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ENVIRONMENTAL CONSULTING & MANAGEMENT
ROUX ASSOCIATES INC

ROUX

25 CORPORATE DRIVE
SUITE 230
BURLINGTON, MASSACHUSETTS 01803 TEL: 781-270-6600 FAX: 781-270-9066

July 19, 2004

Mr. Gerald M. Rinaldi
Industri-Plex Site Remedial Trust
c/o Solutia Inc.
575 Marysville Centre Drive
St. Louis, Missouri 63141

Re: Sub-Slab Soil Gas Sampling
Industri-Plex Superfund Site
Woburn, Massachusetts

Dear Mr. Rinaldi:

This letter report presents the results of sub-slab soil gas sampling recently conducted by Roux Associates, Inc. (Roux Associates) at the Industri-Plex Superfund Site in Woburn, Massachusetts (Site). Collection of sub-slab soil gas samples was requested by the U.S. Environmental Protection Agency (USEPA) in a June 18, 2003 e-mail to the Industri-Plex Site Remedial Trust (ISRT), to facilitate assessment of potential current and future human health risks at the Site. Sampling was conducted at seven buildings located at or immediately adjacent to the Site at which indoor air could potentially be impacted by volatile organic compounds (VOCs) from underlying shallow groundwater, according to USEPA. The seven buildings at which sampling was conducted and the approximate sampling point locations are shown in the figure provided as Attachment 1.

Roux Associates collected soil gas samples from six of the seven buildings on May 14, 2004, while sampling at the seventh building (Teradyne) was performed on June 18, 2004. USEPA's contractor TetraTech NUS provided oversight of Roux Associates' sampling activities on both dates. Sampling was performed in accordance with USEPA's Industri-Plex Superfund Site Sub-Slab Sampling Guideline, dated November 3, 2003, as modified based on the ISRT's November 18, 2003 e-mail to USEPA providing comments on the USEPA sampling guideline and USEPA's November 26, 2003 e-mail response. (Copies of the sampling guideline and both e-mail transmissions, as well as USEPA's June 18, 2003 e-mail requesting the sub-slab soil gas samples, are provided in Attachment 2.) One notable modification to the USEPA sampling guideline was the collection of two exterior soil gas samples at the Sacco property located at 41 Atlantic Avenue, where sub-slab sampling was not permitted by the landowner due to the alleged presence of a moisture and/or vapor barrier beneath the building slab. Instead, the samples were collected outside the Sacco building, approximately four feet below land surface and as close as possible to the building's exterior walls. The other notable

modification involved the Teradyne building, where the following additional field quality assurance/quality control (QA/QC) measures were implemented at Teradyne's request:

- Use of permanent markers for labeling was prohibited;
- A "duplicate" sample and a trip blank were collected; and
- A sample of the modeling clay used to seal the annular space around the soil gas probe was submitted for laboratory analysis of VOCs.

The "duplicate" sample collected at the Teradyne building was not a split of a given sample volume; rather, it was a distinct sample collected immediately after the original sample using the same sampling apparatus, setup, and location. Given the inherent difficulties in precisely splitting soil gas samples, this approach is considered by Roux Associates to be a suitable alternative for evaluating field (i.e., sampling) precision, and was accepted as such by Teradyne.

All soil gas samples were submitted to Severn Trent Laboratories, Inc. (STL) in Colchester, Vermont for analysis of VOCs using USEPA Method TO-15. The sample of the modeling clay used to seal the annular space around the soil gas probe at the Teradyne building was also submitted to STL for analysis of VOCs, using USEPA Method 8260B.

Validated results of the soil gas analyses, including results for the QA/QC samples collected by Roux Associates, are summarized in the table provided as Attachment 3. Copies of the two "Sample Data Summary Packages" produced by STL are provided in Attachment 4. (STL's "Extended Data Packages," which include both summary forms and raw data, are not being provided as attachments to this report; however, copies can be provided under separate cover upon request.) In accordance with USEPA's November 2003 Industri-Plex Superfund Site Sub-Slab Sampling Guideline, the laboratory data underwent Tier III data validation, which was performed by Trillium Inc. (Trillium) of Knoxville, Tennessee, using USEPA Region I Data Validation Functional Guidelines for Evaluating Environmental Analysis (12/96). Trillium's validation reports for the two batches of soil gas samples are provided in Attachment 5.

Laboratory analysis of the modeling clay used to seal the annular space around the soil gas probe at the Teradyne building demonstrated that the clay contains 1,1-dichloroethene, acrylonitrile, and 2-butanone (methyl ethyl ketone [MEK]), at concentrations of 260, 46, and approximately 14 micrograms per kilogram, respectively. 1,1-dichloroethene was not detected in any of the soil gas samples, while acrylonitrile was not reported in the soil gas results because it is not a TO-15 analyte. MEK was detected in both the clay and in several of the soil gas samples, including the two "duplicate" samples collected at the Teradyne building. However, the data validator did not qualify any of the detections of MEK in soil gas based solely on the presence of MEK in the clay. Laboratory forms for the modeling clay are included in one of the Sample

Data Summary Packages provided in Attachment 4, and Trillium's validation report for the analysis of the modeling clay is provided in Attachment 5.

Sincerely,

ROUX ASSOCIATES, INC.

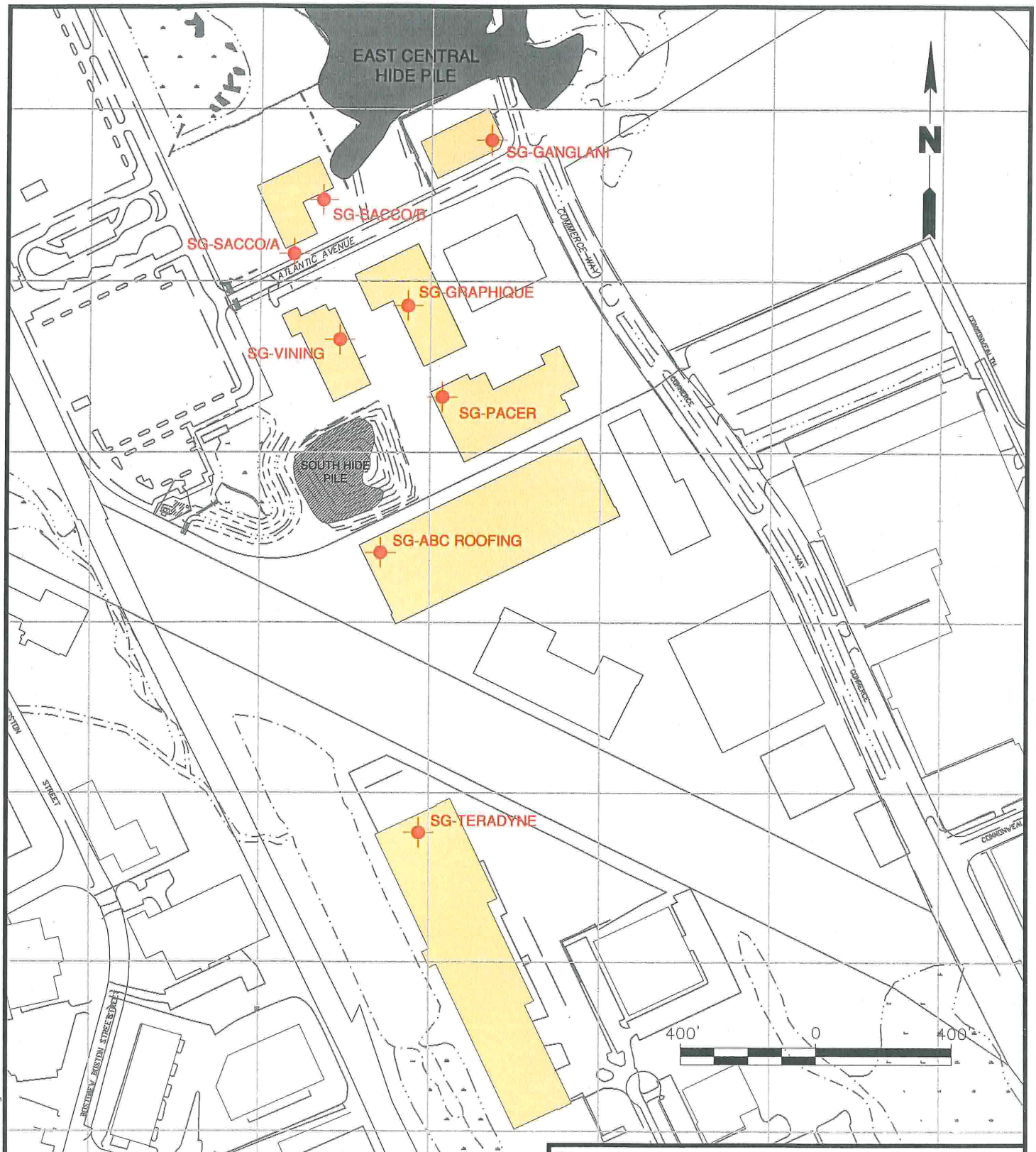
for L.M.

Lawrence McTiernan
Principal Hydrogeologist/Project Manager

Attachments

ATTACHMENT 1

Sub-Slab Soil Gas Sampling Locations Map



Title:

SUB-SLAB SOIL GAS SAMPLING LOCATIONS

INDUSTRI-PLEX SUPERFUND SITE
WOBURN, MASSACHUSETTS

Prepared For:

INDUSTRI-PLEX SITE REMEDIAL TRUST

ROUX ASSOCIATES, INC.
Environmental Consulting & Management

Compiled by: LM	Date: 7/19/04	FIGURE
Prepared by: RF	Scale: AS SHOWN	
Project Mgr: LM	Office: MA	1
File No: IPS0110202	Project: 119401M	

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ATTACHMENT 2

USEPA's Industri-Plex Superfund Site Sub-Slab Sampling Guideline (November 3, 2003) and Related E-mail Correspondence

Larry McTiernan

From: Rinaldi, Gerald M [gmrina@solutia.com]
Sent: Friday, July 16, 2004 5:47 PM
To: Larry McTiernan
Subject: FW: indoor air evaluation

-----Original Message-----
From: lemay.joe@epamail.epa.gov [mailto:lemay.joe@epamail.epa.gov]
Sent: Wednesday, June 18, 2003 12:35 PM
To: Light, D Michael
Subject: indoor air evaluation

Mike,

Regarding potential indoor air contaminant concentrations from underlying groundwater plumes at the Industri-Plex Superfund Site, EPA plans on modeling contaminant concentrations from underlying shallow groundwater plumes (e.g. benzene, toluene) through the soil vadose zone and existing building foundations to produce an indoor air contaminant concentration for calculating potential current risk to workers in the building via inhalation. Currently, we plan on applying the Johnson-Ettinger model to calculate the indoor air contaminant concentrations.

Alternatively, if soil gas data were collected from immediately below the foundation of buildings within the contaminant plumes at the site, then this data could be directly applied to the model, modeling the soil gas concentrations through the foundation and calculating indoor air concentrations. Soil gas data immediate below the existing building foundations would eliminate the need for modeling shallow groundwater concentrations through the vadose zone. Based upon the Final GSIP shallow groundwater data, benzene and/or toluene shallow groundwater concentrations appear to effect at least 4 building foundations (41 Atlantic, Vining at 20 Atlantic, France de graphic immediately east of Vining, and Spaulding and Sly at 36 Cabot Road) and possibly 2 other building foundations south Vining and France de graphic buildings (building immediately south of Vining and de graphics buildings, and large building at the western side of 110 Commerce Way). I'll fax you a map of the site identifying the location of the building foundations.

I would like to know if ISRT is willing to collect one soil gas samples under each building foundation above the groundwater plume (via drilling a hole through the foundation, and collecting the soil gas sample immediately below the foundation), analyze the samples for benzene and toluene, conduct tier 2 data validation, and submit the data to EPA (electronically), so we can evaluate an indoor air risk to individuals working in each buildings. It is estimated that up to 6 soil gas samples would be collected (one per foundation), plus any QA/QC samples. Otherwise, EPA will model an indoor air concentration from the shallow groundwater data.

I would like to discuss this request with you further, as well as potential schedule for data collection, analysis, validation and submission. I would like to have the data by the middle of August, or so.

Sincerely,

Joe LeMay

INDUSTRI-PLEX SUPERFUND SITE
SUB-SLAB SAMPLING GUIDELINE
DRAFT - November 3, 2003

Background

Industri-Plex Operable Unit 1 (OU-1) 1987 ROD and 1989 Consent Decree identified groundwater plume hotspots of toluene and benzene contamination at the Site, and established an interim groundwater remedy to address the hotspots. No other VOCs were identified as hotspot contaminants of concern at that time. The 1987 ROD described the Multiple Source Groundwater Response Plan (i.e. OU-2) as an RI/FS to establish a comprehensive/final groundwater solution for the Site, as well as address any metals migrating from the site (e.g. groundwater, surface water and sediments) posing an unacceptable risk. As EPA proceeds with the OU-2 risk assessment, the potential migration of vapors from the underlying toluene and benzene groundwater hotspots through the vadose zone and entering buildings needs to be evaluated for possible current and future human health risks.

In 2000 - 2002, the PRPs completed extensive groundwater sampling to evaluate extent of benzene and toluene groundwater contamination, as well as detailed investigations to locate the sources of contamination for these groundwater hotspots (e.g. magnetometer studies, soil gas sampling, and concentrations groundwater sampling). Refer to the attached Final GSIP groundwater transect figures and data tables prepared by Maverick Construction Management, Inc. The results indicate that the toluene and benzene hotspots remain on the site at relatively the same locations identified in the previous Remedial Investigation (1984) and GSIP Phase 1 and 2 investigations (1990 and 1991).

A majority of the groundwater contamination appears to be located within the deeper portions of the overburden aquifer. Generally, the locations of these groundwater hotspot source areas area as follows: 1) Benzene and to a lesser extent toluene plumes from the western half of Atlantic Avenue southwest to the northern portion of Halls Brook Holding Area (HBHA) Pond by 36 Cabot Road, including the Boston Edison ROW; 2) Toluene and to a lesser extent benzene plumes by the intersection of Atlantic Avenue and Commerce Way; and 3) Benzene plume by the West Hide Pile.

In the absence of sub-slab or indoor air sampling, EPA would typically conservatively estimate indoor air VOC concentrations by modeling VOC concentrations from shallow groundwater and soil (through the vadose zone) to the sub-slab, and from the sub-slab to the basement/ first floor. This modeling approach estimates indoor air VOC concentrations that can be applied to current and future human health risk assessment exposure scenarios.

11/04/2003 14:22 FAX 3146/4895/ SOLUTIA INC 002

Historically, EPA has collected indoor air samples and applied the analytical results to human health risk assessments. However, interferences can occur with this direct indoor air sampling approach from other potential VOC sources inside the building, making it very difficult to distinguish the subsurface groundwater/soil VOC contamination contribution from other VOC sources inside the building.

Considering the above, on June 18, 2003, I requested ISRT to collect sub-slab soil gas samples from existing buildings above the underling shallow benzene and toluene groundwater plumes. See attached email and map. The sub-slab soil gas data would be applied to assess current and future indoor air human health risks. The data would be considered representative of VOC concentrations which could migrate from shallow groundwater, through the vadose zone, and potentially be present underneath the sub-slab/ foundation.

The following is a summary of the data necessary to evaluate current and future indoor risks. Note: this summary supplements the June 18, 2003, email.

Current Risks Inside Buildings: Collect sub-slab soil gas samples via summa canisters at buildings potentially impacted by VOCs from underlying shallow groundwater hotspots; collect sufficient QA/QC samples to appropriately validate the data. See below the "Summa Canister VOC Air Sampling and Analytical Methodology" for a description of QA/QC sampling. The sub-slab soil gas data from these buildings will be modeled to estimate indoor air concentrations and calculate current risks inside these structures.

Future Risks Inside Buildings: Presuming the data is of sufficient quality, utilize the soil gas data collected above the shallow groundwater hot spot plumes under the previous source areas investigation, in conjunction with sub-slab soil gas data, to estimate future indoor risks. The soil gas data from these areas will be modeled to estimate indoor air concentrations and calculate future risks inside structures potentially constructed in the future.

ISRT has responded in the affirmative to collect these sub-slab soil gas samples (i.e. one sample per building foundation at 6 buildings above the benzene and toluene plumes). This document serves as guidelines for sampling procedures for the sub-slab sampling. ISRT should follow this and other referenced EPA guidelines for soil gas sampling and summa canister sampling. This guideline incorporates sub-slab summa canister sampling procedures previously conducted by EPA at the Raymark Superfund Site. EPA's Office of Research and Development (ORD) is in the process of developing a standard QAPP for sub-slab floor air sampling. However, it is unknown when this QAPP will be completed and made publicly available. As a result, this SOP was prepared to help guide the sub-slab sampling effort. Should EPA ORD complete a final QAPP for sub-slab sampling, EPA will be forwarded a copy to ISRT.

Currently, EPA's contractor, Metcalf & Eddy (M&E), is in the process of preparing a baseline

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risk assessment for the area north of Route 128, known as the Industri-Plex Study Area. The sub-slab soil gas samples should be collected as soon as possible to support the baseline risk assessment. A specific sample location within each building shall be approved by EPA prior to sampling. Considerations for selecting the sample locations shall include proximity to prior soil gas and groundwater sample locations conducted under previous investigations, location of sub-slab utilities, and potential interference with building tenant operations. In addition, ISRT should also consider adding 130 Commerce Way building foundation (northwest corner of Commerce Way and Atlantic Avenue Intersection) as an additional sub-slab sampling location. Note: the foundation has a long 1 inch wide crack in the foundation located on the east side of the building.

Objective

Collect sub-slab soil gas grab samples via summa canister from buildings situated above toluene and/or benzene groundwater hot spots at/adjacent to the Industri-Plex Superfund Site, analyze the samples for VOCs at qualified laboratory, and validate the analytical results so the data can be applied the human health risk assessment. The purpose of the samples is to evaluate the current and future human health risks from the volatilization and migration of groundwater contamination through the vadose zone and into the buildings.

Reporting

A summary report shall be prepared describing the location, collection procedures of each sample, and summarize the analytical results in tabular form. The laboratory shall prepare the analytical results in a spreadsheet format (e.g. excel), which shall be electronically provided as soon as possible. The analytical data shall undergo Tier III data validation so it can be applied to the human health risk assessment. The summary report, electronic analytical results, and data validation reports shall be submitted to EPA and DEP as soon as possible (copies should also be submitted to EPA's contractor's Sean Czarniecki, Metcalf & Eddy and Gordon Bullard, TtNUS).

Sub-Slab Vapor Probe Construction

A hammer drill should be used to drill a 1.2 inch diameter hole through the concrete slab for installation of sub-slab vapor probes. Once through the concrete slab, a annular space shall be created approximately 3 inches into sub-slab materials so a vapor sample probe can be installed. There are two options for creating this annular space: 1) Drill bits could be advanced approximately 3 inches into sub-slab materials to create open cavities; or 2) a slam bar could be used to drive a solid rod into the soil and withdrawn to create an annular space.

If drilling is selected, care should be taken to avoid bring drill cuttings from the sub-slab materials to the surface of the slab. Otherwise, these cuttings will need to be appropriate managed and disposed. The sample probe is then installed in the hole and the top of the hole is properly sealed (e.g. modeling clay) around the sample probe. It is very important to establish a tight seal around the hole and probe so that ambient/indoor air will not be introduced into the sample. Otherwise, the sample may not be representative.

Summa Canister VOC Air Sampling and Analytical Methodologies

1.0 Description

EPA Region I Standard Operating Procedure for the Sampling of Trace Volatile Organic Compounds using SUMMA Polished Stainless Steel Canisters, EPA-REG1-ESD/CAN-SAM-SOP, March 2001, Revision 2, may used to collect air samples. Soil gas grab samples shall be collected in evacuated 6 liter canisters using the procedure described in Part 1 of the Region I SOP, referenced above. Detailed descriptions of the quality assurance procedures are outlined below in Section 3.0.

The soil gas sample should be collected as grab for approximately two minutes. A particulate filter should be used to prevent solid material from entering the canister. The canister is initially at a vacuum of approximately minus 30 inches of mercury (-30" Hg). After the canister valve is opened, the sampled air is drawn into the canister until the canister pressure reaches atmospheric pressure. The laboratory should document the canister's pressure prior to leaving the laboratory. Prior to the sampling, the contractor should record the pressure of the canister in the field. If the canister has a significant difference in pressure (within -5" Hg), suggesting canister leakage, the canister should not be used for sampling. At the conclusion of the sampling, the contractor should document the pressure of the canister in the field. Upon the laboratory's receipt of the canister, the laboratory shall measure and record the pressure of the canister. These pressure measurements will help evaluate the integrity of the canister/sample, and provide assurance that no leakage has occurred to the canister during transit.

The soil gas canister grab samples should be submitted to an experienced air-laboratory for analysis, properly logged in, and analyzed using a GC/MS following EPA Method TO15 - The Determination of Volatile Organic Compounds in Ambient Air using SUMMA Passivated Canister Sampling and Gas Chromatographic Analysis, from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, EPA-600/4-84-041. This analytical procedure shall be used to identify and quantify the VOCs.

Prior to analyzing the canisters, each one will be pressurized with humidified nitrogen to 30 psig. Indoor air and soil gas concentrations are typically higher than outside ambient air, therefore, 50

milliliters are initially withdrawn from the canisters for analysis to determine if concentrations are within the calibration range. If the data shows the levels to be within the calibration range, the normal 500 milliliters will be withdrawn from the canisters for the second round of analysis. A 500-milliliter calibration standard is used to produce the calibration curve and with the 500-milliliter sample size from the canisters, a more accurate concentration and lower reporting limit can be reported. There maybe cases where levels are extremely high, such as soil gas, therefore, smaller volumes are withdrawn from the canister or a series of dilutions made to bring concentrations within the calibration range

2.0 Canister Cleaning and Leak Certification Procedures

2.1 Laboratory Clean and Lead Free Canister Certification

The canisters must be obtained from an experienced-air laboratory. A 100 percent certification (or individual certification) should be requested from the laboratory providing clean and leak-free Summa canisters. The certificate documentations must demonstrate that ALL the canisters are free of VOC target compounds by EPA Method TO-15, down to the project reporting limits.

The canisters must have been checked for mechanical integrity. However, every canister must be checked at the site and the initial vacuum recorded. The initial vacuum must be greater than 25" Hg. If vacuum is below 25" Hg, the canister should not be used.

The canisters must be used within 30 days of cleaning.

2.2 Canister Cleaning and Leak Certification Procedures

2.2.1 Canister Cleaning Procedure

Prior to the sampling event, all the canisters will be cleaned by placing them in ovens maintained at 150°C, evacuated to at least 10^{-3} Torr, and then pressurized with humidified nitrogen to approximately 30 psig. This process will be repeated three times. Detailed descriptions of these procedures are provided in the document entitled, "Canister Cleaning Standard Operating Procedures, EPA-REG1-OEME/CANISTER-CLEANING-SOP, April 1998, Revision 2."

2.2.2 Canister Leak Certification Procedure

At the end of the cleaning process described above, the canisters will be evacuated to less than 10^{-3} Torr, with a Pirani sensor the vacuum in each canister will be measured. The canisters will then be placed on a shelf for at least 24 hours. At the conclusion of this period, the Pirani sensor will be used again to measure the final canister vacuum which will then be compared to the initial reading to determine if the canisters show signs of leaking. Detailed descriptions of these

procedures are provided in the document entitled, "Canister Leak Certification Standard Operating Procedures, EPA-REG1-OEME/ CANISTER-LEAK-CERT-SOP, April 1998, Revision 2."

2.2.3 Canister Cleanliness Certification Procedure

After all the canisters are certified leak free, each canister will be pressurized with humidified nitrogen and then analyzed for contamination using the same GC/MS used for the sample analysis. Detailed descriptions of these procedures are provided in the document entitled, "Pressurized Canisters for Clean Certification Standard Operating Procedures, EPA-REG1-OEME/CANISTER-PREP-SOP, April 1998, Revision 2."

Canisters are stored under pressure until a few days before the sampling event, when they will be re-evacuated to less than 10^{-3} Torr. Detailed descriptions of these procedures are provided in the document entitled, "Canister Evacuation Standard Operating Procedures, EPA-REG1-OEME/CAN-VACUATION-SOP, May 1996."

3.0 VOC Canister Analysis Quality Control/Quality Assurance

3.1 Canister Sampling and Analysis Performance Criteria

The canisters shall be analyzed for volatile organic compounds (VOC). The primary VOC of interest for this particular project are benzene and toluene. The reporting limit for these primary compounds must be provided by the laboratory prior to sampling. These reporting limits must be within acceptable levels to accomplish the data quality objectives. Table 1 illustrates some of the VOC target compound list, including benzene and toluene.

3.2 Laboratory Blank Results

Humidified nitrogen shall be introduced into the analytical instrument inlet line prior to analyzing the canisters to serve as a laboratory blank. A laboratory blank shall be analyzed to determine the background contamination present in the analytical instrumentation before sample analysis. The laboratory blank must not contain any target VOC compound at concentrations equal or above the quantitation limits. Acceptable blank criteria must be met before sample analysis.

The laboratory blank results shall be submitted in the Laboratory Analytical Report.

3.3 Data Reproducibility/ Precision Procedures

For each batch of canisters analyzed (up to 10 canisters/ batch), one canister shall be analyzed a second time for assessing analytical precision. The same sample aliquot shall be withdrawn from the canister and analyzed in a similar manner. Those compounds having values above their reporting limits shall be reported in tables at the end of the Laboratory Analytical Report. The relative percent differences (RPD) shall also be calculated and reported in the Laboratory Analytical Report. The RPD should be less than the 30% acceptance criterion for precision.

3.4 Laboratory Fortified Canister

A quality control canister sample containing selected VOCs at known concentrations shall be analyzed with the canister samples to determine analytical accuracy. The results of the observed concentrations shall be reported in a table at the end of the Laboratory Analytical Report. The percent difference must be within 90 percent for the VOC compounds except for the polar compounds that may be within 40 percent.

3.5 Canister Surrogate Spike Results

Prior to analyzing each canister sample, surrogate compounds (e.g. 1,2 dichloroethane,d4, toluene d8, and p-bromofluoro-benzene) shall be added to the analytical system. The percent recovery data for the surrogate compounds shall be reported with the sample data. The percent recovery must be within 70-130 percent.

3.6 Chain of Custody

Chain of custody documentation shall be completed by the contractor.

3.7 Data Validation and Usability

A complete data package deliverables is required (including summary forms and raw data) in order to perform data validation. The analytical reports shall be validated by the independent contractor who is experienced and routinely performs data validation work consistent with Tier III data validation level according to EPA Region 1- validation procedures. The data reported by the laboratory shall be compared to the data quality performance criteria to evaluate data usability. The independent contractor shall prepare a data validation and usability report for all the data collected under this project.

TABLE 1

PROJECT TARGET COMPOUND LIST

COMPOUND	EPA METHOD TO-15 REPORTING LIMITS (Approximate)	
	(ug/m^3)	(ppb)
Benzene	0.15	0.05
Toluene	0.18	0.05
1,1-Dichloroethene	0.19	0.05
Vinyl Chloride	0.12	0.05
Trichloroethene	0.24	0.05
Chlorobenzene	0.21	0.05
1,1,1-Trichloroethane	**0.26**	**0.05**

EPA-REG1-ESD/CAN-SAM-SOP
MARCH 2001
REVISION 2

STANDARD OPERATING PROCEDURE

SAMPLING VOLATILE ORGANIC COMPOUNDS USING

SUMMA® POLISHED STAINLESS STEEL CANISTERS

U.S. ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND REGIONAL LABORATORY
OFFICE OF ENVIRONMENTAL MEASUREMENT & EVALUATION
11 TECHNOLOGY DRIVE
NORTH CHELMSFORD, MASSACHUSETTS 01863

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SCOPE AND APPLICATION

The purpose of this Standard Operating Procedure (SOP) is to describe the procedures utilized by EPA Region I ESD for sampling of volatile organic compounds (VOCs) in ambient or indoor air environments. The samples are collected as whole air samples in passivated SUMMA_ or Silco lined stainless steel canisters. The VOCs are subsequently separated by gas chromatography (GC) and measured by an ion trap mass spectrometer (MS) at the EPA Region I ESD Laboratory. The ESD Laboratory analytical operating procedures for the GC/MS are described under separate cover in SOP document, AIRCAN6.SOP.

This canister sampling SOP describes procedures for sampling with canisters at final pressures above atmospheric pressure (referred to as pressurized sampling), below atmospheric pressure (referred to as subatmospheric sampling), and at atmospheric pressure (referred to as grab sampling). This method is applicable to specific VOCs that have been tested and determined to be stable when stored in pressurized and subatmospheric pressure canisters. The organic compounds that have been successfully collected in canisters by this method are listed on table 1. These compounds have been measured at the parts per billion by volume (ppbv) level.

The canister sampler configuration and procedure, the number of samples to be collected, where they are collected, and the duration of the sampling event, are dependent upon the project objectives. Therefore, prior to field sampling activities, a detailed sampling work plan is prepared for each project. The sampling work plan will incorporate the procedures specified in the following SOP document.

This document is divided into four parts. Part 1 describes the grab sampler configuration and sampling procedures, Part 2 the subatmospheric time-integrated sampler configuration and sampling procedures, Part 3 the pressurized time-integrated sampler configuration and sampling procedures, and Part 4 describes the quality assurance/quality control procedures and performance criteria.

TABLE 1 - EPA METHOD TO15 TARGET VOC LIST

Propylene
Dichlorodifluoromethane (F12)
Chloromethane (Methyl Chloride)
1,2-Dichloro-1,1,2,2-Tetrafluoroethane (F114)
Vinyl Chloride
1,3-Butadiene
Methyl Bromide (Bromomethane)
Chloroethane
Acetone
Trichlorofluoromethane
Isopropyl Alcohol
1,1-Dichloroethylene
Methylene Chloride
Carbon Disulfide
1,1,2-Trichloro-1,2,2-Trifluoroethane (F113)
trans-1,2-Dichloroethene
1,1-Dichloroethane
Methyl-t-butyl ether
Methyl Ethyl Ketone
cis-1,2-Dichloroethene
Hexane
Chloroform
Ethyl Acetate
Tetrahydrofuran
1,2-Dichloroethane
1,1,1-Trichloroethane
Benzene
Carbon Tetrachloride
Cyclohexane
1,2-Dichloropropane
Bromodichloromethane
Trichloroethene
Heptane
cis-1,3-Dichloropropene
Methyl Isobutyl Ketone
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Toluene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane
Tetrachloroethene
Chlorobenzene
Ethyl Benzene
m,p-Xylene
Styrene
1,1,2,2-Tetrachloroethane
o-Xylene
4-Ethyl Toluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
Chloromethylbenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene

PART 1

CANISTER GRAB SAMPLING PROCEDURES

1.1 CANISTER GRAB SAMPLING EQUIPMENT

See Figure 1 for a diagram of the grab sampling system.

- Sampling Inlet Line - chromatographic-grade stainless steel tubing to connect canister to sample inlet.

- Sample Canister - certified clean and leak free stainless steel pressure vessels of desired volume with valve and SUMMA_ passivated or Silco lined interior surfaces (Scientific Instrumentation Specialists (SIS), Andersen Instruments Inc., RESTEK, or equivalent). A vacuum/pressure gauge (0-30 in Hg and 0-30 psig) can be attached to canister as an option.

- Vacuum/Pressure Gauge - if a vacuum/pressure gauge is not attached to canister, a separate gauge is connected to check vacuum/pressure readings before and after sampling event.

- Particulate Matter Filter - 2 micrometer stainless steel in-line filter (Nupro Co., Model SS4F-2, or equivalent) is attached to sample inlet line.

- Chromatographic-grade Stainless Steel Tubing and Fittings for Interconnections - all material in contact with sample, analyte, and support gases should be chromatographic-grade stainless steel.

- Canister Shipping Containers - Sheet metal container holds two 15 liter canisters to protect canisters and valves from becoming damaged during shipment.

1.2 CANISTER GRAB SAMPLING PROCEDURES

1. Configure the sampler as shown in Figure 1 using the components described in Section 1.1.

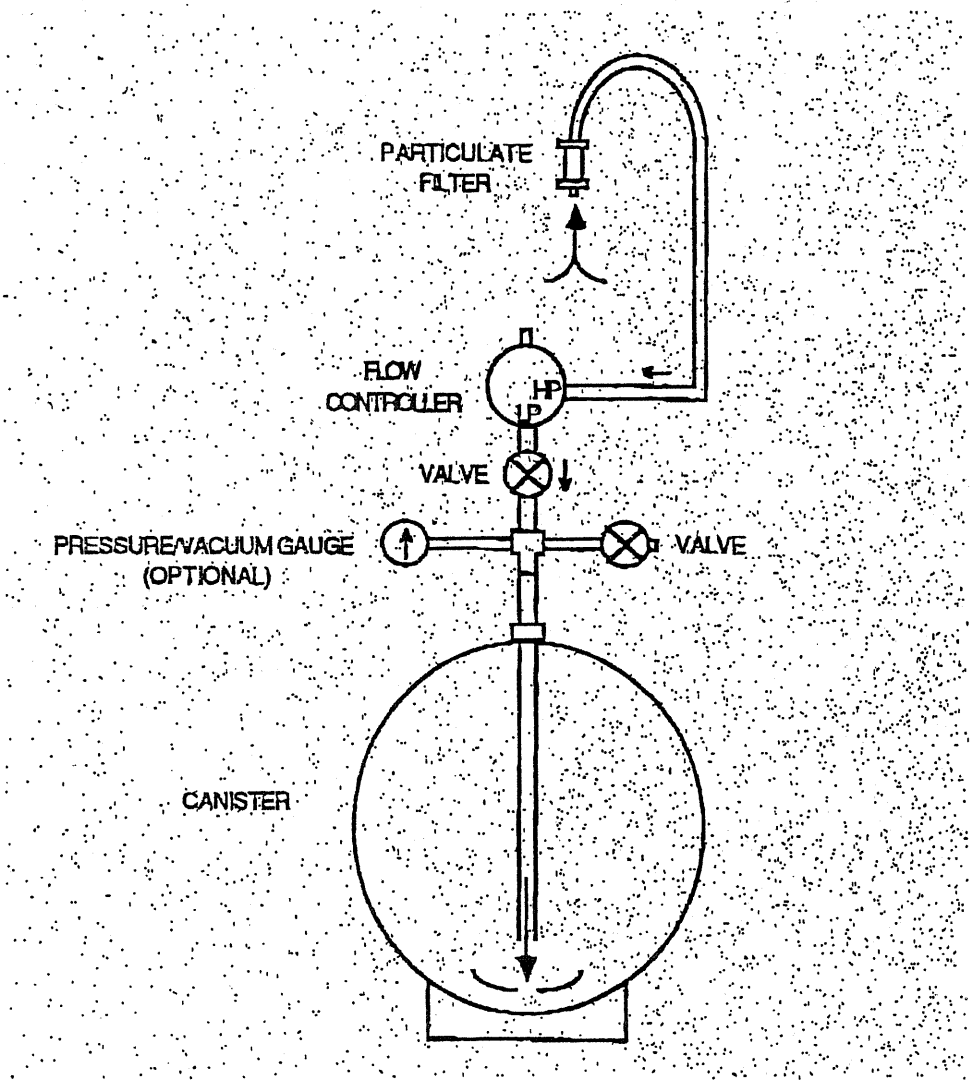
2. If the canister does not have a vacuum/pressure gauge attached, connect a gauge to the canister inlet, open the valve, read the gauge, close the valve, and remove the gauge.

3. If a vacuum/pressure gauge is attached, open valve, read the gauge, and then close the valve.

4. Connect the 2 micrometer particulate matter filter and sampling line to the canister inlet as shown in Figure 1.

FIGURE 1

GRAB AIR SAMPLER CONFIGURATION



5. Open the canister valve slightly, just enough to slowly allow a sample to be drawn into the canister. The canister pressure differential causes the sample to flow into the canister. It will take approximately 30 seconds for the canister pressure to go from 30 psig vacuum to atmospheric pressure or 0 gauge.

6. In a field log book record the project name, sampling event date, sampling location, canister number, initial canister pressure gauge reading, and the sampling start time.

7. Close the canister valve. **DO NOT OVER-TIGHTEN THE VALVE.**

8. Disconnect the 2 micrometer particulate matter filter from the canister inlet.

9. If the canister does not have a vacuum/pressure gauge attached, connect a gauge to the canister inlet, open the valve, read the gauge, close the valve, and then disconnect the gauge from the canister.

10. If a vacuum/pressure gauge is attached, open valve, read the gauge, and then close the valve.

11. In a field log book record the final canister pressure gauge reading and the meteorological conditions during the sampling event.

13. Place canister into shipping container.

14. Complete chain-of-custody record form. See Part 4.

PART 2

CANISTER SUBATMOSPHERIC TIME-INTEGRATED SAMPLING PROCEDURES

2.1 CANISTER SUBATMOSPHERIC TIME-INTEGRATED SAMPLING EQUIPMENT

See Figure 2 for a diagram of the subatmospheric time-integrated sampling system.

- Sampling Inlet Line - chromatographic-grade stainless steel tubing to connect canister to sample inlet.

- Sample Canister - certified clean and leak free stainless steel pressure vessels of desired volume with valve and SUMMA_ passivated or Silco Lined interior surfaces (Scientific Instrumentation Specialists (SIS), Andersen Instruments Inc.,RESTEK, or equivalent). A vacuum/pressure gauge (0-30 in Hg and 0-30 psig) can be attached to canister as an option.

- Vacuum/Pressure Gauge - if a vacuum/pressure gauge is not attached to canister, a separate gauge is connected to check vacuum/pressure readings before and after sampling event.

- Particulate Matter Filter - 2 micrometer stainless steel in-line filter (Nupro Co., Model SS4F-2, or equivalent) is attached to sample inlet line.

- Chromatographic-grade Stainless Steel Tubing and Fittings for Interconnections - all material in contact with sample, analyte, and support gases should be chromatographic-grade stainless steel.

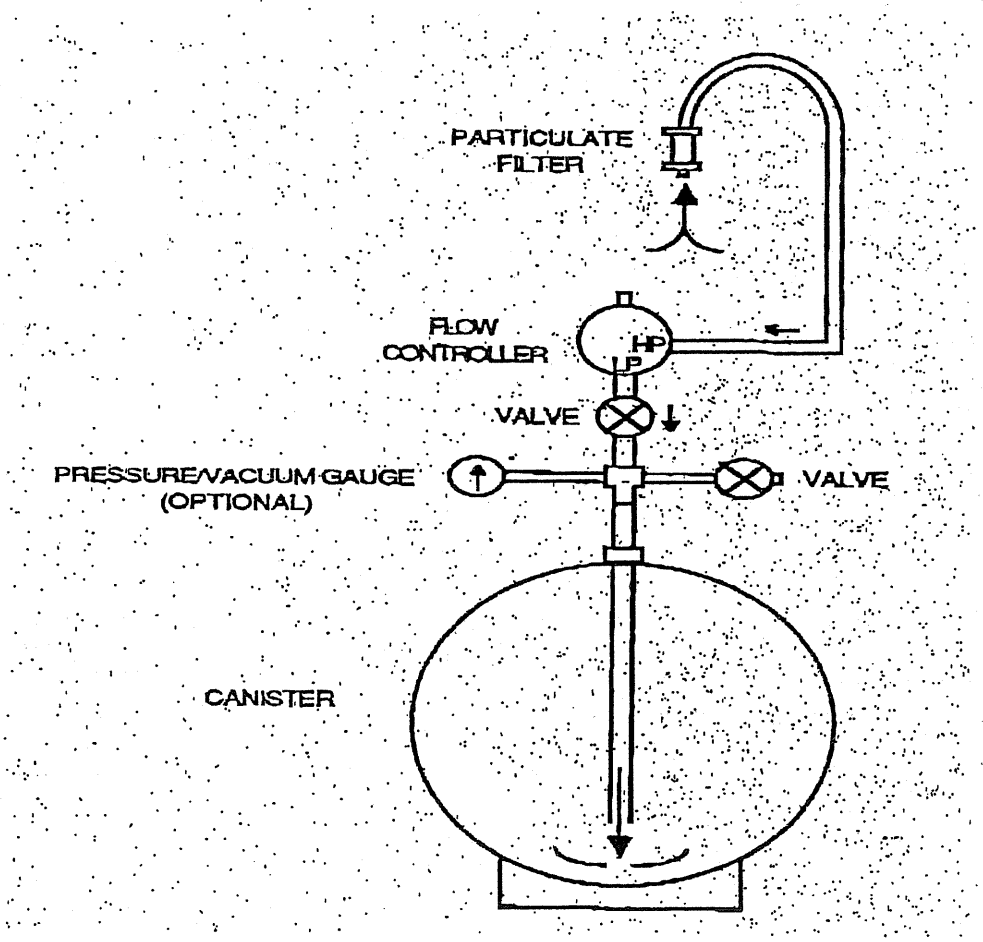
- Flow Controller - Millaflow Controller, model SC423SXFT/B or equivalent, a mechanical flow controller made of stainless steel, having a flow range of 5 - 500 ml/min.

- Mass Flowmeter - An Aalborg Electronic Mass Flowmeter (Model GFM-1700) is used to calibrate the flow controller. The mass flowmeter measures flow rates between 0 - 500 ml/min. within $\pm$1.5% full scale.

- Canister Shipping Containers - Sheet metal container holds two 15 liter canisters to protect canisters and valves from becoming damaged during shipment.

FIGURE 2

SUBATMOSPHERIC TIME-INTERGRATED AIR SAMPLER CONFIGURATION



2.2 CANISTER SUBATMOSPHERIC TIME-INTEGRATED SAMPLING PROCEDURES

1. In the laboratory, prior to the sampling event, calibrate the flow controller using the procedure outlined in Section 4.1.2. **Note: For this procedure use an evacuated dummy canister.**

2. In the field, before placing the sampler at the desired sampling location, check the calibration of the flow controller using the procedure outlined in Section 4.1.2. **Note: For this procedure use an evacuated dummy canister.**

3. Select the canister and flow controller to be used for the sampling event and bring it to the desired sampling location. If the canister does not have a vacuum/ pressure gauge attached, connect a gauge to the canister inlet, open the valve, read the gauge, close the valve, and then disconnect the gauge from the canister. If the canister to be used for the sampling event does have a vacuum/pressure gauge attached, read the gauge and record value and canister number in field log book.

4. Connect the sample inlet line with particulate matter filter to the flow controller's high pressure inlet port (HP) and the low pressure outlet port (LP) to the canister inlet port as shown in Figure 2 using the components described in Section 2.1.

5. In a field log book record the project name, sampling event date, sampling location, canister number, flow controller number, and the initial canister pressure gauge reading.

6. After all of the samplers have been set-up at their desired sampling locations, go back to each location and open the canister valve to allow a sample to be drawn through the flow meter and into the canister. The canister pressure differential causes the sample to flow into the canister. In the field log book record the sampling event start time for each sampling location.

7. During the course of the sampling event, periodically check each sampling location to see if the sampler had been tampered with. In addition, if the canister has a vacuum/pressure gauge attached, observe and record the gauge reading to determine if the canister is being filled at a constant rate. If the no vacuum/pressure gauge is being used, connect the Aalborg Electronic Mass Flowmeter and check the flow rate, adjust if necessary.

8. 45 to 30 minutes before the end of the sampling period, visit each sampling location and obtain a flow rate reading using the procedure outlined in Section 4.1.3.

9. At the conclusion of the predetermined sampling period, return to each sampling location and close the canister valve. **DO NOT OVER-TIGHTEN THE VALVE.** Disconnect the sample inlet line with particulate matter filter from the flow controller and the flow controller from the canister. If the canister does not have a vacuum/ pressure gauge attached, connect a gauge to the canister inlet, open the valve, read the gauge, close the valve, and then disconnect the gauge from the canister. If the canister does have a vacuum/pressure gauge attached, read the gauge, and record the value in the field log book. **Note: The gauge reading obtained in this step and in step 3 should agree with the predetermined final canister pressure used in the calculations described in Section 4.1.1. This step will help determine if the sample had been collected at a constant rate over the sampling period.**

10. Place canister into shipping container.

11. In a field log book record for each sampling location, the sampling event end time, final canister pressure, and meteorological conditions during the sampling event.

12. Complete chain-of-custody record form. See Part 4.

PART 3

CANISTER PRESSURIZED TIME-INTEGRATED SAMPLING PROCEDURES

3.1 CANISTER PRESSURIZED TIME-INTEGRATED SAMPLING EQUIPMENT

See Figure 3 for a diagram of the pressurized time-integrated sampling system.

- Sampling Inlet Line - chromatographic-grade stainless steel tubing to connect canister to sample inlet.

- Sample Canister - certified clean and leak free stainless steel pressure vessels of desired volume with valve and SUMMA_ passivated or Silco lined interior surfaces (Scientific Instrumentation Specialists (SIS), Andersen Instruments Inc., RESTEK, or equivalent). A vacuum/pressure gauge (0-30 in Hg and 0-30 psig) can be attached to canister as an option.

- Vacuum/Pressure Gauge - if a vacuum/pressure gauge is not attached to canister, a separate gauge is connected to check vacuum/pressure readings before and after sampling event.

- Particulate Matter Filter - 2 micrometer stainless steel in-line filter (Nupro Co., Model SS4F-2, or equivalent) is attached to sample inlet line.

- Chromatographic-grade Stainless Steel Tubing and Fittings for Interconnections - all material in contact with sample, analyte, and support gases should be chromatographic-grade stainless steel.

- Flow Controller - Millaflow Controller, model SC423SXFT/B, a mechanical flow controller made of stainless steel, having a flow range of 5 - 500 ml/min.

- Mass Flowmeter - An Aalborg Electronic Mass Flowmeter (Model GFM-1700) is used to calibrate the flow controller. The mass flowmeter can measure flow rates between 0 - 500 ml/min. within $\pm$1.5% full scale.

- Sample Pump - SIS stainless steel/viton diaphragm vacuum pump/compressor, model NO5SV, with a current draw at max load of 1.1 amps.

- Batteries - 2 Technacell rechargeable solid-gel cell 6 volt, 12 ampere hour batteries connected in series to produce 12 volts.

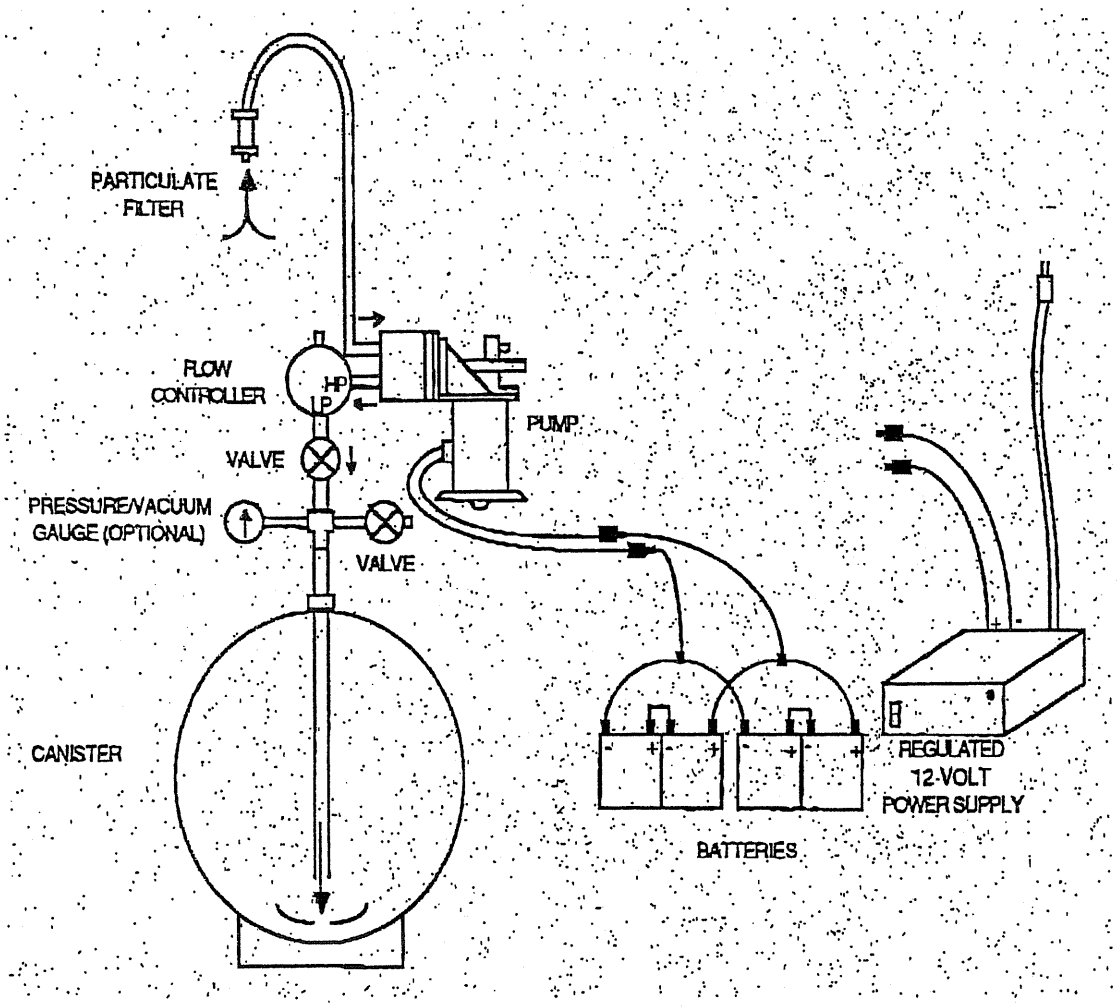
- Power Supply - Micronta regulated 12 volt power supply, converts 120VAC to 12VDC

- Sampler Carrying Case - Pelican Products, Inc. Pro Case houses and protects the sampling pump, batteries, and power supply.

- Canister Shipping Containers - Sheet metal container holds two 15 liter canisters to protect canisters and valves from becoming damaged during shipment.

FIGURE 3

PRESSURIZED TIME-INTERGRATED AIR SAMPLER CONFIGURATION



3.2 CANISTER PRESSURIZED TIME-INTEGRATED SAMPLING PROCEDURES

1. In the laboratory, prior to the sampling event, calibrate the flow controller using the procedure outlined in Section 4.1.4. **Note: For this procedure use an evacuated dummy canister.**

2. In the field, before placing the sampler at the desired sampling location, check the calibration of the flow controller using the procedure outlined in Section 4.1.4. **Note: For this procedure use an evacuated dummy canister.**

3. Select the canister and sampler to be used for the sampling event and bring it to the desired sampling location. If the canister does not have a vacuum/ pressure gauge attached, connect a gauge to the canister inlet, open the valve, read the gauge, close the valve, and then disconnect the gauge from the canister. If the canister to be used for the sampling event does have a vacuum/pressure gauge attached, read the gauge and record the value and canister number in a field log book.

4. Connect the sample inlet line with particulate matter filter to the inlet/vacuum side of the pump. Connect the outlet/pressure side of the pump to the high pressure inlet port (HP) of the flow controller. Connect the low pressure outlet port (LP) side of the flow controller to the canister inlet port. Refer to Figure 3 for a diagram of the sampler.

5. In a field log book record the project name, sampling event date, sampling location, canister number, sampler number, and the initial canister pressure gauge reading.

6. After all of the samplers have been set-up at their desired sampling locations, go back to each location and first turn on the sampling pump then open the canister valve. In the field log book record the sampling event start time for each sampling location.

7. During the course of the sampling event, periodically check each sampling location to see if the sampler had been tampered with or that the pump is running. In addition, if the canister has a vacuum/pressure gauge attached, observe and record the gauge reading to determine if the canister is being filled at a constant rate. If the no vacuum/pressure gauge is being used, connect the Aalborg Electronic Mass Flowmeter and check the flow rate, adjust if necessary.

8. 45 to 30 minutes before the end of the sampling period, visit each sampling location and obtain a flow rate reading using the procedure outlined in Section 4.1.5.

9. At the conclusion of the predetermined sampling period, return to each sampling location and first close the canister valve then turn off the sampling pump. **DO NOT OVER-TIGHTEN THE VALVE.** Disconnect the sampler from the canister. If the canister does not have a vacuum/ pressure gauge attached, connect a gauge to the canister inlet, open the valve, read the gauge, close the valve, and then disconnect the

gauge from the canister. If the canister does have a vacuum/pressure gauge attached, read the gauge and record the value and in the field log book. **Note: The gauge reading obtained in this step and in step 3 should agree with the predetermined final canister pressure used in the calculations described in Section 4.1.1. This step will help determine if the sample had been collected at a constant rate over the sampling period.**

10. Place canister into shipping container.

11. In a field log book record for each sampling location, the sampling event end time, final canister pressure, and meteorological conditions during the sampling event.

12. Complete chain-of-custody record form. See Part 4.

PART 4

QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES AND PERFORMANCE CRITERIA

4.1 FLOW CONTROLLER CALIBRATION

The canister sampling system uses a Millaflow flow controller, model SC423SXFT/B or equivalent to regulate the flow of sample entering the canister over the desired sample period. The flow controller is calibrated using an Aalborg Electronic Mass Flowmeter (Model GFM-1700) capable of measuring flow rates between 0 - 500 ml/min. within $\pm$1.5% full scale. Laboratory and field pre-sampling event calibration procedures for subatmospheric and pressurized canister samples are described in Sections 4.1.2 and 4.1.4, respectively. The post sampling event flow rate check procedures for subatmospheric and pressurized canister samples are described in Sections 4.1.3 and 4.1.5, respectively.

4.1.1 FLOW RATE DETERMINATION

Flow rates are determined based on the duration of the sampling event and whether subatmospheric or pressurized samples will be collected. Flow rates can be calculated using the following formula:

$$F = \frac{P \times V}{T \times 60}$$

F = flow rate (ml/min)
P = final canister pressure, atmospheres absolute
$= \frac{\text{gauge pressure (psig) + 14.7 psi}}{\text{14.7 psi}}$
V = volume of canister (ml)
T = sampling period (hours)

For example, if a 15 liter canister is to be pressurized to 26 psig in 8 hours, the flow rate should be calculated as follows:

$$\text{Flow Rate (ml/min)} = \frac{(26 \text{ psig} + 14.7 \text{ psi}) \times 15{,}000 \text{ ml}}{14.7 \times 8 \text{ hours} \times 60 \text{ min}}$$

$$= \frac{2.8 \text{ atmospheres absolute} \times 15{,}000 \text{ ml}}{480 \text{ min}}$$

$$= 88 \text{ ml/min}$$

If a subatmospheric sample is be collected in a 15 liter canister over an 8 hour period the flow rate should be calculated as follows to achieve a final canister gauge pressure reading of 8 in. Hg vacuum:

$$\text{Flow Rate (ml/min)} = \frac{(-8 \text{ in. Hg} + 29.92 \text{ in. Hg}) \times 15{,}000 \text{ ml}}{29.92 \text{ in. Hg} \times 8 \text{ hours} \times 60 \text{ min}}$$

$$= \frac{0.73 \text{ atmospheres absolute} \times 15{,}000 \text{ ml}}{480 \text{ min}}$$

$$= 23 \text{ ml/min}$$

4.1.2 Subatmospheric Canister Laboratory and Field Flow Controller Calibration Procedures

1. On the inlet side of the Aalborg Electronic Mass Flowmeter (Model GFM-1700) connect the 7 micrometer stainless steel Nupro Co. particulate filter supplied with the flowmeter.

2. Power up the Aalborg Electronic Mass Flowmeter (Model GFM-1700) by connecting it to the power supply. **Note: The meter must be warmed up for a minimum of 15 minutes prior to taking readings.**

3. Using an insulated screwdriver through the ZERO (lower) access window adjust the trim potentiometer until the display reads zero.

4. Configure the sampler as shown in Figure 2 using the components described in Section 2.1. Connect the sample inlet line with particulate matter filter to the flow controller's high pressure inlet port (HP) and the low pressure outlet port (LP) to an evacuated canister. **Note: This canister will serve as a dummy canister for calibrating all the flow controllers to be used during the sampling event.**

5. Connect the flowmeter to the sample inlet making sure the "FLOW ARROW" marked on the flowmeter is pointing in the right direction.

6. In a field log book record the project name, calibration date, and flow controller number.

7. Open the canister valve to allow a sample of room air or

clean/background ambient air to be drawn through the flowmeter and into the canister. The canister pressure differential causes the sample to flow into the canister.

8. Observe the mass flowmeter reading and adjust the micrometering valve on the flow controller until the predetermined flow rate registers on the meter. In the field log book record the flow rate reading. Refer to Section 4.1.1 for the procedure to calculate flow rates. **Note: With the mechanical flow controller, the difference between the inlet and outlet pressure must be 10 psi to maintain a constant flow rate. As the internal canister pressure approaches atmospheric pressure, there will be a decrease in the flow rate. Therefore, a 6 liter canister will only be able to collect a 2 - 3 liter sample.**

9. Close the canister valve. **DO NOT OVER-TIGHTEN THE VALVE.**

10. Turn off (unless it will be used for further calibrations) and disconnect the Aalborg Electronic Mass Flowmeter from the sample inlet.

11. Disconnect the sample inlet line with particulate matter filter from the flow controller and the flow controller from the canister.

12. Place flow controller in appropriate carrying case.

4.1.3 Subatmospheric Canister Field Flow Controller Post and During Sampling Flow Check Procedures

1. On the inlet side of the Aalborg Electronic Mass Flowmeter (Model GFM-1700) connect the 7 micrometer stainless steel Nupro Co. particulate filter supplied with the flowmeter.

2. Power up the Aalborg Electronic Mass Flowmeter by connecting it to the power supply. **Note: The meter must be warmed up for a minimum of 15 minutes prior to taking readings.**

3. Using an insulated screwdriver through the ZERO (lower) access window adjust the trim potentiometer until the display reads zero.

4. Connect the flowmeter to the sample inlet making sure the "FLOW ARROW" marked on the flowmeter is pointing in the right direction.

5. Observe the mass flowmeter reading. In a field log book record the date, sampling location, flow controller number, and flow rate reading.

6. Turn off (unless it will be used at another sampling location) and disconnect the Aalborg Electronic Mass Flowmeter from the sample inlet.

7. Place flow controller in appropriate carrying case.

4.1.4 Pressurized Canister Laboratory and Field Flow Controller Calibration Procedures

1. On the inlet side of the Aalborg Electronic Mass Flowmeter (Model GFM-1700) connect the 7 micrometer stainless steel Nupro Co. particulate filter supplied with the flowmeter.

2. Power up the Aalborg Electronic Mass Flowmeter (Model GFM-1700) by connecting it to the power supply. **Note: The meter must be warmed up for a minimum of 15 minutes prior to taking readings.**

3. Using an insulated screwdriver through the ZERO (lower) access window adjust the trim potentiometer until the display reads zero.

4. Configure the sampler as shown in Figure 3 using the components described in Section 3.1. Connect the sample inlet line with particulate matter filter to the inlet/vacuum side of the pump. Connect the outlet/ pressure side of the pump to the high pressure inlet port (HP) of the flow controller. Connect the low pressure outlet port (LP) side of the flow controller to the canister inlet port. **Note: This canister will serve as a dummy canister for calibrating all the flow controllers to be used during the sampling event.**

5. Connect the Aalborg Electronic Mass Flowmeter (Model GFM-1700) to the sampler inlet making sure the "FLOW ARROW" marked on the flowmeter is pointing in the right direction.

6. Power up the pump, open the canister valve to allow a sample of room air or clean/background ambient air to be drawn into the canister.

7. Observe the mass flowmeter reading and adjust the

micrometering valve on the flow controller until the predetermined flow rate registers on the meter. In the field log book record the date, pump number, sampler number, and flow rate reading.

8. Close the canister valve. **DO NOT OVER-TIGHTEN THE VALVE.**

10. Turn off the pump and flowmeter (unless it will be used for further calibrations).

11. Disconnect the Aalborg Electronic Mass Flowmeter from the sample inlet.

12. Disconnect the sampler from the canister.

13. Place flow controller and sampler in their appropriate carrying case.

4.1.5 Pressurized Canister Field Flow Controller Post and During Sampling Flow Check Procedures

1. On the inlet side of the Aalborg Electronic Mass Flowmeter (Model GFM-1700) connect the 7 micrometer stainless steel Nupro Co. particulate filter supplied with the flowmeter.

2. Power up the Aalborg Electronic Mass Flowmeter (Model GFM-1700) by connecting it to the power supply. **Note: The meter must be warmed up for a minimum of 15 minutes prior to taking readings.**

3. Using an insulated screwdriver through the ZERO (lower) access window adjust the trim potentiometer until the display reads zero.

4. Connect the Aalborg Electronic Mass Flowmeter (Model GFM-1700) to the sampler inlet making sure the "FLOW ARROW" marked on the flowmeter is pointing in the right direction.

5. Observe the mass flowmeter reading. In a field log book record the date, sampling location, sampler number (includes flow controller and pump number), and flow rate reading.

6. Turn off (unless it will be used at another sampling

location) and disconnect the Aalborg Electronic Mass Flowmeter from the sample inlet.

7. Place flow controller in appropriate carrying case.

4.2 FIELD/TRIP BLANK

There will be no canister field/trip blanks brought back to the laboratory for analyses. All the canisters and samplers designated for a specific project are certified clean and leak free by the ESD Laboratory prior to sample collection. The cleaning and leak certification procedures are described under separate cover in SOP document, EPA-REG1-OEME/CANISTER-CLEANING-SOP, Revision 2. This process eliminates the need to have field/trip blanks analyzed with canister samples.

4.3 CANISTER STORAGE

Canisters that have been certified clean and leak free by the ESD Laboratory are stored in a locked cabinet under pressure. Several days prior to the sampling event canisters are evacuated to their final canister pressure (10^{-3} TORR). After the sampling event and after being logged into the laboratory, the canister samples are stored in a locked cabinet. Two engineers from the Ambient Air and Emissions Monitoring Section responsible for collecting canister samples and a chemist from the Chemistry Section performing canister analyses have keys to the cabinet.

4.4 CANISTER TRANSPORT

Canisters are transported to the field and back to the laboratory in a SIS metal carrying case designed to carry two 15 liter canisters. The carrying case helps eliminate valves on the canisters from being inadvertently opened and/or damaged.

4.5 CHAIN-OF-CUSTODY

4.5.1 CHAIN-OF-CUSTODY RECORD FORM

A chain-of-custody record form accompanies the samples from the point of sample collection to the point of analyses. The field engineer enters the following information on the chain-of-custody record form (copy provided in Appendix A) at the completion of the sampling event:

Project/Site Name
Samplers Signature
Station Numbers
Date

Station Location Description
Remarks: canister type (i.e. SIS, Andersen), canister size (i.e. 15, 6 liter), canister number, final canister gauge pressure reading, and any other pertinent information

The field engineer returns to the laboratory, stores the samples in the locked cabinet or on shelf in the hall outside the Air Calibration Room, and contacts a representative of the Chemistry Section to transfer sample custody. At that time, the engineer signs and enters the date/time on the chain-of-custody record form, relinquishing the samples to the Chemistry representative, who also signs and enters the date/time on to the form.

4.6 DATA REPORTING

The field engineer prepares a final report after the laboratory has submitted its analytical report. The final report describes in detail the project's objective/purpose, the sampling and analytical procedures utilized, the quality/useability of the data generated, an interpretation of the results from an air quality impact perspective, and presents the air sampling data using a spread sheet.

APPENDIX A

CHAIN-OF-CUSTODY FORMS

Larry McTiernan

From: Rinaldi, Gerald M [gmrina@solutia.com]

Sent: Tuesday, November 18, 2003 10:34 AM

To: lemay.joe@epamail.epa.gov

Cc: Yare, Bruce S; Garcia, Jorge Y; carol.dickerson-env@astrazeneca.com; lmctiernan@rouxinc.com; rpentowski@stl-inc.com

Subject: RE: sub-slab guideline

As I promised in our 11/04/03 phone conversation, following are comments from the Industri-Plex Site Remedial Trust (ISRT) and its contractors re the subject final draft guideline, provided with your 11/03/03 e-mail (below) and reflecting changes to the preliminary draft which you provided during our 10/15/03 meeting at the Site.

Note: The ISRT intends to use Roux Associates for soil gas sampling and Severn Trent Laboratories (STL) for analytical support. An electronic version of STL's relevant Standard Operating Procedures (SOP) is attached for your information.

<<TO15 Volatile Org Cmpds in Ambient Air, rev3.pdf>>

Future Risks Inside Buildings, third paragraph, page 3: "A specific sample location within each building shall be approved by EPA prior to sampling." To satisfy this requirement, after receipt of EPA's response to these comments, the ISRT requests separate meetings at each building to be sampled among the owners, ISRT contractors (Roux and/or Maverick), and EPA's contractor (TTNUS) to reach agreement on precise locations befoe mobilization.

Sub-Slab Vapor Probe Construction, page 3: The ISRT's contractor Roux use a 1-inch drill as their standard procedure, versus 1.2 noted in this section.

Summa Canister VOC Air Sampling and Analytical Methodolgies, pages 4 through 8:

1.0 Description, fourth paragraph: As their standard procedures, STL uses "Zero Air" instead of humidified nitrogen (this comment also applies to Sections 2.2.1 and 3.2) and calibration and sample volumes of 200 milliliters instead of 500 milliliters.

2.1 Laboratory Clean and Leak Free Canister Certification (note correction in section heading from "lead" to "leak"), first paragraph: In lieu of the 100 percent certification (or individual certification) as outlined, STL performs a batch certification on the canisters and provides certification in the final data packages. In addition, STL demonstrates that the canisters are free of VOC target compounds down to the lab reporting limits.

2.2.3 Canister Cleanliness Certification Procedure, second paragraph: STL evaluates whether the canister vacuum decreases below 30" Hg. If so, instead of being re-evacuated, the canisters are replaced.

3.1 Canister Sampling and Analysis Performance Criteria: Per this section, "the primary VOC [volatile organic compounds] of interest for this particular project are benzene and toluene." That is consistent with the Remedial and GSIP Investigations cited in the guideline and excerpts of which were included with your letter dated 11/04/03. Therefore, the soil gas sampling effort should target, and Table 1 should list, only benzene and toluene. In addition, TO-15 Reporting Limits in Table 1 are "off" by an order of magnitude; they should be: benzene: 1.59 ug/m3 and 0.5ppb; and toluene: 1.88 ug/m3 and 0.5 ppb.

3.4 Laboratory Fortified Canister: STL does not use "a quality control canister sample .... to determine analytical accuracy." Refer to Section 9.0 of STL's attached "SOP" for their quality control procedures for Method TO-15.

3.5 Canister Surrogate Spike Results: According to STL, no surrogates are included in TO-15 methodology.

Please let me know that these proposed modifications to your guideline are acceptable, after which we can proceed to schedule the sampling location meetings noted above.

G. M. (Jerry) Rinaldi - 1S
Solutia Inc.
575 Maryville Centre Drive
St. Louis, MO 63141
Phone 314-674-3312
Fax 314-674-8957
E-mail gmrina@solutia.com

-----Original Message-----
From: lemay.joe@epamail.epa.gov
Sent: Monday, November 03, 2003 4:35 PM
To: Rinaldi, Gerald M
Cc: Yare, Bruce S; bullardg@ttnus.com; anna.mayor@state.ma.us
Subject: sub-slab guideline

Jerry,

Since our October 15, 2003, meeting at the TOU Building, EPA has revised the draft Sub-Slab Sampling Guideline. Please find attached a final version dated November 3, 2003. In addition, I've attached EPA New England Laboratory's summa canister SOP, dated March 2001, which is referenced in the final guideline. I'll send you a hard copy of both documents in the mail.

I would also like George Garcia and/or your contractor conducting the work to coordinate with Gordon Bullard, TTNUS, at (978) 658-1245, regarding the sampling schedule. TTNUS may be providing some field oversight when they initiate the field work.

If you have any questions, please contact me at (617) 918-1323.

Joe-

(See attached file: sub-slab proposal WP. 11-03-03.wpd) (See attached file: Summa Cannister SOP 2. March 2001)

Larry McTiernan

From: lemay.joe@epamail.epa.gov
Sent: Wednesday, November 26, 2003 3:53 PM
To: Rinaldi, Gerald M
Cc: Yare, Bruce S; carol.dickerson-env@astrazeneca.com; Garcia, Jorge Y; lmctiernan@rouxinc.com; rpentowski@stl-inc.com; bullardg@ttnus.com; diane.silverman@m-e.com; kahn.peter@epamail.epa.gov; anna.mayor@ttnus.com
Subject: RE: sub-slab guideline

TO15 Volatile Org Cmpds in Amb...

Jerry,

Thank you for ISRT's detailed response to the sub-slab guideline. Your response has been reviewed by our personnel at EPA NE Laboratory and our contractors. I have also discussed the matter of 41 Atlantic further with the owner and our contractors. I have requested the owner research any records documenting the installation of a vapor/ moisture barrier under the foundation. Currently, I have not received a response from the landowner, however, the owner states they observed the installation of a barrier during construction.

An alterative approach to sub-slab drilling and sampling for 41 Atlantic may be as follows: Collecting soil gas samples adjacent to the building foundation below the slab at areas with high VOCs in groundwater. For 41 Atlantic, two soil gas samples should be collected at various locations along the southern side of the building (which has a eastern segment, closer to the East Central Hide Pile and Ganglani Property, and a western segment, closer to Atlantic Avenue). one sample should be collected along the center of the eastern segment by groundwater sample transect B3 # 6, which had shallow benzene at 87 ppb; and the other should be collected along the center/west of the western segment, closer to Atlantic Avenue and transect B5 #1, which had shallow benzene at 6,200 ppb. This approach would increase the number of samples from 1 to 2, but would avoid the drilling/ access issues and potential delays. I will fax you a drawing with approximate locations.

I have three responses to your 11/18 email below regarding the agency's sub-slab sampling guideline:

1) An EPA representative will go out with ISRT representatives and mark out all sampling locations prior to initiating the subslab sampling program.

2) In response to your request to only analyze the soil gas samples for benzene and toluene, I wanted to make sure you understand the approach for the risk assessment regarding indoor and outdoor air concentrations. For the risk assessment, we will be using shallow groundwater data (benzene, toluene and any other VOCs) that are not sampled for soil gas, to model indoor and outdoor air. Some of the groundwater data we have from the Final GSIP is comprehensive, including full VOC analysis. Where there is no soil gas data, we will use the shallow groundwater data (toluene, benzene and other VOCs) to model indoor and outdoor air concentrations for current and/or future risk evaluation. So absent the soil gas data, we will revert back to the shallow groundwater VOC data. Knowing the approach, ISRT's must determine the appropriate analysis for

the soil gas samples.

That being said, EPA's contractor has looked into the matter further. They have reviewed all the Final GSIP shallow groundwater VOC concentrations, and compared them to the MCP GW 2 groundwater standards. Excluding benzene and toluene, no shallow VOC concentrations are above the GW-2 standards. Hence, if EPA only had benzene and toluene soil gas data and had to model the other shallow VOC concentrations, then it is not believed that the modeled shallow VOC concentrations would promote an indoor/ outdoor air risk.

3) In response to your proposed reporting limit (RL), we have evaluated the proposed 0.5 ppbv RL further relative to risk calculations. The benzene 0.5 ppbv RL would be about 2-fold greater than the screening level EPA uses for selecting COPCs for indoor and outdoor air. This screening level corresponds to benzene cancer risk of 1E-06. So non-detects at the 0.5 ppbv RL would correspond to a cancer risk of slightly greater than 2E-06.

Considering this, EPA believes it can live with your proposed benzene RL at 0.5 ppbv.

EPA accepts all your other responses to the sub-slab guideline.

If you have any other questions, please contact me at (617) 918-1323. I will only need to know how you plan to analyze the soil gas samples under my response #2 (i.e benzene and toluene analysis, or full VOC analysis). Please coordinate directly with Gordon Bullard, TTNUS, (978) 678-1245 for marking out the sampling locations. Please move forward with the sampling, asap.

Thanks!

Joe-

ATTACHMENT 3

Summary of Validated Analytical Results

Concentrations of Volatile Organic Compounds in Soil Gas
Industri-Plex Site
Woburn, Massachusetts

Parameter	ABC Roofing		Ganglani		Graphique		Pacer		Sacco/A		Sacco/B		Teradyne		Teradyne DUP		Trip Blank		Vining	
	ppbv	ug/m^3	ppbv	ug/m^3	ppbv	ug/m^3	ppbv	ug/m^3	ppbv	ug/m^3	ppbv	ug/m^3	ppbv	ug/m^3	ppbv	ug/m^3	ppbv	ug/m^3	ppbv	ug/m^3
1,1,1-Trichloroethane	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U
1,1,2,2-Tetrachloroethane	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U
1,1,2-Trichloroethane	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U
1,1-Dichloroethane	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U
1,1-Dichloroethene	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U
1,2,4-Trichlorobenzene	0.50 U	3.7 U	0.50 U	3.7 U	0.50 U	3.7 U	0.50 U	3.7 U	0.50 U	3.7 U	0.50 U	3.7 U	0.50 U	3.7 U	0.50 U	3.7 U	0.50 U	3.7 U	0.50 U	3.7 U
1,2,4-Trimethylbenzene	**2.8**	**14**	**1.8**	**8.8**	0.50 U	2.5 U	0.50 U	2.5 U	0.50 U	2.5 U	**0.68**	**3.3**	**0.67**	**3.3**	**0.70**	**3.4**	0.50 U	2.5 U	0.50 U	2.5 U
1,2-Dibromoethane	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U
1,2-Dichlorobenzene	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U
1,2-Dichloroethane	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U
1,2-Dichloropropane	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U
1,2-Dichlorotetrafluoroethane	0.50 U	3.5 U	0.50 U	3.5 U	0.50 U	3.5 U	0.50 U	3.5 U	0.50 U	3.5 U	0.50 U	3.5 U	0.50 U	3.5 U	0.50 U	3.5 U	0.50 U	3.5 U	0.50 U	3.5 U
1,3,5-Trimethylbenzene	**1.0**	**4.9**	**0.59**	**2.9**	0.50 U	2.5 U	0.50 U	2.5 U	0.50 U	2.5 U	0.50 U	2.5 U	0.50 U	2.5 U	0.50 U	2.5 U	0.50 U	2.5 U	0.50 U	2.5 U
1,3-Butadiene	0.50 U	1.1 U	0.50 U	1.1 U	**1.1**	**2.4**	**9.1**	**20**	0.50 U	1.1 U	**1.4**	**3.1**	0.50 U	1.1 U	0.50 U	1.1 U	0.50 U	1.1 U	0.50 U	1.1 U
1,3-Dichlorobenzene	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U
1,4-Dichlorobenzene	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U	0.50 U	3.0 U
2-Chlorotoluene	0.50 U	2.6 U	0.50 U	2.6 U	0.50 U	2.6 U	0.50 U	2.6 U	0.50 U	2.6 U	0.50 U	2.6 U	0.50 UJ	2.6 UJ	0.50 UJ	2.6 UJ	0.50 U	2.6 U	0.50 U	2.6 U
4-Ethyltoluene	**3.2**	**16**	**1.6**	**7.9**	0.50 U	2.5 U	0.50 U	2.5 U	0.50 U	2.5 U	**0.51**	**2.5**	**0.52**	**2.6**	**0.52**	**2.6**	0.50 U	2.5 U	0.50 U	2.5 U
Acetone	**74 J**	**180 J**	**16**	**38**	**8.4**	**20**	**89 J**	**210 J**	5.0 U	12 U	**20**	**48**	**34 J**	**81 J**	**32**	**76**	5.0 U	12 U	**5.0**	**12**
Benzene	**0.70**	**2.2**	0.50 U	1.6 U	**0.76**	**2.4**	**5.5**	**18**	0.50 U	1.6 U	**0.76**	**2.4**	**0.91 J**	**2.9 J**	**0.73**	**2.3**	0.50 U	1.6 U	0.50 U	1.6 U
Bromodichloromethane	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U
Bromomethane	0.50 U	1.9 U	0.50 U	1.9 U	0.50 U	1.9 U	0.50 U	1.9 U	0.50 U	1.9 U	0.50 U	1.9 U	0.50 U	1.9 U	0.50 U	1.9 U	0.50 U	1.9 U	0.50 U	1.9 U
Carbon Disulfide	0.50 U	1.6 U	0.50 U	1.6 U	0.50 U	1.6 U	**1.0**	**3.1**	0.50 U	1.6 U	**1.1**	**3.4**	**2.0 J**	**6.2 J**	**0.98**	**3.1**	0.50 U	1.6 U	0.50 U	1.6 U
Carbon Tetrachloride	0.50 U	3.1 U	0.50 U	3.1 U	0.50 U	3.1 U	0.50 U	3.1 U	0.50 U	3.1 U	0.50 U	3.1 U	0.50 U	3.1 U	0.50 U	3.1 U	0.50 U	3.1 U	0.50 U	3.1 U
Chlorobenzene	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U
Chloroethane	0.50 U	1.3 U	0.50 U	1.3 U	0.50 U	1.3 U	0.50 U	1.3 U	0.50 U	1.3 U	0.50 U	1.3 U	**0.58 J**	**1.5 J**	**0.61**	**1.6**	0.50 U	1.3 U	0.50 U	1.3 U
Chloroform	0.50 U	2.4 U	0.50 U	2.4 U	0.50 U	2.4 U	0.50 U	2.4 U	0.50 U	2.4 U	**0.51**	**2.5**	0.50 U	2.4 U	0.50 U	2.4 U	0.50 U	2.4 U	0.50 U	2.4 U
Chloromethane	**0.69**	**1.4**	**0.73**	**1.5**	**0.56**	**1.2**	**0.57**	**1.2**	**0.66**	**1.4**	0.50 U	1.0 U	**0.58 J**	**1.2 J**	**0.69**	**1.4**	0.50 U	1.0 U	**0.65**	**1.3**
cis-1,2-Dichloroethene	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U
cis-1,3-Dichloropropene	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U
Cyclohexane	0.50 U	1.7 U	0.50 U	1.7 U	0.50 U	1.7 U	**0.71**	**2.4**	0.50 U	1.7 U	0.50 U	1.7 U	**1.7 J**	**5.9 J**	**1.7**	**5.9**	0.50 U	1.7 U	0.50 U	1.7 U
Dibromochloromethane	0.50 U	4.3 U	0.50 U	4.3 U	0.50 U	4.3 U	0.50 U	4.3 U	0.50 U	4.3 U	0.50 U	4.3 U	0.50 U	4.3 U	0.50 U	4.3 U	0.50 U	4.3 U	0.50 U	4.3 U
Dichlorodifluoromethane	**0.77**	**3.8**	**24**	**120**	**0.82**	**4.1**	**0.77**	**3.8**	**0.75**	**3.7**	**0.81**	**4.0**	**0.59 J**	**2.9 J**	**0.62**	**3.1**	0.50 U	2.5 U	**0.88**	**4.4**
Ethylbenzene	**2.4**	**10**	**2.9**	**13**	0.50 U	2.2 U	**0.97**	**4.2**	0.50 U	2.2 U	**0.61**	**2.6**	**1.3**	**5.6**	**1.1**	**4.8**	0.50 U	2.2 U	0.50 U	2.2 U
Freon TF	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U	0.50 U	3.8 U
Hexachlorobutadiene	0.50 U	5.3 U	0.50 U	5.3 U	0.50 U	5.3 U	0.50 U	5.3 U	0.50 U	5.3 U	0.50 U	5.3 U	0.50 U	5.3 U	0.50 U	5.3 U	0.50 U	5.3 U	0.50 U	5.3 U
Isopropyl Alcohol	5.0 U	12 U	**7.0**	**17**	5.0 U	12 U	5.0 U	12 U	5.0 U	12 U	5.0 U	12 U	**29 J**	**71 J**	**32**	**79**	5.0 U	12 U	5.0 U	12 U
Methyl Butyl Ketone	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U
Methyl Ethyl Ketone	0.50 U	1.5 U	0.50 U	1.5 U	0.50 U	1.5 U	**39**	**120**	0.50 U	1.5 U	0.50 U	1.5 U	**2.0 J**	**5.9 J**	**2.0**	**5.9**	0.50 U	1.5 U	0.50 U	1.5 U
Methyl Isobutyl Ketone	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U
Methyl tert-Butyl Ether	0.50 U	1.8 U	0.50 U	1.8 U	0.50 U	1.8 U	**1.3**	**4.7**	0.50 U	1.8 U	0.50 U	1.8 U	0.50 U	1.8 U	0.50 U	1.8 U	0.50 U	1.8 U	0.50 U	1.8 U
Methylene Chloride	**2.6**	**9.0**	0.50 U	1.7 U	0.50 U	1.7 U	0.50 U	1.7 U	0.50 U	1.7 U	0.50 U	1.7 U	0.50 UJ	1.7 UJ	**0.51 J**	**1.8 J**	0.50 U	1.7 U	**5.8**	**20**
n-Heptane	**0.85**	**3.5**	0.50 U	2.0 U	0.50 U	2.0 U	**2.7**	**11**	0.50 U	2.0 U	0.50 U	2.0 U	**7.5**	**31**	**8.4**	**34**	0.50 U	2.0 U	0.50 U	2.0 U
n-Hexane	**4.4**	**16**	**0.97**	**3.4**	0.50 U	1.8 U	**3.8**	**13**	0.50 U	1.8 U	**0.57**	**2.0**	**1.8 J**	**6.3 J**	**1.9**	**6.7**	0.50 U	1.8 U	**4.1**	**14**
Styrene	0.50 U	2.1 U	0.50 U	2.1 U	0.50 U	2.1 U	0.50 U	2.1 U	0.50 U	2.1 U	0.50 U	2.1 U	**1.8**	**7.7**	**1.4**	**6.0**	0.50 U	2.1 U	0.50 U	2.1 U
Tetrachloroethene	**0.77**	**5.2**	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U	0.50 U	3.4 U
Tetrahydrofuran	5.0 U	15 U	5.0 U	15 U	5.0 U	15 U	5.0 U	15 U	5.0 U	15 U	5.0 U	15 U	5.0 U	15 U	5.0 U	15 U	5.0 U	15 U	5.0 U	15 U
Toluene	**4.4**	**17**	**3.8**	**14**	**1.1**	**4.1**	**6.9**	**26**	0.50 U	1.9 U	**2.1**	**7.9**	**7.1**	**27**	**6.5**	**24**	0.50 U	1.9 U	**0.61**	**2.3**
trans-1,2-Dichloroethene	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U	0.50 U	2.0 U
trans-1,3-Dichloropropene	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U	0.50 U	2.3 U
Trichloroethene	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	0.50 U	2.7 U	**5.1 J**	**27 J**	**4.1**	**22**	0.50 U	2.7 U	0.50 U	2.7 U
Trichlorofluoromethane	0.50 U	2.8 U	**0.51**	**2.9**	0.50 U	2.8 U	0.50 U	2.8 U	0.50 U	2.8 U	0.50 U	2.8 U	**7.9 J**	**44 J**	**8.6**	**48**	0.50 U	2.8 U	**0.77**	**4.3**
Vinyl Chloride	0.50 U	1.3 U	0.50 U	1.3 U	0.50 U	1.3 U	0.50 U	1.3 U	0.50 U	1.3 U	0.50 U	1.3 U	0.50 U	1.3 U	0.50 U	1.3 U	0.50 U	1.3 U	0.50 U	1.3 U
Xylene (m,p)	**7.7**	**33**	**11**	**48**	**0.72**	**3.1**	**2.6**	**11**	0.50 U	2.2 U	**1.8**	**7.8**	**4.7**	**20**	**4.5**	**20**	0.50 U	2.2 U	0.50 U	2.2 U
Xylene (o)	**2.0**	**8.7**	**2.8**	**12**	0.50 U	2.2 U	**0.84**	**3.6**	0.50 U	2.2 U	**0.62**	**2.7**	**1.4**	**6.1**	**1.4**	**6.1**	0.50 U	2.2 U	0.50 U	2.2 U

Notes:
Compounds detected in at least one sample are shown in **bold type**, along with detected concentrations.
DUP = Duplicate sample
ppbv = parts per billion by volume
ug/m^3 = micrograms per cubic meter
U = Compound was analyzed for, but not detected; value shown is laboratory reporting limit.
UJ = Compound was analyzed for, but was not detected; laboratory reporting limit shown is estimated.
J = Concentration shown is estimated.

ATTACHMENT 4

STL's Sample Data Summary Packages

STL Burlington
Colchester, Vermont

Sample Data Summary Package

SDG: 100226

SEVERN TRENT STL

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248
www.stl-inc.com

June 16, 2004

Mr. Chris Milone
Roux Associates
25 Corporate Drive
Suite 230
Burlington, MA 01803

Re: Laboratory Project No. 24000
Case 24000; SDG: 100226

Dear Mr. Milone:

Enclosed are the analytical results for samples received by STL Burlington on May 15, 2004. This report is sequentially numbered starting with page 0001 and ending with page 0379.

Laboratory numbers have been assigned and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 05/15/04 ETR No: 100226		
571912	SG-ABC ROOFING	05/13/04	Air
571913	SG-VINING	05/13/04	Air
571914	SG-GANGLIANI	05/13/04	Air
571915	SG-SACCO/A	05/13/04	Air
571916	SG-GRAPHIQUE	05/13/04	Air
571917	SG-SACCO/B	05/13/04	Air
571918	SG-PACER	05/13/04	Air

Documentation of the condition of the samples at the time their receipt and any exceptions to the laboratory's Sample Acceptance Policy is included in the Sample Handling section of this submittal.

Method TO-15 – Volatile Organics:
The original volatile organics analysis for samples SG-ABC ROOFING and SG-PACER yielded concentrations of the target compound Acetone that exceeded the range of calibrated instrument response. This sample was diluted and re-analyzed within the holding time yielding results that were within the calibration range of the instrument. Both sets of analyses have been included in this case submittal.

The analysis of the blank spike sample W9ICVLCS exhibited percent recoveries of the target compound Acetone that exceeded the control criterion. This exceedence is presented on the analytical form 3s.

The analysis of the blank spike sample X1LCS and the associated blank spike duplicate sample X1LCSD exhibited percent recoveries of select target compounds that exceeded the control criterion. These exceedences are presented on the analytical form 3s.

Method TO-15 – Volatile Organics (cont.)
Methyl Ethyl Ketone was quantitated from the secondary mass ion 72 in of the field samples and method blank sample of this delivery group due to interference with mass ion 43. The blank spike and associated blank spike duplicate samples were quantitated from the mass ion 43. The analytical form 6s and 7s were manually edited to reflect response factors from the mass ion 72 quantitation.

The analytical results presented in this data report were generated under a quality system that adheres to the requirements specified in the NELAC standard. This report shall not be reproduced, except in full, without the written approval of the laboratory. The release of the data in this report is authorized by the Laboratory Director or his designee, as verified by the following signature.

If there are any questions regarding this submittal, please contact Ron Pentkowski at (802) 655-1203.

Sincerely,

Ron Pentkowski for

Michael F. Wheeler, Ph.D.
Laboratory Director

Enclosure

0001B ~~(Last alpha)~~ JTD 6/16/04

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-ABC ROOFING

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571912

Date Analyzed: 06/09/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.77		0.50	3.8		2.5
Chloromethane	74-87-3	0.69		0.50	1.4		1.0
Vinyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
Bromomethane	74-83-9	0.50	U	0.50	1.9	U	1.9
Chloroethane	75-00-3	0.50	U	0.50	1.3	U	1.3
Trichlorofluoromethane	75-69-4	0.50	U	0.50	2.8	U	2.8
Freon TF	76-13-1	0.50	U	0.50	3.8	U	3.8
1,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
Methylene Chloride	75-09-2	2.6		0.50	9.0		1.7
1,1-Dichloroethane	75-34-3	0.50	U	0.50	2.0	U	2.0
cis-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
Chloroform	67-66-3	0.50	U	0.50	2.4	U	2.4
1,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
Carbon Tetrachloride	56-23-5	0.50	U	0.50	3.1	U	3.1
Benzene	71-43-2	0.70		0.50	2.2		1.6
1,2-Dichloroethane	107-06-2	0.50	U	0.50	2.0	U	2.0
Trichloroethene	79-01-6	0.50	U	0.50	2.7	U	2.7
1,2-Dichloropropane	78-87-5	0.50	U	0.50	2.3	U	2.3
cis-1,3-Dichloropropene	10061-01-5	0.50	U	0.50	2.3	U	2.3
Toluene	108-88-3	4.4		0.50	17		1.9
trans-1,3-Dichloropropene	10061-02-6	0.50	U	0.50	2.3	U	2.3
1,1,2-Trichloroethane	79-00-5	0.50	U	0.50	2.7	U	2.7
Tetrachloroethene	127-18-4	0.77		0.50	5.2		3.4
Chlorobenzene	108-90-7	0.50	U	0.50	2.3	U	2.3
Ethylbenzene	100-41-4	2.4		0.50	10		2.2
Xylene (m,p)	1330-20-7	7.7		0.50	33		2.2
Styrene	100-42-5	0.50	U	0.50	2.1	U	2.1
Xylene (o)	95-47-6	2.0		0.50	8.7		2.2
1,1,2,2-Tetrachloroethane	79-34-5	0.50	U	0.50	3.4	U	3.4
1,3-Dichlorobenzene	541-73-1	0.50	U	0.50	3.0	U	3.0
1,4-Dichlorobenzene	106-46-7	0.50	U	0.50	3.0	U	3.0
1,2-Dichlorobenzene	95-50-1	0.50	U	0.50	3.0	U	3.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-ABC ROOFING

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571912

Date Analyzed: 06/09/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2,4-Trichlorobenzene	120-82-1	0.50	U	0.50	3.7	U	3.7
Hexachlorobutadiene	87-68-3	0.50	U	0.50	5.3	U	5.3
1,3,5-Trimethylbenzene	108-67-8	1.0		0.50	4.9		2.5
1,2,4-Trimethylbenzene	95-63-6	2.8		0.50	14		2.5
1,2-Dichlorotetrafluoroethane	76-14-2	0.50	U	0.50	3.5	U	3.5
1,2-Dibromoethane	106-93-4	0.50	U	0.50	3.8	U	3.8
1,3-Butadiene	106-99-0	0.50	U	0.50	1.1	U	1.1
Carbon Disulfide	75-15-0	0.50	U	0.50	1.6	U	1.6
Acetone	67-64-1	66	E	5.0	160	E	12
Isopropyl Alcohol	67-63-0	5.0	U	5.0	12	U	12
Methyl tert-Butyl Ether	1634-04-4	3.4		0.50	12		1.8
Cyclohexane	110-82-7	0.50	U	0.50	1.7	U	1.7
Dibromochloromethane	124-48-1	0.50	U	0.50	4.3	U	4.3
Methyl Ethyl Ketone	78-93-3	2.4	U	0.50	7.1	U	1.5
Methyl Isobutyl Ketone	108-10-1	0.50	U	0.50	2.0	U	2.0
Methyl Butyl Ketone	591-78-6	0.50	U	0.50	2.0	U	2.0
Bromodichloromethane	75-27-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0
4-Ethyltoluene	622-96-8	3.2		0.50	16		2.5
2-Chlorotoluene	95-49-8	0.50	U	0.50	2.6	U	2.6
n-Hexane	110-54-3	4.4		0.50	16		1.8
Tetrahydrofuran	109-99-9	5.0	U	5.0	15	U	15
n-Heptane	142-82-5	0.85		0.50	3.5		2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-ABC ROOFINGDL

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571912D1

Date Analyzed: 06/10/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	2.0	U	2.0	9.9	U	9.9
Chloromethane	74-87-3	2.0	U	2.0	4.1	U	4.1
Vinyl Chloride	75-01-4	2.0	U	2.0	5.1	U	5.1
Bromomethane	74-83-9	2.0	U	2.0	7.8	U	7.8
Chloroethane	75-00-3	2.0	U	2.0	5.3	U	5.3
Trichlorofluoromethane	75-69-4	2.0	U	2.0	11	U	11
Freon TF	76-13-1	2.0	U	2.0	15	U	15
1,1-Dichloroethene	75-35-4	2.0	U	2.0	7.9	U	7.9
Methylene Chloride	75-09-2	3.7	D	2.0	13	D	6.9
1,1-Dichloroethane	75-34-3	2.0	U	2.0	8.1	U	8.1
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	7.9	U	7.9
Chloroform	67-66-3	2.0	U	2.0	9.8	U	9.8
1,1,1-Trichloroethane	71-55-6	2.0	U	2.0	11	U	11
Carbon Tetrachloride	56-23-5	2.0	U	2.0	13	U	13
Benzene	71-43-2	2.0	U	2.0	6.4	U	6.4
1,2-Dichloroethane	107-06-2	2.0	U	2.0	8.1	U	8.1
Trichloroethene	79-01-6	2.0	U	2.0	11	U	11
1,2-Dichloropropane	78-87-5	2.0	U	2.0	9.2	U	9.2
cis-1,3-Dichloropropene	10061-01-5	2.0	U	2.0	9.1	U	9.1
Toluene	108-88-3	5.1	D	2.0	19	D	7.5
trans-1,3-Dichloropropene	10061-02-6	2.0	U	2.0	9.1	U	9.1
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	11	U	11
Tetrachloroethene	127-18-4	2.0	U	2.0	14	U	14
Chlorobenzene	108-90-7	2.0	U	2.0	9.2	U	9.2
Ethylbenzene	100-41-4	2.9	D	2.0	13	D	8.7
Xylene (m,p)	1330-20-7	8.6	D	2.0	37	D	8.7
Styrene	100-42-5	2.0	U	2.0	8.5	U	8.5
Xylene (o)	95-47-6	2.2	D	2.0	9.6	D	8.7
1,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	14	U	14
1,3-Dichlorobenzene	541-73-1	2.0	U	2.0	12	U	12
1,4-Dichlorobenzene	106-46-7	2.0	U	2.0	12	U	12
1,2-Dichlorobenzene	95-50-1	2.0	U	2.0	12	U	12

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-ABC ROOFINGDL

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571912D1

Date Analyzed: 06/10/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2,4-Trichlorobenzene	120-82-1	2.0	U	2.0	15	U	15
Hexachlorobutadiene	87-68-3	2.0	U	2.0	21	U	21
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	9.8	U	9.8
1,2,4-Trimethylbenzene	95-63-6	2.9	D	2.0	14	D	9.8
1,2-Dichlorotetrafluoroethane	76-14-2	2.0	U	2.0	14	U	14
1,2-Dibromoethane	106-93-4	2.0	U	2.0	15	U	15
1,3-Butadiene	106-99-0	2.0	U	2.0	4.4	U	4.4
Carbon Disulfide	75-15-0	2.0	U	2.0	6.2	U	6.2
Acetone	67-64-1	74	D	20	180	D	48
Isopropyl Alcohol	67-63-0	20	U	20	49	U	49
Methyl tert-Butyl Ether	1634-04-4	2.0	U	2.0	7.2	U	7.2
Cyclohexane	110-82-7	2.0	U	2.0	6.9	U	6.9
Dibromochloromethane	124-48-1	2.0	U	2.0	17	U	17
Methyl Ethyl Ketone	78-93-3	3.2	U	2.0	9.4	U	5.9
Methyl Isobutyl Ketone	108-10-1	2.0	U	2.0	8.2	U	8.2
Methyl Butyl Ketone	591-78-6	2.0	U	2.0	8.2	U	8.2
Bromodichloromethane	75-27-4	2.0	U	2.0	13	U	13
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	7.9	U	7.9
4-Ethyltoluene	622-96-8	3.4	D	2.0	17	D	9.8
2-Chlorotoluene	95-49-8	2.0	U	2.0	10	U	10
n-Hexane	110-54-3	3.9	D	2.0	14	D	7.0
Tetrahydrofuran	109-99-9	20	U	20	59	U	59
n-Heptane	142-82-5	2.0	U	2.0	8.2	U	8.2

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-VINING

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571913

Date Analyzed: 06/09/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.88		0.50	4.4		2.5
Chloromethane	74-87-3	0.65		0.50	1.3		1.0
Vinyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
Bromomethane	74-83-9	0.50	U	0.50	1.9	U	1.9
Chloroethane	75-00-3	0.50	U	0.50	1.3	U	1.3
Trichlorofluoromethane	75-69-4	0.77		0.50	4.3		2.8
Freon TF	76-13-1	0.50	U	0.50	3.8	U	3.8
1,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
Methylene Chloride	75-09-2	5.8		0.50	20		1.7
1,1-Dichloroethane	75-34-3	0.50	U	0.50	2.0	U	2.0
cis-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
Chloroform	67-66-3	0.50	U	0.50	2.4	U	2.4
1,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
Carbon Tetrachloride	56-23-5	0.50	U	0.50	3.1	U	3.1
Benzene	71-43-2	0.50	U	0.50	1.6	U	1.6
1,2-Dichloroethane	107-06-2	0.50	U	0.50	2.0	U	2.0
Trichloroethene	79-01-6	0.50	U	0.50	2.7	U	2.7
1,2-Dichloropropane	78-87-5	0.50	U	0.50	2.3	U	2.3
cis-1,3-Dichloropropene	10061-01-5	0.50	U	0.50	2.3	U	2.3
Toluene	108-88-3	0.61		0.50	2.3		1.9
trans-1,3-Dichloropropene	10061-02-6	0.50	U	0.50	2.3	U	2.3
1,1,2-Trichloroethane	79-00-5	0.50	U	0.50	2.7	U	2.7
Tetrachloroethene	127-18-4	0.50	U	0.50	3.4	U	3.4
Chlorobenzene	108-90-7	0.50	U	0.50	2.3	U	2.3
Ethylbenzene	100-41-4	0.50	U	0.50	2.2	U	2.2
Xylene (m,p)	1330-20-7	0.50	U	0.50	2.2	U	2.2
Styrene	100-42-5	0.50	U	0.50	2.1	U	2.1
Xylene (o)	95-47-6	0.50	U	0.50	2.2	U	2.2
1,1,2,2-Tetrachloroethane	79-34-5	0.50	U	0.50	3.4	U	3.4
1,3-Dichlorobenzene	541-73-1	0.50	U	0.50	3.0	U	3.0
1,4-Dichlorobenzene	106-46-7	0.50	U	0.50	3.0	U	3.0
1,2-Dichlorobenzene	95-50-1	0.50	U	0.50	3.0	U	3.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-VINING

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571913

Date Analyzed: 06/09/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2,4-Trichlorobenzene	120-82-1	0.50	U	0.50	3.7	U	3.7
Hexachlorobutadiene	87-68-3	0.50	U	0.50	5.3	U	5.3
1,3,5-Trimethylbenzene	108-67-8	0.50	U	0.50	2.5	U	2.5
1,2,4-Trimethylbenzene	95-63-6	0.50	U	0.50	2.5	U	2.5
1,2-Dichlorotetrafluoroethane	76-14-2	0.50	U	0.50	3.5	U	3.5
1,2-Dibromoethane	106-93-4	0.50	U	0.50	3.8	U	3.8
1,3-Butadiene	106-99-0	0.50	U	0.50	1.1	U	1.1
Carbon Disulfide	75-15-0	0.50	U	0.50	1.6	U	1.6
Acetone	67-64-1	5.0		5.0	12		12
Isopropyl Alcohol	67-63-0	5.0	U	5.0	12	U	12
Methyl tert-Butyl Ether	1634-04-4	0.50	U	0.50	1.8	U	1.8
Cyclohexane	110-82-7	0.50	U	0.50	1.7	U	1.7
Dibromochloromethane	124-48-1	0.50	U	0.50	4.3	U	4.3
Methyl Ethyl Ketone	78-93-3	0.50	U	0.50	1.5	U	1.5
Methyl Isobutyl Ketone	108-10-1	0.50	U	0.50	2.0	U	2.0
Methyl Butyl Ketone	591-78-6	0.50	U	0.50	2.0	U	2.0
Bromodichloromethane	75-27-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0
4-Ethyltoluene	622-96-8	0.50	U	0.50	2.5	U	2.5
2-Chlorotoluene	95-49-8	0.50	U	0.50	2.6	U	2.6
n-Hexane	110-54-3	4.1		0.50	14		1.8
Tetrahydrofuran	109-99-9	5.0	U	5.0	15	U	15
n-Heptane	142-82-5	0.50	U	0.50	2.0	U	2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-GANGLIANI

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571914

Date Analyzed: 06/09/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	24		0.50	120		2.5
Chloromethane	74-87-3	0.73		0.50	1.5		1.0
Vinyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
Bromomethane	74-83-9	0.50	U	0.50	1.9	U	1.9
Chloroethane	75-00-3	0.50	U	0.50	1.3	U	1.3
Trichlorofluoromethane	75-69-4	0.51		0.50	2.9		2.8
Freon TF	76-13-1	0.50	U	0.50	3.8	U	3.8
1,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
Methylene Chloride	75-09-2	0.50	U	0.50	1.7	U	1.7
1,1-Dichloroethane	75-34-3	0.50	U	0.50	2.0	U	2.0
cis-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
Chloroform	67-66-3	0.50	U	0.50	2.4	U	2.4
1,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
Carbon Tetrachloride	56-23-5	0.50	U	0.50	3.1	U	3.1
Benzene	71-43-2	0.50	U	0.50	1.6	U	1.6
1,2-Dichloroethane	107-06-2	0.50	U	0.50	2.0	U	2.0
Trichloroethene	79-01-6	0.50	U	0.50	2.7	U	2.7
1,2-Dichloropropane	78-87-5	0.50	U	0.50	2.3	U	2.3
cis-1,3-Dichloropropene	10061-01-5	0.50	U	0.50	2.3	U	2.3
Toluene	108-88-3	3.8		0.50	14		1.9
trans-1,3-Dichloropropene	10061-02-6	0.50	U	0.50	2.3	U	2.3
1,1,2-Trichloroethane	79-00-5	0.50	U	0.50	2.7	U	2.7
Tetrachloroethene	127-18-4	0.50	U	0.50	3.4	U	3.4
Chlorobenzene	108-90-7	0.50	U	0.50	2.3	U	2.3
Ethylbenzene	100-41-4	2.9		0.50	13		2.2
Xylene (m,p)	1330-20-7	11		0.50	48		2.2
Styrene	100-42-5	0.50	U	0.50	2.1	U	2.1
Xylene (o)	95-47-6	2.8		0.50	12		2.2
1,1,2,2-Tetrachloroethane	79-34-5	0.50	U	0.50	3.4	U	3.4
1,3-Dichlorobenzene	541-73-1	0.50	U	0.50	3.0	U	3.0
1,4-Dichlorobenzene	106-46-7	0.50	U	0.50	3.0	U	3.0
1,2-Dichlorobenzene	95-50-1	0.50	U	0.50	3.0	U	3.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-GANGLIANI

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571914

Date Analyzed: 06/09/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2,4-Trichlorobenzene	120-82-1	0.50	U	0.50	3.7	U	3.7
Hexachlorobutadiene	87-68-3	0.50	U	0.50	5.3	U	5.3
1,3,5-Trimethylbenzene	108-67-8	0.59		0.50	2.9		2.5
1,2,4-Trimethylbenzene	95-63-6	1.8		0.50	8.8		2.5
1,2-Dichlorotetrafluoroethane	76-14-2	0.50	U	0.50	3.5	U	3.5
1,2-Dibromoethane	106-93-4	0.50	U	0.50	3.8	U	3.8
1,3-Butadiene	106-99-0	0.50	U	0.50	1.1	U	1.1
Carbon Disulfide	75-15-0	0.50	U	0.50	1.6	U	1.6
Acetone	67-64-1	16		5.0	38		12
Isopropyl Alcohol	67-63-0	7.0		5.0	17		12
Methyl tert-Butyl Ether	1634-04-4	0.50	U	0.50	1.8	U	1.8
Cyclohexane	110-82-7	0.50	U	0.50	1.7	U	1.7
Dibromochloromethane	124-48-1	0.50	U	0.50	4.3	U	4.3
Methyl Ethyl Ketone	78-93-3	1.2	U	0.50	3.5	U	1.5
Methyl Isobutyl Ketone	108-10-1	0.50	U	0.50	2.0	U	2.0
Methyl Butyl Ketone	591-78-6	0.50	U	0.50	2.0	U	2.0
Bromodichloromethane	75-27-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0
4-Ethyltoluene	622-96-8	1.6		0.50	7.9		2.5
2-Chlorotoluene	95-49-8	0.50	U	0.50	2.6	U	2.6
n-Hexane	110-54-3	0.97		0.50	3.4		1.8
Tetrahydrofuran	109-99-9	5.0	U	5.0	15	U	15
n-Heptane	142-82-5	0.50	U	0.50	2.0	U	2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-SACCO/A

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571915

Date Analyzed: 06/09/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.75		0.50	3.7		2.5
Chloromethane	74-87-3	0.66		0.50	1.4		1.0
Vinyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
Bromomethane	74-83-9	0.50	U	0.50	1.9	U	1.9
Chloroethane	75-00-3	0.50	U	0.50	1.3	U	1.3
Trichlorofluoromethane	75-69-4	0.50	U	0.50	2.8	U	2.8
Freon TF	76-13-1	0.50	U	0.50	3.8	U	3.8
1,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
Methylene Chloride	75-09-2	0.50	U	0.50	1.7	U	1.7
1,1-Dichloroethane	75-34-3	0.50	U	0.50	2.0	U	2.0
cis-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
Chloroform	67-66-3	0.50	U	0.50	2.4	U	2.4
1,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
Carbon Tetrachloride	56-23-5	0.50	U	0.50	3.1	U	3.1
Benzene	71-43-2	0.50	U	0.50	1.6	U	1.6
1,2-Dichloroethane	107-06-2	0.50	U	0.50	2.0	U	2.0
Trichloroethene	79-01-6	0.50	U	0.50	2.7	U	2.7
1,2-Dichloropropane	78-87-5	0.50	U	0.50	2.3	U	2.3
cis-1,3-Dichloropropene	10061-01-5	0.50	U	0.50	2.3	U	2.3
Toluene	108-88-3	0.50	U	0.50	1.9	U	1.9
trans-1,3-Dichloropropene	10061-02-6	0.50	U	0.50	2.3	U	2.3
1,1,2-Trichloroethane	79-00-5	0.50	U	0.50	2.7	U	2.7
Tetrachloroethene	127-18-4	0.50	U	0.50	3.4	U	3.4
Chlorobenzene	108-90-7	0.50	U	0.50	2.3	U	2.3
Ethylbenzene	100-41-4	0.50	U	0.50	2.2	U	2.2
Xylene (m,p)	1330-20-7	0.50	U	0.50	2.2	U	2.2
Styrene	100-42-5	0.50	U	0.50	2.1	U	2.1
Xylene (o)	95-47-6	0.50	U	0.50	2.2	U	2.2
1,1,2,2-Tetrachloroethane	79-34-5	0.50	U	0.50	3.4	U	3.4
1,3-Dichlorobenzene	541-73-1	0.50	U	0.50	3.0	U	3.0
1,4-Dichlorobenzene	106-46-7	0.50	U	0.50	3.0	U	3.0
1,2-Dichlorobenzene	95-50-1	0.50	U	0.50	3.0	U	3.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-SACCO/A

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571915

Date Analyzed: 06/09/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2,4-Trichlorobenzene	120-82-1	0.50	U	0.50	3.7	U	3.7
Hexachlorobutadiene	87-68-3	0.50	U	0.50	5.3	U	5.3
1,3,5-Trimethylbenzene	108-67-8	0.50	U	0.50	2.5	U	2.5
1,2,4-Trimethylbenzene	95-63-6	0.50	U	0.50	2.5	U	2.5
1,2-Dichlorotetrafluoroethane	76-14-2	0.50	U	0.50	3.5	U	3.5
1,2-Dibromoethane	106-93-4	0.50	U	0.50	3.8	U	3.8
1,3-Butadiene	106-99-0	0.50	U	0.50	1.1	U	1.1
Carbon Disulfide	75-15-0	0.50	U	0.50	1.6	U	1.6
Acetone	67-64-1	5.0	U	5.0	12	U	12
Isopropyl Alcohol	67-63-0	5.0	U	5.0	12	U	12
Methyl tert-Butyl Ether	1634-04-4	0.50	U	0.50	1.8	U	1.8
Cyclohexane	110-82-7	0.50	U	0.50	1.7	U	1.7
Dibromochloromethane	124-48-1	0.50	U	0.50	4.3	U	4.3
Methyl Ethyl Ketone	78-93-3	0.71	U	0.50	2.1	U	1.5
Methyl Isobutyl Ketone	108-10-1	0.50	U	0.50	2.0	U	2.0
Methyl Butyl Ketone	591-78-6	0.50	U	0.50	2.0	U	2.0
Bromodichloromethane	75-27-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0
4-Ethyltoluene	622-96-8	0.50	U	0.50	2.5	U	2.5
2-Chlorotoluene	95-49-8	0.50	U	0.50	2.6	U	2.6
n-Hexane	110-54-3	0.50	U	0.50	1.8	U	1.8
Tetrahydrofuran	109-99-9	5.0	U	5.0	15	U	15
n-Heptane	142-82-5	0.50	U	0.50	2.0	U	2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-GRAPHIQUE

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571916

Date Analyzed: 06/09/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.82		0.50	4.1		2.5
Chloromethane	74-87-3	0.56		0.50	1.2		1.0
Vinyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
Bromomethane	74-83-9	0.50	U	0.50	1.9	U	1.9
Chloroethane	75-00-3	0.50	U	0.50	1.3	U	1.3
Trichlorofluoromethane	75-69-4	0.50	U	0.50	2.8	U	2.8
Freon TF	76-13-1	0.50	U	0.50	3.8	U	3.8
1,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
Methylene Chloride	75-09-2	0.50	U	0.50	1.7	U	1.7
1,1-Dichloroethane	75-34-3	0.50	U	0.50	2.0	U	2.0
cis-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
Chloroform	67-66-3	0.50	U	0.50	2.4	U	2.4
1,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
Carbon Tetrachloride	56-23-5	0.50	U	0.50	3.1	U	3.1
Benzene	71-43-2	0.76		0.50	2.4		1.6
1,2-Dichloroethane	107-06-2	0.50	U	0.50	2.0	U	2.0
Trichloroethene	79-01-6	0.50	U	0.50	2.7	U	2.7
1,2-Dichloropropane	78-87-5	0.50	U	0.50	2.3	U	2.3
cis-1,3-Dichloropropene	10061-01-5	0.50	U	0.50	2.3	U	2.3
Toluene	108-88-3	1.1		0.50	4.1		1.9
trans-1,3-Dichloropropene	10061-02-6	0.50	U	0.50	2.3	U	2.3
1,1,2-Trichloroethane	79-00-5	0.50	U	0.50	2.7	U	2.7
Tetrachloroethene	127-18-4	0.50	U	0.50	3.4	U	3.4
Chlorobenzene	108-90-7	0.50	U	0.50	2.3	U	2.3
Ethylbenzene	100-41-4	0.50	U	0.50	2.2	U	2.2
Xylene (m,p)	1330-20-7	0.72		0.50	3.1		2.2
Styrene	100-42-5	0.50	U	0.50	2.1	U	2.1
Xylene (o)	95-47-6	0.50	U	0.50	2.2	U	2.2
1,1,2,2-Tetrachloroethane	79-34-5	0.50	U	0.50	3.4	U	3.4
1,3-Dichlorobenzene	541-73-1	0.50	U	0.50	3.0	U	3.0
1,4-Dichlorobenzene	106-46-7	0.50	U	0.50	3.0	U	3.0
1,2-Dichlorobenzene	95-50-1	0.50	U	0.50	3.0	U	3.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-GRAPHIQUE

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571916

Date Analyzed: 06/09/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2,4-Trichlorobenzene	120-82-1	0.50	U	0.50	3.7	U	3.7
Hexachlorobutadiene	87-68-3	0.50	U	0.50	5.3	U	5.3
1,3,5-Trimethylbenzene	108-67-8	0.50	U	0.50	2.5	U	2.5
1,2,4-Trimethylbenzene	95-63-6	0.50	U	0.50	2.5	U	2.5
1,2-Dichlorotetrafluoroethane	76-14-2	0.50	U	0.50	3.5	U	3.5
1,2-Dibromoethane	106-93-4	0.50	U	0.50	3.8	U	3.8
1,3-Butadiene	106-99-0	1.1		0.50	2.4		1.1
Carbon Disulfide	75-15-0	0.50	U	0.50	1.6	U	1.6
Acetone	67-64-1	8.4		5.0	20		12
Isopropyl Alcohol	67-63-0	5.0	U	5.0	12	U	12
Methyl tert-Butyl Ether	1634-04-4	0.50	U	0.50	1.8	U	1.8
Cyclohexane	110-82-7	0.50	U	0.50	1.7	U	1.7
Dibromochloromethane	124-48-1	0.50	U	0.50	4.3	U	4.3
Methyl Ethyl Ketone	78-93-3	1.3	U	0.50	3.8	U	1.5
Methyl Isobutyl Ketone	108-10-1	0.50	U	0.50	2.0	U	2.0
Methyl Butyl Ketone	591-78-6	0.50	U	0.50	2.0	U	2.0
Bromodichloromethane	75-27-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0
4-Ethyltoluene	622-96-8	0.50	U	0.50	2.5	U	2.5
2-Chlorotoluene	95-49-8	0.50	U	0.50	2.6	U	2.6
n-Hexane	110-54-3	0.50	U	0.50	1.8	U	1.8
Tetrahydrofuran	109-99-9	5.0	U	5.0	15	U	15
n-Heptane	142-82-5	0.50	U	0.50	2.0	U	2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-SACCO/B

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571917

Date Analyzed: 06/09/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.81		0.50	4.0		2.5
Chloromethane	74-87-3	0.50	U	0.50	1.0	U	1.0
Vinyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
Bromomethane	74-83-9	0.50	U	0.50	1.9	U	1.9
Chloroethane	75-00-3	0.50	U	0.50	1.3	U	1.3
Trichlorofluoromethane	75-69-4	0.50	U	0.50	2.8	U	2.8
Freon TF	76-13-1	0.50	U	0.50	3.8	U	3.8
1,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
Methylene Chloride	75-09-2	0.50	U	0.50	1.7	U	1.7
1,1-Dichloroethane	75-34-3	0.50	U	0.50	2.0	U	2.0
cis-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
Chloroform	67-66-3	0.51		0.50	2.5		2.4
1,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
Carbon Tetrachloride	56-23-5	0.50	U	0.50	3.1	U	3.1
Benzene	71-43-2	0.76		0.50	2.4		1.6
1,2-Dichloroethane	107-06-2	0.50	U	0.50	2.0	U	2.0
Trichloroethene	79-01-6	0.50	U	0.50	2.7	U	2.7
1,2-Dichloropropane	78-87-5	0.50	U	0.50	2.3	U	2.3
cis-1,3-Dichloropropene	10061-01-5	0.50	U	0.50	2.3	U	2.3
Toluene	108-88-3	2.1		0.50	7.9		1.9
trans-1,3-Dichloropropene	10061-02-6	0.50	U	0.50	2.3	U	2.3
1,1,2-Trichloroethane	79-00-5	0.50	U	0.50	2.7	U	2.7
Tetrachloroethene	127-18-4	0.50	U	0.50	3.4	U	3.4
Chlorobenzene	108-90-7	0.50	U	0.50	2.3	U	2.3
Ethylbenzene	100-41-4	0.61		0.50	2.6		2.2
Xylene (m,p)	1330-20-7	1.8		0.50	7.8		2.2
Styrene	100-42-5	0.50	U	0.50	2.1	U	2.1
Xylene (o)	95-47-6	0.62		0.50	2.7		2.2
1,1,2,2-Tetrachloroethane	79-34-5	0.50	U	0.50	3.4	U	3.4
1,3-Dichlorobenzene	541-73-1	0.50	U	0.50	3.0	U	3.0
1,4-Dichlorobenzene	106-46-7	0.50	U	0.50	3.0	U	3.0
1,2-Dichlorobenzene	95-50-1	0.50	U	0.50	3.0	U	3.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-SACCO/B

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571917

Date Analyzed: 06/09/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2,4-Trichlorobenzene	120-82-1	0.50	U	0.50	3.7	U	3.7
Hexachlorobutadiene	87-68-3	0.50	U	0.50	5.3	U	5.3
1,3,5-Trimethylbenzene	108-67-8	0.50	U	0.50	2.5	U	2.5
1,2,4-Trimethylbenzene	95-63-6	0.68		0.50	3.3		2.5
1,2-Dichlorotetrafluoroethane	76-14-2	0.50	U	0.50	3.5	U	3.5
1,2-Dibromoethane	106-93-4	0.50	U	0.50	3.8	U	3.8
1,3-Butadiene	106-99-0	1.4		0.50	3.1		1.1
Carbon Disulfide	75-15-0	1.1		0.50	3.4		1.6
Acetone	67-64-1	20		5.0	48		12
Isopropyl Alcohol	67-63-0	5.0	U	5.0	12	U	12
Methyl tert-Butyl Ether	1634-04-4	0.51		0.50	1.8		1.8
Cyclohexane	110-82-7	0.50	U	0.50	1.7	U	1.7
Dibromochloromethane	124-48-1	0.50	U	0.50	4.3	U	4.3
Methyl Ethyl Ketone	78-93-3	2.6	U	0.50	7.7	U	1.5
Methyl Isobutyl Ketone	108-10-1	0.50	U	0.50	2.0	U	2.0
Methyl Butyl Ketone	591-78-6	0.50	U	0.50	2.0	U	2.0
Bromodichloromethane	75-27-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0
4-Ethyltoluene	622-96-8	0.51		0.50	2.5		2.5
2-Chlorotoluene	95-49-8	0.50	U	0.50	2.6	U	2.6
n-Hexane	110-54-3	0.57		0.50	2.0		1.8
Tetrahydrofuran	109-99-9	5.0	U	5.0	15	U	15
n-Heptane	142-82-5	0.50	U	0.50	2.0	U	2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-PACER

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571918

Date Analyzed: 06/09/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.77		0.50	3.8		2.5
Chloromethane	74-87-3	0.57		0.50	1.2		1.0
Vinyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
Bromomethane	74-83-9	0.50	U	0.50	1.9	U	1.9
Chloroethane	75-00-3	0.50	U	0.50	1.3	U	1.3
Trichlorofluoromethane	75-69-4	0.50	U	0.50	2.8	U	2.8
Freon TF	76-13-1	0.50	U	0.50	3.8	U	3.8
1,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
Methylene Chloride	75-09-2	0.50	U	0.50	1.7	U	1.7
1,1-Dichloroethane	75-34-3	0.50	U	0.50	2.0	U	2.0
cis-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
Chloroform	67-66-3	0.50	U	0.50	2.4	U	2.4
1,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
Carbon Tetrachloride	56-23-5	0.50	U	0.50	3.1	U	3.1
Benzene	71-43-2	5.5		0.50	18		1.6
1,2-Dichloroethane	107-06-2	0.50	U	0.50	2.0	U	2.0
Trichloroethene	79-01-6	0.50	U	0.50	2.7	U	2.7
1,2-Dichloropropane	78-87-5	0.50	U	0.50	2.3	U	2.3
cis-1,3-Dichloropropene	10061-01-5	0.50	U	0.50	2.3	U	2.3
Toluene	108-88-3	6.9		0.50	26		1.9
trans-1,3-Dichloropropene	10061-02-6	0.50	U	0.50	2.3	U	2.3
1,1,2-Trichloroethane	79-00-5	0.50	U	0.50	2.7	U	2.7
Tetrachloroethene	127-18-4	0.50	U	0.50	3.4	U	3.4
Chlorobenzene	108-90-7	0.50	U	0.50	2.3	U	2.3
Ethylbenzene	100-41-4	0.97		0.50	4.2		2.2
Xylene (m,p)	1330-20-7	2.6		0.50	11		2.2
Styrene	100-42-5	0.50	U	0.50	2.1	U	2.1
Xylene (o)	95-47-6	0.84		0.50	3.6		2.2
1,1,2,2-Tetrachloroethane	79-34-5	0.50	U	0.50	3.4	U	3.4
1,3-Dichlorobenzene	541-73-1	0.50	U	0.50	3.0	U	3.0
1,4-Dichlorobenzene	106-46-7	0.50	U	0.50	3.0	U	3.0
1,2-Dichlorobenzene	95-50-1	0.50	U	0.50	3.0	U	3.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-PACER

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571918

Date Analyzed: 06/09/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2,4-Trichlorobenzene	120-82-1	0.50	U	0.50	3.7	U	3.7
Hexachlorobutadiene	87-68-3	0.50	U	0.50	5.3	U	5.3
1,3,5-Trimethylbenzene	108-67-8	0.50	U	0.50	2.5	U	2.5
1,2,4-Trimethylbenzene	95-63-6	0.50	U	0.50	2.5	U	2.5
1,2-Dichlorotetrafluoroethane	76-14-2	0.50	U	0.50	3.5	U	3.5
1,2-Dibromoethane	106-93-4	0.50	U	0.50	3.8	U	3.8
1,3-Butadiene	106-99-0	9.1		0.50	20		1.1
Carbon Disulfide	75-15-0	1.0		0.50	3.1		1.6
Acetone	67-64-1	96	E	5.0	230	E	12
Isopropyl Alcohol	67-63-0	5.0	U	5.0	12	U	12
Methyl tert-Butyl Ether	1634-04-4	1.3		0.50	4.7		1.8
Cyclohexane	110-82-7	0.71		0.50	2.4		1.7
Dibromochloromethane	124-48-1	0.50	U	0.50	4.3	U	4.3
Methyl Ethyl Ketone	78-93-3	39	U	0.50	120	U	1.5
Methyl Isobutyl Ketone	108-10-1	0.50	U	0.50	2.0	U	2.0
Methyl Butyl Ketone	591-78-6	0.50	U	0.50	2.0	U	2.0
Bromodichloromethane	75-27-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0
4-Ethyltoluene	622-96-8	0.50	U	0.50	2.5	U	2.5
2-Chlorotoluene	95-49-8	0.50	U	0.50	2.6	U	2.6
n-Hexane	110-54-3	3.8		0.50	13		1.8
Tetrahydrofuran	109-99-9	5.0	U	5.0	15	U	15
n-Heptane	142-82-5	2.7		0.50	11		2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-PACERDL

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571918D1

Date Analyzed: 06/10/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	2.0	U	2.0	9.9	U	9.9
Chloromethane	74-87-3	2.0	U	2.0	4.1	U	4.1
Vinyl Chloride	75-01-4	2.0	U	2.0	5.1	U	5.1
Bromomethane	74-83-9	2.0	U	2.0	7.8	U	7.8
Chloroethane	75-00-3	2.0	U	2.0	5.3	U	5.3
Trichlorofluoromethane	75-69-4	2.0	U	2.0	11	U	11
Freon TF	76-13-1	2.0	U	2.0	15	U	15
1,1-Dichloroethene	75-35-4	2.0	U	2.0	7.9	U	7.9
Methylene Chloride	75-09-2	2.0	U	2.0	6.9	U	6.9
1,1-Dichloroethane	75-34-3	2.0	U	2.0	8.1	U	8.1
cis-1,2-Dichloroethene	156-59-2	2.0	U	2.0	7.9	U	7.9
Chloroform	67-66-3	2.0	U	2.0	9.8	U	9.8
1,1,1-Trichloroethane	71-55-6	2.0	U	2.0	11	U	11
Carbon Tetrachloride	56-23-5	2.0	U	2.0	13	U	13
Benzene	71-43-2	5.2	D	2.0	17	D	6.4
1,2-Dichloroethane	107-06-2	2.0	U	2.0	8.1	U	8.1
Trichloroethene	79-01-6	2.0	U	2.0	11	U	11
1,2-Dichloropropane	78-87-5	2.0	U	2.0	9.2	U	9.2
cis-1,3-Dichloropropene	10061-01-5	2.0	U	2.0	9.1	U	9.1
Toluene	108-88-3	6.4	D	2.0	24	D	7.5
rans-1,3-Dichloropropene	10061-02-6	2.0	U	2.0	9.1	U	9.1
1,1,2-Trichloroethane	79-00-5	2.0	U	2.0	11	U	11
Tetrachloroethene	127-18-4	2.0	U	2.0	14	U	14
Chlorobenzene	108-90-7	2.0	U	2.0	9.2	U	9.2
Ethylbenzene	100-41-4	2.0	U	2.0	8.7	U	8.7
Xylene (m,p)	1330-20-7	2.5	D	2.0	11	D	8.7
Styrene	100-42-5	2.0	U	2.0	8.5	U	8.5
Xylene (o)	95-47-6	2.0	U	2.0	8.7	U	8.7
,1,2,2-Tetrachloroethane	79-34-5	2.0	U	2.0	14	U	14
,3-Dichlorobenzene	541-73-1	2.0	U	2.0	12	U	12
,4-Dichlorobenzene	106-46-7	2.0	U	2.0	12	U	12
,2-Dichlorobenzene	95-50-1	2.0	U	2.0	12	U	12

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-PACERDL

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: Air

Lab Sample No.: 571918D1

Date Analyzed: 06/10/04

Date Received: 05/15/04

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2,4-Trichlorobenzene	120-82-1	2.0	U	2.0	15	U	15
Hexachlorobutadiene	87-68-3	2.0	U	2.0	21	U	21
1,3,5-Trimethylbenzene	108-67-8	2.0	U	2.0	9.8	U	9.8
1,2,4-Trimethylbenzene	95-63-6	2.0	U	2.0	9.8	U	9.8
1,2-Dichlorotetrafluoroethane	76-14-2	2.0	U	2.0	14	U	14
1,2-Dibromoethane	106-93-4	2.0	U	2.0	15	U	15
1,3-Butadiene	106-99-0	7.8	D	2.0	17	D	4.4
Carbon Disulfide	75-15-0	2.0	U	2.0	6.2	U	6.2
Acetone	67-64-1	89	D	20	210	D	48
Isopropyl Alcohol	67-63-0	20	U	20	49	U	49
Methyl tert-Butyl Ether	1634-04-4	2.0	U	2.0	7.2	U	7.2
Cyclohexane	110-82-7	2.0	U	2.0	6.9	U	6.9
Dibromochloromethane	124-48-1	2.0	U	2.0	17	U	17
Methyl Ethyl Ketone	78-93-3	38	U	2.0	110	U	5.9
Methyl Isobutyl Ketone	108-10-1	2.0	U	2.0	8.2	U	8.2
Methyl Butyl Ketone	591-78-6	2.0	U	2.0	8.2	U	8.2
Bromodichloromethane	75-27-4	2.0	U	2.0	13	U	13
trans-1,2-Dichloroethene	156-60-5	2.0	U	2.0	7.9	U	7.9
4-Ethyltoluene	622-96-8	2.0	U	2.0	9.8	U	9.8
2-Chlorotoluene	95-49-8	2.0	U	2.0	10	U	10
n-Hexane	110-54-3	3.8	D	2.0	13	D	7.0
Tetrahydrofuran	109-99-9	20	U	20	59	U	59
n-Heptane	142-82-5	2.0	U	2.0	8.2	U	8.2

TO-14/15
Result Summary

CLIENT SAMPLE NO.

ABLKW9

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: AIR

Lab Sample No.: ABLKW9

Date Analyzed: 06/08/04

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.50	U	0.50	2.5	U	2.5
Chloromethane	74-87-3	0.50	U	0.50	1.0	U	1.0
Vinyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
Bromomethane	74-83-9	0.50	U	0.50	1.9	U	1.9
Chloroethane	75-00-3	0.50	U	0.50	1.3	U	1.3
Trichlorofluoromethane	75-69-4	0.50	U	0.50	2.8	U	2.8
Freon TF	76-13-1	0.50	U	0.50	3.8	U	3.8
1,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
Methylene Chloride	75-09-2	0.50	U	0.50	1.7	U	1.7
1,1-Dichloroethane	75-34-3	0.50	U	0.50	2.0	U	2.0
cis-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
Chloroform	67-66-3	0.50	U	0.50	2.4	U	2.4
1,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
Carbon Tetrachloride	56-23-5	0.50	U	0.50	3.1	U	3.1
Benzene	71-43-2	0.50	U	0.50	1.6	U	1.6
1,2-Dichloroethane	107-06-2	0.50	U	0.50	2.0	U	2.0
Trichloroethene	79-01-6	0.50	U	0.50	2.7	U	2.7
1,2-Dichloropropane	78-87-5	0.50	U	0.50	2.3	U	2.3
cis-1,3-Dichloropropene	10061-01-5	0.50	U	0.50	2.3	U	2.3
Toluene	108-88-3	0.50	U	0.50	1.9	U	1.9
trans-1,3-Dichloropropene	10061-02-6	0.50	U	0.50	2.3	U	2.3
1,1,2-Trichloroethane	79-00-5	0.50	U	0.50	2.7	U	2.7
Tetrachloroethene	127-18-4	0.50	U	0.50	3.4	U	3.4
Chlorobenzene	108-90-7	0.50	U	0.50	2.3	U	2.3
Ethylbenzene	100-41-4	0.50	U	0.50	2.2	U	2.2
Xylene (m,p)	1330-20-7	0.50	U	0.50	2.2	U	2.2
Styrene	100-42-5	0.50	U	0.50	2.1	U	2.1
Xylene (o)	95-47-6	0.50	U	0.50	2.2	U	2.2
1,1,2,2-Tetrachloroethane	79-34-5	0.50	U	0.50	3.4	U	3.4
1,3-Dichlorobenzene	541-73-1	0.50	U	0.50	3.0	U	3.0
1,4-Dichlorobenzene	106-46-7	0.50	U	0.50	3.0	U	3.0
1,2-Dichlorobenzene	95-50-1	0.50	U	0.50	3.0	U	3.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

ABLKW9

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: AIR

Lab Sample No.: ABLKW9

Date Analyzed: 06/08/04

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2,4-Trichlorobenzene	120-82-1	0.50	U	0.50	3.7	U	3.7
Hexachlorobutadiene	87-68-3	0.50	U	0.50	5.3	U	5.3
1,3,5-Trimethylbenzene	108-67-8	0.50	U	0.50	2.5	U	2.5
1,2,4-Trimethylbenzene	95-63-6	0.50	U	0.50	2.5	U	2.5
1,2-Dichlorotetrafluoroethane	76-14-2	0.50	U	0.50	3.5	U	3.5
1,2-Dibromoethane	106-93-4	0.50	U	0.50	3.8	U	3.8
1,3-Butadiene	106-99-0	0.50	U	0.50	1.1	U	1.1
Carbon Disulfide	75-15-0	0.50	U	0.50	1.6	U	1.6
Acetone	67-64-1	5.0	U	5.0	12	U	12
Isopropyl Alcohol	67-63-0	5.0	U	5.0	12	U	12
Methyl tert-Butyl Ether	1634-04-4	0.50	U	0.50	1.8	U	1.8
Cyclohexane	110-82-7	0.50	U	0.50	1.7	U	1.7
Dibromochloromethane	124-48-1	0.50	U	0.50	4.3	U	4.3
Methyl Ethyl Ketone	78-93-3	0.50	U	0.50	1.5	U	1.5
Methyl Isobutyl Ketone	108-10-1	0.50	U	0.50	2.0	U	2.0
Methyl Butyl Ketone	591-78-6	0.50	U	0.50	2.0	U	2.0
Bromodichloromethane	75-27-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0
4-Ethyltoluene	622-96-8	0.50	U	0.50	2.5	U	2.5
2-Chlorotoluene	95-49-8	0.50	U	0.50	2.6	U	2.6
n-Hexane	110-54-3	0.50	U	0.50	1.8	U	1.8
Tetrahydrofuran	109-99-9	5.0	U	5.0	15	U	15
n-Heptane	142-82-5	0.50	U	0.50	2.0	U	2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

ABLKX1

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: AIR

Lab Sample No.: ABLKX1

Date Analyzed: 06/09/04

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.50	U	0.50	2.5	U	2.5
Chloromethane	74-87-3	0.50	U	0.50	1.0	U	1.0
Vinyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
Bromomethane	74-83-9	0.50	U	0.50	1.9	U	1.9
Chloroethane	75-00-3	0.50	U	0.50	1.3	U	1.3
Trichlorofluoromethane	75-69-4	0.50	U	0.50	2.8	U	2.8
Freon TF	76-13-1	0.50	U	0.50	3.8	U	3.8
1,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
Methylene Chloride	75-09-2	0.50	U	0.50	1.7	U	1.7
1,1-Dichloroethane	75-34-3	0.50	U	0.50	2.0	U	2.0
cis-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
Chloroform	67-66-3	0.50	U	0.50	2.4	U	2.4
1,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
Carbon Tetrachloride	56-23-5	0.50	U	0.50	3.1	U	3.1
Benzene	71-43-2	0.50	U	0.50	1.6	U	1.6
1,2-Dichloroethane	107-06-2	0.50	U	0.50	2.0	U	2.0
Trichloroethene	79-01-6	0.50	U	0.50	2.7	U	2.7
1,2-Dichloropropane	78-87-5	0.50	U	0.50	2.3	U	2.3
cis-1,3-Dichloropropene	10061-01-5	0.50	U	0.50	2.3	U	2.3
Toluene	108-88-3	0.50	U	0.50	1.9	U	1.9
trans-1,3-Dichloropropene	10061-02-6	0.50	U	0.50	2.3	U	2.3
1,1,2-Trichloroethane	79-00-5	0.50	U	0.50	2.7	U	2.7
Tetrachloroethene	127-18-4	0.50	U	0.50	3.4	U	3.4
Chlorobenzene	108-90-7	0.50	U	0.50	2.3	U	2.3
Ethylbenzene	100-41-4	0.50	U	0.50	2.2	U	2.2
Xylene (m,p)	1330-20-7	0.50	U	0.50	2.2	U	2.2
Styrene	100-42-5	0.50	U	0.50	2.1	U	2.1
Xylene (o)	95-47-6	0.50	U	0.50	2.2	U	2.2
1,1,2,2-Tetrachloroethane	79-34-5	0.50	U	0.50	3.4	U	3.4
1,3-Dichlorobenzene	541-73-1	0.50	U	0.50	3.0	U	3.0
1,4-Dichlorobenzene	106-46-7	0.50	U	0.50	3.0	U	3.0
1,2-Dichlorobenzene	95-50-1	0.50	U	0.50	3.0	U	3.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

ABLKX1

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: AIR

Lab Sample No.: ABLKX1

Date Analyzed: 06/09/04

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2,4-Trichlorobenzene	120-82-1	0.50	U	0.50	3.7	U	3.7
Hexachlorobutadiene	87-68-3	0.50	U	0.50	5.3	U	5.3
1,3,5-Trimethylbenzene	108-67-8	0.50	U	0.50	2.5	U	2.5
1,2,4-Trimethylbenzene	95-63-6	0.50	U	0.50	2.5	U	2.5
1,2-Dichlorotetrafluoroethane	76-14-2	0.50	U	0.50	3.5	U	3.5
1,2-Dibromoethane	106-93-4	0.50	U	0.50	3.8	U	3.8
1,3-Butadiene	106-99-0	0.50	U	0.50	1.1	U	1.1
Carbon Disulfide	75-15-0	0.50	U	0.50	1.6	U	1.6
Acetone	67-64-1	5.0	U	5.0	12	U	12
Isopropyl Alcohol	67-63-0	5.0	U	5.0	12	U	12
Methyl tert-Butyl Ether	1634-04-4	0.50	U	0.50	1.8	U	1.8
Cyclohexane	110-82-7	0.50	U	0.50	1.7	U	1.7
Dibromochloromethane	124-48-1	0.50	U	0.50	4.3	U	4.3
Methyl Ethyl Ketone	78-93-3	0.50	U	0.50	1.5	U	1.5
Methyl Isobutyl Ketone	108-10-1	0.50	U	0.50	2.0	U	2.0
Methyl Butyl Ketone	591-78-6	0.50	U	0.50	2.0	U	2.0
Bromodichloromethane	75-27-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0
4-Ethyltoluene	622-96-8	0.50	U	0.50	2.5	U	2.5
2-Chlorotoluene	95-49-8	0.50	U	0.50	2.6	U	2.6
n-Hexane	110-54-3	0.50	U	0.50	1.8	U	1.8
Tetrahydrofuran	109-99-9	5.0	U	5.0	15	U	15
n-Heptane	142-82-5	0.50	U	0.50	2.0	U	2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

W9ICVLCS

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: AIR

Lab Sample No.: W9ICVLC

Date Analyzed: 06/08/04

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	11		0.50	54		2.5
Chloromethane	74-87-3	11		0.50	23		1.0
Vinyl Chloride	75-01-4	11		0.50	28		1.3
Bromomethane	74-83-9	12		0.50	47		1.9
Chloroethane	75-00-3	11		0.50	29		1.3
Trichlorofluoromethane	75-69-4	12		0.50	67		2.8
Freon TF	76-13-1	12		0.50	92		3.8
1,1-Dichloroethene	75-35-4	12		0.50	48		2.0
Methylene Chloride	75-09-2	10		0.50	35		1.7
1,1-Dichloroethane	75-34-3	12		0.50	49		2.0
cis-1,2-Dichloroethene	156-59-2	11		0.50	44		2.0
Chloroform	67-66-3	12		0.50	59		2.4
1,1,1-Trichloroethane	71-55-6	12		0.50	65		2.7
Carbon Tetrachloride	56-23-5	12		0.50	75		3.1
Benzene	71-43-2	11		0.50	35		1.6
1,2-Dichloroethane	107-06-2	12		0.50	49		2.0
Trichloroethene	79-01-6	12		0.50	64		2.7
1,2-Dichloropropane	78-87-5	11		0.50	51		2.3
cis-1,3-Dichloropropene	10061-01-5	11		0.50	50		2.3
Toluene	108-88-3	11		0.50	41		1.9
trans-1,3-Dichloropropene	10061-02-6	11		0.50	50		2.3
1,1,2-Trichloroethane	79-00-5	12		0.50	65		2.7
Tetrachloroethene	127-18-4	12		0.50	81		3.4
Chlorobenzene	108-90-7	12		0.50	55		2.3
Ethylbenzene	100-41-4	12		0.50	52		2.2
Xylene (m,p)	1330-20-7	24		0.50	100		2.2
Styrene	100-42-5	12		0.50	51		2.1
Xylene (o)	95-47-6	12		0.50	52		2.2
1,1,2,2-Tetrachloroethane	79-34-5	12		0.50	82		3.4
1,3-Dichlorobenzene	541-73-1	13		0.50	78		3.0
1,4-Dichlorobenzene	106-46-7	12		0.50	72		3.0
1,2-Dichlorobenzene	95-50-1	13		0.50	78		3.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

W9ICVLCS

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: AIR

Lab Sample No.: W9ICVLC

Date Analyzed: 06/08/04

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2,4-Trichlorobenzene	120-82-1	13		0.50	96		3.7
Hexachlorobutadiene	87-68-3	13		0.50	140		5.3
1,3,5-Trimethylbenzene	108-67-8	10		0.50	49		2.5
1,2,4-Trimethylbenzene	95-63-6	12		0.50	59		2.5
1,2-Dichlorotetrafluoroethane	76-14-2	12		0.50	84		3.5
1,2-Dibromoethane	106-93-4	12		0.50	92		3.8
1,3-Butadiene	106-99-0	11		0.50	24		1.1
Carbon Disulfide	75-15-0	11		0.50	34		1.6
Acetone	67-64-1	16		5.0	38		12
Isopropyl Alcohol	67-63-0	11		5.0	27		12
Methyl tert-Butyl Ether	1634-04-4	12		0.50	43		1.8
Cyclohexane	110-82-7	11		0.50	38		1.7
Dibromochloromethane	124-48-1	12		0.50	100		4.3
Methyl Ethyl Ketone	78-93-3	11		0.50	32		1.5
Methyl Isobutyl Ketone	108-10-1	10		0.50	41		2.0
Methyl Butyl Ketone	591-78-6	9.4		0.50	39		2.0
Bromodichloromethane	75-27-4	12		0.50	80		3.4
trans-1,2-Dichloroethene	156-60-5	12		0.50	48		2.0
4-Ethyltoluene	622-96-8	13		0.50	64		2.5
2-Chlorotoluene	95-49-8	12		0.50	62		2.6
n-Hexane	110-54-3	11		0.50	39		1.8
Tetrahydrofuran	109-99-9	11		5.0	32		15
n-Heptane	142-82-5	12		0.50	49		2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

W9ICVLCSD

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: AIR

Lab Sample No.: W9ICVLC

Date Analyzed: 06/08/04

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	10		0.50	49		2.5
Chloromethane	74-87-3	9.9		0.50	20		1.0
Vinyl Chloride	75-01-4	9.3		0.50	24		1.3
Bromomethane	74-83-9	10		0.50	39		1.9
Chloroethane	75-00-3	10		0.50	26		1.3
Trichlorofluoromethane	75-69-4	11		0.50	62		2.8
Freon TF	76-13-1	10		0.50	77		3.8
1,1-Dichloroethene	75-35-4	10		0.50	40		2.0
Methylene Chloride	75-09-2	9.1		0.50	32		1.7
1,1-Dichloroethane	75-34-3	10		0.50	40		2.0
cis-1,2-Dichloroethene	156-59-2	9.8		0.50	39		2.0
Chloroform	67-66-3	10		0.50	49		2.4
1,1,1-Trichloroethane	71-55-6	10		0.50	55		2.7
Carbon Tetrachloride	56-23-5	10		0.50	63		3.1
Benzene	71-43-2	9.9		0.50	32		1.6
1,2-Dichloroethane	107-06-2	10		0.50	40		2.0
Trichloroethene	79-01-6	10		0.50	54		2.7
1,2-Dichloropropane	78-87-5	9.8		0.50	45		2.3
cis-1,3-Dichloropropene	10061-01-5	9.9		0.50	45		2.3
Toluene	108-88-3	9.9		0.50	37		1.9
trans-1,3-Dichloropropene	10061-02-6	9.9		0.50	45		2.3
1,1,2-Trichloroethane	79-00-5	10		0.50	55		2.7
Tetrachloroethene	127-18-4	11		0.50	75		3.4
Chlorobenzene	108-90-7	11		0.50	51		2.3
Ethylbenzene	100-41-4	10		0.50	43		2.2
Xylene (m,p)	1330-20-7	22		0.50	96		2.2
Styrene	100-42-5	10		0.50	43		2.1
Xylene (o)	95-47-6	11		0.50	48		2.2
1,1,2,2-Tetrachloroethane	79-34-5	11		0.50	76		3.4
1,3-Dichlorobenzene	541-73-1	11		0.50	66		3.0
1,4-Dichlorobenzene	106-46-7	11		0.50	66		3.0
1,2-Dichlorobenzene	95-50-1	11		0.50	66		3.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

W9ICVLCSD

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: AIR

Lab Sample No.: W9ICVLC

Date Analyzed: 06/08/04

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2,4-Trichlorobenzene	120-82-1	11		0.50	82		3.7
Hexachlorobutadiene	87-68-3	11		0.50	120		5.3
1,3,5-Trimethylbenzene	108-67-8	9.6		0.50	47		2.5
1,2,4-Trimethylbenzene	95-63-6	10		0.50	49		2.5
1,2-Dichlorotetrafluoroethane	76-14-2	11		0.50	77		3.5
1,2-Dibromoethane	106-93-4	10		0.50	77		3.8
1,3-Butadiene	106-99-0	9.5		0.50	21		1.1
Carbon Disulfide	75-15-0	9.8		0.50	31		1.6
Acetone	67-64-1	13		5.0	31		12
Isopropyl Alcohol	67-63-0	9.3		5.0	23		12
Methyl tert-Butyl Ether	1634-04-4	10		0.50	36		1.8
Cyclohexane	110-82-7	9.9		0.50	34		1.7
Dibromochloromethane	124-48-1	10		0.50	85		4.3
Methyl Ethyl Ketone	78-93-3	9.8		0.50	29		1.5
Methyl Isobutyl Ketone	108-10-1	8.9		0.50	36		2.0
Methyl Butyl Ketone	591-78-6	8.1		0.50	33		2.0
Bromodichloromethane	75-27-4	10		0.50	67		3.4
trans-1,2-Dichloroethene	156-60-5	10		0.50	40		2.0
4-Ethyltoluene	622-96-8	11		0.50	54		2.5
2-Chlorotoluene	95-49-8	11		0.50	57		2.6
n-Hexane	110-54-3	9.4		0.50	33		1.8
Tetrahydrofuran	109-99-9	9.8		5.0	29		15
n-Heptane	142-82-5	10		0.50	41		2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

X1LCS

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: AIR

Lab Sample No.: X1LCS

Date Analyzed: 06/09/04

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	11		0.50	54		2.5
Chloromethane	74-87-3	10		0.50	21		1.0
Vinyl Chloride	75-01-4	9.4		0.50	24		1.3
Bromomethane	74-83-9	11		0.50	43		1.9
Chloroethane	75-00-3	10		0.50	26		1.3
Trichlorofluoromethane	75-69-4	11		0.50	62		2.8
Freon TF	76-13-1	11		0.50	84		3.8
1,1-Dichloroethene	75-35-4	10		0.50	40		2.0
Methylene Chloride	75-09-2	9.5		0.50	33		1.7
1,1-Dichloroethane	75-34-3	10		0.50	40		2.0
cis-1,2-Dichloroethene	156-59-2	9.9		0.50	39		2.0
Chloroform	67-66-3	11		0.50	54		2.4
1,1,1-Trichloroethane	71-55-6	11		0.50	60		2.7
Carbon Tetrachloride	56-23-5	11		0.50	69		3.1
Benzene	71-43-2	10		0.50	32		1.6
1,2-Dichloroethane	107-06-2	11		0.50	45		2.0
Trichloroethene	79-01-6	10		0.50	54		2.7
1,2-Dichloropropane	78-87-5	10		0.50	46		2.3
cis-1,3-Dichloropropene	10061-01-5	10		0.50	45		2.3
Toluene	108-88-3	9.9		0.50	37		1.9
trans-1,3-Dichloropropene	10061-02-6	10		0.50	45		2.3
1,1,2-Trichloroethane	79-00-5	10		0.50	55		2.7
Tetrachloroethene	127-18-4	11		0.50	75		3.4
Chlorobenzene	108-90-7	11		0.50	51		2.3
Ethylbenzene	100-41-4	11		0.50	48		2.2
Xylene (m,p)	1330-20-7	22		0.50	96		2.2
Styrene	100-42-5	10		0.50	43		2.1
Xylene (o)	95-47-6	11		0.50	48		2.2
,1,2,2-Tetrachloroethane	79-34-5	11		0.50	76		3.4
,3-Dichlorobenzene	541-73-1	11		0.50	66		3.0
,4-Dichlorobenzene	106-46-7	12		0.50	72		3.0
,2-Dichlorobenzene	95-50-1	12		0.50	72		3.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

X1LCS

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: AIR

Lab Sample No.: X1LCS

Date Analyzed: 06/09/04

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2,4-Trichlorobenzene	120-82-1	12		0.50	89		3.7
Hexachlorobutadiene	87-68-3	12		0.50	130		5.3
1,3,5-Trimethylbenzene	108-67-8	12		0.50	59		2.5
1,2,4-Trimethylbenzene	95-63-6	11		0.50	54		2.5
1,2-Dichlorotetrafluoroethane	76-14-2	11		0.50	77		3.5
1,2-Dibromoethane	106-93-4	10		0.50	77		3.8
1,3-Butadiene	106-99-0	10		0.50	22		1.1
Carbon Disulfide	75-15-0	10		0.50	31		1.6
Acetone	67-64-1	15		5.0	36		12
Isopropyl Alcohol	67-63-0	9.8		5.0	24		12
Methyl tert-Butyl Ether	1634-04-4	11		0.50	40		1.8
Cyclohexane	110-82-7	10		0.50	34		1.7
Dibromochloromethane	124-48-1	11		0.50	94		4.3
Methyl Ethyl Ketone	78-93-3	10		0.50	29		1.5
Methyl Isobutyl Ketone	108-10-1	9.5		0.50	39		2.0
Methyl Butyl Ketone	591-78-6	8.6		0.50	35		2.0
Bromodichloromethane	75-27-4	11		0.50	74		3.4
trans-1,2-Dichloroethene	156-60-5	10		0.50	40		2.0
4-Ethyltoluene	622-96-8	10		0.50	49		2.5
2-Chlorotoluene	95-49-8	11		0.50	57		2.6
n-Hexane	110-54-3	9.6		0.50	34		1.8
Tetrahydrofuran	109-99-9	10		5.0	29		15
n-Heptane	142-82-5	11		0.50	45		2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

X1LCSD

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: AIR

Lab Sample No.: X1LCSD

Date Analyzed: 06/09/04

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	10		0.50	49		2.5
Chloromethane	74-87-3	10		0.50	21		1.0
Vinyl Chloride	75-01-4	9.4		0.50	24		1.3
Bromomethane	74-83-9	10		0.50	39		1.9
Chloroethane	75-00-3	10		0.50	26		1.3
Trichlorofluoromethane	75-69-4	11		0.50	62		2.8
Freon TF	76-13-1	11		0.50	84		3.8
1,1-Dichloroethene	75-35-4	10		0.50	40		2.0
Methylene Chloride	75-09-2	9.4		0.50	33		1.7
1,1-Dichloroethane	75-34-3	10		0.50	40		2.0
cis-1,2-Dichloroethene	156-59-2	9.7		0.50	38		2.0
Chloroform	67-66-3	10		0.50	49		2.4
1,1,1-Trichloroethane	71-55-6	11		0.50	60		2.7
Carbon Tetrachloride	56-23-5	11		0.50	69		3.1
Benzene	71-43-2	10		0.50	32		1.6
1,2-Dichloroethane	107-06-2	11		0.50	45		2.0
Trichloroethene	79-01-6	10		0.50	54		2.7
1,2-Dichloropropane	78-87-5	10		0.50	46		2.3
cis-1,3-Dichloropropene	10061-01-5	10		0.50	45		2.3
Toluene	108-88-3	9.9		0.50	37		1.9
trans-1,3-Dichloropropene	10061-02-6	10		0.50	45		2.3
1,1,2-Trichloroethane	79-00-5	10		0.50	55		2.7
Tetrachloroethene	127-18-4	11		0.50	75		3.4
Chlorobenzene	108-90-7	10		0.50	46		2.3
Ethylbenzene	100-41-4	10		0.50	43		2.2
Xylene (m,p)	1330-20-7	21		0.50	91		2.2
Styrene	100-42-5	10		0.50	43		2.1
Xylene (o)	95-47-6	10		0.50	43		2.2
1,1,2,2-Tetrachloroethane	79-34-5	11		0.50	76		3.4
1,3-Dichlorobenzene	541-73-1	11		0.50	66		3.0
1,4-Dichlorobenzene	106-46-7	11		0.50	66		3.0
1,2-Dichlorobenzene	95-50-1	11		0.50	66		3.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

X1LCSD

Lab Name: STL Burlington

SDG Number: 100226

Case Number:

Sample Matrix: AIR

Lab Sample No.: X1LCSD

Date Analyzed: 06/09/04

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2,4-Trichlorobenzene	120-82-1	12		0.50	89		3.7
Hexachlorobutadiene	87-68-3	15		0.50	160		5.3
1,3,5-Trimethylbenzene	108-67-8	12		0.50	59		2.5
1,2,4-Trimethylbenzene	95-63-6	11		0.50	54		2.5
1,2-Dichlorotetrafluoroethane	76-14-2	11		0.50	77		3.5
1,2-Dibromoethane	106-93-4	11		0.50	85		3.8
1,3-Butadiene	106-99-0	9.7		0.50	21		1.1
Carbon Disulfide	75-15-0	9.8		0.50	31		1.6
Acetone	67-64-1	14		5.0	33		12
Isopropyl Alcohol	67-63-0	9.8		5.0	24		12
Methyl tert-Butyl Ether	1634-04-4	11		0.50	40		1.8
Cyclohexane	110-82-7	10		0.50	34		1.7
Dibromochloromethane	124-48-1	11		0.50	94		4.3
Methyl Ethyl Ketone	78-93-3	10		0.50	29		1.5
Methyl Isobutyl Ketone	108-10-1	9.2		0.50	38		2.0
Methyl Butyl Ketone	591-78-6	8.5		0.50	35		2.0
Bromodichloromethane	75-27-4	11		0.50	74		3.4
trans-1,2-Dichloroethene	156-60-5	10		0.50	40		2.0
4-Ethyltoluene	622-96-8	10		0.50	49		2.5
2-Chlorotoluene	95-49-8	11		0.50	57		2.6
n-Hexane	110-54-3	9.9		0.50	35		1.8
Tetrahydrofuran	109-99-9	10		5.0	29		15
n-Heptane	142-82-5	11		0.50	45		2.0

TRENT STL

SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

CHAIN OF CUSTODY RECORD

Report to:
Company: ROUX ASSOCIATES
Address: 25 CORPORATE DR.
BURLINGTON, MA 01803
Contact: CHRIS MILONE
Phone: (781) 270-6600
Fax: (781) 270-9066
Contract/
Quote:

Invoice to:
Company: SAME
Address: AS
REPORT TO:
Contact:
Phone:
Fax:

ANALYSIS REQUESTED: TOIS

Lab Use Only
Due Date:

Temp. of coolers when received (C°):
1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Sampler's Name: C. MILONE
Sampler's Signature: C. Milone

Proj. No.: 066216M35
Project Name: Industri-plex

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	TOIS	Lab/Sample ID (Lab Use Only)
A	5/13/04	8:15		X	SG - ABC Roofing				1	X	
A	5/13/04	9:15		X	SG - Vining				1	X	
A	5/13/04	10:05		X	SG - Gangliani				1	X	
A	5/13/04	11:25		X	SG - SACCO/A				1	X	
A	5/13/04	13:20		X	SG - Graphique				1	X	
A	5/13/04	13:45		X	SG - SACCO/B				1	X	
A	5/14/04	10:20		X	SG - PACER				1	X	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
C. Milone	5/14/04	17:00	Heather Gough	5/15/04	1100
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Remarks: Keep batch open pending receipt of two more samples to be collected on May 21, 2004.

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____

STL cannot accept verbal changes. Please Fax written changes to

STL8234-200 (12/02)

SEVERN TRENT STL

METHOD TO-15

SAMPLE DATA SUMMARY PACKAGE

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-ABC ROOFING

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571912

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571912

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.77	
74-87-3	Chloromethane	0.69	
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	2.6	
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.70	
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	4.4	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.77	
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	2.4	
1330-20-7	Xylene (m,p)	7.7	
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	2.0	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-ABC ROOFING

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571912

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571912

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1.0	
95-63-6	1,2,4-Trimethylbenzene	2.8	
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	0.50	U
67-64-1	Acetone	66	E
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	3.4	
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	2.4	
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	3.2	
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	4.4	
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.85	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-ABC R
OOFINGDL

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571912D1

Sample wt/vol: 50.00 (g/mL) ML Lab File ID: 571912D

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/10/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 4.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	2.0	U
74-87-3	Chloromethane	2.0	U
75-01-4	Vinyl Chloride	2.0	U
74-83-9	Bromomethane	2.0	U
75-00-3	Chloroethane	2.0	U
75-69-4	Trichlorofluoromethane	2.0	U
76-13-1	Freon TF	2.0	U
75-35-4	1,1-Dichloroethene	2.0	U
75-09-2	Methylene Chloride	3.7	D
75-34-3	1,1-Dichloroethane	2.0	U
156-59-2	cis-1,2-Dichloroethene	2.0	U
67-66-3	Chloroform	2.0	U
71-55-6	1,1,1-Trichloroethane	2.0	U
56-23-5	Carbon Tetrachloride	2.0	U
71-43-2	Benzene	2.0	U
107-06-2	1,2-Dichloroethane	2.0	U
79-01-6	Trichloroethene	2.0	U
78-87-5	1,2-Dichloropropane	2.0	U
10061-01-5	cis-1,3-Dichloropropene	2.0	U
108-88-3	Toluene	5.1	D
10061-02-6	trans-1,3-Dichloropropene	2.0	U
79-00-5	1,1,2-Trichloroethane	2.0	U
127-18-4	Tetrachloroethene	2.0	U
108-90-7	Chlorobenzene	2.0	U
100-41-4	Ethylbenzene	2.9	D
1330-20-7	Xylene (m,p)	8.6	D
100-42-5	Styrene	2.0	U
95-47-6	Xylene (o)	2.2	D
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U
541-73-1	1,3-Dichlorobenzene	2.0	U
106-46-7	1,4-Dichlorobenzene	2.0	U
95-50-1	1,2-Dichlorobenzene	2.0	U
120-82-1	1,2,4-Trichlorobenzene	2.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-ABC R
OOFINGDL

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571912D1

Sample wt/vol: 50.00 (g/mL) ML Lab File ID: 571912D

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/10/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 4.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	2.0	U
108-67-8	1,3,5-Trimethylbenzene	2.0	U
95-63-6	1,2,4-Trimethylbenzene	2.9	D
76-14-2	1,2-Dichlorotetrafluoroethan	2.0	U
106-93-4	1,2-Dibromoethane	2.0	U
106-99-0	1,3-Butadiene	2.0	U
75-15-0	Carbon Disulfide	2.0	U
67-64-1	Acetone	74	D
67-63-0	Isopropyl Alcohol	20	U
1634-04-4	Methyl tert-Butyl Ether	2.0	U
110-82-7	Cyclohexane	2.0	U
124-48-1	Dibromochloromethane	2.0	U
78-93-3	Methyl Ethyl Ketone	3.2	D
108-10-1	Methyl Isobutyl Ketone	2.0	U
591-78-6	Methyl Butyl Ketone	2.0	U
75-27-4	Bromodichloromethane	2.0	U
156-60-5	trans-1,2-Dichloroethene	2.0	U
622-96-8	4-Ethyltoluene	3.4	D
95-49-8	2-Chlorotoluene	2.0	U
110-54-3	n-Hexane	3.9	D
109-99-9	Tetrahydrofuran	20	U
142-82-5	n-Heptane	2.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-GANGLIANI

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571914

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571914

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	24	
74-87-3	Chloromethane	0.73	
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.51	
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	3.8	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	2.9	
1330-20-7	Xylene (m,p)	11	
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	2.8	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-GANGLIANI

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571914

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571914

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.59	
95-63-6	1,2,4-Trimethylbenzene	1.8	
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	0.50	U
67-64-1	Acetone	16	
67-63-0	Isopropyl Alcohol	7.0	
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	1.2	
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	1.6	
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	0.97	
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-GRAPHIQUE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571916

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571916

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.82	
74-87-3	Chloromethane	0.56	
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.76	
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	1.1	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (m,p)	0.72	
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-GRAPHIQUE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571916

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571916

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	1.1	
75-15-0	Carbon Disulfide	0.50	U
67-64-1	Acetone	8.4	
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	1.3	
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	0.50	U
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-PACER

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571918

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571918

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.77	
74-87-3	Chloromethane	0.57	
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	5.5	
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	6.9	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.97	
1330-20-7	Xylene (m,p)	2.6	
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.84	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-PACER

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571918

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571918

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	9.1	
75-15-0	Carbon Disulfide	1.0	
67-64-1	Acetone	96	E
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.3	
110-82-7	Cyclohexane	0.71	
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	39	
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	3.8	
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	2.7	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-PACERDL

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571918D1

Sample wt/vol: 50.00 (g/mL) ML Lab File ID: 571918D

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/10/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 4.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	2.0	U
74-87-3	Chloromethane	2.0	U
75-01-4	Vinyl Chloride	2.0	U
74-83-9	Bromomethane	2.0	U
75-00-3	Chloroethane	2.0	U
75-69-4	Trichlorofluoromethane	2.0	U
76-13-1	Freon TF	2.0	U
75-35-4	1,1-Dichloroethene	2.0	U
75-09-2	Methylene Chloride	2.0	U
75-34-3	1,1-Dichloroethane	2.0	U
156-59-2	cis-1,2-Dichloroethene	2.0	U
67-66-3	Chloroform	2.0	U
71-55-6	1,1,1-Trichloroethane	2.0	U
56-23-5	Carbon Tetrachloride	2.0	U
71-43-2	Benzene	5.2	D
107-06-2	1,2-Dichloroethane	2.0	U
79-01-6	Trichloroethene	2.0	U
78-87-5	1,2-Dichloropropane	2.0	U
10061-01-5	cis-1,3-Dichloropropene	2.0	U
108-88-3	Toluene	6.4	D
10061-02-6	trans-1,3-Dichloropropene	2.0	U
79-00-5	1,1,2-Trichloroethane	2.0	U
127-18-4	Tetrachloroethene	2.0	U
108-90-7	Chlorobenzene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylene (m,p)	2.5	D
100-42-5	Styrene	2.0	U
95-47-6	Xylene (o)	2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U
541-73-1	1,3-Dichlorobenzene	2.0	U
106-46-7	1,4-Dichlorobenzene	2.0	U
95-50-1	1,2-Dichlorobenzene	2.0	U
120-82-1	1,2,4-Trichlorobenzene	2.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-PACERDL

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571918D1

Sample wt/vol: 50.00 (g/mL) ML Lab File ID: 571918D

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/10/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 4.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	2.0	U
108-67-8	1,3,5-Trimethylbenzene	2.0	U
95-63-6	1,2,4-Trimethylbenzene	2.0	U
76-14-2	1,2-Dichlorotetrafluoroethan	2.0	U
106-93-4	1,2-Dibromoethane	2.0	U
106-99-0	1,3-Butadiene	7.8	D
75-15-0	Carbon Disulfide	2.0	U
67-64-1	Acetone	89	D
67-63-0	Isopropyl Alcohol	20	U
1634-04-4	Methyl tert-Butyl Ether	2.0	U
110-82-7	Cyclohexane	2.0	U
124-48-1	Dibromochloromethane	2.0	U
78-93-3	Methyl Ethyl Ketone	38	D
108-10-1	Methyl Isobutyl Ketone	2.0	U
591-78-6	Methyl Butyl Ketone	2.0	U
75-27-4	Bromodichloromethane	2.0	U
156-60-5	trans-1,2-Dichloroethene	2.0	U
622-96-8	4-Ethyltoluene	2.0	U
95-49-8	2-Chlorotoluene	2.0	U
110-54-3	n-Hexane	3.8	D
109-99-9	Tetrahydrofuran	20	U
142-82-5	n-Heptane	2.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-SACCO_A

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571915

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571915

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.75	
74-87-3	Chloromethane	0.66	
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (m,p)	0.50	U
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-SACCO_A

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571915

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571915

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	0.50	U
67-64-1	Acetone	5.0	U
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	0.71	
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	0.50	U
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-SACCO_B

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571917

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571917

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.81	
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.51	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.76	
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	2.1	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.61	
1330-20-7	Xylene (m,p)	1.8	
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.62	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-SACCO_B

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571917

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571917

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.68	
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	1.4	
75-15-0	Carbon Disulfide	1.1	
67-64-1	Acetone	20	
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	0.51	
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	2.6	
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.51	
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	0.57	
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-VINING

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571913

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571913

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.88	
74-87-3	Chloromethane	0.65	
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.77	
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	5.8	
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.61	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (m,p)	0.50	U
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-VINING

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571913

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571913

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	0.50	U
67-64-1	Acetone	5.0	
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	0.50	U
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	4.1	
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ABLKW9

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: ABLKW9

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EFB002

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/08/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (m,p)	0.50	U
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ABLKW9

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: ABLKW9

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EFB002

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/08/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	0.50	U
67-64-1	Acetone	5.0	U
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	0.50	U
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	0.50	U
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ABLKX1

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: ABLKX1

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EFB002A

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (m,p)	0.50	U
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ABLKX1

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: ABLKX1

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EFB002A

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	0.50	U
67-64-1	Acetone	5.0	U
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	0.50	U
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	0.50	U
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

W9ICVLCS

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: W9ICVLCS

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EF010Q

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/08/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	11	
74-87-3	Chloromethane	11	
75-01-4	Vinyl Chloride	11	
74-83-9	Bromomethane	12	
75-00-3	Chloroethane	11	
75-69-4	Trichlorofluoromethane	12	
76-13-1	Freon TF	12	
75-35-4	1,1-Dichloroethene	12	
75-09-2	Methylene Chloride	10	
75-34-3	1,1-Dichloroethane	12	
156-59-2	cis-1,2-Dichloroethene	11	
67-66-3	Chloroform	12	
71-55-6	1,1,1-Trichloroethane	12	
56-23-5	Carbon Tetrachloride	12	
71-43-2	Benzene	11	
107-06-2	1,2-Dichloroethane	12	
79-01-6	Trichloroethene	12	
78-87-5	1,2-Dichloropropane	11	
10061-01-5	cis-1,3-Dichloropropene	11	
108-88-3	Toluene	11	
10061-02-6	trans-1,3-Dichloropropene	11	
79-00-5	1,1,2-Trichloroethane	12	
127-18-4	Tetrachloroethene	12	
108-90-7	Chlorobenzene	12	
100-41-4	Ethylbenzene	12	
1330-20-7	Xylene (m,p)	24	
100-42-5	Styrene	12	
95-47-6	Xylene (o)	12	
79-34-5	1,1,2,2-Tetrachloroethane	12	
541-73-1	1,3-Dichlorobenzene	13	
106-46-7	1,4-Dichlorobenzene	12	
95-50-1	1,2-Dichlorobenzene	13	
120-82-1	1,2,4-Trichlorobenzene	13	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

W9ICVLCS

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: W9ICVLCS

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EF010Q

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/08/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	13	
108-67-8	1,3,5-Trimethylbenzene	10	
95-63-6	1,2,4-Trimethylbenzene	12	
76-14-2	1,2-Dichlorotetrafluoroethan	12	
106-93-4	1,2-Dibromoethane	12	
106-99-0	1,3-Butadiene	11	
75-15-0	Carbon Disulfide	11	
67-64-1	Acetone	16	
67-63-0	Isopropyl Alcohol	11	
1634-04-4	Methyl tert-Butyl Ether	12	
110-82-7	Cyclohexane	11	
124-48-1	Dibromochloromethane	12	
78-93-3	Methyl Ethyl Ketone	11	
108-10-1	Methyl Isobutyl Ketone	10	
591-78-6	Methyl Butyl Ketone	9.4	
75-27-4	Bromodichloromethane	12	
156-60-5	trans-1,2-Dichloroethene	12	
622-96-8	4-Ethyltoluene	13	
95-49-8	2-Chlorotoluene	12	
110-54-3	n-Hexane	11	
109-99-9	Tetrahydrofuran	11	
142-82-5	n-Heptane	12	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

W9ICVLCSD

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: W9ICVLCSD

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EF010QD

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/08/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	10	
74-87-3	Chloromethane	9.9	
75-01-4	Vinyl Chloride	9.3	
74-83-9	Bromomethane	10	
75-00-3	Chloroethane	10	
75-69-4	Trichlorofluoromethane	11	
76-13-1	Freon TF	10	
75-35-4	1,1-Dichloroethene	10	
75-09-2	Methylene Chloride	9.1	
75-34-3	1,1-Dichloroethane	10	
156-59-2	cis-1,2-Dichloroethene	9.8	
67-66-3	Chloroform	10	
71-55-6	1,1,1-Trichloroethane	10	
56-23-5	Carbon Tetrachloride	10	
71-43-2	Benzene	9.9	
107-06-2	1,2-Dichloroethane	10	
79-01-6	Trichloroethene	10	
78-87-5	1,2-Dichloropropane	9.8	
10061-01-5	cis-1,3-Dichloropropene	9.9	
108-88-3	Toluene	9.9	
10061-02-6	trans-1,3-Dichloropropene	9.9	
79-00-5	1,1,2-Trichloroethane	10	
127-18-4	Tetrachloroethene	11	
108-90-7	Chlorobenzene	11	
100-41-4	Ethylbenzene	10	
1330-20-7	Xylene (m,p)	22	
100-42-5	Styrene	10	
95-47-6	Xylene (o)	11	
79-34-5	1,1,2,2-Tetrachloroethane	11	
541-73-1	1,3-Dichlorobenzene	11	
106-46-7	1,4-Dichlorobenzene	11	
95-50-1	1,2-Dichlorobenzene	11	
120-82-1	1,2,4-Trichlorobenzene	11	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

W9ICVLCSD

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: W9ICVLCSD

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EF010QD

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/08/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	11	
108-67-8	1,3,5-Trimethylbenzene	9.6	
95-63-6	1,2,4-Trimethylbenzene	10	
76-14-2	1,2-Dichlorotetrafluoroethan	11	
106-93-4	1,2-Dibromoethane	10	
106-99-0	1,3-Butadiene	9.5	
75-15-0	Carbon Disulfide	9.8	
67-64-1	Acetone	13	
67-63-0	Isopropyl Alcohol	9.3	
1634-04-4	Methyl tert-Butyl Ether	10	
110-82-7	Cyclohexane	9.9	
124-48-1	Dibromochloromethane	10	
78-93-3	Methyl Ethyl Ketone	9.8	
108-10-1	Methyl Isobutyl Ketone	8.9	
591-78-6	Methyl Butyl Ketone	8.1	
75-27-4	Bromodichloromethane	10	
156-60-5	trans-1,2-Dichloroethene	10	
622-96-8	4-Ethyltoluene	11	
95-49-8	2-Chlorotoluene	11	
110-54-3	n-Hexane	9.4	
109-99-9	Tetrahydrofuran	9.8	
142-82-5	n-Heptane	10	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

X1LCS

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: X1LCS

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EF010AQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	11	
74-87-3	Chloromethane	10	
75-01-4	Vinyl Chloride	9.4	
74-83-9	Bromomethane	11	
75-00-3	Chloroethane	10	
75-69-4	Trichlorofluoromethane	11	
76-13-1	Freon TF	11	
75-35-4	1,1-Dichloroethene	10	
75-09-2	Methylene Chloride	9.5	
75-34-3	1,1-Dichloroethane	10	
156-59-2	cis-1,2-Dichloroethene	9.9	
67-66-3	Chloroform	11	
71-55-6	1,1,1-Trichloroethane	11	
56-23-5	Carbon Tetrachloride	11	
71-43-2	Benzene	10	
107-06-2	1,2-Dichloroethane	11	
79-01-6	Trichloroethene	10	
78-87-5	1,2-Dichloropropane	10	
10061-01-5	cis-1,3-Dichloropropene	10	
108-88-3	Toluene	9.9	
10061-02-6	trans-1,3-Dichloropropene	10	
79-00-5	1,1,2-Trichloroethane	10	
127-18-4	Tetrachloroethene	11	
108-90-7	Chlorobenzene	11	
100-41-4	Ethylbenzene	11	
1330-20-7	Xylene (m,p)	22	
100-42-5	Styrene	10	
95-47-6	Xylene (o)	11	
79-34-5	1,1,2,2-Tetrachloroethane	11	
541-73-1	1,3-Dichlorobenzene	11	
106-46-7	1,4-Dichlorobenzene	12	
95-50-1	1,2-Dichlorobenzene	12	
120-82-1	1,2,4-Trichlorobenzene	12	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

X1LCS

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: X1LCS

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EF010AQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	12	
108-67-8	1,3,5-Trimethylbenzene	12	
95-63-6	1,2,4-Trimethylbenzene	11	
76-14-2	1,2-Dichlorotetrafluoroethan	11	
106-93-4	1,2-Dibromoethane	10	
106-99-0	1,3-Butadiene	10	
75-15-0	Carbon Disulfide	10	
67-64-1	Acetone	15	
67-63-0	Isopropyl Alcohol	9.8	
1634-04-4	Methyl tert-Butyl Ether	11	
110-82-7	Cyclohexane	10	
124-48-1	Dibromochloromethane	11	
78-93-3	Methyl Ethyl Ketone	10	
108-10-1	Methyl Isobutyl Ketone	9.5	
591-78-6	Methyl Butyl Ketone	8.6	
75-27-4	Bromodichloromethane	11	
156-60-5	trans-1,2-Dichloroethene	10	
622-96-8	4-Ethyltoluene	10	
95-49-8	2-Chlorotoluene	11	
110-54-3	n-Hexane	9.6	
109-99-9	Tetrahydrofuran	10	
142-82-5	n-Heptane	11	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

X1LCSD

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: X1LCSD

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EF010AQD

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	10	
74-87-3	Chloromethane	10	
75-01-4	Vinyl Chloride	9.4	
74-83-9	Bromomethane	10	
75-00-3	Chloroethane	10	
75-69-4	Trichlorofluoromethane	11	
76-13-1	Freon TF	11	
75-35-4	1,1-Dichloroethene	10	
75-09-2	Methylene Chloride	9.4	
75-34-3	1,1-Dichloroethane	10	
156-59-2	cis-1,2-Dichloroethene	9.7	
67-66-3	Chloroform	10	
71-55-6	1,1,1-Trichloroethane	11	
56-23-5	Carbon Tetrachloride	11	
71-43-2	Benzene	10	
107-06-2	1,2-Dichloroethane	11	
79-01-6	Trichloroethene	10	
78-87-5	1,2-Dichloropropane	10	
10061-01-5	cis-1,3-Dichloropropene	10	
108-88-3	Toluene	9.9	
10061-02-6	trans-1,3-Dichloropropene	10	
79-00-5	1,1,2-Trichloroethane	10	
127-18-4	Tetrachloroethene	11	
108-90-7	Chlorobenzene	10	
100-41-4	Ethylbenzene	10	
1330-20-7	Xylene (m,p)	21	
100-42-5	Styrene	10	
95-47-6	Xylene (o)	10	
79-34-5	1,1,2,2-Tetrachloroethane	11	
541-73-1	1,3-Dichlorobenzene	11	
106-46-7	1,4-Dichlorobenzene	11	
95-50-1	1,2-Dichlorobenzene	11	
120-82-1	1,2,4-Trichlorobenzene	12	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

X1LCSD

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: X1LCSD

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EF010AQD

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	15	
108-67-8	1,3,5-Trimethylbenzene	12	
95-63-6	1,2,4-Trimethylbenzene	11	
76-14-2	1,2-Dichlorotetrafluoroethan	11	
106-93-4	1,2-Dibromoethane	11	
106-99-0	1,3-Butadiene	9.7	
75-15-0	Carbon Disulfide	9.8	
67-64-1	Acetone	14	
67-63-0	Isopropyl Alcohol	9.8	
1634-04-4	Methyl tert-Butyl Ether	11	
110-82-7	Cyclohexane	10	
124-48-1	Dibromochloromethane	11	
78-93-3	Methyl Ethyl Ketone	10	
108-10-1	Methyl Isobutyl Ketone	9.2	
591-78-6	Methyl Butyl Ketone	8.5	
75-27-4	Bromodichloromethane	11	
156-60-5	trans-1,2-Dichloroethene	10	
622-96-8	4-Ethyltoluene	10	
95-49-8	2-Chlorotoluene	11	
110-54-3	n-Hexane	9.9	
109-99-9	Tetrahydrofuran	10	
142-82-5	n-Heptane	11	

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix Spike - Sample No.: W9ICVLCS

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	10		11	110	70-130
Chloromethane	10		11	110	70-130
Vinyl Chloride	10		11	110	70-130
Bromomethane	10		12	120	70-130
Chloroethane	10		11	110	70-130
Trichlorofluoromethane	10		12	120	70-130
Freon TF	10		12	120	70-130
1,1-Dichloroethene	10		12	120	70-130
Methylene Chloride	10		10	100	70-130
1,1-Dichloroethane	10		12	120	70-130
cis-1,2-Dichloroethene	10		11	110	70-130
Chloroform	10		12	120	70-130
1,1,1-Trichloroethane	10		12	120	70-130
Carbon Tetrachloride	10		12	120	70-130
Benzene	10		11	110	70-130
1,2-Dichloroethane	10		12	120	70-130
Trichloroethene	10		12	120	70-130
1,2-Dichloropropane	10		11	110	70-130
cis-1,3-Dichloropropene	10		11	110	70-130
Toluene	10		11	110	70-130
trans-1,3-Dichloroprope	10		11	110	70-130
1,1,2-Trichloroethane	10		12	120	70-130
Tetrachloroethene	10		12	120	70-130
Chlorobenzene	10		12	120	70-130
Ethylbenzene	10		12	120	70-130
Xylene (m,p)	20		24	120	70-130
Styrene	10		12	120	70-130
Xylene (o)	10		12	120	70-130

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

* Values outside of QC limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix Spike - Sample No.: W9ICVLCS

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
1,1,2,2-Tetrachloroetha	10		12	120	70-130
1,3-Dichlorobenzene	10		13	130	70-130
1,4-Dichlorobenzene	10		12	120	70-130
1,2-Dichlorobenzene	10		13	130	70-130
1,2,4-Trichlorobenzene	10		13	130	70-130
Hexachlorobutadiene	10		13	130	70-130
1,3,5-Trimethylbenzene	10		10	100	70-130
1,2,4-Trimethylbenzene	10		12	120	70-130
1,2-Dichlorotetrafluoro	10		12	120	70-130
1,2-Dibromoethane	10		12	120	70-130
1,3-Butadiene	10		11	110	70-130
Carbon Disulfide	10		11	110	70-130
Acetone	10		16	160*	70-130
Isopropyl Alcohol	10		11	110	70-130
Methyl tert-Butyl Ether	10		12	120	70-130
Cyclohexane	10		11	110	70-130
Dibromochloromethane	10		12	120	70-130
Methyl Ethyl Ketone	10		11	110	70-130
Methyl Isobutyl Ketone	10		10	100	70-130
Methyl Butyl Ketone	10		9.4	94	70-130
Bromodichloromethane	10		12	120	70-130
trans-1,2-Dichloroethen	10		12	120	70-130
4-Ethyltoluene	10		13	130	70-130
2-Chlorotoluene	10		12	120	70-130
n-Hexane	10		11	110	70-130
Tetrahydrofuran	10		11	110	70-130
n-Heptane	10		12	120	70-130

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

* Values outside of QC limits

COMMENTS: _____

_____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix Spike - Sample No.: W9ICVLCS

COMPOUND	SPIKE ADDED (ppbv)	LCSD CONCENTRATION (ppbv)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	10	10	100	10	40	70-130
Chloromethane	10	9.9	99	10	40	70-130
Vinyl Chloride	10	9.3	93	17	40	70-130
Bromomethane	10	10	100	18	40	70-130
Chloroethane	10	10	100	10	40	70-130
Trichlorofluoromethane	10	11	110	9	40	70-130
Freon TF	10	10	100	18	40	70-130
1,1-Dichloroethene	10	10	100	18	40	70-130
Methylene Chloride	10	9.1	91	9	40	70-130
1,1-Dichloroethane	10	10	100	18	40	70-130
cis-1,2-Dichloroethene	10	9.8	98	12	40	70-130
Chloroform	10	10	100	18	40	70-130
1,1,1-Trichloroethane	10	10	100	18	40	70-130
Carbon Tetrachloride	10	10	100	18	40	70-130
Benzene	10	9.9	99	10	40	70-130
1,2-Dichloroethane	10	10	100	18	40	70-130
Trichloroethene	10	10	100	18	40	70-130
1,2-Dichloropropane	10	9.8	98	12	40	70-130
cis-1,3-Dichloropropene	10	9.9	99	10	40	70-130
Toluene	10	9.9	99	10	40	70-130
trans-1,3-Dichloroprope	10	9.9	99	10	40	70-130
1,1,2-Trichloroethane	10	10	100	18	40	70-130
Tetrachloroethene	10	11	110	9	40	70-130
Chlorobenzene	10	11	110	9	40	70-130
Ethylbenzene	10	10	100	18	40	70-130
Xylene (m,p)	20	22	110	9	40	70-130
Styrene	10	10	100	18	40	70-130
Xylene (o)	10	11	110	9	40	70-130

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

* Values outside of QC limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix Spike - Sample No.: W9ICVLCS

COMPOUND	SPIKE ADDED (ppbv)	LCSD CONCENTRATION (ppbv)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1,2,2-Tetrachloroetha	10	11	110	9	40	70-130
1,3-Dichlorobenzene	10	11	110	17	40	70-130
1,4-Dichlorobenzene	10	11	110	9	40	70-130
1,2-Dichlorobenzene	10	11	110	17	40	70-130
1,2,4-Trichlorobenzene	10	11	110	17	40	70-130
Hexachlorobutadiene	10	11	110	17	40	70-130
1,3,5-Trimethylbenzene	10	9.6	96	4	40	70-130
1,2,4-Trimethylbenzene	10	10	100	18	40	70-130
1,2-Dichlorotetrafluoro	10	11	110	9	40	70-130
1,2-Dibromoethane	10	10	100	18	40	70-130
1,3-Butadiene	10	9.5	95	15	40	70-130
Carbon Disulfide	10	9.8	98	12	40	70-130
Acetone	10	13	130	21	40	70-130
Isopropyl Alcohol	10	9.3	93	17	40	70-130
Methyl tert-Butyl Ether	10	10	100	18	40	70-130
Cyclohexane	10	9.9	99	10	40	70-130
Dibromochloromethane	10	10	100	18	40	70-130
Methyl Ethyl Ketone	10	9.8	98	12	40	70-130
Methyl Isobutyl Ketone	10	8.9	89	12	40	70-130
Methyl Butyl Ketone	10	8.1	81	15	40	70-130
Bromodichloromethane	10	10	100	18	40	70-130
trans-1,2-Dichloroethen	10	10	100	18	40	70-130
4-Ethyltoluene	10	11	110	17	40	70-130
2-Chlorotoluene	10	11	110	9	40	70-130
n-Hexane	10	9.4	94	16	40	70-130
Tetrahydrofuran	10	9.8	98	12	40	70-130
n-Heptane	10	10	100	18	40	70-130

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

* Values outside of QC limits

RPD: 0 out of 55 outside limits
Spike Recovery: 1 out of 110 outside limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix Spike - Sample No.: X1LCS

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	10		11	110	70-130
Chloromethane	10		10	100	70-130
Vinyl Chloride	10		9.4	94	70-130
Bromomethane	10		11	110	70-130
Chloroethane	10		10	100	70-130
Trichlorofluoromethane	10		11	110	70-130
Freon TF	10		11	110	70-130
1,1-Dichloroethene	10		10	100	70-130
Methylene Chloride	10		9.5	95	70-130
1,1-Dichloroethane	10		10	100	70-130
cis-1,2-Dichloroethene	10		9.9	99	70-130
Chloroform	10		11	110	70-130
1,1,1-Trichloroethane	10		11	110	70-130
Carbon Tetrachloride	10		11	110	70-130
Benzene	10		10	100	70-130
1,2-Dichloroethane	10		11	110	70-130
Trichloroethene	10		10	100	70-130
1,2-Dichloropropane	10		10	100	70-130
cis-1,3-Dichloropropene	10		10	100	70-130
Toluene	10		9.9	99	70-130
trans-1,3-Dichloroprope	10		10	100	70-130
1,1,2-Trichloroethane	10		10	100	70-130
Tetrachloroethene	10		11	110	70-130
Chlorobenzene	10		11	110	70-130
Ethylbenzene	10		11	110	70-130
Xylene (m,p)	20		22	110	70-130
Styrene	10		10	100	70-130
Xylene (o)	10		11	110	70-130

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

* Values outside of QC limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix Spike - Sample No.: X1LCS

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
1,1,2,2-Tetrachloroetha	10		11	110	70-130
1,3-Dichlorobenzene	10		11	110	70-130
1,4-Dichlorobenzene	10		12	120	70-130
1,2-Dichlorobenzene	10		12	120	70-130
1,2,4-Trichlorobenzene	10		12	120	70-130
Hexachlorobutadiene	10		12	120	70-130
1,3,5-Trimethylbenzene	10		12	120	70-130
1,2,4-Trimethylbenzene	10		11	110	70-130
1,2-Dichlorotetrafluoro	10		11	110	70-130
1,2-Dibromoethane	10		10	100	70-130
1,3-Butadiene	10		10	100	70-130
Carbon Disulfide	10		10	100	70-130
Acetone	10		15	150*	70-130
Isopropyl Alcohol	10		9.8	98	70-130
Methyl tert-Butyl Ether	10		11	110	70-130
Cyclohexane	10		10	100	70-130
Dibromochloromethane	10		11	110	70-130
Methyl Ethyl Ketone	10		10	100	70-130
Methyl Isobutyl Ketone	10		9.5	95	70-130
Methyl Butyl Ketone	10		8.6	86	70-130
Bromodichloromethane	10		11	110	70-130
trans-1,2-Dichloroethen	10		10	100	70-130
4-Ethyltoluene	10		10	100	70-130
2-Chlorotoluene	10		11	110	70-130
n-Hexane	10		9.6	96	70-130
Tetrahydrofuran	10		10	100	70-130
n-Heptane	10		11	110	70-130

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

* Values outside of QC limits

COMMENTS: _____

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FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix Spike - Sample No.: X1LCS

COMPOUND	SPIKE ADDED (ppbv)	LCSD CONCENTRATION (ppbv)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	10	10	100	10	40	70-130
Chloromethane	10	10	100	0	40	70-130
Vinyl Chloride	10	9.4	94	0	40	70-130
Bromomethane	10	10	100	10	40	70-130
Chloroethane	10	10	100	0	40	70-130
Trichlorofluoromethane	10	11	110	0	40	70-130
Freon TF	10	11	110	0	40	70-130
1,1-Dichloroethene	10	10	100	0	40	70-130
Methylene Chloride	10	9.4	94	1	40	70-130
1,1-Dichloroethane	10	10	100	0	40	70-130
cis-1,2-Dichloroethene	10	9.7	97	2	40	70-130
Chloroform	10	10	100	10	40	70-130
1,1,1-Trichloroethane	10	11	110	0	40	70-130
Carbon Tetrachloride	10	11	110	0	40	70-130
Benzene	10	10	100	0	40	70-130
1,2-Dichloroethane	10	11	110	0	40	70-130
Trichloroethene	10	10	100	0	40	70-130
1,2-Dichloropropane	10	10	100	0	40	70-130
cis-1,3-Dichloropropene	10	10	100	0	40	70-130
Toluene	10	9.9	99	0	40	70-130
trans-1,3-Dichloroprope	10	10	100	0	40	70-130
1,1,2-Trichloroethane	10	10	100	0	40	70-130
Tetrachloroethene	10	11	110	0	40	70-130
Chlorobenzene	10	10	100	10	40	70-130
Ethylbenzene	10	10	100	10	40	70-130
Xylene (m,p)	20	21	105	5	40	70-130
Styrene	10	10	100	0	40	70-130
Xylene (o)	10	10	100	10	40	70-130

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

* Values outside of QC limits

COMMENTS: _____

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FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix Spike - Sample No.: X1LCS

COMPOUND	SPIKE ADDED (ppbv)	LCSD CONCENTRATION (ppbv)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1,2,2-Tetrachloroetha	10	11	110	0	40	70-130
1,3-Dichlorobenzene	10	11	110	0	40	70-130
1,4-Dichlorobenzene	10	11	110	9	40	70-130
1,2-Dichlorobenzene	10	11	110	9	40	70-130
1,2,4-Trichlorobenzene	10	12	120	0	40	70-130
Hexachlorobutadiene	10	15	150*	22	40	70-130
1,3,5-Trimethylbenzene	10	12	120	0	40	70-130
1,2,4-Trimethylbenzene	10	11	110	0	40	70-130
1,2-Dichlorotetrafluoro	10	11	110	0	40	70-130
1,2-Dibromoethane	10	11	110	10	40	70-130
1,3-Butadiene	10	9.7	97	3	40	70-130
Carbon Disulfide	10	9.8	98	2	40	70-130
Acetone	10	14	140*	7	40	70-130
Isopropyl Alcohol	10	9.8	98	0	40	70-130
Methyl tert-Butyl Ether	10	11	110	0	40	70-130
Cyclohexane	10	10	100	0	40	70-130
Dibromochloromethane	10	11	110	0	40	70-130
Methyl Ethyl Ketone	10	10	100	0	40	70-130
Methyl Isobutyl Ketone	10	9.2	92	3	40	70-130
Methyl Butyl Ketone	10	8.5	85	1	40	70-130
Bromodichloromethane	10	11	110	0	40	70-130
trans-1,2-Dichloroethen	10	10	100	0	40	70-130
4-Ethyltoluene	10	10	100	0	40	70-130
2-Chlorotoluene	10	11	110	0	40	70-130
n-Hexane	10	9.9	99	3	40	70-130
Tetrahydrofuran	10	10	100	0	40	70-130
n-Heptane	10	11	110	0	40	70-130

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

* Values outside of QC limits

RPD: 0 out of 55 outside limits
Spike Recovery: 3 out of 110 outside limits

COMMENTS: _____

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

ABLKW9

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Lab File ID: EFB002 Lab Sample ID: ABLKW9

Date Analyzed: 06/08/04 Time Analyzed: 1901

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: V

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	W9ICVLCS	W9ICVLCS	EF010Q	1645
02	W9ICVLCSD	W9ICVLCSD	EF010QD	1729
03	SG-ABC ROOFI	571912	571912	0312
04	SG-VINING	571913	571913	0356
05	SG-GANGLIANI	571914	571914	0441
06	SG-SACCO_A	571915	571915	0526
07	SG-GRAPHIQUE	571916	571916	0612
08	SG-SACCO_B	571917	571917	0658
09	SG-PACER	571918	571918	0743
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
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30				

COMMENTS:

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

ABLKX1

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Lab File ID: EFB002A Lab Sample ID: ABLKX1

Date Analyzed: 06/09/04 Time Analyzed: 1417

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: V

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	X1LCS	X1LCS	EF010AQ	1209
02	X1LCSD	X1LCSD	EF010AQD	1248
03	SG-ABC ROOFI	571912D1	571912D	0213
04	SG-PACERDL	571918D1	571918D	0259
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
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30				

COMMENTS:

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Lab File ID: EF001P BFB Injection Date: 06/08/04

Instrument ID: V BFB Injection Time: 1031

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.9
75	30.0 - 66.0% of mass 95	52.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	64.7
175	4.0 - 9.0% of mass 174	4.8 (7.3)1
176	93.0 - 101.0% of mass 174	62.8 (97.0)1
177	5.0 - 9.0% of mass 176	4.1 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ASTD0005	ASTD0005	EF0005I2	06/08/04	1201
02	ASTD005	ASTD005	EF005	06/08/04	1245
03	ASTD010	ASTD010	EF010	06/08/04	1332
04	ASTD015	ASTD015	EF015	06/08/04	1418
05	ASTD020	ASTD020	EF020	06/08/04	1500
06	ASTD040	ASTD040	EF040	06/08/04	1541
07	W9ICVLCS	W9ICVLCS	EF010Q	06/08/04	1645
08	W9ICVLCSD	W9ICVLCSD	EF010QD	06/08/04	1729
09	ABLKW9	ABLKW9	EFB002	06/08/04	1901
10	SG-ABC ROOFI	571912	571912	06/09/04	0312
11	SG-VINING	571913	571913	06/09/04	0356
12	SG-GANGLIANI	571914	571914	06/09/04	0441
13	SG-SACCO_A	571915	571915	06/09/04	0526
14	SG-GRAPHIQUE	571916	571916	06/09/04	0612
15	SG-SACCO_B	571917	571917	06/09/04	0658
16	SG-PACER	571918	571918	06/09/04	0743
17					
18					
19					
20					
21					
22					

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Lab File ID: EF002P BFB Injection Date: 06/09/04

Instrument ID: V BFB Injection Time: 1034

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	21.0
75	30.0 - 66.0% of mass 95	52.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	63.8
175	4.0 - 9.0% of mass 174	4.3 (6.8)1
176	93.0 - 101.0% of mass 174	62.2 (97.5)1
177	5.0 - 9.0% of mass 176	4.2 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ASTD010	ASTD010	EF010A	06/09/04	1121
02	X1LCS	X1LCS	EF010AQ	06/09/04	1209
03	X1LCSD	X1LCSD	EF010AQD	06/09/04	1248
04	ABLKX1	ABLKX1	EFB002A	06/09/04	1417
05	SG-ABC ROOFI	571912D1	571912D	06/10/04	0213
06	SG-PACERDL	571918D1	571918D	06/10/04	0259
07					
08					
09					
10					
11					
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22					

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Instrument ID: V Calibration Date(s): 06/08/04 06/08/04

Heated Purge: (Y/N) N Calibration Time(s): 1201 1541

GC Column: RTX-624 ID: 0.32 (mm)

LAB FILE ID: RRF0.5=EF0005I2 RRF5 =EF005
RRF10 =EF010 RRF20 =EF020 RRF40 =EF040

	COMPOUND	RRF0.5	RRF5	RRF10	RRF20	RRF40	$\overline{RRF}$	% RSD	
	Dichlorodifluoromethane	2.976	2.333	2.173	2.118	1.971			
	Chloromethane	0.677	0.698	0.625	0.607	0.563			
	Vinyl Chloride	1.020	0.884	0.758	0.737	0.681			
	Bromomethane	0.805	0.971	0.885	0.863	0.798			
	Chloroethane	0.428	0.489	0.443	0.419	0.388			
	Trichlorofluoromethane	2.251	2.630	2.377	2.338	2.134			
	Freon TF	1.636	1.926	1.733	1.652	1.449			
	1,1-Dichloroethene	0.757	0.824	0.741	0.706	0.624			
	Methylene Chloride	1.454	1.117	0.970	0.914	0.842			
*	1,1-Dichloroethane	1.419	1.761	1.567	1.494	1.316			*
	cis-1,2-Dichloroethene	1.010	0.982	0.879	0.844	0.772			
	Chloroform	2.113	2.252	2.035	1.998	1.786			
	1,1,1-Trichloroethane	0.499	0.490	0.451	0.435	0.380			
	Carbon Tetrachloride	0.529	0.561	0.525	0.507	0.453			
	Benzene	0.618	0.601	0.552	0.535	0.464			
	1,2-Dichloroethane	0.338	0.332	0.304	0.293	0.258			
	Trichloroethene	0.305	0.290	0.272	0.264	0.231			
	1,2-Dichloropropane	0.245	0.237	0.217	0.199	0.166			
	cis-1,3-Dichloropropene	0.440	0.426	0.394	0.381	0.352			
	Toluene	0.498	0.467	0.441	0.431	0.374			
	trans-1,3-Dichloropropene	0.411	0.373	0.350	0.347	0.320			
	1,1,2-Trichloroethane	0.257	0.278	0.256	0.247	0.213			
	Tetrachloroethene	0.328	0.359	0.337	0.329	0.274			
*	Chlorobenzene	0.615	0.645	0.591	0.553	0.440			*
	Ethylbenzene	1.089	1.073	0.982	0.905	0.727			
	Xylene (m,p)	0.373	0.381	0.342	0.302	0.216			
	Styrene	0.595	0.642	0.595	0.532	0.412			
	Xylene (o)	0.358	0.371	0.348	0.316	0.247			
	1,1,2,2-Tetrachloroethane	0.639	0.684	0.640	0.578	0.495			
	1,3-Dichlorobenzene	0.524	0.565	0.546	0.531	0.472			
	1,4-Dichlorobenzene	0.522	0.554	0.530	0.510	0.448			
	1,2-Dichlorobenzene	0.456	0.498	0.482	0.465	0.415			
	1,2,4-Trichlorobenzene	0.237	0.253	0.241	0.199				
	Hexachlorobutadiene	0.254	0.244	0.218	0.172				
	1,3,5-Trimethylbenzene	1.053	1.125	0.911	0.885	0.680			
	1,2,4-Trimethylbenzene	0.848	0.918	0.863	0.826	0.693			
	1,2-Dichlorotetrafluoroethan	2.046	2.527	2.304	2.268	2.044			

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Instrument ID: V Calibration Date(s): 06/08/04 06/08/04

Heated Purge: (Y/N) N Calibration Time(s): 1201 1541

GC Column: RTX-624 ID: 0.32 (mm)

LAB FILE ID: RRF0.5=EF0005I2 RRF5 =EF005
RRF10 =EF010 RRF20 =EF020 RRF40 =EF040

COMPOUND	RRF0.5	RRF5	RRF10	RRF20	RRF40	$\overline{RRF}$	% RSD
1,2-Dibromoethane	0.563	0.584	0.540	0.512	0.445		
1,3-Butadiene	0.550	0.565	0.498	0.491	0.468		
Carbon Disulfide	2.666	2.877	2.572	2.480	2.264		
Acetone		1.434	1.258	1.239	1.145		
Isopropyl Alcohol		1.619	1.482	1.363	1.299		
Methyl tert-Butyl Ether	2.400	2.665	2.459	2.411	2.138		
Cyclohexane	0.288	0.265	0.235	0.217	0.179		
Dibromochloromethane	0.670	0.698	0.653	0.633	0.547		
Methyl Ethyl Ketone	0.524	0.516	0.460	0.429	0.387		
Methyl Isobutyl Ketone	0.560	0.559	0.523	0.521	0.492		
Methyl Butyl Ketone	0.621	0.608	0.567	0.544	0.504		
Bromodichloromethane	0.546	0.578	0.533	0.514	0.447		
trans-1,2-Dichloroethene	1.208	1.392	1.248	1.209	1.085		
4-Ethyltoluene	1.041	1.173	1.199	1.087	0.928		
2-Chlorotoluene	0.946	0.970	0.892	0.807	0.632		
n-Hexane	1.148	1.799	1.191	1.224	0.996		
Tetrahydrofuran		0.281	0.247	0.242	0.180		
n-Heptane	0.330	0.329	0.296	0.277	0.231		

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Instrument ID: V Calibration Date(s): 06/08/04 06/08/04

Heated Purge: (Y/N) N Calibration Time(s): 1201 1541

GC Column: RTX-624 ID: 0.32 (mm)

LAB FILE ID: RRF15 =EF015

COMPOUND	RRF15					$\overline{RRF}$	% RSD
Dichlorodifluoromethane						2.314	16.9
Chloromethane						0.634	8.6
Vinyl Chloride						0.816	16.6
Bromomethane						0.864	8.1
Chloroethane						0.433	8.5
Trichlorofluoromethane						2.346	7.8
Freon TF						1.679	10.3
1,1-Dichloroethene						0.730	10.0
Methylene Chloride						1.059	22.9
1,1-Dichloroethane *						1.511	11.1*
cis-1,2-Dichloroethene						0.897	11.0
Chloroform						2.037	8.4
1,1,1-Trichloroethane						0.451	10.6
Carbon Tetrachloride						0.515	7.7
Benzene						0.554	11.0
1,2-Dichloroethane						0.305	10.5
Trichloroethene						0.272	10.3
1,2-Dichloropropane						0.213	15.0
cis-1,3-Dichloropropene						0.399	8.9
Toluene						0.442	10.4
trans-1,3-Dichloropropene						0.360	9.4
1,1,2-Trichloroethane						0.250	9.5
Tetrachloroethene						0.325	9.7
Chlorobenzene *						0.569	13.9*
Ethylbenzene						0.955	15.4
Xylene (m,p)						0.323	20.9
Styrene						0.555	16.0
Xylene (o)						0.328	15.1
1,1,2,2-Tetrachloroethane						0.607	12.0
1,3-Dichlorobenzene						0.528	6.6
1,4-Dichlorobenzene						0.513	7.7
1,2-Dichlorobenzene						0.463	6.8
1,2,4-Trichlorobenzene	0.210					0.228	10.0
Hexachlorobutadiene	0.194					0.216	15.7
1,3,5-Trimethylbenzene						0.931	18.4
1,2,4-Trimethylbenzene						0.830	10.1
1,2-Dichlorotetrafluoroethan						2.238	9.0

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Instrument ID: V Calibration Date(s): 06/08/04 06/08/04

Heated Purge: (Y/N) N Calibration Time(s): 1201 1541

GC Column: RTX-624 ID: 0.32 (mm)

LAB FILE ID: RRF15 =EF015

COMPOUND	RRF15					$\overline{RRF}$	% RSD
1,2-Dibromoethane						0.529	10.2
1,3-Butadiene						0.514	8.0
Carbon Disulfide						2.572	8.8
Acetone	1.253					1.266	8.3
Isopropyl Alcohol	1.432					1.439	8.5
Methyl tert-Butyl Ether						2.415	7.8
Cyclohexane						0.237	17.8
Dibromochloromethane						0.640	9.0
Methyl Ethyl Ketone						0.463	12.6
Methyl Isobutyl Ketone						0.531	5.4
Methyl Butyl Ketone						0.569	8.4
Bromodichloromethane						0.524	9.3
trans-1,2-Dichloroethene						1.228	9.0
4-Ethyltoluene						1.086	10.0
2-Chlorotoluene						0.849	16.1
n-Hexane						1.272	24.2
Tetrahydrofuran	0.253					0.241	15.4
n-Heptane						0.293	14.1

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Instrument ID: V Calibration Date: 06/08/04 Time: 1332

Lab File ID: EF010 Init. Calib. Date(s): 06/08/04 06/08/04

Heated Purge: (Y/N) N Init. Calib. Times: 1201 1541

GC Column: RTX-624 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	2.314	2.173	0.01	6.1	30.0
Chloromethane	0.634	0.625	0.01	1.4	30.0
Vinyl Chloride	0.816	0.758	0.01	7.1	30.0
Bromomethane	0.864	0.885	0.01	2.4	30.0
Chloroethane	0.433	0.443	0.01	2.3	30.0
Trichlorofluoromethane	2.346	2.377	0.01	1.3	30.0
Freon TF	1.679	1.733	0.01	3.2	30.0
1,1-Dichloroethene	0.730	0.741	0.01	1.5	30.0
Methylene Chloride	1.059	0.970	0.01	8.4	30.0
1,1-Dichloroethane	1.511	1.567	0.1	3.7	30.0
cis-1,2-Dichloroethene	0.897	0.879	0.01	2.0	30.0
Chloroform	2.037	2.035	0.01	0.1	30.0
1,1,1-Trichloroethane	0.451	0.451	0.01	0.0	30.0
Carbon Tetrachloride	0.515	0.525	0.01	1.9	30.0
Benzene	0.554	0.552	0.01	0.4	30.0
1,2-Dichloroethane	0.305	0.304	0.01	0.3	30.0
Trichloroethene	0.272	0.272	0.01	0.0	30.0
1,2-Dichloropropane	0.213	0.217	0.01	1.9	30.0
cis-1,3-Dichloropropene	0.399	0.394	0.01	1.2	30.0
Toluene	0.442	0.441	0.01	0.2	30.0
trans-1,3-Dichloropropene	0.360	0.350	0.01	2.8	30.0
1,1,2-Trichloroethane	0.250	0.256	0.01	2.4	30.0
Tetrachloroethene	0.325	0.337	0.01	3.7	30.0
Chlorobenzene	0.569	0.591	0.3	3.9	30.0
Ethylbenzene	0.955	0.982	0.01	2.8	30.0
Xylene (m,p)	0.323	0.342	0.01	5.9	30.0
Styrene	0.555	0.595	0.01	7.2	30.0
Xylene (o)	0.328	0.348	0.01	6.1	30.0
1,1,2,2-Tetrachloroethane	0.607	0.640	0.01	5.4	30.0
1,3-Dichlorobenzene	0.528	0.546	0.01	3.4	30.0
1,4-Dichlorobenzene	0.513	0.530	0.01	3.3	30.0
1,2-Dichlorobenzene	0.463	0.482	0.01	4.1	30.0
1,2,4-Trichlorobenzene	0.228	0.241	0.01	5.7	30.0
Hexachlorobutadiene	0.216	0.218	0.01	0.9	30.0
1,3,5-Trimethylbenzene	0.931	0.911	0.01	2.1	30.0
1,2,4-Trimethylbenzene	0.830	0.863	0.01	4.0	30.0
1,2-Dichlorotetrafluoroethan	2.238	2.304	0.01	2.9	30.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Instrument ID: V Calibration Date: 06/08/04 Time: 1332

Lab File ID: EF010 Init. Calib. Date(s): 06/08/04 06/08/04

Heated Purge: (Y/N) N Init. Calib. Times: 1201 1541

GC Column: RTX-624 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
1,2-Dibromoethane	0.529	0.540	0.01	2.1	30.0
1,3-Butadiene	0.514	0.498	0.01	3.1	30.0
Carbon Disulfide	2.572	2.572	0.01	0.0	30.0
Acetone	1.266	1.258	0.01	0.6	30.0
Isopropyl Alcohol	1.439	1.482	0.01	3.0	30.0
Methyl tert-Butyl Ether	2.415	2.459	0.01	1.8	30.0
Cyclohexane	0.237	0.235	0.01	0.8	30.0
Dibromochloromethane	0.640	0.653	0.01	2.0	30.0
Methyl Ethyl Ketone	0.463	0.460	0.01	0.6	30.0
Methyl Isobutyl Ketone	0.531	0.523	0.01	1.5	30.0
Methyl Butyl Ketone	0.569	0.567	0.01	0.4	30.0
Bromodichloromethane	0.524	0.533	0.01	1.7	30.0
trans-1,2-Dichloroethene	1.228	1.248	0.01	1.6	30.0
4-Ethyltoluene	1.086	1.199	0.01	10.4	30.0
2-Chlorotoluene	0.849	0.892	0.01	5.1	30.0
n-Hexane	1.272	1.191	0.01	6.4	30.0
Tetrahydrofuran	0.241	0.247	0.01	2.5	30.0
n-Heptane	0.293	0.296	0.01	1.0	30.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Instrument ID: V Calibration Date: 06/09/04 Time: 1121

Lab File ID: EF010A Init. Calib. Date(s): 06/08/04 06/08/04

Heated Purge: (Y/N) N Init. Calib. Times: 1201 1541

GC Column: RTX-624 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	2.314	2.437	0.01	5.3	30.0
Chloromethane	0.634	0.646	0.01	1.9	30.0
Vinyl Chloride	0.816	0.757	0.01	7.2	30.0
Bromomethane	0.864	0.899	0.01	4.0	30.0
Chloroethane	0.433	0.429	0.01	0.9	30.0
Trichlorofluoromethane	2.346	2.611	0.01	11.3	30.0
Freon TF	1.679	1.800	0.01	7.2	30.0
1,1-Dichloroethene	0.730	0.744	0.01	1.9	30.0
Methylene Chloride	1.059	0.994	0.01	6.1	30.0
1,1-Dichloroethane	1.511	1.588	0.1	5.1	30.0
cis-1,2-Dichloroethene	0.897	0.880	0.01	1.9	30.0
Chloroform	2.037	2.168	0.01	6.4	30.0
1,1,1-Trichloroethane	0.451	0.490	0.01	8.6	30.0
Carbon Tetrachloride	0.515	0.567	0.01	10.1	30.0
Benzene	0.554	0.557	0.01	0.5	30.0
1,2-Dichloroethane	0.305	0.336	0.01	10.2	30.0
Trichloroethene	0.272	0.277	0.01	1.8	30.0
1,2-Dichloropropane	0.213	0.208	0.01	2.3	30.0
cis-1,3-Dichloropropene	0.399	0.406	0.01	1.8	30.0
Toluene	0.442	0.454	0.01	2.7	30.0
trans-1,3-Dichloropropene	0.360	0.373	0.01	3.6	30.0
1,1,2-Trichloroethane	0.250	0.256	0.01	2.4	30.0
Tetrachloroethene	0.325	0.355	0.01	9.2	30.0
Chlorobenzene	0.569	0.606	0.3	6.5	30.0
Ethylbenzene	0.955	1.026	0.01	7.4	30.0
Xylene (m,p)	0.323	0.360	0.01	11.4	30.0
Styrene	0.555	0.611	0.01	10.1	30.0
Xylene (o)	0.328	0.360	0.01	9.8	30.0
1,1,2,2-Tetrachloroethane	0.607	0.650	0.01	7.1	30.0
1,3-Dichlorobenzene	0.528	0.578	0.01	9.5	30.0
1,4-Dichlorobenzene	0.513	0.572	0.01	11.5	30.0
1,2-Dichlorobenzene	0.463	0.504	0.01	8.8	30.0
1,2,4-Trichlorobenzene	0.228	0.197	0.01	13.6	30.0
Hexachlorobutadiene	0.216	0.200	0.01	7.4	30.0
1,3,5-Trimethylbenzene	0.931	1.189	0.01	27.7	30.0
1,2,4-Trimethylbenzene	0.830	0.929	0.01	11.9	30.0
1,2-Dichlorotetrafluoroethan	2.238	2.482	0.01	10.9	30.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Instrument ID: V Calibration Date: 06/09/04 Time: 1121

Lab File ID: EF010A Init. Calib. Date(s): 06/08/04 06/08/04

Heated Purge: (Y/N) N Init. Calib. Times: 1201 1541

GC Column: RTX-624 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
1,2-Dibromoethane	0.529	0.550	0.01	4.0	30.0
1,3-Butadiene	0.514	0.509	0.01	1.0	30.0
Carbon Disulfide	2.572	2.553	0.01	0.7	30.0
Acetone	1.266	1.383	0.01	9.2	30.0
Isopropyl Alcohol	1.439	1.538	0.01	6.9	30.0
Methyl tert-Butyl Ether	2.415	2.570	0.01	6.4	30.0
Cyclohexane	0.237	0.235	0.01	0.8	30.0
Dibromochloromethane	0.640	0.694	0.01	8.4	30.0
Methyl Ethyl Ketone	0.463	0.461	0.01	0.4	30.0
Methyl Isobutyl Ketone	0.531	0.555	0.01	4.5	30.0
Methyl Butyl Ketone	0.569	0.604	0.01	6.2	30.0
Bromodichloromethane	0.524	0.564	0.01	7.6	30.0
trans-1,2-Dichloroethene	1.228	1.287	0.01	4.8	30.0
4-Ethyltoluene	1.086	1.112	0.01	2.4	30.0
2-Chlorotoluene	0.849	0.994	0.01	17.1	30.0
n-Hexane	1.272	1.178	0.01	7.4	30.0
Tetrahydrofuran	0.241	0.258	0.01	7.0	30.0
n-Heptane	0.293	0.312	0.01	6.5	30.0

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Lab File ID (Standard): EF010 Date Analyzed: 06/08/04

Instrument ID: V Time Analyzed: 1332

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

		IS1 (BCM) AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DFB) AREA #	RT #
	12 HOUR STD	187037	9.63	738513	12.68	820225	10.42
	UPPER LIMIT	261852	9.96	1033918	13.01	1148315	10.75
	LOWER LIMIT	112222	9.30	443108	12.35	492135	10.09
	CLIENT SAMPLE NO.						
01	W9ICVLCS	144055	9.63	575032	12.69	636393	10.42
02	W9ICVLCSD	166591	9.63	671205	12.69	750674	10.42
03	ABLKW9	153550	9.65	609932	12.69	683418	10.42
04	SG-ABC ROOFI	149619	9.65	576235	12.69	644740	10.42
05	SG-VINING	141770	9.65	545749	12.69	612310	10.42
06	SG-GANGLIANI	136014	9.65	540419	12.70	600797	10.42
07	SG-SACCO_A	142380	9.64	558484	12.70	621204	10.43
08	SG-GRAPHIQUE	139633	9.64	543752	12.70	606540	10.43
09	SG-SACCO_B	133297	9.64	528699	12.70	586268	10.42
10	SG-PACER	137637	9.64	544965	12.70	604191	10.42
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DFB) = 1,4-Difluorobenzene

AREA UPPER LIMIT = + 40% of internal standard area
AREA LOWER LIMIT = - 40% of internal standard area
RT UPPER LIMIT = + 0.33 minutes of internal standard RT
RT LOWER LIMIT = - 0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Lab File ID (Standard): EF010A Date Analyzed: 06/09/04

Instrument ID: V Time Analyzed: 1121

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(CBZ) AREA #	RT #	IS3(DFB) AREA #	RT #
	12 HOUR STD	144111	9.64	571110	12.70	639200	10.43
	UPPER LIMIT	201755	9.97	799554	13.03	894880	10.76
	LOWER LIMIT	86467	9.31	342666	12.37	383520	10.10
	CLIENT SAMPLE NO.						
01	X1LCS	145527	9.65	585191	12.70	645059	10.44
02	X1LCSD	149881	9.64	576547	12.70	642079	10.43
03	ABLKX1	147027	9.65	574208	12.70	629444	10.44
04	SG-ABC ROOFI	164002	9.64	632959	12.70	717411	10.42
05	SG-PACERDL	160288	9.65	624046	12.68	700060	10.42
06							
07							
08							
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17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DFB) = 1,4-Difluorobenzene

AREA UPPER LIMIT = + 40% of internal standard area
AREA LOWER LIMIT = - 40% of internal standard area
RT UPPER LIMIT = + 0.33 minutes of internal standard RT
RT LOWER LIMIT = - 0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

STL Burlington
Colchester, Vermont

Sample Data Summary Package

SDG: 100862

SEVERN TRENT STL

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248
www.stl-inc.com

July 7, 2004

Mr. Chris Milone
Roux Associates
25 Corporate Drive
Suite 230
Burlington, MA 01803

Re: Laboratory Project No. 24000
Case 24000; SDG: 100862

Dear Mr. Milone:

Enclosed are the analytical results for samples received by STL Burlington on June 19, 2004. This report is sequentially numbered starting with page 0001 and ending with page 0558.

Laboratory numbers have been assigned and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 06/19/04 ETR No: 100862		
576334	SG-TERADYNE	06/18/04	Air
576335	SG-TERADYNE-DUP	06/18/04	Air
576336	TRIP BLANK		Air
576337	MODELING CLAY	06/18/04	Solid

Documentation of the condition of the samples at the time their receipt and any exceptions to the laboratory's Sample Acceptance Policy is included in the Sample Handling section of this submittal.

In order to accommodate field length limitations in processing the data summary forms, the laboratory did, in certain instances, abbreviate the sample identifiers. The electronically formatted data provides the full sample identifier.

EPA SW846 Method 8260B – Volatile Organics:
The analysis of the method blank identified as VBLKW8 exhibited the presence of the target compound Naphthalene. However the concentrations detected in the method blank sample were below the method reporting limit. This compound was not detected in the field samples of this delivery group. All associated results have been identified with the qualifier "B".

The analysis of the blank spike sample NXXI LCS and the associated blank spike duplicate sample NXXI LCSD exhibited percent recoveries of select target compounds that marginally exceeded the control limits. These exceedences are presented on the analytical form 3s.

The responses for the target compound Acrolein in a select continuing calibration check acquisition exceeded the maximum percent difference criterion. This compound was not detected in the samples of this delivery group.

Method TO-15 – Volatile Organics:
The analyses of the blank spike samples B1LCS and B3LCS the associated blank spike duplicate samples exhibited percent recoveries of select target compounds that exceeded the control limits. These exceedences are presented on the analytical form 3s.

The responses for the target compounds 1,3,5-Trimethylbenzene and 2-CHlorotoluene in select continuing calibration check acquisitions exceeded the maximum percent difference criterion. These compounds were not detected in the samples of this delivery group.

The original analysis of the sample SG-TERADYNE exhibited select internal standard area responses that were outside the control criterion. The laboratory suspects that this anomaly is due to the nature of the sample matrix. This sample was re-analyzed at a dilution in order to reduce the matrix effect, but yielded in similar results. Both sets of data have been presented in this case submittal.

The original analysis of the sample SG-TERADYNE-DUP exhibited select internal standard area responses that were outside the control criterion. The laboratory suspects that this anomaly is due to the nature of the sample matrix. This sample was re-analyzed and yielded results that were within the control limits. The results of the re-analysis have been presented in this case submittal.

The analytical results presented in this data report were generated under a quality system that adheres to the requirements specified in the NELAC standard. This report shall not be reproduced, except in full, without the written approval of the laboratory. The release of the data in this report is authorized by the Laboratory Director or his designee, as verified by the following signature.

If there are any questions regarding this submittal, please contact Ron Pentkowski at (802) 655-1203.

Sincerely,

Michael F. Wheeler, Ph.D.
Laboratory Director

Enclosure

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-TERADYNE

ab Name: STL Burlington

DG Number: 100862

ase Number:

ample Matrix: Air

Lab Sample No.: 576334

Date Analyzed: 07/02/2004

Date Received: 06/19/2004

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
ichlorodifluoromethane	75-71-8	0.59		0.50	2.9		2.5
hloromethane	74-87-3	0.58		0.50	1.2		1.0
inyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
romomethane	74-83-9	0.50	U	0.50	1.9	U	1.9
hloroethane	75-00-3	0.58		0.50	1.5		1.3
richlorofluoromethane	75-69-4	7.9		0.50	44		2.8
reon TF	76-13-1	0.50	U	0.50	3.8	U	3.8
,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
lethylene Chloride	75-09-2	0.50	U	0.50	1.7	U	1.7
,1-Dichloroethane	75-34-3	0.50	U	0.50	2.0	U	2.0
s-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
hloroform	67-66-3	0.50	U	0.50	2.4	U	2.4
,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
arbon Tetrachloride	56-23-5	0.50	U	0.50	3.1	U	3.1
enzene	71-43-2	0.91		0.50	2.9		1.6
2-Dichloroethane	107-06-2	0.50	U	0.50	2.0	U	2.0
richloroethene	79-01-6	5.1		0.50	27		2.7
2-Dichloropropane	78-87-5	0.50	U	0.50	2.3	U	2.3
s-1,3-Dichloropropene	10061-01-5	0.50	U	0.50	2.3	U	2.3
oluene	108-88-3	7.1		0.50	27		1.9
ans-1,3-Dichloropropene	10061-02-6	0.50	U	0.50	2.3	U	2.3
1,2-Trichloroethane	79-00-5	0.50	U	0.50	2.7	U	2.7
etrachloroethene	127-18-4	0.50	U	0.50	3.4	U	3.4
nlorobenzene	108-90-7	0.50	U	0.50	2.3	U	2.3
hylbenzene	100-41-4	1.3		0.50	5.6		2.2
lene (m,p)	1330-20-7	4.7		0.50	20		2.2
yrene	100-42-5	1.8		0.50	7.7		2.1
lene (o)	95-47-6	1.4		0.50	6.1		2.2
1,2,2-Tetrachloroethane	79-34-5	0.50	U	0.50	3.4	U	3.4
3-Dichlorobenzene	541-73-1	0.50	U	0.50	3.0	U	3.0
4-Dichlorobenzene	106-46-7	0.50	U	0.50	3.0	U	3.0
2-Dichlorobenzene	95-50-1	0.50	U	0.50	3.0	U	3.0
2,4-Trichlorobenzene	120-82-1	0.50	U	0.50	3.7	U	3.7

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-TERADYNE

Lab Name: STL Burlington

SDG Number: 100862

Case Number:

Sample Matrix: Air

Lab Sample No.: 576334

Date Analyzed: 07/02/2004

Date Received: 06/19/2004

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Hexachlorobutadiene	87-68-3	0.50	U	0.50	5.3	U	5.3
1,3,5-Trimethylbenzene	108-67-8	0.50	U	0.50	2.5	U	2.5
1,2,4-Trimethylbenzene	95-63-6	0.67		0.50	3.3		2.5
1,2-Dichlorotetrafluoroethane	76-14-2	0.50	U	0.50	3.5	U	3.5
1,2-Dibromoethane	106-93-4	0.50	U	0.50	3.8	U	3.8
1,3-Butadiene	106-99-0	0.50	U	0.50	1.1	U	1.1
Carbon Disulfide	75-15-0	2.0		0.50	6.2		1.6
Acetone	67-64-1	34		5.0	81		12
Isopropyl Alcohol	67-63-0	29		5.0	71		12
Methyl tert-Butyl Ether	1634-04-4	0.50	U	0.50	1.8	U	1.8
Cyclohexane	110-82-7	1.7		0.50	5.9		1.7
Dibromochloromethane	124-48-1	0.50	U	0.50	4.3	U	4.3
Methyl Ethyl Ketone	78-93-3	2.0		0.50	5.9		1.5
Methyl Isobutyl Ketone	108-10-1	0.50	U	0.50	2.0	U	2.0
Methyl Butyl Ketone	591-78-6	0.50	U	0.50	2.0	U	2.0
Bromodichloromethane	75-27-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0
4-Ethyltoluene	622-96-8	0.52		0.50	2.6		2.5
2-Chlorotoluene	95-49-8	0.50	U	0.50	2.6	U	2.6
n-Hexane	110-54-3	1.8		0.50	6.3		1.8
Tetrahydrofuran	109-99-9	5.0	U	5.0	15	U	15
n-Heptane	142-82-5	7.5		0.50	31		2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-TERADYNEDL

ab Name: STL Burlington

DG Number: 100862

ase Number:

ample Matrix: Air

Lab Sample No.: 576334D1

Date Analyzed: 07/02/2004

Date Received: 06/19/2004

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
ichlorodifluoromethane	75-71-8	1.0	U	1.0	4.9	U	4.9
hloromethane	74-87-3	1.0	U	1.0	2.1	U	2.1
inyl Chloride	75-01-4	1.0	U	1.0	2.6	U	2.6
romomethane	74-83-9	1.0	U	1.0	3.9	U	3.9
hloroethane	75-00-3	1.0	U	1.0	2.6	U	2.6
richlorofluoromethane	75-69-4	8.5	D	1.0	48	D	5.6
reon TF	76-13-1	1.0	U	1.0	7.7	U	7.7
,1-Dichloroethene	75-35-4	1.0	U	1.0	4.0	U	4.0
lethylene Chloride	75-09-2	1.0	U	1.0	3.5	U	3.5
,1-Dichloroethane	75-34-3	1.0	U	1.0	4.0	U	4.0
s-1,2-Dichloroethene	156-59-2	1.0	U	1.0	4.0	U	4.0
hloroform	67-66-3	1.0	U	1.0	4.9	U	4.9
,1,1-Trichloroethane	71-55-6	1.0	U	1.0	5.5	U	5.5
arbon Tetrachloride	56-23-5	1.0	U	1.0	6.3	U	6.3
enzene	71-43-2	1.1	D	1.0	3.5	D	3.2
,2-Dichloroethane	107-06-2	1.0	U	1.0	4.0	U	4.0
richloroethene	79-01-6	5.3	D	1.0	28	D	5.4
,2-Dichloropropane	78-87-5	1.0	U	1.0	4.6	U	4.6
s-1,3-Dichloropropene	10061-01-5	1.0	U	1.0	4.5	U	4.5
oluene	108-88-3	7.3	D	1.0	28	D	3.8
ans-1,3-Dichloropropene	10061-02-6	1.0	U	1.0	4.5	U	4.5
1,2-Trichloroethane	79-00-5	1.0	U	1.0	5.5	U	5.5
etrachloroethene	127-18-4	1.0	U	1.0	6.8	U	6.8
hlorobenzene	108-90-7	1.0	U	1.0	4.6	U	4.6
hylbenzene	100-41-4	1.4	D	1.0	6.1	D	4.3
ylene (m,p)	1330-20-7	4.9	D	1.0	21	D	4.3
yrene	100-42-5	1.8	D	1.0	7.7	D	4.3
ylene (o)	95-47-6	1.5	D	1.0	6.5	D	4.3
1,2,2-Tetrachloroethane	79-34-5	1.0	U	1.0	6.9	U	6.9
3-Dichlorobenzene	541-73-1	1.0	U	1.0	6.0	U	6.0
4-Dichlorobenzene	106-46-7	1.0	U	1.0	6.0	U	6.0
2-Dichlorobenzene	95-50-1	1.0	U	1.0	6.0	U	6.0
2,4-Trichlorobenzene	120-82-1	1.0	U	1.0	7.4	U	7.4

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-TERADYNEDL

Lab Name: STL Burlington

SDG Number: 100862

Case Number:

Sample Matrix: Air

Lab Sample No.: 576334D1

Date Analyzed: 07/02/2004

Date Received: 06/19/2004

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Hexachlorobutadiene	87-68-3	1.0	U	1.0	11	U	11
1,3,5-Trimethylbenzene	108-67-8	1.0	U	1.0	4.9	U	4.9
1,2,4-Trimethylbenzene	95-63-6	1.0	U	1.0	4.9	U	4.9
1,2-Dichlorotetrafluoroethane	76-14-2	1.0	U	1.0	7.0	U	7.0
1,2-Dibromoethane	106-93-4	1.0	U	1.0	7.7	U	7.7
1,3-Butadiene	106-99-0	1.0	U	1.0	2.2	U	2.2
Carbon Disulfide	75-15-0	2.2	D	1.0	6.9	D	3.1
Acetone	67-64-1	39	D	10	93	D	24
Isopropyl Alcohol	67-63-0	33	D	10	81	D	25
Methyl tert-Butyl Ether	1634-04-4	1.0	U	1.0	3.6	U	3.6
Cyclohexane	110-82-7	1.8	D	1.0	6.2	D	3.4
Dibromochloromethane	124-48-1	1.0	U	1.0	8.5	U	8.5
Methyl Ethyl Ketone	78-93-3	2.0	D	1.0	5.9	D	2.9
Methyl Isobutyl Ketone	108-10-1	1.1	D	1.0	4.5	D	4.1
Methyl Butyl Ketone	591-78-6	2.4	D	1.0	9.8	D	4.1
Bromodichloromethane	75-27-4	1.0	U	1.0	6.7	U	6.7
trans-1,2-Dichloroethene	156-60-5	1.0	U	1.0	4.0	U	4.0
4-Ethyltoluene	622-96-8	1.0	U	1.0	4.9	U	4.9
2-Chlorotoluene	95-49-8	1.0	U	1.0	5.2	U	5.2
n-Hexane	110-54-3	1.4	D	1.0	4.9	D	3.5
Tetrahydrofuran	109-99-9	10	U	10	29	U	29
n-Heptane	142-82-5	8.2	D	1.0	34	D	4.1

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-TERADYNE-DUP

ab Name: STL Burlington

DG Number: 100862

ase Number:

ample Matrix: Air

Lab Sample No.: 576335

Date Analyzed: 07/02/2004

Date Received: 06/19/2004

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
ichlorodifluoromethane	75-71-8	0.62		0.50	3.1		2.5
hloromethane	74-87-3	0.69		0.50	1.4		1.0
inyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
romomethane	74-83-9	0.50	U	0.50	1.9	U	1.9
hloroethane	75-00-3	0.61		0.50	1.6		1.3
richlorofluoromethane	75-69-4	8.6		0.50	48		2.8
reon TF	76-13-1	0.50	U	0.50	3.8	U	3.8
,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
lethylene Chloride	75-09-2	0.51		0.50	1.8		1.7
,1-Dichloroethane	75-34-3	0.50	U	0.50	2.0	U	2.0
is-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
hloroform	67-66-3	0.50	U	0.50	2.4	U	2.4
,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
arbon Tetrachloride	56-23-5	0.50	U	0.50	3.1	U	3.1
enzene	71-43-2	0.73		0.50	2.3		1.6
,2-Dichloroethane	107-06-2	0.50	U	0.50	2.0	U	2.0
richloroethene	79-01-6	4.1		0.50	22		2.7
,2-Dichloropropane	78-87-5	0.50	U	0.50	2.3	U	2.3
s-1,3-Dichloropropene	10061-01-5	0.50	U	0.50	2.3	U	2.3
oluene	108-88-3	6.5		0.50	24		1.9
ans-1,3-Dichloropropene	10061-02-6	0.50	U	0.50	2.3	U	2.3
,1,2-Trichloroethane	79-00-5	0.50	U	0.50	2.7	U	2.7
etrachloroethene	127-18-4	0.50	U	0.50	3.4	U	3.4
hlorobenzene	108-90-7	0.50	U	0.50	2.3	U	2.3
thylbenzene	100-41-4	1.1		0.50	4.8		2.2
ylene (m,p)	1330-20-7	4.5		0.50	20		2.2
tyrene	100-42-5	1.4		0.50	6.0		2.1
ylene (o)	95-47-6	1.4		0.50	6.1		2.2
1,2,2-Tetrachloroethane	79-34-5	0.50	U	0.50	3.4	U	3.4
3-Dichlorobenzene	541-73-1	0.50	U	0.50	3.0	U	3.0
4-Dichlorobenzene	106-46-7	0.50	U	0.50	3.0	U	3.0
2-Dichlorobenzene	95-50-1	0.50	U	0.50	3.0	U	3.0
2,4-Trichlorobenzene	120-82-1	0.50	U	0.50	3.7	U	3.7

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SG-TERADYNE-DUP

Lab Name: STL Burlington

SDG Number: 100862

Case Number:

Sample Matrix: Air

Lab Sample No.: 576335

Date Analyzed: 07/02/2004

Date Received: 06/19/2004

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Hexachlorobutadiene	87-68-3	0.50	U	0.50	5.3	U	5.3
1,3,5-Trimethylbenzene	108-67-8	0.50	U	0.50	2.5	U	2.5
1,2,4-Trimethylbenzene	95-63-6	0.70		0.50	3.4		2.5
1,2-Dichlorotetrafluoroethane	76-14-2	0.50	U	0.50	3.5	U	3.5
1,2-Dibromoethane	106-93-4	0.50	U	0.50	3.8	U	3.8
1,3-Butadiene	106-99-0	0.50	U	0.50	1.1	U	1.1
Carbon Disulfide	75-15-0	0.98		0.50	3.1		1.6
Acetone	67-64-1	32		5.0	76		12
Isopropyl Alcohol	67-63-0	32		5.0	79		12
Methyl tert-Butyl Ether	1634-04-4	0.50	U	0.50	1.8	U	1.8
Cyclohexane	110-82-7	1.7		0.50	5.9		1.7
Dibromochloromethane	124-48-1	0.50	U	0.50	4.3	U	4.3
Methyl Ethyl Ketone	78-93-3	2.0		0.50	5.9		1.5
Methyl Isobutyl Ketone	108-10-1	0.50	U	0.50	2.0	U	2.0
Methyl Butyl Ketone	591-78-6	0.50	U	0.50	2.0	U	2.0
Bromodichloromethane	75-27-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0
4-Ethyltoluene	622-96-8	0.52		0.50	2.6		2.5
2-Chlorotoluene	95-49-8	0.50	U	0.50	2.6	U	2.6
n-Hexane	110-54-3	1.9		0.50	6.7		1.8
Tetrahydrofuran	109-99-9	5.0	U	5.0	15	U	15
n-Heptane	142-82-5	8.4		0.50	34		2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

TRIP BLANK

ab Name: STL Burlington

DG Number: 100862

ase Number:

ample Matrix: Air

Lab Sample No.: 576336

Date Analyzed: 07/02/2004

Date Received: 06/19/2004

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
ichlorodifluoromethane	75-71-8	0.50	U	0.50	2.5	U	2.5
hloromethane	74-87-3	0.50	U	0.50	1.0	U	1.0
inyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
romomethane	74-83-9	0.50	U	0.50	1.9	U	1.9
hloroethane	75-00-3	0.50	U	0.50	1.3	U	1.3
richlorofluoromethane	75-69-4	0.50	U	0.50	2.8	U	2.8
reon TF	76-13-1	0.50	U	0.50	3.8	U	3.8
,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
ethylene Chloride	75-09-2	0.50	U	0.50	1.7	U	1.7
,1-Dichloroethane	75-34-3	0.50	U	0.50	2.0	U	2.0
is-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
hloroform	67-66-3	0.50	U	0.50	2.4	U	2.4
,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
arbon Tetrachloride	56-23-5	0.50	U	0.50	3.1	U	3.1
enzene	71-43-2	0.50	U	0.50	1.6	U	1.6
,2-Dichloroethane	107-06-2	0.50	U	0.50	2.0	U	2.0
richloroethene	79-01-6	0.50	U	0.50	2.7	U	2.7
,2-Dichloropropane	78-87-5	0.50	U	0.50	2.3	U	2.3
is-1,3-Dichloropropene	10061-01-5	0.50	U	0.50	2.3	U	2.3
oluene	108-88-3	0.50	U	0.50	1.9	U	1.9
rans-1,3-Dichloropropene	10061-02-6	0.50	U	0.50	2.3	U	2.3
,1,2-Trichloroethane	79-00-5	0.50	U	0.50	2.7	U	2.7
etrachloroethene	127-18-4	0.50	U	0.50	3.4	U	3.4
hlorobenzene	108-90-7	0.50	U	0.50	2.3	U	2.3
thylbenzene	100-41-4	0.50	U	0.50	2.2	U	2.2
ylene (m,p)	1330-20-7	0.50	U	0.50	2.2	U	2.2
tyrene	100-42-5	0.50	U	0.50	2.1	U	2.1
ylene (o)	95-47-6	0.50	U	0.50	2.2	U	2.2
,1,2,2-Tetrachloroethane	79-34-5	0.50	U	0.50	3.4	U	3.4
,3-Dichlorobenzene	541-73-1	0.50	U	0.50	3.0	U	3.0
,4-Dichlorobenzene	106-46-7	0.50	U	0.50	3.0	U	3.0
,2-Dichlorobenzene	95-50-1	0.50	U	0.50	3.0	U	3.0
,2,4-Trichlorobenzene	120-82-1	0.50	U	0.50	3.7	U	3.7

TO-14/15
Result Summary

CLIENT SAMPLE NO.

TRIP BLANK

Lab Name: STL Burlington

SDG Number: 100862

Case Number:

Sample Matrix: Air

Lab Sample No.: 576336

Date Analyzed: 07/02/2004

Date Received: 06/19/2004

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Hexachlorobutadiene	87-68-3	0.50	U	0.50	5.3	U	5.3
1,3,5-Trimethylbenzene	108-67-8	0.50	U	0.50	2.5	U	2.5
1,2,4-Trimethylbenzene	95-63-6	0.50	U	0.50	2.5	U	2.5
1,2-Dichlorotetrafluoroethane	76-14-2	0.50	U	0.50	3.5	U	3.5
1,2-Dibromoethane	106-93-4	0.50	U	0.50	3.8	U	3.8
1,3-Butadiene	106-99-0	0.50	U	0.50	1.1	U	1.1
Carbon Disulfide	75-15-0	0.50	U	0.50	1.6	U	1.6
Acetone	67-64-1	5.0	U	5.0	12	U	12
Isopropyl Alcohol	67-63-0	5.0	U	5.0	12	U	12
Methyl tert-Butyl Ether	1634-04-4	0.50	U	0.50	1.8	U	1.8
Cyclohexane	110-82-7	0.50	U	0.50	1.7	U	1.7
Dibromochloromethane	124-48-1	0.50	U	0.50	4.3	U	4.3
Methyl Ethyl Ketone	78-93-3	0.50	U	0.50	1.5	U	1.5
Methyl Isobutyl Ketone	108-10-1	0.50	U	0.50	2.0	U	2.0
Methyl Butyl Ketone	591-78-6	0.50	U	0.50	2.0	U	2.0
Bromodichloromethane	75-27-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0
4-Ethyltoluene	622-96-8	0.50	U	0.50	2.5	U	2.5
2-Chlorotoluene	95-49-8	0.50	U	0.50	2.6	U	2.6
n-Hexane	110-54-3	0.50	U	0.50	1.8	U	1.8
Tetrahydrofuran	109-99-9	5.0	U	5.0	15	U	15
n-Heptane	142-82-5	0.50	U	0.50	2.0	U	2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

ABLKB1

ab Name: STL Burlington

DG Number: 100862

ase Number:

ample Matrix: AIR

Lab Sample No.: ABLKB1

Date Analyzed: 07/01/2004

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
ichlorodifluoromethane	75-71-8	0.50	U	0.50	2.5	U	2.5
hloromethane	74-87-3	0.50	U	0.50	1.0	U	1.0
inyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
romomethane	74-83-9	0.50	U	0.50	1.9	U	1.9
hloroethane	75-00-3	0.50	U	0.50	1.3	U	1.3
richlorofluoromethane	75-69-4	0.50	U	0.50	2.8	U	2.8
reon TF	76-13-1	0.50	U	0.50	3.8	U	3.8
,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
lethylene Chloride	75-09-2	0.50	U	0.50	1.7	U	1.7
,1-Dichloroethane	75-34-3	0.50	U	0.50	2.0	U	2.0
is-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
hloroform	67-66-3	0.50	U	0.50	2.4	U	2.4
,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
arbon Tetrachloride	56-23-5	0.50	U	0.50	3.1	U	3.1
enzene	71-43-2	0.50	U	0.50	1.6	U	1.6
,2-Dichloroethane	107-06-2	0.50	U	0.50	2.0	U	2.0
richloroethene	79-01-6	0.50	U	0.50	2.7	U	2.7
,2-Dichloropropane	78-87-5	0.50	U	0.50	2.3	U	2.3
is-1,3-Dichloropropene	10061-01-5	0.50	U	0.50	2.3	U	2.3
oluene	108-88-3	0.50	U	0.50	1.9	U	1.9
ans-1,3-Dichloropropene	10061-02-6	0.50	U	0.50	2.3	U	2.3
,1,2-Trichloroethane	79-00-5	0.50	U	0.50	2.7	U	2.7
etrachloroethene	127-18-4	0.50	U	0.50	3.4	U	3.4
hlorobenzene	108-90-7	0.50	U	0.50	2.3	U	2.3
thylbenzene	100-41-4	0.50	U	0.50	2.2	U	2.2
ylene (m,p)	1330-20-7	0.50	U	0.50	2.2	U	2.2
tyrene	100-42-5	0.50	U	0.50	2.1	U	2.1
ylene (o)	95-47-6	0.50	U	0.50	2.2	U	2.2
,1,2,2-Tetrachloroethane	79-34-5	0.50	U	0.50	3.4	U	3.4
,3-Dichlorobenzene	541-73-1	0.50	U	0.50	3.0	U	3.0
,4-Dichlorobenzene	106-46-7	0.50	U	0.50	3.0	U	3.0
,2-Dichlorobenzene	95-50-1	0.50	U	0.50	3.0	U	3.0
2,4-Trichlorobenzene	120-82-1	0.50	U	0.50	3.7	U	3.7

TO-14/15
Result Summary

CLIENT SAMPLE NO.

ABLKB1

Lab Name: STL Burlington

SDG Number: 100862

Case Number:

Sample Matrix: AIR

Lab Sample No.: ABLKB1

Date Analyzed: 07/01/2004

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Hexachlorobutadiene	87-68-3	0.50	U	0.50	5.3	U	5.3
1,3,5-Trimethylbenzene	108-67-8	0.50	U	0.50	2.5	U	2.5
1,2,4-Trimethylbenzene	95-63-6	0.50	U	0.50	2.5	U	2.5
1,2-Dichlorotetrafluoroethane	76-14-2	0.50	U	0.50	3.5	U	3.5
1,2-Dibromoethane	106-93-4	0.50	U	0.50	3.8	U	3.8
1,3-Butadiene	106-99-0	0.50	U	0.50	1.1	U	1.1
Carbon Disulfide	75-15-0	0.50	U	0.50	1.6	U	1.6
Acetone	67-64-1	5.0	U	5.0	12	U	12
Isopropyl Alcohol	67-63-0	5.0	U	5.0	12	U	12
Methyl tert-Butyl Ether	1634-04-4	0.50	U	0.50	1.8	U	1.8
Cyclohexane	110-82-7	0.50	U	0.50	1.7	U	1.7
Dibromochloromethane	124-48-1	0.50	U	0.50	4.3	U	4.3
Methyl Ethyl Ketone	78-93-3	0.50	U	0.50	1.5	U	1.5
1,4-Dioxane	123-91-1	5.0	U	5.0	18	U	18
Methyl Isobutyl Ketone	108-10-1	0.50	U	0.50	2.0	U	2.0
Methyl Butyl Ketone	591-78-6	0.50	U	0.50	2.0	U	2.0
Bromoform	75-25-2	0.50	U	0.50	5.2	U	5.2
Bromodichloromethane	75-27-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0
4-Ethyltoluene	622-96-8	0.50	U	0.50	2.5	U	2.5
3-Chloropropene	107-05-1	0.50	U	0.50	1.6	U	1.6
2,2,4-Trimethylpentane	540-84-1	0.50	U	0.50	2.3	U	2.3
Bromoethene	593-60-2	0.50	U	0.50	2.2	U	2.2
2-Chlorotoluene	95-49-8	0.50	U	0.50	2.6	U	2.6
n-Hexane	110-54-3	0.50	U	0.50	1.8	U	1.8
Tetrahydrofuran	109-99-9	5.0	U	5.0	15	U	15
n-Heptane	142-82-5	0.50	U	0.50	2.0	U	2.0
Methyl Methacrylate	80-62-6	0.50	U	0.50	2.0	U	2.0
1,2-Dichloroethene (total)	540-59-0	0.50	U	0.50	2.0	U	2.0
Xylene (total)	1330-20-7	0.50	U	0.50	2.2	U	2.2
tert-Butyl Alcohol	75-65-0	5.0	U	5.0	15	U	15

TO-14/15
Result Summary

CLIENT SAMPLE NO.

ABLKB3

.ab Name: STL Burlington

SDG Number: 100862

Case Number:

Sample Matrix: AIR

Lab Sample No.: ABLKB3

Date Analyzed: 07/02/2004

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.50	U	0.50	2.5	U	2.5
Chloromethane	74-87-3	0.50	U	0.50	1.0	U	1.0
Vinyl Chloride	75-01-4	0.50	U	0.50	1.3	U	1.3
Bromomethane	74-83-9	0.50	U	0.50	1.9	U	1.9
Chloroethane	75-00-3	0.50	U	0.50	1.3	U	1.3
Trichlorofluoromethane	75-69-4	0.50	U	0.50	2.8	U	2.8
Freon TF	76-13-1	0.50	U	0.50	3.8	U	3.8
,1-Dichloroethene	75-35-4	0.50	U	0.50	2.0	U	2.0
Methylene Chloride	75-09-2	0.50	U	0.50	1.7	U	1.7
,1-Dichloroethane	75-34-3	0.50	U	0.50	2.0	U	2.0
is-1,2-Dichloroethene	156-59-2	0.50	U	0.50	2.0	U	2.0
Chloroform	67-66-3	0.50	U	0.50	2.4	U	2.4
,1,1-Trichloroethane	71-55-6	0.50	U	0.50	2.7	U	2.7
Carbon Tetrachloride	56-23-5	0.50	U	0.50	3.1	U	3.1
Benzene	71-43-2	0.50	U	0.50	1.6	U	1.6
,2-Dichloroethane	107-06-2	0.50	U	0.50	2.0	U	2.0
richloroethene	79-01-6	0.50	U	0.50	2.7	U	2.7
,2-Dichloropropane	78-87-5	0.50	U	0.50	2.3	U	2.3
is-1,3-Dichloropropene	10061-01-5	0.50	U	0.50	2.3	U	2.3
oluene	108-88-3	0.50	U	0.50	1.9	U	1.9
ans-1,3-Dichloropropene	10061-02-6	0.50	U	0.50	2.3	U	2.3
,1,2-Trichloroethane	79-00-5	0.50	U	0.50	2.7	U	2.7
etrachloroethene	127-18-4	0.50	U	0.50	3.4	U	3.4
hlorobenzene	108-90-7	0.50	U	0.50	2.3	U	2.3
thylbenzene	100-41-4	0.50	U	0.50	2.2	U	2.2
ylene (m,p)	1330-20-7	0.50	U	0.50	2.2	U	2.2
tyrene	100-42-5	0.50	U	0.50	2.1	U	2.1
ylene (o)	95-47-6	0.50	U	0.50	2.2	U	2.2
1,2,2-Tetrachloroethane	79-34-5	0.50	U	0.50	3.4	U	3.4
3-Dichlorobenzene	541-73-1	0.50	U	0.50	3.0	U	3.0
4-Dichlorobenzene	106-46-7	0.50	U	0.50	3.0	U	3.0
2-Dichlorobenzene	95-50-1	0.50	U	0.50	3.0	U	3.0
2,4-Trichlorobenzene	120-82-1	0.50	U	0.50	3.7	U	3.7

TO-14/15
Result Summary

CLIENT SAMPLE NO.

ABLKB3

Lab Name: STL Burlington

SDG Number: 100862

Case Number:

Sample Matrix: AIR

Lab Sample No.: ABLKB3

Date Analyzed: 07/02/2004

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Hexachlorobutadiene	87-68-3	0.50	U	0.50	5.3	U	5.3
1,3,5-Trimethylbenzene	108-67-8	0.50	U	0.50	2.5	U	2.5
1,2,4-Trimethylbenzene	95-63-6	0.50	U	0.50	2.5	U	2.5
1,2-Dichlorotetrafluoroethane	76-14-2	0.50	U	0.50	3.5	U	3.5
1,2-Dibromoethane	106-93-4	0.50	U	0.50	3.8	U	3.8
1,3-Butadiene	106-99-0	0.50	U	0.50	1.1	U	1.1
Carbon Disulfide	75-15-0	0.50	U	0.50	1.6	U	1.6
Acetone	67-64-1	5.0	U	5.0	12	U	12
Isopropyl Alcohol	67-63-0	5.0	U	5.0	12	U	12
Methyl tert-Butyl Ether	1634-04-4	0.50	U	0.50	1.8	U	1.8
Cyclohexane	110-82-7	0.50	U	0.50	1.7	U	1.7
Dibromochloromethane	124-48-1	0.50	U	0.50	4.3	U	4.3
Methyl Ethyl Ketone	78-93-3	0.50	U	0.50	1.5	U	1.5
Methyl Isobutyl Ketone	108-10-1	0.50	U	0.50	2.0	U	2.0
Methyl Butyl Ketone	591-78-6	0.50	U	0.50	2.0	U	2.0
Bromodichloromethane	75-27-4	0.50	U	0.50	3.4	U	3.4
trans-1,2-Dichloroethene	156-60-5	0.50	U	0.50	2.0	U	2.0
4-Ethyltoluene	622-96-8	0.50	U	0.50	2.5	U	2.5
2-Chlorotoluene	95-49-8	0.50	U	0.50	2.6	U	2.6
n-Hexane	110-54-3	0.50	U	0.50	1.8	U	1.8
Tetrahydrofuran	109-99-9	5.0	U	5.0	15	U	15
n-Heptane	142-82-5	0.50	U	0.50	2.0	U	2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

B1LCS

Lab Name: STL Burlington

SDG Number: 100862

Case Number:

Sample Matrix: AIR

Lab Sample No.: B1LCS

Date Analyzed: 07/01/2004

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	11		0.50	54		2.5
Chloromethane	74-87-3	11		0.50	23		1.0
Vinyl Chloride	75-01-4	11		0.50	28		1.3
Bromomethane	74-83-9	12		0.50	47		1.9
Chloroethane	75-00-3	12		0.50	32		1.3
Trichlorofluoromethane	75-69-4	12		0.50	67		2.8
Freon TF	76-13-1	11		0.50	84		3.8
,1-Dichloroethene	75-35-4	11		0.50	44		2.0
Methylene Chloride	75-09-2	10		0.50	35		1.7
,1-Dichloroethane	75-34-3	11		0.50	45		2.0
is-1,2-Dichloroethene	156-59-2	10		0.50	40		2.0
Chloroform	67-66-3	11		0.50	54		2.4
,1,1-Trichloroethane	71-55-6	11		0.50	60		2.7
Carbon Tetrachloride	56-23-5	11		0.50	69		3.1
Benzene	71-43-2	11		0.50	35		1.6
,2-Dichloroethane	107-06-2	12		0.50	49		2.0
richloroethene	79-01-6	10		0.50	54		2.7
,2-Dichloropropane	78-87-5	10		0.50	46		2.3
is-1,3-Dichloropropene	10061-01-5	10		0.50	45		2.3
oluene	108-88-3	11		0.50	41		1.9
ans-1,3-Dichloropropene	10061-02-6	10		0.50	45		2.3
,1,2-Trichloroethane	79-00-5	11		0.50	60		2.7
etrachloroethene	127-18-4	11		0.50	75		3.4
hlorobenzene	108-90-7	11		0.50	51		2.3
thylbenzene	100-41-4	11		0.50	48		2.2
ylene (m,p)	1330-20-7	24		0.50	100		2.2
tyrene	100-42-5	12		0.50	51		2.1
ylene (o)	95-47-6	12		0.50	52		2.2
1,2,2-Tetrachloroethane	79-34-5	12		0.50	82		3.4
3-Dichlorobenzene	541-73-1	12		0.50	72		3.0
4-Dichlorobenzene	106-46-7	12		0.50	72		3.0
2-Dichlorobenzene	95-50-1	12		0.50	72		3.0
2,4-Trichlorobenzene	120-82-1	18		0.50	130		3.7

TO-14/15
Result Summary

CLIENT SAMPLE NO.

B1LCS

Lab Name: STL Burlington

SDG Number: 100862

Case Number:

Sample Matrix: AIR

Lab Sample No.: B1LCS

Date Analyzed: 07/01/2004

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Hexachlorobutadiene	87-68-3	14		0.50	150		5.3
1,3,5-Trimethylbenzene	108-67-8	14		0.50	69		2.5
1,2,4-Trimethylbenzene	95-63-6	12		0.50	59		2.5
1,2-Dichlorotetrafluoroethane	76-14-2	11		0.50	77		3.5
1,2-Dibromoethane	106-93-4	11		0.50	85		3.8
1,3-Butadiene	106-99-0	12		0.50	27		1.1
Carbon Disulfide	75-15-0	11		0.50	34		1.6
Acetone	67-64-1	12		5.0	29		12
Isopropyl Alcohol	67-63-0	9.8		5.0	24		12
Methyl tert-Butyl Ether	1634-04-4	11		0.50	40		1.8
Cyclohexane	110-82-7	11		0.50	38		1.7
Dibromochloromethane	124-48-1	12		0.50	100		4.3
Methyl Ethyl Ketone	78-93-3	10		0.50	29		1.5
1,4-Dioxane	123-91-1	9.1		5.0	33		18
Methyl Isobutyl Ketone	108-10-1	9.8		0.50	40		2.0
Methyl Butyl Ketone	591-78-6	9.8		0.50	40		2.0
Bromoform	75-25-2	12		0.50	120		5.2
Bromodichloromethane	75-27-4	11		0.50	74		3.4
trans-1,2-Dichloroethene	156-60-5	11		0.50	44		2.0
4-Ethyltoluene	622-96-8	10		0.50	49		2.5
3-Chloropropene	107-05-1	10		0.50	31		1.6
2,2,4-Trimethylpentane	540-84-1	11		0.50	51		2.3
Bromoethene	593-60-2	12		0.50	52		2.2
2-Chlorotoluene	95-49-8	12		0.50	62		2.6
n-Hexane	110-54-3	11		0.50	39		1.8
Tetrahydrofuran	109-99-9	10		5.0	29		15
n-Heptane	142-82-5	12		0.50	49		2.0
Methyl Methacrylate	80-62-6	10		0.50	41		2.0
1,2-Dichloroethene (total)	540-59-0	22		0.50	87		2.0
Xylene (total)	1330-20-7	32		0.50	140		2.2
tert-Butyl Alcohol	75-65-0	11		5.0	33		15

TO-14/15
Result Summary

CLIENT SAMPLE NO.

B1LCSD

.ab Name: STL Burlington

;DG Number: 100862

;ase Number:

;ample Matrix: AIR

Lab Sample No.: B1LCSD

Date Analyzed: 07/01/2004

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
)ichlorodifluoromethane	75-71-8	12		0.50	59		2.5
;hloromethane	74-87-3	12		0.50	25		1.0
'inyl Chloride	75-01-4	12		0.50	31		1.3
romomethane	74-83-9	12		0.50	47		1.9
:hloroethane	75-00-3	12		0.50	32		1.3
richlorofluoromethane	75-69-4	12		0.50	67		2.8
reon TF	76-13-1	11		0.50	84		3.8
,1-Dichloroethene	75-35-4	11		0.50	44		2.0
lethylene Chloride	75-09-2	10		0.50	35		1.7
,1-Dichloroethane	75-34-3	11		0.50	45		2.0
s-1,2-Dichloroethene	156-59-2	10		0.50	40		2.0
hloroform	67-66-3	11		0.50	54		2.4
.1,1-Trichloroethane	71-55-6	12		0.50	65		2.7
arbon Tetrachloride	56-23-5	11		0.50	69		3.1
enzene	71-43-2	11		0.50	35		1.6
2-Dichloroethane	107-06-2	12		0.50	49		2.0
'ichloroethene	79-01-6	10		0.50	54		2.7
2-Dichloropropane	78-87-5	11		0.50	51		2.3
s-1,3-Dichloropropene	10061-01-5	10		0.50	45		2.3
)luene	108-88-3	11		0.50	41		1.9
ans-1,3-Dichloropropene	10061-02-6	11		0.50	50		2.3
1,2-Trichloroethane	79-00-5	11		0.50	60		2.7
:trachloroethene	127-18-4	11		0.50	75		3.4
ılorobenzene	108-90-7	11		0.50	51		2.3
hylbenzene	100-41-4	12		0.50	52		2.2
'lene (m,p)	1330-20-7	25		0.50	110		2.2
yrene	100-42-5	12		0.50	51		2.1
'lene (o)	95-47-6	12		0.50	52		2.2
1,2,2-Tetrachloroethane	79-34-5	12		0.50	82		3.4
3-Dichlorobenzene	541-73-1	12		0.50	72		3.0
4-Dichlorobenzene	106-46-7	12		0.50	72		3.0
2-Dichlorobenzene	95-50-1	13		0.50	78		3.0
2,4-Trichlorobenzene	120-82-1	20		0.50	150		3.7

TO-14/15
Result Summary

CLIENT SAMPLE NO.

B1LCSD

Lab Name: STL Burlington

SDG Number: 100862

Case Number:

Sample Matrix: AIR

Lab Sample No.: B1LCSD

Date Analyzed: 07/01/2004

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Hexachlorobutadiene	87-68-3	16		0.50	170		5.3
1,3,5-Trimethylbenzene	108-67-8	14		0.50	69		2.5
1,2,4-Trimethylbenzene	95-63-6	13		0.50	64		2.5
1,2-Dichlorotetrafluoroethane	76-14-2	12		0.50	84		3.5
1,2-Dibromoethane	106-93-4	11		0.50	85		3.8
1,3-Butadiene	106-99-0	12		0.50	27		1.1
Carbon Disulfide	75-15-0	11		0.50	34		1.6
Acetone	67-64-1	12		5.0	29		12
Isopropyl Alcohol	67-63-0	9.9		5.0	24		12
Methyl tert-Butyl Ether	1634-04-4	12		0.50	43		1.8
Cyclohexane	110-82-7	11		0.50	38		1.7
Dibromochloromethane	124-48-1	12		0.50	100		4.3
Methyl Ethyl Ketone	78-93-3	10		0.50	29		1.5
1,4-Dioxane	123-91-1	8.8		5.0	32		18
Methyl Isobutyl Ketone	108-10-1	9.8		0.50	40		2.0
Methyl Butyl Ketone	591-78-6	10		0.50	41		2.0
Bromoform	75-25-2	12		0.50	120		5.2
Bromodichloromethane	75-27-4	11		0.50	74		3.4
trans-1,2-Dichloroethene	156-60-5	11		0.50	44		2.0
4-Ethyltoluene	622-96-8	12		0.50	59		2.5
3-Chloropropene	107-05-1	10		0.50	31		1.6
2,2,4-Trimethylpentane	540-84-1	11		0.50	51		2.3
Bromoethene	593-60-2	12		0.50	52		2.2
2-Chlorotoluene	95-49-8	13		0.50	67		2.6
n-Hexane	110-54-3	11		0.50	39		1.8
Tetrahydrofuran	109-99-9	11		5.0	32		15
n-Heptane	142-82-5	12		0.50	49		2.0
Methyl Methacrylate	80-62-6	10		0.50	41		2.0
1,2-Dichloroethene (total)	540-59-0	22		0.50	87		2.0
Xylene (total)	1330-20-7	33		0.50	140		2.2
tert-Butyl Alcohol	75-65-0	11		5.0	33		15

TO-14/15
Result Summary

CLIENT SAMPLE NO.

B3LCS

ab Name: STL Burlington

DG Number: 100862

ase Number:

ample Matrix: AIR

Lab Sample No.: B3LCS

Date Analyzed: 07/02/2004

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
ichlorodifluoromethane	75-71-8	9.8		0.50	48		2.5
hloromethane	74-87-3	10		0.50	21		1.0
inyl Chloride	75-01-4	10		0.50	26		1.3
romomethane	74-83-9	11		0.50	43		1.9
hloroethane	75-00-3	10		0.50	26		1.3
richlorofluoromethane	75-69-4	10		0.50	56		2.8
reon TF	76-13-1	10		0.50	77		3.8
,1-Dichloroethene	75-35-4	11		0.50	44		2.0
lethylene Chloride	75-09-2	9.2		0.50	32		1.7
,1-Dichloroethane	75-34-3	10		0.50	40		2.0
is-1,2-Dichloroethene	156-59-2	10		0.50	40		2.0
hloroform	67-66-3	10		0.50	49		2.4
,1,1-Trichloroethane	71-55-6	10		0.50	55		2.7
arbon Tetrachloride	56-23-5	10		0.50	63		3.1
enzene	71-43-2	11		0.50	35		1.6
,2-Dichloroethane	107-06-2	11		0.50	45		2.0
richloroethene	79-01-6	10		0.50	54		2.7
,2-Dichloropropane	78-87-5	10		0.50	46		2.3
is-1,3-Dichloropropene	10061-01-5	10		0.50	45		2.3
oluene	108-88-3	11		0.50	41		1.9
ans-1,3-Dichloropropene	10061-02-6	10		0.50	45		2.3
,1,2-Trichloroethane	79-00-5	10		0.50	55		2.7
etrachloroethene	127-18-4	11		0.50	75		3.4
hlorobenzene	108-90-7	11		0.50	51		2.3
thylbenzene	100-41-4	11		0.50	48		2.2
ylene (m,p)	1330-20-7	23		0.50	100		2.2
tyrene	100-42-5	11		0.50	47		2.1
ylene (o)	95-47-6	11		0.50	48		2.2
,1,2,2-Tetrachloroethane	79-34-5	11		0.50	76		3.4
,3-Dichlorobenzene	541-73-1	11		0.50	66		3.0
,4-Dichlorobenzene	106-46-7	11		0.50	66		3.0
,2-Dichlorobenzene	95-50-1	11		0.50	66		3.0
,2,4-Trichlorobenzene	120-82-1	17		0.50	130		3.7

TO-14/15
Result Summary

CLIENT SAMPLE NO.

B3LCS

Lab Name: STL Burlington

SDG Number: 100862

Case Number:

Sample Matrix: AIR

Lab Sample No.: B3LCS

Date Analyzed: 07/02/2004

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Hexachlorobutadiene	87-68-3	13		0.50	140		5.3
1,3,5-Trimethylbenzene	108-67-8	11		0.50	54		2.5
1,2,4-Trimethylbenzene	95-63-6	11		0.50	54		2.5
1,2-Dichlorotetrafluoroethane	76-14-2	10		0.50	70		3.5
1,2-Dibromoethane	106-93-4	10		0.50	77		3.8
1,3-Butadiene	106-99-0	10		0.50	22		1.1
Carbon Disulfide	75-15-0	10		0.50	31		1.6
Acetone	67-64-1	10		5.0	24		12
Isopropyl Alcohol	67-63-0	9.1		5.0	22		12
Methyl tert-Butyl Ether	1634-04-4	10		0.50	36		1.8
Cyclohexane	110-82-7	11		0.50	38		1.7
Dibromochloromethane	124-48-1	11		0.50	94		4.3
Methyl Ethyl Ketone	78-93-3	9.8		0.50	29		1.5
Methyl Isobutyl Ketone	108-10-1	9.8		0.50	40		2.0
Methyl Butyl Ketone	591-78-6	9.3		0.50	38		2.0
Bromodichloromethane	75-27-4	10		0.50	67		3.4
trans-1,2-Dichloroethene	156-60-5	10		0.50	40		2.0
4-Ethyltoluene	622-96-8	11		0.50	54		2.5
2-Chlorotoluene	95-49-8	11		0.50	57		2.6
n-Hexane	110-54-3	9.7		0.50	34		1.8
Tetrahydrofuran	109-99-9	10		5.0	29		15
n-Heptane	142-82-5	11		0.50	45		2.0

TO-14/15
Result Summary

CLIENT SAMPLE NO.

B3LCSD

Lab Name: STL Burlington

SDG Number: 100862

Case Number:

Sample Matrix: AIR

Lab Sample No.: B3LCSD

Date Analyzed: 07/02/2004

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	11		0.50	54		2.5
Chloromethane	74-87-3	11		0.50	23		1.0
Vinyl Chloride	75-01-4	11		0.50	28		1.3
Bromomethane	74-83-9	11		0.50	43		1.9
Chloroethane	75-00-3	11		0.50	29		1.3
Trichlorofluoromethane	75-69-4	11		0.50	62		2.8
Freon TF	76-13-1	11		0.50	84		3.8
,1-Dichloroethene	75-35-4	11		0.50	44		2.0
Methylene Chloride	75-09-2	9.6		0.50	33		1.7
,1-Dichloroethane	75-34-3	10		0.50	40		2.0
is-1,2-Dichloroethene	156-59-2	10		0.50	40		2.0
Chloroform	67-66-3	10		0.50	49		2.4
,1,1-Trichloroethane	71-55-6	11		0.50	60		2.7
Carbon Tetrachloride	56-23-5	11		0.50	69		3.1
Benzene	71-43-2	11		0.50	35		1.6
,2-Dichloroethane	107-06-2	11		0.50	45		2.0
Trichloroethene	79-01-6	10		0.50	54		2.7
,2-Dichloropropane	78-87-5	10		0.50	46		2.3
is-1,3-Dichloropropene	10061-01-5	10		0.50	45		2.3
Toluene	108-88-3	10		0.50	38		1.9
rans-1,3-Dichloropropene	10061-02-6	10		0.50	45		2.3
,1,2-Trichloroethane	79-00-5	11		0.50	60		2.7
Tetrachloroethene	127-18-4	11		0.50	75		3.4
Chlorobenzene	108-90-7	11		0.50	51		2.3
thylbenzene	100-41-4	12		0.50	52		2.2
ylene (m,p)	1330-20-7	25		0.50	110		2.2
tyrene	100-42-5	12		0.50	51		2.1
ylene (o)	95-47-6	12		0.50	52		2.2
,1,2,2-Tetrachloroethane	79-34-5	12		0.50	82		3.4
,3-Dichlorobenzene	541-73-1	12		0.50	72		3.0
,4-Dichlorobenzene	106-46-7	12		0.50	72		3.0
,2-Dichlorobenzene	95-50-1	12		0.50	72		3.0
1,2,4-Trichlorobenzene	120-82-1	16		0.50	120		3.7

TO-14/15
Result Summary

CLIENT SAMPLE NO.

B3LCSD

Lab Name: STL Burlington

SDG Number: 100862

Case Number:

Sample Matrix: AIR

Lab Sample No.: B3LCSD

Date Analyzed: 07/02/2004

Date Received: / /

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Hexachlorobutadiene	87-68-3	14		0.50	150		5.3
1,3,5-Trimethylbenzene	108-67-8	15		0.50	74		2.5
1,2,4-Trimethylbenzene	95-63-6	12		0.50	59		2.5
1,2-Dichlorotetrafluoroethane	76-14-2	11		0.50	77		3.5
1,2-Dibromoethane	106-93-4	11		0.50	85		3.8
1,3-Butadiene	106-99-0	11		0.50	24		1.1
Carbon Disulfide	75-15-0	11		0.50	34		1.6
Acetone	67-64-1	10		5.0	24		12
Isopropyl Alcohol	67-63-0	9.4		5.0	23		12
Methyl tert-Butyl Ether	1634-04-4	11		0.50	40		1.8
Cyclohexane	110-82-7	11		0.50	38		1.7
Dibromochloromethane	124-48-1	12		0.50	100		4.3
Methyl Ethyl Ketone	78-93-3	10		0.50	29		1.5
Methyl Isobutyl Ketone	108-10-1	9.7		0.50	40		2.0
Methyl Butyl Ketone	591-78-6	10		0.50	41		2.0
Bromodichloromethane	75-27-4	11		0.50	74		3.4
trans-1,2-Dichloroethene	156-60-5	11		0.50	44		2.0
4-Ethyltoluene	622-96-8	10		0.50	49		2.5
2-Chlorotoluene	95-49-8	12		0.50	62		2.6
n-Hexane	110-54-3	11		0.50	39		1.8
Tetrahydrofuran	109-99-9	10		5.0	29		15
n-Heptane	142-82-5	11		0.50	45		2.0

SEVERN TRENT LABORATORIES, INC.

208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

CHAIN OF CUSTODY RECORD

Report to:
Company: ROUX ASSOCIATES
Address: 25 Corporate Dr. Burlington MA 01803
Contact: Larry McTiernan
Phone: 781-270-6600
Fax: 781-270-9060
Contract/ Quote:

Invoice to:
Company: SAME AS
Address: REPORT TO:
Contact:
Phone:
Fax:

Sampler's Name: C. Milne
Sampler's Signature: C. Milne

Proj. No.: 11940/M
Project Name: Solutia-WPP/Vining

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	TO15	Lab/Sample ID (Lab Use Only)
A	6/12/04	6:42		X	SG - Teradyne				1	X	
A	6/12/04	6:45		X	SG - Teradyne-DUP				1	X	
A					TRIP BLANK				1	X	

Analysis Requested

Lab Use Only
Due Date:

Temp. of coolers when received (C°):
1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
C. Milne	6/12/04	16:00	Angela Patnaud	06.19.04	1030
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks: Fedex # 3456 3284 3060

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other _____

STL cannot accept verbal changes. Please Fax written changes to (802) 655-1248

STL8234-200 (12/02)

TRENT STL
SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

CHAIN OF CUSTODY RECORD

Report to:
Company: ROUX ASSOCIATES
Address: 25 Corporate Dr. Suite 230 Burlington, MA 01803
Contact:
Phone: 781-270-6600
Fax: 781-270-9066
Contract/ Quote:

Invoice to:
Company: SAME AS REPORT TO.
Address:
Contact:
Phone:
Fax:

Sampler's Name: C. Milone
Sampler's Signature: C. Milone

Proj. No.: 11940/M
Project Name: Solutia - WHP/Vinyl

ANALYSIS REQUESTED: VOC (8260B)

Lab Use Only
Due Date:

Temp. of coolers when received (C°): 1 | 2 | 3 | 4 | 5

Custody Seal N / Y
Intact N / Y

Screened For Radioactivity ☐

Matrix[1]	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	No/Type of Containers[2] VOA	A/G 1 Lt.	250 ml	P/O	Lab/Sample ID (Lab Use Only)
	6/18/04	9:00			Modeling Clay.	2				X
	6/18/04	CJM			TRIP BLANK CJM	2				X CJM CJM

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
C. Milone	6/18/04	16:00	Angela Patnoad	06.19.04	1030
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Remarks: FedEx # 8456 3284 3070

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

[1]Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
[2]Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other

STL cannot accept verbal changes. Please Fax written changes to

STL8234-200 (12/02)

SEVERN TRENT STL

Sample Data Summary Package For Wet Chemistry

WET CHEMISTRY

Sample Report Summary

Client Sample No.
MODELING CLAY

b Name: STL BURLINGTON | Contract: | SDG No.: 100862

b Code: STLVT | Case No.: 24000 | Lab Sample ID: 576337

atrix: SOLID | Client: ROUX2 | Date Received: 06/19/04

Solids: 46.8

Method	Parameter	Analytical Run Date	Analytical Batch	Units	DF	RL	Conc.	Qual.
IN623	Solids, Percent	06/22/04	N/A	%	1.0		46.8	

nted on: 06/23/04 02:38 PM

SEVERN TRENT STL

METHOD 8260B

VOLATILE ORGANIC ANALYSIS

SAMPLE DATA SUMMARY PACKAGE

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

MODEL CLAY

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) SOIL Lab Sample ID: 576337

Sample wt/vol: 3.6 (g/mL) G Lab File ID: 576337

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. 53 Date Analyzed: 06/22/04

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	15	U
74-87-3	Chloromethane	15	U
75-01-4	Vinyl Chloride	15	U
74-83-9	Bromomethane	15	U
75-00-3	Chloroethane	15	U
75-69-4	Trichlorofluoromethane	15	U
107-02-8	Acrolein	15	U
76-13-1	Freon TF	15	U
75-35-4	1,1-Dichloroethene	260	
67-64-1	Acetone	15	U
74-88-4	Methyl Iodide	15	U
75-15-0	Carbon Disulfide	15	U
107-05-1	Allyl Chloride	15	U
75-09-2	Methylene Chloride	15	U
107-13-1	Acrylonitrile	46	
156-60-5	trans-1,2-Dichloroethene	15	U
540-59-0	1,2-Dichloroethene (total)	15	U
1634-04-4	Methyl-t-Butyl Ether	15	U
75-34-3	1,1-Dichloroethane	15	U
108-05-4	Vinyl Acetate	15	U
126-99-8	Chloroprene	15	U
156-59-2	cis-1,2-Dichloroethene	15	U
78-93-3	2-Butanone	14	J
107-12-0	Propionitrile	58	U
126-98-7	Methacrylonitrile	15	U
74-97-5	Bromochloromethane	15	U
109-99-9	Tetrahydrofuran	150	U
67-66-3	Chloroform	15	U
71-55-6	1,1,1-Trichloroethane	15	U
56-23-5	Carbon Tetrachloride	15	U
78-83-1	Isobutyl Alcohol	730	U
71-43-2	Benzene	15	U
107-06-2	1,2-Dichloroethane	15	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

MODEL CLAY

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) SOIL Lab Sample ID: 576337

Sample wt/vol: 3.6 (g/mL) G Lab File ID: 576337

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. 53 Date Analyzed: 06/22/04

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	15	U
78-87-5	1,2-Dichloropropane	15	U
80-62-6	Methyl Methacrylate	15	U
74-95-3	Dibromomethane	15	U
123-91-1	1,4-Dioxane	730	U
75-27-4	Bromodichloromethane	15	U
110-75-8	2-Chloroethyl Vinyl Ether	15	U
10061-01-5	cis-1,3-Dichloropropene	15	U
108-10-1	4-Methyl-2-pentanone	15	U
108-88-3	Toluene	15	U
10061-02-6	trans-1,3-Dichloropropene	15	U
97-63-2	Ethyl Methacrylate	15	U
79-00-5	1,1,2-Trichloroethane	15	U
127-18-4	Tetrachloroethene	15	U
591-78-6	2-Hexanone	15	U
124-48-1	Dibromochloromethane	15	U
106-93-4	1,2-Dibromoethane	15	U
108-90-7	Chlorobenzene	15	U
630-20-6	1,1,1,2-Tetrachloroethane	15	U
100-41-4	Ethylbenzene	15	U
1330-20-7	Xylene (m,p)	15	U
1330-20-7	Xylene (total)	15	U
95-47-6	Xylene (o)	15	U
100-42-5	Styrene	15	U
75-25-2	Bromoform	15	U
98-82-8	Isopropylbenzene	15	U
1476-11-5	cis-1,4-Dichloro-2-butene	15	U
79-34-5	1,1,2,2-Tetrachloroethane	15	U
96-18-4	1,2,3-Trichloropropane	15	U
110-57-6	trans-1,4-Dichloro-2-butene	15	U
541-73-1	1,3-Dichlorobenzene	15	U
106-46-7	1,4-Dichlorobenzene	15	U
95-50-1	1,2-Dichlorobenzene	15	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

MODEL CLAY

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) SOIL Lab Sample ID: 576337

Sample wt/vol: 3.6 (g/mL) G Lab File ID: 576337

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. 53 Date Analyzed: 06/22/04

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
96-12-8	1,2-Dibromo-3-Chloropropane	15	U
120-82-1	1,2,4-Trichlorobenzene	15	U
87-68-3	Hexachlorobutadiene	15	U
91-20-3	Naphthalene	4.1	JB
594-20-7	2,2-Dichloropropane	15	U
563-58-6	1,1-Dichloropropene	15	U
142-28-9	1,3-Dichloropropane	15	U
108-86-1	Bromobenzene	15	U
103-65-1	n-Propylbenzene	15	U
95-49-8	2-Chlorotoluene	15	U
106-43-4	4-Chlorotoluene	15	U
108-67-8	1,3,5-Trimethylbenzene	15	U
98-06-6	tert-Butylbenzene	15	U
95-63-6	1,2,4-Trimethylbenzene	15	U
135-98-8	sec-Butylbenzene	15	U
99-87-6	4-Isopropyltoluene	15	U
104-51-8	n-Butylbenzene	15	U
87-61-6	1,2,3-Trichlorobenzene	15	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NXXI LCS

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) SOIL Lab Sample ID: NXXI LCS

Sample wt/vol: 5.0 (g/mL) G Lab File ID: NXX50IQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/21/04

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	50	
74-87-3	Chloromethane	45	
75-01-4	Vinyl Chloride	50	
74-83-9	Bromomethane	60	
75-00-3	Chloroethane	52	
75-69-4	Trichlorofluoromethane	52	
107-02-8	Acrolein	41	
76-13-1	Freon TF	52	
75-35-4	1,1-Dichloroethene	53	
67-64-1	Acetone	47	
74-88-4	Methyl Iodide	59	
75-15-0	Carbon Disulfide	49	
107-05-1	Allyl Chloride	45	
75-09-2	Methylene Chloride	48	
107-13-1	Acrylonitrile	46	
156-60-5	trans-1,2-Dichloroethene	51	
540-59-0	1,2-Dichloroethene (total)	100	
1634-04-4	Methyl-t-Butyl Ether	47	
75-34-3	1,1-Dichloroethane	49	
108-05-4	Vinyl Acetate	47	
126-99-8	Chloroprene	46	
156-59-2	cis-1,2-Dichloroethene	51	
78-93-3	2-Butanone	50	
107-12-0	Propionitrile	200	
126-98-7	Methacrylonitrile	47	
74-97-5	Bromochloromethane	50	
109-99-9	Tetrahydrofuran	440	
67-66-3	Chloroform	48	
71-55-6	1,1,1-Trichloroethane	48	
56-23-5	Carbon Tetrachloride	47	
78-83-1	Isobutyl Alcohol	2300	
71-43-2	Benzene	47	
107-06-2	1,2-Dichloroethane	44	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NXXI LCS

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) SOIL Lab Sample ID: NXXI LCS

Sample wt/vol: 5.0 (g/mL) G Lab File ID: NXX50IQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/21/04

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	48	
78-87-5	1,2-Dichloropropane	47	
80-62-6	Methyl Methacrylate	45	
74-95-3	Dibromomethane	46	
123-91-1	1,4-Dioxane	2400	
75-27-4	Bromodichloromethane	46	
110-75-8	2-Chloroethyl Vinyl Ether	54	
10061-01-5	cis-1,3-Dichloropropene	46	
108-10-1	4-Methyl-2-pentanone	44	
108-88-3	Toluene	48	
10061-02-6	trans-1,3-Dichloropropene	45	
97-63-2	Ethyl Methacrylate	46	
79-00-5	1,1,2-Trichloroethane	45	
127-18-4	Tetrachloroethene	47	
591-78-6	2-Hexanone	43	
124-48-1	Dibromochloromethane	46	
106-93-4	1,2-Dibromoethane	46	
108-90-7	Chlorobenzene	47	
630-20-6	1,1,1,2-Tetrachloroethane	47	
100-41-4	Ethylbenzene	47	
1330-20-7	Xylene (m,p)	94	
1330-20-7	Xylene (total)	140	
95-47-6	Xylene (o)	47	
100-42-5	Styrene	48	
75-25-2	Bromoform	46	
98-82-8	Isopropylbenzene	47	
1476-11-5	cis-1,4-Dichloro-2-butene	42	
79-34-5	1,1,2,2-Tetrachloroethane	44	
96-18-4	1,2,3-Trichloropropane	45	
110-57-6	trans-1,4-Dichloro-2-butene	42	
541-73-1	1,3-Dichlorobenzene	48	
106-46-7	1,4-Dichlorobenzene	50	
95-50-1	1,2-Dichlorobenzene	48	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NXXI LCS

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) SOIL Lab Sample ID: NXXI LCS

Sample wt/vol: 5.0 (g/mL) G Lab File ID: NXX50IQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/21/04

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
96-12-8	1,2-Dibromo-3-Chloropropane	44	
120-82-1	1,2,4-Trichlorobenzene	55	
87-68-3	Hexachlorobutadiene	58	
91-20-3	Naphthalene	48	B
594-20-7	2,2-Dichloropropane	48	
563-58-6	1,1-Dichloropropene	47	
142-28-9	1,3-Dichloropropane	45	
108-86-1	Bromobenzene	47	
103-65-1	n-Propylbenzene	48	
95-49-8	2-Chlorotoluene	48	
106-43-4	4-Chlorotoluene	48	
108-67-8	1,3,5-Trimethylbenzene	48	
98-06-6	tert-Butylbenzene	48	
95-63-6	1,2,4-Trimethylbenzene	47	
135-98-8	sec-Butylbenzene	48	
99-87-6	4-Isopropyltoluene	48	
104-51-8	n-Butylbenzene	52	
87-61-6	1,2,3-Trichlorobenzene	53	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NXXI LCSD

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) SOIL Lab Sample ID: NXXI LCSD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: NXX50IQ2

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/21/04

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	42	
74-87-3	Chloromethane	38	
75-01-4	Vinyl Chloride	43	
74-83-9	Bromomethane	52	
75-00-3	Chloroethane	48	
75-69-4	Trichlorofluoromethane	47	
107-02-8	Acrolein	42	
76-13-1	Freon TF	48	
75-35-4	1,1-Dichloroethene	48	
67-64-1	Acetone	39	
74-88-4	Methyl Iodide	56	
75-15-0	Carbon Disulfide	44	
107-05-1	Allyl Chloride	38	
75-09-2	Methylene Chloride	47	
107-13-1	Acrylonitrile	43	
156-60-5	trans-1,2-Dichloroethene	53	
540-59-0	1,2-Dichloroethene (total)	100	
1634-04-4	Methyl-t-Butyl Ether	45	
75-34-3	1,1-Dichloroethane	48	
108-05-4	Vinyl Acetate	38	
126-99-8	Chloroprene	43	
156-59-2	cis-1,2-Dichloroethene	53	
78-93-3	2-Butanone	47	
107-12-0	Propionitrile	190	
126-98-7	Methacrylonitrile	47	
74-97-5	Bromochloromethane	52	
109-99-9	Tetrahydrofuran	390	
67-66-3	Chloroform	47	
71-55-6	1,1,1-Trichloroethane	49	
56-23-5	Carbon Tetrachloride	48	
78-83-1	Isobutyl Alcohol	2000	
71-43-2	Benzene	45	
107-06-2	1,2-Dichloroethane	42	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NXXI LCSD

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) SOIL Lab Sample ID: NXXI LCSD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: NXX50IQ2

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/21/04

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	49	
78-87-5	1,2-Dichloropropane	45	
80-62-6	Methyl Methacrylate	47	
74-95-3	Dibromomethane	46	
123-91-1	1,4-Dioxane	2500	
75-27-4	Bromodichloromethane	44	
110-75-8	2-Chloroethyl Vinyl Ether	53	
10061-01-5	cis-1,3-Dichloropropene	44	
108-10-1	4-Methyl-2-pentanone	36	
108-88-3	Toluene	50	
10061-02-6	trans-1,3-Dichloropropene	45	
97-63-2	Ethyl Methacrylate	44	
79-00-5	1,1,2-Trichloroethane	45	
127-18-4	Tetrachloroethene	56	
591-78-6	2-Hexanone	41	
124-48-1	Dibromochloromethane	48	
106-93-4	1,2-Dibromoethane	49	
108-90-7	Chlorobenzene	50	
630-20-6	1,1,1,2-Tetrachloroethane	49	
100-41-4	Ethylbenzene	49	
1330-20-7	Xylene (m,p)	100	
1330-20-7	Xylene (total)	150	
95-47-6	Xylene (o)	49	
100-42-5	Styrene	50	
75-25-2	Bromoform	50	
98-82-8	Isopropylbenzene	50	
1476-11-5	cis-1,4-Dichloro-2-butene	42	
79-34-5	1,1,2,2-Tetrachloroethane	44	
96-18-4	1,2,3-Trichloropropane	47	
110-57-6	trans-1,4-Dichloro-2-butene	39	
541-73-1	1,3-Dichlorobenzene	49	
106-46-7	1,4-Dichlorobenzene	50	
95-50-1	1,2-Dichlorobenzene	48	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NXXI LCSD

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) SOIL Lab Sample ID: NXXI LCSD

Sample wt/vol: 5.0 (g/mL) G Lab File ID: NXX50IQ2

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/21/04

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
96-12-8	1,2-Dibromo-3-Chloropropane	41	
120-82-1	1,2,4-Trichlorobenzene	50	
87-68-3	Hexachlorobutadiene	55	
91-20-3	Naphthalene	46	B
594-20-7	2,2-Dichloropropane	46	
563-58-6	1,1-Dichloropropene	45	
142-28-9	1,3-Dichloropropane	45	
108-86-1	Bromobenzene	50	
103-65-1	n-Propylbenzene	49	
95-49-8	2-Chlorotoluene	49	
106-43-4	4-Chlorotoluene	49	
108-67-8	1,3,5-Trimethylbenzene	50	
98-06-6	tert-Butylbenzene	47	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	50	
99-87-6	4-Isopropyltoluene	48	
104-51-8	n-Butylbenzene	49	
87-61-6	1,2,3-Trichlorobenzene	48	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLKW8

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) SOIL Lab Sample ID: VBLKW8

Sample wt/vol: 5.0 (g/mL) G Lab File ID: NXXB01I

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/21/04

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl Chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
107-02-8	Acrolein	5.0	U
76-13-1	Freon TF	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Methyl Iodide	5.0	U
75-15-0	Carbon Disulfide	5.0	U
107-05-1	Allyl Chloride	5.0	U
75-09-2	Methylene Chloride	5.0	U
107-13-1	Acrylonitrile	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
1634-04-4	Methyl-t-Butyl Ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl Acetate	5.0	U
126-99-8	Chloroprene	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
78-93-3	2-Butanone	5.0	U
107-12-0	Propionitrile	20	U
126-98-7	Methacrylonitrile	5.0	U
74-97-5	Bromochloromethane	5.0	U
109-99-9	Tetrahydrofuran	50	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-5	Carbon Tetrachloride	5.0	U
78-83-1	Isobutyl Alcohol	250	U
71-43-2	Benzene	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLKW8

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) SOIL Lab Sample ID: VBLKW8

Sample wt/vol: 5.0 (g/mL) G Lab File ID: NXXB01I

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/21/04

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
80-62-6	Methyl Methacrylate	5.0	U
74-95-3	Dibromomethane	5.0	U
123-91-1	1,4-Dioxane	250	U
75-27-4	Bromodichloromethane	5.0	U
110-75-8	2-Chloroethyl Vinyl Ether	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
97-63-2	Ethyl Methacrylate	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
1330-20-7	Xylene (m,p)	5.0	U
1330-20-7	Xylene (total)	5.0	U
95-47-6	Xylene (o)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
1476-11-5	cis-1,4-Dichloro-2-butene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

VBLKW8

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) SOIL Lab Sample ID: VBLKW8

Sample wt/vol: 5.0 (g/mL) G Lab File ID: NXXB01I

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 06/21/04

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
91-20-3	Naphthalene	1.2	J
594-20-7	2,2-Dichloropropane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
108-86-1	Bromobenzene	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U

FORM 2
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Level: (low/med) LOW

	CLIENT SAMPLE NO.	SMC1 (TOL) #	SMC2 (DCE) #	SMC3 (BFB) #	OTHER (DCB) #	TOT OUT
01	NXXI LCS	95	92	95	101	0
02	NXXI LCSD	101	85	96	99	0
03	VBLKW8	102	84	99	96	0
04	MODEL CLAY	109	101	105	101	0
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
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26						
27						
28						
29						
30						

		QC LIMITS
SMC1 (TOL)	= Toluene-d8	(81-117)
SMC2 (DCE)	= 1,2-Dichloroethane-d4	(80-120)
SMC3 (BFB)	= Bromofluorobenzene	(74-121)
OTHER (DCB)	= 1,2-Dichlorobenzene-d4	(80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix Spike - Sample No.: NXXI LCS Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	50		50	100	78-116
Chloromethane	50		45	90	68-118
Vinyl Chloride	50		50	100	78-118
Bromomethane	50		60	120*	72-118
Chloroethane	50		52	104	65-113
Trichlorofluoromethane	50		52	104	67-111
Acrolein	50		41	82	60-140
Freon TF	50		52	104	60-140
1,1-Dichloroethene	50		53	106	75-113
Acetone	50		47	94	60-140
Methyl Iodide	50		59	118	60-140
Carbon Disulfide	50		49	98	60-140
Allyl Chloride	50		45	90	60-140
Methylene Chloride	50		48	96	80-110
Acrylonitrile	50		46	92	60-140
trans-1,2-Dichloroethen	50		51	102	77-109
1,2-Dichloroethene (tot	100		100	100	60-140
Methyl-t-Butyl Ether	50		47	94	60-140
1,1-Dichloroethane	50		49	98	81-111
Vinyl Acetate	50		47	94	60-140
Chloroprene	50		46	92	60-140
cis-1,2-Dichloroethene	50		51	102	81-121
2-Butanone	50		50	100	60-140
Propionitrile	200		200	100	60-140
Methacrylonitrile	50		47	94	60-140
Bromochloromethane	50		50	100	73-107
Tetrahydrofuran	500		440	88	60-140
Chloroform	50		48	96	74-106

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

* Values outside of QC limits

COMMENTS: _____

_____

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix Spike - Sample No.: NXXI LCS Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
1,1,1-Trichloroethane	50		48	96	74-122
Carbon Tetrachloride	50		47	94	62-106
Isobutyl Alcohol	2500		2300	92	60-140
Benzene	50		47	94	78-116
1,2-Dichloroethane	50		44	88	80-110
Trichloroethene	50		48	96	70-109
1,2-Dichloropropane	50		47	94	79-115
Methyl Methacrylate	50		45	90	60-140
Dibromomethane	50		46	92	83-117
1,4-Dioxane	2500		2400	96	60-140
Bromodichloromethane	50		46	92	78-112
2-Chloroethyl Vinyl Eth	50		54	108	60-140
cis-1,3-Dichloropropene	50		46	92	60-140
4-Methyl-2-pentanone	50		44	88	60-140
Toluene	50		48	96	78-126
trans-1,3-Dichloroprope	50		45	90	60-140
Ethyl Methacrylate	50		46	92	60-140
1,1,2-Trichloroethane	50		45	90	81-126
Tetrachloroethene	50		47	94	71-107
2-Hexanone	50		43	86	60-140
Dibromochloromethane	50		46	92	72-112
1,2-Dibromoethane	50		46	92	90-114
Chlorobenzene	50		47	94	81-115
1,1,1,2-Tetrachloroetha	50		47	94	72-108
Ethylbenzene	50		47	94	74-124
Xylene (m,p)	100		94	94	78-116
Xylene (total)	150		140	93	60-140
Xylene (o)	50		47	94	81-125

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

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix Spike - Sample No.: NXXI LCS Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC #	QC. LIMITS REC.
Styrene	50		48	96	80-124
Bromoform	50		46	92	82-120
Isopropylbenzene	50		47	94	78-124
cis-1,4-Dichloro-2-bute	50		42	84	60-140
1,1,2,2-Tetrachloroetha	50		44	88	74-108
1,2,3-Trichloropropane	50		45	90	81-137
trans-1,4-Dichloro-2-bu	50		42	84	60-140
1,3-Dichlorobenzene	50		48	96	79-119
1,4-Dichlorobenzene	50		50	100	83-123
1,2-Dichlorobenzene	50		48	96	76-110
1,2-Dibromo-3-Chloropro	50		44	88	33-132
1,2,4-Trichlorobenzene	50		55	110	81-135
Hexachlorobutadiene	50		58	116	80-120
Naphthalene	50		48	96	78-130
2,2-Dichloropropane	50		48	96	42-130
1,1-Dichloropropene	50		47	94	72-124
1,3-Dichloropropane	50		45	90	79-113
Bromobenzene	50		47	94	84-116
n-Propylbenzene	50		48	96	83-117
2-Chlorotoluene	50		48	96	73-107
4-Chlorotoluene	50		48	96	74-124
1,3,5-Trimethylbenzene	50		48	96	72-112
tert-Butylbenzene	50		48	96	80-124
1,2,4-Trimethylbenzene	50		47	94	75-123
sec-Butylbenzene	50		48	96	77-123
4-Isopropyltoluene	50		48	96	79-119
n-Butylbenzene	50		52	104	77-123
1,2,3-Trichlorobenzene	50		53	106	81-137

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

* Values outside of QC limits

COMMENTS: _____

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FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix Spike - Sample No.: NXXI LCS Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50	42	84	17	40	78-116
Chloromethane	50	38	76	17	40	68-118
Vinyl Chloride	50	43	86	15	40	78-118
Bromomethane	50	52	104	14	40	72-118
Chloroethane	50	48	96	8	40	65-113
Trichlorofluoromethane	50	47	94	10	40	67-111
Acrolein	50	42	84	2	40	60-140
Freon TF	50	48	96	8	40	60-140
1,1-Dichloroethene	50	48	96	10	40	75-113
Acetone	50	39	78	19	40	60-140
Methyl Iodide	50	56	112	5	40	60-140
Carbon Disulfide	50	44	88	11	40	60-140
Allyl Chloride	50	38	76	17	40	60-140
Methylene Chloride	50	47	94	2	40	80-110
Acrylonitrile	50	43	86	7	40	60-140
trans-1,2-Dichloroethen	50	53	106	4	40	77-109
1,2-Dichloroethene (tot	100	100	100	0	40	60-140
Methyl-t-Butyl Ether	50	45	90	4	40	60-140
1,1-Dichloroethane	50	48	96	2	40	81-111
Vinyl Acetate	50	38	76	21	40	60-140
Chloroprene	50	43	86	7	40	60-140
cis-1,2-Dichloroethene	50	53	106	4	40	81-121
2-Butanone	50	47	94	6	40	60-140
Propionitrile	200	190	95	5	40	60-140
Methacrylonitrile	50	47	94	0	40	60-140
Bromochloromethane	50	52	104	4	40	73-107
Tetrahydrofuran	500	390	78	12	40	60-140
Chloroform	50	47	94	2	40	74-106

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

* Values outside of QC limits

COMMENTS: _____

FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix Spike - Sample No.: NXXI LCS Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1,1-Trichloroethane	50	49	98	2	40	74-122
Carbon Tetrachloride	50	48	96	2	40	62-106
Isobutyl Alcohol	2500	2000	80	14	40	60-140
Benzene	50	45	90	4	40	78-116
1,2-Dichloroethane	50	42	84	5	40	80-110
Trichloroethene	50	49	98	2	40	70-109
1,2-Dichloropropane	50	45	90	4	40	79-115
Methyl Methacrylate	50	47	94	4	40	60-140
Dibromomethane	50	46	92	0	40	83-117
1,4-Dioxane	2500	2500	100	4	40	60-140
Bromodichloromethane	50	44	88	4	40	78-112
2-Chloroethyl Vinyl Eth	50	53	106	2	40	60-140
cis-1,3-Dichloropropene	50	44	88	4	40	60-140
4-Methyl-2-pentanone	50	36	72	20	40	60-140
Toluene	50	50	100	4	40	78-126
trans-1,3-Dichloroprope	50	45	90	0	40	60-140
Ethyl Methacrylate	50	44	88	4	40	60-140
1,1,2-Trichloroethane	50	45	90	0	40	81-126
Tetrachloroethene	50	56	112*	17	40	71-107
2-Hexanone	50	41	82	5	40	60-140
Dibromochloromethane	50	48	96	4	40	72-112
1,2-Dibromoethane	50	49	98	6	40	90-114
Chlorobenzene	50	50	100	6	40	81-115
1,1,1,2-Tetrachloroetha	50	49	98	4	40	72-108
Ethylbenzene	50	49	98	4	40	74-124
Xylene (m,p)	100	100	100	6	40	78-116
Xylene (total)	150	150	100	7	40	60-140
Xylene (o)	50	49	98	4	40	81-125

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

* Values outside of QC limits

COMMENTS: _____

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FORM 3
SOIL VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix Spike - Sample No.: NXXI LCS Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	LCSD CONCENTRATION (ug/Kg)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Styrene	50	50	100	4	40	80-124
Bromoform	50	50	100	8	40	82-120
Isopropylbenzene	50	50	100	6	40	78-124
cis-1,4-Dichloro-2-bute	50	42	84	0	40	60-140
1,1,2,2-Tetrachloroetha	50	44	88	0	40	74-108
1,2,3-Trichloropropane	50	47	94	4	40	81-137
trans-1,4-Dichloro-2-bu	50	39	78	7	40	60-140
1,3-Dichlorobenzene	50	49	98	2	40	79-119
1,4-Dichlorobenzene	50	50	100	0	40	83-123
1,2-Dichlorobenzene	50	48	96	0	40	76-110
1,2-Dibromo-3-Chloropro	50	41	82	7	40	33-132
1,2,4-Trichlorobenzene	50	50	100	10	40	81-135
Hexachlorobutadiene	50	55	110	5	40	80-120
Naphthalene	50	46	92	4	40	78-130
2,2-Dichloropropane	50	46	92	4	40	42-130
1,1-Dichloropropene	50	45	90	4	40	72-124
1,3-Dichloropropane	50	45	90	0	40	79-113
Bromobenzene	50	50	100	6	40	84-116
n-Propylbenzene	50	49	98	2	40	83-117
2-Chlorotoluene	50	49	98	2	40	73-107
4-Chlorotoluene	50	49	98	2	40	74-124
1,3,5-Trimethylbenzene	50	50	100	4	40	72-112
tert-Butylbenzene	50	47	94	2	40	80-124
1,2,4-Trimethylbenzene	50	49	98	4	40	75-123
sec-Butylbenzene	50	50	100	4	40	77-123
4-Isopropyltoluene	50	48	96	0	40	79-119
n-Butylbenzene	50	49	98	6	40	77-123
1,2,3-Trichlorobenzene	50	48	96	10	40	81-137

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

* Values outside of QC limits

RPD: 0 out of 84 outside limits
Spike Recovery: 2 out of 168 outside limits

COMMENTS: _____

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

VBLKW8

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID: NXXB01I Lab Sample ID: VBLKW8

Date Analyzed: 06/21/04 Time Analyzed: 2306

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) Y

Instrument ID: N

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	NXXI LCS	NXXI LCS	NXX50IQ	2206
02	NXXI LCSD	NXXI LCSD	NXX50IQ2	2236
03	MODEL CLAY	576337	576337	0003
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
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24				
25				
26				
27				
28				
29				
30				

COMMENTS:

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID: NXX02PV BFB Injection Date: 05/18/04

Instrument ID: N BFB Injection Time: 1635

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.3
75	30.0 - 60.0% of mass 95	45.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.3 (0.3)1
174	50.0 - 120.0% of mass 95	88.8
175	5.0 - 9.0% of mass 174	6.0 (6.7)1
176	95.0 - 101.0% of mass 174	86.3 (97.2)1
177	5.0 - 9.0% of mass 176	6.2 (7.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005	VSTD005	NXX05V	05/18/04	1725
02	VSTD020	VSTD020	NXX20V	05/18/04	1755
03	VSTD050	VSTD050	NXX50V	05/18/04	1826
04	VSTD100	VSTD100	NXX100V	05/18/04	1856
05	VSTD200	VSTD200	NXX200V	05/18/04	1925
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID: NXX13PV BFB Injection Date: 06/21/04

Instrument ID: N BFB Injection Time: 2117

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.0
75	30.0 - 60.0% of mass 95	45.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.9
173	Less than 2.0% of mass 174	0.6 (0.7)1
174	50.0 - 120.0% of mass 95	89.1
175	5.0 - 9.0% of mass 174	5.9 (6.6)1
176	95.0 - 101.0% of mass 174	87.9 (98.7)1
177	5.0 - 9.0% of mass 176	5.9 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	NXX50IV	06/21/04	2137
02	NXXI LCS	NXXI LCS	NXX50IQ	06/21/04	2206
03	NXXI LCSD	NXXI LCSD	NXX50IQ2	06/21/04	2236
04	VBLKW8	VBLKW8	NXXB01I	06/21/04	2306
05	MODEL CLAY	576337	576337	06/22/04	0003
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
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21					
22					

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: N Calibration Date(s): 05/18/04 05/18/04

Heated Purge: (Y/N) Y Calibration Time(s): 1725 1925

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF5 =NXX05V RRF20 =NXX20V
RRF50 =NXX50V RRF100=NXX100V RRF200=NXX200V

COMPOUND		RRF5	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
Dichlorodifluoromethane		0.548	0.599	0.613	0.517	0.444	0.544	12.6
Chloromethane	*	0.296	0.308	0.303	0.256	0.222	0.277	13.4*
Vinyl Chloride		0.290	0.310	0.343	0.292	0.252	0.297	11.1
Bromomethane		0.252	0.249	0.297	0.296	0.264	0.272	8.5
Chloroethane		0.162	0.175	0.178	0.167	0.121	0.161	14.3
Trichlorofluoromethane		0.540	0.567	0.627	0.580	0.501	0.563	8.3
Acrolein		0.029	0.023	0.028	0.024	0.024	0.026	10.3
Freon TF		0.523	0.518	0.615	0.634	0.596	0.577	9.3
1,1-Dichloroethene		0.274	0.269	0.319	0.327	0.302	0.298	8.7
Acetone		0.082	0.058	0.053	0.049	0.039	0.056	28.4
Methyl Iodide		0.548	0.544	0.658	0.666	0.588	0.601	9.8
Carbon Disulfide		0.800	0.804	0.906	0.885	0.782	0.835	6.7
Allyl Chloride		0.338	0.318	0.356	0.310	0.271	0.319	10.1
Methylene Chloride		0.317	0.277	0.309	0.312	0.262	0.295	8.2
Acrylonitrile		0.063	0.059	0.065	0.063	0.060	0.062	4.3
trans-1,2-Dichloroethene		0.275	0.275	0.302	0.329	0.324	0.301	8.6
1,2-Dichloroethene (total)		0.276	0.286	0.299	0.326	0.330	0.303	7.8
Methyl-t-Butyl Ether		0.574	0.554	0.625	0.615	0.574	0.588	5.1
1,1-Dichloroethane	*	0.516	0.498	0.518	0.541	0.526	0.520	3.0*
Vinyl Acetate		0.421	0.437	0.450	0.418	0.368	0.419	7.5
Chloroprene		0.346	0.345	0.334	0.342	0.310	0.335	4.5
cis-1,2-Dichloroethene		0.278	0.296	0.295	0.322	0.336	0.305	7.5
2-Butanone		0.032	0.026	0.026	0.025	0.024	0.027	11.5
Propionitrile		0.019	0.020	0.023	0.023	0.022	0.021	8.6
Methacrylonitrile		0.066	0.073	0.074	0.074	0.073	0.072	4.5
Bromochloromethane		0.193	0.201	0.202	0.208	0.208	0.202	2.9
Tetrahydrofuran		0.067	0.073	0.071	0.067	0.059	0.067	7.9
Chloroform		0.586	0.594	0.595	0.611	0.593	0.596	1.6
1,1,1-Trichloroethane		0.511	0.500	0.488	0.505	0.507	0.502	1.8
Carbon Tetrachloride		0.476	0.478	0.463	0.478	0.478	0.475	1.4
Isobutyl Alcohol		0.011	0.012	0.013	0.012	0.011	0.012	7.9
Benzene		0.839	0.866	0.826	0.843	0.826	0.840	2.0
1,2-Dichloroethane		0.343	0.349	0.340	0.320	0.294	0.329	6.8
Trichloroethene		0.369	0.383	0.365	0.378	0.380	0.375	2.0
1,2-Dichloropropane		0.335	0.360	0.355	0.346	0.335	0.346	3.3
Methyl Methacrylate		0.228	0.244	0.257	0.264	0.265	0.252	6.2
Dibromomethane		0.339	0.355	0.354	0.354	0.355	0.351	2.0

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: N Calibration Date(s): 05/18/04 05/18/04

Heated Purge: (Y/N) Y Calibration Time(s): 1725 1925

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF5 =NXX05V RRF20 =NXX20V
RRF50 =NXX50V RRF100=NXX100V RRF200=NXX200V

COMPOUND		RRF5	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
1,4-Dioxane		0.003	0.003	0.003	0.003	0.003	0.003	6.4
Bromodichloromethane		0.607	0.631	0.619	0.608	0.580	0.609	3.1
2-Chloroethyl Vinyl Ether		0.055	0.063	0.071	0.068	0.069	0.065	9.7
cis-1,3-Dichloropropene		0.524	0.525	0.508	0.502	0.474	0.507	4.1
4-Methyl-2-pentanone		0.340	0.345	0.320	0.277	0.242	0.305	14.5
Toluene		0.726	0.721	0.701	0.727	0.742	0.723	2.0
trans-1,3-Dichloropropene		0.510	0.522	0.530	0.519	0.503	0.517	2.0
Ethyl Methacrylate		0.392	0.431	0.435	0.412	0.396	0.413	4.8
1,1,2-Trichloroethane		0.355	0.352	0.364	0.372	0.359	0.360	2.1
Tetrachloroethene		0.644	0.639	0.612	0.689	0.706	0.658	5.9
2-Hexanone		0.268	0.280	0.294	0.250	0.220	0.262	10.9
Dibromochloromethane		0.695	0.731	0.765	0.798	0.807	0.759	6.2
1,2-Dibromoethane		0.578	0.608	0.639	0.649	0.662	0.627	5.5
Chlorobenzene	*	0.950	0.967	0.931	0.954	0.981	0.957	2.0*
1,1,1,2-Tetrachloroethane		0.492	0.518	0.531	0.554	0.561	0.531	5.2
Ethylbenzene		1.464	1.534	1.447	1.484	1.527	1.491	2.6
Xylene (m,p)		0.534	0.581	0.542	0.553	0.582	0.558	4.0
Xylene (total)		0.523	0.560	0.537	0.546	0.560	0.545	2.9
Xylene (o)		0.523	0.560	0.537	0.546	0.560	0.545	2.9
Styrene		0.843	0.931	0.886	0.904	0.943	0.901	4.4
Bromoform	*	0.544	0.638	0.671	0.706	0.746	0.661	11.6*
Isopropylbenzene		2.239	2.174	2.175	2.171	2.150	2.182	1.5
cis-1,4-Dichloro-2-butene		0.250	0.256	0.274	0.248	0.208	0.247	9.7
1,1,2,2-Tetrachloroethane	*	1.112	1.115	1.238	1.158	1.077	1.140	5.4*
1,2,3-Trichloropropane		0.253	0.249	0.276	0.270	0.254	0.260	4.5
trans-1,4-Dichloro-2-butene		0.260	0.240	0.259	0.230	0.194	0.237	11.4
1,3-Dichlorobenzene		1.414	1.391	1.386	1.339	1.297	1.365	3.4
1,4-Dichlorobenzene		1.479	1.481	1.447	1.424	1.374	1.441	3.1
1,2-Dichlorobenzene		1.335	1.348	1.358	1.372	1.366	1.356	1.1
1,2-Dibromo-3-Chloropropane		0.237	0.228	0.248	0.218	0.189	0.224	10.1
1,2,4-Trichlorobenzene		1.065	1.109	1.056	1.012	0.916	1.032	7.1
Hexachlorobutadiene		0.779	0.886	0.752	0.730	0.693	0.768	9.5
Naphthalene		1.884	1.943	2.131	1.958	1.725	1.928	7.6
2,2-Dichloropropane		0.452	0.460	0.440	0.444	0.422	0.444	3.2
1,1-Dichloropropene		0.441	0.454	0.433	0.437	0.416	0.436	3.1
1,3-Dichloropropane		0.627	0.641	0.646	0.644	0.622	0.636	1.7
Bromobenzene		0.882	0.854	0.912	0.921	0.922	0.898	3.3

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: N Calibration Date(s): 05/18/04 05/18/04

Heated Purge: (Y/N) Y Calibration Time(s): 1725 1925

GC Column: CAP ID: 0.53 (mm)

LAB FILE ID: RRF5 =NXX05V RRF20 =NXX20V
RRF50 =NXX50V RRF100=NXX100V RRF200=NXX200V

COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
n-Propylbenzene	0.632	0.623	0.602	0.572	0.548	0.595	5.9
2-Chlorotoluene	0.592	0.600	0.593	0.568	0.530	0.577	5.0
4-Chlorotoluene	0.601	0.616	0.591	0.566	0.543	0.583	4.9
1,3,5-Trimethylbenzene	1.677	1.694	1.652	1.628	1.626	1.655	1.8
tert-Butylbenzene	2.383	2.450	2.475	2.391	2.391	2.418	1.7
1,2,4-Trimethylbenzene	1.715	1.684	1.614	1.593	1.564	1.634	3.9
sec-Butylbenzene	2.602	2.683	2.522	2.482	2.324	2.523	5.4
4-Isopropyltoluene	2.173	2.202	1.993	1.924	1.865	2.031	7.4
n-Butylbenzene	2.167	2.225	1.911	1.865	1.803	1.994	9.5
1,2,3-Trichlorobenzene	1.046	1.098	1.102	1.047	0.926	1.044	6.8
Toluene-d8	1.021	1.000	0.991	1.058	1.116	1.037	4.9
1,2-Dichloroethane-d4	0.290	0.286	0.278	0.267	0.250	0.274	5.9
Bromofluorobenzene	1.075	1.034	1.063	1.031	0.994	1.039	3.0
1,2-Dichlorobenzene-d4	0.870	0.859	0.874	0.892	0.898	0.879	1.8

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: N Calibration Date: 06/21/04 Time: 2137

Lab File ID: NXX50IV Init. Calib. Date(s): 05/18/04 05/18/04

Heated Purge: (Y/N) Y Init. Calib. Times: 1725 1925

GC Column: CAP ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
Dichlorodifluoromethane	0.544	0.571	0.01	5.0	20.0	
Chloromethane	0.277	0.258	0.1	6.8	20.0	
Vinyl Chloride	0.297	0.273	0.01	8.1	20.0	
Bromomethane	0.272	0.284	0.01	4.4	20.0	
Chloroethane	0.161	0.163	0.01	1.2	20.0	
Trichlorofluoromethane	0.563	0.522	0.01	7.3	20.0	
Acrolein	0.026	0.020	0.01	23.1	20.0	<-
Freon TF	0.577	0.517	0.01	10.4	20.0	
1,1-Dichloroethene	0.298	0.266	0.01	10.7	20.0	
Acetone	0.056	0.046	0.01	17.8	20.0	
Methyl Iodide	0.601	0.628	0.01	4.5	20.0	
Carbon Disulfide	0.835	0.758	0.01	9.2	20.0	
Allyl Chloride	0.319	0.286	0.01	10.3	20.0	
Methylene Chloride	0.295	0.268	0.01	9.2	20.0	
Acrylonitrile	0.062	0.057	0.01	8.1	20.0	
trans-1,2-Dichloroethene	0.301	0.285	0.01	5.3	20.0	
1,2-Dichloroethene (total)	0.303	0.294	0.01	3.0	20.0	
Methyl-t-Butyl Ether	0.588	0.562	0.01	4.4	20.0	
1,1-Dichloroethane	0.520	0.490	0.1	5.8	20.0	
Vinyl Acetate	0.419	0.417	0.01	0.5	20.0	
Chloroprene	0.335	0.310	0.01	7.5	20.0	
cis-1,2-Dichloroethene	0.305	0.304	0.01	0.3	20.0	
2-Butanone	0.027	0.024	0.01	11.1	20.0	
Propionitrile	0.021	0.022	0.01	4.8	20.0	
Methacrylonitrile	0.072	0.070	0.01	2.8	20.0	
Bromochloromethane	0.202	0.210	0.01	4.0	20.0	
Tetrahydrofuran	0.067	0.064	0.01	4.5	20.0	
Chloroform	0.596	0.573	0.01	3.8	20.0	
1,1,1-Trichloroethane	0.502	0.475	0.01	5.4	20.0	
Carbon Tetrachloride	0.475	0.450	0.01	5.3	20.0	
Isobutyl Alcohol	0.012	0.011	0.01	8.3	20.0	
Benzene	0.840	0.797	0.01	5.1	20.0	
1,2-Dichloroethane	0.329	0.308	0.01	6.4	20.0	
Trichloroethene	0.375	0.365	0.01	2.7	20.0	
1,2-Dichloropropane	0.346	0.326	0.01	5.8	20.0	
Methyl Methacrylate	0.252	0.238	0.01	5.6	20.0	
Dibromomethane	0.351	0.337	0.01	4.0	20.0	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: N Calibration Date: 06/21/04 Time: 2137

Lab File ID: NXX50IV Init. Calib. Date(s): 05/18/04 05/18/04

Heated Purge: (Y/N) Y Init. Calib. Times: 1725 1925

GC Column: CAP ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
1,4-Dioxane	0.003	0.003	0.01	0.0	20.0
Bromodichloromethane	0.609	0.577	0.01	5.2	20.0
2-Chloroethyl Vinyl Ether	0.065	0.073	0.01	12.3	20.0
cis-1,3-Dichloropropene	0.507	0.487	0.01	3.9	20.0
4-Methyl-2-pentanone	0.305	0.273	0.01	10.5	20.0
Toluene	0.723	0.686	0.01	5.1	20.0
trans-1,3-Dichloropropene	0.517	0.488	0.01	5.6	20.0
Ethyl Methacrylate	0.413	0.403	0.01	2.4	20.0
1,1,2-Trichloroethane	0.360	0.338	0.01	6.1	20.0
Tetrachloroethene	0.658	0.606	0.01	7.9	20.0
2-Hexanone	0.262	0.231	0.01	11.8	20.0
Dibromochloromethane	0.759	0.709	0.01	6.6	20.0
1,2-Dibromoethane	0.627	0.595	0.01	5.1	20.0
Chlorobenzene	0.957	0.901	0.3	5.8	20.0
1,1,1,2-Tetrachloroethane	0.531	0.501	0.01	5.6	20.0
Ethylbenzene	1.491	1.423	0.01	4.6	20.0
Xylene (m,p)	0.558	0.535	0.01	4.1	20.0
Xylene (total)	0.545	0.510	0.01	6.4	20.0
Xylene (o)	0.545	0.510	0.01	6.4	20.0
Styrene	0.901	0.867	0.01	3.8	20.0
Bromoform	0.661	0.614	0.1	7.1	20.0
Isopropylbenzene	2.182	1.956	0.01	10.4	20.0
cis-1,4-Dichloro-2-butene	0.247	0.220	0.01	10.9	20.0
1,1,2,2-Tetrachloroethane	1.140	1.006	0.3	11.8	20.0
1,2,3-Trichloropropane	0.260	0.233	0.01	10.4	20.0
trans-1,4-Dichloro-2-butene	0.237	0.204	0.01	13.9	20.0
1,3-Dichlorobenzene	1.365	1.311	0.01	4.0	20.0
1,4-Dichlorobenzene	1.441	1.408	0.01	2.3	20.0
1,2-Dichlorobenzene	1.356	1.256	0.01	7.4	20.0
1,2-Dibromo-3-Chloropropane	0.224	0.190	0.01	15.2	20.0
1,2,4-Trichlorobenzene	1.032	1.187	0.01	15.0	20.0
Hexachlorobutadiene	0.768	0.907	0.01	18.1	20.0
Naphthalene	1.928	1.903	0.01	1.3	20.0
2,2-Dichloropropane	0.444	0.424	0.01	4.5	20.0
1,1-Dichloropropene	0.436	0.427	0.01	2.1	20.0
1,3-Dichloropropane	0.636	0.585	0.01	8.0	20.0
Bromobenzene	0.898	0.802	0.01	10.7	20.0

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID (Standard): NXX50IV Date Analyzed: 06/21/04

Instrument ID: N Time Analyzed: 2137

GC Column: CAP ID: 0.53 (mm) Heated Purge: (Y/N) Y

		IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DCB) AREA #	RT #
	12 HOUR STD	2971244	9.86	2504340	15.63	1831646	20.05
	UPPER LIMIT	5942488	10.36	5008680	16.13	3663292	20.55
	LOWER LIMIT	1485622	9.36	1252170	15.13	915823	19.55
	CLIENT SAMPLE NO.						
01	NXXI LCS	3206249	9.86	2643436	15.63	1842905	20.05
02	NXXI LCSD	3897166	9.84	3033817	15.63	2075402	20.05
03	VBLKW8	3879317	9.86	2919462	15.63	1907994	20.04
04	MODEL CLAY	2402812	9.87	1919191	15.62	1326980	20.04
05							
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22							

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

SEVERN TRENT STL

METHOD TO-15

SAMPLE DATA SUMMARY PACKAGE

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SGTERADYNE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576334

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576334

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.59	
74-87-3	Chloromethane	0.58	
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.58	
75-69-4	Trichlorofluoromethane	7.9	
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.91	
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	5.1	
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	7.1	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	1.3	
1330-20-7	Xylene (m,p)	4.7	
100-42-5	Styrene	1.8	
95-47-6	Xylene (o)	1.4	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SGTERADYNE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576334

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576334

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.67	
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	2.0	
67-64-1	Acetone	34	
67-63-0	Isopropyl Alcohol	29	
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	1.7	
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	2.0	
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.52	
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	1.8	
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	7.5	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SGTERADYNEDL

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576334D1

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576334D

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 2.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume:_____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl Chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	8.5	D
76-13-1	Freon TF	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
75-09-2	Methylene Chloride	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
71-43-2	Benzene	1.1	D
107-06-2	1,2-Dichloroethane	1.0	U
79-01-6	Trichloroethene	5.3	D
78-87-5	1,2-Dichloropropane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-88-3	Toluene	7.3	D
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.4	D
1330-20-7	Xylene (m,p)	4.9	D
100-42-5	Styrene	1.8	D
95-47-6	Xylene (o)	1.5	D
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SGTERADYNEDL

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576334D1

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576334D

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 2.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
76-14-2	1,2-Dichlorotetrafluoroethan	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
106-99-0	1,3-Butadiene	1.0	U
75-15-0	Carbon Disulfide	2.2	D
67-64-1	Acetone	39	D
67-63-0	Isopropyl Alcohol	33	D
1634-04-4	Methyl tert-Butyl Ether	1.0	U
110-82-7	Cyclohexane	1.8	D
124-48-1	Dibromochloromethane	1.0	U
78-93-3	Methyl Ethyl Ketone	2.0	D
108-10-1	Methyl Isobutyl Ketone	1.1	D
591-78-6	Methyl Butyl Ketone	2.4	D
75-27-4	Bromodichloromethane	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
622-96-8	4-Ethyltoluene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
110-54-3	n-Hexane	1.4	D
109-99-9	Tetrahydrofuran	10	U
142-82-5	n-Heptane	8.2	D

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SGTERADYNEDP

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576335

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576335I2

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.62	
74-87-3	Chloromethane	0.69	
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.61	
75-69-4	Trichlorofluoromethane	8.6	
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.51	
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.73	
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	4.1	
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	6.5	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	1.1	
1330-20-7	Xylene (m,p)	4.5	
100-42-5	Styrene	1.4	
95-47-6	Xylene (o)	1.4	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SGTERADYNEDP

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576335

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576335I2

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.70	
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	0.98	
67-64-1	Acetone	32	
67-63-0	Isopropyl Alcohol	32	
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	1.7	
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	2.0	
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.52	
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	1.9	
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	8.4	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

TRIP BLANK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576336

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576336

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (m,p)	0.50	U
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

TRIP BLANK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576336

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576336

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	0.50	U
67-64-1	Acetone	5.0	U
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	0.50	U
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	0.50	U
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ABLKB1

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: ABLKB1

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EHB002B

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/01/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (m,p)	0.50	U
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ABLKB1

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: ABLKB1

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EHB002B

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/01/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	0.50	U
67-64-1	Acetone	5.0	U
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	0.50	U
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	0.50	U
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ABLKB3

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: ABLKB3

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EHB002C

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (m,p)	0.50	U
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

ABLKB3

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: ABLKB3

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EHB002C

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	5.0	U
67-64-1	Acetone	5.0	U
67-63-0	Isopropyl Alcohol	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	0.50	U
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	5.0	U
109-99-9	Tetrahydrofuran	0.50	U
142-82-5	n-Heptane		

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B1LCS

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: B1LCS

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EH010BQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/01/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	11	
74-87-3	Chloromethane	11	
75-01-4	Vinyl Chloride	11	
74-83-9	Bromomethane	12	
75-00-3	Chloroethane	12	
75-69-4	Trichlorofluoromethane	12	
76-13-1	Freon TF	11	
75-35-4	1,1-Dichloroethene	11	
75-09-2	Methylene Chloride	10	
75-34-3	1,1-Dichloroethane	11	
156-59-2	cis-1,2-Dichloroethene	10	
67-66-3	Chloroform	11	
71-55-6	1,1,1-Trichloroethane	11	
56-23-5	Carbon Tetrachloride	11	
71-43-2	Benzene	11	
107-06-2	1,2-Dichloroethane	12	
79-01-6	Trichloroethene	10	
78-87-5	1,2-Dichloropropane	10	
10061-01-5	cis-1,3-Dichloropropene	10	
108-88-3	Toluene	11	
10061-02-6	trans-1,3-Dichloropropene	10	
79-00-5	1,1,2-Trichloroethane	11	
127-18-4	Tetrachloroethene	11	
108-90-7	Chlorobenzene	11	
100-41-4	Ethylbenzene	11	
1330-20-7	Xylene (m,p)	24	
100-42-5	Styrene	12	
95-47-6	Xylene (o)	12	
79-34-5	1,1,2,2-Tetrachloroethane	12	
541-73-1	1,3-Dichlorobenzene	12	
106-46-7	1,4-Dichlorobenzene	12	
95-50-1	1,2-Dichlorobenzene	12	
120-82-1	1,2,4-Trichlorobenzene	18	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B1LCS

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: B1LCS

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EH010BQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/01/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	14	
108-67-8	1,3,5-Trimethylbenzene	14	
95-63-6	1,2,4-Trimethylbenzene	12	
76-14-2	1,2-Dichlorotetrafluoroethan	11	
106-93-4	1,2-Dibromoethane	11	
106-99-0	1,3-Butadiene	12	
75-15-0	Carbon Disulfide	11	
67-64-1	Acetone	12	
67-63-0	Isopropyl Alcohol	9.8	
1634-04-4	Methyl tert-Butyl Ether	11	
110-82-7	Cyclohexane	11	
124-48-1	Dibromochloromethane	12	
78-93-3	Methyl Ethyl Ketone	10	
108-10-1	Methyl Isobutyl Ketone	9.8	
591-78-6	Methyl Butyl Ketone	9.8	
75-27-4	Bromodichloromethane	11	
156-60-5	trans-1,2-Dichloroethene	11	
622-96-8	4-Ethyltoluene	10	
95-49-8	2-Chlorotoluene	12	
110-54-3	n-Hexane	11	
109-99-9	Tetrahydrofuran	10	
142-82-5	n-Heptane	12	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B1LCSD

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: B1LCSD

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EH010BQD

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/01/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	12	
74-87-3	Chloromethane	12	
75-01-4	Vinyl Chloride	12	
74-83-9	Bromomethane	12	
75-00-3	Chloroethane	12	
75-69-4	Trichlorofluoromethane	12	
76-13-1	Freon TF	11	
75-35-4	1,1-Dichloroethene	11	
75-09-2	Methylene Chloride	10	
75-34-3	1,1-Dichloroethane	11	
156-59-2	cis-1,2-Dichloroethene	10	
67-66-3	Chloroform	11	
71-55-6	1,1,1-Trichloroethane	12	
56-23-5	Carbon Tetrachloride	11	
71-43-2	Benzene	11	
107-06-2	1,2-Dichloroethane	12	
79-01-6	Trichloroethene	10	
78-87-5	1,2-Dichloropropane	11	
10061-01-5	cis-1,3-Dichloropropene	10	
108-88-3	Toluene	11	
10061-02-6	trans-1,3-Dichloropropene	11	
79-00-5	1,1,2-Trichloroethane	11	
127-18-4	Tetrachloroethene	11	
108-90-7	Chlorobenzene	11	
100-41-4	Ethylbenzene	12	
1330-20-7	Xylene (m,p)	25	
100-42-5	Styrene	12	
95-47-6	Xylene (o)	12	
79-34-5	1,1,2,2-Tetrachloroethane	12	
541-73-1	1,3-Dichlorobenzene	12	
106-46-7	1,4-Dichlorobenzene	12	
95-50-1	1,2-Dichlorobenzene	13	
120-82-1	1,2,4-Trichlorobenzene	20	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B1LCSD

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: B1LCSD

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EH010BQD

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/01/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	16	
108-67-8	1,3,5-Trimethylbenzene	14	
95-63-6	1,2,4-Trimethylbenzene	13	
76-14-2	1,2-Dichlorotetrafluoroethan	12	
106-93-4	1,2-Dibromoethane	11	
106-99-0	1,3-Butadiene	12	
75-15-0	Carbon Disulfide	11	
67-64-1	Acetone	12	
67-63-0	Isopropyl Alcohol	9.9	
1634-04-4	Methyl tert-Butyl Ether	12	
110-82-7	Cyclohexane	11	
124-48-1	Dibromochloromethane	12	
78-93-3	Methyl Ethyl Ketone	10	
108-10-1	Methyl Isobutyl Ketone	9.8	
591-78-6	Methyl Butyl Ketone	10	
75-27-4	Bromodichloromethane	11	
156-60-5	trans-1,2-Dichloroethene	11	
622-96-8	4-Ethyltoluene	12	
95-49-8	2-Chlorotoluene	13	
110-54-3	n-Hexane	11	
109-99-9	Tetrahydrofuran	11	
142-82-5	n-Heptane	12	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B3LCS

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: B3LCS

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EH010CQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	9.8	
74-87-3	Chloromethane	10	
75-01-4	Vinyl Chloride	10	
74-83-9	Bromomethane	11	
75-00-3	Chloroethane	10	
75-69-4	Trichlorofluoromethane	10	
76-13-1	Freon TF	10	
75-35-4	1,1-Dichloroethene	11	
75-09-2	Methylene Chloride	9.2	
75-34-3	1,1-Dichloroethane	10	
156-59-2	cis-1,2-Dichloroethene	10	
67-66-3	Chloroform	10	
71-55-6	1,1,1-Trichloroethane	10	
56-23-5	Carbon Tetrachloride	10	
71-43-2	Benzene	11	
107-06-2	1,2-Dichloroethane	11	
79-01-6	Trichloroethene	10	
78-87-5	1,2-Dichloropropane	10	
10061-01-5	cis-1,3-Dichloropropene	10	
108-88-3	Toluene	11	
10061-02-6	trans-1,3-Dichloropropene	10	
79-00-5	1,1,2-Trichloroethane	10	
127-18-4	Tetrachloroethene	11	
108-90-7	Chlorobenzene	11	
100-41-4	Ethylbenzene	11	
1330-20-7	Xylene (m,p)	23	
100-42-5	Styrene	11	
95-47-6	Xylene (o)	11	
79-34-5	1,1,2,2-Tetrachloroethane	11	
541-73-1	1,3-Dichlorobenzene	11	
106-46-7	1,4-Dichlorobenzene	11	
95-50-1	1,2-Dichlorobenzene	11	
120-82-1	1,2,4-Trichlorobenzene	17	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B3LCS

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: B3LCS

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EH010CQ

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	13	
108-67-8	1,3,5-Trimethylbenzene	11	
95-63-6	1,2,4-Trimethylbenzene	11	
76-14-2	1,2-Dichlorotetrafluoroethan	10	
106-93-4	1,2-Dibromoethane	10	
106-99-0	1,3-Butadiene	10	
75-15-0	Carbon Disulfide	10	
67-64-1	Acetone	10	
67-63-0	Isopropyl Alcohol	9.1	
1634-04-4	Methyl tert-Butyl Ether	10	
110-82-7	Cyclohexane	11	
124-48-1	Dibromochloromethane	11	
78-93-3	Methyl Ethyl Ketone	9.8	
108-10-1	Methyl Isobutyl Ketone	9.8	
591-78-6	Methyl Butyl Ketone	9.3	
75-27-4	Bromodichloromethane	10	
156-60-5	trans-1,2-Dichloroethene	10	
622-96-8	4-Ethyltoluene	11	
95-49-8	2-Chlorotoluene	11	
110-54-3	n-Hexane	9.7	
109-99-9	Tetrahydrofuran	10	
142-82-5	n-Heptane	11	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B3LCSD

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: B3LCSD

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EH010CQD

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	11	
74-87-3	Chloromethane	11	
75-01-4	Vinyl Chloride	11	
74-83-9	Bromomethane	11	
75-00-3	Chloroethane	11	
75-69-4	Trichlorofluoromethane	11	
76-13-1	Freon TF	11	
75-35-4	1,1-Dichloroethene	11	
75-09-2	Methylene Chloride	9.6	
75-34-3	1,1-Dichloroethane	10	
156-59-2	cis-1,2-Dichloroethene	10	
67-66-3	Chloroform	10	
71-55-6	1,1,1-Trichloroethane	11	
56-23-5	Carbon Tetrachloride	11	
71-43-2	Benzene	11	
107-06-2	1,2-Dichloroethane	11	
79-01-6	Trichloroethene	10	
78-87-5	1,2-Dichloropropane	10	
10061-01-5	cis-1,3-Dichloropropene	10	
108-88-3	Toluene	10	
10061-02-6	trans-1,3-Dichloropropene	10	
79-00-5	1,1,2-Trichloroethane	11	
127-18-4	Tetrachloroethene	11	
108-90-7	Chlorobenzene	11	
100-41-4	Ethylbenzene	12	
1330-20-7	Xylene (m,p)	25	
100-42-5	Styrene	12	
95-47-6	Xylene (o)	12	
79-34-5	1,1,2,2-Tetrachloroethane	12	
541-73-1	1,3-Dichlorobenzene	12	
106-46-7	1,4-Dichlorobenzene	12	
95-50-1	1,2-Dichlorobenzene	12	
120-82-1	1,2,4-Trichlorobenzene	16	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B3LCSD

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: B3LCSD

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: EH010CQD

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	14	
108-67-8	1,3,5-Trimethylbenzene	15	
95-63-6	1,2,4-Trimethylbenzene	12	
76-14-2	1,2-Dichlorotetrafluoroethan	11	
106-93-4	1,2-Dibromoethane	11	
106-99-0	1,3-Butadiene	11	
75-15-0	Carbon Disulfide	11	
67-64-1	Acetone	10	
67-63-0	Isopropyl Alcohol	9.4	
1634-04-4	Methyl tert-Butyl Ether	11	
110-82-7	Cyclohexane	11	
124-48-1	Dibromochloromethane	12	
78-93-3	Methyl Ethyl Ketone	10	
108-10-1	Methyl Isobutyl Ketone	9.7	
591-78-6	Methyl Butyl Ketone	10	
75-27-4	Bromodichloromethane	11	
156-60-5	trans-1,2-Dichloroethene	11	
622-96-8	4-Ethyltoluene	10	
95-49-8	2-Chlorotoluene	12	
110-54-3	n-Hexane	11	
109-99-9	Tetrahydrofuran	10	
142-82-5	n-Heptane	11	

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix Spike - Sample No.: B1LCS

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	10		11	110	70-130
Chloromethane	10		11	110	70-130
Vinyl Chloride	10		11	110	70-130
Bromomethane	10		12	120	70-130
Chloroethane	10		12	120	70-130
Trichlorofluoromethane	10		12	120	70-130
Freon TF	10		11	110	70-130
1,1-Dichloroethene	10		11	110	70-130
Methylene Chloride	10		10	100	70-130
1,1-Dichloroethane	10		11	110	70-130
cis-1,2-Dichloroethene	10		10	100	70-130
Chloroform	10		11	110	70-130
1,1,1-Trichloroethane	10		11	110	70-130
Carbon Tetrachloride	10		11	110	70-130
Benzene	10		11	110	70-130
1,2-Dichloroethane	10		12	120	70-130
Trichloroethene	10		10	100	70-130
1,2-Dichloropropane	10		10	100	70-130
cis-1,3-Dichloropropene	10		10	100	70-130
Toluene	10		11	110	70-130
trans-1,3-Dichloroprope	10		10	100	70-130
1,1,2-Trichloroethane	10		11	110	70-130
Tetrachloroethene	10		11	110	70-130
Chlorobenzene	10		11	110	70-130
Ethylbenzene	10		11	110	70-130
Xylene (m,p)	20		24	120	70-130
Styrene	10		12	120	70-130
Xylene (o)	10		12	120	70-130

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

* Values outside of QC limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix Spike - Sample No.: B1LCS

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
1,1,2,2-Tetrachloroetha	10		12	120	70-130
1,3-Dichlorobenzene	10		12	120	70-130
1,4-Dichlorobenzene	10		12	120	70-130
1,2-Dichlorobenzene	10		12	120	70-130
1,2,4-Trichlorobenzene	10		18	180*	70-130
Hexachlorobutadiene	10		14	140*	70-130
1,3,5-Trimethylbenzene	10		14	140*	70-130
1,2,4-Trimethylbenzene	10		12	120	70-130
1,2-Dichlorotetrafluoro	10		11	110	70-130
1,2-Dibromoethane	10		11	110	70-130
1,3-Butadiene	10		12	120	70-130
Carbon Disulfide	10		11	110	70-130
Acetone	10		12	120	70-130
Isopropyl Alcohol	10		9.8	98	70-130
Methyl tert-Butyl Ether	10		11	110	70-130
Cyclohexane	10		11	110	70-130
Dibromochloromethane	10		12	120	70-130
Methyl Ethyl Ketone	10		10	100	70-130
Methyl Isobutyl Ketone	10		9.8	98	70-130
Methyl Butyl Ketone	10		9.8	98	70-130
Bromodichloromethane	10		11	110	70-130
trans-1,2-Dichloroethen	10		11	110	70-130
4-Ethyltoluene	10		10	100	70-130
2-Chlorotoluene	10		12	120	70-130
n-Hexane	10		11	110	70-130
Tetrahydrofuran	10		10	100	70-130
n-Heptane	10		12	120	70-130

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

* Values outside of QC limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix Spike - Sample No.: B1LCS

COMPOUND	SPIKE ADDED (ppbv)	LCSD CONCENTRATION (ppbv)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	10	12	120	9	40	70-130
Chloromethane	10	12	120	9	40	70-130
Vinyl Chloride	10	12	120	9	40	70-130
Bromomethane	10	12	120	0	40	70-130
Chloroethane	10	12	120	0	40	70-130
Trichlorofluoromethane	10	12	120	0	40	70-130
Freon TF	10	11	110	0	40	70-130
1,1-Dichloroethene	10	11	110	0	40	70-130
Methylene Chloride	10	10	100	0	40	70-130
1,1-Dichloroethane	10	11	110	0	40	70-130
cis-1,2-Dichloroethene	10	10	100	0	40	70-130
Chloroform	10	11	110	0	40	70-130
1,1,1-Trichloroethane	10	12	120	9	40	70-130
Carbon Tetrachloride	10	11	110	0	40	70-130
Benzene	10	11	110	0	40	70-130
1,2-Dichloroethane	10	12	120	0	40	70-130
Trichloroethene	10	10	100	0	40	70-130
1,2-Dichloropropane	10	11	110	10	40	70-130
cis-1,3-Dichloropropene	10	10	100	0	40	70-130
Toluene	10	11	110	0	40	70-130
trans-1,3-Dichloroprope	10	11	110	10	40	70-130
1,1,2-Trichloroethane	10	11	110	0	40	70-130
Tetrachloroethene	10	11	110	0	40	70-130
Chlorobenzene	10	11	110	0	40	70-130
Ethylbenzene	10	12	120	9	40	70-130
Xylene (m,p)	20	25	125	4	40	70-130
Styrene	10	12	120	0	40	70-130
Xylene (o)	10	12	120	0	40	70-130

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

* Values outside of QC limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix Spike - Sample No.: B1LCS

COMPOUND	SPIKE ADDED (ppbv)	LCSD CONCENTRATION (ppbv)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1,2,2-Tetrachloroetha	10	12	120	0	40	70-130
1,3-Dichlorobenzene	10	12	120	0	40	70-130
1,4-Dichlorobenzene	10	12	120	0	40	70-130
1,2-Dichlorobenzene	10	13	130	8	40	70-130
1,2,4-Trichlorobenzene	10	20	200*	10	40	70-130
Hexachlorobutadiene	10	16	160*	13	40	70-130
1,3,5-Trimethylbenzene	10	14	140*	0	40	70-130
1,2,4-Trimethylbenzene	10	13	130	8	40	70-130
1,2-Dichlorotetrafluoro	10	12	120	9	40	70-130
1,2-Dibromoethane	10	11	110	0	40	70-130
1,3-Butadiene	10	12	120	0	40	70-130
Carbon Disulfide	10	11	110	0	40	70-130
Acetone	10	12	120	0	40	70-130
Isopropyl Alcohol	10	9.9	99	1	40	70-130
Methyl tert-Butyl Ether	10	12	120	9	40	70-130
Cyclohexane	10	11	110	0	40	70-130
Dibromochloromethane	10	12	120	0	40	70-130
Methyl Ethyl Ketone	10	10	100	0	40	70-130
Methyl Isobutyl Ketone	10	9.8	98	0	40	70-130
Methyl Butyl Ketone	10	10	100	2	40	70-130
Bromodichloromethane	10	11	110	0	40	70-130
trans-1,2-Dichloroethen	10	11	110	0	40	70-130
4-Ethyltoluene	10	12	120	18	40	70-130
2-Chlorotoluene	10	13	130	8	40	70-130
n-Hexane	10	11	110	0	40	70-130
Tetrahydrofuran	10	11	110	10	40	70-130
n-Heptane	10	12	120	0	40	70-130

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

* Values outside of QC limits

RPD: 0 out of 55 outside limits
Spike Recovery: 6 out of 110 outside limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix Spike - Sample No.: B3LCS

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
Dichlorodifluoromethane	10		9.8	98	70-130
Chloromethane	10		10	100	70-130
Vinyl Chloride	10		10	100	70-130
Bromomethane	10		11	110	70-130
Chloroethane	10		10	100	70-130
Trichlorofluoromethane	10		10	100	70-130
Freon TF	10		10	100	70-130
1,1-Dichloroethene	10		11	110	70-130
Methylene Chloride	10		9.2	92	70-130
1,1-Dichloroethane	10		10	100	70-130
cis-1,2-Dichloroethene	10		10	100	70-130
Chloroform	10		10	100	70-130
1,1,1-Trichloroethane	10		10	100	70-130
Carbon Tetrachloride	10		10	100	70-130
Benzene	10		11	110	70-130
1,2-Dichloroethane	10		11	110	70-130
Trichloroethene	10		10	100	70-130
1,2-Dichloropropane	10		10	100	70-130
cis-1,3-Dichloropropene	10		10	100	70-130
Toluene	10		11	110	70-130
trans-1,3-Dichloroprope	10		10	100	70-130
1,1,2-Trichloroethane	10		10	100	70-130
Tetrachloroethene	10		11	110	70-130
Chlorobenzene	10		11	110	70-130
Ethylbenzene	10		11	110	70-130
Xylene (m,p)	20		23	115	70-130
Styrene	10		11	110	70-130
Xylene (o)	10		11	110	70-130

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

* Values outside of QC limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix Spike - Sample No.: B3LCS

COMPOUND	SPIKE ADDED (ppbv)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ppbv)	LCS % REC #	QC. LIMITS REC.
1,1,2,2-Tetrachloroetha	10		11	110	70-130
1,3-Dichlorobenzene	10		11	110	70-130
1,4-Dichlorobenzene	10		11	110	70-130
1,2-Dichlorobenzene	10		11	110	70-130
1,2,4-Trichlorobenzene	10		17	170*	70-130
Hexachlorobutadiene	10		13	130	70-130
1,3,5-Trimethylbenzene	10		11	110	70-130
1,2,4-Trimethylbenzene	10		11	110	70-130
1,2-Dichlorotetrafluoro	10		10	100	70-130
1,2-Dibromoethane	10		10	100	70-130
1,3-Butadiene	10		10	100	70-130
Carbon Disulfide	10		10	100	70-130
Acetone	10		10	100	70-130
Isopropyl Alcohol	10		9.1	91	70-130
Methyl tert-Butyl Ether	10		10	100	70-130
Cyclohexane	10		11	110	70-130
Dibromochloromethane	10		11	110	70-130
Methyl Ethyl Ketone	10		9.8	98	70-130
Methyl Isobutyl Ketone	10		9.8	98	70-130
Methyl Butyl Ketone	10		9.3	93	70-130
Bromodichloromethane	10		10	100	70-130
trans-1,2-Dichloroethen	10		10	100	70-130
4-Ethyltoluene	10		11	110	70-130
2-Chlorotoluene	10		11	110	70-130
n-Hexane	10		9.7	97	70-130
Tetrahydrofuran	10		10	100	70-130
n-Heptane	10		11	110	70-130

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

* Values outside of QC limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix Spike - Sample No.: B3LCS

COMPOUND	SPIKE ADDED (ppbv)	LCSD CONCENTRATION (ppbv)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	10	11	110	12	40	70-130
Chloromethane	10	11	110	10	40	70-130
Vinyl Chloride	10	11	110	10	40	70-130
Bromomethane	10	11	110	0	40	70-130
Chloroethane	10	11	110	10	40	70-130
Trichlorofluoromethane	10	11	110	10	40	70-130
Freon TF	10	11	110	10	40	70-130
1,1-Dichloroethene	10	11	110	0	40	70-130
Methylene Chloride	10	9.6	96	4	40	70-130
1,1-Dichloroethane	10	10	100	0	40	70-130
cis-1,2-Dichloroethene	10	10	100	0	40	70-130
Chloroform	10	10	100	0	40	70-130
1,1,1-Trichloroethane	10	11	110	10	40	70-130
Carbon Tetrachloride	10	11	110	10	40	70-130
Benzene	10	11	110	0	40	70-130
1,2-Dichloroethane	10	11	110	0	40	70-130
Trichloroethene	10	10	100	0	40	70-130
1,2-Dichloropropane	10	10	100	0	40	70-130
cis-1,3-Dichloropropene	10	10	100	0	40	70-130
Toluene	10	10	100	10	40	70-130
trans-1,3-Dichloroprope	10	10	100	0	40	70-130
1,1,2-Trichloroethane	10	11	110	10	40	70-130
Tetrachloroethene	10	11	110	0	40	70-130
Chlorobenzene	10	11	110	0	40	70-130
Ethylbenzene	10	12	120	9	40	70-130
Xylene (m,p)	20	25	125	8	40	70-130
Styrene	10	12	120	9	40	70-130
Xylene (o)	10	12	120	9	40	70-130

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

* Values outside of QC limits

COMMENTS: _____

FORM 3
AIR VOLATILE LAB CONTROL SAMPLE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix Spike - Sample No.: B3LCS

COMPOUND	SPIKE ADDED (ppbv)	LCSD CONCENTRATION (ppbv)	LCSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1,2,2-Tetrachloroetha	10	12	120	9	40	70-130
1,3-Dichlorobenzene	10	12	120	9	40	70-130
1,4-Dichlorobenzene	10	12	120	9	40	70-130
1,2-Dichlorobenzene	10	12	120	9	40	70-130
1,2,4-Trichlorobenzene	10	16	160*	6	40	70-130
Hexachlorobutadiene	10	14	140*	7	40	70-130
1,3,5-Trimethylbenzene	10	15	150*	31	40	70-130
1,2,4-Trimethylbenzene	10	12	120	9	40	70-130
1,2-Dichlorotetrafluoro	10	11	110	10	40	70-130
1,2-Dibromoethane	10	11	110	10	40	70-130
1,3-Butadiene	10	11	110	10	40	70-130
Carbon Disulfide	10	11	110	10	40	70-130
Acetone	10	10	100	0	40	70-130
Isopropyl Alcohol	10	9.4	94	3	40	70-130
Methyl tert-Butyl Ether	10	11	110	10	40	70-130
Cyclohexane	10	11	110	0	40	70-130
Dibromochloromethane	10	12	120	9	40	70-130
Methyl Ethyl Ketone	10	10	100	2	40	70-130
Methyl Isobutyl Ketone	10	9.7	97	1	40	70-130
Methyl Butyl Ketone	10	10	100	7	40	70-130
Bromodichloromethane	10	11	110	10	40	70-130
trans-1,2-Dichloroethen	10	11	110	10	40	70-130
4-Ethyltoluene	10	10	100	10	40	70-130
2-Chlorotoluene	10	12	120	9	40	70-130
n-Hexane	10	11	110	12	40	70-130
Tetrahydrofuran	10	10	100	0	40	70-130
n-Heptane	10	11	110	0	40	70-130

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

* Values outside of QC limits

RPD: 0 out of 55 outside limits
Spike Recovery: 4 out of 110 outside limits

COMMENTS: _____

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: N Calibration Date: 06/21/04 Time: 2137

Lab File ID: NXX50IV Init. Calib. Date(s): 05/18/04 05/18/04

Heated Purge: (Y/N) Y Init. Calib. Times: 1725 1925

GC Column: CAP ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
n-Propylbenzene	0.595	0.566	0.01	4.9	20.0
2-Chlorotoluene	0.577	0.538	0.01	6.8	20.0
4-Chlorotoluene	0.583	0.554	0.01	5.0	20.0
1,3,5-Trimethylbenzene	1.655	1.518	0.01	8.3	20.0
tert-Butylbenzene	2.418	2.243	0.01	7.2	20.0
1,2,4-Trimethylbenzene	1.634	1.526	0.01	6.6	20.0
sec-Butylbenzene	2.523	2.377	0.01	5.8	20.0
4-Isopropyltoluene	2.031	1.982	0.01	2.4	20.0
n-Butylbenzene	1.994	2.061	0.01	3.4	20.0
1,2,3-Trichlorobenzene	1.044	1.114	0.01	6.7	20.0
Toluene-d8	1.037	0.964	0.01	7.0	20.0
1,2-Dichloroethane-d4	0.274	0.256	0.01	6.6	20.0
Bromofluorobenzene	1.039	0.945	0.01	9.0	20.0
1,2-Dichlorobenzene-d4	0.879	0.839	0.01	4.6	20.0

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

ABLKB1

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID: EHB002B Lab Sample ID: ABLKB1

Date Analyzed: 07/01/04 Time Analyzed: 1317

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: V

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	B1LCS	B1LCS	EH010BQ	1109
02	B1LCSD	B1LCSD	EH010BQD	1146
03	SGTERADYNE	576334	576334	0446
04	TRIP BLANK	576336	576336	0619
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
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30				

COMMENTS:

FORM 4
VOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

ABLKB3

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID: EHB002C Lab Sample ID: ABLKB3

Date Analyzed: 07/02/04 Time Analyzed: 1339

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

Instrument ID: V

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	B3LCS	B3LCS	EH010CQ	1128
02	B3LCSD	B3LCSD	EH010CQD	1206
03	SGTERADYNEDP	576335	576335I2	1525
04	SGTERADYNEDL	576334D1	576334D	1610
05				
06				
07				
08				
09				
10				
11				
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14				
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29				
30				

COMMENTS:

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID: EH001P BFB Injection Date: 06/29/04

Instrument ID: V BFB Injection Time: 1029

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.2
75	30.0 - 66.0% of mass 95	54.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	68.9
175	4.0 - 9.0% of mass 174	5.0 (7.3)1
176	93.0 - 101.0% of mass 174	67.0 (97.2)1
177	5.0 - 9.0% of mass 176	4.7 (7.0)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ASTD0005	ASTD0005	EH0005I2	06/29/04	1147
02	ASTD010	ASTD010	EH010	06/29/04	1313
03	ASTD015	ASTD015	EH015	06/29/04	1353
04	ASTD020	ASTD020	EH020	06/29/04	1438
05	ASTD040	ASTD040	EH040I3	06/29/04	1655
06	ASTD005	ASTD005	EH005I2	06/29/04	1923
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID: EH003P BFB Injection Date: 07/01/04

Instrument ID: V BFB Injection Time: 0959

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.8
75	30.0 - 66.0% of mass 95	54.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	66.3
175	4.0 - 9.0% of mass 174	4.6 (6.9)1
176	93.0 - 101.0% of mass 174	63.3 (95.5)1
177	5.0 - 9.0% of mass 176	4.1 (6.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ASTD010	ASTD010	EH010B	07/01/04	1029
02	B1LCS	B1LCS	EH010BQ	07/01/04	1109
03	B1LCSD	B1LCSD	EH010BQD	07/01/04	1146
04	ABLKB1	ABLKB1	EHB002B	07/01/04	1317
05	SGTERADYNE	576334	576334	07/02/04	0446
06	TRIP BLANK	576336	576336	07/02/04	0619
07					
08					
09					
10					
11					
12					
13					
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16					
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18					
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22					

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID: EH004P BFB Injection Date: 07/02/04

Instrument ID: V BFB Injection Time: 0948

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	18.8
75	30.0 - 66.0% of mass 95	52.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	71.6
175	4.0 - 9.0% of mass 174	5.1 (7.1)1
176	93.0 - 101.0% of mass 174	68.3 (95.4)1
177	5.0 - 9.0% of mass 176	4.6 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	ASTD010	ASTD010	EH010C	07/02/04	1033
02	B3LCS	B3LCS	EH010CQ	07/02/04	1128
03	B3LCSD	B3LCSD	EH010CQD	07/02/04	1206
04	ABLKB3	ABLKB3	EHB002C	07/02/04	1339
05	SGTERADYNEDP	576335	576335I2	07/02/04	1525
06	SGTERADYNEDL	576334D1	576334D	07/02/04	1610
07					
08					
09					
10					
11					
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13					
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18					
19					
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22					

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Calibration Time(s): 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

LAB FILE ID: RRF0.5=EH0005I2 RRF5 =EH005I2
RRF10 =EH010 RRF20 =EH020 RRF40 =EH040I3

COMPOUND		RRF0.5	RRF5	RRF10	RRF20	RRF40	$\overline{RRF}$	% RSD	
Dichlorodifluoromethane		2.485	2.085	2.055	1.802	1.603			
Chloromethane		0.511	0.466	0.471	0.419	0.348			
Vinyl Chloride		0.656	0.616	0.642	0.590	0.530			
Bromomethane		0.774	0.872	0.923	0.861	0.793			
Chloroethane		0.320	0.340	0.350	0.328	0.296			
Trichlorofluoromethane		2.696	2.754	2.674	2.357	1.989			
Freon TF		1.734	1.912	1.818	1.626	1.461			
1,1-Dichloroethene		0.680	0.704	0.657	0.591	0.494			
Methylene Chloride		1.274	0.861	0.821	0.724	0.626			
1,1-Dichloroethane	*	1.362	1.388	1.346	1.204	1.022			*
cis-1,2-Dichloroethene		0.762	0.889	0.849	0.828	0.811			
Chloroform		2.048	2.084	2.034	1.795	1.556			
1,1,1-Trichloroethane		0.501	0.550	0.531	0.470	0.380			
Carbon Tetrachloride		0.565	0.635	0.599	0.536	0.451			
Benzene		0.463	0.488	0.448	0.399	0.304			
1,2-Dichloroethane		0.290	0.296	0.289	0.240	0.168			
Trichloroethene		0.265	0.291	0.283	0.272	0.246			
1,2-Dichloropropane		0.179	0.189	0.182	0.168	0.133			
cis-1,3-Dichloropropene		0.342	0.383	0.377	0.357	0.331			
Toluene		0.410	0.427	0.396	0.358	0.298			
trans-1,3-Dichloropropene		0.302	0.354	0.345	0.316	0.284			
1,1,2-Trichloroethane		0.240	0.255	0.238	0.219	0.187			
Tetrachloroethene		0.306	0.373	0.353	0.333	0.306			
Chlorobenzene	*	0.509	0.568	0.537	0.478	0.378			*
Ethylbenzene		0.910	0.892	0.839	0.702	0.502			
Xylene (m,p)		0.289	0.323	0.295	0.228	0.134			
Styrene		0.444	0.575	0.542	0.446	0.311			
Xylene (o)		0.288	0.352	0.339	0.290	0.217			
1,1,2,2-Tetrachloroethane		0.486	0.556	0.534	0.446	0.363			
1,3-Dichlorobenzene		0.482	0.618	0.617	0.549	0.481			
1,4-Dichlorobenzene		0.462	0.578	0.565	0.474	0.400			
1,2-Dichlorobenzene		0.422	0.533	0.539	0.458	0.408			
1,2,4-Trichlorobenzene		0.174	0.212	0.216	0.170				
Hexachlorobutadiene		0.188	0.209	0.199	0.138				
1,3,5-Trimethylbenzene		0.845	0.888	0.811	0.615	0.414			
1,2,4-Trimethylbenzene		0.734	0.893	0.873	0.723	0.595			
1,2-Dichlorotetrafluoroethan		2.234	2.325	2.384	2.076	1.698			

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Calibration Time(s): 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

LAB FILE ID: RRF0.5=EH0005I2 RRF5 =EH005I2
RRF10 =EH010 RRF20 =EH020 RRF40 =EH040I3

COMPOUND	RRF0.5	RRF5	RRF10	RRF20	RRF40	$\overline{RRF}$	% RSD
1,2-Dibromoethane	0.505	0.558	0.518	0.454	0.382		
1,3-Butadiene	0.360	0.381	0.393	0.355	0.312		
Carbon Disulfide	2.259	2.303	2.209	2.013	1.853		
Acetone		1.063	1.019	0.895	0.773		
Isopropyl Alcohol		1.169	1.142	0.961	0.859		
Methyl tert-Butyl Ether	2.102	2.184	2.140	1.896	1.587		
Cyclohexane	0.214	0.232	0.213	0.194	0.143		
Dibromochloromethane	0.579	0.703	0.665	0.586	0.495		
Methyl Ethyl Ketone	3.378	3.024	2.925	2.570	1.999		
Methyl Isobutyl Ketone	0.370	0.439	0.442	0.401	0.346		
Methyl Butyl Ketone	0.398	0.459	0.428	0.343	0.277		
Bromodichloromethane	0.515	0.588	0.578	0.527	0.442		
trans-1,2-Dichloroethene	1.024	1.070	1.035	0.966	0.862		
4-Ethyltoluene	0.894	1.196	1.177	1.017	0.780		
2-Chlorotoluene	0.784	0.856	0.766	0.561	0.344		
n-Hexane	0.828	1.261	0.900	0.860	0.664		
Tetrahydrofuran		0.198	0.188	0.173	0.114		
n-Heptane	0.220	0.234	0.214	0.173	0.103		

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Calibration Time(s): 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

LAB FILE ID: RRF15 =EH015

COMPOUND	RRF15					$\overline{RRF}$	% RSD
Dichlorodifluoromethane						2.006	16.6
Chloromethane						0.443	14.0
Vinyl Chloride						0.607	8.2
Bromomethane						0.845	7.2
Chloroethane						0.327	6.4
Trichlorofluoromethane						2.494	12.9
Freon TF						1.710	10.2
1,1-Dichloroethene						0.625	13.6
Methylene Chloride						0.861	28.8
1,1-Dichloroethane *						1.264	12.1*
cis-1,2-Dichloroethene						0.828	5.7
Chloroform						1.903	11.8
1,1,1-Trichloroethane						0.486	13.8
Carbon Tetrachloride						0.557	12.6
Benzene						0.420	17.3
1,2-Dichloroethane						0.257	21.1
Trichloroethene						0.271	6.5
1,2-Dichloropropane						0.170	13.0
cis-1,3-Dichloropropene						0.358	6.2
Toluene						0.378	13.6
trans-1,3-Dichloropropene						0.320	9.1
1,1,2-Trichloroethane						0.228	11.4
Tetrachloroethene						0.334	8.8
Chlorobenzene *						0.494	14.8*
Ethylbenzene						0.769	22.1
Xylene (m,p)						0.254	29.7
Styrene						0.464	22.3
Xylene (o)						0.297	17.9
1,1,2,2-Tetrachloroethane						0.477	16.1
1,3-Dichlorobenzene						0.549	12.4
1,4-Dichlorobenzene						0.496	15.1
1,2-Dichlorobenzene						0.472	13.0
1,2,4-Trichlorobenzene	0.182					0.191	11.3
Hexachlorobutadiene	0.158					0.178	16.6
1,3,5-Trimethylbenzene						0.715	27.6
1,2,4-Trimethylbenzene						0.764	16.0
1,2-Dichlorotetrafluoroethan						2.143	12.8

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Calibration Time(s): 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

LAB FILE ID: RRF15 =EH015

COMPOUND	RRF15					$\overline{RRF}$	% RSD
1,2-Dibromoethane						0.483	14.0
1,3-Butadiene						0.360	8.6
Carbon Disulfide						2.127	8.9
Acetone	0.968					0.944	12.1
Isopropyl Alcohol	1.046					1.035	12.4
Methyl tert-Butyl Ether						1.982	12.5
Cyclohexane						0.199	17.2
Dibromochloromethane						0.606	13.4
Methyl Ethyl Ketone						2.779	18.8
Methyl Isobutyl Ketone						0.400	10.5
Methyl Butyl Ketone						0.381	19.0
Bromodichloromethane						0.530	11.0
trans-1,2-Dichloroethene						0.991	8.2
4-Ethyltoluene						1.013	17.7
2-Chlorotoluene						0.662	31.6
n-Hexane						0.903	24.3
Tetrahydrofuran	0.183					0.171	19.3
n-Heptane						0.189	28.1

* Compounds with required minimum RRF and maximim %RSD values.
All other compounds must meet a minimim RRF of 0.010.

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date: 07/01/04 Time: 1029

Lab File ID: EH010B Init. Calib. Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Init. Calib. Times: 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D	
Dichlorodifluoromethane	2.006	2.141	0.01	6.7	30.0	
Chloromethane	0.443	0.440	0.01	0.7	30.0	
Vinyl Chloride	0.607	0.592	0.01	2.5	30.0	
Bromomethane	0.845	0.846	0.01	0.1	30.0	
Chloroethane	0.327	0.338	0.01	3.4	30.0	
Trichlorofluoromethane	2.494	2.945	0.01	18.1	30.0	
Freon TF	1.710	1.938	0.01	13.3	30.0	
1,1-Dichloroethene	0.625	0.680	0.01	8.8	30.0	
Methylene Chloride	0.861	0.888	0.01	3.1	30.0	
1,1-Dichloroethane	1.264	1.420	0.1	12.3	30.0	
cis-1,2-Dichloroethene	0.828	0.900	0.01	8.7	30.0	
Chloroform	1.903	2.276	0.01	19.6	30.0	
1,1,1-Trichloroethane	0.486	0.592	0.01	21.8	30.0	
Carbon Tetrachloride	0.557	0.668	0.01	19.9	30.0	
Benzene	0.420	0.476	0.01	13.3	30.0	
1,2-Dichloroethane	0.257	0.333	0.01	29.6	30.0	
Trichloroethene	0.271	0.303	0.01	11.8	30.0	
1,2-Dichloropropane	0.170	0.198	0.01	16.5	30.0	
cis-1,3-Dichloropropene	0.358	0.406	0.01	13.4	30.0	
Toluene	0.378	0.414	0.01	9.5	30.0	
trans-1,3-Dichloropropene	0.320	0.383	0.01	19.7	30.0	
1,1,2-Trichloroethane	0.228	0.258	0.01	13.2	30.0	
Tetrachloroethene	0.334	0.366	0.01	9.6	30.0	
Chlorobenzene	0.494	0.578	0.3	17.0	30.0	
Ethylbenzene	0.769	0.921	0.01	19.8	30.0	
Xylene (m,p)	0.254	0.318	0.01	25.2	30.0	
Styrene	0.464	0.585	0.01	26.1	30.0	
Xylene (o)	0.297	0.364	0.01	22.6	30.0	
1,1,2,2-Tetrachloroethane	0.477	0.586	0.01	22.8	30.0	
1,3-Dichlorobenzene	0.549	0.651	0.01	18.6	30.0	
1,4-Dichlorobenzene	0.496	0.601	0.01	21.2	30.0	
1,2-Dichlorobenzene	0.472	0.568	0.01	20.3	30.0	
1,2,4-Trichlorobenzene	0.191	0.189	0.01	1.0	30.0	
Hexachlorobutadiene	0.178	0.182	0.01	2.2	30.0	
1,3,5-Trimethylbenzene	0.715	0.974	0.01	36.2	30.0	<-
1,2,4-Trimethylbenzene	0.764	0.967	0.01	26.6	30.0	
1,2-Dichlorotetrafluoroethan	2.143	2.269	0.01	5.9	30.0	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date: 07/01/04 Time: 1029

Lab File ID: EH010B Init. Calib. Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Init. Calib. Times: 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D	
1,2-Dibromoethane	0.483	0.549	0.01	13.7	30.0	
1,3-Butadiene	0.360	0.359	0.01	0.3	30.0	
Carbon Disulfide	2.127	2.283	0.01	7.3	30.0	
Acetone	0.944	1.111	0.01	17.7	30.0	
Isopropyl Alcohol	1.035	1.233	0.01	19.1	30.0	
Methyl tert-Butyl Ether	1.982	2.341	0.01	18.1	30.0	
Cyclohexane	0.199	0.220	0.01	10.6	30.0	
Dibromochloromethane	0.606	0.720	0.01	18.8	30.0	
Methyl Ethyl Ketone	2.779	3.214	0.01	15.6	30.0	
Methyl Isobutyl Ketone	0.400	0.481	0.01	20.2	30.0	
Methyl Butyl Ketone	0.381	0.459	0.01	20.5	30.0	
Bromodichloromethane	0.530	0.638	0.01	20.4	30.0	
trans-1,2-Dichloroethene	0.991	1.152	0.01	16.2	30.0	
4-Ethyltoluene	1.013	1.190	0.01	17.5	30.0	
2-Chlorotoluene	0.662	0.864	0.01	30.5	30.0	<-
n-Hexane	0.903	1.010	0.01	11.8	30.0	
Tetrahydrofuran	0.171	0.199	0.01	16.4	30.0	
n-Heptane	0.189	0.237	0.01	25.4	30.0	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date: 07/02/04 Time: 1033

Lab File ID: EH010C Init. Calib. Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Init. Calib. Times: 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D	
Dichlorodifluoromethane	2.006	2.085	0.01	3.9	30.0	
Chloromethane	0.443	0.419	0.01	5.4	30.0	
Vinyl Chloride	0.607	0.568	0.01	6.4	30.0	
Bromomethane	0.845	0.833	0.01	1.4	30.0	
Chloroethane	0.327	0.331	0.01	1.2	30.0	
Trichlorofluoromethane	2.494	2.780	0.01	11.5	30.0	
Freon TF	1.710	1.821	0.01	6.5	30.0	
1,1-Dichloroethene	0.625	0.670	0.01	7.2	30.0	
Methylene Chloride	0.861	0.831	0.01	3.5	30.0	
1,1-Dichloroethane	1.264	1.363	0.1	7.8	30.0	
cis-1,2-Dichloroethene	0.828	0.877	0.01	5.9	30.0	
Chloroform	1.903	2.122	0.01	11.5	30.0	
1,1,1-Trichloroethane	0.486	0.552	0.01	13.6	30.0	
Carbon Tetrachloride	0.557	0.628	0.01	12.7	30.0	
Benzene	0.420	0.460	0.01	9.5	30.0	
1,2-Dichloroethane	0.257	0.303	0.01	17.9	30.0	
Trichloroethene	0.271	0.306	0.01	12.9	30.0	
1,2-Dichloropropane	0.170	0.186	0.01	9.4	30.0	
cis-1,3-Dichloropropene	0.358	0.387	0.01	8.1	30.0	
Toluene	0.378	0.397	0.01	5.0	30.0	
trans-1,3-Dichloropropene	0.320	0.355	0.01	10.9	30.0	
1,1,2-Trichloroethane	0.228	0.244	0.01	7.0	30.0	
Tetrachloroethene	0.334	0.352	0.01	5.4	30.0	
Chlorobenzene	0.494	0.554	0.3	12.1	30.0	
Ethylbenzene	0.769	0.871	0.01	13.3	30.0	
Xylene (m,p)	0.254	0.304	0.01	19.7	30.0	
Styrene	0.464	0.543	0.01	17.0	30.0	
Xylene (o)	0.297	0.343	0.01	15.5	30.0	
1,1,2,2-Tetrachloroethane	0.477	0.554	0.01	16.1	30.0	
1,3-Dichlorobenzene	0.549	0.614	0.01	11.8	30.0	
1,4-Dichlorobenzene	0.496	0.569	0.01	14.7	30.0	
1,2-Dichlorobenzene	0.472	0.536	0.01	13.6	30.0	
1,2,4-Trichlorobenzene	0.191	0.216	0.01	13.1	30.0	
Hexachlorobutadiene	0.178	0.197	0.01	10.7	30.0	
1,3,5-Trimethylbenzene	0.715	0.997	0.01	39.4	30.0	<-
1,2,4-Trimethylbenzene	0.764	0.893	0.01	16.9	30.0	
1,2-Dichlorotetrafluoroethan	2.143	2.162	0.01	0.9	30.0	

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Instrument ID: V Calibration Date: 07/02/04 Time: 1033

Lab File ID: EH010C Init. Calib. Date(s): 06/29/04 06/29/04

Heated Purge: (Y/N) N Init. Calib. Times: 1147 1923

GC Column: RTX-624 ID: 0.32 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
1,2-Dibromoethane	0.483	0.517	0.01	7.0	30.0
1,3-Butadiene	0.360	0.349	0.01	3.0	30.0
Carbon Disulfide	2.127	2.234	0.01	5.0	30.0
Acetone	0.944	1.078	0.01	14.2	30.0
Isopropyl Alcohol	1.035	1.153	0.01	11.4	30.0
Methyl tert-Butyl Ether	1.982	2.199	0.01	10.9	30.0
Cyclohexane	0.199	0.220	0.01	10.6	30.0
Dibromochloromethane	0.606	0.684	0.01	12.9	30.0
Methyl Ethyl Ketone	2.779	2.947	0.01	6.0	30.0
Methyl Isobutyl Ketone	0.400	0.446	0.01	11.5	30.0
Methyl Butyl Ketone	0.381	0.424	0.01	11.3	30.0
Bromodichloromethane	0.530	0.604	0.01	14.0	30.0
trans-1,2-Dichloroethene	0.991	1.068	0.01	7.8	30.0
4-Ethyltoluene	1.013	1.062	0.01	4.8	30.0
2-Chlorotoluene	0.662	0.819	0.01	23.7	30.0
n-Hexane	0.903	0.952	0.01	5.4	30.0
Tetrahydrofuran	0.171	0.188	0.01	9.9	30.0
n-Heptane	0.189	0.224	0.01	18.5	30.0

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID (Standard): EH010B Date Analyzed: 07/01/04

Instrument ID: V Time Analyzed: 1029

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

		IS1 (BCM) AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DFB) AREA #	RT #
	12 HOUR STD	196072	9.63	859176	12.69	863432	10.41
	UPPER LIMIT	274501	9.96	1202846	13.02	1208805	10.74
	LOWER LIMIT	117643	9.30	515506	12.36	518059	10.08
	CLIENT SAMPLE NO.						
01	B1LCS	231538	9.63	884114	12.68	979077	10.42
02	B1LCSD	224263	9.63	826099	12.69	945364	10.41
03	ABLKB1	212816	9.63	811592	12.68	906434	10.42
04	SGTERADYNE	308010*	9.63	1186672	12.69	1282355*	10.42
05	TRIP BLANK	243248	9.63	910176	12.68	1023072	10.42
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DFB) = 1,4-Difluorobenzene

AREA UPPER LIMIT = + 40% of internal standard area
AREA LOWER LIMIT = - 40% of internal standard area
RT UPPER LIMIT = + 0.33 minutes of internal standard RT
RT LOWER LIMIT = - 0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

FORM 8
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Lab File ID (Standard): EH010C Date Analyzed: 07/02/04

Instrument ID: V Time Analyzed: 1033

GC Column: RTX-624 ID: 0.32 (mm) Heated Purge: (Y/N) N

		IS1 (BCM) AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 (DFB) AREA #	RT #
	12 HOUR STD	213170	9.63	916870	12.69	925818	10.42
	UPPER LIMIT	298438	9.96	1283618	13.02	1296145	10.75
	LOWER LIMIT	127902	9.30	550122	12.36	555491	10.09
	CLIENT SAMPLE NO.						
01	B3LCS	261320	9.63	1047738	12.68	1105504	10.42
02	B3LCSD	246543	9.63	893892	12.69	1026603	10.42
03	ABLKB3	221884	9.63	839440	12.69	944306	10.42
04	SGTERADYNEDP	284314	9.63	1106641	12.68	1186731	10.42
05	SGTERADYNEDL	299404*	9.64	1131082	12.69	1247332	10.43
06							
07							
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18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DFB) = 1,4-Difluorobenzene

AREA UPPER LIMIT = + 40% of internal standard area
AREA LOWER LIMIT = - 40% of internal standard area
RT UPPER LIMIT = + 0.33 minutes of internal standard RT
RT LOWER LIMIT = - 0.33 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

ATTACHMENT 5

Trillium's Data Validation Reports

ATTACHMENT 5

Trillium's Data Validation Reports

TRILLIUM INC.

DATA VALIDATION

FOR

INDUSTRIPLEX PROJECT
WOBURN, MASSACHUSETTS

ORGANIC ANALYSIS DATA
Volatile Organics in Soil Gas

Sample Delivery Group #100226
May 2004 Sample Collections

Chemical Analyses Performed by:

Severn Trent Laboratories
Colchester, Vermont

FOR

Roux Associates, Inc.
Burlington, Massachusetts

BY

Trillium, Inc.
356 Farragut Crossing Drive
Knoxville, Tennessee 37922
(865) 966-8880

June 25, 2004

04864\CAE\EKD
Industriplex/Soil Gas/100226 voc

EXECUTIVE SUMMARY

Validation of the volatile organics analysis data prepared by Severn Trent Laboratories (STL Burlington) for seven soil gas samples collected in association with the IndustriPlex project in Woburn, Massachusetts, has been completed by Trillium, Inc. The data were reported by the laboratory in a single data package under Sample Delivery Group (SDG) #100226, which was received for review on June 22, 2004. The following samples were reported:

SG-ABC ROOFING	SG-GANGLIANI
SG-GRAPHIQUE	SG-PACER
SG-SACCO/A	SG-SACCO/B
SG-VINING	

Throughout this report, the suffix "DL" is used to distinguish the diluted re-analysis of a sample (e.g., SG-PACERDL) from the original, undiluted analysis of the sample.

Based on the validation effort, reported sample results were qualified as follows:

- Results for acetone in SG-PACER, SG-PACERDL, SG-ABC ROOFING, and SG-ABC ROOFINGDL were qualified as estimated (J).
- Results for methyl tert-butyl ether and methyl ethyl ketone in SG-ABC ROOFING and SG-SACCO/B were corrected to less than the reporting limit (RL) (0.50 U).
- Results for methyl ethyl ketone in SG-GANGLIANI, SG-GRAPHIQUE, and SG-SACCO/A were corrected to less than the RL (0.50 U).

All "D" and "E" qualifiers applied by the laboratory were removed by the validator. "J" qualifiers applied by the laboratory to denote target analyte results below the applicable RL were not removed except where superceded by validation qualifiers.

For SG-ABC ROOFING and SG-PACER, only the results recommended for use by the validator have been reported on the data summary form; these represent a combination of results from the original and diluted analyses of these samples. In Attachment B, the Form Is for the original analyses of SG-ABC ROOFING and SG-PACER have been "hybridized" to reflect the results recommended for use from the two reported analyses of each sample. The Form Is for the analyses that should not be used have been marked "Do Not Use" for clarity.

Brief explanations of the reasons for the actions taken above may be found in the Overall Assessment (Section XIV) of this report. Details of the validation findings and conclusions based on review of the results for each quality control requirement are provided in the remaining sections of this report.

Documentation issues are discussed in Section XIII.

This validation report should be considered part of the data package for all future distributions of these volatiles data.

INTRODUCTION

Analyses were performed according to U.S. EPA Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)," January 1999 (EPA 625/R-96/010b). Results of sample analyses are reported by the laboratory as either qualified or unqualified; various qualifier codes are used to denote specific information regarding the analytical results.

To the extent possible, Trillium's validation was performed in conformance with the "Region I, EPA-New England Data Validation Functional Guidelines for Evaluating Environmental Analysis, 12/96. Where discrepancies were observed between the criteria presented in the validation guidelines and the method specifications, the method specifications took precedence. Professional judgment was applied as necessary and appropriate.

The data validation process is intended to evaluate data on a technical basis rather than a contract compliance basis. This requires that the data package contain sufficient raw data documentation to facilitate the validation effort and allow verification of the reported results. It is assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate and sufficient quality review prior to submission for validation.

During the validation process, laboratory data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data validator. Validated results are, therefore, either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Final validated results are annotated with the following codes as defined by Region I:

U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

J - The associated numerical value is an estimated quantity.

UJ - The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

R - The data are unusable (compound may or may not be present). Resampling and reanalysis is necessary for verification.

These codes are recorded on the data summary form in Attachment A and the laboratory's Volatile Organics Analysis Data Sheets (Form Is) in Attachment B to qualify the results as appropriate according to the review of the data package.

Two facts should be noted by all data users. First, **the "R" qualifier means that the laboratory-reported result is unusable.** In other words, due to significant quality control problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Rejected results should not appear on data tables because they cannot be relied upon, even as a last resort. Second, **no analyte concentration is guaranteed to be accurate even if all associated quality control is acceptable.** Strict quality control conformance serves only to increase confidence in reported results; any analytical result will always contain some error.

The data user is also cautioned that the validation effort is based on the raw data printouts as provided by the laboratory. Software manipulation cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

I. Holding Times, Preservation and Sample Integrity

The samples were collected on 5/13/04 and 5/14/04. All sample analyses were performed on 6/8/04 and 6/9/04, which is within the 30-day holding time specified by the referenced method.

The laboratory's Log-In Sheet indicates that the samples were received intact and with intact custody seals on 5/15/04. The shipping container was at ambient temperature; no preservation is required for air samples collected in canisters.

II. GC/MS Instrument Performance Checks

Two instrument performance checks using bromofluorobenzene (BFB) were run, representing both shifts (24-hour periods) during which samples, associated standards, and/or associated quality control samples were analyzed. Results for both instrument performance checks were acceptable.

III. Calibration

Sample analyses were performed on a single gas chromatograph/mass spectrometer (GC/MS) system identified as "V." A few target analytes were manually integrated in some of the calibration standards associated with this data set. The documentation provided verifies that these integrations were acceptably performed and accurately incorporated into the applicable quantitation reports. No internal standard or surrogate compounds were manually integrated in any of the calibration standards.

A. Initial Calibration (IC)

One five-point, ambient purge IC was established on 6/8/04 in support of the reported analyses. Standards at concentrations of 0.50, 5.0, 10, 20, and 40 parts per billion by volume (ppbv) were analyzed for all of the target analytes. For hexachlorobutadiene and 1,2,4-trichlorobenzene, a 15 ppbv standard was included and the 40 ppbv standard was dropped, establishing a calibration range of 0.50 ppbv to 20 ppbv for these two analytes. For acetone, isopropyl alcohol, and tetrahydrofuran, a 15 ppbv standard was included and the 0.5 ppbv standard was dropped, establishing a calibration range of 5.0 ppbv to 40 ppbv for these three analytes. Documentation of all individual IC standards analyzed was present in the data package. Relative response factor (RRF) as well as percent relative standard deviation (%RSD) values were correctly calculated and accurately reported in all cases.

The 15 ppbv standard used for the five target analytes listed above also included the other target analytes at this concentration, but the 15 ppbv results for these analytes were not included in the initial calibration. While it is acceptable to drop the high or low concentration standard responses,

exclusion of responses from the middle of the calibration curve is not an acceptable practice, and should not be continued by the laboratory. Based on validator calculations, RRFs from the 15 ppbv standard were consistent with the established IC, and their inclusion would not likely have made a significant difference in the reported sample results. Therefore, based on professional judgment, no action was taken on this basis.

Average RRF values reported by the laboratory were above the applicable minimum acceptance criterion (0.05) and all %RSD values were below the maximum acceptance criterion (30%) for all target analytes.

B. Continuing Calibration (CC)

All samples and associated quality control analyses were analyzed immediately following the IC on 6/8/04. Two diluted re-analyses and associated quality control analyses were run following a continuing calibration standard on 6/9/04. The CC standard was fully documented in the data package. Documentation of the mid-point IC standard (10 ppbv) evaluated as a CC standard was also provided.

All RRF and percent difference (%D) values were correctly calculated and accurately reported for both reported CC standards. All RRFs were above the minimum acceptance criterion (0.05) and all %D values were below the maximum acceptance limit (30%).

IV. Blanks

Two laboratory method blanks (MBs: ABLKW9 and ABLKX1) were analyzed in association with the soil gas samples. No target analytes were detected in either MB.

No field or trip blanks were submitted to the laboratory with this set of samples.

Canister cleaning certification data were provided in the data package. Canister numbers 6384 and 6524, both of which were used to collect samples in this data set, were analyzed after cleaning. Associated tuning, calibration, and method blank data were documented in addition to the canister analyses. Both canisters were free of contamination, and all associated quality control data were acceptable. All canister numbers recorded on the laboratory's run logs for the seven site samples in this SDG were included in the list of canisters associated with each of the certified clean canisters.

V. Surrogate Recoveries

The use of a surrogate compound is not addressed in Method TO-15, and no surrogate compound was employed with the analyses of these samples

VI. Laboratory Control Samples (LCSs)

Two 10 ppbv laboratory control sample pairs (W9ICVLCS/LCSD and X1LCS/LCSD) were associated with the reported samples. Both LCS/LCSD pairs were spiked with all target analytes. All target analyte recoveries were within the 70-130% acceptance limits specified by the laboratory on the summary forms in the data package except for acetone in W9ICV/LCS (160%), X1LCS (150%), and X1LCSD (140%) and for hexachlorobutadiene in X1LCSD (150%).

Since at least one control sample recovery was acceptable for acetone on 6/8/04, no sample results were qualified based on the high recovery in the LCS run on this date. Results for acetone in SG-PACERDL and SG-ABC ROOFINGDL were qualified as estimated (J) based on the high recoveries for acetone in both associated control samples.

The recovery for hexachlorobutadiene was acceptable in one of the two LCSs run on 6/9/04 and this analyte was not detected in any of the site samples. Therefore, no sample results for hexachlorobutadiene warranted qualification based on the high recovery in the LCSD on this date.

Reproducibility between paired concentrations was acceptable (QC $\leq$40 relative percent difference [RPD]) in both LCS/LCSD pairs.

VII. Field Duplicate

No field duplicate pair was submitted with this set of samples.

VIII. Internal Standard Performance

All internal standard areas and retention times (RTs) were within the method-specified quality control limits (area $\pm$40% of the corresponding CC standard area and RT $\pm$0.33 minutes of the corresponding CC standard RT) for all reported sample and quality control analyses.

IX. Target Compound Identification

With the exceptions noted below, reported target analytes in all samples were correctly identified with acceptable supporting mass spectra present in the data package.

For several laboratory-reported positive results, the identified peaks were at RTs that differed from the RTs in the associated CC standard and the mass spectra do not support the identifications. RT comparisons are summarized below:

		minutes	
Sample	**Compound**	**6/8/04 CC RT**	**Sample RT**
SG-ABC ROOFING	methyl tert-butyl ether	8.504	8.599
	methyl ethyl ketone	9.491	9.586
	bromochloromethane (IS)	9.628	9.647
SG-GANGLIANI	methyl ethyl ketone	9.491	9.615
	bromochloromethane (IS)	9.628	9.645
SG-GRAPHIQUE	methyl ethyl ketone	9.491	9.612
	bromochloromethane (IS)	9.628	9.642
SG-SACCO/A	methyl ethyl ketone	9.491	9.658
	bromochloromethane (IS)	9.628	9.643
SG-SACCO/B	methyl tert-butyl ether	8.504	8.671
	methyl ethyl ketone	9.491	9.567
	bromochloromethane (IS)	9.628	9.643

The analyte RT shifts listed above are not supported by the RTs for the associated IS compound, which are very consistent between the CC standard and the samples. In addition, methyl tert-butyl ether and methyl ethyl ketone were identified in SG-PACER at RTs of 8.505 minutes and 9.478 minutes, respectively, with valid supporting mass spectra. These RTs are very consistent with the RTs for these compounds in the CC standard, and there is no reason to expect that they would be significantly different in any of the other samples.

Therefore, based on the RT discrepancies and mass spectra that do not support the reported identifications (see Attachment C), results for the following analytes were corrected to less than the reporting limit (RL) (0.50 U) by the validator:

- Methyl tert-butyl ether and methyl ethyl ketone in SG-ABC ROOFING
- Methyl ethyl ketone in SG-GANGLIANI
- Methyl ethyl ketone in SG-GRAPHIQUE

- Methyl ethyl ketone in SG-SACCO/A
- Methyl tert-butyl ether and methyl ethyl ketone in SG-SACCO/B

X. Compound Quantitation and Reported Detection Limits

Target compound concentrations and sample-specific RLs were correctly calculated and accurately reported by the laboratory, including adjustments for dilutions where applicable.

Results for acetone in SG-ABC ROOFING and SG-PACER were qualified as estimated (J) because the reported concentrations exceeded the established calibration range. Four-fold diluted analyses of both samples were performed and responses for acetone that were within the calibration range were achieved; therefore, results for acetone in these two samples were taken from the diluted analyses. The validator removed the "E" qualifiers applied by the laboratory to indicate sample results that exceeded the calibration range and the "D" qualifiers used to indicate sample results from a diluted analysis.

For SG-ABC ROOFING and SG-PACER, only the results recommended for use by the validator have been reported on the data summary form; as discussed above, these represent a combination of results from the original and diluted analyses of these samples. In Attachment B, the Form Is for the original analyses of SG-ABC ROOFING and SG-PACER have been "hybridized" to reflect the results recommended for use from the two reported analyses of each sample. The Form Is for the analyses that should not be used have been marked "Do Not Use" for clarity.

"J" qualifiers were appropriately applied by the laboratory to positive target analyte results that were below the sample-specific RL; these qualifiers were not removed except where superceded by validator-applied qualifiers.

The unadjusted RLs reported by the laboratory for each target analyte are equal to the lowest IC standard concentration associated with these sample analyses. These values are well supported by the raw data.

The data summary form in Attachment A lists all individual sample analytes affected by the applied qualifications. All positive results are listed on this form, whether or not the value or qualifier was changed as a result of the validation. Where no result is listed, the compound was not detected and the RL was not qualified. Sample-specific RLs may be found on the laboratory-generated Form I for each sample (Attachment B) or may be calculated from the information on the data summary form as follows: unadjusted RL (far left column) multiplied by the dilution factor.

XI. Tentatively Identified Compounds (TIC)

Library searches of non-target compound peaks are not required by the referenced method and were not requested for these samples.

XII. System Performance

The GC/MS system appears to have been working satisfactorily at the time of these analyses, based on review of the available raw data.

XIII. Documentation

A copy of the field COC record listing all site samples was provided in the data package; the following issues were noted:

- The container type used for sample collection was not specified; "P/O," defined as "plastic/other" was recorded. The use of canisters should be clearly documented on the COC record.
- Most of the samples were collected on 5/13/04, with one collected on 5/14/04. All were shipped to the laboratory on 5/14/04. The disposition of the samples collected on 5/13/04 during the delay between collection and shipment was not documented.
- No shipping information was documented, and a copy of the overnight courier airbill was not included in the data package to document the shipping portion of the sample transfers. At a minimum, the use of an overnight courier and the applicable airbill number should be recorded.

These issues do not directly affect the validity of the analytical data generated. However, they could be problematic if the data were to be used for litigation.

XIV. Overall Assessment

Results for volatile organics in the soil gas samples reported in SDG #100226 were determined to be valid as reported with the following exceptions:

- Results for acetone in SG-PACERDL and SG-ABC ROOFINGDL were qualified as estimated (J) based on unacceptably high recoveries for this analyte in both associated laboratory control samples.

- Results for methyl tert-butyl ether and methyl ethyl ketone in SG-ABC ROOFING and SG-SACCO/B were corrected to less than the RL (0.50 U) because the mass spectra provided do not support these identifications and the RTs of the identified peaks are inconsistent with the RTs of these analytes in the associated calibration standards.

- Results for methyl ethyl ketone in SG-GANGLIANI, SG-GRAPHIQUE, and SG-SACCO/A were corrected to less than the RL (0.50 U) because the mass spectra provided do not support these identifications and the RTs of the identified peaks are inconsistent with the RTs of these analytes in the associated calibration standards.

- Results for acetone in SG-ABC ROOFING and SG-PACER were qualified as estimated (J) because the reported concentrations exceeded the established calibration range.

All "D" and "E" qualifiers applied by the laboratory were removed by the validator. "J" qualifiers applied by the laboratory to denote target analyte results below the applicable RL were not removed except where superceded by validation qualifiers.

For SG-ABC ROOFING and SG-PACER, only the results recommended for use by the validator have been reported on the data summary form; these represent a combination of results from the original and diluted analyses of these samples. In Attachment B, the Form Is for the original analyses of SG-ABC ROOFING and SG-PACER have been "hybridized" to reflect the results recommended for use from the two reported analyses of each sample. The Form Is for the analyses that should not be used have been marked "Do Not Use" for clarity.

Documentation issues are discussed in Section XIII.

This validation report should be considered part of the data package for all future distributions of these volatiles data.

TRILLIUM INC.

ATTACHMENT A

DATA SUMMARY FORM
SDG #100226
Volatiles in Soil Gas - IndustriPlex
Samples Collected May 13-14, 2004

DATA SUMMARY FORM: VOLATILES 1

SOIL GAS SAMPLES

parts per billion by volume (ppbv)

Site Name: IndustriPlex

Sampling Dates: May 13-14, 2004

SDG #100226

Trillium Project No. 04864

	Sample Number	SG-ABC ROOFING		SG-GANGLIANI		SG-GRAPHIQUE		SG-PACER		SG-SACCO/A		SG-SACCO/B		SG-VINING	
	Lab ID	571912		571914		571916		571918		571915		571917		571913	
	Dilution Factor	1.0, 4.0*		1.0		1.0		1.0, 4.0*		1.0		1.0		1.0	
0.50	Dichlorodifluoromethane	0.77		24		0.82		0.77		0.75		0.81		0.88	
0.50	Chloromethane	0.69		0.73		0.56		0.57		0.66				0.65	
0.50	Vinyl chloride														
0.50	Bromomethane														
0.50	Chloroethane														
0.50	Trichlorofluoromethane			0.51										0.77	
0.50	Freon TF														
0.50	1,1-Dichloroethene														
0.50	Methylene chloride	2.6												5.8	
0.50	1,1-Dichloroethane														
0.50	cis-1,2-Dichloroethene														
0.50	Chloroform											0.51			
0.50	1,1,1-Trichloroethane														
0.50	Carbon tetrachloride														
0.50	Benzene	0.70				0.76		5.5				0.76			
0.50	1,2-Dichloroethane														
0.50	Trichloroethene														
0.50	1,2-Dichloropropane														
0.50	cis-1,3-Dichloropropene														
0.50	Toluene	4.4		3.8		1.1		6.9				2.1		0.61	
0.50	trans-1,3-dichloropropene														
0.50	1,1,2-Trichloroethane														
0.50	Tetrachloroethene	0.77													
0.50	Chlorobenzene														
0.50	Ethylbenzene	2.4		2.9				0.97				0.61			
0.50	m,p-Xylenes	7.7		11		0.72		2.6				1.8			
0.50	Styrene														
0.50	o-Xylene	2.0		2.8				0.84				0.62			
0.50	1,1,2,2-Tetrachloroethane														
0.50	1,3-Dichlorobenzene														

* Acetone only was taken from the diluted analysis.

\Industriplex\soil gas voc

EPA TO-15

DATA SUMMARY FORM: VOLATILES 1
SOIL GAS SAMPLES
parts per billion by volume (ppbv)

Site Name: IndustriPlex

Sampling Dates: May 13-14, 2004

SDG #100226

Trillium Project No. 04864

CRQL		SG-ABC ROOFING		SG-GANGLIANI		SG-GRAPHIQUE		SG-PACER		SG-SACCO/A		SG-SACCO/B		SG-VINING	
	Sample Number	SG-ABC ROOFING		SG-GANGLIANI		SG-GRAPHIQUE		SG-PACER		SG-SACCO/A		SG-SACCO/B		SG-VINING	
	Lab ID	571912		571914		571916		571918		571915		571917		571913	
	Dilution Factor	1.0, 4.0*		1.0		1.0		1.0, 4.0*		1.0		1.0		1.0	
0.50	1,4-Dichlorobenzene														
0.50	1,2-Dichlorobenzene														
0.50	1,2,4-Trichlorobenzene														
0.50	Hexachlorobutadiene														
0.50	1,3,5-Trimethylbenzene	1.0		0.59											
0.50	1,2,4-Trimethylbenzene	2.8		1.8								0.68			
0.50	1,2-Dichlorotetrafluoroethane														
0.50	1,2-Dibromoethane														
0.50	1,3-Butadiene					1.1		9.1				1.4			
0.50	Carbon disulfide							1.0				1.1			
5.0	Acetone	74	J	16		8.4		89	J			20		5.0	
5.0	Isopropyl alcohol			7.0											
0.50	Methyl tert-butyl ether	0.50	U					1.3				0.50	U		
0.50	Cyclohexane							0.71							
0.50	Dibromochloromethane														
0.50	Methyl ethyl ketone	0.50	U	0.50	U	0.50	U	39		0.50	U	0.50	U		
0.50	Methyl isobutyl ketone														
0.50	Methyl butyl ketone														
0.50	Bromodichloromethane														
0.50	trans-1,2-Dichloroethene														
0.50	4-Ethyltoluene	3.2		1.6								0.51			
0.50	2-Chlorotoluene														
0.50	n-Hexane	4.4		0.97				3.8				0.57		4.1	
5.0	Tetrahydrofuran														
0.50	n-Heptane	0.85						2.7							

\Industriplex\soil gas voc

TRILLIUM INC.

ATTACHMENT B

VOLATILE ORGANICS ANALYSIS DATA SHEETS (FORM Is)
SDG #100226
Volatiles in Soil Gas - IndustriPlex
Samples Collected May 13-14, 2004

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-ABC ROOFING

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571912

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571912

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.77	
74-87-3	Chloromethane	0.69	
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	2.6	
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.70	
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	4.4	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.77	
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	2.4	
1330-20-7	Xylene (m,p)	7.7	
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	2.0	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-ABC ROOFING

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571912

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571912

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	1.0	
95-63-6	1,2,4-Trimethylbenzene	2.8	
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	0.50	U
67-64-1	Acetone *	74 ~~66~~ ~~J~~ J	
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	0.50 ~~3.4~~	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	0.50 ~~2.4~~	U
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	3.2	
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	4.4	
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.85	

* Result is from the diluted analysis.

CAErikson 6/25/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-ABC R
OOFINGDL

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571912D1

Sample wt/vol: 50.00 (g/mL) ML Lab File ID: 571912D

Level: (low/med) LOW *DO NOT USE* Date Received: 05/15/04

% Moisture: not dec. _____ CAE 6/25/04 Date Analyzed: 06/10/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 4.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	2.0	U
74-87-3	Chloromethane	2.0	U
75-01-4	Vinyl Chloride	2.0	U
74-83-9	Bromomethane	2.0	U
75-00-3	Chloroethane	2.0	U
75-69-4	Trichlorofluoromethane	2.0	U
76-13-1	Freon TF	2.0	U
75-35-4	1,1-Dichloroethene	2.0	U
75-09-2	Methylene Chloride	3.7	D
75-34-3	1,1-Dichloroethane	2.0	U
156-59-2	cis-1,2-Dichloroethene	2.0	U
67-66-3	Chloroform	2.0	U
71-55-6	1,1,1-Trichloroethane	2.0	U
56-23-5	Carbon Tetrachloride	2.0	U
71-43-2	Benzene	2.0	U
107-06-2	1,2-Dichloroethane	2.0	U
79-01-6	Trichloroethene	2.0	U
78-87-5	1,2-Dichloropropane	2.0	U
10061-01-5	cis-1,3-Dichloropropene	2.0	U
108-88-3	Toluene	5.1	D
10061-02-6	trans-1,3-Dichloropropene	2.0	U
79-00-5	1,1,2-Trichloroethane	2.0	U
127-18-4	Tetrachloroethene	2.0	U
108-90-7	Chlorobenzene	2.0	U
100-41-4	Ethylbenzene	2.9	D
1330-20-7	Xylene (m,p)	8.6	D
100-42-5	Styrene	2.0	U
95-47-6	Xylene (o)	2.2	D
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U
541-73-1	1,3-Dichlorobenzene	2.0	U
106-46-7	1,4-Dichlorobenzene	2.0	U
95-50-1	1,2-Dichlorobenzene	2.0	U
120-82-1	1,2,4-Trichlorobenzene	2.0	U

CAE 6/25/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-ABC R
OOFINGDL

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571912D1

Sample wt/vol: 50.00 (g/mL) ML Lab File ID: 571912D

Level: (low/med) LOW * DO NOT USE* Date Received: 05/15/04

% Moisture; not dec. _____ CAE 6/25/04 Date Analyzed: 06/10/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 4.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	2.0	U
108-67-8	1,3,5-Trimethylbenzene	2.0	U
95-63-6	1,2,4-Trimethylbenzene	2.9	D
76-14-2	1,2-Dichlorotetrafluoroethan	2.0	U
106-93-4	1,2-Dibromoethane	2.0	U
106-99-0	1,3-Butadiene	2.0	U
75-15-0	Carbon Disulfide	2.0	U
67-64-1	Acetone	74	D J
67-63-0	Isopropyl Alcohol	20	U
1634-04-4	Methyl tert-Butyl Ether	2.0	U
110-82-7	Cyclohexane	2.0	U
124-48-1	Dibromochloromethane	2.0	U
78-93-3	Methyl Ethyl Ketone	3.2	D
108-10-1	Methyl Isobutyl Ketone	2.0	U
591-78-6	Methyl Butyl Ketone	2.0	U
75-27-4	Bromodichloromethane	2.0	U
156-60-5	trans-1,2-Dichloroethene	2.0	U
622-96-8	4-Ethyltoluene	3.4	D
95-49-8	2-Chlorotoluene	2.0	U
110-54-3	n-Hexane	3.9	D
109-99-9	Tetrahydrofuran	20	U
142-82-5	n-Heptane	2.0	U

CAE 6/25/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-GANGLIANI

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571914

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571914

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	24	
74-87-3	Chloromethane	0.73	
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.51	
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	3.8	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	2.9	
1330-20-7	Xylene (m,p)	11	
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	2.8	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-GANGLIANI

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571914

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571914

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.59	
95-63-6	1,2,4-Trimethylbenzene	1.8	
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	0.50	U
67-64-1	Acetone	16	
67-63-0	Isopropyl Alcohol	7.0	
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	0.50 ~~1.2~~	U
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	1.6	
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	0.97	
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.50	U

CAE 6/25/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-GRAPHIQUE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571916

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571916

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.82	
74-87-3	Chloromethane	0.56	
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.76	
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	1.1	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (m,p)	0.72	
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-GRAPHIQUE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571916

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571916

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	1.1	
75-15-0	Carbon Disulfide	0.50	U
67-64-1	Acetone	8.4	
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	0.50 ~~1.3~~	U
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	0.50	U
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.50	U

CAE 6/25/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-PACER

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571918

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571918

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.77	
74-87-3	Chloromethane	0.57	
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	5.5	
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	6.9	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.97	
1330-20-7	Xylene (m,p)	2.6	
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.84	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-PACER

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571918

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571918

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	9.1	
75-15-0	Carbon Disulfide	1.0	
67-64-1	Acetone*	89 ~~96~~ ~~J~~ J	
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	1.3	
110-82-7	Cyclohexane	0.71	
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	39	
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	3.8	
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	2.7	

*Result is from the diluted analysis.

CAErikson 6/25/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-PACERDL

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571918D1

Sample wt/vol: 50.00 (g/mL) ML Lab File ID: 571918D

Level: (low/med) LOW * DO NOT USE * Date Received: 05/15/04

% Moisture: not dec. _____ CAE 6/25/04 Date Analyzed: 06/10/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 4.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	2.0	U
74-87-3	Chloromethane	2.0	U
75-01-4	Vinyl Chloride	2.0	U
74-83-9	Bromomethane	2.0	U
75-00-3	Chloroethane	2.0	U
75-69-4	Trichlorofluoromethane	2.0	U
76-13-1	Freon TF	2.0	U
75-35-4	1,1-Dichloroethene	2.0	U
75-09-2	Methylene Chloride	2.0	U
75-34-3	1,1-Dichloroethane	2.0	U
156-59-2	cis-1,2-Dichloroethene	2.0	U
67-66-3	Chloroform	2.0	U
71-55-6	1,1,1-Trichloroethane	2.0	U
56-23-5	Carbon Tetrachloride	2.0	U
71-43-2	Benzene	5.2	D
107-06-2	1,2-Dichloroethane	2.0	U
79-01-6	Trichloroethene	2.0	U
78-87-5	1,2-Dichloropropane	2.0	U
10061-01-5	cis-1,3-Dichloropropene	2.0	U
108-88-3	Toluene	6.4	D
10061-02-6	trans-1,3-Dichloropropene	2.0	U
79-00-5	1,1,2-Trichloroethane	2.0	U
127-18-4	Tetrachloroethene	2.0	U
108-90-7	Chlorobenzene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylene (m,p)	2.5	D
100-42-5	Styrene	2.0	U
95-47-6	Xylene (o)	2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2.0	U
541-73-1	1,3-Dichlorobenzene	2.0	U
106-46-7	1,4-Dichlorobenzene	2.0	U
95-50-1	1,2-Dichlorobenzene	2.0	U
120-82-1	1,2,4-Trichlorobenzene	2.0	U

CAE 4/25/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-PACERDL

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571918D1

Sample wt/vol: 50.00 (g/mL) ML Lab File ID: 571918D

Level: (low/med) LOW * DO NOT USE * Date Received: 05/15/04

% Moisture: not dec. _____ CAE 6/25/04 Date Analyzed: 06/10/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 4.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	2.0	U
108-67-8	1,3,5-Trimethylbenzene	2.0	U
95-63-6	1,2,4-Trimethylbenzene	2.0	U
76-14-2	1,2-Dichlorotetrafluoroethan	2.0	U
106-93-4	1,2-Dibromoethane	2.0	U
106-99-0	1,3-Butadiene	7.8	Ø
75-15-0	Carbon Disulfide	2.0	U
67-64-1	Acetone	89	Ø J
67-63-0	Isopropyl Alcohol	20	U
1634-04-4	Methyl tert-Butyl Ether	2.0	U
110-82-7	Cyclohexane	2.0	U
124-48-1	Dibromochloromethane	2.0	U
78-93-3	Methyl Ethyl Ketone	38	Ø
108-10-1	Methyl Isobutyl Ketone	2.0	U
591-78-6	Methyl Butyl Ketone	2.0	U
75-27-4	Bromodichloromethane	2.0	U
156-60-5	trans-1,2-Dichloroethene	2.0	U
622-96-8	4-Ethyltoluene	2.0	U
95-49-8	2-Chlorotoluene	2.0	U
110-54-3	n-Hexane	3.8	Ø
109-99-9	Tetrahydrofuran	20	U
142-82-5	n-Heptane	2.0	U

CAE 6/25/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-SACCO_A

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571915

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571915

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.75	
74-87-3	Chloromethane	0.66	
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (m,p)	0.50	U
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-SACCO_A

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571915

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571915

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	0.50	U
67-64-1	Acetone	5.0	U
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	0.50 ~~0.71~~	U
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	0.50	U
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.50	U

CAE 6/25/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-SACCO_B

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571917

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571917

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.81	
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.51	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.76	
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	2.1	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.61	
1330-20-7	Xylene (m,p)	1.8	
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.62	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-SACCO_B

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571917

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571917

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.68	
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	1.4	
75-15-0	Carbon Disulfide	1.1	
67-64-1	Acetone	20	
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	0.50 ~~0.51~~	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	0.50 ~~2.6~~	U
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.51	
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	0.57	
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.50	U

CAE 6/25/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-VINING

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571913

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571913

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.88	
74-87-3	Chloromethane	0.65	
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.77	
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	5.8	
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.61	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (m,p)	0.50	U
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SG-VINING

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100226

Matrix: (soil/water) AIR Lab Sample ID: 571913

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 571913

Level: (low/med) LOW Date Received: 05/15/04

% Moisture: not dec. _____ Date Analyzed: 06/09/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	0.50	U
67-64-1	Acetone	5.0	
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	0.50	U
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
110-54-3	n-Hexane	4.1	
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.50	U

TRILLIUM INC.

ATTACHMENT C

MASS SPECTRA FOR INCORRECTLY IDENTIFIED PEAKS
SDG #100226
Volatiles in Soil Gas - IndustriPlex
Samples Collected May 13-14, 2004

Data File: /chem/V.i/Vsvr.p/vefto15.b/571912.d

Date : 09-JUN-2004 03:12

Client ID: SG-ABC ROOFING

Instrument: V.i

Sample Info: SG-ABC ROOFING :[05/13/04 @0815(Air)

Purge Volume: 200.0

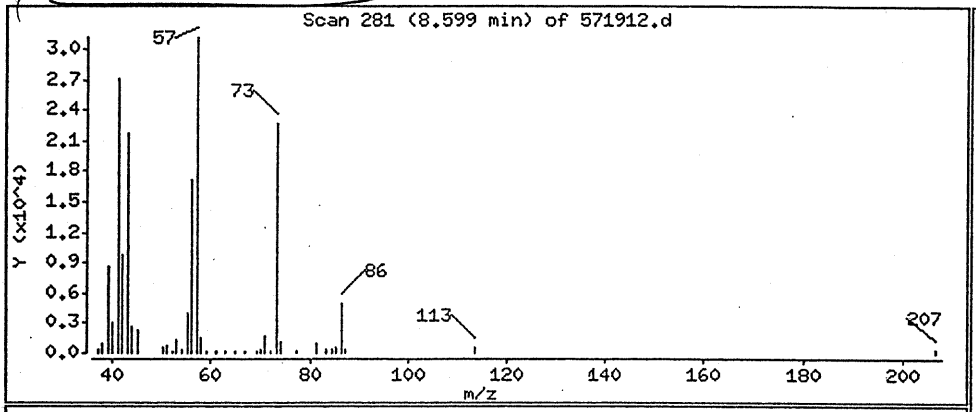
Operator: dmw

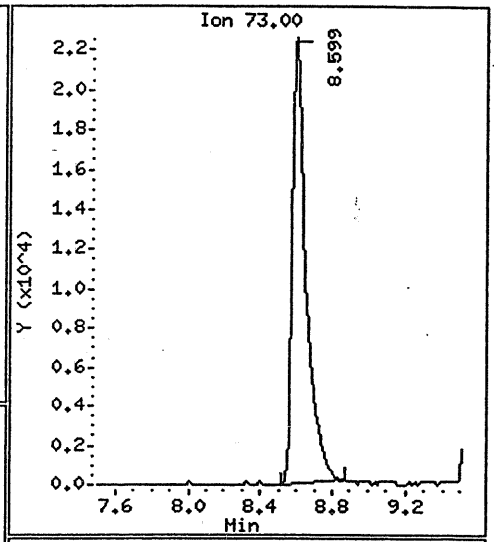
Column phase: RTX-624

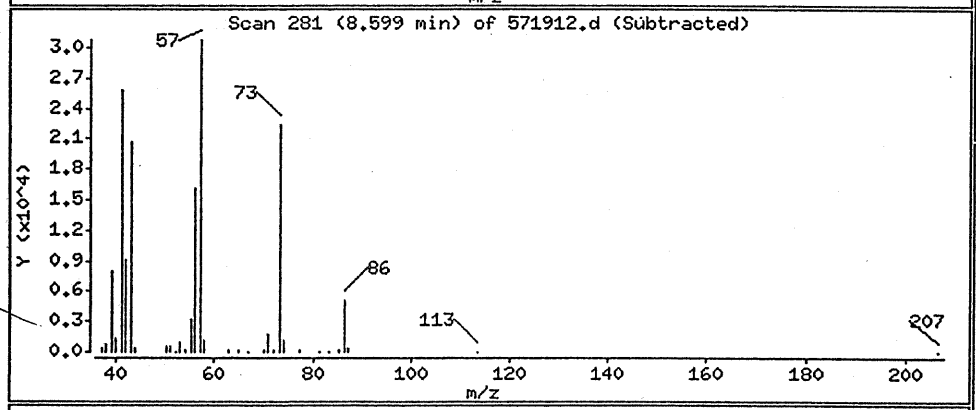
Column diameter: 0.32

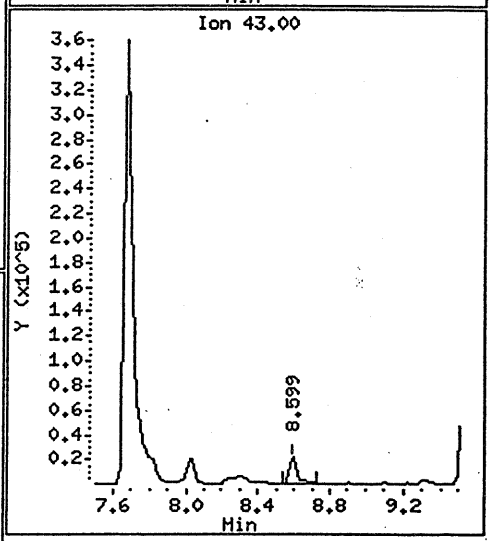
18 Methyl tert-Butyl Ether

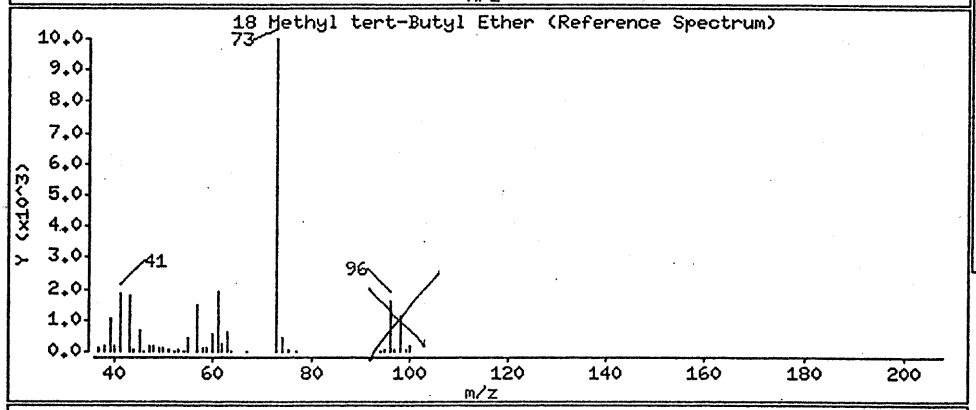
Concentration: 3.4 ppbv

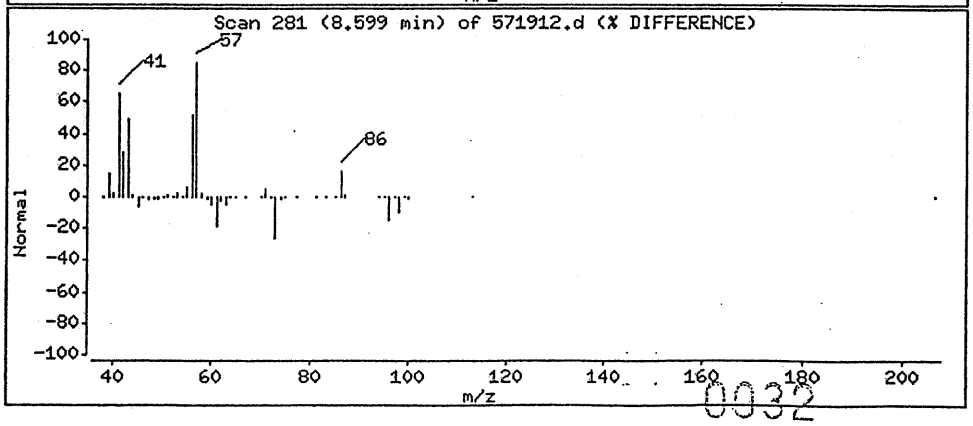












0032

Data File: /chem/V.i/Vsvr.p/vefto15mod.b/571912.d

Date : 09-JUN-2004 03:12

Client ID: SG-ABC ROOFING

Instrument: V.i

Sample Info: SG-ABC ROOFING :[ ]05/13/04 @0815(Air)

Purge Volume: 200.0

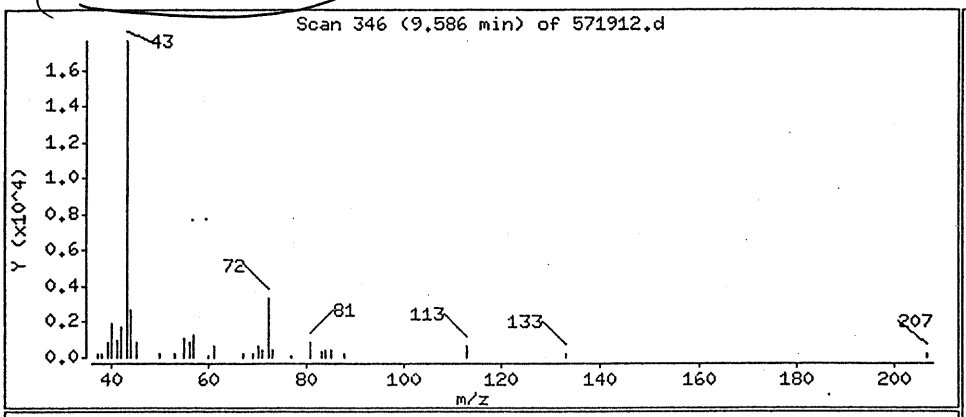
Operator: dmw

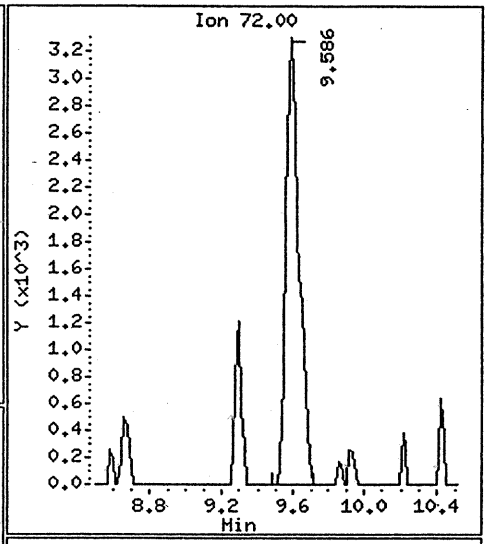
Column phase: RTX-624

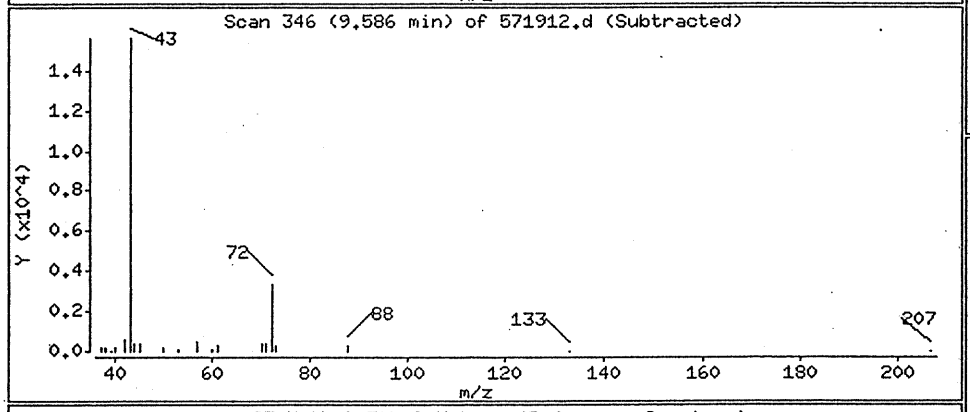
Column diameter: 0.32

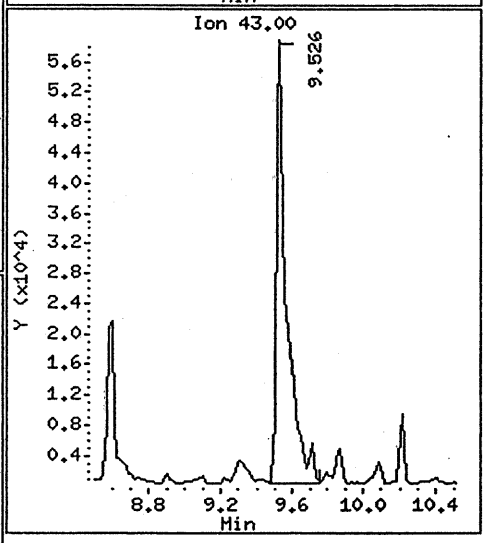
23 Methyl Ethyl Ketone

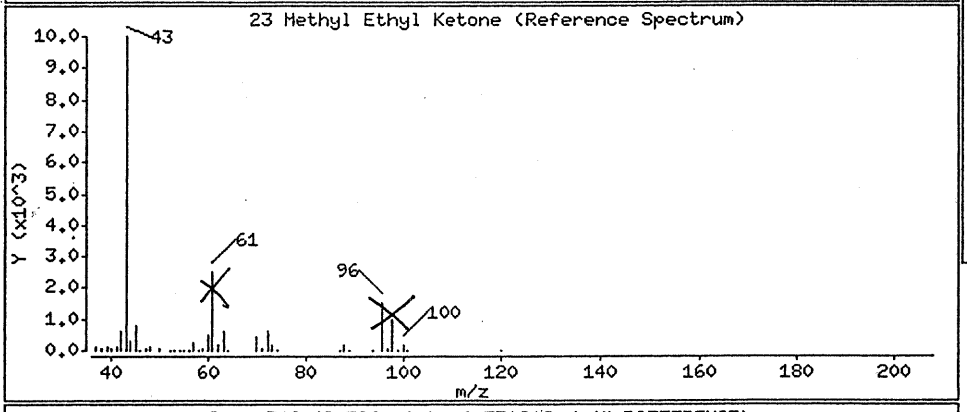
Concentration: 2.4 ppbv

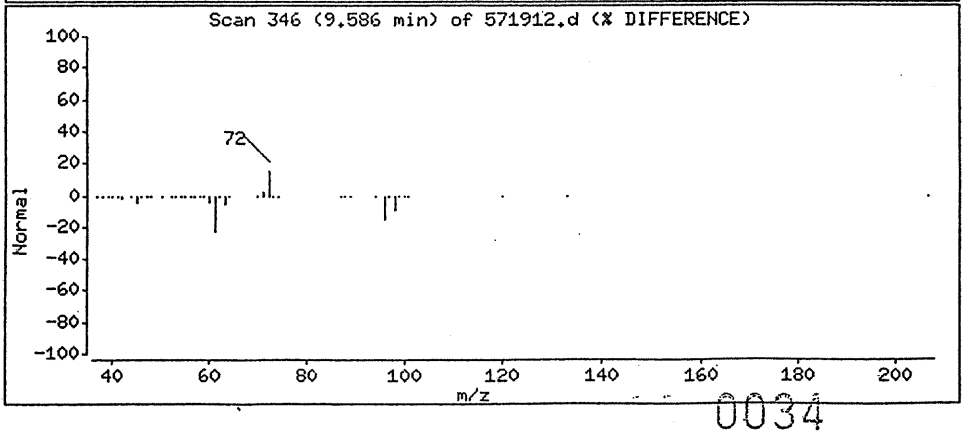












Data File: /chem/V.i/Vsvr.p/vefto15mod.b/571914.d

Date : 09-JUN-2004 04:41

Client ID: SG-GANGLIANI

Instrument: V.i

Sample Info: SG-GANGLIANI :[05/13/04 @1005(Air)

Purge Volume: 200.0

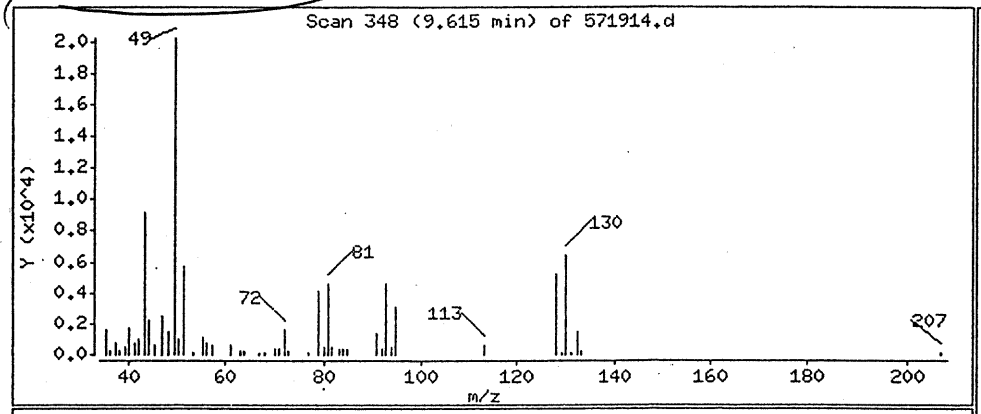
Operator: dmw

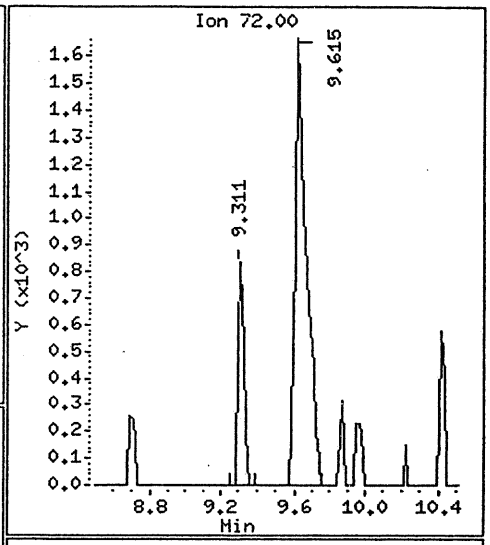
Column phase: RTX-624

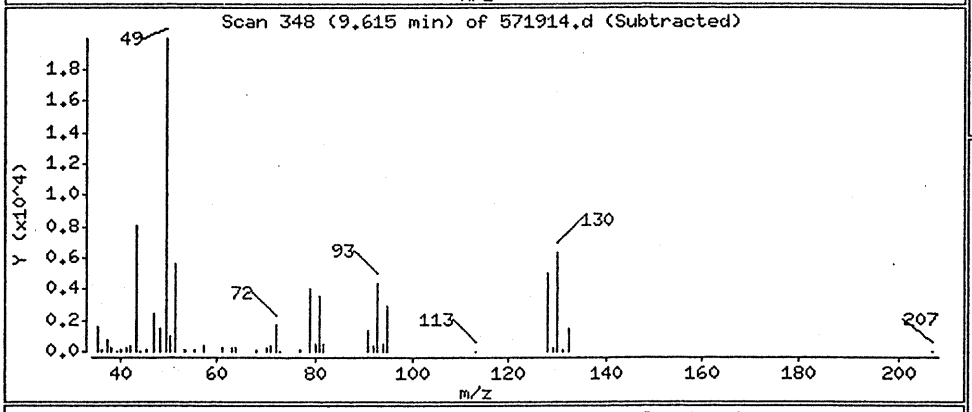
Column diameter: 0.32

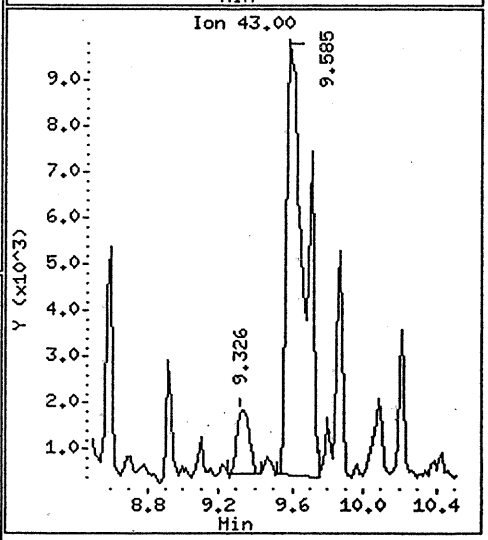
23 Methyl Ethyl Ketone

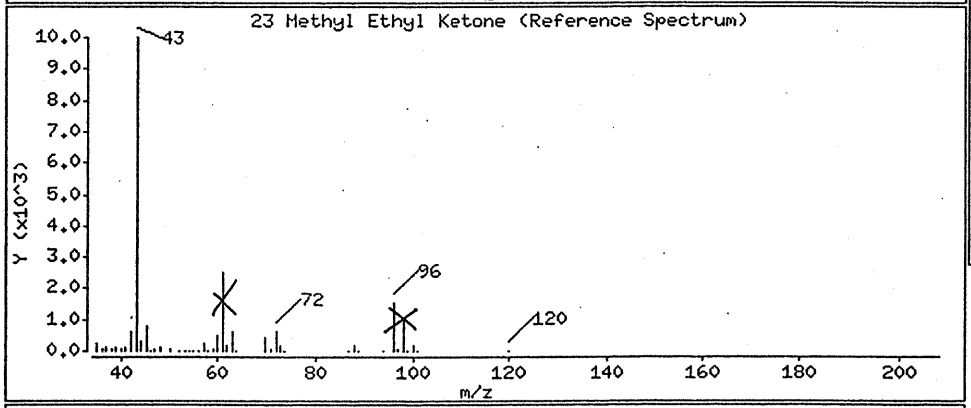
Concentration: 1.2 ppbv

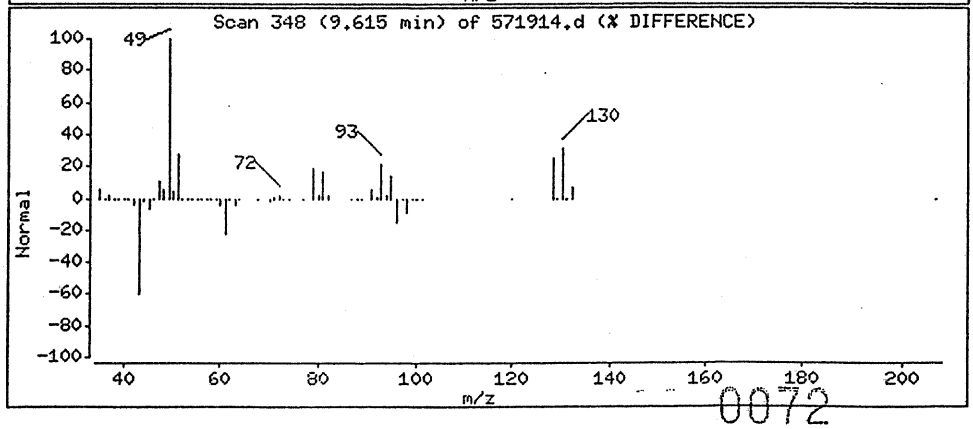












0072

Data File: /chem/V.i/Vsvr.p/vefto15mod.b/571916.d

Date : 09-JUN-2004 06:12

Client ID: SG-GRAPHIQUE

Instrument: V.i

Sample Info: SG-GRAPHIQUE :[ ]05/13/04 @1320(Air)

Purge Volume: 200.0

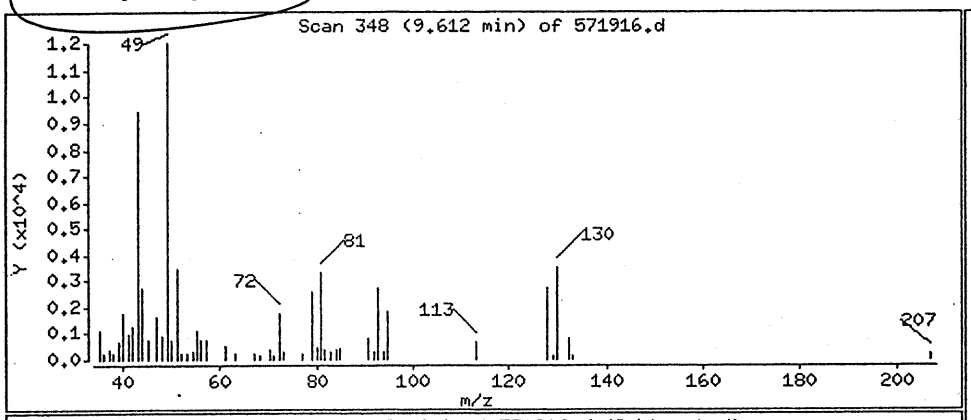
Operator: dmw

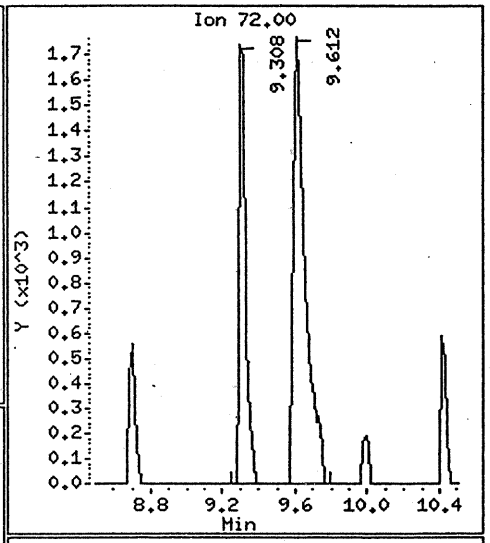
Column phase: RTX-624

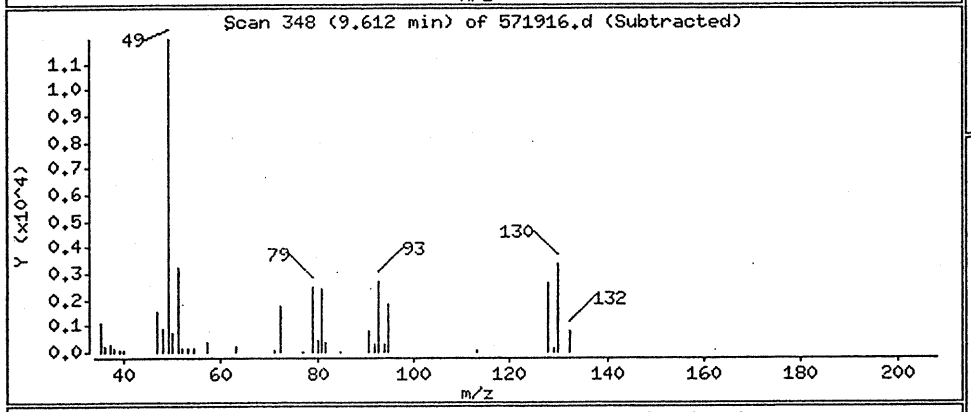
Column diameter: 0.32

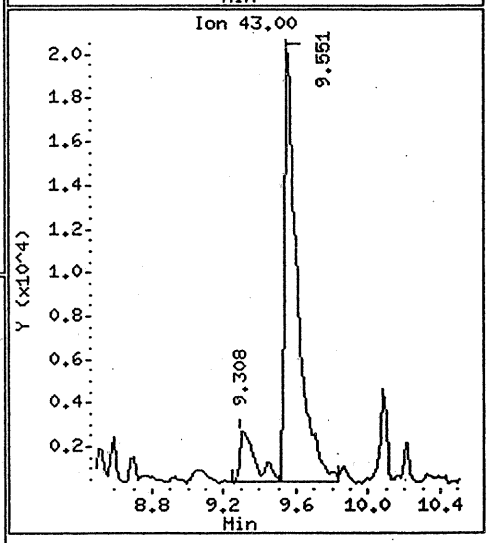
23 Methyl Ethyl Ketone

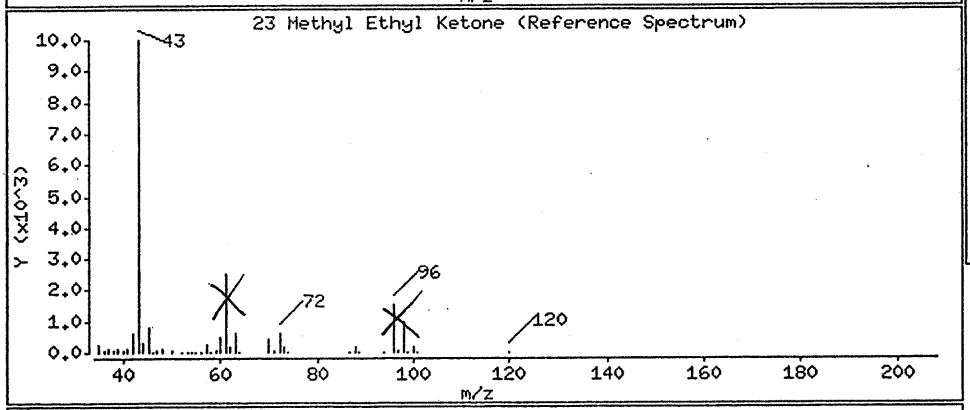
Concentration: 1.3 ppbv

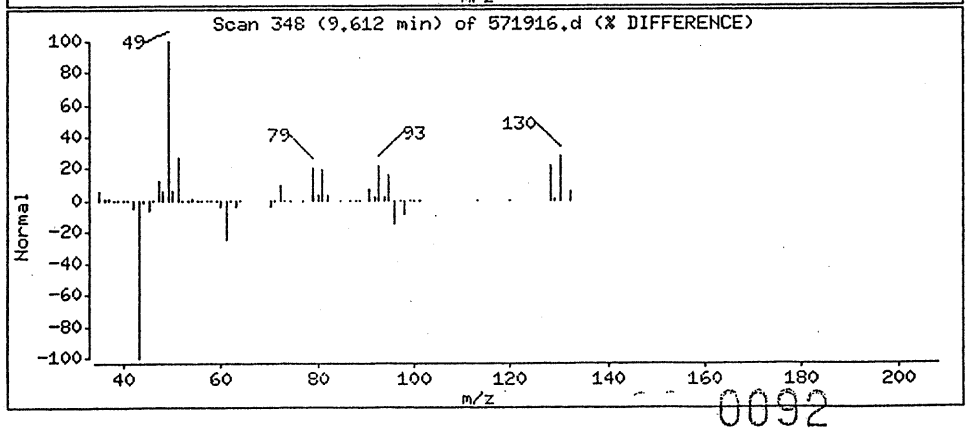












Data File: /chem/V.i/Vsvr.p/vefto15mod.b/571915.d

Date : 09-JUN-2004 05:26

Client ID: SG-SACCO_A

Instrument: V.i

Sample Info: SG-SACCO_A :[ ]05/13/04 @1125(Air)

Purge Volume: 200.0

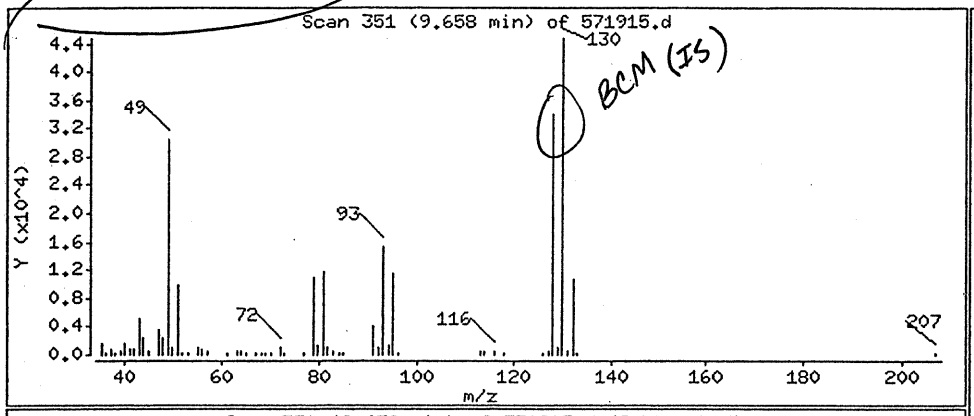
Operator: dmw

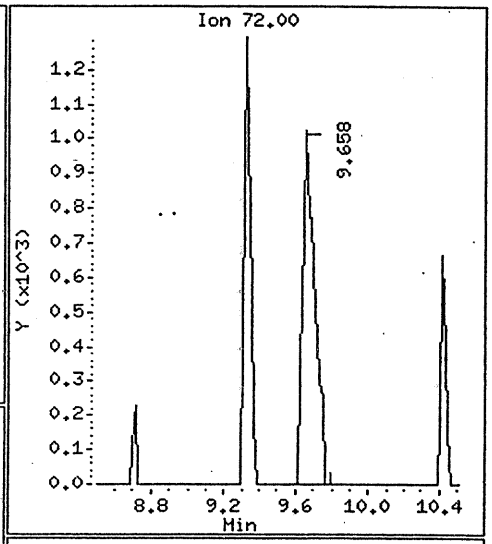
Column phase: RTX-624

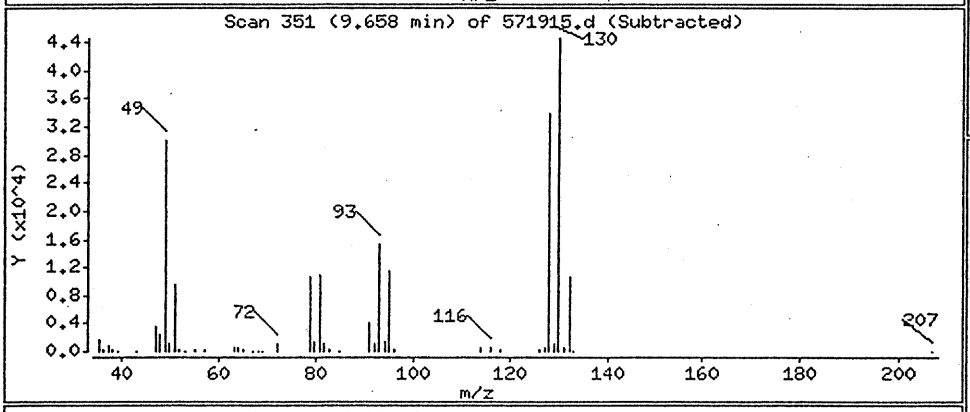
Column diameter: 0.32

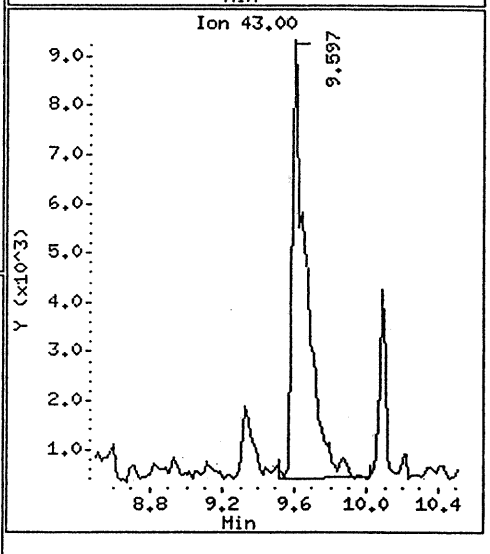
23 Methyl Ethyl Ketone

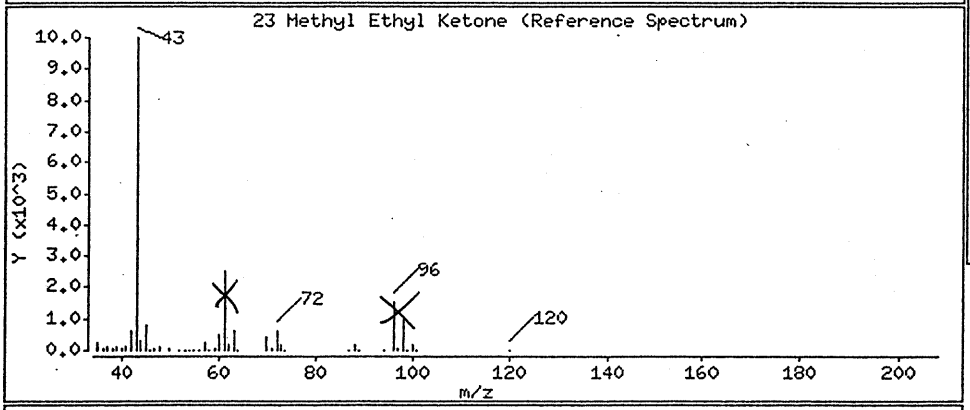
Concentration: 0.71 ppbv

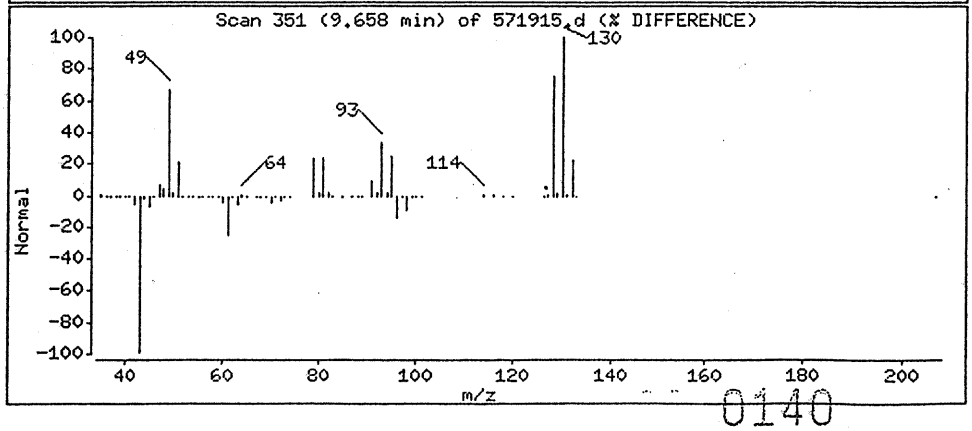












Data File: /chem/V.i/Vsvr.p/vefto15.b/571917.d

Date : 09-JUN-2004 06:58

Client ID: SG-SACCO_B

Instrument: V.i

Sample Info: SG-SACCO_B :[ ]05/13/04 @1345(Air)

Purge Volume: 200.0

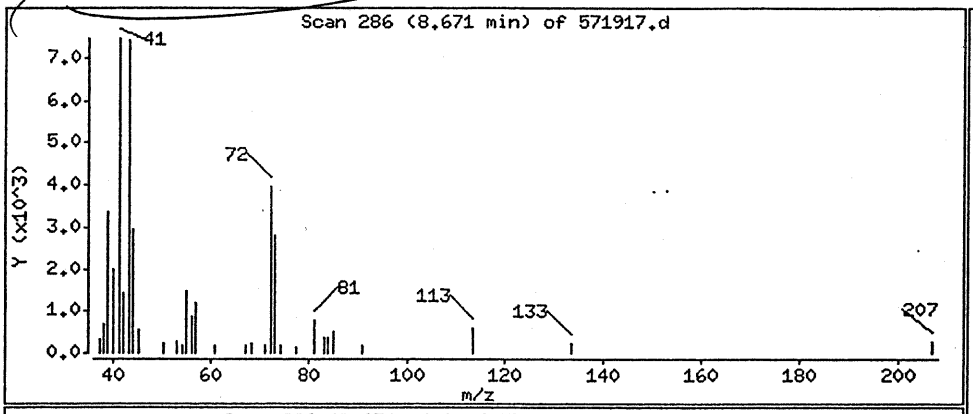
Operator: dmw

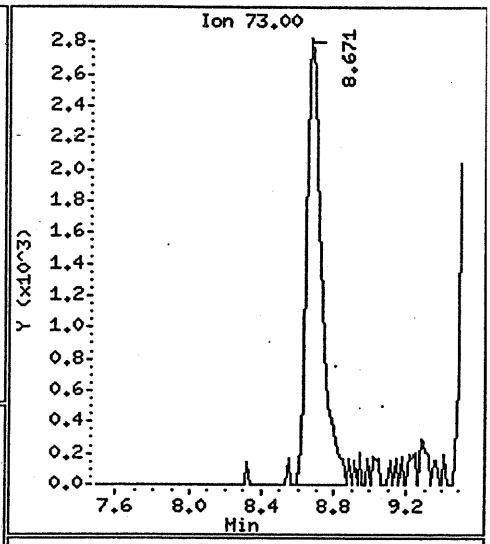
Column phase: RTX-624

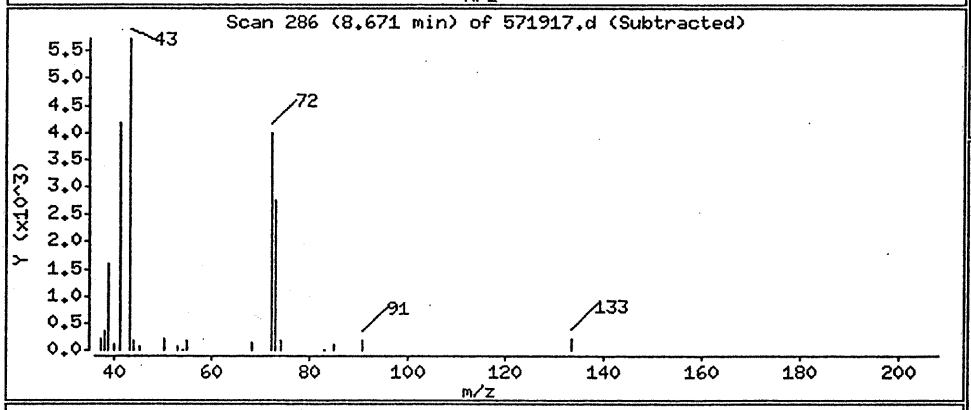
Column diameter: 0.32

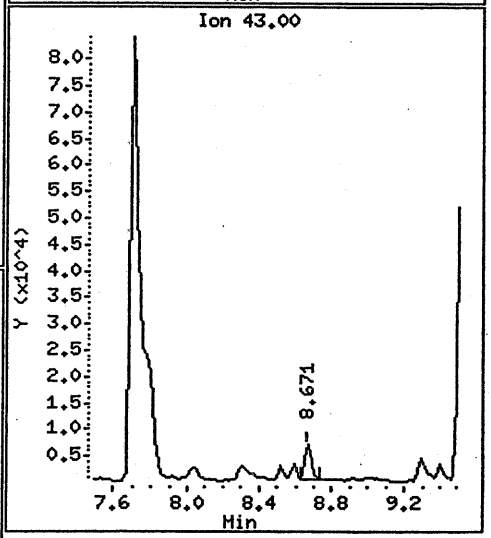
18 Methyl tert-Butyl Ether

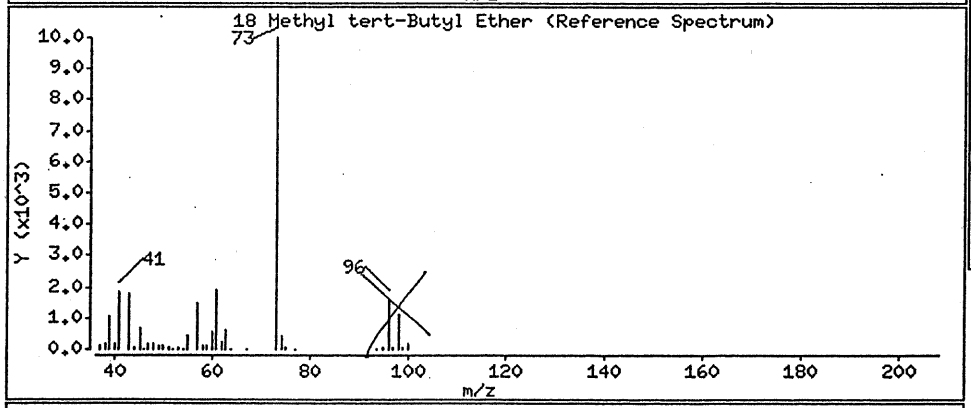
Concentration: 0.51 ppbv

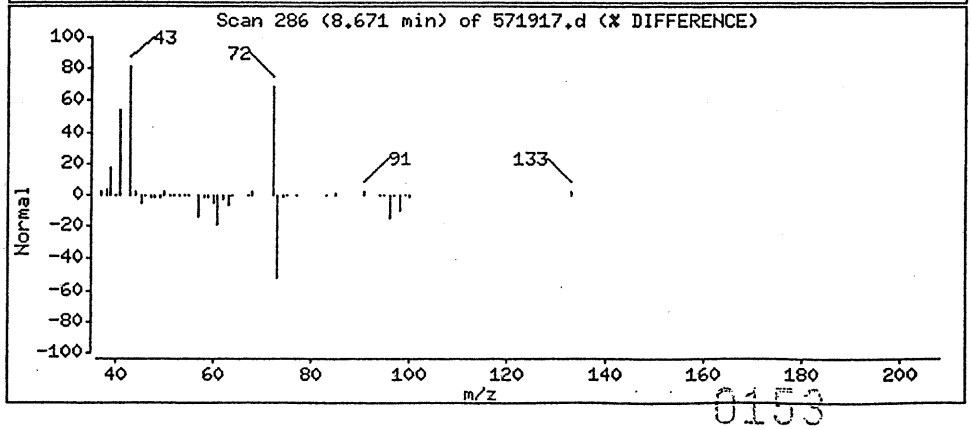












Data File: /chem/V.i/Vsvr.p/vefto15mod.b/571917.d

Date : 09-JUN-2004 06:58

Client ID: SG-SACCO_B

Instrument: V.i

Sample Info: SG-SACCO_B :[ ]05/13/04 @1345(Air)

Purge Volume: 200.0

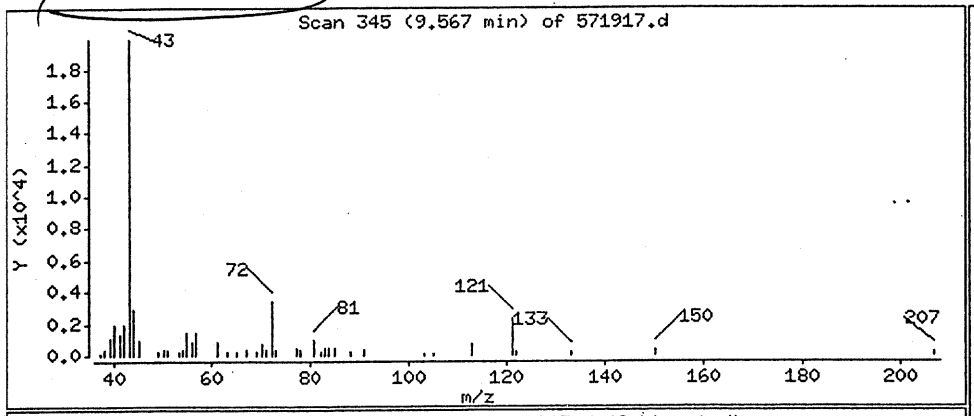
Operator: dmw

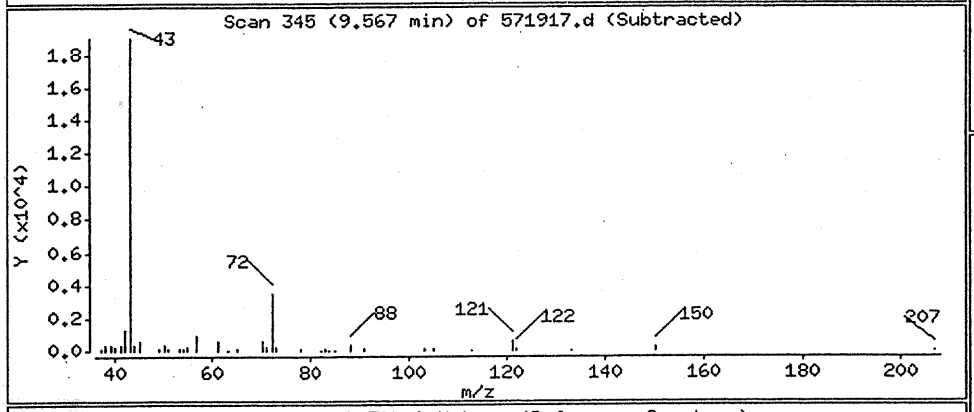
Column phase: RTX-624

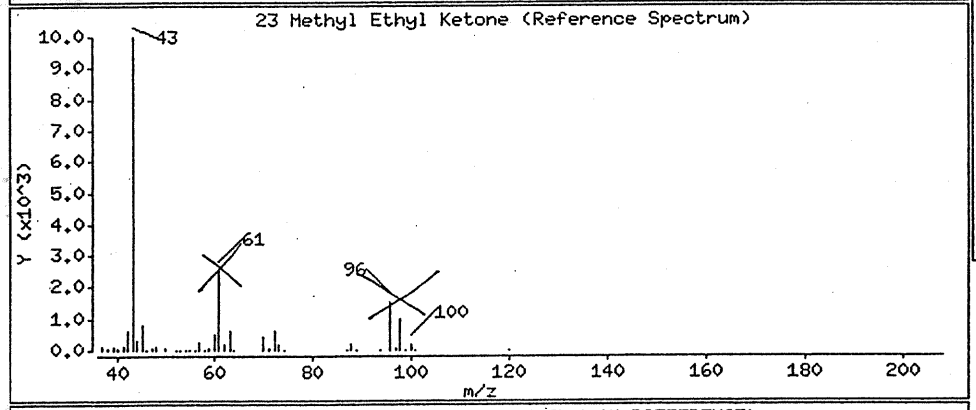
Column diameter: 0.32

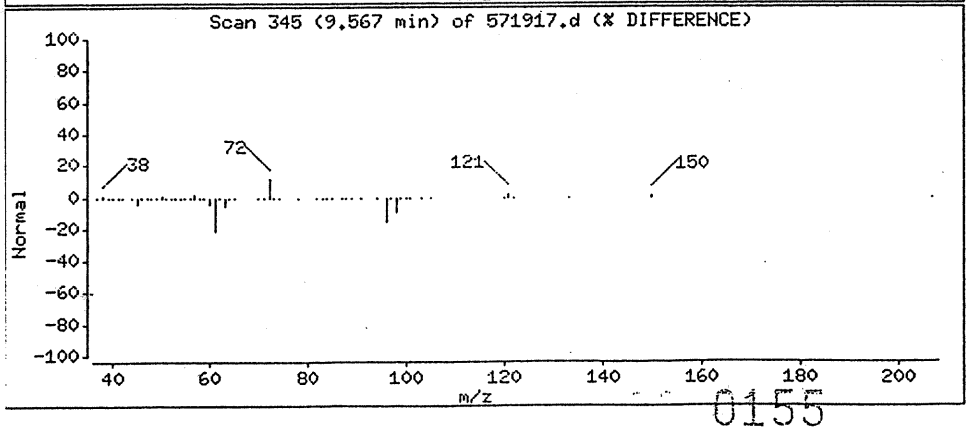
23 Methyl Ethyl Ketone

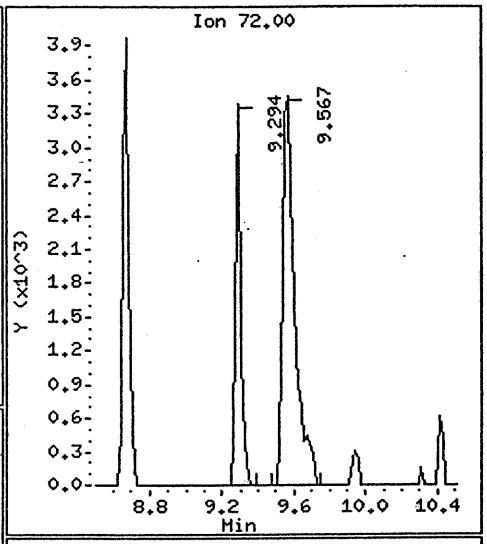
Concentration: 2.6 ppbv

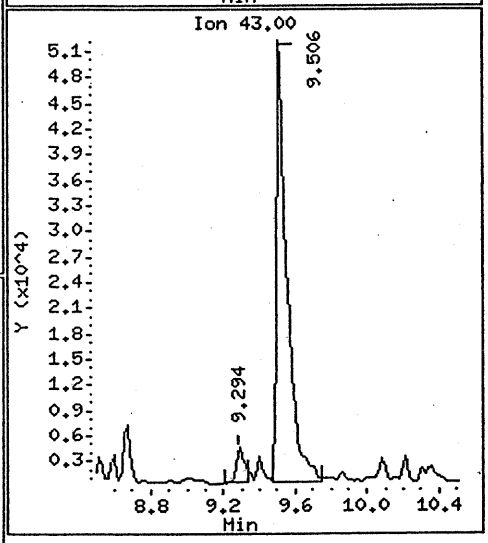












TRILLIUM INC.

DATA VALIDATION

FOR

INDUSTRIPLEX PROJECT
WOBURN, MASSACHUSETTS

ORGANIC ANALYSIS DATA
Volatile Organics in Soil Gas
Sample Delivery Group #100862
June 2004 Sample Collections

Chemical Analyses Performed by:

Severn Trent Laboratories
Colchester, Vermont

FOR

Roux Associates, Inc.
Burlington, Massachusetts

BY

Trillium, Inc.
356 Farragut Crossing Drive
Knoxville, Tennessee 37922
(865) 966-8880

July 13, 2004

04864\CAE\DAS
Industriplex/Soil Gas/100862 voc

TRILLIUM INC.

EXECUTIVE SUMMARY

Validation of the volatile organics analysis data prepared by Severn Trent Laboratories (STL Burlington) for two soil gas samples and a trip blank collected in association with the IndustriPlex project in Woburn, Massachusetts, has been completed by Trillium, Inc. The data were reported by the laboratory in a single data package under Sample Delivery Group (SDG) #100862, which was received for review on July 8, 2004. The following samples were reported:

SG-TERADYNE	SG-TERADYNE-DUP
TRIP BLANK	

Throughout this report, the suffix "DL" is used to distinguish the diluted re-analysis of a sample (e.g., SG-TERADYNEDL) from the original, undiluted analysis of the sample.

Based on the validation effort, reported sample results were qualified as follows:

- Results for 2-chlorotoluene in all reported sample analyses were qualified as estimated (UJ).
- Results for methylene chloride in SG-TERADYNE and SG-TERADYNE-DUP were qualified as estimated (J, UJ).
- Results for dichlorodifluoromethane, chloromethane, chloroethane, trichlorofluoromethane, acetone, carbon disulfide, isopropyl alcohol, n-hexane, methyl ethyl ketone, cyclohexane, benzene, n-heptane, and trichloroethene in SG-TERADYNE were qualified as estimated (J).
- Results for trichlorofluoromethane, acetone, carbon disulfide, isopropyl alcohol, n-hexane, and methyl ethyl ketone in SG-TERADYNEDL were qualified as estimated (J).

All "D" qualifiers applied by the laboratory were removed by the validator.

For SG-TERADYNE, the undiluted analysis results are recommended for use and only these results have been reported on the data summary form in Attachment A. The Form I for SG-TERADYNEDL in Attachment B has been marked "Do Not Use" for clarity.

Methyl ethyl ketone[1] was detected in a sample of the modeling clay used as a sealant during sample collection as well as in three of the nine soil gas samples collected in May and June, 2004. Although no sample results were qualified by the validator, the data user is cautioned that the source and/or concentration of methyl ethyl ketone in the soil gas samples where it was detected cannot be confirmed.

Brief explanations of the reasons for the actions taken above may be found in the Overall Assessment (Section XIV) of this report. Details of the validation findings and conclusions based on review of the results for each quality control requirement are provided in the remaining sections of this report.

Documentation issues are discussed in Section XIII.

This validation report should be considered part of the data package for all future distributions of these volatiles data.

[1] Methyl ethyl ketone is referred to as 2-butanone in the EPA 8260 data package in which the modeling clay data are reported.

INTRODUCTION

Analyses were performed according to U.S. EPA Compendium Method TO-15, "Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography/Mass Spectrometry (GC/MS)," January 1999 (EPA 625/R-96/010b). Results of sample analyses are reported by the laboratory as either qualified or unqualified; various qualifier codes are used to denote specific information regarding the analytical results.

To the extent possible, Trillium's validation was performed in conformance with the "Region I, EPA-New England Data Validation Functional Guidelines for Evaluating Environmental Analysis, 12/96. Where discrepancies were observed between the criteria presented in the validation guidelines and the method specifications, the method specifications took precedence. Professional judgment was applied as necessary and appropriate.

The data validation process is intended to evaluate data on a technical basis rather than a contract compliance basis. This requires that the data package contain sufficient raw data documentation to facilitate the validation effort and allow verification of the reported results. It is assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate and sufficient quality review prior to submission for validation.

During the validation process, laboratory data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data validator. Validated results are, therefore, either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Final validated results are annotated with the following codes as defined by Region I:

U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

J - The associated numerical value is an estimated quantity.

UJ - The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

R - The data are unusable (compound may or may not be present). Resampling and reanalysis is necessary for verification.

These codes are recorded on the data summary form in Attachment A and the laboratory's Volatile Organics Analysis Data Sheets (Form Is) in Attachment B to qualify the results as appropriate according to the review of the data package.

Two facts should be noted by all data users. First, **the "R" qualifier means that the laboratory-reported result is unusable.** In other words, due to significant quality control problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Rejected results should not appear on data tables because they cannot be relied upon, even as a last resort. Second, **no analyte concentration is guaranteed to be accurate even if all associated quality control is acceptable.** Strict quality control conformance serves only to increase confidence in reported results; any analytical result will always contain some error.

The data user is also cautioned that the validation effort is based on the raw data printouts as provided by the laboratory. Software manipulation cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

I. Holding Times, Preservation and Sample Integrity

The soil gas samples were collected on 6/12/04. All sample analyses were performed on 7/1/04 and 7/2/04, which is within the 30-day holding time specified by the referenced method.

The laboratory's Log-In Sheet indicates that the samples were received intact and with intact custody seals on 6/19/04. The shipping container was at ambient temperature; no preservation is required for air samples collected in canisters.

II. GC/MS Instrument Performance Checks

Three instrument performance checks using bromofluorobenzene (BFB) were run, representing all shifts (24-hour periods) during which samples, associated standards, and/or associated quality control samples were analyzed. Results for all three instrument performance checks were acceptable.

III. Calibration

Sample analyses were performed on a single gas chromatograph/mass spectrometer (GC/MS) system identified as "V." A few target analytes were manually integrated in some of the calibration standards associated with this data set. The documentation provided verifies that these integrations were acceptably performed and accurately incorporated into the applicable quantitation reports. No internal standard or surrogate compounds were manually integrated in any of the calibration standards.

A. Initial Calibration (IC)

One five-point, ambient purge IC was established on 6/29/04 in support of the reported analyses. Standards at concentrations of 0.50, 5.0, 10, 20, and 40 parts per billion by volume (ppbv) were analyzed for all of the target analytes. For hexachlorobutadiene and 1,2,4-trichlorobenzene, a 15 ppbv standard was included and the 40 ppbv standard was dropped, establishing a calibration range of 0.50 ppbv to 20 ppbv for these two analytes. For acetone, isopropyl alcohol, and tetrahydrofuran, a 15 ppbv standard was included and the 0.50 ppbv standard was dropped, establishing a calibration range of 5.0 ppbv to 40 ppbv for these three analytes. Documentation of all individual IC standards analyzed was present in the data package. Relative response factor (RRF) as well as percent relative standard deviation (%RSD) values were correctly calculated and accurately reported in all cases.

The 15 ppbv standard used for the five target analytes listed above also included the other target analytes at this concentration, but the 15 ppbv results for these analytes were not included in

the initial calibration. While it is acceptable to drop the high or low concentration standard responses, exclusion of responses from the middle of the calibration curve is not an acceptable practice, and should not be continued by the laboratory. Based on validator calculations, RRFs from the 15 ppbv standard were consistent with the established IC, and their inclusion would not likely have made a significant difference in the reported sample results. Therefore, based on professional judgment, no action was taken on this basis.

Average RRF values reported by the laboratory were above the applicable minimum acceptance criterion (0.05) and %RSD values were below the maximum acceptance criterion (30%) for all target analytes except 2-chlorotoluene (31.6%). Per the validation guidelines, results for 2-chlorotoluene in all reported sample analyses were qualified as estimated (UJ) based on the high %RSD value for this analyte.

B. Continuing Calibration (CC)

All samples and associated quality control analyses were analyzed in association with two continuing calibration standards run on 7/1/04 and 7/2/04. Both CC standards were fully documented in the data package.

All RRF and percent difference (%D) values were correctly calculated and accurately reported for both CC standards. All RRFs were above the minimum acceptance criterion (0.05) and all %D values were below the maximum acceptance limit (30%) except for 1,3,5-trimethylbenzene (36.2%) and 2-chlorotoluene (30.5%) on 7/1/04 and 1,3,5-trimethylbenzene (39.4%) on 7/2/04.

All of the unacceptably high %D values listed above reflect increased analyte responses in the CC standards relative to the IC, suggesting the potential for reporting false positives or for positive results that are biased high. 1,3,5-Trimethylbenzene and 2-chlorotoluene were not detected in any of the samples in this data set. Therefore, based on professional judgment, no sample results were qualified based on the high %D values for these analytes in the CC standards.

IV. Blanks

Two laboratory method blanks (MBs: ABLKB1 and ABLKB3) were analyzed in association with the soil gas samples. No target analytes were detected in either MB.

One trip blank (TRIP BLANK) was submitted to the laboratory with this set of samples. A pre-evacuated canister was taken to the site and returned to the laboratory with the soil gas samples; at the laboratory, it was filled with blank air and then analyzed. No target analytes were detected in this trip blank.

A sample of the modeling clay used to seal the sampling probe at the floor surface during collection of the samples in this data set was also submitted for analysis of volatile organics by EPA

Method 8260. Results of this analysis were validated separately, and are discussed in a separate validation report. One analyte detected in the clay sample was not a target analyte for the TO-15 analyses (acrylonitrile). 1,1-Dichloroethene was detected in the clay (260 ppb) but was not found in any of the soil gas samples collected in May (SDG #100226) or June. Methyl ethyl ketone (referred to as 2-butanone in the EPA 8260 data package) was detected in the clay (14 ppb) and in three of the May/June soil gas samples (2.0 ppbv to 39 ppbv). However, there is no way to relate the concentration of this analyte in the clay to the concentrations found in the soil gas samples. Therefore, although no qualifiers were applied by the validator, the data user is cautioned that the source and/or concentration of methyl ethyl ketone in the soil gas samples where it was detected cannot be confirmed.

Canister cleaning certification data for three canister batches were provided in the data package. Canister numbers 6722, 6597, and 6524 were analyzed after cleaning. Canister #6597 was used to collect sample SG-TERADYNE-DUP. The canisters used to collect SG-TERADYNE and TRIP BLANK were included in the other two canister cleaning batches. Associated tuning, calibration, and method blank data for all three canister certification batches were documented in addition to the canister analyses. All three tested canisters were free of contamination, and all associated quality control data were acceptable.

V. Surrogate Recoveries

The use of a surrogate compound is not addressed in Method TO-15, and no surrogate compound was employed with the analyses of these samples.

VI. Laboratory Control Samples (LCSs)

Two 10 ppbv laboratory control sample pairs (B1LCS/LCSD and B3LCS/LCSD) were associated with the reported samples. Both LCS/LCSD pairs were spiked with all target analytes. All target analyte recoveries were within the 70-130% acceptance limits specified by the laboratory on the summary forms in the data package with the following exceptions:

B1LCS:	1,2,4-trichlorobenzene - 180% hexachlorobutadiene - 140% 1,3,5-trimethylbenzene - 140%
B1LCSD:	1,2,4-trichlorobenzene - 200% hexachlorobutadiene - 160% 1,3,5-trimethylbenzene - 140%
B3LCS:	1,2,4-trichlorobenzene - 170%

B3LCSD: 1,2,4-trichlorobenzene - 160%
hexachlorobutadiene - 140%
1,3,5-trimethylbenzene - 150%

All of the recoveries listed above are unacceptably high, suggesting the potential for reporting false positives or for positive results that are biased high. None of these analytes were detected in any of the site samples. Therefore, no sample results were qualified based on the high LCS/LCSD recoveries.

Reproducibility between paired concentrations was acceptable (0-31 relative percent difference [RPD]; QC ≤40 RPD) for all target analytes in both LCS/LCSD pairs.

VII. Field Duplicate

SG-TERADYNE-DUP was identified as a field duplicate of SG-TERADYNE. True duplicates are not feasible for air samples; these paired samples were collected in series from the same soil gas location, with SG-TERADYNE-DUP immediately following SG-TERADYNE. Based on professional judgment, a maximum acceptance limit of 100 RPD was used to define acceptable agreement between reported results in the paired field duplicate samples. Results with RPD values greater than 100 RPD should be used with caution as the concentration and source of these compounds in the reported samples is uncertain.

Undiluted and 2-fold dilution analysis results were reported for SG-TERADYNE, while only undiluted analysis results were reported for SG-TERADYNE-DUP. The following evaluation is based on comparison of the undiluted analysis results for both samples only.

Acceptable reproducibility was demonstrated for dichlorodifluoromethane (5 RPD), chloromethane (17 RPD), chloroethane (5 RPD), trichlorofluoromethane (8 RPD), benzene (22 RPD), trichloroethene (22 RPD), toluene (9 RPD), ethylbenzene (17 RPD), m,p-xylenes (4 RPD), styrene (25 RPD), o-xylene (0 RPD), 1,2,4-trimethylbenzene (4 RPD), carbon disulfide (68 RPD), acetone (6 RPD), isopropyl alcohol (10 RPD), cyclohexane (0 RPD), methyl ethyl ketone (0 RPD), 4-ethyltoluene (0 RPD), n-hexane (5 RPD), and n-heptane (11 RPD).

Methylene chloride was detected just above the reporting limit (RL) in SG-TERADYNE-DUP (0.51 ppbv) but was not found in SG-TERADYNE (0.50 ppbv U). Based on professional judgment, results for methylene chloride were qualified as estimated (J, UJ) in SG-TERADYNE and SG-TERADYNE-DUP due to this lack of confirmation at a very low concentration.

VIII. Internal Standard Performance

Internal standard areas were within the method-specified quality control limits (area ±40% of the corresponding CC standard area) in the reported sample and quality control analyses except for IS#1 (bromochloromethane, 157%) and IS#3 (1,4-difluorobenzene, 149%) in SG-TERADYNE. According to the analysis run log, this sample was re-analyzed (without dilution) with similar results; the data for this second analysis were not reported. SG-TERADYNE was then re-analyzed again at a two-fold dilution. Only IS#1 was very slightly high (140.5%) in the diluted sample analysis. Both the original undiluted analysis and the two-fold dilution analysis were reported in the data package.

Per the validation guidelines, results for detected target analytes that are associated with an unacceptably high IS response must be qualified as estimated (J). The following sample results were so qualified:

- Dichlorodifluoromethane, chloromethane, chloroethane, trichlorofluoromethane, acetone, carbon disulfide, isopropyl alcohol, n-hexane, methyl ethyl ketone, cyclohexane, benzene, n-heptane, and trichloroethene in SG-TERADYNE; and

- Trichlorofluoromethane, acetone, carbon disulfide, isopropyl alcohol, n-hexane, and methyl ethyl ketone in SG-TERADYNEDL.

All internal standard retention times (RTs) were within the method-specified quality control limits (RT ±0.33 minutes of the corresponding CC standard RT) for all reported sample and quality control analyses.

IX. Target Compound Identification

All reported target analytes in all samples were correctly identified with acceptable supporting mass spectra present in the data package.

X. Compound Quantitation and Reported Detection Limits

Target compound concentrations and sample-specific RLs were correctly calculated and accurately reported by the laboratory, including adjustments for dilutions where applicable. All "D" qualifiers applied by the laboratory to the results for detected analytes in SG-TERADYNEDL were removed by the validator.

Comparison of the concentrations of target analytes detected in both the undiluted and diluted analyses of SG-TERADYNE showed excellent reproducibility. Four analytes detected at low

concentrations in the undiluted analysis (dichlorodifluoromethane, chloromethane, chloroethane, and 1,2,4-trimethylbenzene) were diluted out and not found in the dilution. However, two analytes not found in the undiluted analysis (methyl isobutyl ketone and methyl butyl ketone) were detected above the adjusted RL in the dilution; this suggests that these analytes may represent contamination from an unknown source, rather than true sample components. In general, IS areas tended to be in the upper half of the acceptable ranges in all of the sample and quality control analyses in this data set. The following IS areas were reported for the three soil gas sample analyses and the associated trip blank:

Sample	IS#1	IS#2	IS#3
CC-7/1/04	*196072*	*859176*	*863432*
SG-TERADYNE	308010	1186672	1282355
TRIP BLANK	243248	910176	1023072
CC-7/2/04	*213170*	*916870*	*925818*
SG-TERADYNEDL	299404	1131082	1247332
SG-TERADYNE-DUP	284314	1106641	1186731

For SG-TERADYNE, there is no significant difference between the actual IS responses in the undiluted, diluted, and field duplicate analyses; slight differences in the IS areas in the associated CC standards essentially determined whether they were within or outside the acceptance limits. High recoveries (>100%) were also observed for several target analytes in the LCS/LCSD analyses, with several exceeding the acceptance limits (Section VI).

Based on all the available data and professional judgment, the undiluted analysis results for SG-TERADYNE are recommended for use, and only these results have been reported on the data summary form. The Form I for SG-TERADYNEDL has been marked "Do Not Use" for clarity.

The unadjusted RLs reported by the laboratory for each target analyte are equal to the lowest IC standard concentration associated with these sample analyses. These values are well supported by the raw data.

The data summary form in Attachment A lists all individual sample analytes affected by the applied qualifications. All positive results are listed on this form, whether or not the value or qualifier was changed as a result of the validation. Where no result is listed, the compound was not detected and the RL was not qualified. Sample-specific RLs may be found on the laboratory-generated Form I for each sample (Attachment B) or may be calculated from the information on the data summary form as follows: unadjusted RL (far left column) multiplied by the dilution factor.

XI. Tentatively Identified Compounds (TIC)

Library searches of non-target compound peaks are not required by the referenced method and were not requested for these samples.

XII. System Performance

The GC/MS system appears to have been working satisfactorily at the time of these analyses, based on review of the available raw data.

XIII. Documentation

A copy of the field COC record listing all site samples was provided in the data package; the following issues were noted:

- The container type used for sample collection was not specified; "P/O," defined as "plastic/other" was recorded. The use of canisters should be clearly documented on the COC record.

- The soil gas samples were collected on 6/12/04 but were not shipped to the laboratory until 6/18/04. The disposition of the samples during the time period between collection and shipment was not documented in the data package.

These issues do not directly affect the validity of the analytical data generated. However, they could be problematic if the data were to be used for litigation.

XIV. Overall Assessment

Results for volatile organics in the soil gas samples reported in SDG #100862 were determined to be valid as reported with the following exceptions:

- Results for 2-chlorotoluene in all reported sample analyses were qualified as estimated (UJ) based on an unacceptably high %RSD value for this analyte in the associated initial calibration.

- Based on professional judgment, results for methylene chloride in SG-TERADYNE and SG-TERADYNE-DUP were qualified as estimated (J, UJ) due to lack of confirmation at a very low concentration in the paired field duplicate samples.

- Results for dichlorodifluoromethane, chloromethane, chloroethane, trichlorofluoromethane, acetone, carbon disulfide, isopropyl alcohol, n-hexane, methyl ethyl ketone, cyclohexane, benzene, n-heptane, and trichloroethene in SG-TERADYNE were qualified as estimated (J) based on an unacceptably high response for the associated internal standard compound in this analysis.

- Results for trichlorofluoromethane, acetone, carbon disulfide, isopropyl alcohol, n-hexane, and methyl ethyl ketone in SG-TERADYNEDL were qualified as estimated (J) based on an unacceptably high response for the associated internal standard compound in this analysis.

All "D" qualifiers applied by the laboratory were removed by the validator.

Methyl ethyl ketone was detected in a sample of the modeling clay used as a sealant during sample collection as well as in three of the nine soil gas samples collected in May and June, 2004. Although no sample results were qualified by the validator, the data user is cautioned that the source and/or concentration of methyl ethyl ketone in the soil gas samples where it was detected cannot be confirmed.

For SG-TERADYNE, the undiluted analysis results are recommended for use and only these results have been reported on the data summary form. The Form I for SG-TERADYNEDL in Attachment B has been marked "Do Not Use" for clarity.

Documentation issues are discussed in Section XIII.

This validation report should be considered part of the data package for all future distributions of these volatiles data.

TRILLIUM INC.

ATTACHMENT A

DATA SUMMARY FORM
SDG #100862
Volatiles in Soil Gas - IndustriPlex
Samples Collected June 12, 2004

DATA SUMMARY FORM: VOLATILES 1
SOIL GAS SAMPLES
parts per billion by volume (ppbv)

Site Name: IndustriPlex

Sampling Date: June 12, 2004

SDG #100862

Trillium Project No. 04864

RL	Sample Number	SG-TERADYNE		SG-TERADYNE-DUP		TRIP BLANK											
	Lab ID	576334		576335		576336											
	Dilution Factor	1.0		1.0		1.0											
0.50	Dichlorodifluoromethane	0.59	J	0.62													
0.50	Chloromethane	0.58	J	0.69													
0.50	Vinyl chloride																
0.50	Bromomethane																
0.50	Chloroethane	0.58	J	0.61													
0.50	Trichlorofluoromethane	7.9	J	8.6													
0.50	Freon TF																
0.50	1,1-Dichloroethene																
0.50	Methylene chloride		UJ	0.51	J												
0.50	1,1-Dichloroethane																
0.50	cis-1,2-Dichloroethene																
0.50	Chloroform																
0.50	1,1,1-Trichloroethane																
0.50	Carbon tetrachloride																
0.50	Benzene	0.91	J	0.73													
0.50	1,2-Dichloroethane																
0.50	Trichloroethene	5.1	J	4.1													
0.50	1,2-Dichloropropane																
0.50	cis-1,3-Dichloropropene																
0.50	Toluene	7.1		6.5													
0.50	trans-1,3-dichloropropene																
0.50	1,1,2-Trichloroethane																
0.50	Tetrachloroethene																
0.50	Chlorobenzene																
0.50	Ethylbenzene	1.3		1.1													
0.50	m,p-Xylenes	4.7		4.5													
0.50	Styrene	1.8		1.4													
0.50	o-Xylene	1.4		1.4													
0.50	1,1,2,2-Tetrachloroethane																
0.50	1,3-Dichlorobenzene																

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EPA TO-15

DATA SUMMARY FORM: VOLATILES 1
SOIL GAS SAMPLES
parts per billion by volume (ppbv)

Site Name: IndustriPlex

Sampling Date: June 12, 2004

SDG #100862

Trillium Project No. 04864

RL	Sample Number	SG-Teradyne		SG-Teradyne-DUP		TRIP BLANK							
	Lab ID	576334		576335		576336							
	Dilution Factor	1.0		1.0		1.0							
0.50	1,4-Dichlorobenzene												
0.50	1,2-Dichlorobenzene												
0.50	1,2,4-Trichlorobenzene												
0.50	Hexachlorobutadiene												
0.50	1,3,5-Trimethylbenzene												
0.50	1,2,4-Trimethylbenzene	0.67		0.70									
0.50	1,2-Dichlorotetrafluoroethane												
0.50	1,2-Dibromoethane												
0.50	1,3-Butadiene												
0.50	Carbon disulfide	2.0	J	0.98									
5.0	Acetone	34	J	32									
5.0	Isopropyl alcohol	29	J	32									
0.50	Methyl tert-butyl ether												
0.50	Cyclohexane	1.7	J	1.7									
0.50	Dibromochloromethane												
0.50	Methyl ethyl ketone	2.0	J	2.0									
0.50	Methyl isobutyl ketone												
0.50	Methyl butyl ketone												
0.50	Bromodichloromethane												
0.50	trans-1,2-Dichloroethene												
0.50	4-Ethyltoluene	0.52		0.52									
0.50	2-Chlorotoluene		UJ		UJ		UJ						
0.50	n-Hexane	1.8	J	1.9									
5.0	Tetrahydrofuran												
0.50	n-Heptane	7.5	J	8.4									

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TRILLIUM INC.

ATTACHMENT B

VOLATILE ORGANICS ANALYSIS DATA SHEETS (FORM Is)
SDG #100862
Volatiles in Soil Gas - IndustriPlex
Samples Collected June 12, 2004

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SGTERADYNE
SG-TERADYNE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576334

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576334

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.59	J
74-87-3	Chloromethane	0.58	J
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.58	J
75-69-4	Trichlorofluoromethane	7.9	J
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	UJ
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.91	J
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	5.1	J
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	7.1	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	1.3	
1330-20-7	Xylene (m,p)	4.7	
100-42-5	Styrene	1.8	
95-47-6	Xylene (o)	1.4	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

7/13/04 CA Erikson

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SGTERADYNE
SG-TERADYNE

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576334

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576334

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.67	
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	2.0	J
67-64-1	Acetone	34	J
67-63-0	Isopropyl Alcohol	29	J
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	1.7	J
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	2.0	J
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.52	
95-49-8	2-Chlorotoluene	0.50	~~U~~ UJ
110-54-3	n-Hexane	1.8	J
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	7.5	

CAGirkson 7/13/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SGTERADYNEDL
SG-TERADYNEDL

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576334D1

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576334D

Level: (low/med) LOW * DO NOT USE* Date Received: 06/19/04

% Moisture: not dec. _____ CAE 7/13/04 Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 2.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl Chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	8.5	~~D~~ J
76-13-1	Freon TF	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
75-09-2	Methylene Chloride	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
56-23-5	Carbon Tetrachloride	1.0	U
71-43-2	Benzene	1.1	~~D~~
107-06-2	1,2-Dichloroethane	1.0	U
79-01-6	Trichloroethene	5.3	~~D~~
78-87-5	1,2-Dichloropropane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-88-3	Toluene	7.3	~~D~~
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
108-90-7	Chlorobenzene	1.0	U
100-41-4	Ethylbenzene	1.4	~~D~~
1330-20-7	Xylene (m,p)	4.9	~~D~~
100-42-5	Styrene	1.8	~~D~~
95-47-6	Xylene (o)	1.5	~~D~~
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U

7/13/04 CAE

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SGTERADYNEDL
SG-TERADYNEDL

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576334D1

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576334D

Level: (low/med) LOW *DO NOT USE* Date Received: 06/19/04

% Moisture: not dec. _____ CAE 7/13/04 Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 2.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
76-14-2	1,2-Dichlorotetrafluoroethan	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
106-99-0	1,3-Butadiene	1.0	U
75-15-0	Carbon Disulfide	2.2	~~D~~ J
67-64-1	Acetone	39	~~D~~ J
67-63-0	Isopropyl Alcohol	33	~~D~~ J
1634-04-4	Methyl tert-Butyl Ether	1.0	U
110-82-7	Cyclohexane	1.8	~~D~~
124-48-1	Dibromochloromethane	1.0	U
78-93-3	Methyl Ethyl Ketone	2.0	~~D~~ J
108-10-1	Methyl Isobutyl Ketone	1.1	~~D~~
591-78-6	Methyl Butyl Ketone	2.4	~~D~~
75-27-4	Bromodichloromethane	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
622-96-8	4-Ethyltoluene	1.0	U
95-49-8	2-Chlorotoluene	1.0	~~U~~ UJ
110-54-3	n-Hexane	1.4	~~D~~ J
109-99-9	Tetrahydrofuran	10	U
142-82-5	n-Heptane	8.2	~~D~~

7/13/04 CAE Erikson

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SGTERADYNEDP
SG-TERADYNE-DUP

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576335

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576335I2

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.62	
74-87-3	Chloromethane	0.69	
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.61	
75-69-4	Trichlorofluoromethane	8.6	
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.51	J
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.73	
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	4.1	
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	6.5	
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	1.1	
1330-20-7	Xylene (m,p)	4.5	
100-42-5	Styrene	1.4	
95-47-6	Xylene (o)	1.4	
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

CAE 7/13/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

SGTERADYNEDP
SG-TERADYNE DUP

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576335

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576335I2

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.70	
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	0.98	
67-64-1	Acetone	32	
67-63-0	Isopropyl Alcohol	32	
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	1.7	
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	2.0	
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.52	
95-49-8	2-Chlorotoluene	0.50	U UJ
110-54-3	n-Hexane	1.9	
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	8.4	

CAE 7/13/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

TRIP BLANK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576336

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576336

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl Chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
76-13-1	Freon TF	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
75-09-2	Methylene Chloride	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon Tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
1330-20-7	Xylene (m,p)	0.50	U
100-42-5	Styrene	0.50	U
95-47-6	Xylene (o)	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

TRIP BLANK

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) AIR Lab Sample ID: 576336

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 576336

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. _____ Date Analyzed: 07/02/04

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
87-68-3	Hexachlorobutadiene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
76-14-2	1,2-Dichlorotetrafluoroethan	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
106-99-0	1,3-Butadiene	0.50	U
75-15-0	Carbon Disulfide	0.50	U
67-64-1	Acetone	5.0	U
67-63-0	Isopropyl Alcohol	5.0	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
110-82-7	Cyclohexane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
78-93-3	Methyl Ethyl Ketone	0.50	U
108-10-1	Methyl Isobutyl Ketone	0.50	U
591-78-6	Methyl Butyl Ketone	0.50	U
75-27-4	Bromodichloromethane	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
622-96-8	4-Ethyltoluene	0.50	U
95-49-8	2-Chlorotoluene	0.50	~~U~~ UJ
110-54-3	n-Hexane	0.50	U
109-99-9	Tetrahydrofuran	5.0	U
142-82-5	n-Heptane	0.50	U

CAE 7/13/04

TRILLIUM INC.

DATA VALIDATION

FOR

INDUSTRIPLEX PROJECT
WOBURN, MASSACHUSETTS

ORGANIC ANALYSIS DATA
Volatile Organics in a Solid Sample
Sample Delivery Group #100862
Sample Collected June 2004

Chemical Analyses Performed by:
Severn Trent Laboratories
Colchester, Vermont

For:

Roux Associates, Inc.
Burlington, Massachusetts

By:

Trillium, Inc.
356 Farragut Crossing Drive
Knoxville, Tennessee 37922
(865) 966-8880

July 13, 2004

04864\CAE\EKD
Industriplex/Soil Gas/100862 clay

EXECUTIVE SUMMARY

Validation of the volatile organics analysis data prepared by Severn Trent Laboratories (STL Burlington) for one solid sample collected in association with the IndustriPlex project in Woburn, Massachusetts, has been completed by Trillium, Inc. The data were reported by the laboratory in a single data package under Sample Delivery Group (SDG) #100862, which was received for review on July 8, 2004, with corrected documentation provided on July 13, 2004. The following sample was reported:

Modeling Clay

Based on the validation effort, reported sample results were qualified as follows:

- The result for acetone in Modeling Clay was qualified as estimated (UJ).
- The result for naphthalene in Modeling Clay was qualified as less than the sample-specific reporting limit (15 U).

Brief explanations of the reasons for the actions taken above may be found in the Overall Assessment (Section XIII). Details of the validation findings and conclusions based on review of the results for each quality control requirement are provided in the remaining sections of this report.

Documentation issues are discussed in Section XII.

This validation report should be considered part of the data package for all future distributions of the volatile organics data.

INTRODUCTION

Analyses were performed according to EPA Method 8260B (SW-846, Test Methods for Evaluating Solid Waste, Third Edition, through Update III, 12/96). Various qualifiers were used by the laboratory to denote specific information regarding the sample results.

To the extent possible, Trillium's validation was performed in conformance with the "Region I, EPA-New England Data Validation Functional Guidelines for Evaluating Environmental Analysis," 12/96. Where discrepancies were observed between the criteria presented in the validation guidelines and the method specifications, the method specifications took precedence. Professional judgment was applied as necessary and appropriate.

The data validation process is intended to evaluate data on a technical basis rather than a contract compliance basis. This requires that the data package contain sufficient raw data documentation to facilitate the validation effort and allow verification of the reported results. It is assumed that the data package represents the best efforts of the laboratory and has already been subjected to adequate and sufficient quality review prior to submission for validation.

During the validation process, laboratory data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data validator. Validated results are, therefore, either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Final validated results are annotated with the following codes as defined by Region I:

U - The material was analyzed for, but was not detected. The associated numerical value is the sample quantitation limit.

J - The associated numerical value is an estimated quantity.

UJ - The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

R - The data are unusable (compound may or may not be present). Resampling and reanalysis is necessary for verification.

These codes are recorded on the data summary form contained in Attachment A as well as on the laboratory's Volatile Organics Analysis Data Sheet (Form I) in Attachment B of this validation report to indicate qualifications placed on the data as a result of the validation effort.

Two facts should be noted by all data users. First, **the "R" qualifier means that the laboratory-reported value is unusable.** In other words, due to significant quality control problems,

the analysis is invalid and provides no information as to whether the analyte is present or not. Rejected values should not appear on data tables because they cannot be relied upon, even as a last resort. Second, **no analyte concentration is guaranteed to be accurate even if all associated quality control is acceptable.** Strict quality control conformance serves only to increase confidence in reported results; any analytical result will always contain some error.

The data user is also cautioned that the validation effort is based on the raw data printouts as provided by the laboratory. Software manipulation cannot be routinely detected during validation; unless otherwise stated in the report, these kinds of issues are outside the scope of this review.

I. Holding Times, Preservation, and Sample Integrity

The solid sample was collected on 6/18/04 and was analyzed on 6/21/04. This is well within the established holding time (14 days from collection) for solid samples.

No preservation information was recorded on the applicable chain of custody record by the sampler or the laboratory, but an acceptable (4°C ±2°C) cooler temperature of 2°C was recorded on the laboratory's Log-In Sheet. Laboratory notations on the Log-In Sheet also indicated that the sample was received intact, on ice, and in a sealed cooler.

II. GC/MS Instrument Performance Check

Two instrument performance checks using bromofluorobenzene (BFB) were run, representing both shifts (12-hour periods) during which samples, associated quality control (QC) samples, or associated standards were analyzed. Results for both instrument performance checks were acceptable.

III. Calibration

All reported sample analyses were performed on a single gas chromatograph/mass spectrometer (GC/MS) system identified as "N." No evidence that any internal standard or surrogate peaks were manually integrated was found in the data package. One or more target analyte peaks were manually integrated in some of the calibration standards and sample and QC analyses reported in this data set. Documentation of these manual integrations was provided in the data package, and verified that the integrations were correctly performed and accurately transcribed into the applicable quantitation reports.

A. Initial Calibration (IC)

One five-point IC associated with the reported samples was analyzed on 5/18/04. A calibration range of 5 µg/kg (ppb) to 200 ppb was established for all target analytes except propionitrile, which was calibrated from 20 ppb to 800 ppb; tetrahydrofuran, which was calibrated from 50 ppb to 2000 ppb; and isobutyl alcohol and 1,4-dioxane, which were each calibrated from 250 ppb to 10000 ppb. Relative response factors (RRFs) as well as percent relative standard deviation (%RSD) values were correctly calculated and accurately reported for this IC.

All reported average RRF values were greater than the minimum acceptance limit of 0.05 with the exceptions of acrolein (0.026), 2-butanone (0.027), propionitrile (0.021), isobutyl alcohol (0.012), and 1,4-dioxane (0.003).

Responses for all five of the analytes listed above showed acceptable consistency over the calibration range in the IC (6.4 %RSD to 11.5 %RSD), and the area responses were substantial (7512 counts to 143,620 counts) in the low concentration IC standard. These areas are similar to or greater than the low concentration responses for other poor performers (i.e., acrylonitrile, 16,335 counts, 2-chloroethyl vinyl ether, 14,247 counts, and acetone, 20,983 counts) for which acceptable RRFs were obtained. The low average RRFs can be partially attributed to the high area responses for the associated internal standard peak (≥2,500,000 counts in each IC standard). For propionitrile, isobutyl alcohol, and 1,4-dioxane, the higher concentrations analyzed in each IC standard also contributed to the low calculated average RRFs.

2-Butanone was reported in the sample in this data set (14 µg/kg), indicating that detection of this analyte is not a problem. In addition, recoveries of all five analytes with low average RRFs were acceptable in the laboratory control sample analyses (see Section VI.B). Therefore, although the validation guidelines recommend rejection of non-detected sample results for analytes with RRFs below 0.05 in the associated IC, based on all of the available quality control data and professional judgment, no sample results were qualified based on the low average RRFs in the IC.

All %RSD values were below the method-specified maximum acceptance criterion of 15%, with the exception of acetone (28.4%RSD). The result for acetone in Modeling Clay was qualified as estimated (UJ) based on the high %RSD value in the associated IC.

B. Continuing Calibration (CC)

The reported sample analysis was run in association with a CC standard analyzed on 6/21/04 at 21:37. Documentation of this CC standard was present in the data package, and RRF as well as percent difference (%D) values comparing the CC RRFs to the average RRFs from the IC were correctly calculated and accurately reported for all target analytes.

RRFs for all target analytes were acceptable (QC >0.05) in the CC standard with the exceptions of acrolein (0.020), acetone (0.046), 2-butanone (0.024), propionitrile (0.022), isobutyl alcohol (0.011), and 1,4-dioxane (0.003). Very good area counts were obtained for acrolein (59,084 counts), 2-butanone (72,648 counts), propionitrile (257,096 counts), isobutyl alcohol (1,696,135 counts), and 1,4-dioxane (486,297 counts) in the CC standard. For the reasons discussed in Section III.A, no sample results for these five analytes were qualified based on the low RRFs.

A very good area response was also obtained for acetone (136,220 counts) in the CC standard. This is comparable to the area obtained for acetone in the 50 ppb IC standard (133,388 counts), and the RRF in the CC is only slightly below the minimum acceptance limit. Based on professional judgment, no action was taken based on the low RRF for acetone in the CC standard.

IV. Blanks

One solid-matrix method blank (VBLKW8) was analyzed in association with the sample this data set. Naphthalene was detected at a low concentration (1.2 µg/kg) in this method blank. The result for naphthalene in Modeling Clay was qualified as less than the sample-specific reporting limit (RL) (15 U) because it is less than five times the concentration found in the associated method blank. No other target analytes were detected in the method blank.

No field-submitted blanks were submitted for analysis with the solid sample in this data set.

V. Surrogate Recovery

Recoveries for the three surrogate compounds were correctly calculated, accurately reported, and within the acceptance limits documented on the summary forms for all reported analyses in this data package.

VI. Spiked Analyses

A. Matrix Spike/Matrix Spike Duplicate (MS/MSD)

No MS/MSD results were included in the data package.

B. Laboratory Control Sample (LCS)

One laboratory control sample pair (NXX1 LCS/LCSD) was prepared and analyzed in association with the solid sample in this data set. The LCS/LCSD pair was spiked at 50 µg/kg for all target analytes except propionitrile (200 µg/kg), tetrahydrofuran (500 µg/kg), and isobutyl alcohol and 1,4-dioxane (2500 µg/kg). All target analyte recoveries were within the analyte-specific acceptance limits documented by the laboratory on the summary forms in the data package except for chloroethane (120%; QC 72-118%) in the LCS and tetrachloroethene (112%; QC 71-107%) in the LCSD.

Since neither of these analytes was detected in Modeling Clay and both recoveries are too high, suggesting the potential for reporting false positives or for positive results that are biased high, no action was taken by the validator based on the LCS/LCSD results.

VII. Duplicates

A. Laboratory Duplicate

Unspiked laboratory duplicate analysis was not performed on the solid sample in this data set.

B. Field Duplicate

No field duplicate was submitted with this data set.

VIII. Internal Standard Performance

All internal standard areas and retention times (RTs) were within the quality control limits specified by the National Functional Guidelines (area ±50% of the corresponding CC standard area and RT ±0.30 seconds of the corresponding CC standard RT) and documented on the summary forms for all reported analyses in this data set.

IX. Target Compound Identification

All reported target analytes were correctly identified with acceptable supporting mass spectra present in the data package.

X. Compound Quantitation and Reported Quantitation Limits

Target compound concentrations and sample-specific RLs were correctly calculated and accurately reported for the solid sample in this data set, including appropriate adjustments for actual sample weight analyzed and percent moisture.

Documentation of the percent moisture measurement in the solid sample was included in the data package. The reported percent moisture for Modeling Clay was correctly calculated and accurately reported.

Laboratory-reported RLs are equal to the lowest IC standard concentration associated with these sample analyses. These values are well supported by the documented raw data.

The data summary form in Attachment A lists all individual sample analytes. All *positive* results are presented on this form, whether or not the value or qualifier was changed as a result of the validation. Where no result is listed, the analyte was not detected and the RL was not qualified. Sample-specific RLs may be found on the sample Form I (Attachment B), or may be calculated from the information on the data summary form as follows: unadjusted RL (far left column) multiplied by the dilution factor and divided by ([100 minus percent moisture] divided by 100).

XI. System Performance

The analytical system appears to have been working satisfactorily at the time of these analyses, based on evaluation of the available raw data.

XII. Documentation

A COC record documenting the sample in this data set was included in the data package and was accurately completed except that no preservation information was recorded by the sampler at the time of collection or by the laboratory on receipt of the sample.

Raw data supporting the BFB analysis performed on 5/18/04 at 16:35, as documented on the summary form, were not included in the data package. Instead, raw data for a BFB analysis run on 5/18/04 at 16:23, in which all acceptance criteria were not met, were included. At the validator's request on 7/12/04, the laboratory provided the missing raw data via email on 7/13/04. These pages were inserted into the data package as pages 94 to 96, replacing the incorrectly reported pages.

These documentation issues do not directly affect the validity of the analytical data generated. However, some of them could be problematic if the data were to be used for litigation.

XIII. Overall Assessment

Based on the validation effort, results for the sample reported in SDG #100862 were qualified as follows:

- The result for acetone in Modeling Clay was qualified as estimated (UJ) based on an unacceptably high %RSD value in the associated initial calibration.
- The result for naphthalene in Modeling Clay was qualified as less than the sample-specific RL (15 U) based on contamination in the associated method blank

Documentation issues are discussed in Section XII.

This validation report should be considered part of the data package for all future distributions of the volatile organics data.

TRILLIUM INC.

ATTACHMENT A

DATA SUMMARY FORM

SDG#100862
Volatiles in a Solid Sample - IndustriPlex
Sample Collected June 18, 2004

DATA SUMMARY FORM: VOLATILES 1
SOLID SAMPLE
ug/kg

Site Name: IndustriPlex

Sampling Date: June 18, 2004

SDG #100862

Trillium Project No. 04864

RL		Sample Number															
		Lab ID	576337														
		Dilution Factor	1.39														
		Percent Moisture	53														
5.0	Dichlorodifluoromethane																
5.0	Chloromethane																
5.0	Vinyl chloride																
5.0	Bromomethane																
5.0	Chloroethane																
5.0	Trichlorofluoromethane																
5.0	Acrolein																
5.0	Freon TF																
5.0	1,1-Dichloroethene	260															
5.0	Acetone		UJ														
5.0	Methyl iodide																
5.0	Carbon disulfide																
5.0	Allyl chloride																
5.0	Methylene chloride																
5.0	Acrylonitrile	46															
5.0	trans-1,2-Dichloroethene																
5.0	total 1,2-Dichloroethene																
5.0	Methyl-t-butyl ether																
5.0	1,1-Dichloroethane																
5.0	Vinyl acetate																
5.0	Chloroprene																
5.0	cis-1,2-Dichloroethene																
5.0	2-Butanone*	14	J														
20	Proprionitrile																
5.0	Methacrylonitrile																
5.0	Bromochloromethane																
50	Tetrahydrofuran																
5.0	Chloroform																
5.0	1,1,1-Trichloroethane																
5.0	Carbon tetrachloride																
250	Isobutyl alcohol																

* 2-butanone is areferred to as methyl ethyl ketone in the soil gas data packages

\Industriplex\soil gas\100862 clay

SOLID SAMPLE
ug/kg

Site Name: IndustriPlex

Sampling Date: June 18, 2004

SDG #100862

Trillium Project No. 04864

RL																	
	Sample Number	Modeling Clay															
	Lab ID	576337															
	Dilution Factor	1.39															
	Percent Moisture	53															
5.0	Benzene																
5.0	1,2-Dichloroethane																
5.0	Trichloroethene																
5.0	1,2-Dichloropropane																
5.0	Methyl methacrylate																
5.0	Dibromomethane																
250	1,4-Dioxane																
5.0	Bromodichloromethane																
5.0	2-Chloroethyl vinyl ether																
5.0	cis-1,3-Dichloropropene																
5.0	Ethyl methacrylate																
5.0	1,1,2-Trichloroethane																
5.0	Tetrachloroethene																
5.0	2-Hexanone																
5.0	Dibromochloromethane																
5.0	1,2-Dibromoethane																
5.0	Chlorobenzene																
5.0	1,1,1,2-Tetrachloroethane																
5.0	Ethylbenzene																
5.0	m,p-Xylenes																
5.0	total Xylenes																
5.0	o-Xylene																
5.0	Styrene																
5.0	Bromoform																
5.0	Isopropylbenzene																
5.0	cis-1,2-Dichloro-2-butene																
5.0	1,1,2,2-Tetrachloroethane																
5.0	1,2,3-Trichloropropane																
5.0	trans-1,4-Dichloro-2-butene																
5.0	1,3-Dichlorobenzene																
5.0	1,4-Dichlorobenzene																

\Industriplex\soil gas\100862 clay

EPA 8260B

DATA SUMMARY FORM: VOLATILES 3
SOLID SAMPLE
ug/kg

Site Name: IndustriPlex

Sampling Date: June 18, 2004

SDG #100862

Trillium Project No. 04864

RL		Sample Number																	
		Lab ID	Modeling Clay																
		Dilution Factor	576337																
		Percent Moisture	1.39																
			53																
5	1,2-Dichlorobenzene																		
5.0	1,2-Dibromo-3-chloropropane																		
5.0	1,2,4-Trichlorobenzene																		
5.0	Hexachlorobutadiene																		
5.0	Naphthalene	15	U																
5.0	2,2-Dichloropropane																		
5.0	1,1-Dichloropropene																		
5.0	1,3-Dichloropropane																		
5.0	Bromobenzene																		
5.0	n-Propylbenzene																		
5.0	2-Chlorotoluene																		
5.0	4-Chlorotoluene																		
5.0	1,3,5-Trimethylbenzene																		
5.0	tert-Butylbenzene																		
5.0	1,2,4-Trimethylbenzene																		
5.0	sec-Butylbenzene																		
5.0	4-Isopropyltoluene																		
5.0	n-Butylbenzene																		
5.0	1,2,3-Trichlorobenzene																		

\Industriplex\soil gas\100862 clay

TRILLIUM INC.

ATTACHMENT B

LABORATORY FORM I

SDG#100862
Volatiles in a Solid Sample - IndustriPlex
Sample Collected June 18, 2004

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

MODEL CLAY
Modeling Clay

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) SOIL Lab Sample ID: 576337

Sample wt/vol: 3.6 (g/mL) G Lab File ID: 576337

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. 53 Date Analyzed: 06/22/04

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	15	U
74-87-3	Chloromethane	15	U
75-01-4	Vinyl Chloride	15	U
74-83-9	Bromomethane	15	U
75-00-3	Chloroethane	15	U
75-69-4	Trichlorofluoromethane	15	U
107-02-8	Acrolein	15	U
76-13-1	Freon TF	15	U
75-35-4	1,1-Dichloroethene	260	
67-64-1	Acetone	15	~~U~~ UJ
74-88-4	Methyl Iodide	15	U
75-15-0	Carbon Disulfide	15	U
107-05-1	Allyl Chloride	15	U
75-09-2	Methylene Chloride	15	U
107-13-1	Acrylonitrile	46	
156-60-5	trans-1,2-Dichloroethene	15	U
540-59-0	1,2-Dichloroethene (total)	15	U
1634-04-4	Methyl-t-Butyl Ether	15	U
75-34-3	1,1-Dichloroethane	15	U
108-05-4	Vinyl Acetate	15	U
126-99-8	Chloroprene	15	U
156-59-2	cis-1,2-Dichloroethene	15	U
78-93-3	2-Butanone	14	J
107-12-0	Propionitrile	58	U
126-98-7	Methacrylonitrile	15	U
74-97-5	Bromochloromethane	15	U
109-99-9	Tetrahydrofuran	150	U
67-66-3	Chloroform	15	U
71-55-6	1,1,1-Trichloroethane	15	U
56-23-5	Carbon Tetrachloride	15	U
78-83-1	Isobutyl Alcohol	730	U
71-43-2	Benzene	15	U
107-06-2	1,2-Dichloroethane	15	U

CAErikson 7/13/04

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

MODEL CLAY
Modeling Clay

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) SOIL Lab Sample ID: 576337

Sample wt/vol: 3.6 (g/mL) G Lab File ID: 576337

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. 53 Date Analyzed: 06/22/04

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
79-01-6	Trichloroethene	15	U
78-87-5	1,2-Dichloropropane	15	U
80-62-6	Methyl Methacrylate	15	U
74-95-3	Dibromomethane	15	U
123-91-1	1,4-Dioxane	730	U
75-27-4	Bromodichloromethane	15	U
110-75-8	2-Chloroethyl Vinyl Ether	15	U
10061-01-5	cis-1,3-Dichloropropene	15	U
108-10-1	4-Methyl-2-pentanone	15	U
108-88-3	Toluene	15	U
10061-02-6	trans-1,3-Dichloropropene	15	U
97-63-2	Ethyl Methacrylate	15	U
79-00-5	1,1,2-Trichloroethane	15	U
127-18-4	Tetrachloroethene	15	U
591-78-6	2-Hexanone	15	U
124-48-1	Dibromochloromethane	15	U
106-93-4	1,2-Dibromoethane	15	U
108-90-7	Chlorobenzene	15	U
630-20-6	1,1,1,2-Tetrachloroethane	15	U
100-41-4	Ethylbenzene	15	U
1330-20-7	Xylene (m,p)	15	U
1330-20-7	Xylene (total)	15	U
95-47-6	Xylene (o)	15	U
100-42-5	Styrene	15	U
75-25-2	Bromoform	15	U
98-82-8	Isopropylbenzene	15	U
1476-11-5	cis-1,4-Dichloro-2-butene	15	U
79-34-5	1,1,2,2-Tetrachloroethane	15	U
96-18-4	1,2,3-Trichloropropane	15	U
110-57-6	trans-1,4-Dichloro-2-butene	15	U
541-73-1	1,3-Dichlorobenzene	15	U
106-46-7	1,4-Dichlorobenzene	15	U
95-50-1	1,2-Dichlorobenzene	15	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

ROUX2 SAMPLE NO.

MODEL CLAY

Lab Name: STL BURLINGTON Contract: 24000

Lab Code: STLVT Case No.: 24000 SAS No.: SDG No.: 100862

Matrix: (soil/water) SOIL Lab Sample ID: 576337

Sample wt/vol: 3.6 (g/mL) G Lab File ID: 576337

Level: (low/med) LOW Date Received: 06/19/04

% Moisture: not dec. 53 Date Analyzed: 06/22/04

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
96-12-8	1,2-Dibromo-3-Chloropropane	15	U
120-82-1	1,2,4-Trichlorobenzene	15	U
87-68-3	Hexachlorobutadiene	15	U
91-20-3	Naphthalene	15 ~~4.1~~ ~~JB~~	U
594-20-7	2,2-Dichloropropane	15	U
563-58-6	1,1-Dichloropropene	15	U
142-28-9	1,3-Dichloropropane	CAE 7/13/04 15	U
108-86-1	Bromobenzene	15	U
103-65-1	n-Propylbenzene	15	U
95-49-8	2-Chlorotoluene	15	U
106-43-4	4-Chlorotoluene	15	U
108-67-8	1,3,5-Trimethylbenzene	15	U
98-06-6	tert-Butylbenzene	15	U
95-63-6	1,2,4-Trimethylbenzene	15	U
135-98-8	sec-Butylbenzene	15	U
99-87-6	4-Isopropyltoluene	15	U
104-51-8	n-Butylbenzene	15	U
87-61-6	1,2,3-Trichlorobenzene	15	U