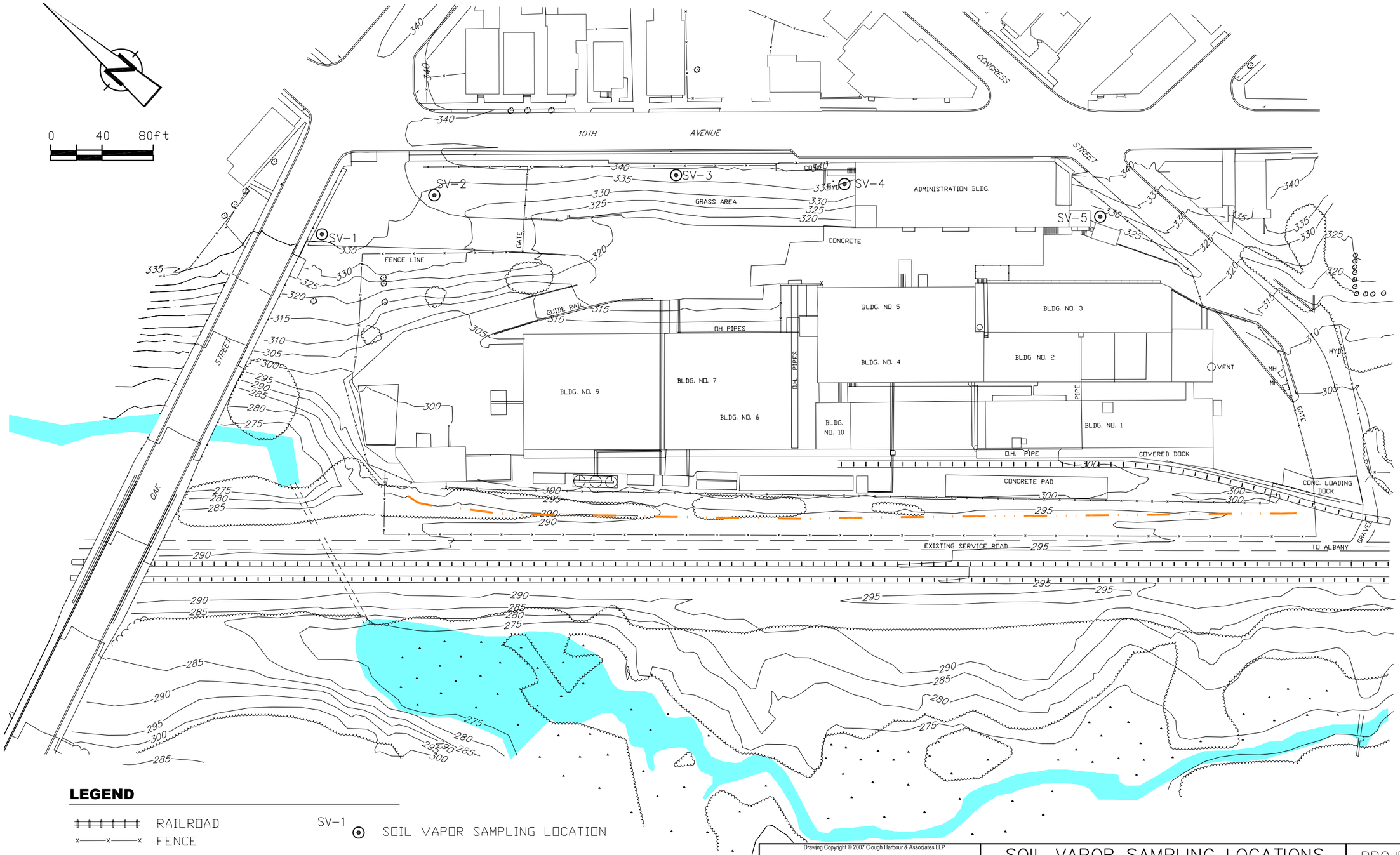
SITE LOCATION

CONGRESS STREET FACILITY
SI GROUP INC.
SCHENECTADY, NEW YORK

PROJECT NO.
15091.2009.1102

DATE: 05/09/07

FIGURE 1



LEGEND

- RAILROAD
- FENCE
- CULVERT
- SWALE
- 300 CONTOUR WITH ELEVATION
- SV-1 SOIL VAPOR SAMPLING LOCATION

CLOUGH HARBOUR & ASSOCIATES LLP
III Winners Circle, PO Box 5269 - Albany, NY 12205-0269
Main: (518) 453-4500 · www.cloughharbour.com

SOIL VAPOR SAMPLING LOCATIONS

SOIL VAPOR INTRUSION INVESTIGATION REPORT

ADDENDUM TO THE UPDATED REMEDIAL INVESTIGATION REPORT
CONGRESS STREET FACILITY
SI GROUP INC.
SCHENECTADY, NEW YORK

PROJECT NO. 15091.2010.1102
DATE: 11/11/08
FIGURE 2

File: M:\15091\CS\REMEDIAL INVESTIGATION\ACAD\SOIL VAPOR\15091_FIG2_ADDENDUM.DWG Saved: 11/25/2008 8:56:16 AM PLotted: 11/25/2008 8:56:39 AM User: Newell, Sarah

TABLES

TABLE 1
SAMPLE SUMMARY

Soil Vapor Intrusion Investigation Report
Congress Street Facility
SI Group
Schenectady, NY

Sample ID	Type of Sample/Location	Sample Collection		Sample Time (min)	Sample Interval (ft bgs)	Canister Pressure (in. Hg)		QA/QC	Volume	Analyses
		Date	Time			Initial	Final			
SV-1	Primary/SV-1	10/17/2008	12:39	43	5 to 7	30+	5	--	(A)	(B) , (C)
SV-2	Primary/SV-2	10/17/2008	13:08	37	5 to 7	30+	5	--	(A)	(B) , (C)
SV-3	Primary/SV-3	10/17/2008	13:34	45	4.5 to 6.5	30+	5	--	(A)	(B) , (C)
SV-4	Primary/SV-4	10/17/2008	13:56	40	5 to 7	29	5	--	(A)	(B) , (C)
SV-5	Primary/SV-5	10/17/2008	14:24	45	5 to 7	30+	5	--	(A)	(B) , (C)
CHA-1	Duplicate/SV-5	10/17/2008	12:13	45	5 to 7	30+	5	Duplicate	(A)	(B) , (C)
Trip Blank	Trip Blank	10/17/2008	--	--	--	--	--	Trip Blank	(A)	(B)

Notes:
(A) = Volume: One 6-L summa canister, 100% certified
(B) = Analysis: Modified TO-15 for Volatile Organics
(C) = Analysis: Modified ASTM D-1946, He only (leak check compound)
QA/QC = Quality Assurance/Quality Control

TABLE 2
SOIL VAPOR ANALYTICAL RESULTS

Soil Vapor Intrusion Investigation Report
Congress Street Facility
SI Group
Schenectady, NY

			Sample ID:	SV-1	SV-2	SV-3	SV-4	SV-5	CHA-1	Trip Blank
			Collection Date:	10/17/2008	10/17/2008	10/17/2008	10/17/2008	10/17/2008	10/17/2008	--
			Sample Location:	SV-1	SV-2	SV-3	SV-4	SV-5	SV-5	N/A
VOCs	**Units**	**EPA Generic Screening Levels†**								
1,1,1-Trichloroethane	µg/m^3	220,000		**0.48**	<0.43	<0.41	<0.46	<0.42	< 0.44	0.27
1,1,2,2-Tetrachloroethane	µg/m^3	420		<0.50	<0.54	<0.52	<0.58	<0.53	<0.55	<0.34
1,1,2-Trichloroethane	µg/m^3	1,500		<0.40	<0.43	<0.41	<0.46	<0.42	< 0.44	<0.27
1,1-Dichloroethane	µg/m^3	50,000		<0.59	<0.64	<0.62	<0.68	<0.63	<0.65	<0.4
1,1-Dichloroethene	µg/m^3	20,000		<0.58	<0.63	<0.60	<0.67	<0.61	<0.64	<0.4
1,2,4-Trichlorobenzene	µg/m^3	20,000		<5.4	<5.9	<5.6	<6.2	<5.8	<6.0	<3.7
1,2,4-Trimethylbenzene	µg/m^3	600		**4.4**	**3.1**	**5.0**	**5.1**	**2.3**	**1.8**	<0.49
1,2-Dibromoethane (EDB)	µg/m^3	20		<0.56	<0.61	<0.58	<0.64	<0.60	<0.62	<0.38
1,2-Dichlorobenzene	µg/m^3	20,000		<0.44	<0.47	<0.46	<0.50	<0.46	<0.48	<0.3
1,2-Dichloroethane	µg/m^3	940		<0.59	<0.64	<0.62	<0.68	<0.63	<0.65	<0.4
1,2-Dichloropropane	µg/m^3	400		<0.67	<0.73	<0.70	<0.78	<0.72	<0.74	<0.46
1,3,5-Trimethylbenzene	µg/m^3	600		**2.1**	**1.1**	**2.1**	**1.8**	**0.76**	<0.79	<0.49
1,3-Dichlorobenzene	µg/m^3	11,000		<0.44	<0.48	<0.46	**0.57**	**0.61**	**0.5**	<0.3
1,4-Dichlorobenzene	µg/m^3	80,000		<0.44	<0.48	<0.46	<0.50	<0.46	<0.48	<0.3
1,4-Dioxane	µg/m^3	--		<0.53	<0.57	<0.55	<0.60	0.66	<0.58	<0.36
2,2,4-Trimethylpentane	µg/m^3	--		<0.68	<0.74	<0.71	<0.78	<0.72	<0.75	<0.47
2-Butanone (Methyl Ethyl Ketone)	µg/m^3	100,000		**4.1**	**7.2**	**2.8**	**2.6**	**1.7**	**2.2**	<0.29
4-Methyl-2-pentanone (MIBK)	µg/m^3	8,000		**0.69**	<0.65	**0.65**	<0.69	<0.63	<0.66	<0.41
alpha-Chlorotoluene (Benzylchloride)	µg/m^3	500		<0.76	<0.82	<0.79	<0.87	<0.80	<0.83	<0.52
Benzene	µg/m^3	3,100		**0.48**	<0.50	<0.48	<0.54	<0.50	<0.51	<0.32
Bromodichloromethane	µg/m^3	1,400		<0.49	<0.53	<0.51	<0.56	<0.52	<0.54	<0.34
Bromoform	µg/m^3	22,000		<0.75	<0.82	<0.78	<0.87	<0.80	<0.83	<0.52
Bromomethane	µg/m^3	--		**1.1**	<0.61	**0.8**	<0.65	<0.60	<0.62	<0.39
Carbon Tetrachloride	µg/m^3	1,600		**0.53**	**1.0**	<0.48	<0.53	**0.53**	**0.56**	0.31
Chlorobenzene	µg/m^3	6,000		<0.67	<0.73	<0.70	<0.77	<0.71	<0.74	<0.46
Chloroethane	µg/m^3	1,000,000		<0.38	<0.42	<0.40	<0.44	<0.41	<0.42	<0.26
Chloroform	µg/m^3	1,100		<0.71	<0.77	<0.74	**5.6**	<0.76	<0.79	<0.49
Chloromethane (methyl chloride)	µg/m^3	9,000		**0.58**	<0.33	**0.61**	<0.35	<0.32	<0.33	<0.21
cis-1,2-Dichloroethene	µg/m^3	3,500		<0.58	<0.63	<0.60	<0.67	<0.61	<0.64	<0.4
cis-1,3-Dichloropropene	µg/m^3	2,000		<0.66	<0.72	<0.69	<0.76	<0.70	<0.73	<0.45
Cyclohexane	µg/m^3	--		**1.6**	<0.54	<0.52	<0.58	<0.53	<0.55	<0.34
Dibromochloromethane	µg/m^3	1,000		<0.62	<0.67	<0.65	<0.72	<0.66	<0.68	<0.42
Ethanol	µg/m^3	--		**8.6**	**12**	**12**	**24**	**20**	**19**	<0.94
Ethyl Benzene	µg/m^3	22,000		**2.7**	**2.2**	**1.6**	**1.5**	<0.67	<0.70	<0.43
Freon 11 (trichloroflouromethane)	µg/m^3	70,000		**1.6**	**1.5**	**1.1**	**2.4**	**5.9**	**5.6**	<0.28
Freon 113 (1,1,2-Trichloro-1,2,2-trifluoroethane)	µg/m^3	3,000,000		<0.56	<0.60	<0.58	<0.64	0.64	<0.62	<0.38
Freon 114	µg/m^3	--		<0.51	<0.55	<0.53	<0.59	<0.54	<0.56	<0.35
Freon 12 (Dichlorodifluoromethane)	µg/m^3	20,000		**0.96**	**0.94**	**1.5**	**1.6**	**1.3**	**1.2**	<0.25
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	µg/m^3	1,100		<7.8	<8.4	<8.1	<9.0	<8.3	<8.6	<5.3
Hexane	µg/m^3	20,000		**1.3**	**0.61**	<0.54	<0.59	<0.55	<0.57	<0.35
m,p-Xylene	µg/m^3	700,000		**12**	**8.3**	**6.5**	**5.9**	**2.1**	**2.0**	<0.43
Methyl tert-butyl ether	µg/m^3	300,000		<0.53	<0.57	<0.55	<0.60	<0.56	<0.58	<0.36
Methylene Chloride	µg/m^3	52,000		<2.5	<2.7	<2.6	<2.9	<2.7	<2.8	<1.7
o-Xylene	µg/m^3	700,000		**4.6**	**3.4**	**3.0**	**3.0**	**1.0**	**0.94**	<0.43
Styrene	µg/m^3	100,000		<0.62	<0.67	<0.65	<0.72	<0.66	<0.68	<0.42
tert-Butyl alcohol	µg/m^3	--		<2.2	<2.4 UJ	<2.3 UJ	**3.7 J**	<2.3 UJ	<2.4 UJ	<1.5
Tetrachloroethene	µg/m^3	8,100		**1.6**	**2.0**	**4.4**	**5.4**	**2.5**	**2.6**	<0.34
Toluene	µg/m^3	40,000		**5.1**	**3.1**	**2.5**	**1.9**	**1.1**	**0.96**	<0.38
trans-1,2-Dichloroethene	µg/m^3	7,000		<0.58	<0.63	<0.60	<0.67	<0.61	<0.64	<0.4
trans-1,3-Dichloropropene	µg/m^3	--		<0.66	<0.72	<0.69	<0.76	<0.70	<0.73	<0.45
Trichloroethene	µg/m^3	220		<0.39	<0.42	<0.41	<0.45	<0.42	<0.43	<0.27
Vinyl Chloride	µg/m^3	2,800		<0.37	<0.40	<0.39	<0.43	<0.40	<0.41	<0.26
Leak Detection										
Helium	%	10		<0.073	<0.079	<0.076	<0.084	<0.078	<0.08	N/A

Notes:
† = Screening Levels identified in EPA's "OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance)" (November, 2002). Target Deep Soil Gas Concentration corresponding to target indoor air concentration where the soil gas to indoor air attentuation factor = 0.01
BOLD values are compounds detected above the reporting limit.
-- = Standard or guidance value does not exist or is not applicable.
µg/m3 = micrograms per cubic meter
% = percent
N/A = Not applicable
< 0.00 = Compound not detected above the noted reporting limit

TABLE 3
RELATIVE PERCENT DIFFERENCE CALCULATIONS

Soil Vapor Intrusion Investigation Report
Congress Street Facility
SI Group
Schenectady, NY

	Sample ID:	SV-5	CHA-1	Relative Percent Difference (%)
	Collection Date:	10/17/2008	10/17/2008	
	Sample Location:	SV-5	SV-5	
VOCs	**Units**			
1,1,1-Trichloroethane	µg/m^3	<0.42	< 0.44	NC
1,1,2,2-Tetrachloroethane	µg/m^3	<0.53	<0.55	NC
1,1,2-Trichloroethane	µg/m^3	<0.42	< 0.44	NC
1,1-Dichloroethane	µg/m^3	<0.63	<0.65	NC
1,1-Dichloroethene	µg/m^3	<0.61	<0.64	NC
1,2,4-Trichlorobenzene	µg/m^3	<5.8	<6.0	NC
1,2,4-Trimethylbenzene	µg/m^3	**2.3**	**1.8**	24
1,2-Dibromoethane (EDB)	µg/m^3	<0.60	<0.62	NC
1,2-Dichlorobenzene	µg/m^3	<0.46	<0.48	NC
1,2-Dichloroethane	µg/m^3	<0.63	<0.65	NC
1,2-Dichloropropane	µg/m^3	<0.72	<0.74	NC
1,3,5-Trimethylbenzene	µg/m^3	**0.76**	<0.79	NC
1,3-Dichlorobenzene	µg/m^3	**0.61**	**0.5**	20
1,4-Dichlorobenzene	µg/m^3	<0.46	<0.48	NC
1,4-Dioxane	µg/m^3	0.66	<0.58	NC
2,2,4-Trimethylpentane	µg/m^3	<0.72	<0.75	NC
2-Butanone (Methyl Ethyl Ketone)	µg/m^3	**1.7**	**2.2**	26
4-Methyl-2-pentanone (MIBK)	µg/m^3	<0.63	<0.66	NC
alpha-Chlorotoluene (Benzylchloride)	µg/m^3	<0.80	<0.83	NC
Benzene	µg/m^3	<0.50	<0.51	NC
Bromodichloromethane	µg/m^3	<0.52	<0.54	NC
Bromoform	µg/m^3	<0.80	<0.83	NC
Bromomethane	µg/m^3	<0.60	<0.62	NC
Carbon Tetrachloride	µg/m^3	**0.53**	**0.56**	6
Chlorobenzene	µg/m^3	<0.71	<0.74	NC
Chloroethane	µg/m^3	<0.41	<0.42	NC
Chloroform	µg/m^3	<0.76	<0.79	NC
Chloromethane (methyl chloride)	µg/m^3	<0.32	<0.33	NC
cis-1,2-Dichloroethene	µg/m^3	<0.61	<0.64	NC
cis-1,3-Dichloropropene	µg/m^3	<0.70	<0.73	NC
Cyclohexane	µg/m^3	<0.53	<0.55	NC
Dibromochloromethane	µg/m^3	<0.66	<0.68	NC
Ethanol	µg/m^3	**20**	**19**	5
Ethyl Benzene	µg/m^3	<0.67	<0.70	NC
Freon 11 (trichloroflouromethane)	µg/m^3	**5.9**	**5.6**	5
Freon 113 (1,1,2-Trichloro-1,2,2-trifluoroethane)	µg/m^3	0.64	<0.62	NC
Freon 114	µg/m^3	<0.54	<0.56	NC
Freon 12 (Dichlorodifluoromethane)	µg/m^3	**1.3**	**1.2**	8
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	µg/m^3	<8.3	<8.6	NC
Hexane	µg/m^3	<0.55	<0.57	NC
m,p-Xylene	µg/m^3	**2.1**	**2.0**	5
Methyl tert-butyl ether	µg/m^3	<0.56	<0.58	NC
Methylene Chloride	µg/m^3	<2.7	<2.8	NC
o-Xylene	µg/m^3	**1.0**	**0.94**	6
Styrene	µg/m^3	<0.66	<0.68	NC
tert-Butyl alcohol	µg/m^3	<2.3 UJ	<2.4 UJ	NC
Tetrachloroethene	µg/m^3	**2.5**	**2.6**	4
Toluene	µg/m^3	**1.1**	**0.96**	14
trans-1,2-Dichloroethene	µg/m^3	<0.61	<0.64	NC
trans-1,3-Dichloropropene	µg/m^3	<0.70	<0.73	NC
Trichloroethene	µg/m^3	<0.42	<0.43	NC
Vinyl Chloride	µg/m^3	<0.40	<0.41	NC

Notes:
µg/m3 = micrograms per cubic meter
% = percent
NC = Not calculated. Both results must be above the reporting limit for valid RPDS to be calculated or within quatification limits (above the low standard).
< 0.00 = Compound not detected above the noted reporting limit

APPENDIX A

WORK PLAN

SOIL VAPOR INTRUSION INVESTIGATION
CONGRESS STREET FACILITY
SI GROUP

The Soil Vapor Intrusion Investigation Work Plan for the Congress Street Facility (DEC File No. R-0888-90-12) of SI Group has been prepared in response to a recommendation from the New York State Department of Health (NYSDOH). SI Group recently completed an Updated Remedial Investigation Report for the Congress Street site that had been submitted to New York State Department of Environmental Conservation (NYSDEC) on February 25, 2008. On May 29, 2008, SI Group received comments from NYSDEC and NYSDOH concerning the Updated Remedial Investigation Report. One of the comments from NYSDOH recommended the completion of a soil vapor intrusion investigation along the Site perimeter to determine if contaminated soil vapor was present at the Site perimeter and, if so, whether that contamination was possibly migrating in the direction of nearby commercial and residential buildings. In response to the request from NYSDOH, the following Work Plan has been prepared.

Background

SI Group, Inc. (SI Group) owned and operated a chemical manufacturing facility located in Schenectady, New York at Congress Street and Tenth Avenue that is referred to as the Congress Street Facility (Figure 1). The Site encompasses an area approximately 7 acres in size with approximately 5.1 acres having been developed. The area south and west of the Site consists of light industrial areas; commercial facilities are located east and northwest; and residential areas to the north and northeast.

The Site is located on a steep slope that has been developed over the years. Figure 3 shows the Site as it was in the late 1990's with a number of buildings located on the Site. Some of the buildings were constructed such that the lower portion of the buildings acted as retaining structures for the upper slope area. Located at the bottom of the slope is the main CSX/Amtrak rail line between Albany and western New York. The Cowhorn Creek is located just beyond the main rail line.

The Congress Street facility began operations in 1910 and expanded operations over the years by adding buildings and developing the Site. In 1997, SI Group ceased production at the Site. A Remedial Investigation of the Site was originally completed in 1995. Based on the results of the 1995 Remedial Investigation, groundwater flow across the Site was determined to be in a southwesterly direction towards the Cowhorn Creek and away from the residential area to the north and northeast. Groundwater contamination was identified in the shallow groundwater in the lower sections of the Site where the process buildings were located. As a result of this investigation, NYSDEC issued a Record of Decision on March 11, 1998. The ROD required SI Group to install a groundwater collection system along the southwest boundary of the Site, which became operational in 2001. The groundwater collection system was installed to intercept the migration of contaminated groundwater off-site. The contaminated groundwater is treated on-site and discharged through a permitted SPDES discharge point.

In 2004, SI Group removed all the process equipment, storage tanks, piping and buildings remaining on the Site. The buildings were demolished such that all structures above grade were removed. The floors and walls that remained were cleaned to remove any visual contamination. With the buildings removed,

Site soils became accessible allowing investigation of the entire Site and further evaluation of potential remedial alternatives.

In 2007, a remedial investigation of the Site was completed with the results reported in the "Updated Remedial Investigation Report" that was submitted to NYSDEC on February 25, 2008. As shown in Figure 2, soil contamination was identified in the lower sections of the Site. The contamination consisted of volatile and semi-volatile organic compounds. The main volatile organic compound detected was xylene. No chlorinated volatile organic compounds were detected at the Site. As shown in the Updated Remedial Investigation Report, the remedial investigation did not detect any significant soil or groundwater contamination in the upper sections of the Site.

The soil vapor investigation will be conducted in a manner consistent with NYSDOH's "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (NYSDOH, 2006), NYSDEC's "DER13/Strategy for Evaluating Soil Vapor Intrusion at Remedial Sites in New York" (NYSDEC, 2006) and United States Environmental Protection Agency (USEPA) "Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils" (USEPA, 2002). Results from the soil vapor investigation will be used to determine if contaminated soil vapor is present at the Site perimeter along Congress Street, 10th Avenue and Oak Street and, if so, whether that contamination is possibly migrating in the direction of nearby commercial and residential buildings.

Scope of Work

Pre-Field Activities:

A review of existing environmental data and site background information was reviewed to select locations for sampling soil vapor. NYSDOH guidelines (section 2.6.1(c)) indicate that to evaluate the potential for off-site soil vapor contamination, samples should be collected along the site's perimeter at a depth comparable to the depth of foundation footings. In addition, an evaluation of underground utilities (NYSDOH, section 2.6.1(d)) has been completed to determine if a preferential migration pathway exists. Based on various current and historical site plans, no utility corridor extends from on-Site across 10th Avenue, Congress Street, or Oak Street within the area of concern.

Type of Sampling:

Only subsurface soil vapor samples are to be collected along the Site's border with 10th Avenue, Congress Street and Oak Street. At present, there is only one building located on the Congress Street site that is used to house the groundwater treatment system. The building is only occupied on a part-time basis by SI Group maintenance personnel, who maintain the groundwater collection and treatment system.

Sampling Locations:

As shown on Figure 3, five soil vapor sampling locations (SV-1 through SV-5) have been selected on-site to determine if soil vapor contamination is present along the Site's border with 10th Avenue, Congress Street and Oak Street. Figure 3 shows the Congress Street site as it existed in the late 1990's prior to removal of the buildings. The buildings were removed but the building foundations, ground floors, and building walls used to retain site soils were left in place. The sampling locations were selected to avoid building foundations and associated slabs that remain on site within the sampling area. As shown on Figure 3, the former Administration Building was located at the corner of 10th Avenue and Congress Street. Sample locations SV-4 and SV-5 are

proposed to be located on either side of the former Administration Building's foundation and floor slab that were left in place. The area above the slab was backfilled with soil to help maintain the slope adjacent to 10th Avenue.

If a foundation is encountered at any location, the sampling location will be moved to avoid the foundation. If the foundation or slab cannot be avoided, the sample point will be installed below the concrete structure.

Number of Sampling Events:
The completion of one sampling event is proposed to assess the potential migration of contaminated soil vapor off-site in the direction of nearby commercial and residential buildings. Only one sampling event is being proposed because investigation of the groundwater and soils in this area have not detected any sources of contamination, and the contamination sources that have been detected are down gradient from this area.

Soil Vapor Probe Installation:
Permanent subsurface vapor probes versus semi-permanent or temporary probes will be installed to ensure that outdoor air infiltration does not occur and to enable the collection of consistent and accurate soil vapor samples should additional sampling be required.

Vapor implants will be installed using direct-push technology (DPT) by advancing a 2 ¼ -inch stainless-steel rod to a depth of approximately seven (7) feet below ground surface (bgs). This depth was selected to avoid dilution by entrained surface air, for greatest relevancy to potential vapor intrusion and to avoid potential pore water interference. A six-inch stainless steel screen will be fitted with ¼" inert tubing (polyethylene, Teflon, etc.) and placed in the borehole at depth. Porous, inert backfill material (e.g. glass beads, washed #1 crushed stone, etc.) will be placed such that it creates a two (2)-foot sampling interval from seven (7) to five (5) feet below ground surface (bgs).

The soil vapor probe will be sealed above the sampling zone with bentonite slurry for a minimum distance of three (3) feet. A 2" PVC protective casing will be placed around the top of the probe tubing and grouted in place to the top of bentonite, creating a downward slope from the borehole to direct surface water away from the sampling point.

Soil Vapor Sampling Protocol:
Twenty-four to seventy two hours after the installation and sealing of the subsurface vapor probes, a tracer gas study will be completed to verify the integrity of the subsurface vapor probe seal. In order to facilitate the use of a tracer gas (helium) in the field, a bentonite slurry will be spread on the concrete surface in a 2-foot diameter circle around the vapor probe and a 2-foot x 2-foot square section of plastic sheeting will be placed over the bentonite slurry creating an enclosure. Next, a hole will be opened in the plastic sheeting to insert the sampling tube and the plastic sheeting/tube interface will be sealed with a small amount of plumber's putty. An additional hole will be made in the enclosure in order to introduce the tracer gas to the enclosure. Next, the tracer gas will be released in the enclosure for the duration of the sampling event to displace any ambient air within the enclosure to provide positive pressure. Finally, a helium detector will be utilized on-site to detect potential leaks prior to sample collection by purging vapor through the sample tube. If helium is detected at 10 percent or greater, this will provide an opportunity to re-seal the implant prior to sample collection. CHA will also ensure that the selected analytical laboratory will utilize instrumentation that will be capable of detecting the tracer gas.

After the tracer gas study is performed and before the samples are collected, one to three implant volumes (volume of the sample probe and tube) will be purged. A site-specific purge volume will be estimated based on the internal volume of tubing used and the annular space around the probe tip. This will ensure the samples collected are representative of the soil vapor conditions.

When the soil vapor samples are collected, the following local conditions will be documented:

1. Weather conditions (e.g. precipitation, barometric pressure, wind speed, wind direction and outdoor temperature) will be noted for the previous 24 to 48 hours. The weather conditions as reported by the National Weather Service at the Albany International Airport will be used.
2. Site conditions, such as precipitation, temperature, odors and activities within the sampling area will be documented.

Soil-gas samples will be collected by a qualified scientist/engineer using methods consistent with NYSDEC soil vapor sampling guidance. Soil gas samples will be collected between 5 and 7 feet bgs in six-liter Summa canisters that are individually certified clean by the laboratory. Sample flow rates will be controlled so that they do not exceed 0.2 liters per minute for both purging and sample collection to minimize outdoor air infiltration during sampling. The actual duration of the sampling period for each sample will be provided to the laboratory.

A sample log summarizing the following information will be maintained:

1. sample identification;
2. data and time of sample collection;
3. sampling depth;
4. name of samplers;
5. sampling methods and devices;
6. purge volumes;
7. sample flow rates, time and volume; and
8. the vacuum before and after samples are collected of the Summa canisters.

Sample Analysis and Analytical Quality Assurance:

The Summa canister samples will be transmitted to the analytical laboratory under a signed and dated chain of custody, and will be analyzed for the presence of volatile organic compounds at a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory via EPA Method TO-15. The sample will also be analyzed for the presence of the tracer gas. Air Toxics of Folsom, California is presently proposed as the analytical laboratory to complete the analysis.

Analytical quality assurance for soil vapor samples will include one trip blank and one duplicate sample. The trip blank will be prepared using laboratory grade ultra pure air and analyzed for the target compounds. The duplicate sample will be collected simultaneously with the original sample using a stainless steel duplicate sampling tee.

Health & Safety

A Site Specific Health and Safety Plan will be prepared and maintained on-site for all field activities. Health and safety procedures and equipment specified in this plan will be utilized during the

implementation of this Work Plan. The Health and Safety Plan will include, but is not limited to, a description of the anticipated hazards, personal protection equipment (PPE) to be utilized during the field activities, site control procedures, air monitoring, emergency telephone numbers, routes to the nearest hospital, etc.

Schedule

Implementation of the Work Plan will be completed based on the schedule shown in Figure 4 upon acceptance of the Work Plan by NYSDEC and NYSDOH. The proposed schedule may be adjusted due to weather conditions such as major storm events and low outdoor temperatures that could effect the installation and collection of samples. NYSDEC will be notified when installation of sampling points and sample collection is scheduled.

CLOUGH HARBOUR & ASSOCIATES LLP
III Winners Circle, PO Box 5269 · Albany, NY 12205-0269
Main: (518) 453-4500 · www.cloughharbour.com

SITE LOCATION

CONGRESS STREET FACILITY
SI GROUP INC.
SCHENECTADY, NEW YORK

PROJECT NO.
15091.2009.1102

DATE: 05/09/07

FIGURE 1

0 40 80ft

10TH AVENUE

CONGRESS ST

OAK STREET

OW18A/B-07 S-102507-SDN-032	
DEPTH	20'-22'
NAPHTHALENE	9,500
PHENOL	910

GP-17-07 S-101207-SDN-014	
DEPTH	19'-20'
4-METHYLPHENOL	1,900

GP-14-07 S-101207-SDN-015	
DEPTH	6.9'-7.3'
BENZENE	890
ETHYLBENZENE	14,000
TOLUENE	2,000
TOTAL XYLENES	100,000
2-METHYLPHENOL	18,000
4-METHYLPHENOL	130,000
NAPHTHALENE	53,000
PHENOL	6,200

OW17A/B-07 S-102407-SDN-030	
DEPTH	10'-12'
ETHYLBENZENE	25,000
TOTAL XYLENES	84,000
NAPHTHALENE	21,000

GP-08-07 S-101107-SDN-003	
DEPTH	5'-6'
ETHYLBENZENE	13,000
TOTAL XYLENES	83,000

OW16A/B-07 S-102307-SDN-029	
DEPTH	10'-12'
ETHYLBENZENE	28,000
TOLUENE	12,000
TOTAL XYLENES	120,000
NAPHTHALENE	1,300

GP-33-07 S-101507-SDN-027	
DEPTH	16.5'-17'
BENZENE	780
ETHYLBENZENE	81,000
TOLUENE	130,000
TOTAL XYLENES	710,000
2-METHYLPHENOL	100,000
4-METHYLPHENOL	580,000
NAPHTHALENE	19,000
PHENOL	210,000

OW-22-07 S-102407-SDN-031	
DEPTH	8'-10'
ETHYLBENZENE	190,000
TOLUENE	2,300J
TOTAL XYLENES	700,000
PHENOL	620

OW20-07 S-102907-SDN-035	
DEPTH	2'-4'
2-METHYLPHENOL	250
4-METHYLPHENOL	1,300
PHENOL	510

GP-29-07 S-101507-SDN-023	
DEPTH	3'-4'
ETHYLBENZENE	54,000
TOLUENE	240,000
TOTAL XYLENES	150,000
NAPHTHALENE	180,000

OW21A/B-07 S-102907-SDN-033	
DEPTH	2'-5'
TOTAL XYLENES	5,100

(ND) GP 01-07
(550,090) GP 14-07
(550) GP 16-07
(4,789) GP 17-07
(ND) GP 18-07
(130,139) OW18A-07 OW18B-07
(3,293,780) GP 31-07
OW19A-07 OW19B-07
(415) GP 19-07
(893,838) OW22-07
(12,998) OW20-07
(715,000) GP 29-07
(5,230) OW15B-01 OW15A-07
(9.1) GP 09-07
(280,790) OW17A-07 OW17B-07
(106,850) GP 08-07
(162,500) OW16B-07 OW16A-07
GP 23-07
(1,918)
(ND) GP24-07
(17,180) OW21A-07 OW21B-07
EW-2

BUILDING
FENCE LINE
GUIDE RAIL
GATE
CONC. LOADING DOCK
EXISTING SERVICE ROAD
TO ALBANY
GRAVEL
MH
HYD
BRUSH
DENSE WOODS
COWHORN CREEK

LEGEND

- RAILROAD
- FENCE
- CULVERT
- GROUNDWATER COLLECTION TRENCH
- 300 CONTOUR WITH ELEVATION
- 100,000 ISOCONCENTRATION CONTOUR
- GP 14-07 (580,090) GEOPROBE SOIL SAMPLE LOCATION (TOTAL VOCs AND SVOCs)
- OW22A-07 (593,838) HSA SOIL SAMPLE LOCATION (TOTAL VOCs AND SVOCs)

NOTES:
(1) All units are in µg/Kg
(2) Total VOC & SVOC data based on samples analyzed by TestAmerica. For sampling locations where more than one sample was collected, the VOCs & SVOCs reported are from the sample with the highest totals. For a complete sampling summary, refer to Tables 1 & 3.
(3) Parameters in boxes are select major Site contaminants only. Only those value exceeding TAGM 4046 guidance values are shown. Complete analytical data is provided in Table 8.
(4) A red total VOCs and SVOCs value indicates one or more parameters exceeded a TAGM 4046 guidance value.

Approximate Area of Fill

SAMPLE LOCATION AND ID

GP-17-07 S-101207-SDN-014	
DEPTH	19'-20'
4-METHYLPHENOL	1,900

SAMPLE DEPTH INTERVAL (FEET)
CHEMICAL CONCENTRATION

CLOUGH HARBOUR & ASSOCIATES LLP
III Winners Circle, PO Box 5269 - Albany, NY 12205-0269
Main: (518) 453-4500 · www.cloughharbour.com

ISOCONCENTRATION CONTOURS FOR TOTAL VOCs AND SVOCs IN SOIL

UPDATED REMEDIAL INVESTIGATION REPORT
CONGRESS STREET FACILITY
SI GROUP INC.
SCHENECTADY, NEW YORK

PROJECT NO. 15091.2010.1102
DATE: 1/08
FIGURE 2

0 40 80ft

10TH AVENUE

CONGRESS STREET

OAK STREET

GRASS AREA

ADMINISTRATION BLDG.

CONCRETE

FENCE LINE

GATE

GUIDE RAIL

OH PIPES

BLDG. NO. 9

BLDG. NO. 7

BLDG. NO. 6

BLDG. NO. 5

BLDG. NO. 4

BLDG. NO. 3

BLDG. NO. 2

BLDG. NO. 1

BLDG. NO. 10

VENT

MH

HYD

PIPE

O.H. PIPE

COVERED DOCK

CONCRETE PAD

CONC. LOADING DOCK

EXISTING SERVICE ROAD

TO ALBANY

GRAVEL

SV-1

SV-2

SV-3

SV-4

SV-5

LEGEND

- RAILROAD
- FENCE
- CULVERT
- SWALE
- 300 CONTOUR WITH ELEVATION
- SV-1 PROPOSED SOIL VAPOR SAMPLING LOCATION

CLOUGH HARBOUR & ASSOCIATES LLP
III Winners Circle, PO Box 5269 - Albany, NY 12205-0269
Main: (518) 453-4500 · www.cloughharbour.com

PROPOSED SOIL VAPOR SAMPLING LOCATIONS

SOIL VAPOR INVESTIGATION WORK PLAN

CONGRESS STREET FACILITY
SI GROUP INC.
SCHENECTADY, NEW YORK

PROJECT NO. 15091.2010.1102

DATE: 07/01/08

FIGURE 3

FIGURE 4

SCHEDULE
SOIL VAPOR INTRUSION INVESTIGATION

Activity	Schedule Duration In Days								
	15	30	45	60	75	90	105	120	135
1) NYSDEC/DOH Approval Of Work Plan/ Preparation For Field Activities									
2) Field work Activities									
3) Laboratory Analysis									
4) Preparation Of Soil Vapor Intrusion Investigation Report									
5) Soil Vapor Intrusion Investigation Submitted to NYSDEC/DOH									*

APPENDIX B

CLOUGH HARBOUR & ASSOCIATES LLP

WELL CONSTRUCTION LOG

BORING NO. SV-1

WELL NO. SV-1

PROJECT & LOCATION: Congress Street Facility Remedial Investigation

CLIENT: SI Group

CONTRACTOR: Zebra Environmental Corp.

PROJECT NO.: 15091.2010

SHEET NO.: 1 OF 1

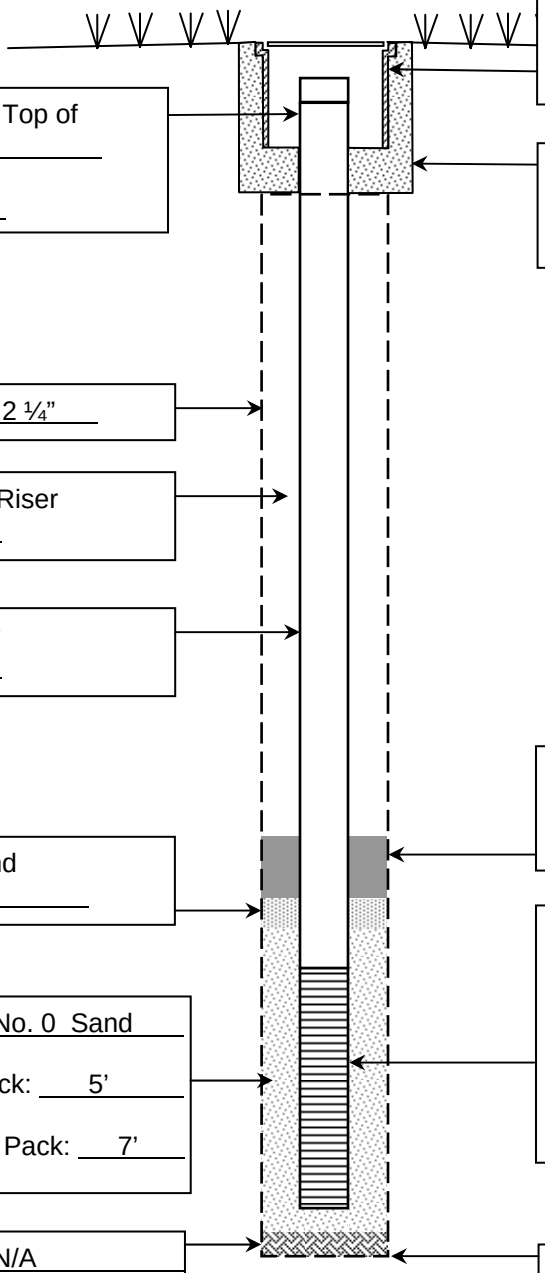
ELEVATION:

START DATE: 10/14/08 TIME: 9:55

FINISH DATE: 10/14/08 TIME: 10:30

DRILLER: E. Plank

INSPECTOR: S. Newell



Type of Protective Casing: Flush Mount

Depth Below Ground of Casing: 6”

Depth Below Ground to Top of Riser Pipe: N/A

Type of Cap: N/A

Type of Surface Seal: Concrete

Thickness of Surface Seal: 6”

Diameter Borehole: 2 ¼”

Type of Backfill Around Riser Pipe: Bentonite Slurry

Inside Diameter of Riser Pipe: ¼”

Type of Bentonite Seal: Bentonite Slurry

Depth to Top of Bentonite Seal: 6”

Depth to Top of Fine Sand Choke: N/A

Type of Screen: Stainless Steel

Screen Diameter: 3/8”

Depth to Top of Screen: 6.5’

Depth to Bottom of Screen: 7’

Type of Sand Pack: No. 0 Sand

Depth to Top of Sand Pack: 5’

Depth to Bottom of Sand Pack: 7’

Backfill (if any): N/A

Depth to Bottom of Borehole: 7’

CLOUGH HARBOUR & ASSOCIATES LLP

WELL CONSTRUCTION LOG

BORING NO. SV-2

WELL NO. SV-2

PROJECT & LOCATION: Congress Street Facility Remedial Investigation

CLIENT: SI Group

CONTRACTOR: Zebra Environmental Corp.

PROJECT NO.: 15091.2010

SHEET NO.: 1 OF 1

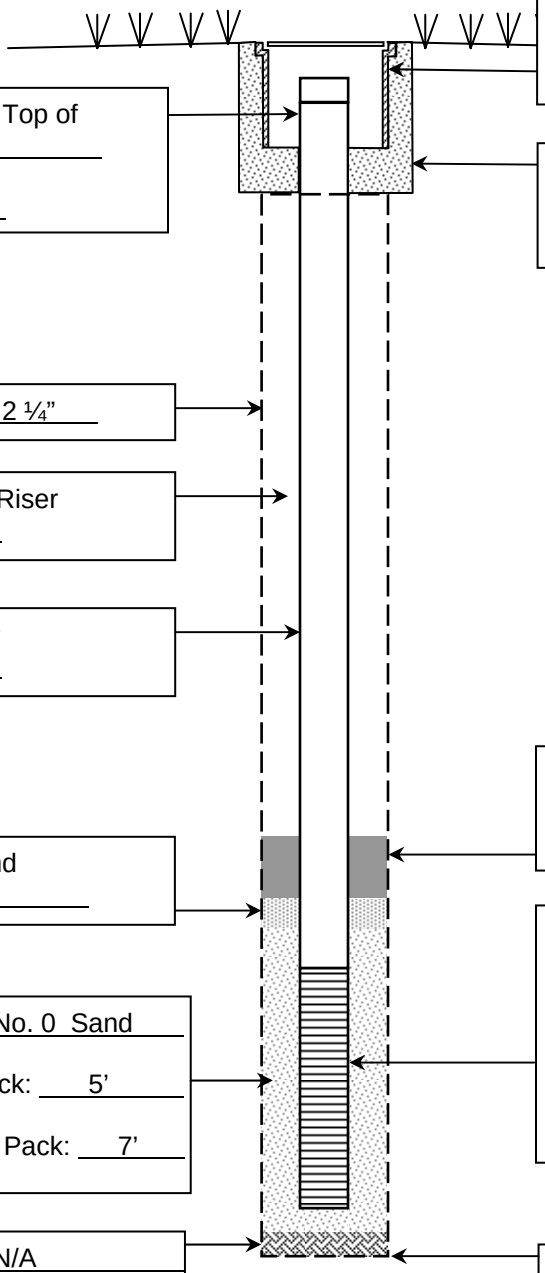
ELEVATION:

START DATE: 10/14/08 TIME: 9:10

FINISH DATE: 10/14/08 TIME: 9:35

DRILLER: E. Plank

INSPECTOR: S. Newell



Type of Protective Casing: Flush Mount

Depth Below Ground of Casing: 6”

Depth Below Ground to Top of Riser Pipe: N/A

Type of Cap: N/A

Type of Surface Seal: Concrete

Thickness of Surface Seal: 6”

Diameter Borehole: 2 ¼”

Type of Backfill Around Riser Pipe: Bentonite Slurry

Inside Diameter of Riser Pipe: ¼”

Type of Bentonite Seal: Bentonite Slurry

Depth to Top of Bentonite Seal: 6”

Depth to Top of Fine Sand Choke: N/A

Type of Screen: Stainless Steel

Screen Diameter: 3/8”

Depth to Top of Screen: 6.5’

Depth to Bottom of Screen: 7’

Type of Sand Pack: No. 0 Sand

Depth to Top of Sand Pack: 5’

Depth to Bottom of Sand Pack: 7’

Backfill (if any): N/A

Depth to Bottom of Borehole: 7’

CLOUGH HARBOUR & ASSOCIATES LLP

WELL CONSTRUCTION LOG

BORING NO. SV-3

WELL NO. SV-3

PROJECT & LOCATION: Congress Street Facility Remedial Investigation

CLIENT: SI Group

CONTRACTOR: Zebra Environmental Corp.

PROJECT NO.: 15091.2010

SHEET NO.: 1 OF 1

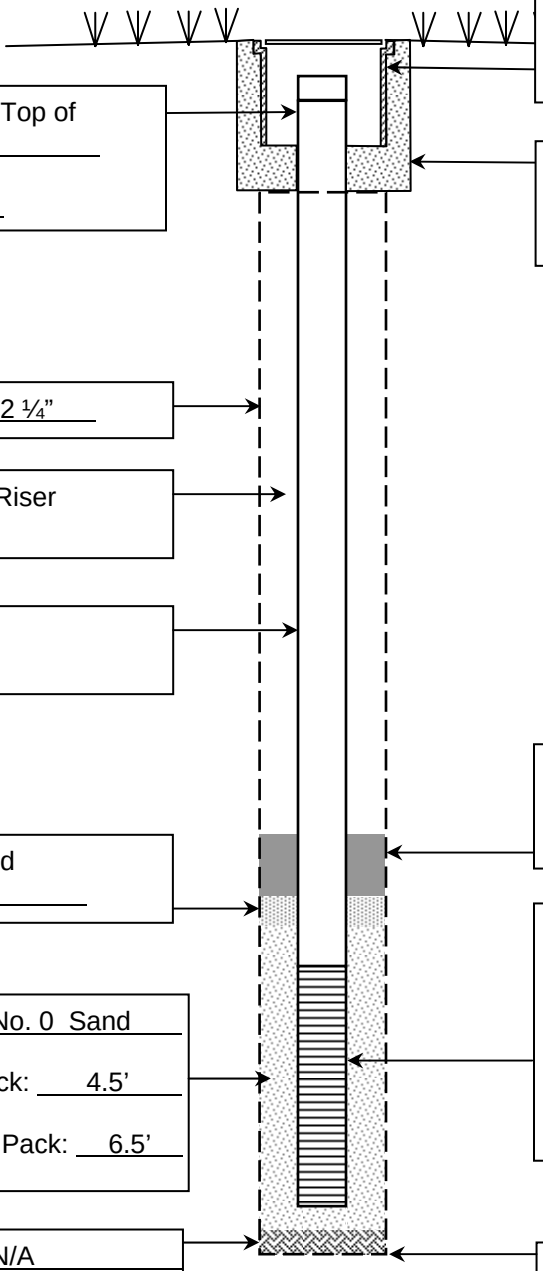
ELEVATION:

START DATE: 10/14/08 TIME: 10:30

FINISH DATE: 10/14/08 TIME: 11:45

DRILLER: E. Plank

INSPECTOR: S. Newell



Type of Protective Casing: Flush Mount

Depth Below Ground of Casing: 6”

Depth Below Ground to Top of Riser Pipe: N/A

Type of Cap: N/A

Type of Surface Seal: Concrete

Thickness of Surface Seal: 6”

Diameter Borehole: 2 ¼”

Type of Backfill Around Riser Pipe: Bentonite Slurry

Inside Diameter of Riser Pipe: ¼”

Type of Bentonite Seal: Bentonite Slurry

Depth to Top of Bentonite Seal: 6”

Depth to Top of Fine Sand Choke: N/A

Type of Screen: Stainless Steel

Screen Diameter: 3/8”

Depth to Top of Screen: 6’

Depth to Bottom of Screen: 6.5’

Type of Sand Pack: No. 0 Sand

Depth to Top of Sand Pack: 4.5’

Depth to Bottom of Sand Pack: 6.5’

Backfill (if any): N/A

Depth to Bottom of Borehole: 6.5'

CLOUGH HARBOUR & ASSOCIATES LLP

WELL CONSTRUCTION LOG

BORING NO. SV-4

WELL NO. SV-4

PROJECT & LOCATION: Congress Street Facility Remedial Investigation

CLIENT: SI Group

CONTRACTOR: Zebra Environmental Corp.

PROJECT NO.: 15091.2010

SHEET NO.: 1 OF 1

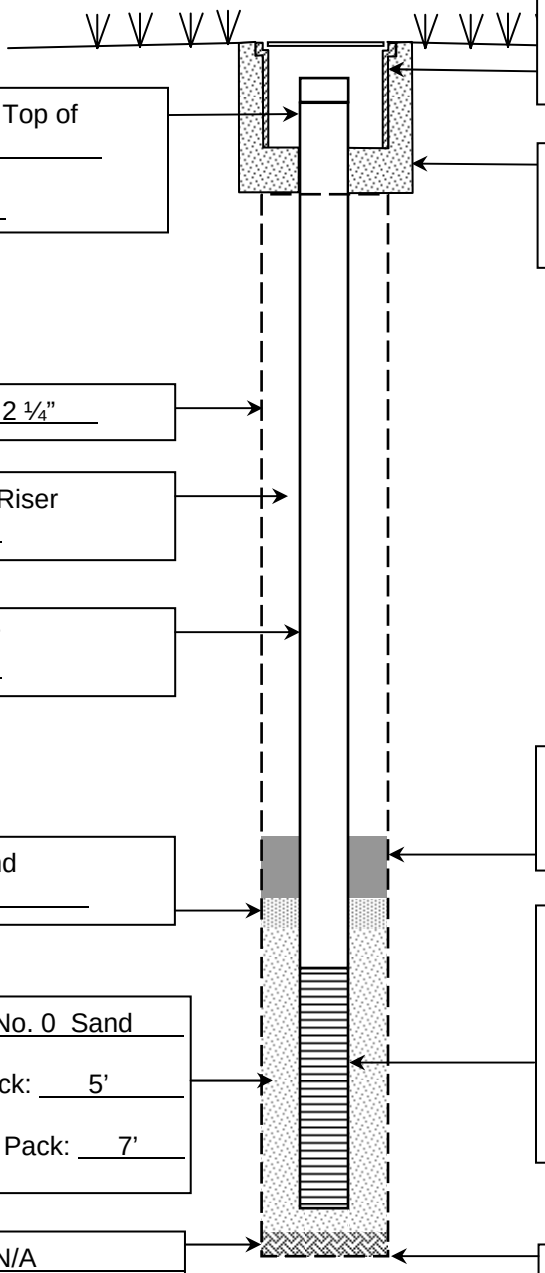
ELEVATION:

START DATE: 10/14/08 TIME: 11:00

FINISH DATE: 10/14/08 TIME: 12:15

DRILLER: E. Plank

INSPECTOR: S. Newell



Type of Protective Casing: Flush Mount

Depth Below Ground of Casing: 6”

Depth Below Ground to Top of Riser Pipe: N/A

Type of Cap: N/A

Type of Surface Seal: Concrete

Thickness of Surface Seal: 6”

Diameter Borehole: 2 ¼”

Type of Backfill Around Riser Pipe: Bentonite Slurry

Inside Diameter of Riser Pipe: ¼”

Type of Bentonite Seal: Bentonite Slurry

Depth to Top of Bentonite Seal: 6”

Depth to Top of Fine Sand Choke: N/A

Type of Screen: Stainless Steel

Screen Diameter: 3/8”

Depth to Top of Screen: 6.5’

Depth to Bottom of Screen: 7’

Type of Sand Pack: No. 0 Sand

Depth to Top of Sand Pack: 5’

Depth to Bottom of Sand Pack: 7’

Backfill (if any): N/A

Depth to Bottom of Borehole: 7’

CLOUGH HARBOUR & ASSOCIATES LLP

WELL CONSTRUCTION LOG

BORING NO. SV-5

WELL NO. SV-5

PROJECT & LOCATION: Congress Street Facility Remedial Investigation

CLIENT: SI Group

CONTRACTOR: Zebra Environmental Corp.

PROJECT NO.: 15091.2010

SHEET NO.: 1 OF 1

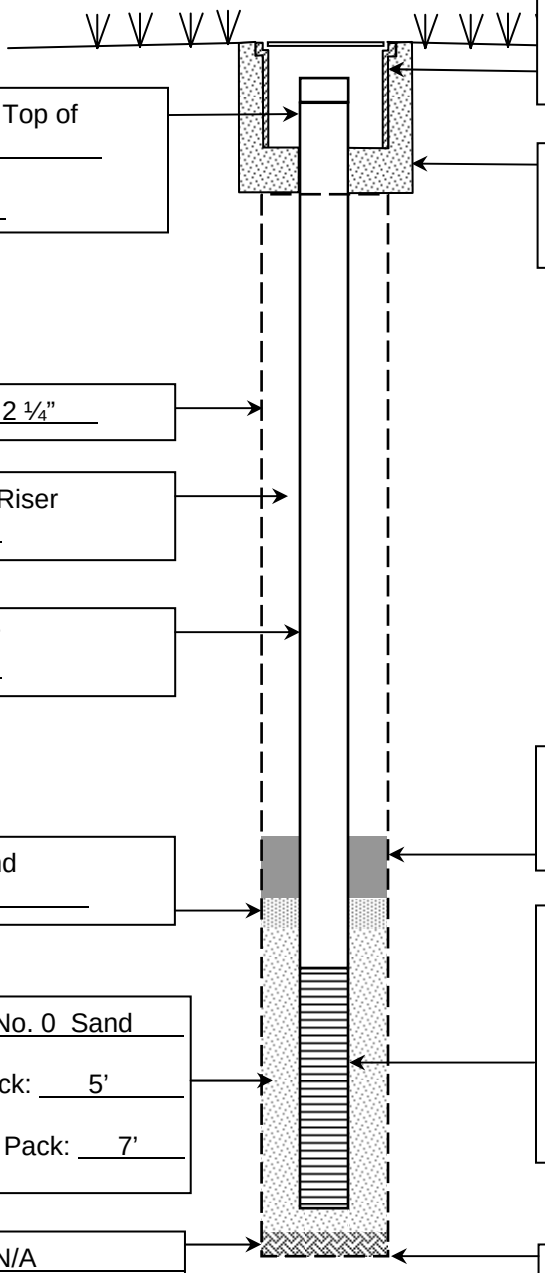
ELEVATION:

START DATE: 10/14/08 TIME: 8:10

FINISH DATE: 10/14/08 TIME: 8:45

DRILLER: E. Plank

INSPECTOR: S. Newell



Type of Protective Casing: Flush Mount

Depth Below Ground of Casing: 6”

Depth Below Ground to Top of Riser Pipe: N/A

Type of Cap: N/A

Type of Surface Seal: Concrete

Thickness of Surface Seal: 6”

Diameter Borehole: 2 ¼”

Type of Backfill Around Riser Pipe: Bentonite Slurry

Inside Diameter of Riser Pipe: ¼”

Type of Bentonite Seal: Bentonite Slurry

Depth to Top of Bentonite Seal: 6”

Depth to Top of Fine Sand Choke: N/A

Type of Screen: Stainless Steel

Screen Diameter: 3/8”

Depth to Top of Screen: 6.5’

Depth to Bottom of Screen: 7’

Type of Sand Pack: No. 0 Sand

Depth to Top of Sand Pack: 5’

Depth to Bottom of Sand Pack: 7’

Backfill (if any): N/A

Depth to Bottom of Borehole: 7’

APPENDIX C

AN ENVIRONMENTAL ANALYTICAL LABRATORY

11/3/2008

Mr. Laury Bibighaus

Clough, Harbour & Associates, LLP

3 Winners Circle

Albany NY 12205

Project Name: SIG-Congress Street

Project #: 15091.2010.1102

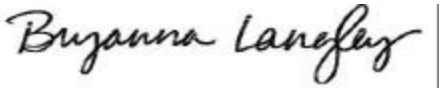
Dear Mr. Laury Bibighaus

The following report includes the data for the above referenced project for sample(s) received on 10/21/2008 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for you air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Bryanna Langley at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Bryanna Langley

Project Manager

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0810462A

Work Order Summary

CLIENT:	Mr. Laury Bibighaus Clough, Harbour & Associates, LLP 3 Winners Circle Albany, NY 12205	**BILL TO:**	Ms. Sarah Newell Clough, Harbour & Associates, LLP 3 Winners Circle Albany, NY 12205
PHONE:	(518) 453-4500	**P.O. #**	15091.2010.1102
FAX:	518-453-4712	**PROJECT #**	15091.2010.1102 SIG-Congress Street
DATE RECEIVED:	10/21/2008	**CONTACT:**	Bryanna Langley
DATE COMPLETED:	11/03/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	Trip Blank	Modified TO-15	29.5 "Hg	5 psi
02A	CHA-1	Modified TO-15	5.0 "Hg	5 psi
03A	SV-1	Modified TO-15	2.5 "Hg	5 psi
04A	SV-2	Modified TO-15	4.5 "Hg	5 psi
05A	SV-3	Modified TO-15	3.5 "Hg	5 psi
06A	SV-4	Modified TO-15	6.0 "Hg	5 psi
07A	SV-5	Modified TO-15	4.0 "Hg	5 psi
07AA	SV-5 Lab Duplicate	Modified TO-15	4.0 "Hg	5 psi
08A	Lab Blank	Modified TO-15	NA	NA
09A	CCV	Modified TO-15	NA	NA
10A	LCS	Modified TO-15	NA	NA

CERTIFIED BY: Linda D. Fruman DATE: 11/03/08

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/08, Expiration date: 06/30/09
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15
Clough, Harbour & Associates, LLP
Workorder# 0810462A

Seven 6 Liter Summa Canister (100% Certified) samples were received on October 21, 2008. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 1.0 liter of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
ICAL %RSD acceptance criteria	+- 30% RSD with 2 compounds allowed out to < 40% RSD	30% RSD with 4 compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	</= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

All Quality Control Limit failures and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not

performed).

J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: Trip Blank

Lab ID#: 0810462A-01A

No Detections Were Found.

Client Sample ID: CHA-1

Lab ID#: 0810462A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Carbon Tetrachloride	0.080	0.090	0.51	0.56
Tetrachloroethene	0.080	0.39	0.55	2.6
1,3-Dichlorobenzene	0.080	0.083	0.48	0.50
Freon 12	0.080	0.25	0.40	1.2
Freon 11	0.080	0.99	0.45	5.6
Toluene	0.16	0.26	0.61	0.96
m,p-Xylene	0.16	0.46	0.70	2.0
o-Xylene	0.16	0.22	0.70	0.94
2-Butanone (Methyl Ethyl Ketone)	0.16	0.74	0.47	2.2
1,2,4-Trimethylbenzene	0.16	0.38	0.79	1.8
Ethanol	0.80	10	1.5	19

Client Sample ID: SV-1

Lab ID#: 0810462A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,1-Trichloroethane	0.073	0.088	0.40	0.48
Carbon Tetrachloride	0.073	0.084	0.46	0.53
Tetrachloroethene	0.073	0.24	0.50	1.6
Freon 12	0.073	0.19	0.36	0.96
Freon 11	0.073	0.29	0.41	1.6
Benzene	0.15	0.15	0.47	0.48
Toluene	0.15	1.3	0.55	5.1
Ethyl Benzene	0.15	0.62	0.63	2.7
m,p-Xylene	0.15	2.8	0.63	12
o-Xylene	0.15	1.0	0.63	4.6
Chloromethane	0.15	0.28	0.30	0.58
Bromomethane	0.15	0.28	0.57	1.1
Hexane	0.15	0.36	0.51	1.3
2-Butanone (Methyl Ethyl Ketone)	0.15	1.4	0.43	4.1
Cyclohexane	0.15	0.46	0.50	1.6
4-Methyl-2-pentanone	0.15	0.17	0.60	0.69

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SV-1

Lab ID#: 0810462A-03A

1,3,5-Trimethylbenzene	0.15	0.44	0.72	2.1
1,2,4-Trimethylbenzene	0.15	0.90	0.72	4.4
Ethanol	0.73	4.6	1.4	8.6

Client Sample ID: SV-2

Lab ID#: 0810462A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Carbon Tetrachloride	0.079	0.16	0.50	1.0
Tetrachloroethene	0.079	0.30	0.54	2.0
Freon 12	0.079	0.19	0.39	0.94
Freon 11	0.079	0.27	0.44	1.5
Toluene	0.16	0.81	0.60	3.1
Ethyl Benzene	0.16	0.51	0.69	2.2
m,p-Xylene	0.16	1.9	0.69	8.3
o-Xylene	0.16	0.78	0.69	3.4
Hexane	0.16	0.17	0.56	0.61
2-Butanone (Methyl Ethyl Ketone)	0.16	2.4	0.46	7.2
1,3,5-Trimethylbenzene	0.16	0.23	0.78	1.1
1,2,4-Trimethylbenzene	0.16	0.63	0.78	3.1
Ethanol	0.79	6.2	1.5	12

Client Sample ID: SV-3

Lab ID#: 0810462A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Tetrachloroethene	0.076	0.64	0.52	4.4
Freon 12	0.076	0.30	0.38	1.5
Freon 11	0.076	0.19	0.43	1.1
Toluene	0.15	0.67	0.57	2.5
Ethyl Benzene	0.15	0.38	0.66	1.6
m,p-Xylene	0.15	1.5	0.66	6.5
o-Xylene	0.15	0.70	0.66	3.0
Chloromethane	0.15	0.30	0.31	0.61
Bromomethane	0.15	0.21	0.59	0.80
2-Butanone (Methyl Ethyl Ketone)	0.15	0.96	0.45	2.8
4-Methyl-2-pentanone	0.15	0.16	0.62	0.65
1,3,5-Trimethylbenzene	0.15	0.43	0.75	2.1

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SV-3

Lab ID#: 0810462A-05A

1,2,4-Trimethylbenzene	0.15	1.0	0.75	5.0
Ethanol	0.76	6.1	1.4	12

Client Sample ID: SV-4

Lab ID#: 0810462A-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Tetrachloroethene	0.084	0.79	0.57	5.4
1,3-Dichlorobenzene	0.084	0.094	0.50	0.57
Freon 12	0.084	0.33	0.42	1.6
Freon 11	0.084	0.42	0.47	2.4
Toluene	0.17	0.52	0.63	1.9
Ethyl Benzene	0.17	0.36	0.73	1.5
m,p-Xylene	0.17	1.4	0.73	5.9
o-Xylene	0.17	0.68	0.73	3.0
2-Butanone (Methyl Ethyl Ketone)	0.17	0.90	0.50	2.6
Chloroform	0.17	1.2	0.82	5.6
1,3,5-Trimethylbenzene	0.17	0.37	0.82	1.8
1,2,4-Trimethylbenzene	0.17	1.0	0.82	5.1
tert-Butyl alcohol	0.84	1.2 J	2.5	3.7 J
Ethanol	0.84	13	1.6	24

Client Sample ID: SV-5

Lab ID#: 0810462A-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Carbon Tetrachloride	0.078	0.085	0.49	0.53
Tetrachloroethene	0.078	0.37	0.52	2.5
1,3-Dichlorobenzene	0.078	0.10	0.46	0.61
Freon 12	0.078	0.26	0.38	1.3
Freon 11	0.078	1.0	0.44	5.9
Freon 113	0.078	0.084	0.59	0.64
Toluene	0.16	0.29	0.58	1.1
m,p-Xylene	0.16	0.47	0.67	2.1
o-Xylene	0.16	0.23	0.67	1.0
2-Butanone (Methyl Ethyl Ketone)	0.16	0.57	0.46	1.7
1,4-Dioxane	0.16	0.18	0.56	0.66
1,3,5-Trimethylbenzene	0.16	0.16	0.76	0.76

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SV-5

Lab ID#: 0810462A-07A

1,2,4-Trimethylbenzene	0.16	0.47	0.76	2.3
Ethanol	0.78	10	1.5	20

Client Sample ID: SV-5 Lab Duplicate

Lab ID#: 0810462A-07AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Carbon Tetrachloride	0.078	0.11	0.49	0.68
Tetrachloroethene	0.078	0.40	0.52	2.7
1,3-Dichlorobenzene	0.078	0.093	0.46	0.56
Freon 12	0.078	0.39	0.38	1.9
Freon 11	0.078	1.1	0.44	6.1
Freon 113	0.078	0.11	0.59	0.82
Toluene	0.16	0.30	0.58	1.1
m,p-Xylene	0.16	0.50	0.67	2.2
o-Xylene	0.16	0.24	0.67	1.0
2-Butanone (Methyl Ethyl Ketone)	0.16	0.71	0.46	2.1
1,4-Dioxane	0.16	0.17	0.56	0.61
1,2,4-Trimethylbenzene	0.16	0.44	0.76	2.2
Ethanol	0.78	11	1.5	21

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Trip Blank

Lab ID#: 0810462A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103107**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/31/08 01:56 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,1-Trichloroethane	0.050	Not Detected	0.27	Not Detected
Carbon Tetrachloride	0.050	Not Detected	0.31	Not Detected
Trichloroethene	0.050	Not Detected	0.27	Not Detected
Bromodichloromethane	0.050	Not Detected	0.34	Not Detected
1,1,2-Trichloroethane	0.050	Not Detected	0.27	Not Detected
Tetrachloroethene	0.050	Not Detected	0.34	Not Detected
Dibromochloromethane	0.050	Not Detected	0.42	Not Detected
1,2-Dibromoethane (EDB)	0.050	Not Detected	0.38	Not Detected
1,1,2,2-Tetrachloroethane	0.050	Not Detected	0.34	Not Detected
1,3-Dichlorobenzene	0.050	Not Detected	0.30	Not Detected
1,4-Dichlorobenzene	0.050	Not Detected	0.30	Not Detected
1,2-Dichlorobenzene	0.050	Not Detected	0.30	Not Detected
Freon 12	0.050	Not Detected	0.25	Not Detected
Freon 114	0.050	Not Detected	0.35	Not Detected
Freon 11	0.050	Not Detected	0.28	Not Detected
Freon 113	0.050	Not Detected	0.38	Not Detected
Bromoform	0.050	Not Detected	0.52	Not Detected
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
1,1-Dichloroethane	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Benzene	0.10	Not Detected	0.32	Not Detected
1,2-Dichloroethane	0.10	Not Detected	0.40	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
Ethyl Benzene	0.10	Not Detected	0.43	Not Detected
m,p-Xylene	0.10	Not Detected	0.43	Not Detected
o-Xylene	0.10	Not Detected	0.43	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected
Chloromethane	0.10	Not Detected	0.21	Not Detected
Bromomethane	0.10	Not Detected	0.39	Not Detected
Chloroethane	0.10	Not Detected	0.26	Not Detected
Hexane	0.10	Not Detected	0.35	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	Not Detected	0.29	Not Detected
Chloroform	0.10	Not Detected	0.49	Not Detected
Cyclohexane	0.10	Not Detected	0.34	Not Detected
1,2-Dichloropropane	0.10	Not Detected	0.46	Not Detected
1,4-Dioxane	0.10	Not Detected	0.36	Not Detected
cis-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Trip Blank

Lab ID#: 0810462A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103107**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/31/08 01:56 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
4-Methyl-2-pentanone	0.10	Not Detected	0.41	Not Detected
trans-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
Chlorobenzene	0.10	Not Detected	0.46	Not Detected
Styrene	0.10	Not Detected	0.42	Not Detected
1,3,5-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,2,4-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
alpha-Chlorotoluene	0.10	Not Detected	0.52	Not Detected
2,2,4-Trimethylpentane	0.10	Not Detected	0.47	Not Detected
tert-Butyl alcohol	0.50	Not Detected U J	1.5	Not Detected U J
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Hexachlorobutadiene	0.50	Not Detected	5.3	Not Detected
Ethanol	0.50	Not Detected	0.94	Not Detected
1,2,4-Trichlorobenzene	0.50	Not Detected	3.7	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	97	70-130
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	98	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CHA-1

Lab ID#: 0810462A-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103108**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.61**	**Date of Analysis: 10/31/08 02:32 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,1-Trichloroethane	0.080	Not Detected	0.44	Not Detected
Carbon Tetrachloride	0.080	0.090	0.51	0.56
Trichloroethene	0.080	Not Detected	0.43	Not Detected
Bromodichloromethane	0.080	Not Detected	0.54	Not Detected
1,1,2-Trichloroethane	0.080	Not Detected	0.44	Not Detected
Tetrachloroethene	0.080	0.39	0.55	2.6
Dibromochloromethane	0.080	Not Detected	0.68	Not Detected
1,2-Dibromoethane (EDB)	0.080	Not Detected	0.62	Not Detected
1,1,2,2-Tetrachloroethane	0.080	Not Detected	0.55	Not Detected
1,3-Dichlorobenzene	0.080	0.083	0.48	0.50
1,4-Dichlorobenzene	0.080	Not Detected	0.48	Not Detected
1,2-Dichlorobenzene	0.080	Not Detected	0.48	Not Detected
Freon 12	0.080	0.25	0.40	1.2
Freon 114	0.080	Not Detected	0.56	Not Detected
Freon 11	0.080	0.99	0.45	5.6
Freon 113	0.080	Not Detected	0.62	Not Detected
Bromoform	0.080	Not Detected	0.83	Not Detected
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.64	Not Detected
1,1-Dichloroethane	0.16	Not Detected	0.65	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Benzene	0.16	Not Detected	0.51	Not Detected
1,2-Dichloroethane	0.16	Not Detected	0.65	Not Detected
Toluene	0.16	0.26	0.61	0.96
Ethyl Benzene	0.16	Not Detected	0.70	Not Detected
m,p-Xylene	0.16	0.46	0.70	2.0
o-Xylene	0.16	0.22	0.70	0.94
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Methyl tert-butyl ether	0.16	Not Detected	0.58	Not Detected
Chloromethane	0.16	Not Detected	0.33	Not Detected
Bromomethane	0.16	Not Detected	0.62	Not Detected
Chloroethane	0.16	Not Detected	0.42	Not Detected
Hexane	0.16	Not Detected	0.57	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.16	0.74	0.47	2.2
Chloroform	0.16	Not Detected	0.79	Not Detected
Cyclohexane	0.16	Not Detected	0.55	Not Detected
1,2-Dichloropropane	0.16	Not Detected	0.74	Not Detected
1,4-Dioxane	0.16	Not Detected	0.58	Not Detected
cis-1,3-Dichloropropene	0.16	Not Detected	0.73	Not Detected

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CHA-1

Lab ID#: 0810462A-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103108**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.61**	**Date of Analysis: 10/31/08 02:32 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
4-Methyl-2-pentanone	0.16	Not Detected	0.66	Not Detected
trans-1,3-Dichloropropene	0.16	Not Detected	0.73	Not Detected
Chlorobenzene	0.16	Not Detected	0.74	Not Detected
Styrene	0.16	Not Detected	0.68	Not Detected
1,3,5-Trimethylbenzene	0.16	Not Detected	0.79	Not Detected
1,2,4-Trimethylbenzene	0.16	0.38	0.79	1.8
alpha-Chlorotoluene	0.16	Not Detected	0.83	Not Detected
2,2,4-Trimethylpentane	0.16	Not Detected	0.75	Not Detected
tert-Butyl alcohol	0.80	Not Detected U J	2.4	Not Detected U J
Methylene Chloride	0.80	Not Detected	2.8	Not Detected
Hexachlorobutadiene	0.80	Not Detected	8.6	Not Detected
Ethanol	0.80	10	1.5	19
1,2,4-Trichlorobenzene	0.80	Not Detected	6.0	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	104	70-130
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-1

Lab ID#: 0810462A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103109**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.46**	**Date of Analysis: 10/31/08 03:03 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,1-Trichloroethane	0.073	0.088	0.40	0.48
Carbon Tetrachloride	0.073	0.084	0.46	0.53
Trichloroethene	0.073	Not Detected	0.39	Not Detected
Bromodichloromethane	0.073	Not Detected	0.49	Not Detected
1,1,2-Trichloroethane	0.073	Not Detected	0.40	Not Detected
Tetrachloroethene	0.073	0.24	0.50	1.6
Dibromochloromethane	0.073	Not Detected	0.62	Not Detected
1,2-Dibromoethane (EDB)	0.073	Not Detected	0.56	Not Detected
1,1,2,2-Tetrachloroethane	0.073	Not Detected	0.50	Not Detected
1,3-Dichlorobenzene	0.073	Not Detected	0.44	Not Detected
1,4-Dichlorobenzene	0.073	Not Detected	0.44	Not Detected
1,2-Dichlorobenzene	0.073	Not Detected	0.44	Not Detected
Freon 12	0.073	0.19	0.36	0.96
Freon 114	0.073	Not Detected	0.51	Not Detected
Freon 11	0.073	0.29	0.41	1.6
Freon 113	0.073	Not Detected	0.56	Not Detected
Bromoform	0.073	Not Detected	0.75	Not Detected
Vinyl Chloride	0.15	Not Detected	0.37	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.58	Not Detected
1,1-Dichloroethane	0.15	Not Detected	0.59	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected
Benzene	0.15	0.15	0.47	0.48
1,2-Dichloroethane	0.15	Not Detected	0.59	Not Detected
Toluene	0.15	1.3	0.55	5.1
Ethyl Benzene	0.15	0.62	0.63	2.7
m,p-Xylene	0.15	2.8	0.63	12
o-Xylene	0.15	1.0	0.63	4.6
trans-1,2-Dichloroethene	0.15	Not Detected	0.58	Not Detected
Methyl tert-butyl ether	0.15	Not Detected	0.53	Not Detected
Chloromethane	0.15	0.28	0.30	0.58
Bromomethane	0.15	0.28	0.57	1.1
Chloroethane	0.15	Not Detected	0.38	Not Detected
Hexane	0.15	0.36	0.51	1.3
2-Butanone (Methyl Ethyl Ketone)	0.15	1.4	0.43	4.1
Chloroform	0.15	Not Detected	0.71	Not Detected
Cyclohexane	0.15	0.46	0.50	1.6
1,2-Dichloropropane	0.15	Not Detected	0.67	Not Detected
1,4-Dioxane	0.15	Not Detected	0.53	Not Detected
cis-1,3-Dichloropropene	0.15	Not Detected	0.66	Not Detected

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-1

Lab ID#: 0810462A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103109**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.46**	**Date of Analysis: 10/31/08 03:03 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
4-Methyl-2-pentanone	0.15	0.17	0.60	0.69
trans-1,3-Dichloropropene	0.15	Not Detected	0.66	Not Detected
Chlorobenzene	0.15	Not Detected	0.67	Not Detected
Styrene	0.15	Not Detected	0.62	Not Detected
1,3,5-Trimethylbenzene	0.15	0.44	0.72	2.1
1,2,4-Trimethylbenzene	0.15	0.90	0.72	4.4
alpha-Chlorotoluene	0.15	Not Detected	0.76	Not Detected
2,2,4-Trimethylpentane	0.15	Not Detected	0.68	Not Detected
tert-Butyl alcohol	0.73	Not Detected U J	2.2	Not Detected U J
Methylene Chloride	0.73	Not Detected	2.5	Not Detected
Hexachlorobutadiene	0.73	Not Detected	7.8	Not Detected
Ethanol	0.73	4.6	1.4	8.6
1,2,4-Trichlorobenzene	0.73	Not Detected	5.4	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	100	70-130
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	99	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-2

Lab ID#: 0810462A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103110**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.58**	**Date of Analysis: 10/31/08 03:35 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,1-Trichloroethane	0.079	Not Detected	0.43	Not Detected
Carbon Tetrachloride	0.079	0.16	0.50	1.0
Trichloroethene	0.079	Not Detected	0.42	Not Detected
Bromodichloromethane	0.079	Not Detected	0.53	Not Detected
1,1,2-Trichloroethane	0.079	Not Detected	0.43	Not Detected
Tetrachloroethene	0.079	0.30	0.54	2.0
Dibromochloromethane	0.079	Not Detected	0.67	Not Detected
1,2-Dibromoethane (EDB)	0.079	Not Detected	0.61	Not Detected
1,1,2,2-Tetrachloroethane	0.079	Not Detected	0.54	Not Detected
1,3-Dichlorobenzene	0.079	Not Detected	0.48	Not Detected
1,4-Dichlorobenzene	0.079	Not Detected	0.48	Not Detected
1,2-Dichlorobenzene	0.079	Not Detected	0.47	Not Detected
Freon 12	0.079	0.19	0.39	0.94
Freon 114	0.079	Not Detected	0.55	Not Detected
Freon 11	0.079	0.27	0.44	1.5
Freon 113	0.079	Not Detected	0.60	Not Detected
Bromoform	0.079	Not Detected	0.82	Not Detected
Vinyl Chloride	0.16	Not Detected	0.40	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.63	Not Detected
1,1-Dichloroethane	0.16	Not Detected	0.64	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
Benzene	0.16	Not Detected	0.50	Not Detected
1,2-Dichloroethane	0.16	Not Detected	0.64	Not Detected
Toluene	0.16	0.81	0.60	3.1
Ethyl Benzene	0.16	0.51	0.69	2.2
m,p-Xylene	0.16	1.9	0.69	8.3
o-Xylene	0.16	0.78	0.69	3.4
trans-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
Methyl tert-butyl ether	0.16	Not Detected	0.57	Not Detected
Chloromethane	0.16	Not Detected	0.33	Not Detected
Bromomethane	0.16	Not Detected	0.61	Not Detected
Chloroethane	0.16	Not Detected	0.42	Not Detected
Hexane	0.16	0.17	0.56	0.61
2-Butanone (Methyl Ethyl Ketone)	0.16	2.4	0.46	7.2
Chloroform	0.16	Not Detected	0.77	Not Detected
Cyclohexane	0.16	Not Detected	0.54	Not Detected
1,2-Dichloropropane	0.16	Not Detected	0.73	Not Detected
1,4-Dioxane	0.16	Not Detected	0.57	Not Detected
cis-1,3-Dichloropropene	0.16	Not Detected	0.72	Not Detected

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-2

Lab ID#: 0810462A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103110**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.58**	**Date of Analysis: 10/31/08 03:35 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
4-Methyl-2-pentanone	0.16	Not Detected	0.65	Not Detected
trans-1,3-Dichloropropene	0.16	Not Detected	0.72	Not Detected
Chlorobenzene	0.16	Not Detected	0.73	Not Detected
Styrene	0.16	Not Detected	0.67	Not Detected
1,3,5-Trimethylbenzene	0.16	0.23	0.78	1.1
1,2,4-Trimethylbenzene	0.16	0.63	0.78	3.1
alpha-Chlorotoluene	0.16	Not Detected	0.82	Not Detected
2,2,4-Trimethylpentane	0.16	Not Detected	0.74	Not Detected
tert-Butyl alcohol	0.79	Not Detected U J	2.4	Not Detected U J
Methylene Chloride	0.79	Not Detected	2.7	Not Detected
Hexachlorobutadiene	0.79	Not Detected	8.4	Not Detected
Ethanol	0.79	6.2	1.5	12
1,2,4-Trichlorobenzene	0.79	Not Detected	5.9	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	98	70-130
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	96	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-3

Lab ID#: 0810462A-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103111**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.52**	**Date of Analysis: 10/31/08 04:08 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,1-Trichloroethane	0.076	Not Detected	0.41	Not Detected
Carbon Tetrachloride	0.076	Not Detected	0.48	Not Detected
Trichloroethene	0.076	Not Detected	0.41	Not Detected
Bromodichloromethane	0.076	Not Detected	0.51	Not Detected
1,1,2-Trichloroethane	0.076	Not Detected	0.41	Not Detected
Tetrachloroethene	0.076	0.64	0.52	4.4
Dibromochloromethane	0.076	Not Detected	0.65	Not Detected
1,2-Dibromoethane (EDB)	0.076	Not Detected	0.58	Not Detected
1,1,2,2-Tetrachloroethane	0.076	Not Detected	0.52	Not Detected
1,3-Dichlorobenzene	0.076	Not Detected	0.46	Not Detected
1,4-Dichlorobenzene	0.076	Not Detected	0.46	Not Detected
1,2-Dichlorobenzene	0.076	Not Detected	0.46	Not Detected
Freon 12	0.076	0.30	0.38	1.5
Freon 114	0.076	Not Detected	0.53	Not Detected
Freon 11	0.076	0.19	0.43	1.1
Freon 113	0.076	Not Detected	0.58	Not Detected
Bromoform	0.076	Not Detected	0.78	Not Detected
Vinyl Chloride	0.15	Not Detected	0.39	Not Detected
1,1-Dichloroethene	0.15	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.15	Not Detected	0.62	Not Detected
cis-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
Benzene	0.15	Not Detected	0.48	Not Detected
1,2-Dichloroethane	0.15	Not Detected	0.62	Not Detected
Toluene	0.15	0.67	0.57	2.5
Ethyl Benzene	0.15	0.38	0.66	1.6
m,p-Xylene	0.15	1.5	0.66	6.5
o-Xylene	0.15	0.70	0.66	3.0
trans-1,2-Dichloroethene	0.15	Not Detected	0.60	Not Detected
Methyl tert-butyl ether	0.15	Not Detected	0.55	Not Detected
Chloromethane	0.15	0.30	0.31	0.61
Bromomethane	0.15	0.21	0.59	0.80
Chloroethane	0.15	Not Detected	0.40	Not Detected
Hexane	0.15	Not Detected	0.54	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.15	0.96	0.45	2.8
Chloroform	0.15	Not Detected	0.74	Not Detected
Cyclohexane	0.15	Not Detected	0.52	Not Detected
1,2-Dichloropropane	0.15	Not Detected	0.70	Not Detected
1,4-Dioxane	0.15	Not Detected	0.55	Not Detected
cis-1,3-Dichloropropene	0.15	Not Detected	0.69	Not Detected

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-3

Lab ID#: 0810462A-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103111**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.52**	**Date of Analysis: 10/31/08 04:08 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
4-Methyl-2-pentanone	0.15	0.16	0.62	0.65
trans-1,3-Dichloropropene	0.15	Not Detected	0.69	Not Detected
Chlorobenzene	0.15	Not Detected	0.70	Not Detected
Styrene	0.15	Not Detected	0.65	Not Detected
1,3,5-Trimethylbenzene	0.15	0.43	0.75	2.1
1,2,4-Trimethylbenzene	0.15	1.0	0.75	5.0
alpha-Chlorotoluene	0.15	Not Detected	0.79	Not Detected
2,2,4-Trimethylpentane	0.15	Not Detected	0.71	Not Detected
tert-Butyl alcohol	0.76	Not Detected U J	2.3	Not Detected U J
Methylene Chloride	0.76	Not Detected	2.6	Not Detected
Hexachlorobutadiene	0.76	Not Detected	8.1	Not Detected
Ethanol	0.76	6.1	1.4	12
1,2,4-Trichlorobenzene	0.76	Not Detected	5.6	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	104	70-130
1,2-Dichloroethane-d4	78	70-130
Toluene-d8	98	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-4

Lab ID#: 0810462A-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103112**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.68**	**Date of Analysis: 10/31/08 04:40 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,1-Trichloroethane	0.084	Not Detected	0.46	Not Detected
Carbon Tetrachloride	0.084	Not Detected	0.53	Not Detected
Trichloroethene	0.084	Not Detected	0.45	Not Detected
Bromodichloromethane	0.084	Not Detected	0.56	Not Detected
1,1,2-Trichloroethane	0.084	Not Detected	0.46	Not Detected
Tetrachloroethene	0.084	0.79	0.57	5.4
Dibromochloromethane	0.084	Not Detected	0.72	Not Detected
1,2-Dibromoethane (EDB)	0.084	Not Detected	0.64	Not Detected
1,1,2,2-Tetrachloroethane	0.084	Not Detected	0.58	Not Detected
1,3-Dichlorobenzene	0.084	0.094	0.50	0.57
1,4-Dichlorobenzene	0.084	Not Detected	0.50	Not Detected
1,2-Dichlorobenzene	0.084	Not Detected	0.50	Not Detected
Freon 12	0.084	0.33	0.42	1.6
Freon 114	0.084	Not Detected	0.59	Not Detected
Freon 11	0.084	0.42	0.47	2.4
Freon 113	0.084	Not Detected	0.64	Not Detected
Bromoform	0.084	Not Detected	0.87	Not Detected
Vinyl Chloride	0.17	Not Detected	0.43	Not Detected
1,1-Dichloroethene	0.17	Not Detected	0.67	Not Detected
1,1-Dichloroethane	0.17	Not Detected	0.68	Not Detected
cis-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Benzene	0.17	Not Detected	0.54	Not Detected
1,2-Dichloroethane	0.17	Not Detected	0.68	Not Detected
Toluene	0.17	0.52	0.63	1.9
Ethyl Benzene	0.17	0.36	0.73	1.5
m,p-Xylene	0.17	1.4	0.73	5.9
o-Xylene	0.17	0.68	0.73	3.0
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.60	Not Detected
Chloromethane	0.17	Not Detected	0.35	Not Detected
Bromomethane	0.17	Not Detected	0.65	Not Detected
Chloroethane	0.17	Not Detected	0.44	Not Detected
Hexane	0.17	Not Detected	0.59	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.17	0.90	0.50	2.6
Chloroform	0.17	1.2	0.82	5.6
Cyclohexane	0.17	Not Detected	0.58	Not Detected
1,2-Dichloropropane	0.17	Not Detected	0.78	Not Detected
1,4-Dioxane	0.17	Not Detected	0.60	Not Detected
cis-1,3-Dichloropropene	0.17	Not Detected	0.76	Not Detected

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-4

Lab ID#: 0810462A-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103112**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.68**	**Date of Analysis: 10/31/08 04:40 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
4-Methyl-2-pentanone	0.17	Not Detected	0.69	Not Detected
trans-1,3-Dichloropropene	0.17	Not Detected	0.76	Not Detected
Chlorobenzene	0.17	Not Detected	0.77	Not Detected
Styrene	0.17	Not Detected	0.72	Not Detected
1,3,5-Trimethylbenzene	0.17	0.37	0.82	1.8
1,2,4-Trimethylbenzene	0.17	1.0	0.82	5.1
alpha-Chlorotoluene	0.17	Not Detected	0.87	Not Detected
2,2,4-Trimethylpentane	0.17	Not Detected	0.78	Not Detected
tert-Butyl alcohol	0.84	1.2 J	2.5	3.7 J
Methylene Chloride	0.84	Not Detected	2.9	Not Detected
Hexachlorobutadiene	0.84	Not Detected	9.0	Not Detected
Ethanol	0.84	13	1.6	24
1,2,4-Trichlorobenzene	0.84	Not Detected	6.2	Not Detected

J = Estimated value due to bias in the CCV.

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	104	70-130
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	98	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-5

Lab ID#: 0810462A-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103113**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.55**	**Date of Analysis: 10/31/08 05:11 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,1-Trichloroethane	0.078	Not Detected	0.42	Not Detected
Carbon Tetrachloride	0.078	0.085	0.49	0.53
Trichloroethene	0.078	Not Detected	0.42	Not Detected
Bromodichloromethane	0.078	Not Detected	0.52	Not Detected
1,1,2-Trichloroethane	0.078	Not Detected	0.42	Not Detected
Tetrachloroethene	0.078	0.37	0.52	2.5
Dibromochloromethane	0.078	Not Detected	0.66	Not Detected
1,2-Dibromoethane (EDB)	0.078	Not Detected	0.60	Not Detected
1,1,2,2-Tetrachloroethane	0.078	Not Detected	0.53	Not Detected
1,3-Dichlorobenzene	0.078	0.10	0.46	0.61
1,4-Dichlorobenzene	0.078	Not Detected	0.46	Not Detected
1,2-Dichlorobenzene	0.078	Not Detected	0.46	Not Detected
Freon 12	0.078	0.26	0.38	1.3
Freon 114	0.078	Not Detected	0.54	Not Detected
Freon 11	0.078	1.0	0.44	5.9
Freon 113	0.078	0.084	0.59	0.64
Bromoform	0.078	Not Detected	0.80	Not Detected
Vinyl Chloride	0.16	Not Detected	0.40	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.61	Not Detected
1,1-Dichloroethane	0.16	Not Detected	0.63	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.61	Not Detected
Benzene	0.16	Not Detected	0.50	Not Detected
1,2-Dichloroethane	0.16	Not Detected	0.63	Not Detected
Toluene	0.16	0.29	0.58	1.1
Ethyl Benzene	0.16	Not Detected	0.67	Not Detected
m,p-Xylene	0.16	0.47	0.67	2.1
o-Xylene	0.16	0.23	0.67	1.0
trans-1,2-Dichloroethene	0.16	Not Detected	0.61	Not Detected
Methyl tert-butyl ether	0.16	Not Detected	0.56	Not Detected
Chloromethane	0.16	Not Detected	0.32	Not Detected
Bromomethane	0.16	Not Detected	0.60	Not Detected
Chloroethane	0.16	Not Detected	0.41	Not Detected
Hexane	0.16	Not Detected	0.55	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.16	0.57	0.46	1.7
Chloroform	0.16	Not Detected	0.76	Not Detected
Cyclohexane	0.16	Not Detected	0.53	Not Detected
1,2-Dichloropropane	0.16	Not Detected	0.72	Not Detected
1,4-Dioxane	0.16	0.18	0.56	0.66
cis-1,3-Dichloropropene	0.16	Not Detected	0.70	Not Detected

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-5

Lab ID#: 0810462A-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103113**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.55**	**Date of Analysis: 10/31/08 05:11 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
4-Methyl-2-pentanone	0.16	Not Detected	0.63	Not Detected
trans-1,3-Dichloropropene	0.16	Not Detected	0.70	Not Detected
Chlorobenzene	0.16	Not Detected	0.71	Not Detected
Styrene	0.16	Not Detected	0.66	Not Detected
1,3,5-Trimethylbenzene	0.16	0.16	0.76	0.76
1,2,4-Trimethylbenzene	0.16	0.47	0.76	2.3
alpha-Chlorotoluene	0.16	Not Detected	0.80	Not Detected
2,2,4-Trimethylpentane	0.16	Not Detected	0.72	Not Detected
tert-Butyl alcohol	0.78	Not Detected U J	2.3	Not Detected U J
Methylene Chloride	0.78	Not Detected	2.7	Not Detected
Hexachlorobutadiene	0.78	Not Detected	8.3	Not Detected
Ethanol	0.78	10	1.5	20
1,2,4-Trichlorobenzene	0.78	Not Detected	5.8	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	101	70-130
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	99	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-5 Lab Duplicate

Lab ID#: 0810462A-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103114**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.55**	**Date of Analysis: 10/31/08 06:27 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,1-Trichloroethane	0.078	Not Detected	0.42	Not Detected
Carbon Tetrachloride	0.078	0.11	0.49	0.68
Trichloroethene	0.078	Not Detected	0.42	Not Detected
Bromodichloromethane	0.078	Not Detected	0.52	Not Detected
1,1,2-Trichloroethane	0.078	Not Detected	0.42	Not Detected
Tetrachloroethene	0.078	0.40	0.52	2.7
Dibromochloromethane	0.078	Not Detected	0.66	Not Detected
1,2-Dibromoethane (EDB)	0.078	Not Detected	0.60	Not Detected
1,1,2,2-Tetrachloroethane	0.078	Not Detected	0.53	Not Detected
1,3-Dichlorobenzene	0.078	0.093	0.46	0.56
1,4-Dichlorobenzene	0.078	Not Detected	0.46	Not Detected
1,2-Dichlorobenzene	0.078	Not Detected	0.46	Not Detected
Freon 12	0.078	0.39	0.38	1.9
Freon 114	0.078	Not Detected	0.54	Not Detected
Freon 11	0.078	1.1	0.44	6.1
Freon 113	0.078	0.11	0.59	0.82
Bromoform	0.078	Not Detected	0.80	Not Detected
Vinyl Chloride	0.16	Not Detected	0.40	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.61	Not Detected
1,1-Dichloroethane	0.16	Not Detected	0.63	Not Detected
cis-1,2-Dichloroethene	0.16	Not Detected	0.61	Not Detected
Benzene	0.16	Not Detected	0.50	Not Detected
1,2-Dichloroethane	0.16	Not Detected	0.63	Not Detected
Toluene	0.16	0.30	0.58	1.1
Ethyl Benzene	0.16	Not Detected	0.67	Not Detected
m,p-Xylene	0.16	0.50	0.67	2.2
o-Xylene	0.16	0.24	0.67	1.0
trans-1,2-Dichloroethene	0.16	Not Detected	0.61	Not Detected
Methyl tert-butyl ether	0.16	Not Detected	0.56	Not Detected
Chloromethane	0.16	Not Detected	0.32	Not Detected
Bromomethane	0.16	Not Detected	0.60	Not Detected
Chloroethane	0.16	Not Detected	0.41	Not Detected
Hexane	0.16	Not Detected	0.55	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.16	0.71	0.46	2.1
Chloroform	0.16	Not Detected	0.76	Not Detected
Cyclohexane	0.16	Not Detected	0.53	Not Detected
1,2-Dichloropropane	0.16	Not Detected	0.72	Not Detected
1,4-Dioxane	0.16	0.17	0.56	0.61
cis-1,3-Dichloropropene	0.16	Not Detected	0.70	Not Detected

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-5 Lab Duplicate

Lab ID#: 0810462A-07AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103114**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.55**	**Date of Analysis: 10/31/08 06:27 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
4-Methyl-2-pentanone	0.16	Not Detected	0.63	Not Detected
trans-1,3-Dichloropropene	0.16	Not Detected	0.70	Not Detected
Chlorobenzene	0.16	Not Detected	0.71	Not Detected
Styrene	0.16	Not Detected	0.66	Not Detected
1,3,5-Trimethylbenzene	0.16	Not Detected	0.76	Not Detected
1,2,4-Trimethylbenzene	0.16	0.44	0.76	2.2
alpha-Chlorotoluene	0.16	Not Detected	0.80	Not Detected
2,2,4-Trimethylpentane	0.16	Not Detected	0.72	Not Detected
tert-Butyl alcohol	0.78	Not Detected U J	2.3	Not Detected U J
Methylene Chloride	0.78	Not Detected	2.7	Not Detected
Hexachlorobutadiene	0.78	Not Detected	8.3	Not Detected
Ethanol	0.78	11	1.5	21
1,2,4-Trichlorobenzene	0.78	Not Detected	5.8	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	100	70-130
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	101	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810462A-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103106a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/31/08 01:03 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
1,1,1-Trichloroethane	0.050	Not Detected	0.27	Not Detected
Carbon Tetrachloride	0.050	Not Detected	0.31	Not Detected
Trichloroethene	0.050	Not Detected	0.27	Not Detected
Bromodichloromethane	0.050	Not Detected	0.34	Not Detected
1,1,2-Trichloroethane	0.050	Not Detected	0.27	Not Detected
Tetrachloroethene	0.050	Not Detected	0.34	Not Detected
Dibromochloromethane	0.050	Not Detected	0.42	Not Detected
1,2-Dibromoethane (EDB)	0.050	Not Detected	0.38	Not Detected
1,1,2,2-Tetrachloroethane	0.050	Not Detected	0.34	Not Detected
1,3-Dichlorobenzene	0.050	Not Detected	0.30	Not Detected
1,4-Dichlorobenzene	0.050	Not Detected	0.30	Not Detected
1,2-Dichlorobenzene	0.050	Not Detected	0.30	Not Detected
Freon 12	0.050	Not Detected	0.25	Not Detected
Freon 114	0.050	Not Detected	0.35	Not Detected
Freon 11	0.050	Not Detected	0.28	Not Detected
Freon 113	0.050	Not Detected	0.38	Not Detected
Bromoform	0.050	Not Detected	0.52	Not Detected
Vinyl Chloride	0.10	Not Detected	0.26	Not Detected
1,1-Dichloroethene	0.10	Not Detected	0.40	Not Detected
1,1-Dichloroethane	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Benzene	0.10	Not Detected	0.32	Not Detected
1,2-Dichloroethane	0.10	Not Detected	0.40	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
Ethyl Benzene	0.10	Not Detected	0.43	Not Detected
m,p-Xylene	0.10	Not Detected	0.43	Not Detected
o-Xylene	0.10	Not Detected	0.43	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected
Chloromethane	0.10	Not Detected	0.21	Not Detected
Bromomethane	0.10	Not Detected	0.39	Not Detected
Chloroethane	0.10	Not Detected	0.26	Not Detected
Hexane	0.10	Not Detected	0.35	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.10	Not Detected	0.29	Not Detected
Chloroform	0.10	Not Detected	0.49	Not Detected
Cyclohexane	0.10	Not Detected	0.34	Not Detected
1,2-Dichloropropane	0.10	Not Detected	0.46	Not Detected
1,4-Dioxane	0.10	Not Detected	0.36	Not Detected
cis-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810462A-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103106a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/31/08 01:03 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
4-Methyl-2-pentanone	0.10	Not Detected	0.41	Not Detected
trans-1,3-Dichloropropene	0.10	Not Detected	0.45	Not Detected
Chlorobenzene	0.10	Not Detected	0.46	Not Detected
Styrene	0.10	Not Detected	0.42	Not Detected
1,3,5-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,2,4-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
alpha-Chlorotoluene	0.10	Not Detected	0.52	Not Detected
2,2,4-Trimethylpentane	0.10	Not Detected	0.47	Not Detected
tert-Butyl alcohol	0.50	Not Detected U J	1.5	Not Detected U J
Methylene Chloride	0.50	Not Detected	1.7	Not Detected
Hexachlorobutadiene	0.50	Not Detected	5.3	Not Detected
Ethanol	0.50	Not Detected	0.94	Not Detected
1,2,4-Trichlorobenzene	0.50	Not Detected	3.7	Not Detected

UJ = Non-detected compound associated with low bias in the CCV

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
4-Bromofluorobenzene	97	70-130
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	95	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0810462A-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/31/08 10:29 AM**	

Compound	%Recovery
1,1,1-Trichloroethane	92
Carbon Tetrachloride	106
Trichloroethene	89
Bromodichloromethane	92
1,1,2-Trichloroethane	84
Tetrachloroethene	92
Dibromochloromethane	95
1,2-Dibromoethane (EDB)	80
1,1,2,2-Tetrachloroethane	92
1,3-Dichlorobenzene	92
1,4-Dichlorobenzene	94
1,2-Dichlorobenzene	91
Freon 12	97
Freon 114	102
Freon 11	116
Freon 113	105
Bromoform	104
Vinyl Chloride	93
1,1-Dichloroethene	92
1,1-Dichloroethane	87
cis-1,2-Dichloroethene	91
Benzene	83
1,2-Dichloroethane	90
Toluene	84
Ethyl Benzene	86
m,p-Xylene	84
o-Xylene	84
trans-1,2-Dichloroethene	108
Methyl tert-butyl ether	77
Chloromethane	109
Bromomethane	72
Chloroethane	79
Hexane	83
2-Butanone (Methyl Ethyl Ketone)	86
Chloroform	89
Cyclohexane	88
1,2-Dichloropropane	83
1,4-Dioxane	86
cis-1,3-Dichloropropene	84

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0810462A-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103102**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/31/08 10:29 AM**	

Compound	**%Recovery**
4-Methyl-2-pentanone	87
trans-1,3-Dichloropropene	86
Chlorobenzene	89
Styrene	85
1,3,5-Trimethylbenzene	85
1,2,4-Trimethylbenzene	85
alpha-Chlorotoluene	88
2,2,4-Trimethylpentane	88
tert-Butyl alcohol	68 Q
Methylene Chloride	79
Hexachlorobutadiene	95
Ethanol	91
1,2,4-Trichlorobenzene	91

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	100	70-130
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	102	70-130

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0810462A-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/31/08 11:08 AM**	

Compound	%Recovery
1,1,1-Trichloroethane	95
Carbon Tetrachloride	93
Trichloroethene	100
Bromodichloromethane	94
1,1,2-Trichloroethane	92
Tetrachloroethene	99
Dibromochloromethane	101
1,2-Dibromoethane (EDB)	89
1,1,2,2-Tetrachloroethane	88
1,3-Dichlorobenzene	97
1,4-Dichlorobenzene	96
1,2-Dichlorobenzene	95
Freon 12	98
Freon 114	98
Freon 11	115
Freon 113	118
Bromoform	103
Vinyl Chloride	95
1,1-Dichloroethene	107
1,1-Dichloroethane	91
cis-1,2-Dichloroethene	96
Benzene	86
1,2-Dichloroethane	96
Toluene	92
Ethyl Benzene	90
m,p-Xylene	90
o-Xylene	90
trans-1,2-Dichloroethene	109
Methyl tert-butyl ether	97
Chloromethane	120
Bromomethane	80
Chloroethane	96
Hexane	86
2-Butanone (Methyl Ethyl Ketone)	88
Chloroform	93
Cyclohexane	89
1,2-Dichloropropane	84
1,4-Dioxane	84
cis-1,3-Dichloropropene	85

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0810462A-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**g103103**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/31/08 11:08 AM**	

Compound	**%Recovery**
4-Methyl-2-pentanone	95
trans-1,3-Dichloropropene	93
Chlorobenzene	92
Styrene	90
1,3,5-Trimethylbenzene	89
1,2,4-Trimethylbenzene	88
alpha-Chlorotoluene	93
2,2,4-Trimethylpentane	91
tert-Butyl alcohol	80
Methylene Chloride	88
Hexachlorobutadiene	100
Ethanol	100
1,2,4-Trichlorobenzene	104

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
4-Bromofluorobenzene	102	70-130
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	102	70-130

AN ENVIRONMENTAL ANALYTICAL LABRATORY

10/31/2008

Mr. Laury Bibighaus

Clough, Harbour & Associates, LLP

3 Winners Circle

Albany NY 12205

Project Name: SIG-Congress Street

Project #: 15091.2010.1102

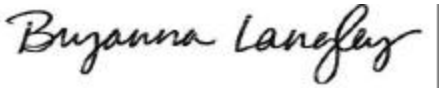
Dear Mr. Laury Bibighaus

The following report includes the data for the above referenced project for sample(s) received on 10/21/2008 at Air Toxics Ltd.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for you air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Bryanna Langley at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Bryanna Langley

Project Manager

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0810462B

Work Order Summary

CLIENT:	Mr. Laury Bibighaus Clough, Harbour & Associates, LLP 3 Winners Circle Albany, NY 12205	**BILL TO:**	Ms. Sarah Newell Clough, Harbour & Associates, LLP 3 Winners Circle Albany, NY 12205
PHONE:	(518) 453-4500	**P.O. #**	15091.2010.1102
FAX:	518-453-4712	**PROJECT #**	15091.2010.1102 SIG-Congress Street
DATE RECEIVED:	10/21/2008	**CONTACT:**	Bryanna Langley
DATE COMPLETED:	10/29/2008		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
02A	CHA-1	Modified ASTM D-1946	5.0 "Hg	5 psi
03A	SV-1	Modified ASTM D-1946	2.5 "Hg	5 psi
04A	SV-2	Modified ASTM D-1946	4.5 "Hg	5 psi
05A	SV-3	Modified ASTM D-1946	3.5 "Hg	5 psi
06A	SV-4	Modified ASTM D-1946	6.0 "Hg	5 psi
07A	SV-5	Modified ASTM D-1946	4.0 "Hg	5 psi
07AA	SV-5 Lab Duplicate	Modified ASTM D-1946	4.0 "Hg	5 psi
08A	Lab Blank	Modified ASTM D-1946	NA	NA
09A	LCS	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Linda D. Fruman DATE: 10/31/08

Laboratory Director

Certfication numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892, AZ Licensure AZ0719
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/08, Expiration date: 06/30/09
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified ASTM D-1946
Clough, Harbour & Associates, LLP
Workorder# 0810462B

Six 6 Liter Summa Canister (100% Certified) samples were received on October 21, 2008. The laboratory performed analysis via Modified ASTM Method D-1946 for Helium in air using GC/TCD. The method involves direct injection of 1.0 mL of sample.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***ASTM D-1946***	***ATL Modifications***
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A 3-point calibration curve is performed. Quantitation is based on a daily calibration standard which may or may not resemble the composition of the associated samples.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.
File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: CHA-1

Lab ID#: 0810462B-02A
No Detections Were Found.

Client Sample ID: SV-1

Lab ID#: 0810462B-03A
No Detections Were Found.

Client Sample ID: SV-2

Lab ID#: 0810462B-04A
No Detections Were Found.

Client Sample ID: SV-3

Lab ID#: 0810462B-05A
No Detections Were Found.

Client Sample ID: SV-4

Lab ID#: 0810462B-06A
No Detections Were Found.

Client Sample ID: SV-5

Lab ID#: 0810462B-07A
No Detections Were Found.

Client Sample ID: SV-5 Lab Duplicate

Lab ID#: 0810462B-07AA
No Detections Were Found.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CHA-1

Lab ID#: 0810462B-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9102505b**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.61**	**Date of Analysis: 10/25/08 12:13 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.080	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-1

Lab ID#: 0810462B-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9102506b**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.46**	**Date of Analysis: 10/25/08 12:39 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.073	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-2

Lab ID#: 0810462B-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9102507b**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.58**	**Date of Analysis: 10/25/08 01:08 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.079	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-3

Lab ID#: 0810462B-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9102508b**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.52**	**Date of Analysis: 10/25/08 01:34 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.076	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-4

Lab ID#: 0810462B-06A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9102509b**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.68**	**Date of Analysis: 10/25/08 01:56 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.084	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-5

Lab ID#: 0810462B-07A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9102510b**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.55**	**Date of Analysis: 10/25/08 02:24 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.078	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: SV-5 Lab Duplicate

Lab ID#: 0810462B-07AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9102511b**	**Date of Collection: 10/17/08**	
Dil. Factor:	**1.55**	**Date of Analysis: 10/25/08 02:56 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.078	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0810462B-08A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9102503b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/25/08 10:56 AM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.050	Not Detected

Container Type: NA - Not Applicable

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0810462B-09A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9102525b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/25/08 08:37 PM**	

Compound	**%Recovery**
Helium	106

Container Type: NA - Not Applicable