

January 8, 2004

Mr. Todd M. Caffoe, P.E.
Project Manager
New York State Department of
Environmental Conservation
6274 East Avon-Lima Road
Avon, New York 14414

Re: Former Brainerd Manufacturing Site #V00519-8
Voluntary Cleanup Assessment
Sub-Slab Soil Vapor Sampling Letter Report

Dear Mr. Caffoe:

In accordance with our October 2003 Work Plan, Benchmark has completed subslab air sampling activities at the former Brainerd Manufacturing building located in East Rochester, New York (see Figures 1 and 2). Field activities were conducted on December 3-4, 2003. During the sub-slab vapor sampling event, Benchmark personnel used Summa Canisters fitted with 24-hour regulators to obtain concurrent ambient air and sub-slab vapor samples at five interior locations. In addition, an outdoor ambient air sample was collected from the roof of the building. A description of our approach to the work, vapor sampling activities, analytical results and conclusions are presented in the sections below.

VAPOR SAMPLING APPROACH

As indicated above, the vapor sampling program consisted of collecting and analyzing a total of eleven air samples. Specifically, one sub-slab vapor sample and one ambient air sample were collected at each of the five (5) building locations listed below. In addition, one outdoor sample located on the high point of the building roof away from the influence of HVAC equipment or exhaust was collected. The sample locations were selected based on the likelihood for potential continuous human occupancy during the workday (i.e., due to the size of the areas and available infrastructure), and to account for the possibility of varying foundation depths in different areas of the building. As shown on Figure 2, the eleven sample locations and field identifications include:

- Offices: V-1 office floor, V-1 office ambient
- Warehouse: V-2 warehouse floor, V-2 warehouse ambient
- Assembly Room: V-3 assembly floor, V-3 assembly ambient
- Shipping 1: V-4 shipping floor, V-4 shipping ambient
- Blanking Room: V-5 blanking room floor, V-5 blanking room ambient
- Roof: roof sample

At each location, Benchmark used a hand-held hammer drill to advance a $\frac{3}{4}$ -inch diameter hole through the concrete floor slab (approximately 6-inches thick). Following advancement through the concrete, approximately 8-inches of sub-slab soil was removed from the hole. An appropriately sized silicone stopper fitted with a $\frac{1}{4}$ -inch hollow Teflon tube was immediately inserted into the concrete core hole upon completion and secured. A Summa Canister fitted with a 24-hour regulator was attached to the opposite end of the Teflon tubing. Concurrent with each subslab sample location, an indoor ambient air sample was prepared by staging a second Summa Canister on a ladder (approximately 5-feet above ground surface) adjacent to the sub-slab sample location. The roof sample location was assembled similar to the ambient air samples on the roof at the location identified on Figure 2.

All Summa Canister valves remained closed until the borings were complete and all of the canisters in their respective positions. The valves were then opened for the required 24-hour collection period. Because the building was vacant and sealed for over a year, the building ventilation system was not fully functional at the time of the sampling. Doors and windows were also shut, further assuring conservative sampling conditions throughout the event. It should be noted, during air monitoring activities, the current tenant was using lacquer thinner and cleaning solvents to clean office shelving within the assembly room, which likely biased the ambient air results. The Material Safety Data Sheet for the lacquer thinner and cleaning solvent is presented in Attachment 1. As indicated, aromatic volatile organics including toluene and xylene are present in the lacquer thinner and likely contributed to detections of these constituents in the samples.

Following sample collection, Benchmark personnel closed and capped each canister valve and gathered the eleven canisters. The air samples were shipped to Severn Trent Laboratories (STL) located in Burlington, Vermont under chain-of-custody command for VOC analysis in accordance with USEPA Method TO-15. All concrete openings were repaired with a cement patch.

LABORATORY ANALYTICAL RESULTS

Upon receipt of the data, the analytical results presented in Attachment 2 were tabulated and summarized in Table 1. As indicated, all reported concentrations were well below the Occupational Safety and Health Administration's (OSHA) Permissive Exposure Limits (PELs). Thus, both the subslab vapors and indoor air comply with these regulatory limits for work place exposure. The outdoor air sample contained only a slightly elevated concentration of toluene, also at a concentration well below the OSHA PEL.

HEALTH-RISK BASED INTRUSION MODELING

In accordance with the approved work plan, Benchmark modeled subslab vapor concentrations in accordance with recommendations presented in USEPA's 2002 "OSWER Draft Guidance For Evaluating Vapor Intrusion to Indoor Air Pathway From Groundwater and Soils." This guidance incorporates the Johnson and Ettinger (1991) screening level



model for estimating the transport of contaminant vapors from a subsurface source into indoor air spaces.

The Johnson and Ettinger (1991) model is a widely accepted tool for determining potential health risks due to VOC migration to indoor air. The model is a one-dimensional analytical solution to diffusive and convective transport of vapors formulated as an attenuation factor that relates the vapor concentration in the indoor space to the vapor concentration at the source. To facilitate use of the Johnson-Ettinger Model (JEM), the USEPA in 1997 developed spreadsheet versions of the model that calculate associated health risks from subslab vapors. The most recent spreadsheets have been used to evaluate the subslab air samples collected at the Former Brainerd Manufacturing site.

The JEM was run using the highest concentration for each detected compound at any of the locations (i.e., worst-case scenario – see Table 2). A summary of the values/inputs used to run the JEM are presented below (see Figure 3). Unless otherwise noted, standard USEPA default parameters were used.

- The laboratory reported concentration for each parameter in units of parts per million volume (ppmv);
- Depth below grade to bottom of enclosed space floor was 6-inches (15.24 cm) (field measured), therefore the model default value of 15 cm was entered;
- Soil gas-sampling depth was field measured at 14-inches below grade (35.56 cm);
- Average soil temperature of 10 °C (default model value);
- Vadose zone USCS soil type described as Loamy (L) based on boring logs from previous drilling activities performed by Benchmark;
- Vadose zone soil dry density, total porosity and water-filled porosity (model look up values for designated soil type);
- Q_{soil} (default value) value was left blank so as to allow the model to calculate this value (as appropriate in the absence of a measured vapor intrusion rate);
- Averaging Time for Carcinogens of 70 years (default model value);
- Averaging Time for non carcinogens of 30 years (default model value);
- Non-residential exposure duration of 25 years (typical value per USEPA Risk Assessment Guidelines); and
- Non-residential exposure frequency of 250 days (typical value per USEPA Risk Assessment Guidelines).

The JEM-predicted excess cancer risk and hazard quotient values (i.e., carcinogenic and toxic effect, respectively) from vapor intrusion to indoor air for each compound and subslab sample location are presented in Table 2.

SUMMARY AND CONCLUSIONS

As shown in Table 1, laboratory analytical results for all sample locations (ambient and subslab) were reported at concentrations significantly below the OSHA PELs. As such,



inhalation of subslab vapors, even without the introduction of fresh air that will occur when the HVAC system is fully operational, would meet regulatory occupational exposure limits.

The previously referenced USEPA vapor intrusion guidance recommends conformance to a Hazard Quotient (HQ) of 1 or less. With respect to vapor intrusion, USEPA generally recommends the use of 10^{-5} as a baseline for comparison to Excess Cancer Risk (ECR) values. This level, in USEPA's view, serves as a generally reasonable screening mechanism for the vapor intrusion pathway. Additionally, it takes into account practical issues associated with the analytical difficulties in taking air measurements and the possible presence of many constituents of concern due to contributions from "background" sources, including ambient (outdoor) air and/or emitted from indoor sources. As presented in Table 2, the JEM analysis shows that ECR values were well below 1.0×10^{-5} and HQ values were well below 1.

Based on the laboratory analytical results as well as the JEM results, the potential for excess risk due to vapor intrusion is insignificant at the Former Brainerd Manufacturing Facility; therefore, no further action is recommended toward addressing this pathway.

DECLARATIONS/LIMITATIONS

Benchmark personnel conducted all activities during the Subslab Soil Vapor Program at the former Brainerd Manufacturing building according to generally accepted practices. Based on the field observations made by Benchmark personnel, field and laboratory test data, and data provided by Despatch Industries, the activities observed and conducted at the site complied with the scope of work provided to the NYSDEC by Benchmark.

Please contact us if you have any questions.

Sincerely,
Benchmark Environmental Engineering & Science, PLLC

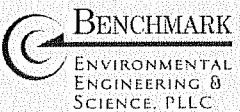


Thomas H. Forbes, P.E.
Project Manager

Attachment

- C: A. Shaffer (Despatch Industries)
 F. Pavia (Boylan Brown)
 B. Putzig (NYSDEC)
 M. Desmond (NYSDEC)
 M. Van Valkenburg (NYSDOH)
 J. Crua (NYSDOH)

File: 0040-002-200



TABLES

TABLE 1

 SUMMARY OF AIR MONITORING RESULTS
 DECEMBER 2003

 FORMER BRAINERD MANUFACTURING FACILITY
 EAST ROCHESTER, NEW YORK

Parameter	Sample Location/I.D. and Analytical Result (ppbv)								OSHA PELs
	V-1 office floor	V-1 office ambient	V-2 warehouse floor	V-2 warehouse ambient	V-3 assembly floor	V-3 assembly ambient	V-4 shipping floor	V-4 shipping ambient	
Dichlorodifluoromethane	ND	0.5	0.61	0.6	0.57	ND	0.5	0.5	0.72
Chloroethane	1	ND	ND	2.3	ND	ND	0.5	ND	ND
Trichlorofluoromethane	0.9	ND	6.5	ND	0.59	0.55	0.56	0.59	ND
Freon TF	ND	ND	ND	ND	ND	ND	ND	ND	1,000,000
Chloroform	4.7	ND	1	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	8.9	ND	4.8	ND	0.67	0.65	ND
Benzene	17	ND	1.7	0.54	0.8	ND	1.9	ND	ND
Trichloroethene	140 D	9.2	3.3	6	55 D	9.4	18	18	240 D
Toluene	14	120 D	52 D	810 D	1000 D	650 D	100 D	90 D	70 D
Tetrachloroethene	70 D	11	6.8	7.1	22	11	21	24	16
Ethylbenzene	5.1	ND	1.1	ND	ND	0.69	ND	0.8	ND
Xylylene (m,p)	19	0.56	4.7	0.93	1.6	0.56	5.2	ND	6.3
Styrene	ND	ND	1.9	ND	ND	ND	ND	ND	ND
Xylyene (o)	8	ND	1.3	ND	ND	1.5	ND	1.7	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	0.7	ND	ND	ND
1,3,5-Trimethylbenzene	0.86	ND	0.5	ND	ND	1.5	ND	1.2	ND
1,2,4-Trimethylbenzene	1.4	ND	1.4	0.61	0.66	ND	3.3	ND	ND
Carbon Disulfide	1.1	ND	2.2	ND	ND	3.4	ND	3.4	ND
Cyclohexane	3.5	4.2	5.5	22	28	11	6.2	3.2	3.4
4-Ethyltoluene	1.6	ND	1.1	ND	ND	1.5	ND	0.87	ND
n-Hexane	4	1	5.6	3.6	5.1	1.6	5.6	0.64	5.2
n-Heptane	7.3	11	9.1	68 D	88 D	29	13	8.4	8.5
								19	ND

Notes:

- Only those parameters detected above the method detection limit, at a minimum of one location, are presented in this table.
- "D" = Concentrations identified from analysis of the sample at a secondary dilution.
- "ND" = compound was analyzed, but detected below method detection limit; not detected.

TABLE 2

VAPOR INTRUSION CALCULATION SUMMARY
JOHNSON & ETTINGER MODEL

FORMER BRAINERD MANUFACTURING FACILITY
EAST ROCHESTER, NEW YORK

Parameter	CAS No.	Sample Location/I.D. and Analytical Result For Maximum Detected Concentration									
		V-1 office floor		V-2 warehouse floor		V-3 assembly floor		V-4 shipping floor		V-5 blanking rm floor	
Ppbv	ECR	Ppbv	ECR	Ppbv	ECR	Ppbv	ECR	Ppbv	ECR	Ppbv	ECR
Dichlorodifluoromethane	75-71-8										
Chloroethane	75-00-5	1	5.8E-11	1.6E-08							
Trichlorofluoromethane	75-69-4			6.5	NA	2.9E-06					
Freon TF	76-13-1										
Chloroform	67-66-3	4.7	1.3E-08	NA							
1,1,1-Trichloroethane	75-55-6										
Benzene	71-43-2	17	1.0E-08	NA							
Trichloroethylene	79-01-6										
Toluene	108-88-3							1000 D	NA	5.3E-04	
Tetrachloroethene	127-18-4	70 D	3.4E-08	NA							
Ethylbenzene	100-41-4	5.1	5.8E-10	1.2E-06							
Xylylene (m,p)	1330-20-7	19	NA	NA							
Styrene	100-42-5				1.9	NA	4.5E-07				
Xylyene (o)	95-47-6	8	NA	2.8E-07							
1,4-Dichlorobenzene	106-46-7							0.7	NA	2.9E-07	
1,3,5-Trimethylbenzene	108-67-8								1.5	NA	6.9E-05
1,2,4-Trimethylbenzene	120-92-1								3.3	NA	6.8E-06
Carbon Disulfide	75-15-0								3.4	NA	8.5E-07
Cyclohexane	110-82-7							28	NA		
4-Ethyltoluene	622-96-8	1.6	NA	NA							
n-Hexane	110-54-3					5.6	NA	5.8E-06			
n-Heptane	142-82-5							88 D	NA	NA	

Notes:

- Only those parameters detected above the method detection limit, at a minimum of one location, are presented in this table. In all instances, maximum detected concentrations were modeled.
- "D" = Concentrations identified from analysis of the sample at a secondary dilution.
- "Ppbv" = laboratory reported value in parts per billion by volume.

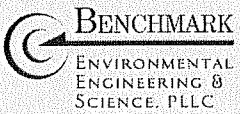
3. "ECR" = Excess Cancer Risk; the incremental risk from vapor intrusion to indoor air, carcinogen (unless) as calculated by Johnson-Ettinger Model.

4. "HQ" = Hazard Quotient from vapor intrusion to indoor air, non-carcinogen (unless) as calculated by Johnson-Ettinger Model.

5. ECR/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

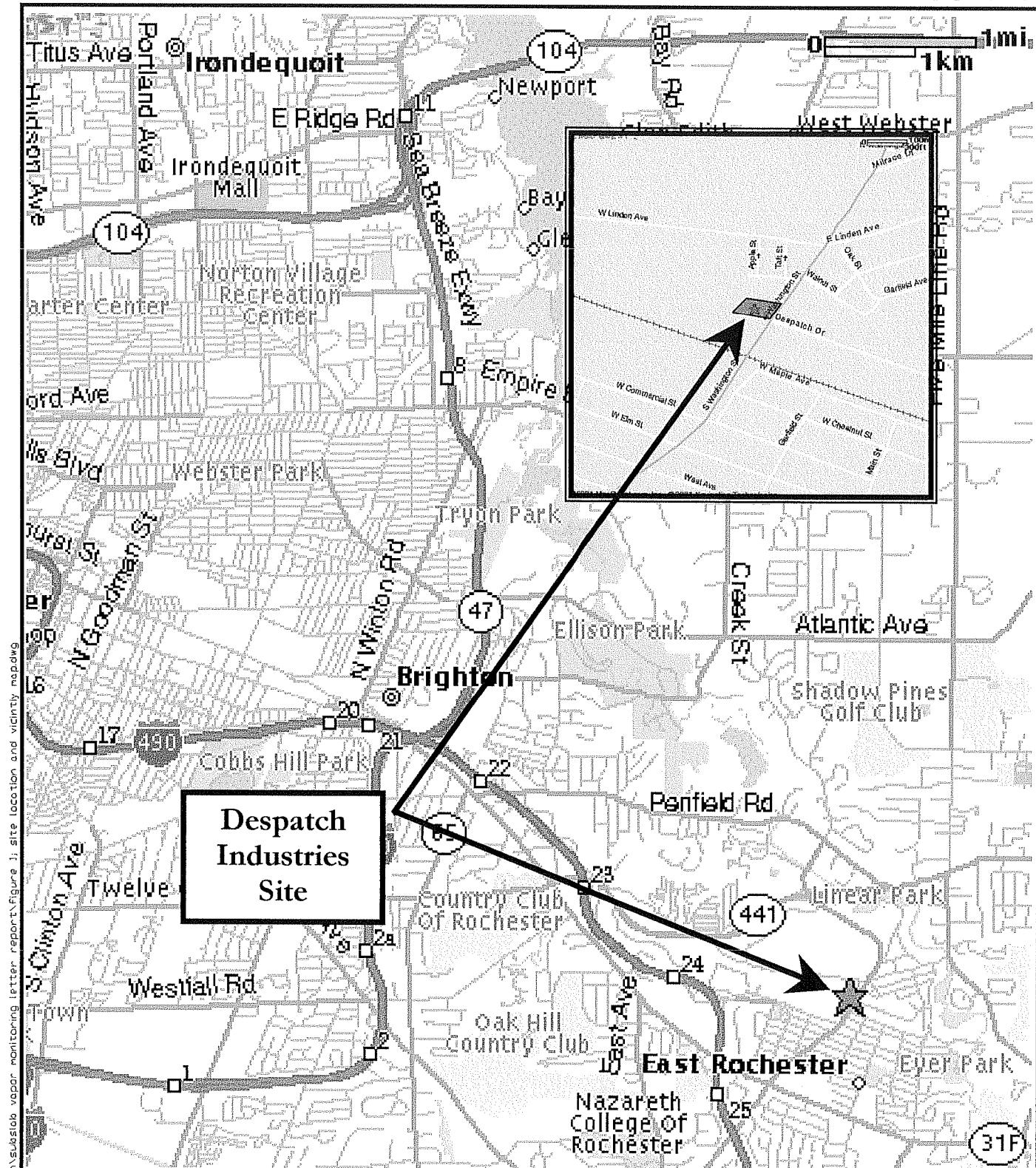
6. Johnson & Ettinger Model does not include these parameters in their model.





FIGURES

FIGURE 1



50 FOUNTAIN PLAZA
SUITE 1350
BUFFALO, NEW YORK 14202
(716) 856-0599

PROJECT NO.: 0040-002-200

DATE: JANUARY 2004

DRAFTED BY: BCH

SITE LOCATION AND VICINITY MAP

SUBSLAB SOIL VAPOR SAMPLING

FORMER BRAINERD MANUFACTURING FACILITY
EAST ROCHESTER, NEW YORK

PREPARED FOR
DESPATCH INDUSTRIES, INC.

DATA ENTRY SHEET

SG-SCREEN Version 2.0.0403

ENTER Chemical CAS No. (numbers only, no dashes)		ENTER Soil Gas Concentration Data Soil gas conc., C_1 , C_2 (ppmv)		ENTER Soil gas conc., C_1 , C_2 (ppmv)	
110535		5000.00		5000.00	
MORE		FIELD MEASURED		JEM DEFAULT VALUES	
Reset to Defaults		ENTER Depth below grade to bottom of trench or space factor, L_t (15 or 200 cm)		ENTER Depth below grade to bottom of trench or space factor, L_t (15 or 200 cm)	
		15 200		15 200	
MORE		ENTER Vapour zone soil type SDS		ENTER Vapour zone soil type SDS	
		User-defined parameters		User-defined vapour zone soil type SDS	
		1.00		1.00	
MORE		ENTER Average soil temperature, T_a ($^{\circ}$ C)		ENTER Average soil temperature, T_a ($^{\circ}$ C)	
		15.0		15.0	
MORE		ENTER Vapour zone soil dry bulk density, D_s (kg m^{-3})		ENTER Vapour zone soil dry bulk density, D_s (kg m^{-3})	
		1.99		1.99	
MORE		ENTER Average time for remediation, A_t (years)		ENTER Average time for remediation, A_t (years)	
		10.0		10.0	
MORE		ENTER Exposure duration, ED		ENTER Exposure duration, ED	
		25		25	
MORE		ENTER Exposure frequency, EF		ENTER Exposure frequency, EF	
		250		250	
MORE		ENTER JEM soil type default values		ENTER JEM soil type default values	
		NON-RESIDENTIAL EXPOSURE VALUES		NON-RESIDENTIAL EXPOSURE VALUES	
MORE		ENTER Average vapor flow rate into soil (leave blank to calculate)		ENTER Average vapor flow rate into soil (leave blank to calculate)	
		Q _{av} (l/m ² day)		Q _{av} (l/m ² day)	
MORE		ENTER JEM soil type default values		ENTER JEM soil type default values	
		JEM SOIL TYPE DEFAULT VALUES		JEM SOIL TYPE DEFAULT VALUES	
MORE		ENTER JEM default values		ENTER JEM default values	
		LEFT BLANK TO ALLOW JEM TO CALCULATE		LEFT BLANK TO ALLOW JEM TO CALCULATE	
MORE		ENTER JEM default values		ENTER JEM default values	
		JEM DEFAULT VALUE		JEM DEFAULT VALUE	
MORE		ENTER LABORATORY REPORTED RESULT (ppmv)		ENTER LABORATORY REPORTED RESULT (ppmv)	
		5000.00		5000.00	

FIGURE 3

JEM DATA ENTRY SHEET EXAMPLE

SUBSLAB SOIL VAPOR SAMPLING

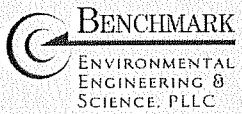
FORMER BRAINERD MANUFACTURING FACILITY

EAST ROCHESTER, NEW YORK

PREPARED FOR
DESPATCH INDUSTRIES, INC.

BENCHMARK 50 FOUNTAIN PLAZA
ENVIRONMENTAL SUITE 1350 BUFFALO, NEW YORK 14202
ENGINEERING SCIENCE, PLLC (716) 856-0599

PROJECT NO.: 0040-002-200
DATE: JANUARY 2004
DRAFTED BY: BCH



ATTACHMENT 1

MSDS SHEET

FOR LACQUER THINNER & CLEANING SOLVENTS

Inhalation: May cause nose and throat irritation. Repeated and prolonged overexposure to solvents may lead to permanent brain and nervous system damage. Eye watering, headaches, nausea, dizziness and loss of coordination are signs that solvent levels are too high. If affected by inhalation of vapor or spray mist, remove to fresh air. If breathing difficulty persists, or occurs later, consult a physician. Skin or eye contact: May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis. In case of eye contact, immediately flush with plenty of water for at least 15 minutes; call a physician. In case of skin contact, wash with soap and water. If irritation occurs, contact a physician.

Specific Effects:

Acetic Acid: May cause irritation of the mucous membranes. Contact may cause skin burns. Causes eye corrosion and permanent injury. Tests for mutagenic activity in bacterial or mammalian cell cultures have been inconclusive. Aromatic hydrocarbon - Laboratory studies with rats have shown that petroleum distillates cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors. Butyl acetate: May cause abnormal liver function. Tests for embryotoxic activity in animals has been inconclusive. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother. Ethylene glycol monobutyl ether acetate: Can be absorbed through the skin in harmful amounts. May destroy red blood cells. May cause abnormal kidney function. Formaldehyde - Repeated exposure may cause allergic skin rash, itching, swelling. Causes severe eye irritation. Formaldehyde has produced tumors in the nasal passages of laboratory animals when exposed to high concentrations for a two year period. Epidemiology studies conducted to date have not found evidence of formaldehyde related tumor induction in humans. May induce pulmonary sensitization or significant irritation of the respiratory airways. Is an IARC, NTP or OSHA carcinogen. Has shown mutagenic activity in laboratory cell culture tests. WARNING: This chemical is known to the State of California to cause cancer. Isopropyl alcohol: Ingestion studies on laboratory animals showed that very high oral doses caused increased liver and kidney weights. Medium mineral spirits and VM&P naphtha: Laboratory studies with rats have shown that petroleum distillates cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea pigs, dogs, or monkeys. Several studies evaluating petroleum workers have not shown a significant increase of kidney damage or an increase in kidney or liver tumors. May cause temporary upper respiratory and/or lung irritation with cough, difficult breathing, or shortness of breath. Methyl alcohol: Excessive human exposure to methanol may lead to fatigue, headache, anesthetic, neurologic effects, and visual difficulties including blindness or death. Recurrent overexposure may result in liver and kidney injury. Can be absorbed through the skin in harmful amounts. Has been toxic to the fetus in laboratory animals at doses that are toxic to the mother. Mixed dibasic esters: High airborne levels in rats have shown mild injury to the olfactory region of the nose. Methyl ethyl ketone - High concentrations have caused embryotoxic effects in laboratory animals. Methyl ethyl ketone has been demonstrated to potentiate (i.e., shorten the time of onset) the peripheral neuropathy caused by either n-hexane or methyl n-butyl ketone. MEK by itself has not been demonstrated to cause peripheral neuropathy. Liquid splashes in the eye may result in chemical burns. N-butyl alcohol: Liquid splashes in the eye may result in chemical burns. May cause abnormal blood forming function with anemia. Recurrent overexposure may result in liver and kidney injury. Can be absorbed through the skin in harmful amounts. Nonylphenoxypoly(ethyleneoxy)ethanol - Liquid splashes in the eye may result in chemical burns. Propylene glycol monomethyl ether acetate: May cause moderate eye burning.

Recurrent overexposure may result in liver and kidney injury. Toluene: Recurrent overexposure may result in liver and kidney injury. High airborne levels have produced irregular heart beats in animals and occasional palpitations in humans. Rats exposed to very high airborne levels have exhibited high frequency hearing deficits. The significance of this to man is unknown. WARNING: This chemical is known to the State of California to cause birth defects or other reproductive harm. Xylene: High concentration have caused embryotoxic effects in laboratory animals. Recurrent overexposure may result in liver and kidney injury. Can be absorbed through the skin in harmful amounts.

Section VI - Reactivity Data

Stability:

Stable

Incompatibility (materials to avoid): None reasonably foreseeable

Hazardous decomposition products: CO, CO₂, smoke.

Hazardous polymerization: Will not occur.

Section VII - Spill or Leak Procedures

Steps to be taken in case material is released or spilled: Ventilate area. Remove sources of ignition. Prevent skin contact and breathing of vapor. Wear a properly fitted vapor/particulate respirator (NIOSH/MSHA TC-23C). Confine and remove with inert absorbent.

Waste disposal method: Do not allow material to contaminate ground water systems. Incinerate absorbed material in accordance with federal, state, and local requirements. Do not incinerate in closed containers.

Section VIII - Special Protection Information

Do not breathe vapors or mists. Wear a properly fitted vapor/particulate respirator approved by NIOSH/MSHA (TC-23C) for use with paints during application and until all vapors and spray mists are exhausted. In confined spaces or in situations where continuous spray operations are typical or proper respirator fit is not possible, wear a positive-pressure, supplied-air respirator (TC-19C). In all cases, follow the respirator manufacturer's directions for respirator use. Do not permit anyone without protection in the painting area.

Ventilation: Provide sufficient ventilation in volume and pattern to keep contaminants below applicable OSHA requirements.

Protective clothing: Neoprene gloves and coveralls are recommended.

Eye protection: Desirable in all industrial situations. Include splash guards or side shields.

Section IX - Special Precautions

Precautions to be taken in handling and storing: Observe label precautions. Keep away from heat, sparks and flame. Close container after each use. Ground containers when pouring. Wash thoroughly after handling and before eating or smoking. Do not store above 120°F.

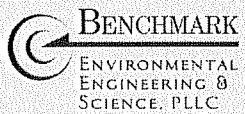
Other precautions: Do not sand, flame cut, braze or weld dry coating without a NIOSH/MSHA approved respirator or appropriate ventilation.

Section X - Other Information

Section 313 Supplier Notification: The chemicals listed below with percentages are subject to the reporting requirements of Section 313 of the Emergency Planning and Right-To-Know Act of 1986 and of 40 CFR 372.

PRODUCT CODE	INGREDIENTS (See Section II)	Product Manager - Refinish Sales
2319S	1, 11, 22. GAL WT: 6.91 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 6.91 VOC: 6.6 H: 1 F: 3 R: 0 FLASH PT: -73L OSHA STORAGE: IB	Rev. 1/95
3602S	2(27%), 5.9(2%), 11, 16, 17(8%), 19, 20(12%), 21. GAL WT: 6.84 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 6.84 VOC: 6.8 H: 2 F: 3 R: 0 FLASH PT: -20L OSHA STORAGE: IB	<i>Prepared by T.R. Lojer, CIH (302) 774-8303</i>
3608S	2(28%), 11, 13(3%), 16, 19, 20(9%), 21, 24(9%). GAL WT: 6.61 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 6.61 VOC: 6.6 H: 2 F: 3 R: 0 FLASH PT: -20L OSHA STORAGE: IB	
3613S	2(56%), 11, 20(20%), 21. GAL WT: 6.61 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 6.61 VOC: 6.6 H: 2 F: 3 R: 0 FLASH PT: -20L OSHA STORAGE: IB	
3642S	2(30%), 8, 11, 13(3%), 19, 20(17%), 21. GAL WT: 6.55 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 6.55 VOC: 6.5 H: 2 F: 3 R: 0 FLASH PT: -20L OSHA STORAGE: IB	
3661S	2(25%), 6, 11, 16, 17(5%), 19, 20(12%). 21. GAL WT: 6.65 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 6.65 VOC: 6.6 H: 2 F: 3 R: 0 FLASH PT: -20L OSHA STORAGE: IB	
3671S	2(27%), 11, 16, 17(6%). 19, 20(9%). 21, 24(8%). GAL WT: 6.64 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 6.64 VOC: 6.6 H: 2 F: 3 R: 0 FLASH PT: -20L OSHA STORAGE: IB	
3696S	2(27%). 11, 16, 19, 20(12%). 21, 24(6%). GAL WT: 6.91 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 6.91 VOC: 6.9 H: 2 F: 3 R: 0 FLASH PT: -20L OSHA STORAGE: IB	
3900S	5, 11, 21. GAL WT: 6.52 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 6.52 VOC: 6.5 H: 2 F: 3 R: 0 FLASH PT: -73L OSHA STORAGE: IB	
3901S	21. GAL WT: 6.05 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 6.05 VOC: 6.0 H: 2 F: 3 R: 0 FLASH PT: -73L OSHA STORAGE: IB	
3909S	4, 23. GAL WT: 8.30 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 8.30 VOC: 8.0 H: 2 F: 1 R: 0 FLASH PT: +200L OSHA STORAGE: IIB	
3914S	2(7%), 8, 11, 12, 14(8%), 20(25%), 21, 24(30%). GAL WT: 6.90 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 6.90 VOC: 6.9 H: 2 F: 3 R: 0 FLASH PT: -20L OSHA STORAGE: IB	
3919S	12, 21. GAL WT: 6.40 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 6.40 VOC: 6.4 H: 2 F: 3 R: 0 FLASH PT: -100L OSHA STORAGE: IC	
3921S	8, 15, 17(5%). GAL WT: 6.87 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 6.87 VOC: 6.8 H: 2 F: 3 R: 0 FLASH PT: -73L OSHA STORAGE: IB	
3924S	2(30%), 11, 20(16%). 21. GAL WT: 6.42 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 6.42 VOC: 6.4 H: 2 F: 3 R: 0 FLASH PT: -20L OSHA STORAGE: IB	
3929S	5, 7, 10(0.1%), 12, 18, 21, 22, 24(1%). GAL WT: 8.09 WT PCT SOLIDS: 7.71 VOL PCT SOLIDS: 7.28 SOLVENT DENSITY: 8.05 VOC: 5.0 H: 2 F: 3 R: 0 FLASH PT: -73L OSHA STORAGE: IB	
3939S	12, 20(13%). GAL WT: 6.52 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 6.52 VOC: 6.5 H: 2 F: 3 R: 0 FLASH PT: -73L OSHA STORAGE: IB	
3949S	3, 23. GAL WT: 8.25 WT PCT SOLIDS: 0.14 VOL PCT SOLIDS: 0.15 SOLVENT DENSITY: 8.25 VOC: 6.8 H: 0 F: 1 R: 0 FLASH PT: +200L OSHA STORAGE: IIB	
3979S	6, 9(30%). 12, 19. GAL WT: 7.76 WT PCT SOLIDS: 0.00 VOL PCT SOLIDS: 0.00 SOLVENT DENSITY: 7.76 VOC: 7.7 H: 2 F: 2 R: 0 FLASH PT: +100L OSHA STORAGE: IIB	

Notice: The data in this material safety data sheet relate only to the specific material designated herein and do not relate to use in combination with any other material or in any process.



ATTACHMENT 2

LABORATORY ANALYTICAL DATA PACKAGE

**SEVERN
TRENT
SERVICES**

Severn Trent Laboratories, Inc.
208 South Park Drive, Suite 1, Colchester, VT 05446 Tel: (802) 655-1203

CHAIN OF CUSTODY RECORD

Report to: <u>Benchmark Env Eng & Sc., Inc.</u>	Company: _____	Invoice to: _____	ANALYSIS REQUESTED					
Address: <u>SO Fountain Plaza</u> <u>Suite 1350, Bldg. 14420</u>	Address: <u>Sam E</u>		Lab Use Only Due Date:					
Contact: <u>Tom Fornes</u>	Contact: _____		Temp. of coolers when received (C):					
Phone: <u>716-856-0555</u>	Phone: _____		1 2 3 4 5					
Fax: <u>716-856-0583</u>	Fax: _____		Custody Seal N / Y					
Contract/ Quote: _____			Intact N / Y					
Sampler's Name <u>Rick Dubois</u>	Sampler's Signature <u>Rick Dubois</u>	No./Type of Containers ²	Screened For Radioactivity <input type="checkbox"/>					
Proj. No. <u>BRW001</u>	Project Name <u>BRW001</u>							
Matrix	Date	C o m p	G o r a	Identifying Marks of Sample(s)	VOA 1 Lt.	A/G 250 ml	P/O ml	Lab/Sample ID (Lab Use Only)
AIR	12/14/93	Y	V-1	-Office -Ambient	W	X	X	
		Y	V-1	-Office -Floor				
		Y	V-2	-Warehouse -Floor		X		
		X	V-2	-Warehouse -Ambient		X		
		X	V-3	-Assembly -Floor		X		
		Y	V-3	-Assembly - Ambient		X		
		Y	V-4	-Shipping -Floor		X		
		Y	V-4	-Shipping -Ambient		X		
		Y	ROOF	Sample		F		
<i>Chlorinated Solvents all present until 12/14/93 - Replaced 12/15/93</i>								
Relinquished by: (Signature) <u>John C. Smith</u>	Date 12/15/93	Time 12:00	Received by: Signature <u>John C. Smith</u>	Date 12/15/93	Time 12:00	Received by: Signature <u>John C. Smith</u>	Date 12/15/93	Remarks <u>STL can not accept verbal changes.</u>
Relinquished by: (Signature) <u>John C. Smith</u>	Date 12/15/93	Time 12:00	Received by: Signature <u>John C. Smith</u>	Date 12/15/93	Time 12:00	Received by: Signature <u>John C. Smith</u>	Date 12/15/93	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Received by: (Signature)	Date	Client's delivery of samples constitutes acceptance of Seven Trent Laboratories terms and conditions contained in the Price Schedule.
Matrix Container	WW - Wastewater VOA - 40 ml vial	W - Water A/G - Amber / Or Glass 1 Liter	S - Soil 250 ml - Glass wide mouth	L - Liquid A - Air bag	C - Charcoal Tube P/O - Plastic or other	Sl - Sludge SumA	O - Oil SumA	Please Fax written changes to (802) 655-1248

STL Burlington Data Qualifier Definitions

Organic

- U: Compound analyzed but not detected at a concentration above the reporting limit.
- J: Estimated value.
- N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.
- P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.
- C: Pesticide result whose identification has been confirmed by GC/MS.
- B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.
- E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.
- D: Concentrations identified from analysis of the sample at a secondary dilution.
- A: Tentatively identified compound is a suspected aldol condensation product.
- X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

Inorganic/Metals

- E: Reported value is estimated due to the presence of interference.
- N: Matrix spike sample recovery is not within control limits.
- * Duplicate sample analysis is not within control limits.
- B: The result reported is less than the reporting limit but greater than the instrument detection limit.
- U: Analyte was analyzed for but not detected above the reporting limit.

Method Codes:

P	ICP-AES
MS	ICP-MS
CV	Cold Vapor AA
AS	Semi-Automated Spectrophotometric

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

BENENV SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23000

ROOF SAMPLE

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 97686

Matrix: (soil/water) AIR

Lab Sample ID: 554560

Sample wt/vol: 200.0 (g/mL) ML

Lab File ID: 554560

Level: (low/med) LOW

Date Received: 12/08/03

% Moisture: not dec. _____

Date Analyzed: 12/17/03

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

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) PPBV

Q

CAS NO.	COMPOUND		
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	1.2	
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

BENENV SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23000

ROOF SAMPLE

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 97686

Matrix: (soil/water) AIR Lab Sample ID: 554560

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 554560

Level: (low/med) LOW Date Received: 12/08/03

% Moisture: not dec. Date Analyzed: 12/17/03

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

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

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-Dichlorotetrafluoroethane	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
110-82-7-----	Cyclohexane	0.50	U
124-48-1-----	Dibromochloromethane	0.50	U
75-25-2-----	Bromoform	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
107-05-1-----	3-Chloropropene	0.50	U
540-84-1-----	2,2,4-Trimethylpentane	0.50	U
593-60-2-----	Bromoethene	0.50	U
95-49-8-----	2-Chlorotoluene	0.50	U
110-54-3-----	n-Hexane	0.50	U
142-82-5-----	n-Heptane	0.50	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

BENENV SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23000

V-1-OFFAMB

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 97686

Matrix: (soil/water) AIR

Lab Sample ID: 554553

Sample wt/vol: 200.0 (g/mL) ML

Lab File ID: 554553

Level: (low/med) LOW

Date Received: 12/08/03

% Moisture: not dec. _____

Date Analyzed: 12/16/03

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

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) PPBV

Q

75-71-8-----	Dichlorodifluoromethane	0.50	
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	9.2	
78-87-5-----	1,2-Dichloropropane	0.50	U
10061-01-5-----	cis-1,3-Dichloropropene	0.50	U
108-88-3-----	Toluene	90	E
10061-02-6-----	trans-1,3-Dichloropropene	0.50	U
79-00-5-----	1,1,2-Trichloroethane	0.50	U
127-18-4-----	Tetrachloroethene	11	
108-90-7-----	Chlorobenzene	0.50	U
100-41-4-----	Ethylbenzene	0.50	U
1330-20-7-----	Xylene (m,p)	0.56	
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

BENENV SAMPLE NO.

V-1-OFFAMB

Lab Name: STL BURLINGTON

Contract: 23000

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 97686

Matrix: (soil/water) AIR

Lab Sample ID: 554553

Sample wt/vol: 200.0 (g/mL) ML

Lab File ID: 554553

Level: (low/med) LOW

Date Received: 12/08/03

% Moisture: not dec. _____

Date Analyzed: 12/16/03

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

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

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-Dichlorotetrafluoroethane	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
110-82-7-----	Cyclohexane	4.2	
124-48-1-----	Dibromochloromethane	0.50	U
75-25-2-----	Bromoform	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
107-05-1-----	3-Chloropropene	0.50	U
540-84-1-----	2,2,4-Trimethylpentane	0.50	U
593-60-2-----	Bromoethene	0.50	U
95-49-8-----	2-Chlorotoluene	0.50	U
110-54-3-----	n-Hexane	1.0	
142-82-5-----	n-Heptane	11	

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

BENENV SAMPLE NO.

V-1-OFFAMBDL

Lab Name: STL BURLINGTON Contract: 23000

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 97686

Matrix: (soil/water) AIR Lab Sample ID: 554553D1

Sample wt/vol: 50.00 (g/mL) ML Lab File ID: 554553D

Level: (low/med) LOW Date Received: 12/08/03

% Moisture: not dec. Date Analyzed: 12/17/03

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	2.0	U
107-06-2-----	1,2-Dichloroethane	2.0	U
79-01-6-----	Trichloroethene	9.5	D
78-87-5-----	1,2-Dichloropropane	2.0	U
10061-01-5-----	cis-1,3-Dichloropropene	2.0	U
108-88-3-----	Toluene	120	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	12	D
108-90-7-----	Chlorobenzene	2.0	U
100-41-4-----	Ethylbenzene	2.0	U
1330-20-7-----	Xylene (m,p)	2.0	U
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

BENENV SAMPLE NO.

V-1-OFFAMBDL

Lab Name: STL BURLINGTON

Contract: 23000

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 97686

Matrix: (soil/water) AIR Lab Sample ID: 554553D1

Sample wt/vol: 50.00 (g/mL) ML Lab File ID: 554553D

Level: (low/med) LOW Date Received: 12/08/03

% Moisture: not dec. Date Analyzed: 12/17/03

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-Dichlorotetrafluoroethane	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
110-82-7-----	Cyclohexane	4.5	D
124-48-1-----	Dibromochloromethane	2.0	U
75-25-2-----	Bromoform	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
107-05-1-----	3-Chloropropene	2.0	U
540-84-1-----	2,2,4-Trimethylpentane	2.0	U
593-60-2-----	Bromoethene	2.0	U
95-49-8-----	2-Chlorotoluene	2.0	U
110-54-3-----	n-Hexane	2.0	U
142-82-5-----	n-Heptane	12	D

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

BENENV SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23000

V-1-OFFFLR

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 97686

Matrix: (soil/water) AIR Lab Sample ID: 554552

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 554552

Level: (low/med) LOW Date Received: 12/08/03

% Moisture: not dec. Date Analyzed: 12/16/03

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

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (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	1.0	_____
75-69-4-----	Trichlorofluoromethane	0.90	_____
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	4.7	_____
71-55-6-----	1,1,1-Trichloroethane	5.0	_____
56-23-5-----	Carbon Tetrachloride	0.50	U
71-43-2-----	Benzene	17	_____
107-06-2-----	1,2-Dichloroethane	0.50	U
79-01-6-----	Trichloroethene	89	E
78-87-5-----	1,2-Dichloropropane	0.50	U
10061-01-5-----	cis-1,3-Dichloropropene	0.50	U
108-88-3-----	Toluene	14	_____
10061-02-6-----	trans-1,3-Dichloropropene	0.50	U
79-00-5-----	1,1,2-Trichloroethane	0.50	U
127-18-4-----	Tetrachloroethene	48	E
108-90-7-----	Chlorobenzene	0.50	U
100-41-4-----	Ethylbenzene	5.1	_____
1330-20-7-----	Xylene (m,p)	19	_____
100-42-5-----	Styrene	0.50	U
95-47-6-----	Xylene (o)	8.0	_____
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

BENENV SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23000

V-1-OFFFLR

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 97686

Matrix: (soil/water) AIR Lab Sample ID: 554552

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 554552

Level: (low/med) LOW Date Received: 12/08/03

% Moisture: not dec. Date Analyzed: 12/16/03

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

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) PPBV

Q

87-68-3-----	Hexachlorobutadiene	0.50	U
108-67-8-----	1, 3, 5-Trimethylbenzene	0.86	_____
95-63-6-----	1, 2, 4-Trimethylbenzene	1.4	_____
76-14-2-----	1, 2-Dichlorotetrafluoroethane	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	1.1	_____
110-82-7-----	Cyclohexane	3.5	_____
124-48-1-----	Dibromochloromethane	0.50	U
75-25-2-----	Bromoform	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	_____
107-05-1-----	3-Chloropropene	0.50	U
540-84-1-----	2, 2, 4-Trimethylpentane	0.50	U
593-60-2-----	Bromoethene	0.50	U
95-49-8-----	2-Chlorotoluene	0.50	U
110-54-3-----	n-Hexane	4.0	_____
142-82-5-----	n-Heptane	7.3	_____

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

BENENV SAMPLE NO.

V-1-OFFFLRDL

Lab Name: STL BURLINGTON Contract: 23000

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 97686

Matrix: (soil/water) AIR Lab Sample ID: 554552D1

Sample wt/vol: 50.00 (g/mL) ML Lab File ID: 554552D

Level: (low/med) LOW Date Received: 12/08/03

% Moisture: not dec. Date Analyzed: 12/17/03

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

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) PPBV

CAS NO.	COMPOUND	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	5.5	D
71-55-6-----	1,1,1-Trichloroethane	5.8	D
56-23-5-----	Carbon Tetrachloride	2.0	U
71-43-2-----	Benzene	20	D
107-06-2-----	1,2-Dichloroethane	2.0	U
79-01-6-----	Trichloroethene	140	D
78-87-5-----	1,2-Dichloropropane	2.0	U
10061-01-5-----	cis-1,3-Dichloropropene	2.0	U
108-88-3-----	Toluene	18	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	70	D
108-90-7-----	Chlorobenzene	2.0	U
100-41-4-----	Ethylbenzene	6.0	D
1330-20-7-----	Xylene (m,p)	24	D
100-42-5-----	Styrene	2.0	U
95-47-6-----	Xylene (o)	9.5	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

BENENV SAMPLE NO.

V-1-OFFFLRDL

Lab Name: STL BURLINGTON

Contract: 23000

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 97686

Matrix: (soil/water) AIR

Lab Sample ID: 554552D1

Sample wt/vol: 50.00 (g/mL) ML

Lab File ID: 554552D

Level: (low/med) LOW

Date Received: 12/08/03

% Moisture: not dec. _____

Date Analyzed: 12/17/03

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-Dichlorotetrafluoroethane	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
110-82-7-----	Cyclohexane	4.2	D
124-48-1-----	Dibromochloromethane	2.0	U
75-25-2-----	Bromoform	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	2.1	D
107-05-1-----	3-Chloropropene	2.0	U
540-84-1-----	2,2,4-Trimethylpentane	2.0	U
593-60-2-----	Bromoethene	2.0	U
95-49-8-----	2-Chlorotoluene	2.0	U
110-54-3-----	n-Hexane	4.7	D
142-82-5-----	n-Heptane	8.7	D

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

BENENV SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23000

V-2-WRHSAMB

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 97686

Matrix: (soil/water) AIR Lab Sample ID: 554555

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 554555

Level: (low/med) LOW Date Received: 12/08/03

% Moisture: not dec. Date Analyzed: 12/16/03

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

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) PPBV

Q

75-71-8-----Dichlorodifluoromethane	0.60	
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	2.3	
75-69-4-----Trichlorodifluoromethane	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	0.54	
107-06-2-----1,2-Dichloroethane	0.50	U
79-01-6-----Trichloroethene	6.0	
78-87-5-----1,2-Dichloropropane	0.50	U
10061-01-5-----cis-1,3-Dichloropropene	0.50	U
108-88-3-----Toluene	220	E
10061-02-6-----trans-1,3-Dichloropropene	0.50	U
79-00-5-----1,1,2-Trichloroethane	0.50	U
127-18-4-----Tetrachloroethene	7.1	
108-90-7-----Chlorobenzene	0.50	U
100-41-4-----Ethylbenzene	0.50	U
1330-20-7-----Xylene (m,p)	0.93	
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

BENENV SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23000

V-2-WRHSAMB

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 97686

Matrix: (soil/water) AIR Lab Sample ID: 554555

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 554555

Level: (low/med) LOW Date Received: 12/08/03

% Moisture: not dec. Date Analyzed: 12/16/03

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

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

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(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	0.61	
76-14-2-----	1,2-Dichlorotetrafluoroethane	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
110-82-7-----	Cyclohexane	22	
124-48-1-----	Dibromochloromethane	0.50	U
75-25-2-----	Bromoform	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
107-05-1-----	3-Chloropropene	0.50	U
540-84-1-----	2,2,4-Trimethylpentane	0.50	U
593-60-2-----	Bromoethene	0.50	U
95-49-8-----	2-Chlorotoluene	0.50	U
110-54-3-----	n-Hexane	3.6	
142-82-5-----	n-Heptane	57	E

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

BENENV SAMPLE NO.

V-2-WRHSAMBDL

Lab Name: STL BURLINGTON

Contract: 23000

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 97686

Matrix: (soil/water) AIR

Lab Sample ID: 554555D1

Sample wt/vol:

40.00 (g/mL) ML

Lab File ID: 554555D2

Level: (low/med) LOW

Date Received: 12/08/03

% Moisture: not dec. _____

Date Analyzed: 12/18/03

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

Dilution Factor: 50.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
---------	----------	--	---

75-71-8-----	Dichlorodifluoromethane _____	25	U
74-87-3-----	Chloromethane _____	25	U
75-01-4-----	Vinyl Chloride _____	25	U
74-83-9-----	Bromomethane _____	25	U
75-00-3-----	Chloroethane _____	25	U
75-69-4-----	Trichlorofluoromethane _____	25	U
76-13-1-----	Freon TF _____	25	U
75-35-4-----	1,1-Dichloroethene _____	25	U
75-09-2-----	Methylene Chloride _____	25	U
75-34-3-----	1,1-Dichloroethane _____	25	U
156-59-2-----	cis-1,2-Dichloroethene _____	25	U
67-66-3-----	Chloroform _____	25	U
71-55-6-----	1,1,1-Trichloroethane _____	25	U
56-23-5-----	Carbon Tetrachloride _____	25	U
71-43-2-----	Benzene _____	25	U
107-06-2-----	1,2-Dichloroethane _____	25	U
79-01-6-----	Trichloroethene _____	25	U
78-87-5-----	1,2-Dichloropropane _____	25	U
10061-01-5-----	cis-1,3-Dichloropropene _____	25	U
108-88-3-----	Toluene _____	810	D
10061-02-6-----	trans-1,3-Dichloropropene _____	25	U
79-00-5-----	1,1,2-Trichloroethane _____	25	U
127-18-4-----	Tetrachloroethene _____	25	U
108-90-7-----	Chlorobenzene _____	25	U
100-41-4-----	Ethylbenzene _____	25	U
1330-20-7-----	Xylene (m,p) _____	25	U
100-42-5-----	Styrene _____	25	U
95-47-6-----	Xylene (o) _____	25	U
79-34-5-----	1,1,2,2-Tetrachloroethane _____	25	U
541-73-1-----	1,3-Dichlorobenzene _____	25	U
106-46-7-----	1,4-Dichlorobenzene _____	25	U
95-50-1-----	1,2-Dichlorobenzene _____	25	U
120-82-1-----	1,2,4-Trichlorobenzene _____	25	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

BENENV SAMPLE NO.

V-2-WRHSAMBBL

Lab Name: STL BURLINGTON

Contract: 23000

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 97686

Matrix: (soil/water) AIR

Lab Sample ID: 554555D1

Sample wt/vol: 40.00 (g/mL) ML

Lab File ID: 554555D2

Level: (low/med) LOW

Date Received: 12/08/03

% Moisture: not dec. _____

Date Analyzed: 12/18/03

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

Dilution Factor: 50.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) PPBV

Q

87-68-3-----	Hexachlorobutadiene	25	U
108-67-8-----	1,3,5-Trimethylbenzene	25	U
95-63-6-----	1,2,4-Trimethylbenzene	25	U
76-14-2-----	1,2-Dichlorotetrafluoroethane	25	U
106-93-4-----	1,2-Dibromoethane	25	U
106-99-0-----	1,3-Butadiene	25	U
75-15-0-----	Carbon Disulfide	25	U
110-82-7-----	Cyclohexane	26	D
124-48-1-----	Dibromochloromethane	25	U
75-25-2-----	Bromoform	25	U
75-27-4-----	Bromodichloromethane	25	U
156-60-5-----	trans-1,2-Dichloroethene	25	U
622-96-8-----	4-Ethyltoluene	25	U
107-05-1-----	3-Chloropropene	25	U
540-84-1-----	2,2,4-Trimethylpentane	25	U
593-60-2-----	Bromoethene	25	U
95-49-8-----	2-Chlorotoluene	25	U
110-54-3-----	n-Hexane	25	U
142-82-5-----	n-Heptane	68	D

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

BENENV SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23000

V-2-WRHSFLR

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 97686

Matrix: (soil/water) AIR Lab Sample ID: 554554

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 554554

Level: (low/med) LOW Date Received: 12/08/03

% Moisture: not dec. Date Analyzed: 12/16/03

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

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) PPBV

Q

75-71-8-----	Dichlorodifluoromethane	0.61	
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	6.5	
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	1.0	
71-55-6-----	1,1,1-Trichloroethane	8.9	
56-23-5-----	Carbon Tetrachloride	0.50	U
71-43-2-----	Benzene	1.7	
107-06-2-----	1,2-Dichloroethane	0.50	U
79-01-6-----	Trichloroethene	3.3	
78-87-5-----	1,2-Dichloropropane	0.50	U
10061-01-5-----	cis-1,3-Dichloropropene	0.50	U
108-88-3-----	Toluene	49	E
10061-02-6-----	trans-1,3-Dichloropropene	0.50	U
79-00-5-----	1,1,2-Trichloroethane	0.50	U
127-18-4-----	Tetrachloroethene	6.8	
108-90-7-----	Chlorobenzene	0.50	U
100-41-4-----	Ethylbenzene	1.1	
1330-20-7-----	Xylene (m,p)	4.7	
100-42-5-----	Styrene	1.9	
95-47-6-----	Xylene (o)	1.3	
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

BENENV SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23000

V-2-WRHSFLR

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 97686

Matrix: (soil/water) AIR

Lab Sample ID: 554554

Sample wt/vol: 200.0 (g/mL) ML

Lab File ID: 554554

Level: (low/med) LOW

Date Received: 12/08/03

% Moisture: not dec. _____

Date Analyzed: 12/16/03

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

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

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	_____
95-63-6-----1,2,4-Trimethylbenzene	1.4	_____
76-14-2-----1,2-Dichlorotetrafluoroethane	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	2.2	_____
110-82-7-----Cyclohexane	5.5	_____
124-48-1-----Dibromochloromethane	0.50	U
75-25-2-----Bromoform	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	1.1	_____
107-05-1-----3-Chloropropene	0.50	U
540-84-1-----2,2,4-Trimethylpentane	0.50	U
593-60-2-----Bromoethene	0.50	U
95-49-8-----2-Chlorotoluene	0.50	U
110-54-3-----n-Hexane	5.6	_____
142-82-5-----n-Heptane	9.1	_____

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

BENENV SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23000

V-2-WRHSFLRDL

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 97686

Matrix: (soil/water) AIR

Lab Sample ID: 554554D1

Sample wt/vol: 100.0 (g/mL) ML

Lab File ID: 554554D

Level: (low/med) LOW

Date Received: 12/08/03

% Moisture: not dec. _____

Date Analyzed: 12/17/03

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-----	Trichlorodifluoromethane	6.2	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	8.7	D
56-23-5-----	Carbon Tetrachloride	1.0	U
71-43-2-----	Benzene	1.6	D
107-06-2-----	1,2-Dichloroethane	1.0	U
79-01-6-----	Trichloroethene	3.2	D
78-87-5-----	1,2-Dichloropropane	1.0	U
10061-01-5-----	cis-1,3-Dichloropropene	1.0	U
108-88-3-----	Toluene	52	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	6.8	D
108-90-7-----	Chlorobenzene	1.0	U
100-41-4-----	Ethylbenzene	1.1	D
1330-20-7-----	Xylene (m,p)	4.6	D
100-42-5-----	Styrene	1.8	D
95-47-6-----	Xylene (o)	1.3	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

BENENV SAMPLE NO.

V-2-WRHSFLRDL

Lab Name: STL BURLINGTON

Contract: 23000

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 97686

Matrix: (soil/water) AIR Lab Sample ID: 554554D1

Sample wt/vol: 100.0 (g/mL) ML Lab File ID: 554554D

Level: (low/med) LOW Date Received: 12/08/03

% Moisture: not dec. Date Analyzed: 12/17/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 2.0

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

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	1.4	D
76-14-2-----	1,2-Dichlorotetrafluoroethane	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	2.0	D
110-82-7-----	Cyclohexane	5.4	D
124-48-1-----	Dibromochloromethane	1.0	U
75-25-2-----	Bromoform	1.0	U
75-27-4-----	Bromodichloromethane	1.0	U
156-60-5-----	trans-1,2-Dichloroethene	1.0	U
622-96-8-----	4-Ethyltoluene	1.1	D
107-05-1-----	3-Chloropropene	1.0	U
540-84-1-----	2,2,4-Trimethylpentane	1.0	U
593-60-2-----	Bromoethene	1.0	U
95-49-8-----	2-Chlorotoluene	1.0	U
110-54-3-----	n-Hexane	5.4	D
142-82-5-----	n-Heptane	9.2	D

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

BENENV SAMPLE NO.

V-3-AS AMB

Lab Name: STL BURLINGTON

Contract: 23000

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 97686

Matrix: (soil/water) AIR

Lab Sample ID: 554557

Sample wt/vol: 200.0 (g/mL) ML

Lab File ID: 554557

Level: (low/med) LOW

Date Received: 12/08/03

% Moisture: not dec. _____

Date Analyzed: 12/17/03

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	0.55	
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	9.4	
78-87-5-----	1,2-Dichloropropane	0.50	U
10061-01-5-----	cis-1,3-Dichloropropene	0.50	U
108-88-3-----	Toluene	160	E
10061-02-6-----	trans-1,3-Dichloropropene	0.50	U
79-00-5-----	1,1,2-Trichloroethane	0.50	U
127-18-4-----	Tetrachloroethene	11	
108-90-7-----	Chlorobenzene	0.50	U
100-41-4-----	Ethylbenzene	0.50	U
1330-20-7-----	Xylene (m,p)	0.56	
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

BENENV SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23000

V-3-AS AMB

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 97686

Matrix: (soil/water) AIR

Lab Sample ID: 554557

Sample wt/vol: 200.0 (g/mL) ML

Lab File ID: 554557

Level: (low/med) LOW

Date Received: 12/08/03

% Moisture: not dec. _____

Date Analyzed: 12/17/03

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

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

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-Dichlorotetrafluoroethane	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
110-82-7-----Cyclohexane	11	_____
124-48-1-----Dibromochloromethane	0.50	U
75-25-2-----Bromoform	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
107-05-1-----3-Chloropropene	0.50	U
540-84-1-----2,2,4-Trimethylpentane	0.50	U
593-60-2-----Bromoethene	0.50	U
95-49-8-----2-Chlorotoluene	0.50	U
110-54-3-----n-Hexane	1.6	_____
142-82-5-----n-Heptane	29	_____

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

BENENV SAMPLE NO.

V-3-AS AMBDL

Lab Name: STL BURLINGTON

Contract: 23000

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 97686

Matrix: (soil/water) AIR Lab Sample ID: 554557D1

Sample wt/vol: 10.00 (g/mL) ML Lab File ID: 554557D2

Level: (low/med) LOW Date Received: 12/08/03

% Moisture: not dec. Date Analyzed: 12/18/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 20.0

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

CONCENTRATION UNITS:
(ug/L or ug/Kg) PPBV

Q

75-71-8-----	Dichlorodifluoromethane	10	U
74-87-3-----	Chloromethane	10	U
75-01-4-----	Vinyl Chloride	10	U
74-83-9-----	Bromomethane	10	U
75-00-3-----	Chloroethane	10	U
75-69-4-----	Trichlorofluoromethane	10	U
76-13-1-----	Freon TF	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-09-2-----	Methylene Chloride	10	U
75-34-3-----	1,1-Dichloroethane	10	U
156-59-2-----	cis-1,2-Dichloroethene	10	U
67-66-3-----	Chloroform	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
71-43-2-----	Benzene	10	U
107-06-2-----	1,2-Dichloroethane	10	U
79-01-6-----	Trichloroethene	18	D
78-87-5-----	1,2-Dichloropropane	10	U
10061-01-5-----	cis-1,3-Dichloropropene	10	U
108-88-3-----	Toluene	650	D
10061-02-6-----	trans-1,3-Dichloropropene	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
127-18-4-----	Tetrachloroethene	22	D
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
1330-20-7-----	Xylene (m,p)	10	U
100-42-5-----	Styrene	10	U
95-47-6-----	Xylene (o)	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

BENENV SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23000

V-3-AS AMBDL

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 97686

Matrix: (soil/water) AIR

Lab Sample ID: 554557D1

Sample wt/vol: 10.00 (g/mL) ML

Lab File ID: 554557D2

Level: (low/med) LOW

Date Received: 12/08/03

% Moisture: not dec. _____

Date Analyzed: 12/18/03

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

Dilution Factor: 20.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.

COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) PPBV

Q

87-68-3-----	Hexachlorobutadiene	10	U
108-67-8-----	1,3,5-Trimethylbenzene	10	U
95-63-6-----	1,2,4-Trimethylbenzene	10	U
76-14-2-----	1,2-Dichlorotetrafluoroethane	10	U
106-93-4-----	1,2-Dibromoethane	10	U
106-99-0-----	1,3-Butadiene	10	U
75-15-0-----	Carbon Disulfide	10	U
110-82-7-----	Cyclohexane	21	D
124-48-1-----	Dibromochloromethane	10	U
75-25-2-----	Bromoform	10	U
75-27-4-----	Bromodichloromethane	10	U
156-60-5-----	trans-1,2-Dichloroethene	10	U
622-96-8-----	4-Ethyltoluene	10	U
107-05-1-----	3-Chloropropene	10	U
540-84-1-----	2,2,4-Trimethylpentane	10	U
593-60-2-----	Bromoethene	10	U
95-49-8-----	2-Chlorotoluene	10	U
110-54-3-----	n-Hexane	10	U
142-82-5-----	n-Heptane	57	D

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

BENENV SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23000

V-3-AS FLR

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 97686

Matrix: (soil/water) AIR

Lab Sample ID: 554556

Sample wt/vol: 200.0 (g/mL) ML

Lab File ID: 554556

Level: (low/med) LOW

Date Received: 12/08/03

% Moisture: not dec. _____

Date Analyzed: 12/17/03

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	0.57	
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	0.59	
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	4.8	
56-23-5-----	Carbon Tetrachloride	0.50	U
71-43-2-----	Benzene	0.80	
107-06-2-----	1,2-Dichloroethane	0.50	U
79-01-6-----	Trichloroethene	43	E
78-87-5-----	1,2-Dichloropropane	0.50	U
10061-01-5-----	cis-1,3-Dichloropropene	0.50	U
108-88-3-----	Toluene	220	E
10061-02-6-----	trans-1,3-Dichloropropene	0.50	U
79-00-5-----	1,1,2-Trichloroethane	0.50	U
127-18-4-----	Tetrachloroethene	22	
108-90-7-----	Chlorobenzene	0.50	U
100-41-4-----	Ethylbenzene	0.50	U
1330-20-7-----	Xylene (m,p)	1.6	
100-42-5-----	Styrene	0.50	U
95-47-6-----	Xylene (o)	0.50	U
79-34-5-----	1,1,2-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

BENENV SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23000

V-3-AS FLR

Lab Code: STLVT Case No.: 23000 SAS No.: SDG No.: 97686

Matrix: (soil/water) AIR Lab Sample ID: 554556

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 554556

Level: (low/med) LOW Date Received: 12/08/03

% Moisture: not dec. Date Analyzed: 12/17/03

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	0.66	_____
76-14-2-----	-1,2-Dichlorotetrafluoroethane	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
110-82-7-----	-Cyclohexane	28	_____
124-48-1-----	-Dibromochloromethane	0.50	U
75-25-2-----	-Bromoform	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
107-05-1-----	-3-Chloropropene	0.50	U
540-84-1-----	-2,2,4-Trimethylpentane	0.50	U
593-60-2-----	-Bromoethene	0.50	U
95-49-8-----	-2-Chlorotoluene	0.50	U
110-54-3-----	-n-Hexane	5.1	_____
142-82-5-----	-n-Heptane	72	E

FORM 1
VOLATILE ORGANICS ANALYSIS DATA SHEET

BENENV SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23000

V-3-AS FLRDL

Lab Code: STLVT

Case No.: 23000

SAS No.:

SDG No.: 97686

Matrix: (soil/water) AIR

Lab Sample ID: 554556D1

Sample wt/vol:

40.00 (g/mL) ML

Lab File ID: 554556D2

Level: (low/med) LOW

Date Received: 12/08/03

% Moisture: not dec. _____

Date Analyzed: 12/18/03

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

Dilution Factor: 50.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) PPBV	Q
---------	----------	--	---

75-71-8-----	Dichlorodifluoromethane	25	U
74-87-3-----	Chloromethane	25	U
75-01-4-----	Vinyl Chloride	25	U
74-83-9-----	Bromomethane	25	U
75-00-3-----	Chloroethane	25	U
75-69-4-----	Trichlorodifluoromethane	25	U
76-13-1-----	Freon TF	25	U
75-35-4-----	1,1-Dichloroethene	25	U
75-09-2-----	Methylene Chloride	25	U
75-34-3-----	1,1-Dichloroethane	25	U
156-59-2-----	cis-1,2-Dichloroethene	25	U
67-66-3-----	Chloroform	25	U
71-55-6-----	1,1,1-Trichloroethane	25	U
56-23-5-----	Carbon Tetrachloride	25	U
71-43-2-----	Benzene	25	U
107-06-2-----	1,2-Dichloroethane	25	U
79-01-6-----	Trichloroethene	55	D
78-87-5-----	1,2-Dichloropropane	25	U
10061-01-5-----	cis-1,3-Dichloropropene	25	U
108-88-3-----	Toluene	1000	D
10061-02-6-----	trans-1,3-Dichloropropene	25	U
79-00-5-----	1,1,2-Trichloroethane	25	U
127-18-4-----	Tetrachloroethene	28	D
108-90-7-----	Chlorobenzene	25	U
100-41-4-----	Ethylbenzene	25	U
1330-20-7-----	Xylene (m,p)	25	U
100-42-5-----	Styrene	25	U
95-47-6-----	Xylene (o)	25	U
79-34-5-----	1,1,2,2-Tetrachloroethane	25	U
541-73-1-----	1,3-Dichlorobenzene	25	U
106-46-7-----	1,4-Dichlorobenzene	25	U
95-50-1-----	1,2-Dichlorobenzene	25	U
120-82-1-----	1,2,4-Trichlorobenzene	25	U

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Fax: 716.856.2545
Tel: 716.856.5636
Buffalo, NY 14202-1805
282 Delaware Avenue
URS Corporation

File: 05-000-35798.01 / C-1
cc: Don McCall, P.E.

Design Task Manager
Don Sundquist, Ph.D.


URS CORPORATION

Sincerely yours,

If you have any questions or comments, please do not hesitate to call me at 716-856-5636.

Enclosed please find 4 copies of the 95% Construction Cost Estimate and the Limited Data Document for the above referenced site. These documents accompany the 95% Design documents submitted on April 17, 2002.

Dear Mr. Caffoe:

RE: 95% DESIGN SUBMITTAL - CALCULATIONS AND LIMITED DATA
DOCUMENT
DINABURG DISTRIBUTING, INC.
WORK ASSIGNMENT #D003825-26

Todd M. Caffoe, P.E.
New York State DEC
Division of Environmental Remediation, Region 8
6274 East Avon-Lima Road
Avon, NY 14414-9519
Todd M. Caffoe, P.E.
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MAY 08 2002
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REGION 8

May 3, 2002

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