# INVESTIGATION REPORT FOR WIN-HOLT EQUIPMENT CORPORATION SITE 592 BROOK STREET GARDEN CITY, NEW YORK

### NYSDEC VOLUNTARY CLEANUP PROGRAM SITE # V00243-1

FOR SUBMITTAL TO

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PREPARED BY



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**MARCH 2004** 

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# SECTION 1.0 INTRODUCTION AND PURPOSE

This Investigation Report has been prepared by FPM Group (FPM) for the New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Program (VCP) Site #V00243-1 identified as Win-Holt Equipment Corporation (Win-Holt) located at 592 and 606 Brook Street in Garden City, New York (Site). This Investigation Report was prepared to document the results of the investigation described in our December 2002 Investigation Work Plan as approved by the NYSDEC on January 24, 2003.

Impacted soil and groundwater have been identified at the Site based on the results of previous investigations, and remediation has previously been performed to address impacted soil. Prior to this investigation, impacted groundwater was noted to extend downgradient of the Site. The extent of the groundwater impact has been delineated. Soil gas sampling was also performed, a receptor survey was completed, and an exposure assessment was prepared.

A summary of the Site history is included in Section 2 of this report together with a description of the environmental setting of the Site. Previous investigation results and remediation are also briefly discussed in Section 2. The results of this investigation are described in Section 3 of this report together with the field sampling procedures. The receptor survey and exposure assessment are covered in Section 4.

# SECTION 2.0 SITE BACKGROUND AND PREVIOUS INVESTIGATIONS/REMEDIATION

Details of the Site history, environmental setting, previous investigations, and remediation were described in detail in Section 2.0 of the Investigation Work Plan. This information is presented in a summary form below.

#### 2.1 Environmental Setting

The topographic surface in the vicinity of the Site slopes gently to the southwest and there are no natural surface water bodies (streams, rivers, or lakes) within one mile downgradient of the Site. Since the rear parking lot of the Site has recently been asphalt-paved with a stormwater drainage catch basin added, surface water from the Site is now directed to the catch basin and associated leaching pools. The Site building roof drains are reported to be connected to the Nassau County storm sewer and, therefore, do not discharge to the Site subsurface.

The surface materials at the Site (prior to urbanization) consisted of glacial outwash deposits of the Wisconsinan glaciation. These deposits, which are referred to as the upper Pleistocene Glacial Deposits, include stratified sand and gravel, which were deposited in meltwater stream channels and outwash plains. The upper Pleistocene Glacial Deposits are approximately 100 feet thick beneath the Site.

There are two primary aquifers beneath the Site. The Upper Glacial Aquifer is a shallow water table aquifer and is associated with the upper Pleistocene Glacial Deposits. The depth to water in the Site area is approximately 25 feet and the base of the Upper Glacial Aquifer is approximately 100 feet below grade. Therefore, this aquifer has a saturated thickness of approximately 75 feet beneath the Site. The regional groundwater flow direction across the Site is generally to the southwest.

The deeper aquifer is the Magothy Aquifer, which underlies the Upper Glacial Aquifer. It is estimated to be approximately 400 feet thick in the Site area and is associated with the Magothy Formation.

#### 2.2 Site History

The Site is located in a commercial and industrial area. Commercial and industrial buildings are located immediately to the north, east, south, and west of the Site. Further to the north, the Long Island Rail

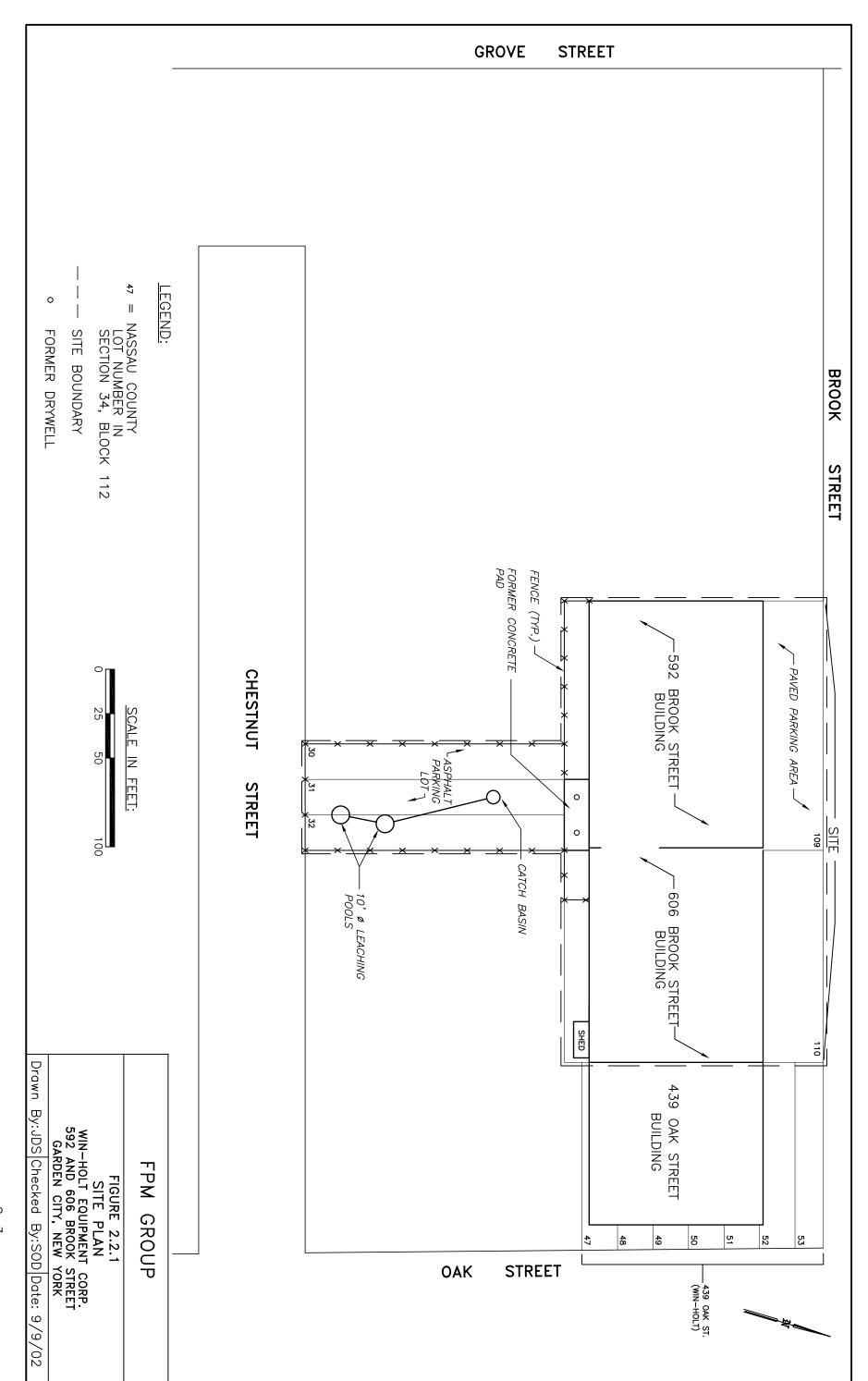
Road tracks are present. Nassau Community College and Nassau County Veterans Memorial Coliseum are located further to the east. Hofstra University and additional commercial and industrial developments are located further to the south. Further to the west is a residential area.

Win-Holt owns and operates 592 and 606 Brook Street in Garden City. A site plan depicted in Figure 2.2.1 shows the two buildings associated with the above addresses. Win-Holt also owns and operates an adjoining building at 439 Oak Street. However, this building is not included in the Site.

The 592 Brook Street address is assigned to the following Nassau County Tax Map numbers: Section 34, Block 112, Lots 109 and 30 through 32. Lot 109 was acquired by Win-Holt in 1967 from David Cohen and Lots 30 through 32 were acquired by Win-Holt in 1984 from Joseph Andrews, who had owned them since 1954. A 15,960-square-foot brick and concrete-block building was completed on Lot 109 in approximately 1962. The building was reported to have been used for a warehouse. No tanks, floor drains, or other subsurface structures were shown on the site plans or plumbing plans for the building other than the four drywells connected to roof drains on the north side of the building. One set of bathrooms is shown on the plumbing plan and a sewer connection was noted. The Nassau County Department of Public Works (NCDPW) confirmed the sewer connection with a dye test in September 2002. No buildings or other structures are reported to the Town of Hempstead Building Department for Lots 30 through 32.

The 606 Brook Street address is assigned the following Nassau County Tax Map Number: Section 34, Block 112, and Lot 110. This lot was acquired by Win-Holt in 1984 from David Cohen. An industrial building that had previously been damaged by fire was reconstructed at this location in 1960. No tanks, floor drains, drywells, or other subsurface structures are shown. The NCDPW has confirmed a sewer connection at 606 Brook Street.

The Site building at 592 Brook Street includes an office area on the north side and a manufacturing area on the south side. The manufacturing area is primarily used for the painting of finished metal products and a paint booth is present inside the building along the south wall. Cutting, grinding, welding and other metal-working processes are performed in the Site building at 606 Brook Street and the adjoining building at



439 Oak Street. Metal parts are transferred either manually or via overhead conveyors both within the Site buildings and between the Site buildings and the adjoining building at 439 Oak Street.

On the south side of the Site building at 592 Brook Street is an area formerly used for storage of metal parts and equipment. Storage was primarily within enclosed trailers. This area was recently paved and is now used for parking. A concrete pad with curbing was formerly located adjoining the south wall of the building and was also used for storage of metal parts and drums. Two drains (drywells) were located beneath this pad for the purpose of discharging stormwater that would otherwise have accumulated on the pad. This pad and the associated drywells were removed in 1997 during a remediation event, as described in Section 2.3 below.

In September 1995 a spill was reported at the Site (#95-07064) based on a NYSDEC inspection. The NYSDEC reported that a drywell behind the Site building appeared contaminated and also noted that a 275-gallon waste oil above-ground storage tank (AST) was present, which exhibited petroleum-like odors and may have had contaminated soil beneath it. The investigations and remediation described in the following sections were performed in response to the reported spill. The Nassau County Department of Health (NCDOH) records for 592 Brook Street indicate that an inspection performed on November 14, 1996 revealed that waste drums were stored outdoors and a visibly-contaminated drywell was noted behind the building. A November 26, 1996 letter from the NYSDEC indicates that remedial action was required in connection with the waste oil AST and a visibly-contaminated drywell.

#### 2.3 Previous Investigation and Remediation Results

Several investigations have previously been performed to evaluate soil and groundwater conditions at and downgradient of the Site. All of this work has been performed at the 592 Brook Street address; no work was required at 606 Brook Street. Copies of the previous data were included in Appendix A of the December 2002 Investigation Work Plan.

Several remediation events have also occurred at the Site. Remediation procedures and results are also summarized below. All remediation was overseen by the NYSDEC, the Nassau County Fire Marshal (NCFM) or the NCDOH.



#### 1995 Reported Spill

Following the report of the spill in September 1995, Win-Holt retained Corporate Safety & Health Consultants (CSHC) to assist in addressing with environmental issues. CSHC subsequently obtained a sample of the sludge in the western drywell (drywell #1) on September 18, 1995 and had the sample analyzed for volatile organic compounds (VOCs) and metals. The results indicated that concentrations of several VOCs, lead, and chromium in the drywell sludge exceeded the NYSDEC's Recommended Soil Cleanup Objectives (Objectives).

#### <u>AST</u>

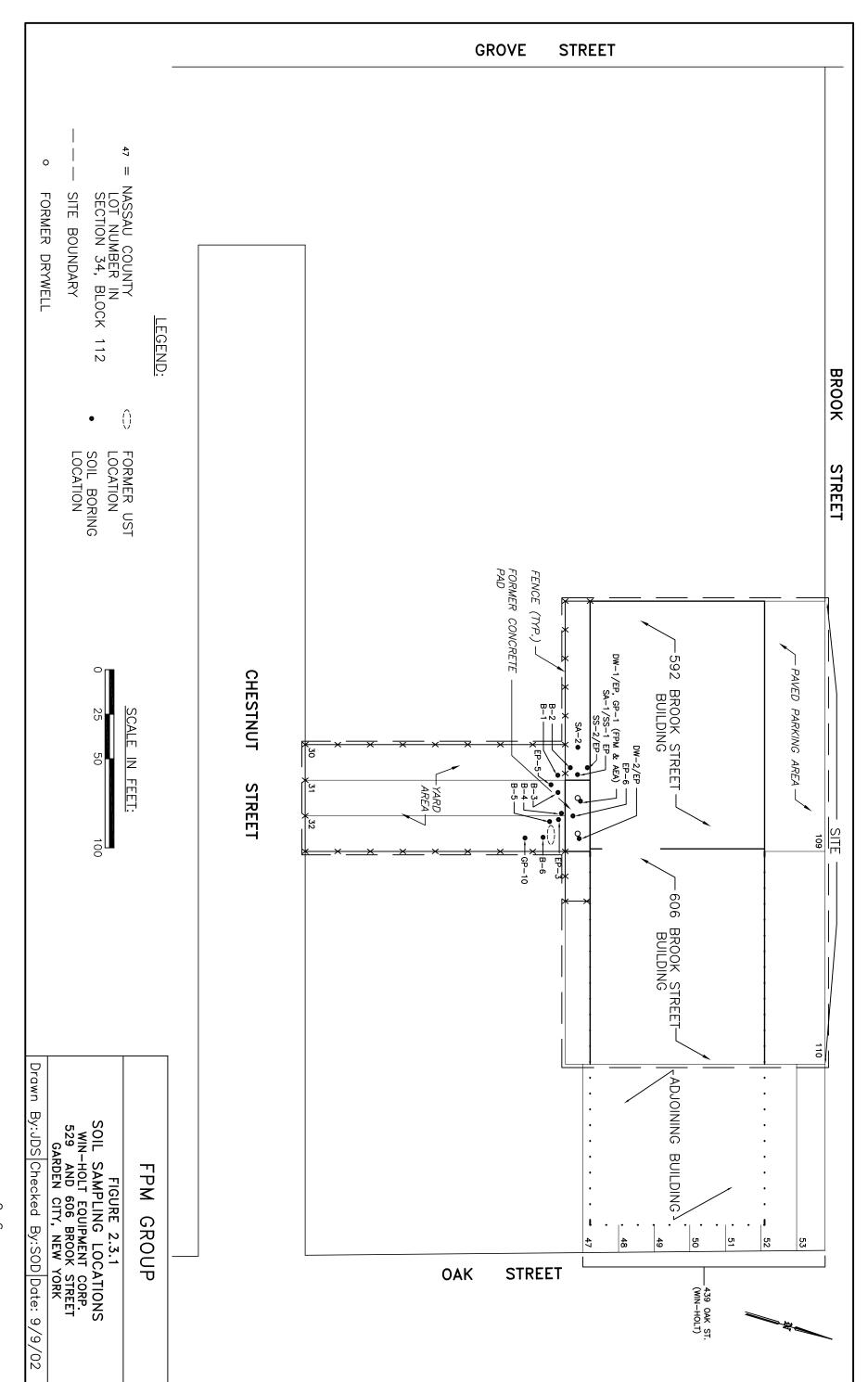
CSHC also confirmed that the 275-gallon AST noted by the NYSDEC contained waste oil. On September 19, 1995, with the oversight of the NCFM, the 275-gallon waste oil AST was emptied of its contents by a waste oil contractor and the waste oil was subsequently properly disposed. The ground beneath the former AST location was examined and found to be free of visible contamination; therefore, confirmatory soil samples were not required by the NCFM.

#### 1995 Soil Sampling

Apex Environmental, Inc. (Apex) conducted a soil investigation at the Site in October 1995. Soil sampling locations are shown on Figure 2.3.1. During this investigation it was confirmed that the two drywells in the concrete pad on the south side of the Site building were intended to collect and discharge stormwater from the concrete pad area. Soil borings B-1 through B-4, SA-1 and SA-2 were performed adjoining the south and west sides of the pad and a wedge of soil impacted with VOCs and metals was identified. This soil appeared to have been visibly impacted by paint.

#### UST

During the Apex investigation, a previously-unreported UST was identified beneath one of the storage trailers as shown on Figure 2.3.1. The storage trailer had been parked at its location since the early 1970s and, therefore, the UST had not been used since at least that time. The UST appeared to be approximately 300 gallons in size and appeared to contain used motor oil. Two soil borings (B-5 and B-6)



were performed next to the UST and no visual indications of a potential release from the UST were noted.

Therefore, no samples from the B-5 or B-6 borings were analyzed.

Remediation in connection with this UST was performed by Soil Mechanics Environmental Services (SMES) and the results were documented in a June 12, 1997 report to the NCDOH. The UST was confirmed to be 275 gallons in size and to contain waste oil. The UST was pumped of its contents, excavated, opened, cleaned, inspected, and disposed in April 1997. The removed UST, the excavation and the overburden soil were inspected by a NCDOH representative on April 8, 1997 and no indications of tank failure or petroleum release were noted. Based on this inspection, no soil sampling was required and the NCDOH authorized the backfilling of the excavation.

#### Drywell Remediation

In April 1997, the area of the concrete pad to the south of the Site building, including the two drywell structures, was remediated by SMES. The results are documented in a June 17, 1997 report to the NYSDEC and the remediation was overseen by the NYSDEC. The drywell structures were both confirmed to be constructed of perforated 55-gallon drums and no piping was found to be associated with either drum. The concrete pad, the drywell structures, and surrounding soils were excavated and stockpiled on poly sheeting pending waste classification for disposal. Approximately 600 tons of material were excavated. Excavation of soil progressed until the remaining soil appeared to be visually clean. A photoionization detector (PID) was used to screen the remaining soils for the presence of organic vapors.

Seven confirmatory end-point samples were collected and analyzed for VOCs (Method 8260 list), semivolatile organic compounds (SVOCs, Method 8270 list) and Resource Conservation and Recovery Act (RCRA) metals. The sample locations are shown on Figure 2.3.1. A slightly elevated concentration of one SVOC, benzo(a)pyrene, remained at the EP-6 location at four feet below grade and approximately in the center of the former location of the concrete pad. Several petroleum-related VOCs, including toluene, ethylbenzene, xylenes, and trimethylbenzenes, were detected in the DW-1 end-point sample from 14 feet below grade. No chlorinated solvents or metals were detected in any of the end-point samples at

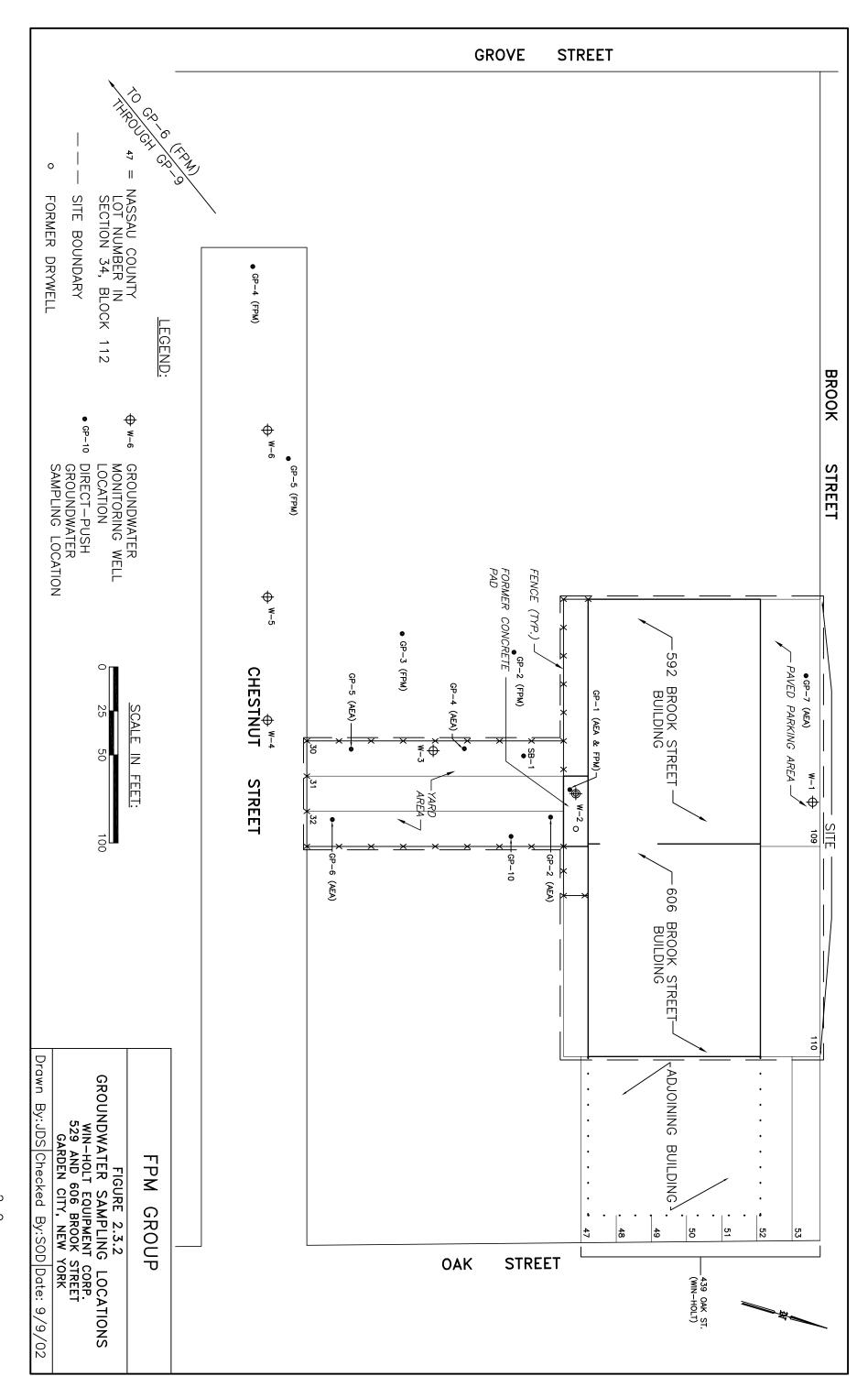
concentrations above the NYSDEC Objectives. The excavation was subsequently backfilled with clean fill and closed. The 600 tons of stockpiled soil was subsequently removed and disposed in October 1997.

A subsurface investigation was performed by American Environmental Assessment Corp. (AEA) in August 1997 to evaluate the extent of impacted soil remaining in the vicinity of the former drywell #1 (western drywell). Soil samples were obtained from three depths in a soil boring performed in the vicinity of the former drywell (GP-1), as shown on Figure 2.3.1. The retrieved samples were screened with a PID and the two deepest samples (22 to 24 and 28 to 30 feet below grade) were submitted for analysis for benzene, toluene, ethylbenzene and xylenes (BTEX) by Method 602. A groundwater sample was also obtained from the GP-1 location and from nearby location GP-2 to evaluate groundwater conditions beneath the Site, as shown on Figure 2.3.2. These groundwater samples were also analyzed for BTEX using Method 602.

The soil sample results indicated that BTEX compounds, including toluene, ethylbenzene, and xylenes, were detected in the soil sample from 22 to 24 feet, with the concentrations of ethylbenzene and xylenes exceeding their NYSDEC Objectives. The soil sample from 28 to 30 feet did not contain detectable concentrations of BTEX. Therefore, the remaining impacted soil in the vicinity of the former drywell #1 appears to be limited to the interval between 14 and approximately 24 feet below grade.

BTEX compounds were also present in the GP-1 groundwater sample, with the concentrations of toluene, ethylbenzene and xylenes exceeding the NYSDEC Class GA Ambient Water Quality Standards (Standards). Toluene and xylenes were also detected in the groundwater at the GP-2 location; however, the detected concentrations did not exceed the NYSDEC Standards. Based on these data, the area of impacted groundwater in August 1997, shortly following remediation of the drywells, included the area in the vicinity of the former drywell #1 but did not extend as far southeast as the GP-2 location.

A groundwater investigation was performed by AEA at the Site in November 1997. Groundwater samples were obtained from five locations (SB-1, and GP-4 through GP-7), as shown on Figure 2.3.2. Each sample was collected from near the water table surface except for the SB-1 sample, which was collected from approximately 10 feet below the water table surface. The samples were analyzed for BTEX (Method 602). BTEX compounds, including toluene, ethylbenzene, and/or xylenes, were detected at the SB-1, GP-4,



GP-5, and GP-6 locations, although the concentrations detected at GP-5 were relatively low and the concentration detected at GP-6 did not exceed the NYSDEC Standard. BTEX was not detected at the GP-7 location, which is located on the upgradient side of the Site.

FPM performed additional soil sampling at the Site in June 2001, as outlined in a revised and subsequently approved investigation work plan submitted to the NYSDEC on October 31, 2000. Two soil borings (GP-1 and GP-10) were performed; GP-1 was performed at the location of the former drywell #1 where the end-point soil sample had contained concentrations of petroleum compounds exceeding the NYSDEC Objectives. Boring GP-10 was performed approximately 40 feet east-southeast of this former drywell, in the vicinity of the former AEA GP-2 location. At each boring, two soil samples were collected from depths of 10 to 12 feet and 20 to 22 feet below grade and the samples were analyzed for VOCs by USEPA Method 8260. The results, reported in FPM's September 4, 2001 letter to the NYSDEC, indicated that no targeted analytes were detected in any of these soil samples.

FPM installed five groundwater monitoring wells (W-1 through W-5) in January 1999 as described in a NYSDEC-approved work plan dated December 11, 1998. All wells were installed to a depth of approximately 34 feet below grade (10 feet below the water table) and were sampled for petroleum compounds in February 1999. The groundwater elevations obtained from the newly-installed wells indicated that the site-specific groundwater flow direction is approximately S25°W, which is consistent with the regional groundwater flow direction. No floating product was detected in any of the wells.

The groundwater samples were analyzed for BTEX using Method 8240. Benzene was not detected in any of the wells sampled. In addition, the upgradient well (W-1) showed no detections of toluene, ethylbenzene or xylenes (TEX). Well W-3 showed slight detections of TEX, none of which exceeded the NYSDEC Standards. Wells W-2, W-4, and W-5 each showed detections of TEX, all of which exceeded the Standards for those compounds. Well W-2, which is located in the approximate location of the former leaching pool, showed the highest concentrations of TEX. In addition, odors noted during the well drilling and sampling indicated VOCs other than petroleum may be present.

Based on the results of the 1999 groundwater sampling, additional groundwater sampling was proposed to further define the nature and extent of groundwater contamination both onsite and offsite. The scope of this work is documented in an October 31, 2000 work plan, which was approved by the NYSDEC, with revisions, on November 3, 2000. In January 2001, monitoring well W-6 was installed to delineate the western edge of the impacted groundwater. In February 2001, wells W-2, and W-4 through W-6 were sampled and analyzed for VOCs and SVOCs by USEPA Methods 8260 and 8270, respectively.

Elevated concentrations of total xylenes, toluene and ethylbenzene continued to be noted at well W-2, although the concentrations were lower than previously detected. These analytes were either not detected or were detected at low concentrations at the other wells. In addition, several other analytes, primarily solvents, including 1,1,1-trichloroethane (1,1,1-TCA), trichloroethylene (TCE), and tetrachloroethylene (PCE), were detected at well W-2 at concentrations exceeding NYSDEC Standards. Elevated concentrations of 1,1,1-TCA were also detected at wells W-6 and W-5. Elevated concentrations of TCE were also detected at wells W-4, W-5 and W-6. In addition, several breakdown products of 1,1,1-TCA and TCE, including 1,1-dichloroethane, 1,1-dichloroethene, and/or cis-1,2-dichloroethene were detected at elevated concentrations at wells W-2 and W-6. No SVOCs were detected in any of the samples.

In June 2001, direct-push groundwater samples were obtained at nine locations, GP-1 through GP-9, for the purpose of delineating the previously-identified plumes. Groundwater samples were collected at each location from depth intervals of 0 to 2, 13 to 15, and 28 to 30 feet below the water table (with the exception of GP-1 and GP-5, at which the shallow sample was omitted due to the presence of adjacent shallow wells W-2 and W-6, respectively). Monitoring wells W-1 through W-3 and well W-6 were also sampled. Depth to water at wells W-1 through W-6 was also recorded to evaluate the site-specific groundwater flow direction, which was found to be comparable to the flow direction previously obtained.

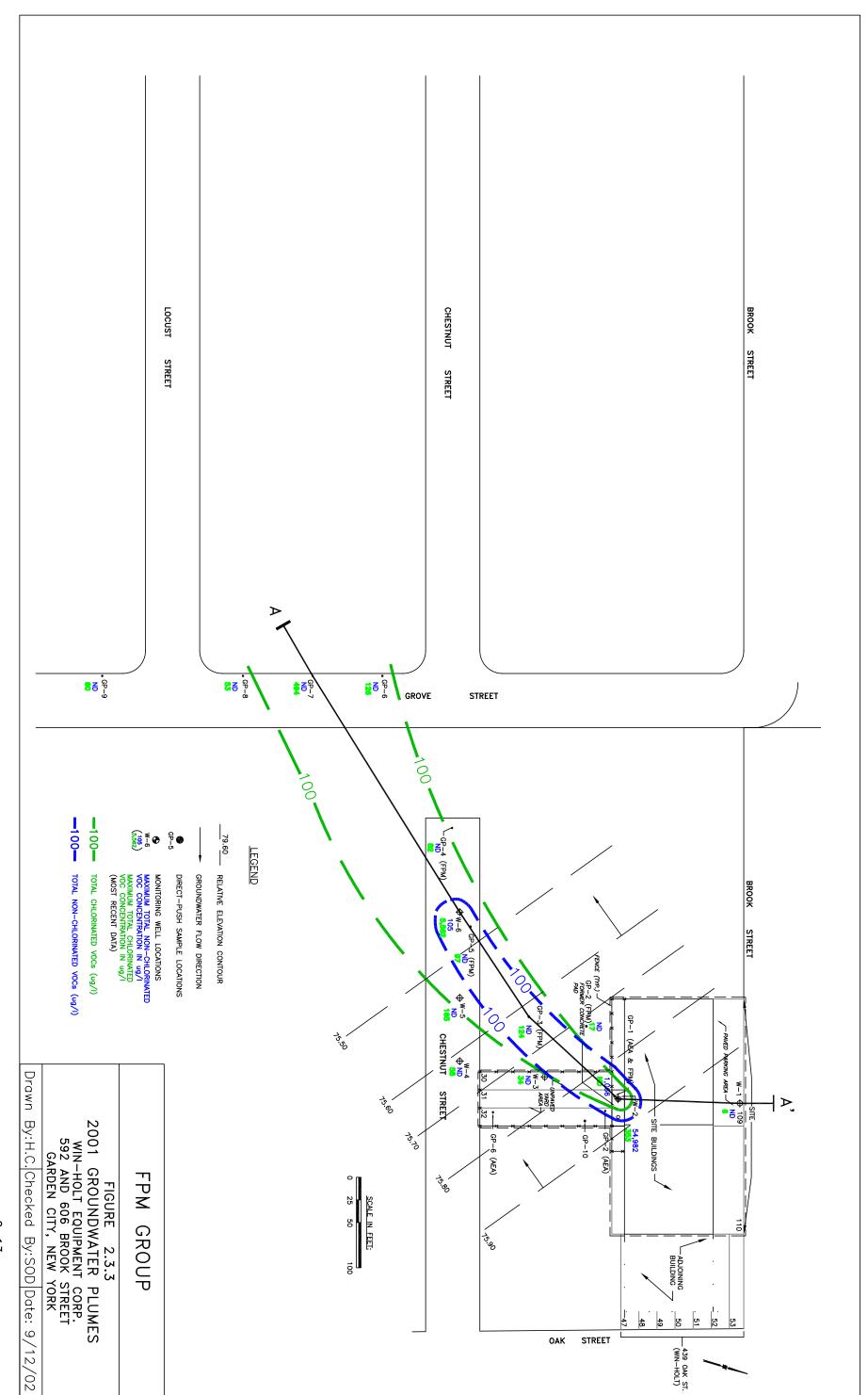
All of the samples were analyzed for Target Compound List (TCL) VOCs by Method 8260. Select samples were also analyzed for TCL SVOCs by Method 8270. No SVOCs were detected at wells W-1 or W-3. These results are consistent with previous groundwater quality results for this site and indicate that no significant SVOC contamination is present in the site groundwater.

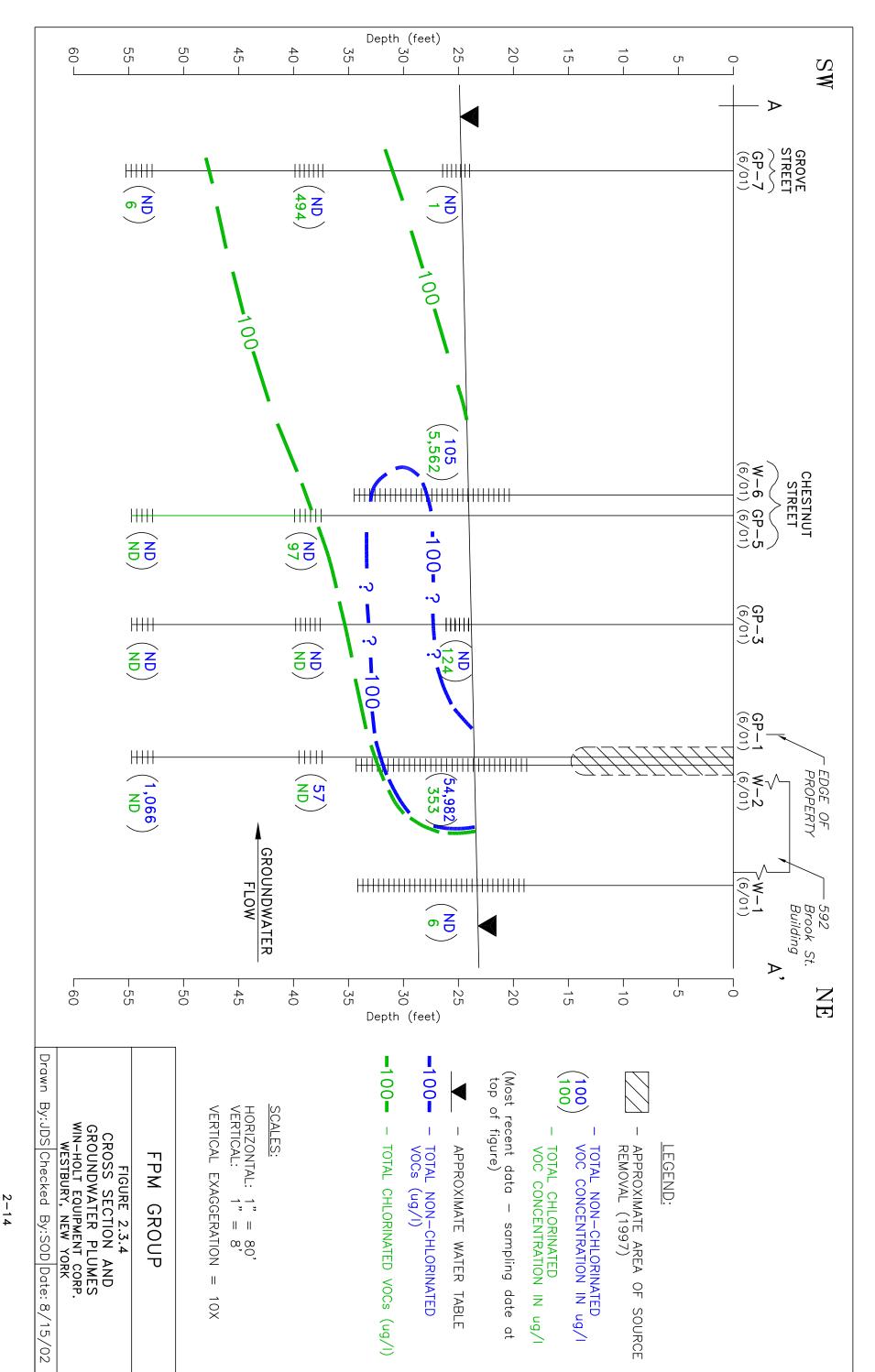


However, two contaminant plumes, which can be identified as a non-chlorinated (petroleum) VOC plume and a chlorinated VOC plume, were noted, as shown on Figure 2.3.3. Concentrations of non-chlorinated petroleum VOCs (mainly ethylbenzene, toluene and/or xylenes) exceeding the NYSDEC Standards were present at W-2, GP-1, and W-6. Concentrations of non-chlorinated petroleum VOCs exceeding the NYSDEC Standards, which had been detected at wells W-4 and W-5 during previous sampling events, had been reduced to levels below the NYSDEC Standards. No non-chlorinated petroleum VOCs were detected further downgradient along Grove Street.

Total chlorinated VOCs were detected at 11 sampling locations with the highest concentrations found at well W-6 (5,562 micrograms per liter, or ug/l), followed by GP-7 (494 ug/l), and well W-2 (353 ug/l). Concentrations of chlorinated VOCs detected at the other locations showed either low to moderate exceedances of the Standards. Detected analytes consisted primarily of solvents, including 1,1,1-TCA and TCE. In addition, several breakdown products of 1,1,1-TCA and TCE, including 1,1-dichloroethane, 1,1-dichloroethylene, and cis-1,2-dichloroethylene, were present. Based on these results and previous groundwater quality data, solvent-impacted groundwater was present at well W-2 in the vicinity of the former leaching pool and extended south-southwest to borings GP-6 through GP-9. The centerline of the plume in the downgradient direction appeared to be approximately at GP-7. Chlorinated VOC concentrations decreased to the north and south of GP-7.

Figure 2.3.4 shows the configuration of the two plumes in cross-section as of June 2001. Non-chlorinated petroleum VOCs and chlorinated VOCs at the upgradient locations (W-2 and GP-3) were detected only at the shallow interval (24-26 feet below grade) indicating that petroleum constituents and solvents are not present in deeper groundwater in the source area. The only exception to this was at upgradient direct-push sampling location GP-1, where petroleum VOCs were detected in 2001 at somewhat higher concentrations in the deepest sample (52 to 54 feet below grade) than in the intermediate-depth sample (37 to 39 feet below grade). Since the petroleum compounds detected are less dense than groundwater, these compounds generally do not tend to sink through aquifers. In addition, these compounds were not detected in either the intermediate-depth (37 to 39 feet below grade) or deeper (52 to





54 feet below grade) groundwater at the closest downgradient sampling locations (GP-3 and GP-5). Therefore, it was concluded that the apparent increase observed between the intermediate and deeper samples at GP-1 was likely an artifact of the sampling process, which included repeatedly inserting direct-push sampling rods through the shallow groundwater and the remaining impacted soil in the vicinity of former drywell #1. It is possible that some cross-contamination occurred during this process. The absence of petroleum VOCs at the closest downgradient sampling locations at the intermediate and deeper sampling depths supports the conclusion that the base of the petroleum VOC plume has been defined and that the deep results at GP-1 may be an artifact of the sampling procedure.

At the downgradient locations (GP-6 through GP-9), impacted groundwater slightly exceeding the Standards was detected only in the deeper samples: 37-39 feet at GP-6 and GP-7; 36-38 and 51-53 feet at GP-8; and 51-53 feet at GP-9. At GP-8 and GP-9 the detected concentrations in the deepest intervals exceeded the NYSDEC Standards only slightly to moderately.

# SECTION 3.0 INVESTIGATION PROCEDURES AND RESULTS

#### 3.1 Investigation Purpose

Based on a review of the previous sampling results and historical records for the Site, additional data was necessary to fully characterize the nature and extent of groundwater contamination associated with the Site and to evaluate potential exposure to contaminants associated with the Site. The following data needs were addressed during the 2003 investigation:

- Installation of an additional downgradient groundwater well (W-7) to monitor groundwater near the downgradient end of the chlorinated VOC plume;
- Periodic groundwater monitoring at Site wells to confirm the observed contaminant concentration trends;
- Collection of additional groundwater samples downgradient of the former GP-7 location to confirm the downgradient extent of the chlorinated VOC plume;
- Collection of soil gas samples in the area above the chlorinated VOC plume; and
- Performance of a receptor survey to evaluate the presence of downgradient groundwater receptors.
   The results of the receptor survey were incorporated into an exposure assessment.

In addition to the investigation activities, a public mailing list was generated to provide public notice of the pending investigation. The mailing list included residents and businesses within 0.25 miles of the Site, public officials, and local citizen groups. A local document repository (Garden City Public Library) was identified. At least two weeks prior to initiating field work the public mailing list was completed and provided to the NYSDEC.

#### 3.2 Investigation Procedures

The well installation and sampling procedures, direct-push soil gas and groundwater sampling procedures, and receptor survey procedures were previously described in Sections 3.2 through 3.6 of the Investigation Work Plan and are not repeated herein. Any deviations from these procedures necessitated by field conditions are noted below.



Several of the tasks outlined in the Work Plan were performed by FPM in April 2003, including the installation of groundwater monitoring well W-7 at the former GP-7 location, sampling of monitoring wells W-1 through W-7, direct-push groundwater sampling at downgradient locations GP-11 through GP-13, and soil gas sampling at locations SG-1 through SG-6 along Grove Street. The procedures and results of this April 2003 work were summarized in FPM's interim investigation results letters dated July 2 and 24, 2003. Copies of the W-7 boring log, well development log, and well sampling forms are included in Appendix A.

A second round of sampling of site wells W-2 through W-7 was conducted on October 1, 2003. Well W-1 was not sampled in October 2003 since the historical groundwater analytical data indicated only low to non-detect concentrations of VOCs in this well. The sampling procedures were the same as for the April 2003 sampling event and each of the groundwater samples was analyzed for Target Compound List (TCL) VOCs.

Following receipt of the chemical analytical data, the associated quality assurance/quality control (QA/QC) sample results were evaluated and the Data Usability Summary Report (DUSR) was prepared. The results of this evaluation and the DUSR are included in Appendix C.

#### 3.3 Investigation Results

#### 3.3.1 April 2003 Sampling Event Results

Following the installation of well W-7, a survey was performed in which the relative elevation of the top of the PVC casing for well W-7 was determined to the nearest 0.01 foot. The static water levels for each of the Site wells were then measured and used in conjunction with the previously-surveyed well casing elevations to calculate the Site-specific groundwater flow direction. A copy of the survey is provided in Appendix A. Table 3.3.1.1 shows the groundwater elevation data for all of the site wells. The site-specific relative groundwater elevation contours are shown on Figure 3.3.1.1. The contours indicate that the groundwater flow direction at the Site is approximately S30°W, which is consistent with previous measurements of the site-specific groundwater flow direction.

The results of the April 2003 groundwater sampling, including the monitoring well and direct-push samples, are summarized on Table 3.3.1.2 and the laboratory reports are included in Appendix B. The



# TABLE 3.3.1.1 RELATIVE GROUNDWATER ELEVATIONS WIN-HOLT EQUIPMENT CORPORATION 592 BROOK STREET, GARDEN CITY, NEW YORK

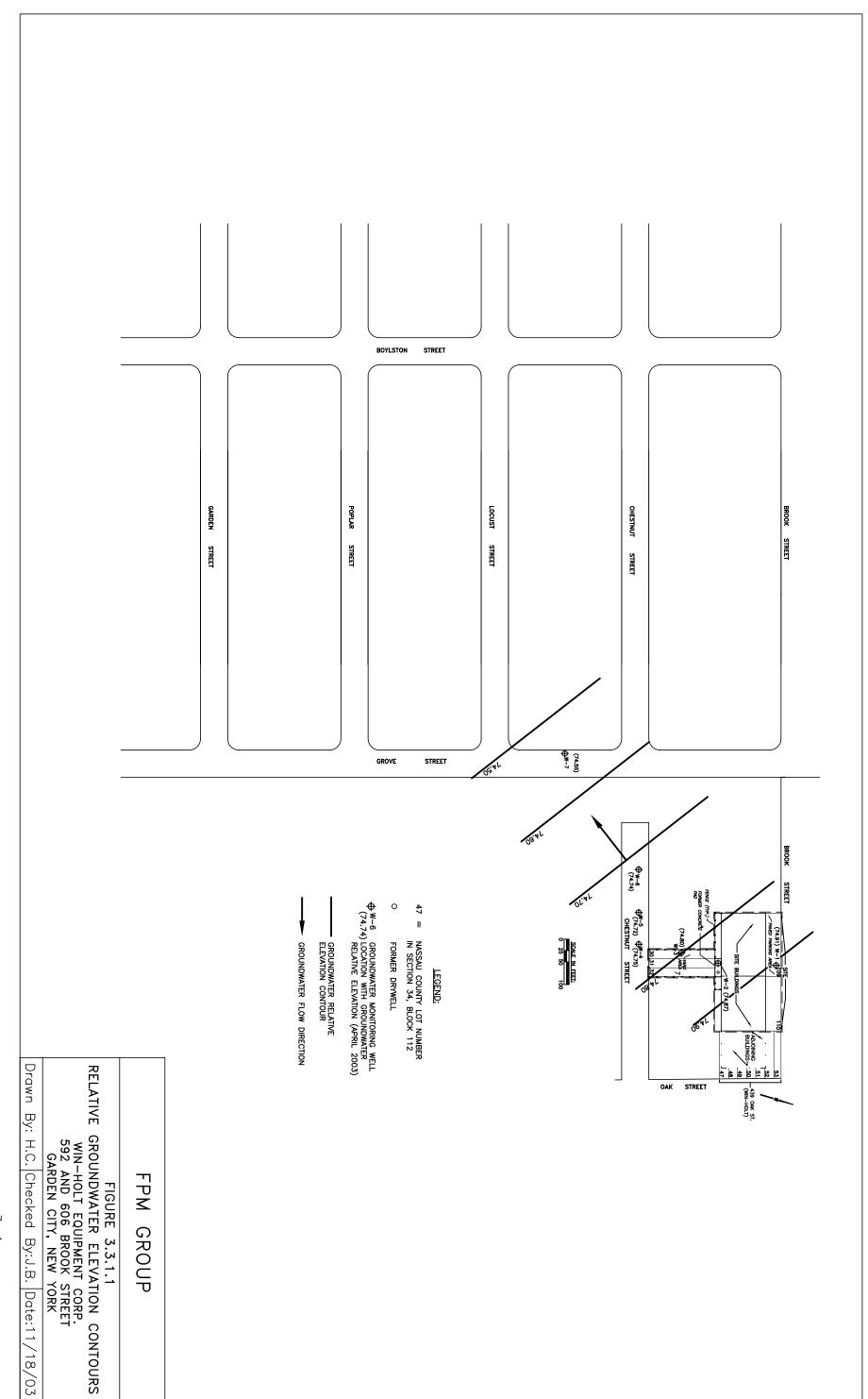
Well	Relative Elevation (in feet)	Depth to Water (in feet)	Groundwater Relative Elevation (in feet)
W-1	99.23	24.32	74.91
W-2	99.89	25.02	74.87
W-3	100.05	25.25	74.80
W-4	101.24	26.49	74.75
W-5	101.46	26.74	74.72
W-6	101.74	27.00	74.74
W-7	100.30	25.75	74.55

#### Note:

Depth-to-water measurements taken April 17, 2003.

clients\Win-Holt\VCP Investigation Report\Table3311 GW Elevations





#### **TABLE 3.3.1.2** SUMMARY OF GROUNDWATER SAMPLING RESULTS WIN-HOLT EQUIPMENT CORPORATION 592 AND 606 BROOK STREET, GARDEN CITY, NEW YORK

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Sample Depth (in feet) Sample Date	2/3/99	6/18/01	4/17/03	2/3/99	2/12/01	6/12/01	4/17/03	10/1/03	2/3/99	6/18/01	4/17/03	10/1/03	2/3/99	2/12/01	4/17/03	10/1/03	2/3/99	2/12/01	4/17/03	10/1/03	2/12/01	6/12/01	4/17/03	10/1/03	4/17/03	10/1/03	6/12/01	6/12/01	6/12/01	6/12/01	6/12/01	Standards
Parameter	2333	30 100 E		Дэгээ	12120	Lance.		101100	2/3/33	0/10/01				2112W1   Society																		
Volatile Organic Compound in r	olorogram	e per liter	JAN STE 25	POLECT: PRINCE	Sirinis Ali ne.	AFIANTS A	regiologia.	rigidal Syriki	SÁSIEDASI.	sierel Date			144 74 35			Miniera Minier		JAN TAKADA	SCHSI ASLAN	uguas riena	5.536.265 <u>1</u> =2	eth versioni	erii ceriil		ing a same	Skistie o		SSEAFTMENT		12172114		
Carbon Tetrachloride	NA NA	NA NA	ND	NA	NA.	T NA	ND	ND	NA	NA NA	ND	ND	NA	NA	ND	ND	NA NA	NA	ND	39	NA	NA	ND	ND	ND	ND	NA	NA.	NA	NA	NA	5
1,1,1-Trichloroethane	NA NA	ND ND	ND	NA NA	170	110	ND	ND	NA NA	3		4 J	NA NA	5	12	6	NA NA	140	320	190	3,400	5,400	1,700	2,900	250	20	ND D	ND	6	ND	ND	5
			<u>-</u>		Conduction (Conduction)	1990505505	ND	<u> </u>			13			ND	102500000000000000000000000000000000000	Houvella Maria	NA NA		sionalita ja egitera	A COMPANY OF THE PARTY OF THE P		97	.53		Greek on teatre	Abbarbathan Abbarbathani	ND	ND	androgen Sugar <mark>a</mark> zasi	ND	ND	5
1,1-Dichloroethane	NA NA	ND	ND ND	NA NA	290 ND	200	ND	ND	NA NA	ND.	(CONTRACTOR	5 J	NA NA	ND ND	1 J ND	ND ND	NA NA	5 ND	5 J	3 J 2 J	76 52	34		70 J 35 JH	6 J	10 0.9 J	ND	ND	ND	ND	ND	5
1,1-Dichloroethylene		ND			NESCHARGE GEREISTE	ND		ND	NA NA	ND	ND	ND					<u> </u>		4 J		disagnation and	January (	26 J	rein eterplerine (v)	10			(surfalm Eva SM)	ND	ND	ND	
1,2,4-Trimethylbenzene	NA NA	ND	NA ND	NA NA	94	140	NA NB	NA NA	NA NA	ND O(=i=)	NA (Aio)	NA (ala)	NA NA	ND	NA (Aio)	NA ND	NA NA	ND	NA ND	NA ND	ND 2(aia)	ND ND	NA ND	NA ND	NA (cia)	NA (Voic)	1	. <b>6</b>			ND .	5
1,2-Dichloroethylene (total)	NA I	3(cis)	ND NA	NA NA	23(cis)	35(cis)	ND NA	ND	NA NA	2(cis)	4 J(cis)	3 J(cis)	NA NA	ND	3 J(cis)	ND NA	NA NA	ND	NA NA	ND	2(cis) ND	ND	NA NA	ND NA	2 J(cis)	4 J(cis) NA	ND ND	ND 3	ND ND	1(cis) ND	ND	5
1,3,5-Trimethylbenzene		ND	NA NA	NA NA	28	80		NA ND	NA NA	ND	NA ND	NA ND	NA NA	ND	NA ND			ND	ļ	NA NA	Godinkinkina:								<del></del>		ND	0.6
1,2-Dichloroethane	NA	ND	ND NA	NA NA	ND	ND ND	ND	ND	NA NA	ND	ND NA	ND	NA NA	ND ND	ND NA	ND ND	NA NA	ND ND	ND NA	ND ND	1 ND	ND ND	ND NA	ND ND	ND NA	ND ND	ND ND	ND ND	ND ND	ND ND	ND	
Chloroethane	NA ND	ND		NA 0 000	5	-3 000-18 WG2608	NA Ora	ND	NA C	ND		ND	NA A		NA ND		NA aaa			1			NA NA		<del> </del>		88-2808896	han the emedia		ND	ND	5
Ethylbenzene	ND	ND	ND	9,000	5,600	4,700	210	1,100	2	ND	ND	ND	9.0	ND	ND	ND	241	ND	ND	ND	ND	ND	ND	ND	ND	ND	7,00	160	ND			5
isopropylbenzene	NA	ND	NA NA	NA	非· <b>13</b> 非	月17日	NA	NA NA	NA NA	ND	NA NA	NA NA	NA NA	ND	NA NA	NA NA	NA NA	ND	NA NA	NA NA	ND	ND	NA	NA 	NA ID	NA NB	ND	1	ND	ND	ND	5
Methylene Chloride	NA .	NA NA	ND	NA NA	NA .	NA NA	21 JB	240 JB	NA NA	NA NA	ND	ND	NA NA	NA NA	ND	ND	NA NA	NA NA	2 JB	ND	NA O	NA NA	20 JB	54 JB	1 JB	ND	NA NA	NA NA	NA ND	NA NA	NA NA	
Naphthalene '	NA	ND	NA 	NA NA	1	ND	NA NA	NA 	NA	ND	NA	NA	NA	ND	NA NA	NA NA	NA	ND	NA NA	NA	2	ND	NA NA	NA	NA	NA	ND	ND	ND	ND	ND	10
n-Butylbenzene	NA	ND	NA	NA	1	3	NA	NA	NA	ND	NA	NA	NA	ND	NA 	NA	NA	ND	NA	NA	ND	ND	NA	NA	NA 	NA	ND	ND	ND	ND	ND	5
n-Propylbenzene	NA	ND	NA	NA	15	19	NA 25224	NA	NA A	ND	NA	NA	NA NA	ND	NA 	NA	NA NA	ND	NA 	NA - ·	ND	ND	NA	NA 	NA .	NA	ND	2	ND	ND	ND	5
Xylenes (total)	ND	ND	ND	47,000	31,100	38,000	7,100	47,000	12	ND	7	ND	56	ND	ND	ND	777	ND	ND	5 J	1	79	ND	ND	2 J	ND	41	770	ND	ND	ND	5
sec-Butylbenzene	NA	ND	NA	NA	1 Nusekińskiej	ND	NA	NA NA	NA	ND	NA NA	NA	NA	ND	NA	NA	NA	ND	NA	NA	ND	ND	NA	NA	NA I	NA	ND	4	ND	ND	ND	5
tert-Butylbenzene	NA	ND	NA	NA	12	23	NA	NA	NA	ND	NA	NA	NA	ND	NA	NA	NA	ND	NA	NA	ND	ND	NA	NA	NA	NA	ND	ND	ND	ND	ND	5
Tetrachloroethylene	NA 	ND	ND	NA	11	8	ND	ND	NA	ND	2J	1 J	NA S	1	2.J	0.9 J	NA	ND	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
Toluene	ND	ND	ND	51,000	12,000	12,000	180	440 J	3	ND	ND	ND	17	ND	ND	ND	164	ND	ND	ND	1 539999833356	26	ND	ND	ND	ND	8	120	ND	ND	ND	5
Trichloroethylene	NA	3	2 J	NA	100	ND	21 J	ND	NA	28	22	16	NA	52	42	16	NA	20	3 J	2 J	32	31	111	ND	5 J	9	ND	ND	4	2	ND	5
Acetone	NA	NA	ND	NA NA	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA NA	NA	NA	NA	NA	50
Chioroform	NA	NA	ND	NA	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA .	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	7
Bromoform	NA	NA	ND	NA	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA NA	NA	NA	50
2-Butanone	NA	NA	ND	NA	NA	NA NA	ND	ND	NA	NA	ND	ND	NA NA	NA	ND	ND	NA NA	NA	ND	ND	NA	NA	ND	ND	ND	ND	NA	NA	NA	NA	NA	50
Total Chlorinated VOCs	NA	3	2	NA	599	353	21	ND	NA	34	52	29	NA	58	60	22.9	NA	165	332	236	3,565	5,531	1,790	3,005	273	43.9	ND	ND	17	3	ND	-
Total *Non-Chlorinated VOCs	ND	ND	ND	107,000	48,865	54,982	7,490	48,540	17	ND	7	ND	82	ND	ND	ND	1,182	ND	ND	5	4	105	ND	ND	2	ND	57	1,066	ND	ND	ND	•

ND = Not detected.

NA = Not analyzed.

J = Result is an estimated value below the reporting limit.

H = Alternate peak selection upon analytical review.

B = Compound was detected in an associated blank sample.
\*Includes petroleum VOCs only.
Bold and shaded values indicate exceedance of NYSDEC Class GA Ambient Water Quality Standard.

#### TABLE 3.3.1.2 (CONTINUED) SUMMARY OF GROUNDWATER SAMPLING RESULTS WIN-HOLT EQUIPMENT CORPORATION 592 AND 606 BROOK STREET, GARDEN CITY, NEW YORK

Sample Location	1848	. GP-3 ⊮	Alleid (net		GP-4	iğuğuğu	GP	-5	11 57 (S) 28 37 (S)	े GP-6 ∂			GP-7		nije je bij	GP-8		A Part of the Part	GP-9	preservi	No.	GP-11			GP-12			GP-13	ggreg d	
Sample Depth (in feet	) 24-26	37-39	52-54	24-26	37-39	52-54	37-39	52-54	24-26	37-39	52-54	24-26	37-39	52-54	23-25	36-38	51-53	23-25	36-38	51-53	37-39	52-54	67-69	37-39	52-54	67-69	37-39	52-54	67-69	NYSDEC Class GA Ambient Water Quality Standards
Sample Date	e 6/12/01	6/12/01	6/12/01	6/11/01	6/11/01	6/11/01	6/11/01	6/11/01	6/18/01	6/18/01	6/18/01	6/18/01	6/18/01	6/18/01	6/11/01	6/11/01	6/11/01	6/18/01	6/18/01	6/18/01	4/9/03	4/11/03	4/11/03	4/9/03	4/11/03	4/11/03	4/9/03	4/11/03	4/11/03	
Parameter Parameter		et al fer si	Subes	VALUE OF SERVICE	ra North Re		ayatsı ayını		will a	6. (2.54(46)74()							e a fa						rigaçii. E					E. 69.72		
Volatile Organic Compound in r	nicrogram	s per liter	•				17 18 17 18	dia mada y t fa											or other parts	TO DE DESCRIPTION		7.0		1 (24 ) Mar (27 ) - M. (24 )	,		tite constituents	PK - 128 0 000	S. 1 (*), 21101 (*)11	The second secon
Carbon Tetrachloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
1,1,1-Trichloroethane	43	ND	ND	<b>77</b> , p. s	5 <b>7</b>	ND	28	ND	ND	110	ND	1	440	ND	ND	4	6	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethane	52	ND	ND	5.	4	ND	10	ND	ND	8	ND	ND	10	ND	ND	ND	4	ND	ND	ND	ОN	ND	1 J	ND	1 J	ND	ND	2 J	3 J	5
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	10	Z	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
1,2-Dichloroethylene (total)	20(cis)	ND	ND	ND	ND	ND	30(cis)	ND	ND	ND	ND	ND	3(cis)	ND	ND	2(cis)	17(cis)	ND	ND	2(cis)	ND	ND	6(cis)	3 J(cis)	25(cis)	20(cis)	ND	3 J(cis)	4 J (cis)	5
1,3,5-Trimethylbenzene	ND	ND	DM	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
1,2-Dichloroethane	ND	ND	ND	ND	Z	ND	ND	ND	ND	ND	ND	ND	ND	ЙĎ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 J	0.6
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	DN	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	5
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Ŋ	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
Methylene Chioride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2 JB	0.5 JB	ND	0.4 J	ND	1 J	ND	ND	0.8 J	5
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ИĎ	ND	ND	ND	D	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	10
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
n-Propylbenzene	ND	МD	ND	ND	ND	ND	ND	ЙĎ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
Xylenes (totai)	ND	ИD	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	3 J	ND	ND	4 J	5
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	NĎ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
tert-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	5
Tetrachloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	1	4	ND	3	2	ND	1	4	ND	ND	1 J	ND	1 J	ل 0.9	0.6 J	1 J	ND	5
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 J	0.9 J	1 J	4 J	5
Trichloroethylene	9	ND	ND	ND	ND	ND	29	ND	ND	6	ND	ND	30	2	ND	25	24	ND	ND	52	ND	ND	3 J	ND	1 J	ND	ИD	2 J	ND	5
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8 J	10 J	ND	ND	ND	40 B	17 B	16 B	34 B	50
Chloroform	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	1 J	ND	ND	ND	0.5 J	2.j	2 J	7
Bromoform	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	2 J	ND	ND	ND	ND	ND	50
2-Butanone (MEK)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	14	ND	ND	ND	50
Total Chlorinated VOCs	124	ND	ND	82	61	ND	97	ND	ND	126	1	1	494	6	ND	34	53	ND	1	60	ND	ND	11	3	28	20.9	0.6	8	10	-
Total *Non-Chlorinated VOCs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	6	0.9	1	8.5	-

#### Notes:

ND = Not detected. NA = Not analyzed.

J = Result is an estimated value below the reporting limit.

Bold and shaded values indicate exceedance of NYSDEC Class GA Ambient Water Quality Standard.



B = Compound was detected in an associated blank sample. \*Includes petroleum VOCs only.

monitoring well results indicate that concentrations of VOCs exceeding the NYSDEC Standards were detected at wells W-2 through W-7. Total VOC concentrations were highest at wells W-2 and W-6. Only minor concentrations of VOCs were detected at wells W-3, W-4, and W-7. No concentrations of VOCs exceeding the NYSDEC Standards were detected at well W-1, located upgradient of the former source area.

The results of the April 2003 direct-push groundwater samples, also shown on Table 3.3.1.2, indicate that only one VOC, cis-1,2-dichloroethylene (cis-1,2-DCE), was detected above the NYSDEC Standards at any of the GP-11 through GP-13 sampling points along Boylston Street. These cis-1,2-DCE detections only slightly exceed the NYSDEC Standard and were noted at a depth of 67 to 69 feet below grade at GP-11 and 52 to 54 and 67 to 69 feet below grade at GP-12.

The results of the April 2003 soil gas sampling are summarized on Tables 3.3.1.3 and 3.3.1.4 and the laboratory report is included in Appendix B. The data are presented in parts per billion by volume on Table 3.3.1.3 and in micrograms per cubic meter on Table 3.3.1.4. The soil gas sampling results indicate that several VOCs were detected at each sampling location. The detected concentrations were evaluated using the USEPA's Draft Subsurface Vapor Intrusion Guidance (November 29, 2002). This Guidance is suggested for use at RCRA Corrective Action, CERCLA and Brownfield sites (the "USEPA Guidance"). In accordance with the USEPA Guidance, FPM identified the VOCs detected in the groundwater plume beneath the sampling area (locations GP-6 through GP-8 and well W-7) since this plume is the presumed source of soil vapor compounds to be evaluated. The VOCs detected in this portion of the groundwater plume include 1,1,1-trichloroethane (1,1,1-TCA), 1,1,-dichloroethane (1,1-DCA), 1,1,-dichloroethylene (1,1-DCE), cis-1,2-DCE, tetrachloroethylene (PCE), trichloroethylene (TCE), methylene chloride, and xylenes. As indicated in the USEPA Guidance, compounds detected in the soil gas samples that were not detected in the groundwater plume were not considered. The source of the compounds detected in the soil gas samples is not known. However, it should be noted that the soil gas sampling locations directly adjoin a street with stormwater collection in catch basins and likely discharge to subsurface leaching pools. Since many of the compounds that were detected in the soil gas but not groundwater are petroleum-related, it is possible that they are associated with the subsurface discharge of stormwater runoff.



# 592 BROOK STREET, GARDEN CITY, NEW YORK APRIL 2003 SOIL GAS ANALYTICAL DATA IN PARTS PER BILLION VOLUME WIN-HOLT EQUIPMENT CORPORATION **TABLE 3.3.1.3**

Sample Location		SG-1	SG-2	1-2	SG-3	-3	SG-4	4	S-9S	-5	9-98	-95	
Sample Depth (in feet)	2 (DE)	(TQ) 9	2	6 (DL)	2 (DL)	- 6	2	6 (DL)	2	- 9	2 (DL)	9	Target Shallow Soil Gas Concentration
Sample Date						4/9/03	.03						Risk 1x10 <sup>-6</sup>
Parameter													
Volatile Organic Compound in parts per billion volume	parts per bil	llion volum	Ф										
1,1,1-Trichloroethane	Q	Q	1.6	3.2	QN	ΟN	2.0	ΟN	ND	ND	ON	QN	4,000
1,2,4-Trimethylbenzene	82	9/	79	70	120	100	100	86	150	140	100	120	12
1,3,5-Trimethylbenzene	19	18	47	16	26	20	24	23	33	29	25	28	12
Ethylbenzene	11	10	13	9	19	15	21	15	27	24	33	30	5.1
o-Xylene	27	26	32	25	47	36	50	37	64	28	71	67	_
p- & m-Xylenes	48	47	09	46	88	7.1	100	70	130	120	150	140	-
Toluene	13	17	19	19	15	63	15	13	16	16	24	20	1,100
Benzene	QN	2.3	4.0	1.7	Q	1.9	3.1	ND	QN	QN	QN	4.6	0.98
Styrene	Ð	GN	Ð	QN	QN	QN	2.0	ND	2.3	QN	QN	Q	2,300
1,3 Butadiene	2.0	3.4	7.8	3.2	QN	1.9	4.6	QN	ND	2.1	13	5.5	0.039
Carbon Disulfide	1.5	Q	Ð	QN	QN	ND	ND	ND	QN	ND	QN	Q	2,200
4-Ethyltoluene	59	55	63	51	91	76	88	74	120	110	06	100	1
n-Hexane	QN	Q	2.2	QN	GN	ON	2.2	ND	ND	QN	4.2	Q	570
n-Heptane	Q	QN	QN	ΠN	ND	2.3	ND	ND	ND	QN	ND	Q	•
Dichlorodifluoromethane	Q	QN	QN	QN	QN	ND	2.0	ND	ND	QN	QN	Q.	400
Methylene Chloride	UN	QN	QN	1.8	QN	QN	QN	QN	ND	Q	ND	QN	15

# Notes:

ND = Not detected.
 DL = Secondary dilution and analysis.
 - = No Target Shallow Soil Gas Concentration established.
 Bold parameters indicate constituents detected in shallow groundwater beneath soil gas sampling locations.

592 BROOK STREET, GARDEN CITY, NEW YORK APRIL 2003 SOIL GAS ANALYTICAL DATA IN MICROGRAMS PER CUBIC METER WIN-HOLT EQUIPMENT CORPORATION **TABLE 3.3.1.4** 

Sample   ocation	SG-1		SG	SG-2	86-3	-3	864	4	SG-5	-5	9-9S	9-	
Sample Death (in feet)	(10) 6	6 (DII)	- 2	6.0013	2 (DI.)	9	2	(DF)	2	9	2 (DL)	9	Target Shallow Soil
Agail III (III) III deg adii III	(20)	(39)	7	122					12 131				Gas Concentration
Sample Date						4/9	4/9/03						Risk 1x10°
Parameter				G G G									
Volatile Organic Compound in micrograms per cubic meter	nicrograms	per cubic r	neter										
1,1,1-Trichloroethane	Q.	QN	8.7	17.5	S	QN	10.9	QΝ	ON	ND	QN	ND	21,827
1,2,4-Trimethylbenzene	403.1	373.6	388.3	344.1	589.9	491.6	491.6	481.7	737.4	688.2	491.6	589.9	59
1,3,5-Trimethylbenzene	93.4	88.5	83.6	78.7	127.8	98.3	118.0	113.1	162.2	142.6	122.9	137.6	59
Ethylbenzene	47.8	43.4	56.5	43.4	82.5	65.1	91.2	65.1	117.2	104.2	143.3	130.3	22
o-Xylene	117.2	112.9	139.0	108.6	204.1	156.3	217.1	160.7	277.9	251.9	308.3	290.9	-
p- & m-Xylenes	208.4	204.1	260.5	199.7	382.1	308.3	434.2	304.0	564.5	521.1	651.3	602.9	•
Toluene	49.0	64.1	71.6	71.6	56.5	237.4	5.95	49.0	60.3	60.3	90.4	75.4	4,145
Benzene	Ð	7.3	12.8	5.4	Q	6.1	6.9	ND	QN	QN	Q	14.7	3
Styrene	Ð	Ð	2	Ð	Q	QN	8.5	UD	9.8	ND	Q	QN	9,796
1,3 Butadiene	4.4	2.5	17.3	7.1	QN	4.2	10.2	ND	QN	4.6	28.8	12.2	0
Carbon Disulfide	4.7	QN	QN	QN	QN	ON	ND	ND	QN	QV	<u>Q</u>	QN	6,851
4-Ethyltoluene	289.6	269.9	309.2	250.3	446.6	373.0	431.9	363.2	589.0	539.9	441.7	490.8	•
n-Hexane	QN	QN	7.8	QN	QN	ND	7.8	QN .	ON	QN	14.8	Q	2,009
n-Heptane	QN	ΩN	ΩN	QN	QN	9.4	QN	QN	Q.	Q	QN	Q	,
Dichlorodifluoromethane	Q	Q.	Ð	QN	QN	ND	6.6	ON	Q	Q	QN	Q	1,978
Methylene Chloride	QN	QN	DN	6.3	QN	ΟN	ND	ND	QN	Q	ND	<u>Q</u>	52

# Notes:

ND = Not detected.
 DL = Secondary dilution and analysis.
 - = No Target Shallow Soil Gas Concentration established.
 Bold parameters indicate constituents detected in shallow groundwater beneath soil gas sampling locations.

The concentrations of the compounds detected in both the groundwater plume and in the soil gas were compared to the Target Shallow Soil Gas Concentrations listed in Table 2C of the USEPA Guidance. The Target Shallow Soil Gas Concentrations were selected since they are applicable to soil gas concentrations measured at a depth of less than five feet below foundations (it was observed that the nearby residences have basements extending below grade). A target acceptable risk level of 1x10<sup>-6</sup> was selected to be conservative.

This evaluation indicated that the only compounds detected in both the groundwater plume and the soil gas were 1,1,1-TCA and xylenes. The detected concentrations of 1,1,1-TCA were well below the Target Shallow Soil Gas Concentration and, therefore, should not present a concern. No Target Shallow Soil Gas Concentration is established for xylenes. However, xylenes were not detected in any of the shallow groundwater samples from this area. Xylenes were detected only in the deeper sample from well W-7 (installed approximately 10 to 20 feet below the water table) at a concentration of 2 micrograms per liter (ug/l), which is below both the Reporting Limit and the NYSDEC Class GA Ambient Water Quality Standard. Therefore, it is unlikely that the detected xylenes concentrations originated from the groundwater plume. As discussed above, although the source of the xylenes is not known, it is possible that it is associated with the subsurface discharge of stormwater in this area.

#### 3.3.2 October 2003 Sampling Event Results

The results of the October 2003 groundwater sampling of wells W-2 through W-7 are summarized on Table 3.3.1.2 and the laboratory reports are included in Appendix B. Concentrations of VOCs above the NYSDEC Standard were detected at wells W-2 through W-7. Total VOC concentrations were again highest at wells W-2 and W-6. Only minor concentrations of VOCs were detected at wells W-3, W-4, and W-7. These results are discussed below.

#### 3.3.3 Site Modifications

In March 2003, the unpaved yard area on the south side of the 592 Brook Street building was regraded and paved to create additional parking for the Site. As required by Town building code, stormwater drainage structures were added. The drainage structures were sited on the southeast corner of the yard



adjacent to Chestnut Street and were connected to a solid-bottom catch basin located near the center of the yard. The locations of these drainage structures are shown on Figure 2.2.1 and were selected so as to be situated outside of the groundwater plume.

During the excavation process, an FPM representative was on site to observe the subsurface conditions. A calibrated PID was used to screen the excavated soil for organic vapors. No staining, odors or PID readings were noted in the vicinity of the piping, or leaching pools. Moderate staining and odors were noted in the vicinity of the catch basin at a depth of approximately seven feet below grade (bottom of the excavation). The maximum PID reading noted in this area was 20 parts per million (ppm). A sample of the soil from the base of the excavation was collected and analyzed. The sample results, which are included in Appendix B, indicated that all of the detected VOC and SVOC concentrations were below the NYSDEC Objectives. Therefore, this soil does not present a concern.

Following the installation of the drainage structures, the yard was regraded to promote drainage toward the catch basin. A cement curb was installed around the perimeter of the yard and the yard was then asphalt paved. The installation of pavement and drainage structures is anticipated to result in improvements to groundwater quality since infiltration of stormwater is essentially eliminated over most of the yard and stormwater discharge has been diverted to an area outside of the plume.

#### 3.4 Summary and Conclusions

#### 3.4.1 Site Soil Conditions

Impacted soil was identified in association with one of two drywells in a concrete pad in the yard area of 592 Brook Street in 1995. Sampling results indicated that the impact appeared to be limited to the vicinity of the pad; no impacted soil was found at other locations in the yard. The sampling also indicated that the impact appeared to be largely limited to the upper few feet below grade. Deeper contamination was only found at the western drywell location.

The area of the western and eastern drywells and associated concrete pad was remediated in 1997 by excavating and disposing of the impacted soil. End-point sampling showed that the soil in all areas of the excavation did not exceed NYSDEC Objectives with the exception of a minor exceedance of the NYSDEC

Objective for one SVOC at one location beneath the former pad area and the soil beneath the former western drywell. Soil in the western drywell area at 14 feet below grade continued to exhibit concentrations of some petroleum-related VOCs exceeding NYSDEC Objectives. Additional soil sampling performed in this area indicated that the petroleum-impacted soil extended to approximately 24 feet below grade but did not extend below 28 feet below grade.

Based on the post-remediation soil sampling data, no significant quantities of additional source material remain present. Minor amounts of petroleum-impacted soil likely remain in the interval between 14 and approximately 24 feet below grade in the vicinity of the western drywell. However, the extent of this soil appears to be limited.

Paving of the yard area in early 2003 combined with diversion of all stormwater drainage to the southeast corner of the yard has further isolated any remaining source material from infiltrating stormwater. This is anticipated to result in decreased groundwater impact over time. No further soil investigation or remediation is recommended.

#### 3.4.2. Groundwater Conditions

A chlorinated VOC plume and a non-chlorinated petroleum VOC plume have both been identified in association with the Site. The extents of both plumes based on 2003 data are shown on Figure 3.4.2.1. The non-chlorinated VOC plume, which consists of petroleum-related TEX, is limited to the vicinity of on-site well W-2. Non-chlorinated VOCs were not detected in any of the wells on Chestnut Street (W-4 through W-6) in 2003 with the exception of one low detection (5 ug/l) of xylenes in well W-5. Non-chlorinated VOCs were not detected immediately downgradient of the Site at GP-3 in 2001. Based on these data, the non-chlorinated VOC plume is limited to the portion of the Site in the vicinity of the former western drainpool.

The chlorinated VOC plume extends from well W-2 to somewhat beyond well W-6. Chlorinated VOC concentrations are much lower at downgradient monitoring well W-7 and direct-push locations GP-11 through GP-13. The lateral extents of the chlorinated plume are delineated by GP-4 to the west and well W-4 to the east.



The behavior of these plumes through time was evaluated by comparing historic and recent sampling data. A comparison of the 2001 plume extents (Figure 2.3.3) and the 2003 plume extents (Figure 3.4.2.1) and the groundwater well monitoring data on Table 3.3.1.2 demonstrates that the concentrations of non-chlorinated VOCs at most of the sampling points are decreasing with time. Well W-2, located in the vicinity of the remaining source material, has shown a decrease from 1999 levels; however, non-chlorinated VOC concentrations in this well have remained relatively consistent since that time.

A similar pattern of decreasing concentrations is observed for the chlorinated VOC plume in many of the Site wells, including wells W-2, W-4, and W-7. In addition, there are no detections of chlorinated VOCs in the former source area. However, at well W-6, concentrations of chlorinated VOCs have been variable and do not show a consistent trend. These data indicate that the source of chlorinated VOCs has been remediated and the source of non-chlorinated VOCs substantially been remediated. Therefore, VOC concentrations may be expected to continue to decrease with time.

As discussed in Section 4.2, there is no anticipated exposure to on-site or off-site impacted groundwater.

#### 3.4.3 Soil Vapor Conditions

As discussed in Section 3.3.1, the only compounds detected in both the groundwater plume beneath the sampled area and the soil gas were 1,1,1-TCA and xylenes. The detected concentrations of 1,1,1-TCA were well below the Target Shallow Soil Gas Concentration. Although no Target Shallow Soil Gas Concentration is established for xylenes, xylenes were not detected in any of the shallow groundwater samples from this area. Xylenes were detected only in the deeper sample from well W-7 and the detected concentration was very low: 2 ug/l, which is below both the Reporting Limit and the NYSDEC Standard. Therefore, it is unlikely that the detected xylenes concentrations originated from the groundwater plume. The remaining VOCs detected in the soil gas samples were not detected in any of the groundwater samples collected beneath Grove Street and, therefore, they originate from other sources. Although the source of these soil gas VOCs is unknown, it is possible that the source is associated with the subsurface discharge of



stormwater runoff from the adjoining street. Based on these data, there does not appear to be a concern for vapor impacts to nearby residences from the groundwater plumes.

## SECTION 4.0 RECEPTOR SURVEY AND EXPOSURE ASSESSMENT

#### 4.1 Receptor Survey Procedures and Results

A receptor survey was performed in the area downgradient of the Site to evaluate the potential for human exposure to groundwater via either private or public drinking water wells of other types of wells (irrigation, cooling water, etc.). Private water supply wells were surveyed within an area one-half mile downgradient of the Site and public water supply wells and other types of wells were surveyed within one mile downgradient of the Site. The results of the receptor survey were used together with the additional and previously-collected Site soil and groundwater data to prepare an exposure assessment for the Site.

The depth to groundwater at the Site is approximately 25 feet below grade and, as discussed in Section 2.1, there are no natural surface water bodies (streams, rivers, or lakes) which might receive groundwater discharge within one mile downgradient of the Site. Therefore, it appears that there are no surface water receptors for groundwater discharge originating from the Site.

A survey of private supply wells within one-half mile downgradient of the Site and public supply wells and other types of wells within one mile downgradient of the Site was conducted to evaluate the potential presence of groundwater receptors. To identify potential private wells, a survey was performed by examining each residence or other building in this area from the vantage point of public streets to confirm that a public water supply connection is present as evidenced by the presence of a water meter or street markings. Most of the properties were observed to have a public water supply connection. Two properties did not have a visible public water supply connection and the local public water supply company (Garden City Village Water District) was contacted to confirm service connections for these properties. The District confirmed via telephone that both of these properties have a public water supply connection. Therefore, it does not appear that any private wells are present in the area that would provide a potential for public exposure to Site groundwater.

The NYSDEC databases of public water supply wells and other types of wells (irrigation, non-contact cooling water, etc.) were accessed and reviewed to evaluate if any of these types of wells are located within

one mile downgradient of the Site. No non-public supply wells were identified within one mile downgradient of the Site. However, four public water supply wells belonging to Hempstead Village are located approximately 0.75 miles southwest (downgradient) of the Site. These wells are all completed in the Magothy Formation at depths ranging from 416 to 1,004 feet below grade. These wells are not anticipated to present a concern due to their depth relative to the Site groundwater plume (from 350 to over 900 feet deeper), the presence of significant clay confining layers in the Magothy Formation, and the distance from the southwesternmost sampling points to the well field (approximately 2,500 feet). Based on this information, it does not appear that public water supply wells will provide a potential for public exposure to Site groundwater.

#### 4.2 Exposure Assessment

A qualitative human health exposure assessment was performed using the existing and newlyobtained Site data following guidance from the New York State Department of Health. The exposure assessment was performed by characterizing the exposure setting, identifying potential exposure pathways, and performing a qualitative evaluation of receptor exposure.

Exposure pathways are the means by which individuals may be exposed to contaminants originating from the Site. A complete exposure pathway must include a contaminant source, contaminant release and transport mechanisms, a point at which an individual may become exposed, a route of exposure, and a receptor population. An exposure pathway is complete when all of these elements are present.

To perform the qualitative human health exposure assessment at this Site, the onsite and offsite conditions were characterized using the existing and recently-obtained chemical analytical data for the environmental media (soil, groundwater and soil vapor). Potential exposure pathways were then evaluated to assess if there is a potential for human health exposure to Site contaminants.

As discussed in Section 4.1 of this report, a groundwater receptor survey has been performed and the only potential groundwater receptors identified were four public water supply wells located approximately 0.75 miles downgradient of the Site. However, due to the depth of these wells, the presence of significant clay confining layers in the Magothy Formation in which these wells are installed, and their distance from the

most downgradient sampling points for the Site, an exposure pathway does not appear to be present. Since it does not appear that there is the potential for public exposure to impacted groundwater associated with the Site, groundwater exposure will not be further addressed in this exposure assessment.

Soil vapor sampling was performed in the residential neighborhood downgradient of the Site above the groundwater plumes. As discussed in Sections 3.3 and 3.4 of this report, although some VOCs were detected in the soil vapor samples, only two compounds, 1,1,1-TCA and xylenes, were present that were also found in the groundwater beneath this area. The detected concentrations of 1,1,1-TCA were well below the USEPA's Target Shallow Soil Gas Concentration and, therefore, should not present a concern. No Target Shallow Soil Gas Concentration is established for xylenes, xylenes were not detected in the shallow groundwater, and the xylenes concentration in the deeper groundwater was below both the Reporting Limit and the NYSDEC Standard. The source of the remaining soil gas VOCs is not known, but may be associated with stormwater discharge in this area. Although it is possible that there may be potential for exposure to these VOCs via soil vapor, the source of these VOCs has not been identified.

VOCs are present in limited portions of the Site soil and may reach human receptors under certain conditions, which are discussed below. This discussion is based on current and reasonably foreseeable onsite conditions and on the site soil data described in Section 2.3 of this report.

At present, the Site is used entirely for commercial/industrial purposes as are the surrounding properties. The reasonably foreseeable uses of the Site are for commercial/industrial purposes only, based on the Site zoning (Industrial). No future residential use is reasonably foreseeable.

A complete exposure pathway must exist for a human population to be exposed to potential impact from the VOCs in the Site soil. It should be noted that the Site surface is completely covered by buildings or asphalt and, therefore, there is no exposure pathway by which Site occupants could be exposed to the Site soil. However, exposure to subsurface impacted soils may occur during intrusive activities, which may include investigation or remediation activities or other construction or repair activities. Since the Site is currently recognized as a NYSDEC VCP site, any investigation or remediation activities will be conducted using a Health and Safety Plan (HASP), which will include provisions for monitoring and/or personal

protective equipment (PPE) for workers. Therefore, it is unlikely that unacceptable exposure to Site soil will occur during investigation or remediation activities. These provisions could be extended to other subsurface construction or repair activities, as was recently done during paving of the yard, thereby eliminating this potential exposure pathway for construction or repair workers.

### SECTION 5.0 REFERENCES

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### SECTION 6.0 DISCLAIMER

Conclusions from this data are limited to those areas focused on in the study and represent our best judgment using analytical techniques and our past experience. Even though our investigation has been scientific and thorough, it is possible that certain areas of this property may pose environmental concerns that yet are undiscovered. In addition, environmental regulations may change in the future and could have an effect on our conclusions.

**APPENDIX A** 

**FIELD LOGS** 

### WELL DEVELOPMENT DATA

Project: Win-Holt	
Location: <u>Garden City</u>	
Well No.: W-7	. • 4.
Date and Time of Static Reading: 4/10/03	
Amount of Water Injected during Drilling (gallons): ~50gallons	
Pump Type and Pumping Rate: Shurflo Impellor pump (surface mounted)	4.0 gallmin
Additional Development Techniques: Surge Black	

TIME (HRS:MINS)	DEPTH TO WATER (FEET)	GALLONS PUMPED	pН	SPECIFIC CONDUCTIVITY (uS)	TEMPERATURE (°F)	TURBIDITY (NTU)
1500	25.93		5.99	295	5-9	120
1503		11	5.76	285	58	395
1510		23	5.84	288	58	290
1518		37	5.78	269	58	110
1525		44	5.85	259	58	220
1530		55	5.89	255	58	90
1535		62	5.92	252	58	32
1538		70	5.91	250	58	2/
1542	25.98	70				
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clients/Hydro Dept Forms/welldevform



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Project: W. N. HocT		
Location: GARDEN CITY		
Well No.:		
Date: 4/17/03	Start Time:	
Weather: OURCAST 38°F	Finish Time:	
Sampled By:		
Depth to Bottom of Well:34	,10	Feet.
Depth to Water: Z 4,	32	Feet.
Height of Water Column: 9.	78	_ Feet.
Water Volume in Casing: &.	3	Gallons.
Water Volume to be Purged:   % 7	Gallons.	
Water Volume Actually Purged:	Ballons.	
Purge Method: Whale Pump		
Physical Appearance/Comments:		
FIELD MEASUREMENTS:		<del></del>

Time	Gallons	PH	Cond. (uS)	Temp. (°F)	Turbidity (NTU)
	6	5.50	320	57	54
	13	6.00	303	57	3/.85
	19	6.00	306	58	11.92

Sampling and Analytical Methods:	Disposable	Bailer	
Laboratory Name and Location:	STL-CT		

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Project: Www Hart	·
Location: C-ARDEN CITY	
Well No.:	
Date: 4/17/03	Start Time:
	Finish Time:
Sampled By:	
Depth to Bottom of Well: 37.76	Feet.
Depth to Water: 25.02	Feet.
Height of Water Column: 7.74	Feet.
Water Volume in Casing:5	Gallons.
Water Volume to be Purged:15Ga	allons.
Water Volume Actually Purged: Ga	allons.
Purge Method: DEDICATED BALLER	
Physical Appearance/Comments: Muck	'
FIELD MEASUREMENTS.	

### FIELD MEASUREMENTS:

Time	Gallons	PH	Cond. (uS)	Temp. (°F)	Turbidity (NTU)
<u> </u>	5	6.00	243	60	7-2
	/6	6.00	240	60	708
	15	6.00	240	60	373

Sampling and Analytical Methods:	Bailer
Laboratory Name and Location:	STL-CT

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Project: Win-Holt		
Location: Garden City		
Well No.: <u>W-3</u> Date: <u>4/17/03</u> Weather: <u>Overcust 38°F</u>	Start Time:	
Sampled By: JB/ms	-	
Depth to Bottom of Well: 33,	31	Feet.
Depth to Water: 25.	25	Feet.
Height of Water Column:	06	Feet.
Water Volume in Casing:5	Ζ	Gallons.
Water Volume to be Purged:	Gallons.	
Water Volume Actually Purged: <i>15</i>	Gallons.	
Purge Method: DEDICATED BAILED	3	
Physical Appearance/Comments:		
FIELD MEASUREMENTS		

Time	Gallons	PH	Cond. (uS)	Temp. (°F)	Turbidity (NTU)
	5	5.50	206	56	502
	10	5.75	214	57	941
	15	5.75	196	56	>1000

Sampling and Analytical Methods:	Bailer
Laboratory Name and Location:	STL-CT

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Project: W. v- HouT		100
Location: GARDEN CTY		
Well No.:	Well Diameter:	4"
Date: 4/17/03	Start Time:	
Weather: Our (45) 35'F		
Sampled By: 58/US		
Depth to Bottom of Well:3	3.80	Feet.
Depth to Water:	2.49	Feet.
Height of Water Column:	31	Feet.
Water Volume in Casing: 4.73	5	Gallons.
Water Volume to be Purged: 14.25	Gallons.	
Water Volume Actually Purged: 15 0	Sallons.	
Purge Method: Disp. Bailer		
Physical Appearance/Comments:		
FIELD MEASUREMENTS:		

Time	Gailons	PH	Cond. (uS)	Temp. (°F)	Turbidity (NTU)
	5	6.10	415	57	376
	10	6.00	244	56	174
	15	6.00	205	57	38,50

Sampling and Analytical Methods: _	Disp.	Bailer	
Laboratory Name and Location:	STL-C		



Page	of	

Project: W.v. Ho-7			
Location: GARDEN C. TY			
Well No.: W-5	Well Diameter:	41	
Date: 4//7/03			
Weather: 38° + Overcast	Finish Time:		
Sampled By: 53/MS		,	
Depth to Bottom of Well:3		Feet.	
Depth to Water: 26.	74	Feet.	
Height of Water Column:6.76		Feet.	
Water Volume in Casing: 4.4		Gallons.	,
Water Volume to be Purged:(	Gallons.		
Water Volume Actually Purged: <u>13.5</u> G	Gallons.		
Purge Method: 1940 CE Punp			
Physical Appearance/Comments:			

### FIELD MEASUREMENTS:

Time	Gallons	PH	Cond. (uS)	Temp. (°F)	Turbidity (NTU)
	4.5	6,25	1294	55	52
	9.0	6,00	1495	23	38.79
	13.5	6.00	1480	55	24.65

Sampling and Analytical Methods:	Disp. Bailer		
Laboratory Name and Location:	STL-CT		

Page	of

Project: W.r. Ho.		
Location: Garden Gry		
Well No.: W-6	Well Diameter:	4"
Date: 4/17/03	Start Time:	
Weather: Ouncast 38°F	Finish Time:	
Sampled By:		
Depth to Bottom of Well:34	1.97	Feet.
Depth to Water:	7. 🔾 o	Feet.
Height of Water Column:7	.97	Feet.
Water Volume in Casing:5.	. 1	Gallons.
Water Volume to be Purged:(	Gallons.	
Water Volume Actually Purged:	Gallons.	
Purge Method: Whale Pump		
Physical Appearance/Comments:		

### FIELD MEASUREMENTS:

Time	Gallons	PH	Cond. (uS)	Temp. (°F)	Turbidity (NTU)
	5	6.0	ચ્ચ	56	39.45
	10.5	6.0	702	58	37.8/
	15.5	6.0	212	58	17.30

Sampling and Analytical Methods:	Disp.	Bailer	 
Laboratory Name and Location: _	STL-	-CT	



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Project: Win-Holt		
Location: <u>Garden City</u>		
	Well Diameter:	
Date: 4/17/03	Start Time:	
Weather: Overcast 38° F	Finish Time:	<u>.</u>
Sampled By:		
Depth to Bottom of Well:46.	25Feet.	
Depth to Water: 25.	7 <i>5</i> Feet.	
Height of Water Column:	5Feet.	
Water Volume in Casing:	Gallons.	
Water Volume to be Purged: 39.9 G	allons.	
Water Volume Actually Purged: <u>'/ô</u> Ga	allons.	
Purge Method: Whale Pump		
Physical Appearance/Comments:		-

### FIELD MEASUREMENTS:

Time	Gallons	PH	Cond. (uS)	Temp. (°F)	Turbidity (NTU)
	15	5,59	243	57	64
	30	6.01	254	58	16
	40	5.98	250	<i>す</i> ど	6

Sampling and Analytical Methods:	Disposable Bailer /TCL VOCs	
Laboratory Name and Location:	STL, CT	



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Project: Win-Itolt	
Location: Garden City	
Well No.: W-2	Well Diameter: 4 mch
Date: 10/1/03	
Weather: Overcast 65°=	Finish Time:
Sampled By:	
Depth to Bottom of Well:32_	Feet.
Depth to Water: 23.2	<u>۲</u> Feet.
Height of Water Column: \$.78	Feet.
Water Volume in Casing: 5,70	Gallons.
Water Volume to be Purged: 17 G	Gallons.
Water Volume Actually Purged: $/8$ G	allons.
Purge Method: Whale fung	
•	t charcoal color; solventodor
FIELD MEASUDEMENTS.	· · · · · · · · · · · · · · · · · · ·

### FIELD MEASUREMENTS:

Time	Gallons	PH	Cond. (uS)	Temp. (°F)	Turbidity (NTU)
	6	5,99	240	63	48,91
	12	5.40	230	62	47.66
	18	5.89	230	62	46.37

Sampling and Analytical Methods:	Disg. bailer / TCL VOCS
Laboratory Name and Location:	STL-CT



Page	of	

Project: Win-Holt		
Location: <u>Garden City</u>		
Well No.: <u>W-3</u>	Well Diameter:	4 inch
Date: 10/1/03	Start Time:	
Weather: Overcast 65°F		
Sampled By:		
Depth to Bottom of Well: 33		Feet.
Depth to Water: 23.3	8	Feet.
Height of Water Column:9.62		Feet.
Water Volume in Casing:6. Z		Gallons.
Water Volume to be Purged:(	Gallons.	
Water Volume Actually Purged: (	Gallons.	
Purge Method: Whale Pung	·	
Physical Appearance/Comments: <u>Clear</u>		
	· <del></del>	

### FIELD MEASUREMENTS:

Time	Gallons	PH	Cond. (uS)	Temp. (°F)	Turbidity (NTU)
	6	6.62	306	60	15.6/
	13	6.85	299	61	\$.32
	19	6.77	292	61	3.50

Sampling and Analytical Methods: _	Disg. Bailer / TCL VOCS	
Laboratory Name and Location:	STL-CT	



Project: W.a~ Holt		
Location: Garden City		
Well No.: W-4		
Date:	Start Time:	
Weather: <u>()versast 68°F</u>		
Sampled By:		-
Depth to Bottom of Well:33		Feet.
Depth to Water: 24.68	}	Feet.
Height of Water Column: 8.3	7	Feet.
Water Volume in Casing:	1	Gallons.
Water Volume to be Purged: <u>/ / (                                </u>		
Water Volume Actually Purged:G	allons.	
Purge Method: WHALE POUP		
Physical Appearance/Comments: 5LiG	HTLY TURBID.	
EIELD MEAGUIDENENTO		

### FIELD MEASUREMENTS:

Time	Gallons	PH	Cond. (uS)	Temp. (°F)	Turbidity (NTU)
	6	7,02	329	62	163
	12	6.99	340	62	47.68
	17	6.98	330	GZ	27.30

Sampling and Analytical Methods:	Disp. Bailer/TOLVOCS
Laboratory Name and Location:	STL-CT



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Project: Win-Half		_
Location: Carden City		
Well No.: W-5	Well Diameter:	4 inch
Date:/ 0 / 1 / 0 3		
Weather: Overast 68°F	Finish Time:	
Sampled By:		
Depth to Bottom of Well:33		Feet.
Depth to Water: 24.	<i>ر</i> ج	Feet.
Height of Water Column: 8.0	5	Feet.
Water Volume in Casing: 57,	2	Gallons.
Water Volume to be Purged:/5.6_ G	allons.	
Water Volume Actually Purged: G	allons.	
Purge Method: Whak Punp		
Physical Appearance/Comments:Clea	<u>r</u>	
SICI DATE A OLIDERATE INTO		

### FIELD MEASUREMENTS:

Time	Gallons	PH	Cond. (uS)	Temp. (°F)	Turbidity (NTU)
	5	6.52	1081	65	56
	70	6.68	1226	62	32
	16	677	1238	62	25./4

Sampling and Analytical Methods: _	Disp. Bailer/TCL VOCS
Laboratory Name and Location:	STL-CT



Page	of	

Project: Win Hout				
Location: Garden City				
Well No.: W·6	Well Diameter: 4:a			
Date: 16/1/03	· · · · · · · · · · · · · · · · · · ·			
Weather: Overcast 68°F	Finish Time:			
Sampled By: JB/ms				
Depth to Bottom of Well:35	Feet.			
Depth to Water: 25.24				
Height of Water Column: 9.76				
Water Volume in Casing: 6.344				
Water Volume to be Purged:				
Water Volume Actually Purged: $\frac{19}{2}$ Ga	allons.			
Purge Method: WHALE FOMP				
Physical Appearance/Comments:				
EIEL D. MEA. O. I. D. T. I.				

### FIELD MEASUREMENTS:

Time	Gallons	PH	Cond. (uS)	Temp. (°F)	Turbidity (NTU)
	6	6.85	600	62	3,92
	13	6.80	59/	63	9.03
	19	6.90	542	63	10.84

Sampling and Analytical Methods: _	Disp. Bailer /TCL VOCS
Laboratory Name and Location:	STL-CT



Page	_ of

Project: Win-ItoIt		
Location: Garden City		
Well No.:	Well Diameter:	4 inch
Date:	Start Time:	
Weather: P. Cloudy 68°F		
Sampled By:		
Depth to Bottom of Well:		Feet.
Depth to Water: 23-99		
Height of Water Column: ZZ.O		
Water Volume in Casing:		
Water Volume to be Purged:42.92c		
Water Volume Actually Purged: <u>43</u> e	Sallons.	
Purge Method: WHALE PUMP		
Physical Appearance/Comments:		
FIELD MEASUREMENTS:		

Time	Gallons	PH	Cond. (uS)	Temp. (°F)	Turbidity (NTU)
	15	6.88	213	62	6.00
	30	6.83	304	62	0.00
	43	6.86	300	61	0.00

Sampling and Analytical Methods:	Disp. Bailer /TCL VOCS
Laboratory Name and Location:	STL-CT



### WIN-HOLT 4/18/03

)

## RELATIVE ELEVATION SURVEY WORK SHEET

		Height of			
Station	+ Sight	Instrument	- Sight	Elevation	Comments
				101.24	Benchmark = $8M - 7$
	44.93	106.17			The state of the s
			82.9-	(99,89)	W-2
			-6.12	(100.05)	5.M
		-			NEW LOOP
				101.74	W - (o
	+ 5.29	/07.03			
•			- 6.79	100,24	
	+ 5.99	106.23			
			-5.96	76.001	
	+6.01	106.28			
			-5.98	(100.30)	W-7
					Unable to close loop due to time constraints. 858

### WIN-HOLT MONITORING WELL ELEVATIONS

8. M.

Berchmark (Beach Street) Top of fine Hydraut @ Corner

STATION Benchmark	BACKSKHIT	HT. (NST	401251441	ecev.
STATION O	5.79	105.79		· ·
W-2			4,88	(100.91)
W-3			A. 66	100,93
W-4			4,55	101.24
N-5	hospitally but	· ·	4.33	101.46)
ANTICR(2)	2.41	102.41	3,71	98.7
MARION (3)	6.20	104.9	J;	
W-1	OP BACK		5.67	99.23
N-2	5,53	an it safe		99.23
Trolly	2173	104016	6.06	98.7
Sprink ig	3.67	102.37	2.37	(100.0 (10.001

# RELATIVE ELEVATION SURVEY WORK SHEET

Sight   Becation   Comments						r.
5.301 5.301 5.301 5.301 5.301 5.301 5.301 5.301 6.3.501 6	Station	+ Sight	Height of Instrument		Elevation	Comments
5.59 1.05.55 1.00 (49.8i) 5.61 (49.8i) 5.62 (49.8i) 5.63 (49.8i)						Benchmark =
5.89 12.84 5.61 (49.81) 5.89 P.S.42 5.89 (49.83)	1			20 7	(56,53)	00/
19.5 (40.81) 19.5 19.5 (40.81) 19.5 19.5 (40.81) 19.5	2	687	24.50.			
5.61 12.42 S.89 (44.53)	3-0				(49.81)	
5.89		19.5	12.5.41			
	1		-	5.89	(49.53)	
						ť
	-					

### APPENDIX B LABORATORY DATA



### ANALYTICAL REPORT

JOB NUMBER: 203464

Prepared For:

FANNING, PHILLIPS AND MOLNAR 909 Marconi Avenue Ronkonkoma, NY 11779

Project: WIN-HOLT

Attention: John Bukoski

Date: 04/28/2003

Name: Johanna L. Dubauskas

Title: Project Manager

E-Mail: jdubauskas@stl-inc.com

4.28.03

STL Connecticut

128 Long Hill Cross Road

Shelton, CT 06484

This Report Contains (1/3) Pages



### STL Report : 203464 FANNING, PHILLIPS AND MOLNAR

### Case Narrative

Sample Receipt - All samples were received in good condition and at the proper temperature.

Volatile Organics – Volatile organics were determined by purge and trap GC/MS using guidance provided in Method 5030B/8260B. The instrumentation used was a Tekmar Model 2000/2016 Concentrator interfaced with a Hewlett Packard Model 5970A GC/MS/DS.

The spike compound percent recoveries were within the laboratory generated guidelines in the independent source quality control samples.

Samples W-7 and W-2 were analyzed at 1:2 and 1:20 dilutions, respectively, due to high target compound concentrations.

Sample Calculation:

Sample ID-W-2 Compound-Toluene

 $\frac{(953203)(125)(20)}{(2730179)(.981)(5)}$  = 177.9 = 180 UG/L.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Jeffrey C. Curran

Laboratory Manager

Upril 28, 2003 Date

### SAMPLE INFORMATION Date: 04/28/2003

Job Number.: 203464

Customer...: FANNING, PHILLIPS AND MOLNAR

Attn.....: John Bukoski

Project Number.....: 20000743
Customer Project ID...: WIN-HOLT
Project Description...: Win-Holt

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received	
203464-1	W-7	Water	04/17/2003	10:30	04/18/2003	09:15	
203464-2	W-1	Water	04/17/2003	11:00	04/18/2003	09:15	
203464-3	W-2	Water	04/17/2003	11:30	04/18/2003	09:15	
							ĺ
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		t					

CUSTOMER: FANN	CONTRIBUTE: FOLICI						Date:(	Date:04/28/2003		
_	FANNING, PHILLIPS AND MOLNAR	PROJECT	PROJECT: WIN-HOLT				ATTN:	John Bukoski		
Customer Date Sam Time Sample M.	Customer Sample ID: W-7 Date Sampled: 04/17/2003 Time Sampled: 10:30 Sample Matrix: Water		Labor Date	atory Sample Received Received	1D: 203464-1 : 04/18/2003 : 09:15					
TEST METHOD	PARAMÉTER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	DNITS	BATCH I	DT DATE/TIME	TIME TECH
82608	Volatile Organics (5mL Purge)	G	=	r	Ç		:			
	Chloromethane Vinvl chloride	2 9	) D	2 0	2 0	2.00000	ng/L	16443	04/24/03	1510
	Bromomethane	QN.	<sub>D</sub>	9	10	2.00000	ng/L	16443	04/24/03	
•	Chloroethane	ND OF	<b>D</b>	2.5	10	2.00000	ng/L	16443	04/54/03	1510
	1,1-Dichloroethene		2	٧	2 0	2.00000	ng/L	16443	04/24/03	1510
	Acetone	Q.		. 4	20	2.00000	ug/L	16443	04/24/03	
	Methylene chloride	-	න ි	8.0	10	2.00000	1/6n	16443	04/24/03	1510
•	trans-1,2-Dichloroethene	9N 9	) <del>-</del>		2 ⊊	2.00000	T/6n	16443	04/24/03	1510
	Vinvl acetate	N		۰ س	10	2.00000	7/6n	16443	04/24/03	med 01c1 8
	cis-1,2-Dichloroethene		¬ ;	<b>—</b> 1	10	2.00000	1/6n	16443	04/24/03	1510
	2-Butanone (MEK)	2 9	5 5	27.0	50	2.00000	ng/L	16443	04/54/03	1510
	Chlorotorm	250	,	2 0	2 6	2,00000	J/6n	16445	04/24/03	1510
	, , -			9.0	10	2.00000	7/6n	57791	04/24/03	
	Benzene	<del>S</del>		0.8	10	2.00000	ug/E	16443	04/24/03	1510
	1,2-Dichloroethane		<b>⊃</b> '	9.0	0.	2.00000	ug/L	16443	04/24/03	1510
	Trichloroethene	<u>د</u>	ב כ	<b>.</b>	10	2.00000	ng/L	16443	04/24/03	1510
	1,2-Dichloropropane	2 5	) <u>=</u>		9 5	2.00000	ng/L	16443	04/24/03	1510
	Bromodich   Oromethane 	2 2	) D		2 6	2,00000	ng/L	2777	04/24/03	1510
	C.S1,S-Dicholopiopio 7.Mathyl-2-pentanone (MIBK)	2	5	_	20	2.00000	7/6n 1/0/1	16443	04/24/03	-
	Tolliene	<u>S</u>	ם	9.0	10	2.00000	i/sn	16443	04/24/03	1510
	trans-1,3-Dichloropropene	<del>2</del>	<u> </u>	8.0	10	2.00000	ng/L	16443	04/24/03	1510
	1,1,2-Trichloroethane	<b>2</b> 9	o :	~ 0	10	2.00000	ng/L	16443	04/54/03	
	Tetrachloroethene	2 5	) =	0. ~	2 8	2,00000	7/6n	16443	04/24/03	1510
	Z-Rexanone	<u> </u>	-	)	Ì	00000	ug/ r	C##01	04/54/00	n c

	Job Number: 203464	LABORATOR	YTES	TRESUL	s L		Date:0	Date: 04/28/2003		
CUSTOMER: FANN	CUSTOMER: FANNING, PHILLIPS AND MOLMAR	PROJECT	PROJECT: WIN-HOLT				ATTN: John Bukoski	John Buke		
Customer Date Sam Time Sam Sample M	Customer Sample ID: W-7 Date Sampled: 04/17/2003 Time Sampled: 10:30 Sample Matrix: Water		Lab Dat Tim	Laboratory Sample ID: Date Received: Time Received:	1D: 203464~1 : 04/18/2003 : 09:15					
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	0 FLAGS	MDL	R	DILUTION	UNITS	ВАТСН Б	DT DATE/TIME	INE TECH
	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	רככככ	0.000.44.4.6.000.88.86.44.4.000.88.86.44.4.88.86.44.88.86.88.88.86.88.86.88.86.88.86.88.86.88.86.88.86.88.86.88.86.88.86.88.88	. 10 11 01 01 01 01 01 01 01 01 01 01 01	2.00000 2.00000 2.00000 2.00000 2.00000 2.00000	1/6n 1/6n 1/6n 1/6n 1/6n 1/6n	16443 16443 16443 16443 16443 16443	04/24/03 04/24/03 04/24/03 04/24/03 04/24/03	1510 pam 1510 pam 1510 pam 1510 pam 1510 pam 1510 pam
	* In Description = Dry Wgt.	Δ.	Page 3							

CUSTOWIER: FAMMING, PHILLIPS AND MOLMAR   CUSTOWIER: FAMMING, PHILLIPS AND MOLMAR   PROJECT: WIN-HOLT					Date:04/28/2003	28/2003		
Time Sample   D: W-1	PROJECT: WIN-HOL				ATTN:	John Bukoski		
REST METHOD   PARAMETER/TEST DESCRIPTION   SAMPLE RESULT   O FLAGS   MOL	Lal Da: Tir	boratory Sample ID te Received						
Volatile Organics (5mL Purge)         ND         U         1           Vinyl chloride         ND         U         1           Vinyl chloride         ND         U         0.8           Romomethane         ND         U         0.8           Chloroethane         ND         U         0.6           Carbon disulfide         ND         U         0.6           Acetone         ND         U         0.6           Acis-1,-Dichloroethane         ND         U         0.6	E RESULT a		RL	DILUTION	UNITS	ватсн рт	DATE/TIME	TECH
	222222222222222222222222222222222222222	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1.00000 1.00000	ug/L 16443 ug/L 16443		04/24/03 1340 04/24/03 1340	1340 pam 1340 pam 134

		Job Number: 203464	LABORATOR	<b>→</b>	EST RESUL	L 1 S	į	Date:0	Date:04/28/2003		
	CUSTOMER: FANN	CUSTOMER: FANNING, PHILLIPS AND MOLNAR	PROJECT: WIN-HOLT	WIN-H				1,57,238	ATTN: John Bukoski		
	Customer Date Sam Time Sam Sample M	Customer Sample ID: W-1 Date Sampled: 04/17/2003 Time Sampled: 11:00 Sample Matrix: Water		— <b></b>	Laboratory Sample ID: 20346 Date Received: 04/18, Time Received: 09:15	1D: 203464-2 : 04/18/2003 : 09:15					
Ш.	TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	a FLAGS	S MOL.	RU	DILUTION	UNITS	BATCH	DT DATEZTIME	AE TECH
0000006		Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	Q Q Q Q Q	22222	0.2 0.3 0.4 1	רא אי אי אי אי	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	7/6n 7/6n 7/6n 7/6n 7/6n 7/6n	16443 16443 16443 16443 16443 16443	04/24/03 04/24/03 04/24/03 04/24/03 04/24/03 04/24/03	1340 pam 1340 pam 1340 pam 1340 pam 1340 pam 1340 pam
		* In Description = Dry Wgt.	ď	Page 5							-

	Job Number: 203464	LABORATOR	YTE	ST RESU	S L J		Date:	Date: 04/28/2003			
CUSTOMER: FANI	CUSTOMER: FANNING, PHILLIPS AND MOLNAR	PROJECT:	T: WIN-HOLT				ATTN:	John Bukoski	17.	5 6 5 6 7 7 7	
									200		
Custome Date Sar Time Sar Sample P	Custoner Sample ID: W-2 Date Sampled: 04/17/2003 Time Sampled: 11:30 Sample Matrix: Water		La Da Ti	Laboratory Sample ID: Date Received Time Received	ID: 203464-3 : 04/18/2003 : 09:15						
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	TOW	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NOTI-DITON	SILINO	ВАТСН	DT - DATE/TIME	7.T.ME	TECH
82608	Volatile Organics (5mL Purge)									(1) 사 지	
•	Chloromethane  Vinv  chloride	Q Q	<b>)</b> )	R 8	901	20,00000	.1/gn	16443	04/24/03		
	Bromomethane	2	·	, 62	100	20.00000		16443	04/24/03	05 1639 03 1639	Dam C
ιÛ	Chloroethane 1 1-Dichloroethene	ND QN	<b>)</b> )	16	100	20.00000	1/6n	16443	04/24/03		
<u> </u>	Carbon disulfide	ON .		12	100	20,00000	ug/L	16443	04/24/03	1639 1639	Dam
<u> </u>	Acetone Mathylene chloride	21 21	U J B	338 82	200 100	20.00000	ng/L	16443	04/24/03		
<u>]</u> [	trans-1,2-Dichloroethene			12	100	20.00000	7/6n na/r	16443	04/24/03	1659	med .
- Creeze	1,1-Dichloroethane	S S	_ ⊃ =	12 30	. 100	20.00000	ng/L	16443	04/24/03		
, , , , , , , , , , , , , , , , , , ,	(Vinyl acetate  cis-1,2-Dichloroethene	Q Q	) D	12	100	20.00000	1/6n 1/6n	16443	04/24/03	1639	pam
	2-Butanone (MEK)	9 :	<b>D</b> :	22	200	20 00000	ng/L	16443	04/24/03	-	
	Chloroform	<u>2</u> §	<del></del>	∞∝	100	20.00000	1/6n	16443	04/24/03		
	Carbon tetrachloride	<u> </u>	· D :	9 9	100	20.00000	ug/L ug/L	16443	04/24/03	15 1659 13 1639	pam
	Benzene	<del>S</del> <del>S</del>	<b>-</b>	<b>∞</b> √	<b>6</b> 5	20.00000	ng/L	16443	04/54/03	-	
	1, Z-D  cnloroethane   Trich  oroethene	27	, ¬	1,5	92.00	20,00000		16443	04/24/03	3 1639 3 1630	pam
	1,2-Dichloropropane	<u>2</u>	<b>-</b> - :	12	100	20.00000	ng/L	16443	04/24/03		
	Bromodichloromethane	<u> </u>	<b>-</b>	5 5	90,50	20.00000	ng/L	16443	04/54/03		
	C1S-1,5-Dichloroproperte	2 2	· >	10	200	20 00000	1/6/L	16445	04/24/03		
<del></del>	Toluene	180		9	100	20.00000	1/6n	16443	04/24/03	3 1639	patt
	trans-1,3-Dichloropropene	<b>₽</b> :	<u></u> :	ත ;	100	20.00000	ng/L	16443	04/24/03		
	1,1,2-Trichloroethane	<b>9</b> 9	→ <b>=</b>	16	100	20.00000	1/6n	16443	04/54/03		
	Tetrachloroethene	2 5	<b>)</b> =	۶ ۵	000	20.00000	ng/L	16443	04/24/03		pam
	Z-Hexanone	<u>}</u>	)	}	007	200000	1/6n	6443	04/24/03	5 1659	
	4-1-		Jame 6								
	* In Description = Dry Wgt.	<u>.</u>	rage o								

\* In Description = Dry Wgt.

	Job Number: 203464	LABORATOR	>- H	ST RESUL	T S		Date:04	Date:04/28/2003		
CUSTOMER: FAN	CUSTOMER: FANNING, PHILLIPS AND MOLNAR	PROJECT:	T: WIN-HOLT				ATTN:	John Bukoski	ski	
Custome Date Sa Time Sa Sample	Customer Sample ID: W-2 Date Sampled: 04/17/2003 Time Sampled: 11:30 Sample Matrix: Water		Lak Dat Tin	Laboratory Sample ID: Date Received: Time Received:	1D: 203464-3 : 04/18/2003 : 09:15					
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	R	DICUTION	UNITS	ВАТСН ОТ	DATE/FIME	HE TECH
<u>anaaaa</u>	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	ND 210 ND ND 7100		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	001 001 001 001 001 001	20.00000 20.00000 20.00000 20.00000 20.00000 20.00000	1/6n 1/6n 1/6n 1/6n 1/6n 1/6n 1/6n	16443 16443 16443 16443 16443 16443	04/24/03 04/24/03 04/24/03 04/24/03 04/24/03 04/24/03	1639 pam 1639 pam 1639 pam 1639 pam 1639 pam 1639 pam
	* In Description = Dry Wgt.		Page 7							

### LABORATORY CHRONICLE

Job Number: 203464

Date: 04/28/2003

CUSTOMER: FANNING	, PHILLIPS AND MOLNAR	PROJECT: WIN-HOLT ATTN: John Bukoski
Lab ID: 203464-1	Client ID: W-7	Date Recvd: 04/18/2003 Sample Date: 04/17/2003
METHOD 5030A	DESCRIPTION 5030 5 mL Purge Prep	RUN# BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION 1 16441
8260B	Volatile Organics (5mL Purge)	1 16441 16441 04/24/2003 1510 2.00000
Lab ID: 203464-2	Client ID: W-1	Date Recvd: 04/18/2003 Sample Date: 04/17/2003
METHOD 5030A	DESCRIPTION 5030 5 mL Purge Prep	RUN# BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION 1 16441
8260B	Volatile Organics (5mL Purge)	1 16443 16441 04/24/2003 1340 1.00000
Lab ID: 203464-3	Client ID: W-2	Date Recvd: 04/18/2003 Sample Date: 04/17/2003
METHOD 5030A	DESCRIPTION 5030 5 mL Purge Prep	RUN# BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION
8260B	Volatile Organics (5mL Purge)	1 16441 1 16443 16441 04/24/2003 1639 20.0000

### QUALITY ASSURANCE METHODS

### REFERENCES AND NOTES

### Report Date: 04/28/2003

### REPORT COMMENTS

- 1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
- 2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
- 3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 4) The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert. ID# 10604 5) According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.

### Glossary of flags, qualifiers and abbreviation

- Inorganic Qualifiers (Q-Column)
- Analyte was not detected at or above the reporting limit.
- Not detected at or above the reporting limit.
- J Result is less than the RL, but greater than or equal to the method detection limit.
- Result is less than the CRDL/RL, but greater than or equal to the IDL/MDL.
- S Result was determined by the Method of Standard Additions.

### Inorganic Flags (Flag Column)

- ICV,CCV,ICB,CCB,ISA,ISB,CRI,CRA,MRL: Instrument related QC exceed th upper or lower control limits.
- \* LCS, LCD, MD: Batch QC exceeds the upper or lower control limits.
- MSA correlation coefficient is less than 0.995.
- 4 MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
- E SD: Serial dilution exceeds the control limits.
- H MB, EB: Batch QC is greater than reporting limit or had a negative instrument reading lower than the absolute value of the reporting limit.
- N MS, MSD: Spike recovery exceeds the upper or lower control limits.
- W PS: Post-digestion spike was outside 85-115% control limits.

### Organic Qualifiers (Q - Column)

- U Analyte was not detected at or above the reporting limit.
- ND Compound not detected.
- J Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).
- Result was qualitatively confirmed, but not quantified.
- C Pesticide identification was confirmed by GC/MS.
- Y The chromatographic response resembles a typical fuel pattern.
- Z The chromatographic response does not resemble a typical fuel pattern.
- E Result exceeded calibration range, secondary dilution required.

### Organic Flags (Flags Column)

- MB,EB, MLE: Batch QC is greater than reporting limit.
- LCS, LCD, CCV, MS, MSD, Surrogate, RS:Batch QC exceeds the upper or lower control limits.
- A Concentration exceeds the instrument calibration range or below the reporting limit.
- B Compound was found in the blank and sample.
- D Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D.
- H Alternate peak selection upon analytical review
- I Indicates the presence of an interfence, recovery is not calculated.
- M Manually integrated compound.
- P The lower of the two values is reported when the % difference between the results of two GC columns is greater than 25%.

### QUALITY ASSURANCE METHODS REFERENCES AND NOTES

Report Date: 04/28/2003

### Abbreviations

Batch	Designation given to identify a specific extraction, digestion, preparation set, or analysis set
CAP	Capillary Column
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CF	Confirmation Analysis
CRA	Low Level Standard Check - GFAA; Mercury
CRI	Low Level Standard Check - ICP
	Dilution Factor
DL	Secondary dilution and analysis
DLFac	Detection Limit Factor
DSH	Distilled Standard - High Level
DSL	Distilled Standard - Low Level
DSM	Distilled Standard - Medium Level
EB	Extraction Blank
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
ISA	Interference Check Sample A
ISB	Interference Check Sample B
Job No.	The first six digits of the sample ID which refers to a specific client, project and sample group
Lab ID	An 8 number unique laboratory identification
LCD	Laboratory Control Standard Duplicate
LCS	Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
мв	Method Blank or (PB) Preparation Blank
MD	Method Duplicate
MDL	Method Detection Limit
MLE	Medium Level Extraction Blank
MRL	Method Reporting Limit Standard
MSA	Method of Standard Additions
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not Detected
PACK	Packed Column
PREPF	Preparation factor used by the Laboratory's Information Management System (LIMS)
PS	Post Spike
PSD	Post Spike Duplicate
RA	Re-analysis
RE	Re-extraction and analysis
RL	Reporting Limit
RPD	Relative Percent Difference of duplicate (unrounded) analyses
RRF	Relative Response Factor
RS	Reference Standard
Rĭ	Retention Time
RT₩	Retention Time Window
SampleID	A 9 digit number unique for each sample, the first six digits are referred as the job number
SCB	Seeded Control Blank
SD	Serial Dilution
UCB	Unseeded Control Blank

One or a combination of these data qualifiers and abbreviations may appear in the analytical report.

### **STATE CERTIFICATIONS**

In some instances it may be necessary for environmental data to be reported to a regulatory authority with reference to a certified laboratory. For your convenience, the laboratory identification numbers for the STL-Connecticut laboratory are provided in the following table. Many states certify laboratories for specific parameters or tests within a category (i.e. method 325.2 for wastewater). The information in the following table indicates the lab is certified in a general category of testing such as drinking water or wastewater analysis. The laboratory should be contacted directly if parameter-specific certification information is required.

### STL-Connecticut Certification Summary (as of May 2002)

State	Responsible Agency	Certification	Lab Number
Connecticut	Department of Health Services	Drinking Water, Wastewater	PH-0497
Maine	Department of Health and Environmental Services	Drinking Water, Wastewater/Solid, Hazardous Waste	CT023
Massachusetts	Department of Environmental Protection	Potable/Non-Potable Water	M-CT023
New Hampshire	Department of Environmental Services	Drinking Water, Wastewater	2528
New Jersey	Department of Environmental Protection	Drinking Water, Wastewater	CT410
New York	Department of Health	CLP, Drinking Water, Wastewater, Solid/ Hazardous Waste NELAC	10602
North Carolina	Division of Environmental Management	Wastewater	388
Rhode Island	Department of Health	ChemistryNon- Potable Water and Wastewater	A43
Utah	Department of Health	RCRA	2032614458
Wisconsin	Department of Natural Resources	Wastewater	998355710

# ANALYTICAL REPORT

JOB NUMBER: 203431

Prepared For:

FANNING, PHILLIPS AND MOLNAR 909 Marconi Avenue Ronkonkoma, NY 11779

Project: WIN-HOLT

Attention: John Bukoski

Date: 04/29/2003

Signature

Name: Johanna L. Dubauskas

Title: Project Manager

E-Mail: jdubauskas@stl-inc.com

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STL Connecticut
128 Long Hill Cross Road

Shelton, CT 06484

This Report Contains (44) Pages



# STL Report: 203431 FANNING, PHILLIPS AND MOLMAR

#### Case Narrative

 $\mathbf{Sample}\ \mathbf{Receipt}-\mathbf{All}\ \mathbf{samples}\ \mathbf{were}\ \mathbf{received}\ \mathbf{in}\ \mathbf{good}\ \mathbf{condition}\ \mathbf{and}\ \mathbf{at}\ \mathbf{the}\ \mathbf{proper}\ \mathbf{temperature}.$ 

Volatile Organics – Volatile organics were determined by purge and trap GC/MS using guidance provided in Method 5030B/8260B. The instrumentation used was a Tekmar Model 2000/2016 Concentrator interfaced with a Hewlett Packard Model 5970A GC/MS/DS.

The spike compound percent recoveries were within the laboratory generated guidelines in the independent source quality control samples except for chloromethane, bromoform and dibromochloromethane.

Sample Calculation:

Sample ID-W-2D Compound-Toluene

 $\frac{(1033931)(125)(20)}{(2279362)(.989)(5)}$  = 229.3 = 230 UG/L.

The following samples were analyzed at dilutions due to high target compound concentrations:

W-2D	1:20
W-5	1:2
W-6	1:10

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

## SAMPLE INFORMATION Date: 04/29/2003

Job Number.: 203431

Customer...: FANNING, PHILLIPS AND MOLNAR

Attm..... John Bukoski

Project Number.....: 20000743 Customer Project ID...: WIN-HOLT Project Description...: Win-Holt

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
203431-1	GP-11(37-39)	Groundwater	04/09/2003	13:15	04/15/2003	09:30
203431-2	GP-11 (52-54)	Groundwater	04/09/2003	14:15	04/15/2003	09:30
203431-3	GP-11(67-69)	Groundwater	04/09/2003	15:10	04/15/2003	09:30
203431-4	GP-13 (37-39)	Groundwater	04/11/2003	09:15	04/15/2003	09:30
203431-5	GP-13 (52-54)	Groundwater	04/11/2003	09:50	04/15/2003	09:30
203431-6	GP-13D(37-39)	Groundwater	04/11/2003	09:20	04/15/2003	09:30
203431-7	GP-13 (67-69)	Groundwater	04/11/2003	10:15	04/15/2003	09:30
203431-8	GP-12 (37-39)	Groundwater	04/11/2003	10:55	04/15/2003	09:30
203431-9	GP-12(52-54)	Groundwater	04/11/2003	11:30	04/15/2003	09:30
203431-10	GP-12(67-69)	Groundwater	04/11/2003	12:00	04/15/2003	09:30
203431-11	FB-1	Groundwater	04/09/2003	13:00	04/15/2003	09:30
203431-12	₽B-2	Groundwater	04/11/2003	08:30	04/15/2003	09:30
203431-13	TB040903	Groundwater	04/09/2003	00:00	04/15/2003	09:30
203431-14	TB041703	Water	04/17/2003	00:00	04/18/2003	09:15
203431-15	W-6F	Water	04/17/2003	13:40	04/18/2003	09:15
203431-16	W-2D	Water	04/17/2003	11:40	04/18/2003	09:15
203431-17	₩-6	Water	04/17/2003	13:30	04/18/2003	09:15
203431-18	W~5	Water	04/17/2003	13:00	04/18/2003	09:15
203431-19	W-4	Water	04/17/2003	12:30	04/18/2003	09:15
203431-20	W-3	Water	04/17/2003	12:00	04/18/2003	09:15
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PROJECT: WIN-HOLT

Date:04/29/2003

ATTN: John Bukoski

CUSTOMER: FANNING, PHILLIPS AND MOLWAR

Customer Sample ID. GP-11(37-39)
Date Sampled.....: 04/09/2003
Time Sampled.....: 13:15
Sample Matrix....: Groundwater

Laboratory Sample ID: 203431-1 Date Received.....: 04/15/2003 Time Received.....: 09:30

TEST METHOD	PARAMETEK/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DILUTION	UNITS	BATCH	DT DATE/TIME	TECH
82608	Volatile Organics (5mL Purge)									
	Chloromethane	S		-	5	1,00000	ng/L	16154	04/16/03 13	1347 pam
	Vinyl chloride	R		-	ιΩ	1,00000	ng/L	16154		
	Bromomethane	2	_	2	2	1.00000	T/Bn	16154		
	Chloroethane	2	п	0.8	5	1.00000	ng/L	16154		
	1,1-Dichloroethene	<u> 2</u>	⊃	0.8	ιΛ	1.00000	ng/l.	16154		_
	Carbon disulfide		n.	9.0	ις	1.00000	ug/L	16154		_
	Acetone	∞	77	2	10	1.00000	ug/L	16154		_
	Methylene chloride	5	89	<b>9.</b> 0	Ŋ	1.00000	ug/l.	16154		1347 pam
	trans-1,2-Dichloroethene	2	<u></u>	9.0	יט	1.00000	ng/L	16154	04/16/03 13	_
	1,1-Dichloroethane	<u>N</u>	<u></u>	9.0	-ν	1.00000	ng/L	16154		
	Vinyl acetate	S.	'n	2	Ŋ	1.00000	ng/L	16154	-	1347 pam
	cis-1,2-Dichloroethene	<del>2</del>	5	9.0	5	1.00000	ng/L	16154	•	
	2.Butanone (MEK)	<u>8</u>		_	10	1.00000	ng/L	16154	04/16/03 1347	
	Chloroform	QV.	_	7.0	2	1.00000	ng/L	16154	•	
	1,1,1-Trichloroethane	<u>8</u>	⊃	7.0	2	1.00000	ng/L	16154		_
	Carbon tetrachloride	Q.	_	0.3	2	1.00000	ng/L	16154	04/16/03 1347	7 pam
	Benzene	<u>N</u>	n	0.4	2	1.00000	ng/f	16154	•	
	1,2-Dichloroethane	<u>N</u>	5	0.3	2	1.00000	ng/L	16154	04/16/03 1347	
	Trichloroethene	<u>Q</u>	<u> </u>	0.7	ī	1.00000	ng/L	16154		
	1,2-Dichloropropane	₽	<u> </u>	9.0	20	1.00000	ng/L	16154	04/16/03 1347	
	Bromodichloromethane	2	<u> </u>	9.0	5	1.00000	ng/L	16154	04/16/03 1347	
	cis-1,3-Dichloropropene	2		9.0	2	1.00000	ng/L	16154	`-	
	4-Methyl-2-pentanone (MIBK)	2	⊇	0.5	10	1.00000	ng/L	16154	04/16/03 1347	
	Toluene	2		0.3	ιΛ	1.00000	ng/L	16154	04/16/03 1347	
	trans-1.3.Dichloropropene	QN.	⊃	0.4	ī	1.00000	ng/L	16154	04/16/03 1347	
	1.1.2-Trichloroethane	QN.	⊃	0.8	2	1.00000	ng/L	16154	04/16/03 1347	_
	Tetrachloroethene	QN	<u></u>	7.0		1.00000	7/Bn	16154	04/16/03 1347	
	2-Hexanone	QN.	5	_	10	1.00000	ng/L	16154	04/16/03 1347	7 pam
								_	_	_

<sup>\*</sup> In Description = Dry Wgt.

Date:04/29/2003	ATTM: John Bukoski	110N UNITS BATCH DI DATE/TIME TECH 000 UG/L 16154 04/16/03 1347 pam 000 UG/L 16154 pam 000 UG/L 16154 04/16/03 1347 pam	-
١ ـ ٢ .	e ID: 203431-1 : 04/15/2003 : 09:30	80. Dilibrion 5 1.00000 5 1.00000 5 1.00000 5 1.00000 5 5 1.00000 5 1.00000 5 5 1.00000 5 5 1.00000 5 5 1.00000 5 5 1.00000 5 5 1.000000 5 1.000000 5 1.00000 5 1.00000 5 1.000000 5 1.00000 5 1.00000 5 1.00000 5 1.000000 5 1.000000 5 1.000	
Y TEST RESU	PROJECT: WIN-HOLT Laboratory Sample ID: 20343 Date Received 04/15 Time Received 09:30	U 0 0.2 U 0 0.3 U 0 0.4 U 0 0.7 U 0 0.7	Page 3
LABORATOR	PROJECT	SAMPLE RESULT ND ND ND ND ND ND ND	d.
Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOLNAR  Customer Sample ID: GP-11(37-39)  Date Sampled 04/09/2003  Time Sampled 13:15  Sample Matrix Groundwater	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	* In Description = Dry Wgt.
	CUSTOMER: FAN Custome Date Sar Time Sar	FEST METHOD	

	Job Number: 203431	ABORATORY	E	ST RESUL	T S		Date:0	Date: 04/29/2003			
CUSTOMER: FAN	CUSTOMER: FANNING, PHIELIPS AND MOLNAR	PROJECT:	PROJECT: WIN-HOLT	Ţ			ATTN	John Bukask	oski		
Custome Date San Time San Sample P	Customer Sample ID: GP-11(52-54) Date Sampled: 04/09/2003 Time Sampled: 14:15 Sample Matrix: Groundwater		La Da Tî	Laboratory Sample ID: Date Received: Time Received:	: 1D: 203431-2 : 04/15/2003 : 09:30						
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDI	RL	DILUTION	STIND	BATCH	DT DATE/TIME		TECH
8260B	Volatile Organics (5mL Purge) Chloromethane Vinyl chloride Bromomethane Chloroethane 1,1-Dichloroethene Carbon disulfide Acetone Methylene chloride trans-1,2-Dichloroethene 1,1-Dichloroethane Vinyl acetate cis-1,2-Dichloroethane Vinyl acetate Carbon tetrachloride 2-Butanone (MEK) Chloroform 1,1-Trichloroethane Trichloroethane Trollene 1,2-Dichloropropene Trollene Trollene Trollene Trollene Trollene Trollene Trollene Trollene Tetrachloroethane Trollene Trollene Trollene Trollene Trollene Tetrachloroethane Tetrachloroethane Tetrachloroethane Tetrachloroethane Tetrachloroethane	88888 88888888888888888888888888888888	m 	1 0.8 0.6 0.6 0.7 0.3 0.3 0.5 0.6 0.6 0.7 0.6 0.7	ນດນດດວ່ານດາດວ່ານດາດວ່ານດາດວ່າ	1.00000 1.00000	1/6n 1/6n 1/6n 1/6n 1/6n 1/6n 1/6n 1/6n	16154 16154 16154 16154 16155 16155 16155 16156 16157 16157 16157 16157 16157 16157 16157 16157 16157 16157 16157 16157	04/16/03 04/16/03	1240 1240 1240 1240 1240 1240 1240 1240	pam

Page 4

Date:04/29/2003	John Bukoski	BATCH DT DATE/TIME TECH 16154 04/16/03 1240 pam
Date:	ATTN:	1/6n C 1/
		DITUITION 1.00000 1.00000 1.00000 1.00000 1.00000
L 1 S	1b: 203431-2 : 04/15/2003	
STRESUL	OLT Laboratory Sample ID: Date Received	MDL 0.2 0.3 0.4 0.7
F	PIN-HOI Le De Le	FLAGS.
LABORATORY	PROJECT! WIN-HOLT	SAMPLE RESULT Q F
Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOLWAR  Customer Sample ID: GP-11(52-54)  Date Sampled: 04/09/2003  Time Sampled: 14:15  Sample Matrix Groundwater	Dibromochloromethane Ethlorbenzene Ethlorbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)  * In Description = Dry Wgt.

. <u></u> .		Job Number: 203431	ABORATOR	1 E	STRESUL	LTS		Date:0	Date:04/29/2003			
	SUSTOMER: FANI	CUSTOMER: FANNING, PHILLIPS AND MOLNAR	PROJECT	: WIN-HO	1			ATTN:	John Bukoski	oskí		
	Custome Date San Time San Sample M	Customer Sample ID: GP-11(67-69) Date Sampled: 04/09/2003 Time Sampled: 15:10 Sample Matrix: Groundwater		Le Ti	Laboratory Sample Date Received Time Received	e ID: 203431-3 : 04/15/2003 : 09:30						<del></del>
	TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	0 FLAGS	JOM	RL	NOTTOTION	SEIND	ВАТСН	DT DATE/TIM		- HOE
<u> </u>	82608	Volatile Organics (5mL Purge)									-	
		Chloromethane	2 5	D =	<del>-</del> -	ru r	1.00000	ng/L	16154	04/16/03	1314 pam	
		Bromomethane	2 2	) <u>¬</u>	- M	ח גח	1 00000	1/6n	16154	04/16/03	_	Ē.
		Chloroethane	QN	<b>D</b> :	0.8	יאט	1.00000	1/6n	16154	04/16/03	1314 pam 1314 pam	
		1,1-Dichloroethene Carbon disulfide	Q CR		0.8	יט וע	1.00000	Lig/L	16154	04/16/03		
		Acetone	Q.	) D	2	. 6	1.00000	ug/L	16154	04/16/03	1314 pam	E 6
		Methylene chloride	QN S	в П:	0.4	ហ	1.00000	7/6n	16154	04/16/03	1314 pam	 7 E
		trans-1,2-Dichloroethene 11 1-Dichloroethana	QN .	<del>.</del>	9.0	TU II	1.00000	ng/t	16154	04/16/03	_	
		Vinyl acetate	- -	· ⊃	2.2	ט זע	1.00000	1/6n	16154	04/16/03	1314 pam	E 8
-		cis-1,2-Dichloroethene	9		9.0		1.00000	7/8n	16154	04/16/03	13 14 pam 13 14 pam	E
		2-Butanone (MEK)	S.	<del>-</del>	<del>-</del> ¢	e .	1.00000		16154	04/16/03		
			_	· ⊃	4.0	ט זכ	00000	ug/L	16154	04/16/03	1314 pam	E 1
		Carbon tetrachloride	€ :	<b>-</b>	0.3	ı LU :	1.00000		16154	-	1314 pam	
		Benzene 1 2-nichlomoothene		<del>-</del> -	0.4	ហយ	1.00000		16154			=
1		Trichloroethene	23		0.7	טי יט	1.00000	1/6n	16154	04/16/05	1514 pam	
-		1,2-Dichloropropane		<u></u>	9.0	30	1.00000		16154		1314 pam	
		Bromodichloromethane	2 2	<b>3</b> =	9.0	יט ה	1,00000		16154		1314 pam	
		cis-i,3-bichicologiopene  4-Methyl-2-pentanone (MIBK)		<u> </u>	0.5	, <u>0</u>	1.00000	1/6n	16154	04/16/03	1514 pam	
		Toluene			0.3	72	1.00000		16154	•		
		trans-1,3-Dichloropropene		<b>5</b>	7.0	ľΩ	1.00000		16154	•		_
		1,1,2-Trichloroethane	_	<del>-</del>	8.0	υπ	1.00000		16154	- 1	_	_
		etrachloroethene	-	- =	±	. E	.00000	1/6n	10154		1514 pam	_
		Z-nexarione		<u> </u>	_	2	00000	7/8n	+C   O	04/16/03	JI4 pair	
											_	_
		* In Description = Dry Wgt.	ď	Page 6								

Page 6

Date:04/29/2003	ATTN: John Bukoski	UB/L 16154 04/16/03 1314 pam ug/L 16155 04/16/03 1314 pam	
S	203431-3 04/15/2003 09:30	8L DIEUTION 5 1.000000 5 1.00000 5 1	_
STRESULT	ULT Laboratory Sample ID: 20343 Date Received: 04/15 Time Received: 09:30	0.2 0.3 0.4 0.4 1	
ORATORY TE	PROJECT: WIN HOLT	SAMPLE RESULT Q FLAGS	Page 7
LAB			
Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOENAR Customer Sample ID: GP-11(67-69) Date Sampled: 04/09/2003 Time Sampled: 15:10 Sample Matrix: Groundwater	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	* In Description = Dry Wgt.
	CUSTOMER: F Custo Date Time Samplu	TEST METHOD	

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CUSTOMER: FANNING, PHILLIPS AND MOLNAR

PROJECT: WIN-HOLT

Date:04/29/2003

ATTN: John Bukoski

Customer Sample ID: GP-13(37-39)
Date Sampled.....: 04/11/2003
Time Sampled.....: 09:15
Sample Matrix....: Groundwater

Laboratory Sample ID: 203431-4
Date Received.....: 04/15/2003
Time Received.....: 09:30

rech		1047 pam	_	47 pam	_				_			_	_	_		_		_		_	_		_	7 pam	_	_	7 pam	7 pam	_	_
DATE/TIME		04/17/03 00	_	_	_	_	_		04/17/03 0047			04/17/03 0047							04/17/03 0047	04/17/03 0047	04/17/03 0047	04/17/03 0047	04/17/03 0047	04/17/03 0047	04/17/03 0047		04/17/03 0047	04/17/03 0047	04/17/03 0047	
ватен рт	_		88	82	89	- 89		80	 	 	<u></u>	∞	80	8	80	- 8	8	8	8	80	8	80	<b>~</b>	<b>8</b>		<b>&amp;</b> O	<u>~</u>			_
BA	_	16158	16158	16158	1615	1615	1615	11615	16158	1615	16158	16158	16158	1615	16158	1615	1615	1615	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	
UNITS		1/gn	1/Bn	1/gn	1/gn	1/Bn	J/Bn	1/6n	ug/L	1/6n	ng/L	T/Bn	ng/L	T/6n	T/6n	ng/L	ng/L	ng/L	1/6n	1/6n	ng/L	J/Bn	1/6n	ng/L	ng/l	ng/L	1/6n	ng/L	ng/L	
DILUTION	_	1,00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1,00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	
RL		īΟ	2	'n	5	יט	5	10	ιn.	5	2	<u>ب</u>	5	10	5	5	٠.	. 2	2	Ŋ	2	2	2	9	ĸ	2	2	2	10	
MDL		<b></b>	_	m	0.8	0.8	9.0	2	0.4	9.0	9.0	2	9-0	_	7.0	7-0	0.3	0.4	0.3	0.7	9-0	9.0	9.0	0.5	0.3	9.0	0.8	7.0	_	
FLAGS								œ																						_
LT Q		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>		<u>-</u>	<u> </u>	<u>-</u>	>	⊃_	<u> </u>	<u> </u>	<u> </u>	<u>&gt;</u>	<u> </u>	_	<u>⊃</u>	7	<u> </u>	<u>⊃</u>	<u>~</u>	<u> </u>	_
SAMPLE RESULT								17							0.5										0.0			9.0		
S	:	운	S	2	2	₽	<u>⊋</u>		2	₽	운	<del>2</del>	皇	<u>2</u>		<u> </u>	2	₽	皇	2	2	2	2	2		2	<u>₽</u>	_	€	
PARAMETER/TEST DESCRIPTION	Volatile Organics (5mL Purge)	Chloromethane	Vinyl chloride	Bromomethane	Chloroethane	1,1-Dichloroethene	Carbon disulfide	Acetone	Methylene chloride	trans-1,2-Dichloroethene	1,1-Dichtoroethane	Vinyl acetate	cis-1,2-Dichloroethene	2-Butanone (MEK)	Chloroform	1,1,1-Trichloroethane	Carbon tetrachloride	Benzene	1,2-Dichloroethane	Trichloroethene	1,2-Dichloropropane	Bromodichloromethane	cis-1,3-Dichloropropene	4-Methyl-2-pentanone (MIBK)	Toluene	trans-1,3-Dichloropropene	1,1,2-Trichloroethane	Tetrachloroethene	2-Hexanone	
TEST METHOD	8260B																													

\* In Description = Dry Wgt.

LABORATORY TEST RESULTS Date:04/29/2003	PRDJECT: WIN:HOLT	Laboratory Sample ID: 203431-4 Date Received: 04/15/2003 Time Received: 09:30	SAMPLE RESULT   G FLAGS   MDL   RL DITUTION UNITS BATCH   DA TEXTIME	ND U 0.2 5 1.00000 ug/L 16158 04/17/03 0.2 1.00000 ug/L 16158	Page 9
Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOLNAR	Customer Sample ID: GP-13(37-39) Date Sampled: 04/11/2003 Time Sampled: 09:15 Sample Matrix: Groundwater	TEST METHOD PARAMETER/JEST DESCRIPTION	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	* In Description = Dry Wgt.

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PROJECT: WIN-HOLT

Date:04/29/2003

ATTN: John Bukoski

CUSTOWER: FANNING, PHELLIPS AND MOLNAR
Customer Sample ID: GP-13(52-54)
Date Sampled..... 04/11/2003
Time Sampled..... 09:50
Sample Matrix.... Groundwater

Laboratory Sample ID: 203431-5
Date Received.....: 04/15/2003
Time Received.....: 09:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	)QW	RL	DILUTION	UNITS	BATCH	DT DATE/TIME	IME FECH
82608	Volatile Organics (5ml Purge)									
•	Chloromethane	읖	_	_		1.00000	1/6n	16158	04/17/03	0120 pam
	Vinyl chloride	S	<u></u>	_	5	1.00000	ng/L	16158	04/17/03	
	Bromomethane	2	<u></u>	3	2	1.00000	ng/L	16158	04/17/03	
	Chloroethane	<u>Q</u>	<u></u>	0.8	ľΩ	1,00000	ng/L	16158	04/17/03	=
	(1,1-Dichloroethene	2	5	0.8	2	1.00000	1/gn	16158	04/17/03	
	Carbon disulfide		<u> </u>	9.0	ζ.	1.00000	1/6n	16158	04/17/03	
	Acetone	16	<b>8</b> 2	2	10	1.00000	1/6h	16158	04/17/03	
	Methylene chloride	9	<del>5</del>	7.0	2	1.00000	ng/L	16158	04/17/03	0120 pam
	trans-1,2-Dichloroethene	<u> </u>	<u>&gt;</u>	9.0	5	1.00000	ng/L	16158	04/17/03	
	1,1-Dichloroethane	5	·	9.0	5	1.00000	ng/L	16158	04/17/03	_
	Vinyl acetate	QN	_	7	5	1.00000	ng/L	16158	04/17/03	
	cis-1,2-Dichloroethene		_	9.0	ĽΛ	1.00000	ng/L	16158	04/17/03	_
	2-Butanone (MEK)	2	_	-	10	1.00000	ng/L	16158	04/17/03	_
	Chloroform	~1	<u> </u>	7,0	5	1.00000	ng/L	16158	04/17/03	
	1,1,1-Trichloroethane	2		7.0	'n	1.00000	ng/L	16158	04/17/03	
	Carbon tetrachloride	QN	<u></u>	0.3	īU	1.00000	ng/L	16158	04/11/03	0120 pam
	Benzene	Q.	_	<b>5.</b> 0	ĸ	1.00000	ng/L	16158	04/17/03	0120 pam
	1,2-Dichloroethane		<del>_</del>	0.3	2	1.00000	ng/L	16158	04/17/03	
	Trichloroethene	7	_	2.0	ſΩ	1.00000	ng/L	16158	04/17/03	
	1,2-Dichloropropane	£	ם	9.0	5	1.00000	ng/L	16158	04/17/03	0120 pam
	Bromodichloromethane	2		9.0	2	1.00000	ng/L	16158	04/17/03	0120 pam
	cis-1,3-Dichloropropene	2	_	9.0	Ŋ	1.00000	ng/r	16158	04/17/03	0120 pam
	4-Methyl-2-pentanone (MIBK)	QN.	<b>¬</b>	0.5	10	1.00000	ng/L	16158	04/17/03	0120 pam
	Toluene	_		0.3	2	1.00000	ng/L	16158	04/17/03	0120 pam
	trans-1,3-Dichloropropene	용		7.0	ĽΩ	1.00000	ng/L	16158	04/17/03	0120 pam
	1,1,2-Trichloroethane	Q.	n	0.8	2	1.00000	ng/L	16158	04/17/03	0120 pam
	Tetrachloroethene	_		7.0	2	1.00000	T/6n	16158	04/17/03	0120 pam
	2-Hexanone	<del>Q</del>		_	10	1.00000	ng/L	16158	04/17/03	0120 pam
									<u></u>	

\* In Description = Dry Wgt.

Date:04/29/2003	ATTN: John Bukoskj	1.00000 ug/L 16158 04/17/03 0120 pam 1.00000
RESULTS	Laboratory Sample ID: 203431-5 Date Received: 04/15/2003 Time Received: 09:30	MDL RL 0.2 0.3 0.4 0.4 1 1 1 5 5 5 5 5 5 5 5 6 1 1 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
ABORA	PROJECT: WIN-HOLT Labor Date F	SAMPLE RESULT Q FLAGS ND U
Job Number: 203431	CUSTOMER: FANNING; PHIELIPS AND MOLNAR  Customer Sample ID: GP-13(52-54)  Date Sampled: 04/11/2003  Time Sampled: Groundwater	TEST METHOD  Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)

\* In Description = Dry Wgt.

	Job Number: 203431	ABORATORY	<u></u> ⊢	ST RESUL	S.		Date: 0	Jate: 04/29/2003			
CUSTOMER: FAN	CUSTOMER: FANNING, PHILLIPS AND MOLNAR	PROJECT:	PROJECT: WIN-HOLT	1			ATTN:	John Bukosk	coski		
Custome Date Sa Time Sa Sample	Customer Sample ID: GP-13D(37-39) Date Sampled: 04/11/2003 Time Sampled: 09:20 Sample Matrix: GroundWater		Lal Da Tir	Laboratory Sample ID: Date Received Time Received	10: 203431-6 : 04/15/2003 : 09:30						<u> </u>
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	TOW.	RL	DILUTION	UNITS	ВАТСН	DT DATE/TIME		TECH
82608	Volatile Organics (5mL Purge) Chloromethane Vinyl chloride Bromomethane Chloroethane 1,1-Dichloroethene Carbon disulfide Acetone Methylene chloride trans-1,2-Dichloroethene 1,1-Dichloroethane Vinyl acetate cis-1,2-Dichloroethene 1,1-Dichloroethane Vinyl acetate cis-1,2-Dichloroethane 1,1-Tichloroethane Vinyl acetate cis-1,2-Dichloroethane 1,1-Dichloroethane Trichloroethane 1,2-Dichloroethane Trichloroethane Trichloroethane Trichloroethane Trichloroethane Trichloroethane Trichloroethane Trichloroethane Trichloroethane Trichloroethane 1,2-Dichloropropene 4-Methyl-2-pentanone (MIBK) Toluen Trichloroethane Trans-1,3-Dichloroethane Trans-1,3-Dichloroethane Tetrachloroethane Tetrachloroethane Tetrachloroethane	85 S S S S S S S S S S S S S S S S S S S	מרכנונונונונונו	1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		7/6n 7/6n 7/6n 7/6n 7/6n 7/6n 7/6n 7/6n	16158 16158 16158 16158 16158 16158 16158 16158 16158 16158 16158 16158 16158 16158 16158 16158 16158 16158 16158	04/17/03 04/17/03 04/17/03 04/17/03 04/17/03 04/17/03 04/17/03 04/17/03 04/17/03 04/17/03 04/17/03 04/17/03 04/17/03 04/17/03 04/17/03 04/17/03 04/17/03 04/17/03 04/17/03	0154 0154 0154 0154 0154 0154 0154 0154	pam

2 Page

\* In Description = Ory Wgt.

Date:04/29/2003	ATTN: John Bukaski	03	011UTION UG/L 16158 04/17/03 0154 pam 1.00000 ug/L 16158 04/17/03 0154 pam	
ABORATORY TEST RESULTS	PROJECT: WIN-HOLT	Laboratory Sample ID: 203431-6 Date Received: 04/15/2003 Time Received: 09:30	SAMPLE RESULT Q FLAGS MOL RL ND 0.2 ND 0.2 ND 0.2 ND 0.4 ND 0.4 ND 0.4 ND 0.4 ND 0.4 ND 0.7 ND 0.7 ND 0.7 ND 0.7 ND 0.7 ND 0.4 ND 0.7 N	Page 13
Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOLNAR	Customer Sample ID: GP-13D(37-39) Date Sampled: 04/11/2003 Time Sampled: 09:20 Sample Matrix: Groundwater	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromnoform 1,1,2,2-Tetrachloroethane Xylenes (total)	* In Description = Dry Wgt.

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PROJECT: WIN-HOLT

Date: 04/29/2003

ATTN: John Bukoski

CUSTOMER: FANKING, PHILLIPS AND MOLNAR

Customer Sample ID: GP-13(67-69)
Date Sampled.....: 04/11/2003
Time Sampled.....: 10:15
Sample Matrix....: Groundwater

Laboratory Sample ID: 203431-7
Date Received.....: 04/15/2003
Time Received.....: 09:30

E TECH		0227 pam	0227 pam		0227 pam	_	_		_	_				-		0227 pam	0227 pam	0227 pam	0227 pam		0227 pam	0227 pam	0227 pam	0227 pam	0227 pam	0227 pam	0227 pam	0227 pam	0227 pam
T DATE/TIME		04/17/03 0	04/17/03 0	04/17/03 0	04/17/03 0	04/17/03 0	04/17/03 0		_																		04/17/03 05	04/17/03 02	04/17/03 02
BATCH DT		16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158	16158
CNITS		T/6n	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/l	ug/I	ng/L	ng/L	√l/gn	ng/L	1/6n	ng/Ľ	ng/L	ng/L	ng/L	√l nay/L	ng/Γ	ng/L	ng/L	ng/E	ng/L	ng/r	ng/L	ng/L	T/6n
DILUTION		1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1,00000	1.00000
RI		Σ	īU	5	2	ις	2	10	5	5	2	2	5	10	2	2	ī,		ر بر ا	יט ו	٠,	ر د	<u>ر</u> د	10	īν	2	2	5	<u>e</u>
MOL		_	<b>-</b>	3	0.8	0.8	9.0	2	0.4	9.0	9.0	2	9.0		7.0	0.4	0.3	4.0	0.5	7.0	9.0	9.0	9.0	0.5	0.3	7.0	0.8	7.0	<b>-</b>
FLAGS								<u>m</u>																					
σ <u>1</u>		<u> </u>	<u>⊃</u>	⊃_	<u> </u>	⊇_	<u> </u>		-	<u> </u>	<u></u>	<u> </u>	_	∍	7	<u>&gt;</u>	<b>5</b> :	<u> </u>	<u>)</u>	<u>ə :</u>	<u> </u>	<u>, :</u>	<u>⊃</u> :	⊃	_	_	<u> </u>	<u> </u>	⊃
SAMPLE RESULT		0	_	_	_	_		34		•	M	_	7	_	5	_	•	•	•	0	•	0	_	_	4	•	•	_	•
		2	2	<b>Z</b>	<u> </u>	₹_	쿧			₽_		2		₽		<u>2</u>	<u>⊋</u>	Z.	Ż	욷	Ž.	Ξ.	Ż.	ᆂ		울	불	웆	<u> </u>
PARAMETER/TEST DESCRIPTION	Volatile Organics (5mL Purge)	Chloromethane .	Vinyl chloride	Bromomethane	Chloroethane	1,1-Dichloroethene	Carbon disulfide	Acetone	Methylene chloride	trans-1,2-Dichloroethene	1,1-Dichloroethane	Vinyl acetate	cis-1,2-Dichloroethene	2-Butanone (MEK)	Chloroform	1,1,1-Trichloroethane	Carbon tetrachloride	Benzene	1,2-Dichloroethane	Trichloroethene	1,2-Dichloropropane	Bromodichloromethane	cis-1,3-Dichloropropene	4-Methyl-2-pentanone (MIBK)	Toluene	trans-1,3-Dichloropropene	1.1.2-Trichloroethane	Tetrachloroethene	2-Hexanone

Page 14

8	koski		04/17/03 0227 pam	
Date:04/29/2003	John Bukoski		16158 16158 16158 16158 16158 16158 16158	_
Date:	ATTN:		7/6n 7/6n 1/6n 1/6n 1/6n	
		·	DIEUTION 1.00000 1.00000 1.00000 1.00000 1.00000	
S L		ID: 203431-7 : 04/15/2003 : 09:30	ች ጥጥጥጥጥ	
ST RESUL		Laboratory Sample ID: Date Received	MOI 0.2 0.3 0.4 0.7 1	
Y TE	PROJECT: WIN-HOLT	Lat Dat Tir	S TO	Page 15
ABORATORY	PROJECT		SAMPLE RESULT ND ND ND A4	ď
Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOLNAR	Customer Sample 1D: GP-13(67-69) Date Sampled: 04/11/2003 Time Sampled: 10:15 Sample Matrix: Groundwater	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	* In Description = Dry Wgt.
	CUSTOMER: FAN	Customel Date San Time San Sample M	TEST METHOD	

Laboratory Sample ID: 203431-8 Date Received: 04/15/2003 Time Received: 09:30
PROJECT: WIN-HOLT
Date:04/29/2003

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	G FLAGS	MDL	RL	DITUTION	CNITS	BATCH	DT DATE/TIME	TECH
82608	Volatile Organics (5ml Purge)									
	Chloromethane	<del>S</del>	_		5	1.00000	ng/L	16158	04/17/03 030	_ med
		<del>S</del>	5	_	52	1,00000	ug/L	16158	_	_
		2		22	5	1.00000	1/6n	16158		_
		S.		0.8	יט	1.00000	ng/L	16158	_	Ξ
	le e	Ð	<u> </u>	0.8	ıc	1.00000	ng/L	16158		
	Carbon disulfide	2	5	9.0	יט	1.00000	T/6n	16158		
			æ 	2	10	1.00000	ng/L	16158		
		9.0		7.0	ī	1.00000	ng/L	16158		
	-e	£	_	9*0	τO	1.00000	T/6n	16158	_	Dam
		윤	_	9.0	Ŋ	1.00000	ng/E	16158	_	
				2	Z	1.00000	ng/L	16158		_
	ethene	3	_	9.0	5	1.00000	ng/L	16158		раш
			_	_	10	1.00000	1/6n	16158		Dam
		S	<u></u>	9.0	Ŋ	1.00000	ng/L	16158		Datt.
	4)			7.0	5	1.00000	ng/L	16158	04/17/03 0301	Dall.
	Carbon tetrachloride	2	<u> </u>	0.3	2	1.00000	ng/L	16158		med.
		Q.		7.0	2	1.00000	ng/L	16158		pam
	ane ane	QN	_	0.3	2	1.00000	ng/L	16158		med
_		QN	_	0.7	Ω	1.00000	ng/L	16158		pam
				9.0	5	1.00000	ng/L	16158	04/17/03 0301	med
			<u></u>	9.0	5	1.00000	ng/E	16158	04/17/03 0301	med
	cis-1,3-Dichloropropene		<u> </u>	9.0	5	1.00000	ng/L	16158		bam
	C		_	0.5	0,	1.00000	ng/L	16158	04/17/03 0301	Dam.
			_	0.3	2	1.00000	ng/L	16158	04/17/03 0301	Dam -
	pene		_	9.0	ις	1,00000	ng/L	16158	04/17/03 0301	Dall .
			5	0.8	S	1.00000	ng/L	16158	04/17/03 0301	раш
		<u>-</u>	_	7.0	ς.	1,00000	ng/L	16158	04/17/03 0301	. med
	2-Hexanone	- Q			10	1.00000	ng/L	16158	04/17/03 0301	pam

\* In Description = Ory Wgt.

			TECH	pam pam pam pam
				0301 p 03
			DATE/TIME	
	: <u>-</u>			04/17/03 04/17/03 04/17/03 04/17/03 04/17/03 04/17/03
2003	John Bukoski		TO HO	######################################
14/29/	John		BATCH	16158 16158 16158 16158 16158 16158
Date:04/29/2003	ATTN:		UNITS	1/6n 1/6n 1/6n 1/6n 1/6n 1/6n
			DILUTION	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000
		D: 203431-8 .: 04/15/2003 .: 09:30	RL	ט ט ט ט ט ט ט ט ט
		Laboratory Sample ID: 203431-8 Date Received: 04/15/2003 Time Received: 09:30	MOL	0.2 0.3 0.4 1 1 7
	PROJECT: WIN-HOLT	Labor Date Time	FLAGS	
	T: WI)		<u>0</u>	כביכככ
	ROJEC		SULT	
	ď		SAMPLE RESULT	2
			SAMP	<u> </u>
Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOCNAR	Customer Sample ID: GP-12(37-39) Date Sampled: 04/11/2003 Time Sampled: 10:55 Sample Matrix: GroundWater	PARAMETER/JEST DESCRIPTION	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)
ob Nuri	IG, PH	Sample (ed ed :rix		oibrom bibrom styren sromof 1,1,2, (ylene
÷	FANNE	omer : Sampl Sampl (e Mat	ac	10 10 m ( x
	IMER:	Cust Date Time Samp	TEST METHOD	
	CUSTO		TEST	
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RESULTS

TEST

LABORATORY

Page 17

LABORATORY TEST RESULTS  Date:04/29/2003  PROJEGT: WIN:HOLT  ATTM: John Bukoski	Laboratory Sample ID: 203431–9 Date Received: 04/15/2003 Time Received: 09:30	SAMPLE RESULT   G FLAGS   MOL   BILLITION   UNITS   BATCH   DATE/TIM	L	2 -	1,00000 ug/l 16158	0.8 5 1.00000	U 06 5 1.00000 ug/t 16158	0.4 5 1.00000 ug/L 16158	1 00000 ug/l. 16158	U 2 5 1.00000 ug/L	25 0.6 5 1.00000 ug/l 16158	0.4 5 1.00000 ug/L	5 1.00000 ug/L 16158	U 0.4 5 1.00000 ug/L 16158	1 0 0.7	U 0.6 5 1.00000 ug/L 16158	0.6 5 11,00000 ug/L 16158	0.5	0.3 5 1.00000 ug/L 16158	4.0 0.0	1,00000 ug/L 16158	10 1.00000 ug/L	Page 18
Job Number: 203431 CUSTOMER: FANNING, PHILEIPS AND MOLNAR	Customer Sample 1D: GP-12(52-54) Date Sampled: 04/11/2003 Time Sampled: 11:30 Sample Matrix: Groundwater	TEST METHOD PARAMETER/TEST DESCRIPTION	Volatile Organics (5ml. Purge)	Vinyl chloride	Bromomethane	1,1-Dichloroethene	Carbon disulfide	Methylene chloride	trans-1,2-Dichloroethene	Vinyl acetate	cis-1,2-Dichloroethene 2-Buranone (MFK)	Chloroform	1,1,1-Trichloroethane Carbon tetrachloride	Benzene	1,2-Dichloroethane Trichloroethene	1,2-Dichloropropane	Bromodich oromethane	4-Methyl-2-pentanone (MIBK)	Toluene	trans-1,5-Dichloropropene	Tetrachloroethene	2-Hexanone	* in Description = Dry Wgt.

Date:04/29/2003	ATTN: John Bukoski	US/L 16158 04/17/03 0334 pam ug/L 16158 04/17/03 0334 pam	-
	13	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	-
ULTS	ole ID: 203431-9 : 04/15/2003	ក្តី សលសសសស	-
TEST RES	HOLT Laboratory Sample ID: Date Received	0.2 0.3 0.4 0.4 1	- 6
RATORY	PROJECT: WIN-HOLT	PLE RESULT © FLAGS	Page 19
LABO			jt.
Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOLNAR Customer Sample ID: GP-12(52-54) Date Sampled: 04/11/2003 Time Sampled: 11:30 Sample Matrix: Groundwater	PARAMETER/TEST DESCRIPTION Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	* In Description = Dry Wgt.
	CUSTOMER: FANN Customer Date Sam Time Sample Mi	TEST METHOD	

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PROJECT: VIN+HOLT

Date:04/29/2003

ATTN: John Bukoski

CUSTOWER: FANNING, PRILLIPS AND MOLNAR
Customer Sample ID: GP-12(67-69)
Date Sampled...... 04/11/2003
Time Sampled...... 12:00
Sample Matrix..... Groundwater

Laboratory Sample ID: 203431-10
Date Received.....: 04/15/2003
Time Received.....: 09:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT		Q FLAGS	MDL	RL	DILUTION	STINO	BATCH	DT DATE/TIME		TECH
	Volatile Organics (5ml Purge)										-	_
_	Chloromethane	QN QN	⊃		_	5	1.00000	ng/L	16158	04/17/03	0407 ps	
_	Vinyl chtoride	Q.	⊃			Ŋ	1.00000	ng/L	16158	04/17/03	0407 pam	E
_	Bromomethane	QN	<u>&gt;</u>		3	2	1.00000	1/gn	16158	04/17/03		
_	Chloroethane	Q.	⊃		0.8	S	1.00000	ng/L	16158	04/17/03		
<u> </u>	1,1-Dichloroethene	2	⊃	_	0.8	'n	1.00000	ug/l	16158	04/17/03		
_	Carbon disulfide		>		9.0	ĸ	1.00000	ug/L	16158	04/17/03		_
_	Acetone	07		<u>m</u>	5	10	1.00000	ng/f	16158	04/17/03	0407 pam	
_	Methylene chloride	_	7		0.4	2	1.00000	ug/L	16158	04/17/03		=
-	trans-1,2-Dichloroethene	2	<u> </u>		9.0	2	1.00000	1/6n ⁺	16158	04/17/03	0407 pam	
·	1,1-Dichloroethane	R	⊋	<del></del> -	9-0	ι	1.00000	ng/L	16158	04/17/03		_
	/inyl acetate	2	<u> </u>		2	2	1.00000	ng/L	16158	04/17/03	0407 pam	
٥	cis-1,2-Dichloroethene		<u> </u>		9.0	50	1.00000	ng/L	16158	04/17/03	_	
7	2-Butanone (MEK)	14			_	10	1.00000	ng/F	16158	04/17/03		_
ບ	hloroform	2	<u> </u>		7.0	5	1.00000	ng/L	16158			_
1	1,1,1-Trichloroethane	2	<u> </u>		7.0	5	1.00000	1/6n	16158			_
၁	Carbon tetrachloride	<u>8</u>	<u>&gt;</u>		0.3	5	1,00000	ng/L	16158		0407 parr	_
89	Benzene	Q.	<u> </u>		4.0	2	1.00000	ng/L	16158	04/17/03	0407 pam	_
<b>~</b>	1,2-Dichloroethane	Q	_		0.3	5	1.00000	ng/L	16158	04/17/03		_
_	richloroethene	Q	<u> </u>		0.7	2	1.00000	ng/L	16158	04/17/03	0407 parr	_
1	1,2-Dichloropropane	₽	<u> </u>		9.0	2	1.00000	ng/L	16158			_
B	romodichloromethane	2	<u> </u>	-	9.0	72	1.00000	ng/L	16158	04/17/03	0407 pam	
ပ	cis-1,3-Dichloropropene	윤	≘		9.0	5	1.00000	T/6n	16158	04/11/03	0407 pam	_
7	-Methyl-2-pentanone (MIBK)		_		0.5	10	1.00000	ng/L	16158	04/11/03	0407 pam	_
	Toluene	2	-		0.3	2	1.00000	ng/L	16158	_	_	
ب	trans-1,3-Dichloropropene	Q.	⊃		9.0	2	1.00000	ng/L	16158	04/17/03	_	
-	.1.2-Trichloroethane	<u>R</u>	⊋		0.8	ī	1.00000	ng/L	16158	04/17/03	3407 pam	_
Ψ.	Tetrachloroethene	6.0	5		7.0	2	1.00000	ng/L	16158	04/17/03	0407 pam	_
Ż	2-Hexanone	Q	⊃		_	10	1,00000	ng/L	16158	04/17/03	0407 pam	_
		_			-					-		

\* In Description = Dry Wgt.

	Job Number: 203431	LABORATOR	⊢ ∃	ST RESUL	S 1		Date:0	Date:04/29/2003		
CUSTOMER: FAN	CUSTOMER: FANNING, PHILIIPS AND MOLNAR	PROJECT	PROJECT: WIN-HOLT	1			ATTN:	John Bukoski	ski	
Custome Date Sa Time Sa Sample	Customer Sample 1D: GP-12(67-69) Date Sampled: 04/11/2003 Time Sampled: 12:00 Sample Matrix: Groundwater		T D L	Laboratory Sample ID: Date Received: Time Received	1D: 203431-10 : 04/15/2003 : 09:30					
TEST METHOD	PARAMETER/ITEST DESCRIPTION	SAMPLE RESULT	0 FLAGS	1dW	RL	OTEUTION	CNITS	ВАТСН ОТ	F DATE/TIME	ТЕСН
	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	전 보호 및 및 및 및	רכבכככ	0.200.3	N N N N N N N	1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	7/6n 1/6n 1/6n 1/6n 1/6n	16158 16158 16158 16158 16158 16158	04/17/03 0407 04/17/03 0407 04/17/03 0407 04/17/03 0407 04/17/03 0407 04/17/03 0407	7 pam 7 pam 7 pam 7 pam 7 pam 7 pam
	* 12 Decemberion - Dry List		Page 21						j	

\* In Description = Dry Wgt.

	Job Number: 203431	LABORATORY	TES	TRESUL	S ∟		Date:C	Date:04/29/2003		
CUSTOMER: FANNING,	NNING, PHILLIPS AND MOENAR	PROJECT: WIN-HOLT	WIN-HOLT				ATTN:	John Bukoskı	oski	
Custom Date S Time S	Customer Sample ID: FB-1 Date Sampled: 04/09/2003 Time Sampled: 13:00 Sample Matrix: Groundwater		Labor Date Time	atory Sampl Received Received	e ID: 203431-11 : 04/15/2003 : 09:30					
TEST METHOD	4.	SAMPLE RESULT   0	FLAGS	NOL	RL	OTTOTION	UNITS	BATCH L	DI DATE/TIME	ME TECH
82608	Volatile Organics (5mL Purge)			-	u	00000	7	9,457	10. 55.	
	Unionernale Vinyl chloride				טז ע	1.00000	ng/r ng/r	16154	04/16/03	1420 pam 1420 pam
	Bromomethane	ON ON		3	w r.	1.00000	ng/L	16154	04/16/03	
	1,1-Dichlosthene	99		0.8	יירטיו	1.00000	1/6n na/1	16154	04/16/03	
	Carbon disultide Acetone			o o o	- 1 - 1	1.00000	7/Bn	16154	04/16/03	1420 pam 1420 pam
	Methylene chloride		8	7.0	, w	1.00000	ng/L	16154	04/16/03	
	trans-1,2-Dichloroethene 1,1-Dichloroethane			9.0	Λ <i>ι</i> ν	1.00000	ug/t. ug/L	16154	04/16/03	1420 pam 1420 pam
	Vinyl acetate			2.	יטו	1.00000	ng/L	16154	04/16/03	
	cis-1,2-Dichloroethene 2-Bitanone (MFK)			0.0	70	1,00000	ug/l.	16154	04/16/03	1420 pam
	Chloroform			0.4	י יסי	1.00000	1/6n	16154	04/16/03	
	ij,i-Trichloroethane Carbon tetrachloride	ON ON		0.3	ላ ቦ	1.00000	ng/L	16154 16154	04/16/03	1420 pam 1420 pam
	Benzene			7.0	יטו	1.00000	1/6n	16154	04/16/03	
	1,2-Dichloroethane Trichloroethene			0.3	e ro	1.00000	ng/L	16154	04/16/03	1420 pam 1420 pam
	1,2-Dichloropropane	ON CAN		9.0	ıΩ	1.00000	1/gn	16154		
	Bromodichloromethane			9.0	Λ IC	1.00000	1/Bn	16154	04/16/03	1420 pam
	4-Methy(-2-pentanone (MIBK)			0.5	, <del>C</del>	1.00000	7/6n	16154		
	Toluene	2		0.3	נטי	1.00000	T/6n	16154		
	trans-1,3-Dichloropropene	ON ON		4.0	ńιn	1.00000	1/6n	16154	04/16/03	14.20 pam
	Trinchion of maic		-	7.0	ı ıcı	1.00000	1/6n	16154		
	2-Hexanone	D QN		_	10	1.00000	ng/L	16154	-	
										_
	* In Description = Dry Wgt.	Pa	Page 22							

Page 22

Date:04/29/2003	John Bukoski	BATCH DT DATE/TIME FECH 16154 04/16/03 1420 pam 16155 04/16/03 1420 pam	
Date:	ATTA	1/8n 1/8n 1/8n 1/8n 1/8n 1/8n 1/8n 1/8n	
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ST RESUI	Laboratory Sample ID: Date Received	0.2 0.3 0.4 0.4 1	
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, A B O R A T O R Y	PROJECT.	ND N	
Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOENAR  Customer Sample ID: FB-1 Date Sampled: 04/09/2003 Time Sampled: 13:00 Sample Matrix: Groundwater	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	

\* In Description = Ory Wgt.

RIPITION  RIPITI	aborat and Recipies R	ory Sample ceived ceived 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	203431-12 04/15/2003 09:30 10 55 55 55 55 55 55 55 55 55 55 55 55 55	203431-12 04/15/2003 09:30 8L DIRUTION UN 5 1.00000 10 1.000000 10 1.000000 10 1.00000 1	81. Bate:04.  203431-12 04/15/2003 09:30 1.00000 19/15 10/15 10/	8203431-12 04/15/2003 09:30 8L DITUTION UNITS 5 1.00000 UG/L 5 1.00000 UG/L 6 1.00000 UG/L 7 1.00000 UG/L 8 1.00000 UG/L 9 1.00000 UG/L 1.00000 UG/L	ABORATORY TES	PROJECT: WIN:HOLT	Laborat Date Re Time Re	SAMPLE RESULT Q		GN					2 2	5															
T. DESCRIPTION  e. e. l. libk.)  lbk.)	MAPIE RESULT Q FLAG	MAPLE RESULT Q FLAG	# O R A T O R Y TEST RESULTS    PROJECT: WIN HOLT	MAPILE RESULT: WIN-HOLT  Date Received 09:30  Time Received 09:30  U	### PROJECT: WIN-HOLT  Laboratory Sample ID: 203431-12  Date Received: 04/15/2003  Time Received	## PROJECT: WIN-HOLT    PROJECT: WIN-HOLT   PARAMETER   PARAMETER	Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOLNAR	Customer Sample ID: FB-2 Date Sampled: 04/11/2003 Time Sampled: 08:30 Sample Matrix: GroundWater	PARAMETER/TEST DESCRIPTION	Volatile Organics (5ml Purge)	Chloromethane	Vinyl chloride	Bromomethane	chroroethane 1,1-Dichloroethane	Carbon disulfide	Acetone Mathylene chloride	trans-1,2-Dichloroethene	1,1-Dichloroethane	vinyl acetate cis-1,2-Dichloroethene	2-Butanone (MEK)	Chloroform 1 1 1-Trichloroethane	Carbon tetrachloride	Benzene	1, z~Dichloroethane Trichloroethane	1.2-Dichloropropane	Bromodichloromethane	cis-1,3-Dichloropropene	4-Methyl-2-pentanone (MIBK)	Toluene +rans-1 3-Dichlopoppopp	t.1.2-Trichloroethane	Tetrachloroethene	2-Hexanone

Page 24

Date: 04/29/2003	ATTN: John Bukoski	DILUTION UNITS BATCH DT DATE/TLUE TECH 1.00000 ug/L 16171 04/17/03 1310 pam	
SULTS	ample ID: 203431-12 d: 04/15/2003 d: 09:30	α   α   α   α   α   α   α   α   α   α	
NTORY TEST RE	PRØJECT: WIN~HOLT Laboratory Sample ID: Date Received: Time Received	Se Connon	Page 25
LABORA		SAMPLE RESULT	
Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOLNAR  Customer Sample ID: FB-2 Date Sampled: 04/11/2003 Time Sampled: 08:30 Sample Matrix: Groundwater	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	* In Description = Dry Wgt.
	CUSTOWER: FA  Custom Date S Time S. Sample	TEST METHOD	

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/2003	John Bukoski		Y 1000 X	**************************************	
Date:04/29/2003	loh	•	BATCH	16154 16154	*C[0]
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) !	12	Laboratory Sample Date Received Time Received			
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			PARAMETER/TEST DESCRIPTION	rge ()	
	YAR.	<b>2</b> 4	EST	Volatile Organics (5mL Purge) Chloromethane Chloromethane Chloroethane 1,1-Dichloroethene Carbon disulfide Acetone Methylene chloride Trans-1,2-Dichloroethene 1,1-Dichloroethene 1,1-Dichloroethene 1,1-Dichloroethene Cis-1,2-Dichloroethene Carbon tetrachloride Benzene 1,2-Dichloroethane Trichloroethene Trichloroethene 1,2-Dichloroethene Trichloroethene Trollone Trichloroethene Trans-1,3-Dichloroethene Trans-1,2-Trichloroethene Tetrachloroethene	
Ξ	NO.	TB040903 04/09/2003 00:00 Groundwater	TER/1	Volatile Organics (5mL Pu Chloromethane Vinyl chloride Bromomethane Chloroethane 1,1-Dichloroethene Carbon disulfide Actone Methylene chloride trans-1,2-Dichloroethene 1,1-Dichloroethene cis-1,2-Dichloroethene Carbon tetrachloride Benzene 1,2-Dichloroethane Trichloroethene	
20343	S AND	TB040903 04/09/20 00:00 Groundwa	ARAME	ganic ide e e e e e e c c c c c c c c c c c c c	
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Job Number: 203431	, PH1	mple d ix		Volatile Organics (5 Volatile Organics (5 Vinyl chloride Bromomethane Chloroethane 1,1-Dichloroethane Carbon disulfide Acetone Methylene chloroethane Vinyl acetate cis-1,2-Dichloroethan 1,1-Dichloroethan 1,1-Dichloroethan 1,1-Dichloroethan 1,2-Dichloroethan 1,2-Dichloroethan 1,2-Dichloroethan 1,2-Dichloroethan 1,2-Dichloropropage Bromodichloromethane cis-1,3-Dichloropropage 1,2-Dichloropropage 1,2-Dichloroethan 1,2-Dichloroethan 1,2-Dichloroethan 1,2-Dichloropropage 1,2-Dichloropropage 1,3-Dichloropropage 1,3-Dichloroethan 1,1,2-Trichloroethan 1,1,2-Trichloroethan 1,1,2-Trichloroethan 1 Etrachloroethan	2-Hexanone
dob	MATING	Customer Sample ID: Date Sampled: Time Sampled: Sample Matrix:		Control Contro	2-1
	7: FA	ustom ate Si me Si mmple	THOD	_	
	CUSTOMER: FANNING, PHILLIPS AND MOLNAR	S. T. S.	TEST METHOD	82608	
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Date:04/29/2003	ATTN: John Bukoski	1.00000 ug/L 16154 DT DATE/ITME TECH 1.00000 ug/L 16154 04/16/03 1454 pam	
RESULTS	OLF Laboratory Sample ID: 203431-13 Date Received: 04,15/2003 Time Received: 09:30	MOL. 0.0.2 0.0.3 0.0.4 0.0.4 0.0.7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
ABORATORY TEST	PROJECT: WIM-HOLT Labora Date R	NO N	Page 27
Job Number: 203431	CUSTOWER: FANNING, PHILLIPS AND MOLNAR  Customer Sample ID: TB040903 Date Sampled: 04/09/2003 Time Sampled: Groundwater	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	* In Description = Dry Wgt.

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CUSTOMER: FANNING, PHILLIPS AND MOLNAR

PROJECT: WIN-HOLT

Date:04/29/2003

ATTN: John Bukoski

Customer Sample ID: TB041703
Date Sampled....: 04/17/2003
Time Sampled....: 00:00
Sample Matrix...: Water

Laboratory Sample ID: 203431-14
Date Received.....: 04/18/2003
Time Received....: 09:15

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TEST METHOD	82608

	TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	S MDE	RL	DILUTION	UNITS	BATCH	DT DATE/TIME		TECH
	82608	Volatile Organics (5mL Purge)							_			
		Chloromethane		_	_	īΟ	1.00000	ng/L	16305	04/21/03	1527 E	раш
		Vinyl chloride			_	5	1.00000	1/Bn	16305	04/21/03	_	med.
_		Bromomethane		_	M	ις	1.00000	T/Bn	16305	04/21/03	_	раш
		Chloroethane			8.0	Ŋ	1.00000	ng/L	16305	04/21/03	_	- Wed
		1,1-Dichloroethene	웆	<del>-</del>	0.8	τO	1.00000	ng/L	16305	04/21/03		раш
		Carbon disulfide	2	=	9.0	5	1.00000	1/gn	16305	04/21/03		mea
		Acetone	2	_	2	10	1.00000	ng/L	16305	04/21/03		раш
		Methylene chloride	S.	<u>в</u>	9.0		1.00000	1/gn	16305	04/21/03	_	Dam .
		trans-1,2-Dichloroethene		_	9.0	5	1.00000	ng/l	16305	04/21/03	1527 p	pam pam
		1,1-Dichloroethane		5	9.0	2	1.00000	ng/l.	16305	04/21/03		pam
		Vinyl acetate		<del>_</del> _	2	Σ.	1.00000	1/6n	16305	04/21/03	1527 p	_ med
		cis-1,2-Dichloroethene	2	_	9.0	2	1.00000	T/6n	16305	04/21/03	1527 p	раш
		2-Butanone (MEK)	QN	_	_	9	1.00000	ng/1	16305	04/21/03	1527 p	pam
		Chloroform	2	_	9.0	2	1.00000	1/6n	16305	04/21/03	1527 p	bam -
		1,1,1-Trichloroethane		_	7.0	2	1.00000	1/6n	16305	04/21/03	_	раш
		Carbon tetrachloride		_	0.3	25	1.00000	ng/L	16305	04/21/03		med
		Benzene		<u></u>	<b>7.</b> 0	2	1.00000	ng/L	16305			pam
		1,2-Dichloroethane		<del></del>	0.3	2	1.00000	T/6n	16305		_	pam
		Trichloroethene		<del>_</del>	0.7	2	1.00000	1/6n	16305			pam
		1,2-Dichloropropane			9.0	2	1.00000	1/gn	16305			pam
		Bromodichloromethane		_	9.0	S	1.00000	1/gn	16305		_	pam
		cis-1,3-Dichloropropene			9.0	Ŋ	1.00000	1/gn	16305			bam
		4-Methyl-2-pentanone (MIBK)		<u></u>	0.5	9	1.00000	, 1/gn	16305	04/21/03	1527 pe	pam
_		Toluene		_	0.3	2	1.00000	ng/L	16305	04/21/03		med
		trans-1,3-Dichloropropene		_	7.0	2	1.00000	ng/L	16305		_	bam
		1,1,2-Trichloroethane		<u>_</u>	0.8	2	1.00000	1/6n	16305	04/21/03	_	pam
	_	Tetrachloroethene		5	7.0	2	1.00000	1/6n	16305	04/21/03	1527 parr	
	_	2-Hexanone		_	_	10	1,00000	ng/L	16305	04/21/03	1527 pe	pam
	_											
									_	_		_

\* In Description = Dry Wgt.

Date:04/29/2003		1.00000 ug/l 16305 04/21/03 1527 pam 1.00000 ug/	
ار ۲ S	: 10: 203431-14 : 04/18/2003 : 09:15	78 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
TEST RESU	Laboratory Sample ID: Date Received	FLAGS MDL 0.2 0.2 0.3 0.4 0.7 1 1	Page 29
LABORATORY TES		SAMPLE RESULT O	Page
Job Number: 203431 CUSTOMER: FANNING: PHILLEPS AND MOLNAR	Customer Sample ID: TB041703 Date Sampled: 04/17/2003 Time Sampled: 00:00 Sample Matrix: Water	TEST METHOD  Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	* In Description = Dry Wgt.

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PROJECT: WIN\*HOLT

Job Number: 203431

Date:04/29/2003

ATTN: John Bukoski

CUSTOMER: FANNING, PHILLIPS AND MOLNAR
Customer Sample ID: W-6F

Customer Sample ID: W-6F
Date Sampled....: 04/17/2003
Time Sampled....: 13:40
Sample Matrix....: Water

Laboratory Sample ID: 203431-15
Date Received......: 04/18/2003
Time Received.....: 09:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDI	RL	DILUTION	SLIND	ВАТСН	DT DATE	DATE/T1ME	тесн
82608	Volatile Organics (5mL Purge)										
	Chloromethane				'n	1.00000	T/gn	16305	04/21/03	33 1600	Шес
	Vinyl chloride		_	_	2	1.00000	ng/F	16305	04/21/03		Dam
	Bromomethane		5	3	5	1.00000	1/gn	16305	04/21/03	-	med
	Chloroethane		<u></u>	0.8	Ŋ	1.00000	1/gn	16305	04/21/03		Dam
	1,1-Dichloroethene			0.8	'n	1.00000	ng/L	16305	04/21/03		Dam
	Carbon disulfide		_	9.0	2	1.00000	1/gn	16305	04/21/03		Dam
	Acetone	_		2	10	1.00000	T/6n	16305	04/21/03		Dam
	Methylene chloride	<u>2</u>	<u>я</u>	<b>9.</b> 0	ις	1.00000	ng/L	16305	04/21/03	-	Dam
	trans-1,2-Dichloroethene			9.0	ις.	1.00000	ng/L	16305	04/21/03	•	med
	1,1-Dichloroethane		_	9.0	- 2	1.00000	ng/L	16305	04/21/03	1600	med.
	Vinyl acetate	<u>2</u>	_	2	Ŋ	1.00000	ng/L	16305	04/21/03	1600	pam -
	cis-1,2-Dichloroethene	N ON	_	9.0	'n	1.00000	ng/L	16305	04/21/03	1600	med
	2-Butanone (MEK)	<u>2</u>	_	-	10	1.00000	T/6n	16305	04/21/03	1600	раш
	Chloroform		_	7.0	īU	1.00000	ng/L	16305	04/21/03	1600	Dam
	1,1,1-Trichloroethane	-	D D	<b>9.</b> 0	'n	1.00000	1/6n	16305	04/21/03	1600	pam
	Carbon tetrachloride	•	n	0.3	īU	1.00000	ng/L	16305	04/21/03	1600	med
	Benzene			7.0	5	1.00000	ng/L	16305	04/21/03	1600	med
	1,2-Dichloroethane			0.3	5	1.00000	T/6n	16305	04/21/03	1600	med
•	Trichloroethene			7.0	5	1.00000	ng/F	16305	04/21/03	1600	раш
	1,2-Dichloropropane		_	9.0	2	1.00000	1/6n	16305	04/21/03	1600	pam
	Bromodichloromethane	ON ON	_	9.0	2	1.00000	ng/L	16305	04/21/03	1600	med.
	cis-1,3-Dichtoropropene		_	9.0	2	1.00000	ng/L	16305	04/21/03	1600	pam
	4-Methyl-2-pentanone (MIBK)		<u> </u>	0.5	10	1.00000	1/6n	16305	04/21/03	1600	pam
	Toluene			0.3	5	1.00000	1/6n	16305	04/21/03	1600	pam
	trans-1,3-Dichloropropene		5	7.0	2	1.00000	ng/L	16305	04/21/03	1600	pam
	1,1,2-Trichloroethane		5	0.8	5	1,00000	ng/L	16305	04/21/03	1600	Dam -
	Tetrachloroethene			<b>9.</b> 4	2	1.00000	ng/L	16305	04/21/03	1600	раш
	2-Hexanone			<del>-</del>	10	1,00000	ng/L	16305	04/21/03	1600	pam
											_

Page 30

Date:04/29/2003	ATTM: John Bukaski	1.00000 ug/l 16305 04/21/03 1600 pam 1.00000 ug/l 16305 04/21/03 1600 pam	
ULTS	atory Sample ID: 203431-15 Received: 04/18/2003 Received: 09:15	13	
Y TEST RES	PROJECT: WIM-HOLT Laboratory Sample ID: Date Received Time Received	0 0.3 0 0.3 0 0.4 0 0.4 1 1 7 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Page 31
LABORATOR	PROJEC	SAMPLE RESULT ND N	
Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOLNAR  Customer Sample ID: W-6F Date Sampled: 04/17/2003 Time Sampled: 13:40 Sample Matrix: Water	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	* In Description = Dry Wgt.
-	CUSTOMER: FANN Customer Date Samy Time Sample Mt	TEST METHOD	

	Date: 04/29/2003	ATTN: John Bukoski
RESULTS		
TEST		/IN-HOLT
LABORATORY		PROJECT: 1
	Job Number: 203431	CUSTOWER: FANNING, PHIELIPS AND WOLNAR
		<b>60305</b> 008

Customer Sample ID: W-2D
Date Sampled.....: 04/17/2003
Time Sampled.....: 11:40
Sample Matrix....: Water

Laboratory Sample ID: 203431-16
Date Received...... 04/18/2003
Time Received...... 09:15

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SAMPLE RESUL		ON	ND	QN	QN	QN	<u>8</u>		45	QN.	QN	GN.	QN	<u>N</u>	9:	QN :	Q¥.	QN			<u>Q</u>	QV.	Q.		230	<u>S</u>		28	QN	
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SA		QN	ON	QN_	QN	QN	QN_		45	QN	QN	GN .	QN	Q.	ON :	QN :	QN	QN_			<u>Q</u>	QN	QN		230	<u>Qv</u>		28	QN	
SA	ge)	ND	ON.	QN_	QN	QN	<u>QN</u>		57	QN	QN	GN C	QN	Q.	ON.	<b>9</b>	QN	QN_			<u>QN</u>	QN		Q.		<u>Qv</u>		78	QN	
SA	. Purge)	QN	ON	QN_	QN	QN	<u>Q</u>	QN		_ _				QN.	ON	GN :	<u>Q.</u>	QN			<u>ON</u>			Q.			QN	28	QN	
SA	(5mL Purge)	QN	ON,				<u> </u>	QN		_ _				Q.		đ)			QN					Q.			QN		QN	
SA	anics (5mL Purge)							QN		_ _						đ)			QN					Q.			QN		QN	
PARAMETER/TEST DESCRIPTION SAMPLE RESUL	Organics (5mL Purge)							QN		_ _						đ)			QN					Q.			QN			
SA	atile Organics (5mL Purge)						isulfide	QN		_ _						đ)	etrachloride		QN					Q.			QN			
SA	Volatile Organics (5mL Purge)		de		Chloroethane		isulfide	QN	Methylene chloride 45	_ _		Vinyl acetate ND		(MEK)		đ)	etrachloride		ND ane					QN C>		trans-1,3-Dichloropropene	QN		2-Hexanone	
PARAMETER/JEST DESCRIPTION SA	Volatile Organics (5mL Purge)						isulfide	QN		_ _						đ)	etrachloride		QN					Q.			QN			
SA	8260B Volatile Organics (5mL Purge)						isulfide	QN		_ _						đ)	etrachloride		QN					Q.			QN			

\* In Description = Dry Wgt.

Date:04/29/2003	N; John Bukoski		BATCH DT DATE/TIME TECH	16444 04/24/03 1233 pam 16444 04/24/03 1233 pam	-
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LTS		ID: 203431-16 : 04/18/2003 : 09:15	RL DIL	100 100 100 100 100 100 20. 20.	
ST RESU	17	Laboratory Sample ID: Date Received: Time Received:	MDL	44488840	
⊢	PROJECT: WIN-HOLT	12.	Q FLAGS	בכה ככ	Page 33
ABORATOR	PROJECT		SAMPLE RESULT	ND 560 ND ND 10000	۵
Job Number: 203431	CUSTOMER: FANNING, PHILLITPS AND MOLNAR	Customer Sample ID: W-2D Date Sampled: 04/17/2003 Time Sampled: 11:40 Sample Matrix: Water	PARAMETER/TEST DESCRIPTION	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	the state of the s
	CUSTOMER: FANN	Customer Date Sam Time Sam Sample M	TEST METHOD	·	

\* In Description = Dry Wgt.

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Job Number: 203431

PROJECT: WIN-HOLT

Date:04/29/2003

ATTN: John Bukoski

CUSTOMER: FANNING, PHILLIPS AND MOLNAR
Customer Sample ID: W-6
Date Sampled.....: 04/17/2003
Time Sampled...... 13:30
Sample Matrix....: Water

Laboratory Sample ID: 203431-17
Date Received.....: 04/18/2003
Time Received.....: 09:15

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BATCH DT		16444	16444	16444	16444	16444	16444	16444	16444	16444	16444	16444	16444	16444	16444	16444	16444	16444	16444	16444	16444	16444	16444	7779	19444	16444	16444	16444	16444
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Q FLAGS									<u>m</u>									-									-		
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SAMPLE RESULT		ē	9	운	Ş	56	9		20	ş	53	<del>S</del>	Ð	Ş		1700	읒	Ş	Ş	7	Ş	Ş	ş	ş	Q.	ş	Ş	Ş	<sub>구</sub>
BIE.	Volatile Organics (5mL Purge)		Vinyl chloride			1.1-Dichloroethene 26	Carbon disulfide	QN .		trans-1,2-Dichloroethene				2-Butanone (MEK)	QN	loroethane		Benzene	loroethane	Trichloroethene	oane	41	cis-1.3-Dichloropropene	18K)		3-Dichloropropene			

\* In Description = Dry Wgt.

Date: 04/29/2003	ATTN: John Bukoski 203431-17 04/18/2003 09:15	8L DJESTION UB/L 16444 D4/24/03 1200 pam 10.00000 Ug/L 16444 D4/24/03 Ug/L 16444 D	
LABORATORY TEST RESULTS	PROJECT: WIN-HOET  Laboratory Sample ID: 3  Date Received	ND ND U U A A A A A A A A A A A A A A A A A	Page 35
Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOLNAR  Customer Sample ID: W-6 Date Sampled: 04/17/2003 Time Sampled: 13:30 Sample Matrix: Water	TEST METHOD  Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromnform 1,1,2,2-Tetrachloroethane Xylenes (total)	* In Description = Dry Wgt.

Page 55

te:04/29/2003	Á⊺TN: John Bukoski
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RESUL	HOLT
TEST	CT: VIN-HOLT
LABORATORY	PROJI
Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOLNAR

Customer Sample ID: W-5
Date Sampled....: 04/17/2003
Time Sampled....: 13:00
Sample Matrix...: Water

Laboratory Sample ID: 203431-18
Date Received.....: 04/18/2003
Time Received....: 09:15

TEST METHOD	PARAMETER/TEST. DESCRIPTION	SAMPLE RESULT	Q FLAGS	TOW	RL	DILUTION	UNITS	ВАТСН О	DT DATE/TIME		TECH
82608	Volatile Organics (5mL Purge)			1	;					_	
	Chloromethane	S.	n	2	10	2.00000	T/6n	16444	04/24/03	1126 pam	Ē
	Vinyl chloride	QN.	<u>.</u>	- 5	10	2.00000	ng/L	16444	04/24/03	1126 pam	Ē
	Bromomethane	<del>2</del>	<u> </u>	9	10	2.00000	ng/f	16444	04/24/03	1126 pam	⊑
	Chloroethane	æ	<u></u>	2	10	2.00000	ng/L	16444	04/24/03	1126 pam	
	1.1-Dichloroethene	*	<u></u>	2	10	2.00000	ng/L	16444	04/24/03	1126 parr	=
	Carbon disulfide	S.	n	_	10	2,00000	ng/L	16444	04/24/03		Ē
	Acetone	QN.	<u></u>	7	20	2.00000	ng/L	16444	04/24/03		
	Methylene chloride	2	г В	8.0	10	2.00000	ng/L	16444	04/54/03		— ≣
	trans-1,2-Dichloroethene	9	⊃	_	10	2.00000	T/6n	16444	04/54/03		
	1.1-Dichloroethane	ın	7	_	10	2.00000	ng/L	16444	04/24/03	1126 parr	=
	Vinvlacetate	S.	n	8	10	2.00000	ng/L	16444	04/24/03	1126 parr	
	cis-1.2-Dichloroethene	QN.	ם	_	10	2.00000	ng/L	16444	04/24/03	1126 parr	
	2-Butanone (MEK)	Q.	n n	2	20	2.00000	ng/L	16444	04/24/03	1126 pam	=
	Chloroform	QN	n	0.8	10	2.00000	ug/L	16444	04/24/03		E
	1-1-1-richloroethane	320		8.0	10	2,00000	ng/L	16444	04/54/03	1126 pam	=
	Carbon tetrachloride	Q.	ס	9.0	10	2,00000	ng/L	16444	04/24/03		E
	Renzene	QN.	<u>&gt;</u>	0.8	.10	2.00000	ug/L	16444	04/54/03	1126 pam	=
	1 2-Dichloroethane	QN.	ם	9.0	10	2.00000	ng/L	16444	04/54/03	1126 parr	E
	Trichloroethene	3	7	_	10	2.00000	ng/L	16444	04/24/03	1126 parr	Ε
	1.2-Dichloropropane	2	n n	_	10	2,00000	ng/L	16444	04/24/03	1126 par	
	Rromodichloromethane	2	n	_	10	2.00000	ng/L	16444	04/54/03	1126 pam	=
	cis-1.3-Dichloropropene	<u>S</u>	<u>n</u>		10	2.00000	ng/L	16444	04/24/03	1126 pam	=
	/- Mothyl-2-pentanone (MIBK)	2	⊃	<b>.</b>	20	2.00000	ng/r	16444	04/24/03	1126 pam	E
	Tolliebe	QN.	n	9.0	10	2.00000	ng/L	16444	04/24/03	1126 parr	
	these-1 3-Dichloropene	QN.	n	0.8	2	2.00000	ug/ľ.	16444	04/24/03		E
	1 1 2-Trichloroethane	<u>S</u>		2	10	2.00000	ng/L	16444	04/24/03		E
	Totrachlorosthana	<u>Q</u>	⊃	0.8	10	2.00000	ng/L	16444	04/54/03	1126 pam	=
	2-Rexanone	<u>S</u>	n	3	20	2,00000	1/6n	16444	04/54/03	1126 pam	=
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Date:04/29/2003	John Bukoski	BATCH 16444 16444 16444 16444 16444 16444	
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R	OLT Laboratory Sample 10: 20343 <sup>.</sup> Date Received 04/18 <sub>.</sub> Time Received 09:15	MD 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
EST		St	
<b>⊢</b>		BC DDDDD	Page 37
0 R Y	PROJECT: WIN-HOLT Lab Dat Tim		
RAT	A	SAMPLE RESULT	
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		<u>108</u>	
		PARAMETER/TEST DESCRIPTION or ommethane ene ene ene ene ene ene ene ene ene	+ 2
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20343	& AND MOLN W-5 04/17/2003 13:00 Water	PARAMETER/ Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroe Xylenes (total)	
mber:	#11/1/17 e 10::::::::::::::::::::::::::::::::::::	PARAM Dibromochlorome Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrach Xylenes (total)	4
Job Number: 203431	Sampl	PARAMETER/TEST Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	1
,	ER: FANNING, PHILLIPS AND Customer Sample ID: W-5 Date Sampled: 13:00 Sample Matrix: Water		
	CUSTOMER: FANNING, PHILLIPS AND MOLNAR Customer Sample ID: W-5 Date Sampled: 04/17/2003 Time Sampled: 13:00 Sample Matrix: Water	TEST METHOD	
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\* In Description = Dry Wgt.

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Job Number: 203431

PROJECT: WIN-HOLT

Date: 04/29/2003

ATTN: John Bukoski

CUSTOMER: FANNING, PHILLIPS AND MOLNAR

Customer Sample ID: W-4
Date Sampled.....: 04/17/2003
Time Sampled.....: 12:30
Sample Matrix....: Water

Laboratory Sample ID: 203431-19
Date Received...... 04/18/2003
Time Received..... 09:15

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q FLAGS	MDL	RL	DIFUTION	STINO	BATCH	DT DATE/TIME	E TECH	Lastones on
82608	Volatile Organics (5ml. Purge)										
	Chloromethane		5	_	72	1.00000	ng/L	16305	04/21/03 1	813 pam	_
	Vinyl chloride		5	_	5	1.00000	ng/L	16305	04/21/03 1	1813 pam	
	Bronomethane		<u></u>	2	5	1.00000	ng/L	16305			
	Chloroethane	₽ Q		0.8	īΛ	1.00000	ng/L	16305	Ξ.	_	
	1,1-Dichloroethene	Q.		0.8	'n	1.00000	ng/L	16305	•	_	
	Carbon disulfide	S		9.0	'n	1.00000	ng/L	16305		_	
	Acetone	S		2	10	1.00000	ng/L	16305	04/21/03 1	1813 pam	_
	Methylene chloride	2	<u>в</u>	7.0	'n	1.00000	ng/L	16305	04/21/03 1	1813 pam	
	trans-1,2-Dichloroethene	2	_	9.0	ιΩ	1.00000	ng/L	16305	04/21/03 1	1813 pam	_
	1.1-Dichloroethane	_	<u> </u>	9.0	'n	1.00000	ng/ľ	16305	04/21/03 1	1813 pam	
	Vinyl acetate	2		2	5	1.00000	ng/L	16305	04/21/03 1	1813 pam	
	cis-1,2-Dichloroethene	2		9.0	2	1.00000	ng/L	16305			
•	2-Butanone (MEK)	<u> </u>		_	10	1.00000	ng/L	16305		1813 pam	_
-	Chloroform	Q.		9.0	2	1.00000	ng/ľ	16305			
	1.1.1-Trichloroethane	12		7.0	2	1.00000	ng/L	16305	04/21/03 18		
	Carbon tetrachloride	2		0.3	2	1.00000	ng/F	16305	04/21/03 1	1813 pam	
	Benzene	2	_	<b>9.</b> 0	5	1.00000	ng/L	16305			
	1.2-Dichloroethane	2	_	0.3	5	1.00000	ng/ľ	16305	04/21/03 18	1813 pam	
•	Trichloroethene	45		0.7	5	1.00000	ng/L	16305		1813 pam	
	1.2-Dichloropropane	2		9.0	ī	1.00000	ng/L	16305		1813 pam	
	Bromodichloromethane	2	_	9.0	Ţ,	1.00000	ng/L	16305	`_	1813 pam	
	cis-1,3-Dichloropropene	<u> </u>		9.0	2	1.00000	√l/gn	16305	`_	1813 pam	
	4-Methyl-2-pentanone (MIBK)	2	_	0.5	10	1.00000	ng/L	16305	04/21/03 18	1813 pam	
	Tolliene	Q.	_	0.3	ī	1.00000	ng/L	16305	04/21/03 18	1813 pam	
	trans-1 3-Dichloropropene	- ON	_	7.0	5	1.00000	ng/L	16305	04/21/03 18	813 pam	
	1 1 2 Trichloroethane	Q.		0.8	2	1.00000	ug/L	16305	04/21/03 18	813 pam	
	Tetrach proethere	2	_	0.4	2	1.00000	ng/L	16305	Ψ.		
	2-Hexanone	ND ON			10	1,00000	ng/L	16305	04/21/03 18	813 pam	

\* In Description = Dry Wgt.

Date:04/29/2003	AT:W: John Bukoski 203431-19 04/18/2003 09:15	RL DILUTION UG/L 16305 04/21/03 1813 pam 1.00000 ug/L 16305 04/21/03 ug/	
LABORATORY TEST RESULTS	PROJECT: WIN-HOLT Laboratory Sample ID: 203 Date Received 09:	ND	70
Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOLNAR  Customer Sample ID: W-4  Date Sampled: 04/17/2003  Time Sampled: 12:30  Sample Matrix: Water	TEST METHOD  Dibromoch loromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	

\* In Description = Dry Wgt.

Date:04/29/2003	ATTN: John Bukoski
LABORATORY TEST RESULTS	PROJECT: WIM-HOLT
Job Number: 203431	CUSTOMER: FANNING, PHILLIPS AND MOLWAR

Laboratory Sample ID: 203431-20
Date Received.....: 04/18/2003
Time Received.....: 09:15 Customer Sample ID: W-3
Date Sampled.....: 04/17/2003
Time Sampled.....: 12:00
Sample Matrix....: Water

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT (	0 FLAGS	MDL	RL	DILUTION	ONITS	ватен от	DT DATE/ITME	: TECH
82608	Volatile Organics (5mL Purge)									
	Chloromethane		<u></u>	_	ıv :	1.00000	ng/L	16305	_	1846 pam
	Vinyl chloride		_	_	'n	1.00000	ng/L	16305	04/21/03 18	1846 pam
	Bromomethane		5	3	5	1.00000	ng/L	16305	04/21/03 18	_
	Chloroethane		_	0.8	Ŋ	1.00000	ng/L	16305	04/21/03 18	_
	1,1-Dichloroethene		_	0.8	Ŋ	1.00000	ug/L	16305	-	
	Carbon disulfide			9.0	ĽΩ	1.00000	ng/L	16305	`.	
	Acetone			2	10	1.00000	ng/L	16305	`	
	Methylene chloride	<u> </u>	B D	9.0	5	1.00000	ng/L	16305		
	trans-1,2-Dichloroethene		_	9.0	2	1.00000	ng/L	16305	04/21/03 18	
	1,1-Dichloroethane	13		9.0	ſΛ	1.00000	ng/ľ.	16305		
	Vinyl acetate	<u>⊇</u>	5	2	ī	1.00000	ng/L	16305	04/21/03 18	
	cis-1,2-Dichloroethene	4	_	9.0	5	1.00000	ng/L	16305	04/21/03 18	
	2-Butanone (MEK)			_	10	1.00000	ng/L	16305		
-	Chloroform	<u>2</u>	_	<b>9.</b> 0	2	1.00000	ng/L	16305	04/21/03 18	
	1,1,1,1-Trichloroethane	11		0.4	Ŋ	1.00000	ng/r	16305	04/21/03 18	
	Carbon tetrachloride		_	0.3	5	1.00000	ng/L	16305		
	Benzene		Ð	9.0	Ŋ	1.00000	ng/L	16305	٠.	
	1,2-Dichloroethane			0.3	2	1.00000	ng/F	16305	04/21/03 18	
	Trichtoroethene	22		0.7	SO.	1.00000	ng/L	16305		1846 pam
	1,2-Dichloropropane			9.0	Ŋ	1.00000	ng/L	16305	٠.	
	Bromodichloromethane			9.0	5	1.00000	ng/L	16305	-	
	cis-1,3-Dichloropropene	물	_	9.0	S	1.00000	ng/L	16305	04/21/03 18	1846 pam
	4-Methyl-2-pentanone (MIBK)		<u> </u>	0.5	10	1.00000	1/gn	16305	04/21/03 18	1846 pam
	Toluene	<u> </u>	_	0.3	5	1.00000	ng/L	16305	04/21/03 18	1846 pam
	trans-1,3-Dichloropropene		_	7.0	'n	1.00000	ng/L	16305	04/21/03 18	846 pam
	1.1.2-Trichloroethane	- GN	_	0.8	Ŋ	1.00000	ng/L	16305	04/21/03 184	846 pam
	Tetrachloroethene	7	_	7.0	ۍ	1.00000	ng/L	16305	04/21/03 18	1846 pam
	2-Rexanone	ND ON	_	-	10	1.00000	ng/L	16305	04/21/03 1846	_
			•		-			_		

\* In Description = Dry Wgt.

Date:04/29/2003	888 <b>.</b>	ug/L 16305 04/21/03 1846 pam ug/L 16305 04/21	
RESULTS	Laboratory Sample ID: 203431-20 Date Received: 04/18/2003 Time Received: 09:15	MOL RI, DILUTION 0.2 5 1.00000 0.3 5 1.00000 0.4 5 1.00000 1 5 1.00000 1 5 1.00000	
LABORATORY TEST	Laborator Date Rece Time Rece	SAMPLE RESULT O FLAGS ND U ND U ND U ND C	pane 41
Job Number: 203431	Customer Sample ID: W-3 Date Sampled: 04/17/2003 Time Sampled: 12:00 Sample Matrix: Water	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	4011 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

\* In Description = Dry Wgt.

#### LABORATORY CHRONICLE

Job Number: 203431 Date: 04/29/2003

CUSTOMER: FANNING	PHILLIPS AND MOLNAR PROJEC	T: WEN-HO	LT		7	ATTN: John Buk:	akr	
Lab ID: 203431-1 METHOD	Client ID: GP-11(37-39) DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	Date Re RUN#	cvd: 04/ BATCH#	15/2003 PREP BT	Sample #(S)	Date: 04/09/20 DATE/TIME AM	003 NALYZED	DILUTION
8260B	Volatile Organics (5mL Purge)	1	16144 16154	16144		04/16/2003	1347	1.00000
Lab ID: 203431-2 METHOD	Client ID: GP-11(52-54) DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	Date Re RUN#	cvd: 04/ BATCH#	15/2003 PREP BT	Sample #(S)	Date: 04/09/20 DATE/TIME AN	003 NALYZED	DILUTION
8260B	Volatile Organics (5mL Purge)	1	16144	16144		04/16/2003	1240	1.00000
Lab ID: 203431-3 METHOD	Client ID: GP-11(67-69) DESCRIPTION	Date Re RUN#	BATCH#	15/2003 PREP BT	Sample #(S)	Date: 04/09/20 DATE/TIME AM	003 NALYZED	DILUTION
8260B	DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	1 1	16144 16154	16144		04/16/2003	1314	1.00000
Lab ID: 203431-4 METHOD 5030A	Client ID: GP-13(37-39) DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	RUN# 1	BATCH# 16146	PREP BT	#(\$)	DATE/TIME AN	NALYZED	DILUTION
		1				04/17/2003		1.00000
Lab ID: 203431-5 METHOD 5030A	Client ID: GP-13(52-54) DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	Date Re RUN# 1	ecvd: 04/ BATCH# 16146	15/2003 PREP BT	Sample #(S)	Date: 04/11/20 DATE/TIME AN	003 NALYZED	, DILUTION
								1.00000
Lab ID: 203431-6 METHOD 5030A	Client ID: GP-13D(37-39) DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	Date Re RUN# 1	ecvd: 04/ BATCH# 16146	15/2003 PREP BT	Sample #(S)	Date: 04/11/20 DATE/TIME A	003 NALYZED	DILUTION
8260B	Volatile Organics (5mL Purge)	•	16158	16146		04/17/2003	0154	1.00000
Lab ID: 203431-7 METHOD 5030A	Client ID: GP-13(67-69) DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	Date Re RUN# 1	ecvd: 04/ BATCH# 16146	15/2003 PREP BT	Sample #(S)	Date: 04/11/2	003 NALYZED	DILUTION
8260B	Volatile Organics (5mL Purge)	1	16158	16146		04/17/2003	0227	1.00000
Lab ID: 203431-8 METHOD 5030A	Client ID: GP-12(37-39) DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	Date Re RUN# 1	ecvd: 04/ BATCH# 16146	15/2003 PREP BT	Sample #(S)	Date: 04/11/2 DATE/TIME A	003 NALYZED	DILUTION
8260B	Volatile Organics (5mL Purge)	1	16158	16146		04/17/2003	0301	1.00000
Lab ID: 203431-9 METHOD 5030A	Client ID: GP-12(52-54) DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	Date Re RUN# 1	ecvd: 04/ BATCH# 16146	/15/2003 PREP BT	Sample #(S)	Date: 04/11/2 DATE/TIME A	003 NALYZED	DILUTION
8260B	Volatile Organics (5mL Purge)	i	16158	16146		04/17/2003	0334	1.00000
	Client ID: GP-12(67-69) DESCRIPTION 5030 5 mL Purge Prep	Date Re RUN# 1	ecvd: 04/ BATCH# 16146	/15/2003 PREP BT	Sample #(S)	Date: 04/11/2 DATE/TIME A	003 NALYZED	DILUTION
8260B	Volatile Organics (5mL Purge)	1		16146		04/17/2003	0407	1.00000
Lab ID: 203431-11 METHOD 5030A	Client ID: FB-1 DESCRIPTION 5030 5 mL Purge Prep	RUN#	BATCH#	/15/2003 PREP BT		Date: 04/09/2 DATE/TIME A		DILUTION
8260B	Volatile Organics (5mL Purge)	1 1	16144 16154	16144		04/16/2003	1420	1.00000
Lab ID: 203431-12 METHOD 5030A	Client ID: FB-2 DESCRIPTION 5030 5 mL Purge Prep					Date: 04/11/2 DATE/TIME A		DILUTION

#### LABORATORY CHRONICLE

Job Number: 203431

Date: 04/29/2003

CUSTOMER: FANNING	PHILLIPS AND MOLNAR PROJECT	: WIN-HOLT		A)	TN: John Bukos	ki	
Lab ID: 203431-12 METHOD 82608	Client ID: FB-2 DESCRIPTION Volatile Organics (5mL Purge)	Date Recvd: RUN# BAT	04/15/2003 CH# PREP BT	Sample [ #(S)	Date: 04/11/200 DATE/TIME ANA	3 LYZED	DILUTION 1.00000
							1.00000
Lab ID: 203431-13 METHOD 5030A	Client ID: TB040903 DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	RUN# BAT 1 161	CH# PREP BT	Sample [ #(S)	Date: 04/09/200 DATE/TIME ANA	3 LYZED	DILUTION
8260B	Volatile Organics (5mL Purge)	1 161			04/16/2003	1454	1.00000
Lab ID: 203431-14 METHOD 5030A	Client ID: TB041703  DESCRIPTION  5030 5 mL Purge Prep  Volatile Organics (5mL Purge)	RUN# BAT 1 162	CH# PREP BT	#(S)	DATE/TIME ANA	LYZED	DILUTION
8260B	Volatile Organics (5mL Purge)	1 163	16255		04/21/2003	1527	1.00000
Lab ID: 203431-15 METHOD 5030A	Client ID: W-6F DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	Date Recvd: RUN# BAT 1 162	: 04/18/2003 TCH# PREP BT	Sample [ #(S)	Date: 04/17/200 DATE/TIME ANA	3 LYZED	DILUTION
8260B	Volatile Organics (5mL Purge)	1 163	305 16255		04/21/2003	1600	1.00000
Lab ID: 203431-16 METHOD 5030A	Client ID: W-2D DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	Date Recvd: RUN# BAT 1 164	: 04/18/2003 CCH# PREP BT	Sample ( #(S)	Date: 04/17/200 DATE/TIME ANA	3 ALYZED	DILUTION
8260B	Volatile Organics (5mL Purge)	1 164	44 16441		04/24/2003	1233	20.0000
Lab ID: 203431-17 METHOD 5030A	Client ID: W-6 DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	Date Recvd: RUN# BAT 1 164	: 04/18/2003 ICH# PREP BT	Sample ( #(S)	Date: 04/17/200 DATE/TIME ANA	3 ALYZED	DILUTION
8260B	Volatile Organics (5mL Purge)	1 164	144 16441		04/24/2003	1200	10.0000
Lab ID: 203431-18 METHOD 5030A	Client ID: W-5 DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	Date Recvd: RUN# BAT 1 164	: 04/18/2003 FCH# PREP BT	Sample 1 #(S)	Date: 04/17/200 DATE/TIME ANA	3 ALYZED	DILUTION
8260B	Volatile Organics (5mL Purge)	1 164	16441		04/24/2003	1126	2.00000
Lab ID: 203431-19 METHOD	Client ID: W-4 DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	Date Recvd: RUN# BAT	: 04/18/2003 TCH# PREP BT	Sample   #(S)	Date: 04/17/200 DATE/TIME AN	03 ALYZED	DILUTION
8260B	Volatile Organics (5mL Purge)	1 163	305 16255		04/21/2003	1813	1.00000
Lab ID: 203431-20 METHOD	Client ID: W-3 DESCRIPTION 5030 5 mL Purge Prep Volatile Organics (5mL Purge)	Date Recvd: RUN# BAI	: 04/18/2003 TCH# PREP BT	Sample #(S)	Date: 04/17/200 DATE/TIME AN	03 ALYZED	DILUTION
8260B	Volatile Organics (5mL Purge)	1 163	305 16255		04/21/2003	1846	1.00000

## QUALITY ASSURANCE METHODSS REFERENCES AND NOTES

Report Date: 04/29/2003

#### REPORT COMMENTS

- 1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
- 2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
- 3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 4) The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert. ID# 10604
  5) According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.

Glossary of flags, qualifiers and abbreviation Inorganic Qualifiers (Q-Column)

- U Analyte was not detected at or above the reporting limit.
- Not detected at or above the reporting limit.
- I Result is less than the RL, but greater than or equal to the method detection limit.
- B Result is less than the CRDL/RL, but greater than or equal to the IDL/MDL.
- S Result was determined by the Method of Standard Additions.

Inorganic Flags (Flag Column)

- ICV,CCV,ICB,CCB,ISA,ISB,CRI,CRA,MRL: Instrument related QC exceed th upper or lower control limits.
- \* LCS, LCD, MD: Batch QC exceeds the upper or lower control limits.
- MSA correlation coefficient is less than 0.995.
- 4 MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
- E SD: Serial dilution exceeds the control limits.
- H MB, EB: Batch QC is greater than reporting limit or had a negative instrument reading lower than the absolute value of the reporting limit.
- N MS, MSD: Spike recovery exceeds the upper or lower control limits.
- W PS: Post-digestion spike was outside 85-115% control limits.

Organic Qualifiers (Q - Column)

- U Analyte was not detected at or above the reporting limit.
- ND Compound not detected.
- J Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).
- Q Result was qualitatively confirmed, but not quantified.
- C Pesticide identification was confirmed by GC/MS.
- Y The chromatographic response resembles a typical fuel pattern.
- Z The chromatographic response does not resemble a typical fuel pattern.
- E Result exceeded calibration range, secondary dilution required.

Organic Flags (Flags Column)

- MB,EB, MLE: Batch QC is greater than reporting limit.
- \* LCS, LCD, CCV, MS, MSD, Surrogate, RS:Batch QC exceeds the upper or lower control limits.
- A Concentration exceeds the instrument calibration range or below the reporting limit.
- B Compound was found in the blank and sample.
- D Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D.
- H Alternate peak selection upon analytical review
- I Indicates the presence of an interfence, recovery is not calculated.
- M Manually integrated compound.
- P The lower of the two values is reported when the % difference between the results of two GC columns is greater than 25%.

## QUALITY ASSURANCE METHODS

#### REFERENCES AND NOTES

Designation given to identify a specific extraction, digestion, preparation set, or analysis set

Report Date: 04/29/2003

#### Abbreviations

Batch

```
CAP
         Capillary Column
         Continuing Calibration Blank
CCB
CCV
         Continuing Calibration Verification
CF
         Confirmation Analysis
         Low Level Standard Check - GFAA; Mercury
CRA
         Low Level Standard Check - ICP
CRI
Dil Fac
         Dilution Factor
         Secondary dilution and analysis
DL
DLFac
         Detection Limit Factor
DSH
         Distilled Standard - High Level
         Distilled Standard - Low Level
DSL
DSM
         Distilled Standard - Medium Level
EΒ
         Extraction Blank
ICB
         Initial Calibration Blank
ICV
         Initial Calibration Verification
IDL
         Instrument Detection Limit
ISA
         Interference Check Sample A
ISB
         Interference Check Sample B
         The first six digits of the sample ID which refers to a specific client, project and sample group
Job No.
         An 8 number unique laboratory identification
Lab ID
         Laboratory Control Standard Duplicate
LCD
         Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
LCS
MB
         Method Blank or (PB) Preparation Blank
         Method Duplicate
MD
MDL
         Method Detection Limit
MLE
         Medium Level Extraction Blank
MRL
         Method Reporting Limit Standard
         Method of Standard Additions
MSA
MS
         Matrix Spike
MSD
         Matrix Spike Duplicate
ND
         Not Detected
PACK
         Packed Column
PREPF
         Preparation factor used by the Laboratory's Information Management System (LIMS)
PS
         Post Spike
PSD
         Post Spike Duplicate
RΑ
         Re-analysis
         Re-extraction and analysis
RΕ
RŁ
         Reporting Limit
RPD
         Relative Percent Difference of duplicate (unrounded) analyses
         Relative Response Factor
RRE
RS
         Reference Standard
RT
         Retention Time
RTW
         Retention Time Window
SampleID A 9 digit number unique for each sample, the first six digits are referred as the job number
         Seeded Control Blank
SCB
$D
         Serial Dilution
UCB
         Unseeded Control Blank
```

One or a combination of these data qualifiers and abbreviations may appear in the analytical report.

#### STATE CERTIFICATIONS

In some instances it may be necessary for environmental data to be reported to a regulatory authority with reference to a certified laboratory. For your convenience, the laboratory identification numbers for the STL-Connecticut laboratory are provided in the following table. Many states certify laboratories for specific parameters or tests within a category (i.e. method 325.2 for wastewater). The information in the following table indicates the lab is certified in a general category of testing such as drinking water or wastewater analysis. The laboratory should be contacted directly if parameter-specific certification information is required.

STL-Connecticut Certification Summary (2s of May 2002)

State	Responsible Agency	Treenicatori	
Connecticut	Department of Health Services	Drinking Water, Wastewater	PH-0497
Maine	Department of Health and Environmental Services	Drinking Water, Wastewater/Solid, Hazardous Waste	CT023
Massachusetts	. Department of Environmental Protection	Potable/Non-Potable Water	M-CT023
New Hampshire	Department of Environmental Services	Drinking Water, Wastewater	2528
New Jersey	Department of Environmental Protection	Drinking Water, Wastewater	CT410
New York	Department of Health	CLP, Drinking Water, Wastewater, Solid/ Hazardous Waste NELAC	10602
North Carolina	Division of Environmental Management	Wastewater	388
Rhode Island	Department of Health	ChemistryNon- Potable Water and Wastewater	A43
Utah.	Department of Health	RCRA	2032614458
Wisconsin	Department of Natural Resources	Wastewater	998355710

## ANALYTICAL REPORT

JOB NUMBER: 203449

Prepared For:

FANNING, PHILLIPS AND MOLNAR 909 Marconi Avenue Ronkonkoma, NY 11779

Project: WIN-HOLT

Attention: John Bukoski

Date: 04/30/2003

Signature Dubous Icas

Name: Johanna L. Dubauskas

Title: Project Manager

E-Mail: jdubauskas@stl-inc.com

4.30.03

Date

STL Connecticut

128 Long Hill Cross Road

Shelton, CT 06484

This Report Contains (\_\_\_\_\_) Pages



# STL Report : 203449 FANNING, PHILLIPS AND MOLNAR

## Case Narrative

Sample Receipt - All samples were received in good condition and at the proper temperature in Burlington VT.

The following analyses were subcontracted to the indicated laboratory:

TO14 volatiles sent to STL - VT, 55 South Park Dr., Colchester, VT 05446.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

## SAMPLE INFORMATION

Data: 04/30/2003

Job Number.: 203449

Customer...: FANNING, PHILLIPS AND MOLNAR

Attn.....: John Bukoski

Project Number....: 20000743 Customer Project ID...: WIN-HOLT

Project Description...: Win-Holt

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
203449-1	SG-6 (2)	Air	04/09/2003	09:05	04/10/2003	09:30
203449-2	SG-6 (6)	Air	04/09/2003	09:15	04/10/2003	09:30
203449-3	SG-5 (2)	. Air	04/09/2003	09:30	04/10/2003	09:30
203449-4	SG-5 (6)	Air	04/09/2003	09:40	04/10/2003	09:30
203449-5	SG-4 (2)	Air	04/09/2003	09:35	04/10/2003	09:30
203449-6	SG-4 (6)	Air	04/09/2003	10:00	04/10/2003	09:30
203449-7	SG-3 (2)	Air	04/09/2003	10:30	04/10/2003	09:30
203449-8	SG-3 (6)	Air	04/09/2003	10:38	04/10/2003	09:30
203449-9	SG-2 (2)	Air	04/09/2003	10:55	04/10/2003	09:30
203449-10	SG-2 (6)	Air	04/09/2003	11:10	04/10/2003	09:30
203449-11	SG-1 (2)	Air	04/09/2003	11:30	04/10/2003	09:30
203449-12	SG-1 (6)	Air	04/09/2003	11:40	04/10/2003	09:30
203449-13	SG-4D (2)	Air	04/09/2003	09:55	04/10/2003	09:30
203449-14	TRIP BLANK	Air	04/09/2003	00:00	04/10/2003	09:30
;		į				
		İ				

# STL Burlington Colchester, Vermont

Sample Data Summary Package

SDG: 92945



April 29, 2003

Ms. Johanna Dubauskas Severn Trent Laboratories 128 Long Hill Cross road Shelton, CT 06484

Re: Laboratory Project No. 23001

Case No. 23001; SDG: 92945

Dear Ms. Dubauskas:

Enclosed are the analytical results of samples received intact by Severn Trent Laboratories on April 10, 2003. Laboratory numbers have been assigned and designated as follows:

<u>Lab ID</u>	Client <u>Sample ID</u>	Sample <u>Date</u>	Sample <u>Matrix</u>
	Received: 04/10/03	ETR No: 92945	
522603 522604 522605 522606 522607 522608 522610 522611 522612 522613 522614 522615 522616	SG-6 2 SG-6 6 SG-5 2 SG-5 6 SG-4 2 SG-4 6 SG-3 2 SG-3 6 SG-2 2 SG-2 6 SG-1 2 SG-1 6 SG-4D 2 Trip Blank	04/09/03 04/09/03 04/09/03 04/09/03 04/09/03 04/09/03 04/09/03 04/09/03 04/09/03 04/09/03 04/09/03	Air Air Air Air Air Air Air Air Air Air
	•		<b>₩</b>

## Method TO-14A Modified-Volatile Organics:

The original analyses of the field samples SG-2 6, SG-3 2, SG-4 6, SG-12 and SG-16 exhibited the presence of select target compounds in concentrations that exceeded the calibration range of the instrument. These samples were subsequently re-analyzed at appropriate dilutions in order to provide quantification of all target analytes within the calibrated range of instrument response. The dilution analyses yielded results that were within the calibration range of the instrument. Both sets of data have been presented in this case submittal.

The volatile organic analyses of the field samples SG-2 2, SG-3 6, SG-4 2, SG-4D 2, SG-5 2, SG-5 6 and SG-6 6 were accomplished at appropriate dilution based upon results from the initial screen data. The dilution analyses yielded results for all compounds that were within the calibration range.

Severn Trent Laboratories, Inc.

Method TO-14A Modified-Volatile Organics (cont.):

The analysis of the blank spike duplicate sample identified as X9LCSD exhibited a percent recovery for Hexachlorobutadiene that was marginally below the control limits (70%-130%) at 66%. The analysis of the associated blanks spike sample yielded a percent recovery for this compound that was within the control limits.

The responses for the target compounds-1,2,4-Trichlorobenzene and Hexachlorobutadiene in the initial calibration check acquisition exceeded the percent relative standard deviation criterion (30%) at 31.8% and 33.0% respectively. These target compounds were not detected in the field samples of this delivery group.

Please note that manual integrations were performed for the processing of volatile organic data files. Documentation of these integrations can be found in supporting documentation section of the data package.

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

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I certify that this package is in compliance with the NELAC requirements, both technically and for completeness, for other than the conditions detailed above. The release of the data contained in this hardcopy data package has been authorized by the Laboratory Director or his designee, as verified by the following signature.

Sincerely,

Michael F. Wheeler, Ph.D.

Laboratory Director

Enclosure

SG-1 2

Lab Name: STL BURLINGTON Contract: 23001 Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522613

Sample wt/vol: 100.0 (g/mL) ML Lab File ID: 522613D

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. Date Analyzed: 04/10/03

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

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kq) PPBV Q 75-71-8-----Dichlorodifluoromethane 1.0 0 74-87-3------Chloromethane 1.0 U 75-01-4-----Vinyl Chloride 1.0 U 74-83-9-----Bromomethane 1.0 ប 75-00-3-----Chloroethane 1.0 ប 75-69-4-----Trichlorofluoromethane 1.0 U 76-13-1-----Freon TF 1.0 U 75-35-4-----1,1-Dichloroethene\_ 1.0 U 75-09-2-----Methylene Chloride 1.0 ប្រ 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 0 71-55-6-----1,1,1-Trichloroethane\_\_\_\_ 1.0 U 56-23-5-----Carbon Tetrachloride\_\_\_ 1.0 U 71-43-2----Benzene 1.1 107-06-2----1,2-Dichloroethane 1.0 U 79-01-6-----Trichloroethene 1.0 0 78-87-5-----1,2-Dichloropropane 1.0 U 10061-01-5----cis-1,3-Dichloropropene 1.0 U 108-88-3----Toluene 14 10061-02-6----trans-1,3-Dichloropropene 1.0 0 79-00-5-----1,1,2-Trichloroethane 1.0 U 127-18-4-----Tetrachloroethene 1.0 ប 108-90-7-----Chlorobenzene 1.0 U 100-41-4-----Ethylbenzene\_ 12 1330-20-7-----Xylene (m,p)\_\_ 57 100-42-5----Styrene 1.2 95-47-6-----Xylene (o) 31 79-34-5----1,1,2,2-Tetrachloroethane 1.0 U 541-73-1----1,3-Dichlorobenzene 1.010 106-46-7-----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

STLCTS SAMPLE NO.

SG-1 2

Lab Name: STL BURLINGTON

Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522613

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

Lab File ID:

522613D

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/10/03

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

0

#### FORM 1

## VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

STLCTS SAMPLE NO.

SG-1 2	
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Lab Name: STL BURLINGTON

Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522613

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

Lab File ID: 522613D

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/10/03

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

Dilution Factor: 2.0

Soil Extract Volume:\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

Number TICs found: 3

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

CAS NUMBER	COMPOUND NAME		RT	EST. CONC.	Q
1°. 2°. 3 . 4	UNKNOWN UNKNOWN	· ·	14.16 14.48 15.21	7.1 8.1 8.1	J J
5, 6; 7. 8.		· ·			
10. 11. 12'.		· 			
13. 14. 15. 16.					
18. 19. 20.					
21. 22. 23. 24. 25.		_			
27. 28.					
29. 30.					

SG-1 2DL

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522613D1

Sample wt/vol: 67.00 (g/mL) ML

Lab File ID: 522613D2

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/11/03

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

Dilution Factor: 3.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: (ua/L or ua/Ka) PPRV

CAS NO.		ONCENTRATION (ug/L or ug/Kg		Q
74-87-3 75-01-4 74-83-9 75-00-3 75-69-4 75-35-4 75-35-4 75-34-3 75-66-3 71-55-6 56-23-5 71-43-2 107-06-2 79-01-6 78-87-5 108-88-3 108-88-3 108-88-3 108-90-7 127-18-4 1330-20-7 100-41-4 1330-20-7 100-42-5 79-34-5 79-34-5 541-73-1 106-46-7 95-50-1	1,1-DichloroetheneMethylene Chloride1,1-Dichloroethanecis-1,2-DichloroetheneChloroform1,1,1-TrichloroetheneCarbon TetrachloriBenzene1,2-Dichloroethene1,2-Dichloroproparcis-1,3-DichloroprToluenetrans-1,3-Dichloroethenetrans-1,2-TrichloroetheneTetrachloroetheneChlorobenzeneEthylbenzene	chane   1.555555555555555555555555555555555555	מממממממממממממממממממממממממממממממממממממממ	
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### FORM 1 VOLATILE ORGANICS ANALYSIS DATA SHEET

STLCTS SAMPLE NO.

SG-1 2DL

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522613D1

Sample wt/vol: 67.00 (g/mL) ML

Lab File ID: 522613D2

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/11/03

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

Dilution Factor: 3.0

Soil Extract Volume: (uL)

CAS NO.

COMPOUND

Soil Aliquot Volume: \_\_\_\_(uL)

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

87-68-3	1.5 92550555555555555555555555555555555555	ממממממממממחממחם
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SG-1 6

Lab Name: STL BURLINGTON

Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522614

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

Lab File ID: 522614D

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/11/03

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

CAS NO.

Dilution Factor: 2.0

Soil Extract Volume:\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

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

<u> </u>		(ug/L or ug/kg)	·	Q
75-71-8	Dichlorodifluorome	ethane	1.0	7.7
/4-8/-3	Chloromethane		1.0	ľ
75-01-4	Vinyl Chloride	<del></del>	1.0	
/4-83-9	Bromomethane		1.0	
75-00-3 <b>-</b>	Chloroethane		1.0	
75-69-4	Trichlorofluoromet	hane	1.0	<u> </u>
76-13-1	Freon TF	-11011G	1.0	
75-35-4	1 1-Dichloroethene		1.0	_
75-09-2	Methylene Chlorida		1.0	_
/5-34-3	·l.l-Dichloroethand	<u> </u>	1.0	-
156-59-2	cis-1,2-Dichloroet	hono	1.0	
67-66-3	·Chloroform	-11ette	1.0	l -
71-55-6	1,1,1-Trichloroeth	3370	1.0	-
56-23-5	Carbon Tetrachlori		1.0	_
71-43-2	Renzene	.ae	1.0	Ū
107-06-2	1,2-Dichloroethane		2.0	
79-01-6	Trichloroethene		1.0	r e
78-87-5	1,2-Dichloropropar	10	1.0	_
10061-01-5	cis-1,3-Dichloropr	1e	1.0	
108-88-3		opene	1.0	Ū
10061-02-6	trans-1,3-Dichloro		15	
79-00-5	1,1,2-Trichloroeth	ppropene	1.0	
127-18-4	Tetrachloroethene	nane	1.0	
108-90-7	Chlorobenzene		1.0	1 -
100-30-7	Ethylbenzene		1.0	)
1330-20-7-	Xylene (m,p)		9.7	
100-42-5	xyrene (m,p)		46	
100-42-5	styrene		1.0	U
95-47-6	xylene (o)		25	
/J-J4-D	1,1,2,2-Tetrachlor	coethane	1.0	Ū
コペエー / コーエーーーー	! ::- );	) <u>_</u>	1.0	U
100-40-/	1,4-Dichlorobenzen	ıe	1.0	U
70-5U-1	1,2-Dichlorobenzen	le	1.0	Ū
TZU-87-T	1,2,4-Trichloroben	ızene	1.0	ŢŢ

#### FORM 1 VOLATILE ORGANICS ANALYSIS DATA SHEET

STLCTS SAMPLE NO.

SG-1 6 Lab Name: STL BURLINGTON Contract: 23001 Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945 Matrix: (soil/water) AIR Lab Sample ID: 522614 Sample wt/vol: 100.0 (g/mL) ML Lab File ID: 522614D Level: (low/med) LOW Date Received: 04/10/03 % Moisture: not dec. Date Analyzed: 04/11/03 GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 2.0 Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL) CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) PPBV 87-68-3-----Hexachlorobutadiene 1.0 U 108-67-8-----1,3,5-Trimethylbenzene 17 95-63-6-----1,2,4-Trimethylbenzene\_ 83 E 76-14-2----1,2-Dichlorotetrafluoroethan 1.0 U 106-93-4----1,2-Dibromoethane 1.0 U 106-99-0-----1,3-Butadiene 2.9 75-15-0-----Carbon Disulfide 1.0 ប៊ 110-82-7-----Cyclohexane 1.0 0 124-48-1-----Dibromochloromethane 1.0U 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 56 107-05-1----3-Chloropropene 1.0 0 540-84-1----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 1.0 U 142-82-5----n-Heptane 1.0 U

### FORM 1

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

STLCTS SAMPLE NO.

SG-1 6

Lab Name: STL BURLINGTON

Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522614

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

Lab File ID: 522614D

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/11/03

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

Dilution Factor: 2.0

Soil Extract Volume: \_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

Number TICs found: 2

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

CAS NUMBER	. COMPOUND NAME	RT	EST. CONC.	Q
1. 2. 3.	UNKNOWN UNKNOWN	14.49 14.78	5.9	J
4		;		
7. 8. 9.				
12.				
14. 15. 16.				
18. 19. 20.				
21. 22. 23. 24.				
25 26 27.				
28. 29. 30.				
	,	_		

SG-1 6DL

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522614D1

Sample wt/vol: 67.00 (g/mL) ML

Lab File ID: 522614D2

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/11/03

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

CAS NO.

COMPOUND

Dilution Factor: 3.0

Soil Extract Volume: \_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: (uq/L or uq/Ka) PPBV

		g/kg/ PPBV	Q
75-71-8	Dichlorodifluoromethane		1.5 U
1 74-87-3	Chloromethane	-	
75-01-4	Vinyl Chloride	-	1.5 U 1.5 U
/4-83-9	Bromomethane	<del>.</del>	
75-00-3	Chloroethane	-	1.5 U
75-69-4	Trichlorofluoromethane	-{	1.5 U 1.5 U
76-13-1	Freon TF		1.5 U
75-35-4	1.1-Dichloroethene	<u>-</u>	1.5 U
75-09-2	Methylene Chloride	-	1.5 U
75-34-3	1.1-Dichloroethane	-1	1.5 U
156-59-2	Cis-1.2-Dichloroethene	-	1.5 U
6/-66-3	Chloroform	+[	1.5 U
71-55-6 <b>-</b> -	1.1.1-Trichloroethane	-	1.5 U
56-23-5	Carbon Tetrachloride	-	1.5 U
71-43-2 <b>-</b> -	Benzene	-	2.3 D
107-06-2	1,2-Dichloroethane	-[	1.5 U
/9-UI-6	Trichloroethene	-	1.5 U
78-87-5	1,2-Dichloropropage	-	1.5 U
10061-01-5	cis-1,3-Dichloropropene	-	1.5 U
[ T08-88-3	Toluene	-	17 D
10061-02-6	trans-1,3-Dichloropropene	-	1.5 U
79-00-5	1,1,2-Trichloroethane	-	1.5 U
127-18-4	Tetrachloroethene	-	1.5 U
108-90-7	Chlorobenzene	-	1.5 U
100-41-4	Ethylbenzene	-	10 D
1330-20-7	Xylene (m,p)	-[	47 D
100-42-5	Styrene	-	1.5 U
95-47-6 <b>--</b> -	Xylene (o)	-[	26 D
79 <b>-</b> 34 <b>-</b> 5- <b></b>	1,1,2,2-Tetrachloroethane	-	1.5 0
541-73-1	1,3-Dichlorobenzene	-	1.5 U
106-46-7	1,4-Dichlorobenzene	-	1.5 U
95-50-1 <b>-</b>	1.2-Dichlorobenzene	-	1.5 0
120-82-1	1,2,4-Trichlorobenzene	<b>-  </b>	1.5 U
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#### FORM 1 VOLATILE ORGANICS ANALYSIS DATA SHEET

STLCTS SAMPLE NO.

SG-1 6DL

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522614D1

Sample wt/vol: 67.00 (g/mL) ML

Lab File ID: 522614D2

Level: (low/med)

LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/11/03

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

Dilution Factor: 3.0

Soil Extract Volume:\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

CAS NO.

COMPOUND

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

87-68-3			ug/H of ug/Ng/	, FEDV	Q
l l	108-67-8 95-63-6 76-14-2 106-93-4 106-99-0 110-82-7 124-48-1 75-25-2 75-27-4 156-60-5 622-96-8 107-05-1 540-84-1 593-60-2 95-49-8 110-54-3	1,3,5-Trimethylben:1,2,4-Trimethylben:1,2-Dichlorotetraf:1,2-Dibromoethane1,3-ButadieneCarbon DisulfideCyclohexaneDibromochloromethaneBromoformBromodichloromethanetrans-1,2-Dichloromethane4-Ethyltoluene3-Chloropropene2,2,4-TrimethylpentBromoethene2-Chlorotoluenen-Hexane	zene zene luoroethan ne ne ethene	1. 1. 3. 1. 1. 1. 1. 1.	865544555555555555555555555555555555555

SG-2 2 Ontract: 23001

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522611

Sample wt/vol: 67.00 (g/mL) ML Lab File ID: 522611D

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 04/10/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 3.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) PPBV 0 75-71-8-----Dichlorodifluoromethane\_\_\_ 1.5 U 74-87-3-----Chloromethane\_ 1.5|U 75-01-4-----Vinyl Chloride\_ 1.5 Û 74-83-9-----Bromomethane 1.5 U 75-00-3-----Chloroethane 1.5 U 75-69-4-----Trichlorofluoromethane 1.5 U 76-13-1-----Freon TF 1.5 U 75-35-4-----1,1-Dichloroethene 1.5 U 75-09-2----Methylene Chloride\_ 1.5 U 75-34-3-----1,1-Dichloroethane 1.5 U 156-59-2----cis-1,2-Dichloroethene 1.5 U 67-66-3-----Chloroform 1.5 U 71-55-6----1,1,1-Trichloroethane 1.6 56-23-5-----Carbon Tetrachloride 1.5 T 71-43-2----Benzene 4.0 107-06-2----1,2-Dichloroethane 1.5 0 79-01-6----Trichloroethene 1.5 U 78-87-5-----1,2-Dichloropropane 1.5 U 10061-01-5----cis-1,3-Dichloropropene 1.5 ប 108-88-3-----Toluene 10061-02-6----trans-1,3-Dichloropropene 19 1.5 U 79-00-5----1,1,2-Trichloroethane\_\_\_\_ 1.5 U 127-18-4-----Tetrachloroethene 1.5 U 108-90-7------Chlorobenzene 1.5 U 100-41-4----Ethylbenzene 13 1330-20-7-----Xylene (m,p) 60 100-42-5-----Styrene\_ 1.5 ਹਿੱ 95-47-6-----Xylene (o) 32 79-34-5----1,1,2,2-Tetrachloroethane\_\_\_ 1.5 U 541-73-1----1,3-Dichlorobenzene 1.5 U 106-46-7----1,4-Dichlorobenzene 1.5 U 95-50-1-----1,2-Dichlorobenzene 1.5 U 120-82-1----1,2,4-Trichlorobenzene 1.5 U

#### FORM 1 VOLATILE ORGANICS ANALYSIS DATA SHEET

STLCTS SAMPLE NO.

SG-2 2

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522611

Sample wt/vol: 67.00 (g/mL) ML

Lab File ID: 522611D

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/10/03

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

Dilution Factor: 3.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CAS NO.

COMPOUND

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

Q

87-68-3	1.5 17 79 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	
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#### FORM 1

## VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

STLCTS SAMPLE NO.

SG-2 2

Lab	Name:	STL	BURLINGTON
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Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522611

Sample wt/vol: 67.00 (g/mL) ML

Lab File ID: 522611D

30.

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/10/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 3.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: Number TICs found: 3 (ug/L or ug/Kg) ppbv

CAS NUMBER COMPOUND NAME RT EST. CONC. | Q UNKNOWN 14.16 7.2 丁 2. UNKNOWN 14.48 7.3|J 3. UNKNOWN 15.21 6.4 J 4. \_ 9. 10.\_\_\_\_ 11.\_\_\_\_ 12. 13. \_ \_\_\_\_ 15. 16. 17. 18.\_\_\_\_ 19.\_\_\_\_ 20. 21. \_\_\_ 22. 23. \_\_\_ 24.\_\_\_\_ 25.\_\_\_\_ 26. \_\_\_ 27. 28.\_\_\_\_ 29.\_\_\_\_

SG-2 6 Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522612

Sample wt/vol: 100.0 (g/mL) ML Lab File ID: 522612D

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. Date Analyzed: 04/10/03

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

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CAS NO.	COMPOUND	CONCENTRATION (ug/L or ug/F	N UNITS: Kg) PPBV	Q
74-87-3	-Vinyl Chloride -Bromomethane -Chloroethane -Trichlorofluorome -Freen TF -1,1-Dichloroether -Methylene Chlorid -1,1-Dichloroethar -cis-1,2-Dichloroether -Chloroform -1,1,1-Trichloroether -Carbon Tetrachlor -Benzene -1,2-Dichloroethar -Trichloroether -1,2-Dichloropropa -cis-1,3-Dichloropropa -cis-1,3-Dichloropropa -trans-1,3-Dichloroether -1,1,2-Trichloroether -Tetrachloroethere -Chlorobenzene	ethane  ne de de de thene chane ride  ne oropene ropropene chane de	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	

#### FORM 1 VOLATILE ORGANICS ANALYSIS DATA SHEET

STLCTS SAMPLE NO.

1.1

1.0

SG-2 6 Lab Name: STL BURLINGTON Contract: 23001

Case No.: 23001 SAS No.: Lab Code: STLVT SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522612

Sample wt/vol: 100.0 (g/mL) ML Lab File ID: 522612D

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. Date Analyzed: 04/10/03

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

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

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) PPBV Q 87-68-3-----Hexachlorobutadiene 1.0 U 108-67-8-----1,3,5-Trimethylbenzene 19 95-63-6-----1,2,4-Trimethylbenzene\_ 97 E 76-14-2----1,2-Dichlorotetrafluoroethan

1.00 106-93-4-----1,2-Dibromoethane\_ 1.0 U 106-99-0----1,3-Butadiene 3.5 75-15-0-----Carbon Disulfide 1.4 110-82-7------Cyclohexane 1.0 0 124-48-1-----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 0 622-96-8-----4-Ethyltoluene 66 107-05-1----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

142-82-5----n-Heptane

## FORM 1

LOW

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

STLCTS	SAMPLE	NO
~		TA/~ .

SG-2 6

Lab Name: STL BURLINGTON

Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522612

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

Lab File ID: 522612D

Level: (low/med)

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/10/03

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

Dilution Factor: 2.0

Soil Extract Volume: \_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

Number TICs found: 1

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

			_	
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18.	COMPOUND NAME UNKNOWN	RT 14.49	EST. CONC. 7.4	=====
19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30.				

SG-2 6DL

Lab Name: STL BURLINGTON Contract: 23001

2500

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522612D1

Sample wt/vol: 67.00 (g/mL) ML Lab File ID: 522612D2

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. \_\_\_\_ Date Analyzed: 04/11/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 3.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

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

75-71-8Dichlorodifluoromethane	1 -	
74-87-3Chloromethane	1.5	
75-01-4Vinyl Chloride	1.5	
74-83-9Bromomethane	1.5	
75-00-3Chloroethane	1.5	_
75-69-4Trichlorofluoromethane	1.5	- 1
76-13-1Freon TF	1.5	- 1
75-35-41,1-Dichloroethene	1.5	
75-09-2Methylene Chloride	1.5	
75-34-31,1-Dichloroethane	1.8	
156-59-2cis-1,2-Dichloroethene	1.5	
67-66-3Chloroform	1.5	
71-55-61,1,1-Trichloroethane	1.5	
56-23-5Carbon Tetrachloride	3.2	
71-43-2Benzene	1.5	
107-06-21,2-Dichloroethane	1.7	
79-01-6Trichloroethene	1.5	_
78-87-51,2-Dichloropropane	1.5	
10061-01-5cis-1,3-Dichloropropene	1.5	
108-88-3Toluene	1.5	-
10061-02-6- +mm= 1 2 52-2-1	19	
10061-02-6trans-1,3-Dichloropropene	1.5	
79-00-51,1,2-Trichloroethane	1.5	
127-18-4Tetrachloroethene	1.5	U
108-90-7Chlorobenzene	1.5	U
100-41-4Ethylbenzene	10	D
1330-20-7Xylene (m,p)	46	D
100-42-5Styrene	1.5	U
95-47-6Xylene (o)	25	D
79-34-51,1,2,2-Tetrachloroethane	1.5	
541-/3-11,3-Dichlorobenzene	1.5	U
106-46-71,4-Dichlorobenzene	1.5	
95-50-11,2-Dichlorobenzene	1.5	υ
120-82-11,2,4-Trichlorobenzene	1.5	

COMPOUND

CAS NO.

STLCTS SAMPLE NO.

SG-2 6DL Lab Name: STL BURLINGTON Contract: 23001 Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945 Matrix: (soil/water) AIR Lab Sample ID: 522612D1 Sample wt/vol: 67.00 (g/mL) MLLab File ID: 522612D2 Level: (low/med) LOW Date Received: 04/10/03 % Moisture: not dec. Date Analyzed: 04/11/03 GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 3.0 Soil Extract Volume: (uL) Soil Aliquot Volume: \_\_\_\_(uL) CONCENTRATION UNITS:

(ug/L or ug/Kg) PPBV 0 87-68-3-----Hexachlorobutadiene 1.5 U 108-67-8-----1,3,5-Trimethylbenzene 16|D 95-63-6-----1,2,4-Trimethylbenzene 70 D 76-14-2----1,2-Dichlorotetrafluoroethan 1.5 U 106-93-4----1,2-Dibromoethane 1.5 U 106-99-0----1,3-Butadiene 3.2 D 75-15-0-----Carbon Disulfide\_ 1.5 U 110-82-7------Cyclohexane 1.5 U 124-48-1-----Dibromochloromethane 1.5 U 75-25-2----Bromoform 1.5 U 75-27-4-----Bromodichloromethane 1.5 U 156-60-5----trans-1,2-Dichloroethene 1.5 U 622-96-8----4-Ethyltoluene 51 D 107-05-1-----3-Chloropropene 1.5 U 540-84-1----2,2,4-Trimethylpentane\_ 1.5 U 593-60-2-----Bromoethene 1.5 U 95-49-8-----2-Chlorotoluene 1.5 U 110-54-3----n-Hexane 1.5 U 142-82-5----n-Heptane 1.5 U

SG-3 2

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522609

Sample wt/vol: 67.00 (g/mL) ML Lab File ID: 522609D

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. Date Analyzed: 04/10/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 3.0

Soil Extract Volume:\_\_\_\_(uL) Soil Aliquot Volume: \_\_\_ (uL)

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

75-71-8Dichlorodifluoromethane       1.5 U         74-87-3Chloromethane       1.5 U         75-01-4Vinyl Chloride       1.5 U         74-83-9Bromomethane       1.5 U         75-00-3Chloroethane       1.5 U         75-69-4Trichlorofluoromethane       1.5 U         76-13-1Freon TF       1.5 U         75-35-41,1-Dichloroethene       1.5 U         75-34-31,1-Dichloroethane       1.5 U         75-34-31,2-Dichloroethane       1.5 U         76-66-3	
74-87-3Chloromethane       1.5 U         75-01-4Vinyl Chloride       1.5 U         74-83-9Bromomethane       1.5 U         75-00-3Chloroethane       1.5 U         75-69-4Trichlorofluoromethane       1.5 U         76-13-1Freon TF       1.5 U         75-35-41,1-Dichloroethene       1.5 U         75-34-3Methylene Chloride       1.5 U         75-34-31,1-Dichloroethane       1.5 U         156-59-2Cis-1,2-Dichloroethene       1.5 U         71-55-61,1,1-Trichloroethane       1.5 U         71-43-2Benzene       1.5 U         107-06-21,2-Dichloroethane       1.5 U         78-87-51,2-Dichloropropane       1.5 U         10061-01-5	
75-01-4	
74-83-9	
75-00-3	
75-69-4Trichlorofluoromethane 76-13-1Freon TF 75-35-41,1-Dichloroethene 75-09-2Methylene Chloride 75-34-31,1-Dichloroethane 1.5 U 156-59-2cis-1,2-Dichloroethene 67-66-3Chloroform 71-55-61,1,1-Trichloroethane 1.5 U	
76-13-1Freon TF 75-35-41,1-Dichloroethene 75-09-2Methylene Chloride 75-34-31,1-Dichloroethane 1.5 U 156-59-2cis-1,2-Dichloroethene 67-66-3Chloroform 71-55-61,1,1-Trichloroethane 1.5 U 71-43-2Benzene 107-06-21,2-Dichloroethane 79-01-6Trichloroethene 78-87-51,2-Dichloropropane 1.5 U	
75-35-41,1-Dichloroethene 75-09-2Methylene Chloride 75-34-31,1-Dichloroethane 1.5 U 156-59-2cis-1,2-Dichloroethene 67-66-3Chloroform 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 71-43-2Benzene 107-06-21,2-Dichloroethane 79-01-6Trichloroethene 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 10061-01-5	
75-09-2Methylene Chloride 75-34-31,1-Dichloroethane 156-59-2cis-1,2-Dichloroethene 67-66-3Chloroform 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 71-43-2Benzene 107-06-21,2-Dichloroethane 79-01-6Trichloroethene 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 1008-88-87-5	
75-34-31,1-Dichloroethane 156-59-2cis-1,2-Dichloroethene 67-66-3Chloroform 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 71-43-2Benzene 107-06-21,2-Dichloroethane 79-01-6Trichloroethene 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 10061-01-5	
156-59-2cis-1,2-Dichloroethene 67-66-3Chloroform 71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 71-43-2Benzene 107-06-21,2-Dichloroethane 79-01-6Trichloroethene 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 10061-01-5	
67-66-3Chloroform       1.5       U         71-55-61,1,1-Trichloroethane       1.5       U         56-23-5Carbon Tetrachloride       1.5       U         71-43-2Benzene       1.5       U         107-06-21,2-Dichloroethane       1.5       U         79-01-6Trichloroethene       1.5       U         78-87-51,2-Dichloropropane       1.5       U         10061-01-5cis-1,3-Dichloropropene       1.5       U	
71-55-61,1,1-Trichloroethane 56-23-5Carbon Tetrachloride 71-43-2Benzene 107-06-21,2-Dichloroethane 79-01-6Trichloroethene 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 100	
56-23-5Carbon Tetrachloride       1.5 U         71-43-2Benzene       1.5 U         107-06-21,2-Dichloroethane       1.5 U         79-01-6Trichloroethene       1.5 U         78-87-51,2-Dichloropropane       1.5 U         10061-01-5cis-1,3-Dichloropropene       1.5 U	
71-43-2Benzene 107-06-21,2-Dichloroethane 79-01-6Trichloroethene 78-87-51,2-Dichloropropane 10061-01-5cis-1,3-Dichloropropene 1008-88-88-89-88-88	
107-06-21,2-Dichloroethane 1.5 U 79-01-6Trichloroethene 1.5 U 78-87-51,2-Dichloropropane 1.5 U 1.5	
79-01-6Trichloroethene 1.5 U 78-87-51,2-Dichloropropane 1.5 U 10061-01-5cis-1,3-Dichloropropene 1.5 U	
78-87-51,2-Dichloropropane 1.5 U 10061-01-5cis-1,3-Dichloropropene 1.5 U	
10061-01-5cis-1,3-Dichloropropene 1.5 U	
100 00 0 m-1	
10061 00 6	
107 10 / m	
100 00 7 02-1	
100 47 4	
1220 20 7	
1330-20-7Xylene (m,p) 100	
100-42-5Styrene 1.8	
95-47-6Xylene (o) 51	
79-34-51,1,2,2-Tetrachloroethane 1.5 U	
541-/3-11,3-Dichlorobenzene 1 5/17	
106-46-71,4-Dichlorobenzene 1.5 U	
95-50-11,2-Dichlorobenzene 1 5/11	
120-82-11,2,4-Trichlorobenzene 1.5 U	

STLCTS SAMPLE NO.

SG-3 2 Lab Name: STL BURLINGTON Contract: 23001 Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945 Matrix: (soil/water) AIR Lab Sample ID: 522609 Sample wt/vol: 67.00 (g/mL) ML Lab File ID: 522609D Level: (low/med) LOW Date Received: 04/10/03 % Moisture: not dec. Date Analyzed: 04/10/03 GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 3.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

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

J) PPBV Q

87-68-3-----Hexachlorobutadiene 1.5 U 108-67-8-----1,3,5-Trimethylbenzene 28 95-63-6----1,2,4-Trimethylbenzene 150 E 76-14-2----1,2-Dichlorotetrafluoroethan 1.5 ប 106-93-4----1,2-Dibromoethane 1.5 U 106-99-0----1,3-Butadiene 1.5 U 75-15-0-----Carbon Disulfide 1.5 U 110-82-7-----Cyclohexane\_\_\_ 1.5 U 124-48-1-----Dibromochloromethane 1.5 U 75-25-2----Bromoform 1.5 U 75-27-4-----Bromodichloromethane 1.5 U 156-60-5----trans-1,2-Dichloroethene 1.5 U 622-96-8----4-Ethyltoluene 110 107-05-1----3-Chloropropene 1.5 0 540-84-1----2,2,4-Trimethylpentane 1.5 U 593-60-2----Bromoethene 1.5 U 95-49-8----2-Chlorotoluene 1.5 U 110-54-3----n-Hexane 1.5 U 142-82-5----n-Heptane 1.5 U

#### FORM I

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

STLCTS SAMPLE NO.

SG-3 2

Lab Name: STL BURLINGTON

Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522609

Sample wt/vol: 67.00 (g/mL) ML

Lab File ID: 522609D

Level: (low/med) LOW

% Moisture: not dec.

Date Received: 04/10/03 Date Analyzed: 04/10/03

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

Dilution Factor: 3.0

Soil Extract Volume:\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 2. 3. 4. 5. 6.	UNKNOWN UNKNOWN UNKNOWN	13.83 14.16 14.48 15.44	9.5	J J
9. 10. 11. 12. 13. 14. 15. 16.				
17. 18. 19. 20. 21. 22. 23.				
24. 25. 26. 27. 28.				
30				

SG-3 2DL

2.5 0

2.5 U

Lab Name: STL BURLINGTON Contract: 23001

CAS NO. COMPOUND

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

CONCENTRATION UNITS:

Matrix: (soil/water) AIR Lab Sample ID: 522609D1

Sample wt/vol: 40.00 (g/mL) ML Lab File ID: 522609D2

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. Date Analyzed: 04/11/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 5.0

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

(ug/L or ug/Kg) PPBV 75-71-8-----Dichlorodifluoromethane 2.5 U 74-87-3------Chloromethane 2.5 U 75-01-4-----Vinyl Chloride 2.5 U 74-83-9-----Bromomethane 2.5 U 75-00-3-----Chloroethane 2.5 U 75-69-4----Trichlorofluoromethane 2.5 U 76-13-1----Freon TF 2.5 U 75-35-4-----1,1-Dichloroethene 2.5 U 75-09-2----Methylene Chloride 2.5 U 75-34-3-----1,1-Dichloroethane 2.5 U 156-59-2----cis-1,2-Dichloroethene 2.5 U 67-66-3-----Chloroform 2.5 U 71-55-6----1,1,1-Trichloroethane 2.5 U 56-23-5-----Carbon Tetrachloride 2.5 U 71-43-2-----Benzene 2.5 Ū 107-06-2----1,2-Dichloroethane 2.5 U 79-01-6-----Trichloroethene 2.5 U 78-87-5----1,2-Dichloropropane 2.5 U 10061-01-5----cis-1,3-Dichloropropene 2.5 U 108-88-3-----Toluene 15 D 10061-02-6----trans-1,3-Dichloropropene 2.5 U 79-00-5----1,1,2-Trichloroethane\_\_\_\_ 2.5 U 127-18-4-----Tetrachloroethene 2.5 U 108-90-7-----Chlorobenzene 2.5 U 100-41-4-----Ethylbenzene 19 D 1330-20-7-----Xylene (m,p) 88 D 100-42-5-----Styrene 2.5 U 95-47-6-----Xylene (o) 47 D 79-34-5----1,1,2,2-Tetrachloroethane 2.5 U 541-73-1----1,3-Dichlorobenzene 2.5 U 106-46-7-----1,4-Dichlorobenzene 2.5 U 95-50-1----1,2-Dichlorobenzene

120-82-1----1,2,4-Trichlorobenzene

STLCTS SAMPLE NO.

SG-3 2DL Contract: 23001 Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Lab Name: STL BURLINGTON

Matrix: (soil/water) AIR

Lab Sample ID: 522609D1

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

Lab File ID: 522609D2

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/11/03

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

Dilution Factor: 5.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: \_\_\_\_(uL)

CAS NO.

COMPOUND

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

Q

87-68-3	2.5 26 120 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	ממממממממממסט
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SG-3 6

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522610

Sample wt/vol: 67.00 (g/mL) ML

Lab File ID: 522610D

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/10/03

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

Dilution Factor: 3.0

Soil Extract Volume: \_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

CAS NO. COMPOUND

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

		r ug/ng/	PPDV	Q
75-71-8	Dichlorodifluoromethane			
74-87-3	Chloromethane		1.5	
75-01-4	Vinyl Chloride	<del></del>	1,5 1,5	U
74-83-9	Bromomethane		1.5	U T
75-00-3	Chloroethane			
75-69-4	Trichlorofluoromethane		1.5 1.5	
76-13-1	Freon TF			
75-35-4	1,1-Dichloroethene		1,5 1.5	
75-09-2	Methylene Chloride	<del></del>	1.5	
75-34-3	1,1-Dichloroethane		1.5	
156-59-2	cis-1,2-Dichloroethene		1.5	
67-66-3	·Chloroform	<del></del>	1.5	
71-55-6	1,1,1-Trichloroethane	<del></del>	1.5	
56-23-5	Carbon Tetrachloride	<del></del>	1:5	1 -
71-43-2- <b></b>	Benzene	<del></del>	1.9	1
107-06-2	1.2-Dichloroethane	<del></del>	1.5	
79-01-6	Trichloroethene		1.5	
78-87-5	1,2-Dichloropropane	<del></del>	1.5	
10061-01-5	cis-1,3-Dichloropropene	<del></del>	1.5	
108 <b>-</b> 88-3	Toluene		63	
10061-02-6	trans-1.3-Dichloropropen	<del>-</del>	1.5	
79-00-5	1.1.2-Trichloroethane		1.5	
127-18-4	Tetrachloroethene		1.5	
108-90-7	Chlorobenzene		1.5	
100-41-4	Ethylbenzene	<del></del>	15	l ·
1330-20-7	Xvlene (m.p)		71	<del></del>
. 100-42-5	Stvrene		1.5	TT -
95-47 <b>-</b> 6- <b>--</b>	Xvlene (o)	<del></del>	36	
: 79-34-5 <b>-</b>	1,1,2,2-Tetrachloroethan	e -	1.5	
. 541-73-1	1.3-Dichlorobenzene		1.5	
106-46-7 <b>-</b>	1,4-Dichlorobenzene	-	1.5	
95-50-1	1,2-Dichlorobenzene		1.5	
120-82-1	1,2,4-Trichlorobenzene		1.5	
			1.0	
		<del></del> !		l

Lab Name: STL BURLINGTON

STLCTS SAMPLE NO.

2.3

SG-3 6 Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522610

Sample wt/vol: 67.00 (g/mL) ML Lab File ID: 522610D

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. Date Analyzed: 04/10/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 3.0

Soil Extract Volume: (uL) Soil Aliquot Volume: \_\_\_\_(uL)

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

87-68-3-----Hexachlorobutadiene 1.5 U 108-67-8-----1,3,5-Trimethylbenzene 20 95-63-6----1,2,4-Trimethylbenzene 100 76-14-2----1,2-Dichlorotetrafluoroethan  $1.5|\overline{U}$ 106-93-4-----1,2-Dibromoethane\_ 1.5 U 106-99-0-----1,3-Butadiene 1.9 75-15-0-----Carbon Disulfide 1.5 T 110-82-7-----Cyclohexane 1.5 U

124-48-1-----Dibromochloromethane 1.5 U 75-25-2-----Bromoform 1.5 U 75-27-4-----Bromodichloromethane 1.5 U

156-60-5----trans-1,2-Dichloroethene 1.5 U 622-96-8----4-Ethyltoluene 76 107-05-1----3-Chloropropene 1.5 U

540-84-1----2,2,4-Trimethylpentane 1.5 U

593-60-2-----Bromoethene 1.5 U

95-49-8-----2-Chlorotoluene 1.5 U 110-54-3----n-Hexane 1.5 U 142-82-5----n-Heptane

FORM I VOA

# VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

STLCTS SAMPLE NO.

SG-3 6

Lab Name: STL BURLINGTON

Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522610

Sample wt/vol: 67.00 (g/mL) ML Lab File ID: 522610D

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/10/03

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

Dilution Factor: 3.0

Soil Extract Volume: \_\_\_\_(uL)

Number TICs found: 3

Soil Aliquot Volume: \_\_\_\_(uL)

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

COMPOUND NAME CAS NUMBER RTEST. CONC. | Q UNKNOWŇ 13.83 4.5J 2. UNKNOWN 14.16 <sup>:</sup>8.2 J 3. UNKNOWN 14.48 8.8 J 4.\_ 9.\_\_ 10.\_\_\_\_ 11.\_\_\_\_ 12.\_\_\_\_ 13. 14. 15. 16. 17. 18.\_\_\_\_ 19.\_\_\_\_ 20.\_ 21. \_\_\_\_ 22.\_ 23.\_\_\_\_ 24.\_\_\_\_ 25.\_\_\_\_ 27. 28.\_\_\_\_ 29.\_\_\_\_ 30.

STLCTS SAMPLE NO.

2.0 U

SG-4 2 Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522607

Sample wt/vol: 50.00 (g/mL) ML Lab File ID: 522607D

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. Date Analyzed: 04/10/03

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

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) PPBV Q 75-71-8-----Dichlorodifluoromethane 2.0 74-87-3-----Chloromethane 2.0 0 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 0 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\_ 20 56-23-5-----Carbon Tetrachloride\_\_\_\_ 2.0 0 71-43-2-----Benzene 3.1 107-06-2----1,2-Dichloroethane\_\_\_ 2.0 0 79-01-6-----Trichloroethene 2.0 U 78-87-5-----1,2-Dichloropropane\_\_ 2.0 ប 10061-01-5----cis-1,3-Dichloropropene 2.0 0 108-88-3----Toluene 15 10061-02-6----trans-1,3-Dichloropropene\_ 2.0 0 79-00-5----1,1,2-Trichloroethane\_\_\_\_ 2.0 U 127-18-4-----Tetrachloroethene\_ 2.0 U 108-90-7-----Chlorobenzene 2.0 0 100-41-4----Ethylbenzene 21 1330-20-7-----Xylene (m,p) 100 100-42-5-----Styrene 2.0 0 95-47-6-----Xylene (o) 50 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 0 120-82-1----1,2,4-Trichlorobenzene

STLCTS SAMPLE NO.

SG-4 2

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522607

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

Lab File ID: 522607D

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

CAS NO.

Date Analyzed: 04/10/03

GC\_Column: RTX-624 ID: 0.32 (mm)

COMPOUND

Dilution Factor: 4.0

Soil Extract Volume: \_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

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

Q

87-68-3	2.0 24 100 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2	מממממ ממממם

# VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

STLCTS SAMPLE NO.

SG-4 2

Lab Name: STL BURLINGTON

Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522607

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

Lab File ID: 522607D

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/10/03

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

Dilution Factor: 4.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

Number TICs found: 4

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

		<del></del>		
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	UNKNOWN UNKNOWN UNKNOWN  UNKNOWN	1	4.5 9.2 9.1 6.3	J :
14. 15. 16. 17. 18. 19. 20.				
22. 23. 24. 25. 26. 27. 28. 29.				
30.				

SG-4 6

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522608

Sample wt/vol: 67.00 (g/mL) ML Lab File ID: 522608D

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. Date Analyzed: 04/10/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 3.0

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

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) PPBV Ō. 75-71-8-----Dichlorodifluoromethane 1.5 U 74-87-3-----Chloromethane 1.5 U 75-01-4-----Vinyl Chloride\_ 1.5 U 1.5 U 74-83-9-----Bromomethane 75-00-3-----Chloroethane 1.5 U 75-69-4-----Trichlorofluoromethane 1.5 U 76-13-1----Freon TF 1.5 U 75-35-4-----1,1-Dichloroethene 1.5 U 75-09-2----Methylene Chloride 1.5 U 75-34-3-----1,1-Dichloroethane 1.5 U 156-59-2----cis-1,2-Dichloroethene\_ 1.5 U 67-66-3------Chloroform 1.5 U 71-55-6-----1,1,1-Trichloroethane 1.5 U 56-23-5-----Carbon Tetrachloride 1.5 U 71-43-2-----Benzene 1.5 U 107-06-2----1,2-Dichloroethane\_ 1.5 U 79-01-6-----Trichloroethene 1.5 U 78-87-5-----1,2-Dichloropropane 1.5 U 10061-01-5----cis-1,3-Dichloropropene 1.5 U 108-88-3-----Toluene 10061-02-6----trans-1,3-Dichloropropene 14 1.5 U 79-00-5----1,1,2-Trichloroethane 1.5 U 127-18-4-----Tetrachloroethene 1.5 U 108-90-7-----Chlorobenzene 1.5 U 100-41-4----Ethylbenzene 17 1330-20-7-----Xylene (m,p)\_\_\_\_ 85 100-42-5----Styrene 1.6 95-47-6-----Xylene (o)\_ 44 79-34-5----1,1,2,2-Tetrachloroethane 1.5 U 541-73-1----1,3-Dichlorobenzene\_\_\_\_ 1.5 U 106-46-7-----1,4-Dichlorobenzene 1.5 U 95-50-1-----1,2-Dichlorobenzene 1.5 U 120-82-1----1,2,4-Trichlorobenzene 1.5 U

STLCTS SAMPLE NO.

Lab Name: STL BURLINGTON Contract: 23001 SG-4 6

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522608

Sample wt/vol: 67.00 (g/mL) ML Lab File ID: 522608D

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 04/10/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 3.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) PPBV Q 87-68-3-----Hexachlorobutadiene 1.5 U 108-67-8-----1,3,5-Trimethylbenzene\_ 29 95-63-6-----1,2,4-Trimethylbenzene 130 E 76-14-2----1,2-Dichlorotetrafluoroethan 1.5 U 106-93-4----1,2-Dibromoethane\_ 1.5|U 106-99-0----1,3-Butadiene 1.8 75-15-0-----Carbon Disulfide 110-82-7-----Cyclohexane 1.5 U 124-48-1-----Dibromochloromethane 1.5 บ 75-25-2-----Bromoform 1.5 U 75-27-4-----Bromodichloromethane 1.5 U 156-60-5-----trans-1,2-Dichloroethene 1.5 U 622-96-8-----4-Ethyltoluene 91 107-05-1----3-Chloropropene 1.5 U 540-84-1----2,2,4-Trimethylpentane 1.5 U 593-60-2-----Bromoethene 1.5 U 95-49-8-----2-Chlorotoluene 1.5 ប 110-54-3----n-Hexane 1.5 U 142-82-5----n-Heptane 1.5 U

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

STLCTS SAMPLE NO.

Lab Name: STL BURLINGTON

Contract: 23001

SG-4 6

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522608

Sample wt/vol: 67.00 (g/mL) ML

Lab File ID: 522608D

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/10/03

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

Dilution Factor: 3.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: \_\_\_\_(uL)

Number TICs found: 2

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

CAS NUMBER	COMPOUND		RT	EST. CONC.	
1. 2. 3. 4. 5.	UNKNOWN	:	14.50 14.78	10 9.4	== <b>=</b> ==  J
9. 10. 11. 12. 13.					
16. 17. 18. 19.					
22. 23. 24. 25.					
27. 28. 29. 30.					

Lab Name: STL BURLINGTON Contract: 23001

SG-4 6DL

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522608D1

Sample wt/vol: 40.00 (g/mL) ML Lab File ID: 522608D2

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. \_\_\_\_ Date Analyzed: 04/11/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 5.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) PPBV 75-71-8-----Dichlorodifluoromethane 2.5 U 74-87-3-----Chloromethane 2.5 U 75-01-4-----Vinyl Chloride 2.5 U 74-83-9-----Bromomethane 2.5 0 75-00-3-----Chloroethane 2.5 U 75-69-4-----Trichlorofluoromethane 2.5 0 76-13-1----Freon TF 2.5 U 75-35-4-----1,1-Dichloroethene 2.5 U 75-09-2----Methylene Chloride 2.5 U 75-34-3-----1,1-Dichloroethane 2.5 U 156-59-2----cis-1,2-Dichloroethene 2.5 U 67-66-3-----Chloroform 2.5 U 71-55-6----1,1,1-Trichloroethane 2.5 U 56-23-5-----Carbon Tetrachloride\_\_\_\_ 2.5 0 71-43-2----Benzene 2.5 0 107-06-2----1,2-Dichloroethane 2.5 U 79-01-6-----Trichloroethene 2.5 U 78-87-5----1,2-Dichloropropane 2.5 U 10061-01-5----cis-1,3-Dichloropropene 2.5 U 108-88-3-----Toluene 13 D 10061-02-6----trans-1,3-Dichloropropene 2.5 U 79-00-5----1,1,2-Trichloroethane 2.5 U 127-18-4-----Tetrachloroethene 2.5 U 108-90-7-----Chlorobenzene 2.5 U 100-41-4----Ethylbenzene 15 D 1330-20-7-----Xylene (m,p) 70 D 100-42-5-----Styrene 2.5 U 95-47-6------Xylene (o)\_ 37 D 2.5 U 79-34-5----1,1,2,2-Tetrachloroethane 541-73-1----1,3-Dichlorobenzene 2.5 U 106-46-7----1,4-Dichlorobenzene 2.5 ប 95-50-1-----1,2-Dichlorobenzene 2.5 U 120-82-1----1,2,4-Trichlorobenzene 2.5 U

STLCTS SAMPLE NO.

SG-4 6DL

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522608D1

Sample wt/vol: 40.00 (g/mL) ML Lab File ID: 522608D2

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. \_\_\_\_ Date Analyzed: 04/11/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 5.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/kg) PPBV

87-68-3	(-3)		Q
142-82-5n-Heptane2.5 U	108-67-81,3,5-Trimethylbenzene 95-63-61,2,4-Trimethylbenzene 76-14-21,2-Dichlorotetrafluor 106-93-41,2-Dibromoethane 106-99-01,3-Butadiene 75-15-0Carbon Disulfide 110-82-7Cyclohexane 124-48-1Bromoform 75-27-4Bromodichloromethane 156-60-5trans-1,2-Dichloroethe 622-96-84-Ethyltoluene 107-05-13-Chloropropene 540-84-12,2,4-Trimethylpentane 593-60-2	23 98 roethan 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	ממממממממממממממממ

Contract: 23001 SG-4D 2

CONCENTRATION UNITS:

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522615

Sample wt/vol: 67.00 (g/mL) ML Lab File ID: 522615D

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 04/11/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 3.0

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

CAS NO. COMPOUND (ug/L or ug/Kg) PPBV Q 75-71-8-----Dichlorodifluoromethane 1.5 U 74-87-3------Chloromethane 1.5 U 75-01-4-----Vin'vl Chloride 1.5 U 74-83-9-----Bromomethane 1.5 U 75-00-3-----Chloroethane 1.5 U 75-69-4-----Trichlorofluoromethane 1.5 ប 76-13-1-----Freon TF 1.5 U 75-35-4----1,1-Dichloroethene 1.5 U: 75-09-2-----Methylene Chloride 1.5 U 75-34-3-----1,1-Dichloroethane 1.5 U 156-59-2----cis-1,2-Dichloroethene 1.5 U 67-66-3------Chloroform 1.5 U 71-55-6-----1,1,1-Trichloroethane 15 56-23-5-----Carbon Tetrachloride 1.5 T 71-43-2----Benzene 1.5 U 107-06-2----1,2-Dichloroethane 1.5 U 79-01-6-----Trichloroethene 1.5 U 78-87-5----1,2-Dichloropropane 1.5 U 10061-01-5----cis-1,3-Dichloropropene 1.5 U 108-88-3-----Toluene 10061-02-6----trans-1,3-Dichloropropene\_ 11 1.5 ប៊ 79-00-5----1,1,2-Trichloroethane 1.5 U 127-18-4-----Tetrachloroethene 1.5 ប 108-90-7-----Chlorobenzene 1.5 ប 100-41-4----Ethylbenzene\_ 17 1330-20-7-----Xylene (m,p) 88 100-42-5----Styrene 1.5 95-47-6-----Xylene (o) 43 79-34-5----1,1,2,2-Tetrachloroethane 1.5 T 541-73-1----1,3-Dichlorobenzene 1.5 U 106-46-7----1,4-Dichlorobenzene 1.5 U 95-50-1-----1,2-Dichlorobenzene 1.5 U 120-82-1----1,2,4-Trichlorobenzene 1.5 U

STLCTS SAMPLE NO.

SG-4D 2 Lab Name: STL BURLINGTON Contract: 23001 Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945 Matrix: (soil/water) AIR Lab Sample ID: 522615 Sample wt/vol: 67.00 (g/mL) ML Lab File ID: 522615D Level: (low/med) LOW Date Received: 04/10/03 % Moisture: not dec. Date Analyzed: 04/11/03 GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 3.0 Soil Extract Volume: (uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or uq/Kq) PPBV Q 87-68-3-----Hexachlorobutadiene 1.5 U 108-67-8-----1,3,5-Trimethylbenzene\_ 24 95-63-6-----1,2,4-Trimethylbenzene\_ 120 76-14-2----1,2-Dichlorotetrafluoroethan 1.5 T 106-93-4----1,2-Dibromoethane 1.5 U 106-99-0-----1,3-Butadiene 1.8 75-15-0-----Carbon Disulfide 110-82-7-----Cyclohexane\_ 1.5 T 1.5 U 124-48-1-----Dibromochloromethane 1.5 U 75-25-2-----Bromoform 1.5 U 75-27-4-----Bromodichloromethane 1.5 ប 156-60-5----trans-1,2-Dichloroethene 1.5 U 622-96-8----4-Ethyltoluene 89 107-05-1----3-Chloropropene 1.5 U 540-84-1----2,2,4-Trimethylpentane 1.5 U 593-60-2-----Bromoethene 1.5 U 95-49-8-----2-Chlorotoluene 1.5 U 110-54-3----n-Hexane 1.5 U 142-82-5----n-Heptane 1.5 U

# VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

STLCTS SAMPLE NO.

SG-4D 2

Lab Name: STL BURLINGTON

Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522615

Sample wt/vol: 67.00 (g/mL) ML

Lab File ID: 522615D

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/11/03

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

Dilution Factor: 3.0

Soil Extract Volume:\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

Number TICs found: 4

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

		7	- <del>-</del>	
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		RT  13.83 14.16 14.78 15.21	===============	===== J J J
19. 20. 21. 22. 23. 24. 25. 26. 27.				

SG-5 2

SDG No.: 92945

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

Matrix: (soil/water) AIR Tab Sample ID: 50000

Tacilx: (SOII/Water) AIR Lab Sample ID: 522605

Sample wt/vol: 50.00 (g/mL) ML Lab File ID: 522605D

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. \_\_\_\_ Date Analyzed: 04/10/03

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

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) PPBV 0 75-71-8-----Dichlorodifluoromethane 2.0 U 74-87-3-----Chloromethane 2.0 U 75-01-4-----Vinyl Chloride\_ 2.0 0 74-83-9-----Bromomethane 2.0 U 75-00-3-----Chloroethane\_ 2.0 ប 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 0 67-66-3-----Chloroform 2.0 U 71-55-6----1,1,1-Trichloroethane 2.0 0 56-23-5-----Carbon Tetrachloride 2.0 0 71-43-2-----Benzene 2.0 0 107-06-2----1,2-Dichloroethane 2.0 U 79-01-6-----Trichloroethene 2.0 0 78-87-5----1,2-Dichloropropane 2.0 U 10061-01-5----cis-1,3-Dichloropropene\_ 2.0 U 108-88-3----Toluene 10061-02-6----trans-1,3-Dichloropropene 16 2.0 0 79-00-5----1,1,2-Trichloroethane\_\_\_\_ 2.0 U 127-18-4-----Tetrachloroethene\_\_\_\_ 2.0 ប 108-90-7-----Chlorobenzene\_\_\_\_ 2.0 0 100-41-4----Ethylbenzene 27 1330-20-7-----Xylene (m,p)\_\_ 130 100-42-5------Styrene 2.3 95-47-6-----Xylene (o) 64 79-34-5----1,1,2,2-Tetrachloroethane 2.0 0 541-73-1----1,3-Dichlorobenzene\_\_\_\_ 2.0 0 106-46-7----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

STLCTS SAMPLE NO.

Q

SG-5 2 Lab Name: STL BURLINGTON Contract: 23001 Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945 Matrix: (soil/water) AIR Lab Sample ID: 522605 Sample wt/vol: 50.00 (g/mL) ML Lab File ID: 522605D Level: (low/med) LOW Date Received: 04/10/03 % Moisture: not dec. Date Analyzed: 04/10/03 GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 4.0 Soil Extract Volume: (uL) Soil Aliquot Volume: \_\_\_\_(uL) CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) PPBV

108-67-8 95-63-6 76-14-2 106-93-4 106-99-0 75-15-0 110-82-7 124-48-1 75-25-2 75-27-4 156-60-5 622-96-8 107-05-1 540-84-1 593-60-2 95-49-8 110-54-3	Hexachlorobutadiene1,3,5-Trimethylbenzene1,2,4-Trimethylbenzene1,2-Dichlorotetrafluoroethan1,3-ButadieneCarbon DisulfideCyclohexaneDibromochloromethaneBromoformBromodichloromethanetrans-1,2-Dichloroethene4-Ethyltoluene3-Chloropropene2,2,4-TrimethylpentaneBromoethene2-ChlorotolueneHexane	2.0 33 150 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.	מממממממממממ
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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

STLCTS SAMPLE NO.

SG-5 2

Lab Name: STL BURLINGTON

Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522605

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

Lab File ID: 522605D

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/10/03

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

Dilution Factor: 4.0

Soil Extract Volume:\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: Number TICs found: 2 (ug/L or ug/Kg) ppbv

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
2. UI 3.	NKNOWN NKNOWN	13.82 14.78		J
5				
7. 8. 9.				
12. 7				
14. 15. 16. 17.				
19.				
21. 22. 23. 24.				
25. 26. 27.				
29.				

sG-5 6

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522606

Sample wt/vol: 50.00 (g/mL) ML Lab File ID: 522606D

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 04/10/03

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

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) PPBV Q 75-71-8-----Dichlorodifluoromethane\_\_\_ 2.0 0 74-87-3------Chloromethane 2.0 0 75-01-4-----Vinyl Chloride\_\_\_\_ 2.0 U 74-83-9-----Bromomethane\_\_\_\_ 2.0 U 75-00-3-----Chloroethane 2.0 0 75-69-4-----Trichlorofluoromethane 2.0 0 76-13-1----Freon TF 2.0 0 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 0 156-59-2----cis-1,2-Dichloroethene 2.0 U 67-66-3-----Chloroform 2.0 0 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 16 10061-02-6----trans-1,3-Dichloropropene 2.0 T 79-00-5-----1,1,2-Trichloroethane\_\_\_\_ 2.0 0 127-18-4-----Tetrachloroethene 2.0 U 108-90-7-----Chlorobenzene\_\_\_\_ 2.0 U 100-41-4-----Ethylbenzene 24 1330-20-7-----Xylene (m,p)\_\_\_ 120 100-42-5-----Styrene 2.0 0 95-47-6-----Xylene (o)\_ 58 79-34-5-----1,1,2,2-Tetrachloroethane\_ 2.0 0 541-73-1----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 ប

STLCTS SAMPLE NO.

SG-5 6

Lab Name: STL BURLINGTON

Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522606

Sample wt/vol:

50.00 (g/mL) ML

LOW

Lab File ID: 522606D

Level: (low/med)

% Moisture: not dec. \_\_\_\_

Date Received: 04/10/03

CAS NO.

Date Analyzed: 04/10/03

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

COMPOUND

Dilution Factor: 4.0

Soil Extract Volume:\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

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

87-68-3	2.0 29 140 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.	ממממ מממממ ממ
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# VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

STLCTS SAMPLE NO.

SG-5 6

Lab Name: STL BURLINGTON

Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522606

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

Lab File ID: 522606D

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/10/03

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

Dilution Factor: 4.0

.Soil Extract Volume:\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25.				= <b>=</b> === J J J
26. 27. 28. 29. 30.				

SG-6 2

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522603

Sample wt/vol:

200.0 (g/mL) ML

Lab File ID: 522603

Level: (low/med) LOW

CAS NO.

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/10/03

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

Dilution Factor: 1.0

Soil Extract Volume:\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: COMPOUND (ua/I or va/Ka) PPRV ·

CAB NO.	COMPOUND	(ug/L c	r ug/Kg)	PPBV	Q
75-71-8	Dichlorodifluo	romethano		0 ===	
/4-8/-3	Chloromethane	_	——— ļ	0.51	
75-01-4	Vinyl Chloride		<del></del>	0.87	
1 /4-83-9	Bromomethane			5.7	
75-00-3	Chloroethane			0.50	
75-69-4	Trichlorofluor	methane	<del></del>	0.50	
/b-T3-T	Freon TF		<del></del> -	0.50	
75-35-4	1 1-Dichloroeth	neme		0.50	
1 75-09-2	Methvlene Chlor	~ide		0.50	
/5-34-3	1.1-Dichloroetl	າລກອ		0.50	
156-59-2	cis-1.2-Dichlo	nethere	<del></del>	0.50 0.50	
1 6/-66-3	Chlarafarm	<del></del>			
71-55-6 <del>-</del> -	1.1.1-Trichlore	ethane		0.50	
55-23-5	Carbon Tetrachl	oride		0.50	
/1-43-2 <i></i> -	Benzene			0.50 2.6	
107-06-2	1.2-Dichloroeth	lane	———		
1 79-01-6	Trichloroethene			0.50 0.50	U
78-87-5	1.2-Dichloropro	nano	<del></del>		
T009T-0T-2	cis-1.3-Dichlor	conropere		0.50 0.50	
1U8-88-3- <b>-</b>	Talijene	<del>-</del>	<del></del>		,
10061-02-6	trans-1.3-Dichl	Oronropen	<del></del>	28 0.50	1
/ <i>3-00-5</i>	<b>-</b> 1.1.2-Trichlord	ethana		0.50	
127-18-4	Tetrachloroethe	ne	<del></del>	0.50	
108-90-7	Chlorobenzene			0.50	
100-41-4	Ethvlbenzene —		<del></del> -	45	
1330-20-7	Xvlene (m.n)	<del></del>		310	
100-42-5	Styrene		<del></del>	4.3	1
95-47-6 <b></b>	Xvlene (a)		<del></del>	130	
79-34-5	1.1.2.2-Tetrach	loroethan		0.50	1
コキエー / コーエーニーー	·=L.3-Dichlorober	7200		0.50	
<u> </u>	1.4-Dichloroben	7000	<del></del>	0.50	
95-50-1	1.2-Dichloroben	7000	<del></del>	0.50	
120-82-1	1,2,4-Trichloro	benzene	<del></del>	0.50	
			<del></del> }	0.50	
			I		l

Lab Name: STL BURLINGTON

STLCTS SAMPLE NO.

Contract: 23001 SG-6 2

CONCENTRATION UNITS:

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522603

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 522603

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 04/10/03

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

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CAS NO. COMPOUND (ug/L or ug/Kg) PPBV Q: 87-68-3-----Hexachlorobutadiene 0.50 U 108-67-8-----1,3,5-Trimethylbenzene 95-63-6-----1,2,4-Trimethylbenzene 38 220 E 76-14-2----1,2-Dichlorotetrafluoroethan 0.50 ប 106-93-4-----1,2-Dibromoethane\_ 0.50 U 106-99-0----1,3-Butadiene 14 75-15-0-----Carbon Disulfide 0.56 110-82-7-----Cyclohexane\_ 2.5 124-48-1-----Dibromochloromethane 0.50 ਹ 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\_\_\_ 180 E 107-05-1-----3-Chloropropene 0.50 U 540-84-1----2,2,4-Trimethylpentane 0.56 593-60-2----Bromoethene 0.50 T 95-49-8-----2-Chlorotoluene\_ 0.50 U 110-54-3----n-Hexane 4.2142-82-5----n-Heptane 1.4

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

STLCTS SAMPLE NO.

SG-6 2

Lab Name: STL BURLINGTON

Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522603

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

Lab File ID: 522603

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/10/03

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

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS:

Number TICs found: 3 (ug/L or ug/Kg) ppbv

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	
1. 2. 3. 4	UNKNOWN UNKNOWN UNKNOWN	13.82 14.76 15.21	6.6 5.1 6.3	J J
5	:			
11. 12.	· · · · · · · · · · · · · · · · · · ·			
15. 16.				
18. 19. 20. 21. 22. 23.				
25. 26. 27.				
28. 29. 30.				

SG-6 2DL

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522603D1

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

Lab File ID: 522603D

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/10/03

GC Column: RTX-624

ID: 0.32 (mm)

Dilution Factor: 5.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: \_\_\_\_(uL)

CAS NO.

COMPOUND

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

	· · · · · · · · · · · · · · · · · · ·		_
   75-71-8	Dichlorodifluoromethane	0.5	
74-87-3	Chloromethane	. 2.5	1 -
75-01-4	Vinyl Chloride	2.5	1 -
74-83-9	Bromomethane	2.5	
75-00-3	Chloroethane	2.5	_
75-69-4	Trichlorofluoromethane	2.5	
76-13-1	Freen TF	2.5	
75-35-4	1,1-Dichloroethene	2.5	
75-09-2	Methylene Chloride	2.5	
75-34-3	1,1-Dichloroethane	2.5	
156-59-2	cis-1,2-Dichloroethene	2.5	
67-66-3	Chloroform	2.5	
71-55-6	Cilloroform	2.5	
56-22-E	1,1,1-Trichloroethane	2.5	
71-43-2	Carbon Tetrachloride	2.5	
107 06 2	Benzene	2.5	
70 01 6	1,2-Dichloroethane	2.5	U
79-01-6	Trichloroethene	2.5	Ŭ
10001 01 =	1,2-Dichloropropane	2.5	Ų
10001-01-2	cis-1,3-Dichloropropene	2.5	U
108-88-3	Toluene	24	
10061-02-6	trans-1,3-Dichloropropene	2.5	
/9-00-5	1.1.2-Trichloroethane	2.5	
12/-18-4	Tetrachloroethene	2.5	
108-90-7	Chlorobenzene	2.5	
100-41-4	Ethylbenzene	33	
1330-20-7	Xvlene (m.n)	150	
100-42-5	Styrene	2.5	
95-47-6	Xvlene (o)		
79-34-5 <b>-</b> -	1.1.2.2-Tetrachloroethane	71 2.5	
54I-/3-I	1.3-Dichlorobenzene	2.5	
106-46-7	1.4-Dichlorobenzene		
95-50-1	1,2-Dichlorobenzene	2.5	
120-82-1	1,2,4-Trichlorobenzene	2.5	i
- <del>-</del> -	-/-/- rrrointoropenzene	2.5	U

STLCTS SAMPLE NO.

SG-6 2DL Lab Name: STL BURLINGTON Contract: 23001 Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945 Matrix: (soil/water) AIR Lab Sample ID: 522603D1 Sample wt/vol: 40.00 (g/mL) ML Lab File ID: 522603D Level: (low/med) LOW Date Received: 04/10/03 % Moisture: not dec. Date Analyzed: 04/10/03 GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 5.0 Soil Extract Volume: (uL) Soil Aliquot Volume: \_\_\_\_(uL) CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) PPBV Q 87-68-3-----Hexachlorobutadiene 2.5 U 108-67-8-----1,3,5-Trimethylbenzene 25 D 95-63-6-----1,2,4-Trimethylbenzene 100|D 76-14-2----1,2-Dichlorotetrafluoroethan 2.5 U 106-93-4----1,2-Dibromoethane 2.5 U 106-99-0----1,3-Butadiene 13 | D 75-15-0-----Carbon Disulfide 2.5 U 110-82-7-----Cyclohexane 2.5 U 124-48-1-----Dibromochloromethane 2.5 U 75-25-2-----Bromoform 2.5 U 75-27-4----Bromodichloromethane 2.5 U 156-60-5-----trans-1,2-Dichloroethene 2.5 U 622-96-8-----4-Ethyltoluene 90 D 107-05-1----3-Chloropropene 2.5 U 540-84-1----2,2,4-Trimethylpentane 2.5 U 593-60-2----Bromoethene 2.5 U 95-49-8-----2-Chlorotoluene 2.5 U 110-54-3----n-Hexane 4.2 D 142-82-5----n-Heptane 2.5 U

SG-6 6

Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522604

Sample wt/vol: 25.00 (g/mL) ML Lab File ID: 522604D

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. Date Analyzed: 04/10/03

GC Column: RTX-624 ...ID: 0.32 (mm) Dilution Factor: 8.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

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

		(49/11 01	ug/ng/	PPDV		Q
75-71-8	Dichlorodifluoro	methane		•	4.0	TT
/4-8/-3	Chloromethane		<del></del>		4.0	
/5-01-4 <b>-</b>	Vinyl Chloride		<del></del>	<b>v</b>	4.0	
74-83-9	Bromomethane			•	4.0	1
75-00-3 <b>-</b>	Chloroethane		<del></del>		4.0	, -
75-69-4	Trichlorofluorom	ethane			4.0	_
/b-l3-l	Freon TF				4.0	
75-35-4	1,1-Dichloroethe	ne	<del></del>		4.0	5 -
/5-09-2	Methvlene Chlori	de		ı	4.0	_
/5-34-3	1	20	<del></del>		$\frac{4.0}{4.0}$	
. 156-59-2 <b>-</b>	Cis-1.2-Dichloro	et.hene	<u>-</u>		4.0	
0/-66-3	Chloroform			i	4.0	i -
71-55-6	1 1 1-Trichloroo	thane	<del></del>		4.0	β -
56-23-5	Carbon Tetrachlo	ride				
/エー43~2-----	Renzena		<del></del>		4.0	
107-06-2	1 2-Dichloroetha	ne	<del>-</del>		4.6	
/9-U1-6	Trichloroethoro		<del></del>		4.0	
78-87-5	1.2-Dichloroprop	ane			4.0	_
T000T-0T-2	Cis-1 3-Dicbloxo	propene			4.0	
T00-00-3	'l'Olijena		<del></del>		4.0	U
10061-02-6	trans-1 3-Dighle	ronronene			20	<del></del>
/ /	ニニー しょう・ノー ピアエ ひわしつかつの	-hamo			4.0	_
T7 / _ T0 _ 4	letrachloroethon	C110116	— <u>—</u> †		4.0	
108-90-7	Chlorobenzena	<u> </u>			4.0	
100-41-4	Ethulhenzene				4.0	Ū
1330-20-7	Xylene (m,p)		<u> </u>		30	
100-42-5	Styrene				140	
95-47-6	Xvlene (a)				4.0	Ŭ
79-34-5	1,1,2,2-Tetrachlo				67	
541-73-1	1,3-Dichlorobenze	roernane_			4.0	
106-46-7	1,4-Dichlorobenze	ene			4.0	_
95-50-1	1,2-Dichlorobenze	ene			4.0	
120-82-1		ene			4.0	U
110 OF 1-346E	1,2,4-Trichlorobe	enzene			4.0	IJ

STLCTS SAMPLE NO.

Contract: 23001 SG-6 6

Lab Name: STL BURLINGTON Contract: 2300:

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522604

Sample wt/vol: 25.00 (g/mL) ML Lab File ID: 522604D

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. \_\_\_\_ Date Analyzed: 04/10/03

GC Column: RTX-624 ID: 0.32 (mm) Dilution Factor: 8.0

Soil Extract Volume: \_\_\_\_(uL) Soil Aliquot Volume: \_\_\_\_(uL)

CAS NO. COMPOUND (ug/L or ug/Kg) PPBV Q

87-68-3------Hexachlorobutadiene 4.0 U

108-67-8-----1,3,5-Trimethylbenzene 28
95-63-6-----1,2,4-Trimethylbenzene 120
76-14-2-----1,2-Dichlorotetrafluoroethan

76-14-2----1,2-Dichlorotetrafluoroethan 106-93-4-----1,2-Dibromoethane\_ 4.0 U 4.0 U 106-99-0-----1,3-Butadiene 5.5 75-15-0------Carbon Disulfide 4.0 U 110-82-7------Cyclohexane 4.0 U 124-48-1-----Dibromochloromethane 4.0 U 75-25-2-----Bromoform 4.0 U 75-27-4-----Bromodichloromethane 4.0 U 156-60-5-----trans-1,2-Dichloroethene 4.0 U 622-96-8-----4-Ethyltoluene 100 | 107-05-1-----3-Chloropropene 4.0 U 540-84-1----2,2,4-Trimethylpentane 4.0 U 593-60-2----Bromoethene 4.0 U 95-49-8-----2-Chlorotoluene 4.0 U 110-54-3----n-Hexane 4.0 U 142-82-5----n-Heptane 4.0 U

# VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

STLCTS SAMPLE NO.

SG-6 6

Lab Name: STL BURLINGTON

Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Sample ID: 522604

Sample wt/vol: 25.00 (g/mL) ML

Lab File ID: 522604D

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/10/03

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

Dilution Factor: 8.0

Soil Extract Volume:\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

Number TICs found: 2

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

1		,		
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q .
2.	UNKNOWN :	14.16 14.48	14 <sup>*</sup>	= <b>==</b> = J J
5				
8. 9.				
11. 12. 13.				
15. 16.				
18. 19. 20. 21.				
23.				
25. 26. 27. 28.				
29.				

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Lab Name: STL BURLINGTON Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945

Matrix: (soil/water) AIR Lab Sample ID: 522616

Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 522616

Level: (low/med) LOW Date Received: 04/10/03

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 04/11/03

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/Kq) PPBV 75-71-8-----Dichlorodifluoromethane 0.50 ប 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 T 75-69-4-----Trichlorofluoromethane 0.50 U 76-13-1----Freon TF 0.50 U 75-35-4-----1,1-Dichloroethene 0.50 ប 75-09-2-----Methylene Chloride 0.83 75-34-3-----1,1-Dichloroethane 0.50 U 156-59-2----cis-1,2-Dichloroethene 0.50 U 67-66-3-----Chloroform 0.50lU 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 0.67 10061-02-6----trans-1,3-Dichloropropene 0.50 T 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 T 95-50-1-----1,2-Dichlorobenzene 0.50 U 120-82-1----1,2,4-Trichlorobenzene 0.50 U

STLCTS SAMPLE NO.

TRIP BLANK Lab Name: STL BURLINGTON Contract: 23001 Lab Code: STLVT Case No.: 23001 SAS No.: SDG No.: 92945 Matrix: (soil/water) AIR Lab Sample ID: 522616 Sample wt/vol: 200.0 (g/mL) ML Lab File ID: 522616 Level: (low/med) LOW Date Received: 04/10/03 % Moisture: not dec. Date Analyzed: 04/11/03 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\_ 0.50 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\_ 2.7 110-82-7-----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 0

# FORM 1 VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

STLCTS SAMPLE NO.

Contract: 23001

Lab Code: STLVT Case No.: 23001 SAS No.:

SDG No.: 92945

Matrix: (soil/water) AIR

Lab Name: STL BURLINGTON

Lab Sample ID: 522616

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

Lab File ID: 522616

Level: (low/med) LOW

Date Received: 04/10/03

% Moisture: not dec.

Date Analyzed: 04/11/03

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

Dilution Factor: 1.0

Soil Extract Volume:\_\_\_\_(uL)

Soil Aliquot Volume: \_\_\_\_(uL)

CONCENTRATION UNITS: Number TICs found: 0 (ug/L or ug/Kg) ppbv

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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# QUALITY ASSURANCE METHODS

# REFERENCES AND NOTES

# Report Date: 04/30/2003

# REPORT COMMENTS

- 1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
- 2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
- 3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 4) The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert. ID# 10604 5) According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.

# Glossary of flags, qualifiers and abbreviation

Inorganic Qualifiers (Q-Column)

- Analyte was not detected at or above the reporting limit. 11
  - Not detected at or above the reporting limit.
- Result is less than the RL, but greater than or equal to the method detection limit. В
  - Result is less than the CRDL/RL, but greater than or equal to the IDL/MDL.
- Result was determined by the Method of Standard Additions.

### Inorganic Flags (Flag Column)

- ICV,CCV,ICB,CCB,ISA,ISB,CRI,CRA,MRL: Instrument related QC exceed th upper or lower control limits.
- LCS, LCD, MD: Batch QC exceeds the upper or lower control limits.
- MSA correlation coefficient is less than 0.995.
- MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
- Е SD: Serial dilution exceeds the control limits.
- MB, EB: Batch QC is greater than reporting limit or had a negative instrument reading lower than the Н absolute value of the reporting limit.
- MS, MSD: Spike recovery exceeds the upper or lower control limits. М
- PS: Post-digestion spike was outside 85-115% control limits.

## Organic Qualifiers (Q - Column)

- 11 Analyte was not detected at or above the reporting limit.
- ND Compound not detected.
- Result is an estimated value below the reporting limit or a tentatively identified compound (TIC). .1 Q
- Result was qualitatively confirmed, but not quantified.
- C Pesticide identification was confirmed by GC/MS.
  - The chromatographic response resembles a typical fuel pattern.
- The chromatographic response does not resemble a typical fuel pattern.
- Result exceeded calibration range, secondary dilution required.

### Organic Flags (Flags Column)

- MB, EB, MLE: Batch QC is greater than reporting limit.
- LCS, LCD, CCV, MS, MSD, Surrogate, RS:Batch QC exceeds the upper or lower control limits. Α
- Concentration exceeds the instrument calibration range or below the reporting limit.
- Compound was found in the blank and sample. В
- Surrogate or matrix spike recoveries were not obtained because the extract was diluted for D analysis; also compounds analyzed at a dilution will be flagged with a D.
- Н Alternate peak selection upon analytical review
- Indicates the presence of an interfence, recovery is not calculated. Ī
- Manually integrated compound. М
- The lower of the two values is reported when the % difference between the results of two GC columns is greater than 25%.

# QUALITY ASSUPANCE METHODS

# REFERENCES AND NOTES

Report Date: 04/30/2003

### Abbreviations

```
Designation given to identify a specific extraction, digestion, preparation set, or analysis set
 Batch
 CAP
          Capillary Column
          Continuing Calibration Blank
 CCB
 CCV
          Continuing Calibration Verification
 CF
          Confirmation Analysis
 CRA
          Low Level Standard Check - GFAA; Mercury
CRI
          Low Level Standard Check - ICP
Dil Fac Dilution Factor
DL
          Secondary dilution and analysis
DLFac
         Detection Limit Factor
DSH
         Distilled Standard - High Level
DSI
         Distilled Standard - Low Level
         Distilled Standard - Medium Level
DSM
EΒ
         Extraction Blank
LCB
          Initial Calibration Blank
ICV
         Initial Calibration Verification
idi
         Instrument Detection Limit
ISA
         Interference Check Sample A
ISB
         Interference Check Sample B
         The first six digits of the sample ID which refers to a specific client, project and sample group
Job No.
Lab ID
         An 8 number unique laboratory identification
LCD
         Laboratory Control Standard Duplicate
         Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
LCS
MB
         Method Blank or (PB) Preparation Blank
MD
         Method Duplicate
MDL
         Method Detection Limit
         Medium Level Extraction Blank
MLE
MRL
         Method Reporting Limit Standard
MSA
         Method of Standard Additions
MS
         Matrix Spike
MSD
         Matrix Spike Duplicate
         Not Detected
ND
PACK
         Packed Column
         Preparation factor used by the Laboratory's Information Management System (LIMS)
PREPF
PS
         Post Spike
PSD
         Post Spike Duplicate
RΑ
         Re-analysis
RΕ
         Re-extraction and analysis
RΙ
         Reporting Limit
RPD
         Relative Percent Difference of duplicate (unrounded) analyses
RRF
         Relative Response Factor
RS
         Reference Standard
RΤ
         Retention Time
RTW
         Retention Time Window
SampleID A 9 digit number unique for each sample, the first six digits are referred as the job number
         Seeded Control Blank
SD
         Serial Dilution
UCB
         Unseeded Control Blank
```

One or a combination of these data qualifiers and abbreviations may appear in the analytical report.

STL Burlington

WALL STANK

IRENI

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CHAIN OF CUSTODY RECORD

ज्ञा-त ३ ०अपव 208 South Park Drive, Suite 1 Colchester, VT 05446 Tel 802 655 1203 SEVERN TRENT LABORATORIES, INC.

¥ / ⊀ 7,√ Lab/Sample ID (Lab Use Only) When received (C): STL cannot accept verbal changes. Teamp, of coolers Screened For Radioactivity Client's delivery of samples constitutes acceptance of Severn Trent Laboratories Lab Use Only Due Date: Plante Fax written changes to 1 2 3 **Custody Seal** (802) 655-1248 Intact CATEBORY & DELIVERABLES 08 02 ી 03 05 S 09 terms and conditions contained in the Price Schedule; 0 9 70 0 - 0 हैं। जी। प्र Remarks St. - Sludge REQUESTED ANALYSIS Time 0930 記 럘 P/O - Plastic or other N N N 2 Pholos | C - Charcoal Tube P/0 No/Type of Containers<sup>2</sup> Date Date 250 ⊒ 250 Company. S AME As 'REPREST TO' John Sishbara. AG 1 Lt ₹ 250 HI - Glass wide mouth Invoice to: A - Air bag Received by: (Signature Received by: (Signature Sampler's Signature ph paybed Phone: Contact Fæ Address: A/G - Amber / Or Glass 1 Liter S - S kentifying Marks of Sample(s) Time Ime (3) (12) 1/2 - 55 2) 5-95 (3) / 5 - 5 / 6) (,2) {-95 26-6121 (7) (-38 Data / (,2) 2 - 3)\$ (19) 9) 9.98 W - Water Date 0027.686 (189) ON KONKOMA, NY 4.95 (631) 737-2410 FOM GROUP Sour Buroski 2-98 909 MARCONI Report to: JOHN BUPSKI Project Name WW - Wastewaler ೨-೯-Relipsyched by. (Sugnature) Retinguished by: (Signature) Relinquished by. [Signature Dray 7:15 7 7:35 Time 7/1/12/9 05 9:4 S S 635 10.55 01.11 Sampter's Name Phone: Contact: Company Quote: Ę, Da:ec Contract/ ځ ٤ ۲, Proj. No. 5 \*Container Matrix Matrix V < < ₹ ₹ ₹

2178534-200 (15/05)

Colchester, VT 05446 Tel 802 655 1203 208 South Park Drive, Suite 1 STL Burlington The state of the state of SEVERN TRENT LABORATORIES, INC. SEVERS TRINT

STL CT 203449

**CHAIN OF CUSTODY RECORD** 

N/Y Lab/Sample ID (Lab Use Only) When received (C\*); STL cannot accept verbal changes. Client's delivery of samples constitutes acceptance of Severn Trent Laboratories Temp, of coolers Screened For Radioachvity 1 2 3 Please Fax written changes to Lab Use Only Due Date: Custody Seal (802) 655-1248 mact Remarks CATEGORY & DELIVELAGES 2  $\overline{\mathcal{I}}$ terms and conditions contained in the Price Schedule. . Oil 1950) में प्रमुख्य है। इंग्रेडिया है। जिस्सी के कि St. - Sludge **REQUESTED** ANALYSIS P/O - Plastic or other Ë Time C - Charcoal Tube P/0 No/Type of Containers 뾺 Date 25 E Company: SANE 45 "REPORT TO Sampler's Signature Signature ¥:: ₫ 250 thi ⋅ Glass wide mouth Invoice to: Received by: [Signature Received by: (Signature L · Liqui Address:\_ Contact: Phone: Ęź, A/G · Amber / Or Glass 1 Liter Identifying Marks of Sample(s) Ĭī 崖 를 ROUKONKONA NY 11779 (<sup>2</sup>) Tail BEANK (:7/ F3S (2) (1-25 909 MARCON AVE W - Water Daka Phone: (631) 737-6200 Fax (63) >37-2410 S6-1 SOHN BUKOSKI FPM GROUP Report to: Project Name JOHN BUKSKI WN - Wastewaler VOA - 40 ml vial ಲಂ E a Reinquished by: (Signature) Relifiquished by, Signature Pelinger And Dr. (Special 2.16 8 6 Matrix Pate Time Sampler's Name Company.\_\_ Contact: Address:\_ Quote:\_ Contract/ Proj. No. 7 Soutainer 'Matrix 7 ♥ <±

LL8234-200 (12/02)

# ANALYTICAL REPORT

JOB NUMBER: 204887

Prepared For:

FANNING, PHILLIPS AND MOLNAR 909 Marconi Avenue Ronkonkoma, NY 11779

Project: WIN-HOLT

Attention: John Bukoski

Date: 10/22/2003

Johanna Duljankus Signature

Name: Johanna L. Dubauskas

Title: Project Manager

E-Mail: jdubauskas@stl-inc.com

10-22-2003

Date

STL Connecticut

128 Long Hill Cross Road

Shelton, CT 06484

This Report Contains (198) Pages



# STL Report : 204887 FANNING, PHILLIPS AND MOLNAR

# Case Narrative

Sample Receipt -Samples were received in good condition and at the proper temperature.

Volatile Organics - Volatile organics were determined by purge and trap GC/MS using guidance provided in Method 5030B/8260B.

The spike compound percent recoveries were within the laboratory generated guidelines in the independent source quality control sample.

The following samples were analyzed at dilutions due to high target compound concentrations:

W-2	1:200
W-6	1:25

Sample Calculation:

Sample ID-W-2 Compound-Xylene (m+p)

(1474209)(125)(1) = 163.03 UG/L.(311808)(.725)(5)

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative.

I certify that this data package is in compliance with the terms and conditions of this contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computerreadable data submitted on diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

# SAMPLE INFORMATION Date: 10/22/2003

Job Number .: 204887

Customer...: FANNING, PHILLIPS AND MOLNAR

Attn.....: John Bukoski

Project Number...... 20000743 Customer Project ID...: WIN-HOLT Project Description...: Win-Holt

Attn						
	Customet	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
Laboratory Sample ID	Sample ID		10/01/2003	10:00	-10/02/2003	09:20
204887-1	W-2	Groundwater	10/01/2003	11:00	10/02/2003	09:20
204887-2	W-3	Groundwater Groundwater	10/01/2003	11:40	10/02/2003	09:20
204887-3	W-4	1	10/01/2003	11:05	10/02/2003	09:20
204887-4	W-3D	Groundwater	10/01/2003	00:00	10/02/2003	09:20
204887-5	TB100103	Groundwater	10/01/2003	12:10	10/02/2003	09:20
204887-6	W-5F	Groundwater	10/01/2003	14:00	10/02/2003	09:20
204887-7	W-6	Groundwater		13:30	10/02/2003	09:20
204887-8	w-7	Groundwater		12:15	10/02/2003	09:20
204887-9	W-5	Groundwater	20,02,00			
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		Page 1				

S U L T S Date:10/22/2003 ATTN: John Bukoski Annel ID: 204887-1 Annel ID: 204887-1 Annel ID: 204887-1 Annel ID: 204887-1	The control of the
204887  204887  S AND MOLNAR  W-2  10/01/2003  Time Receiver	Groundwater  Groundwater  Groundwater  Groundwater  PARAMETER/TEST DESCRIPTION  PARAMETER/TEST DESCRIPTION  Organics (5mL Purge)  ND  Organics (5mL Purge)  ND  Original fide  E chloride  C-Dichloroethene  ND  Original fide

Date:10/22/2003	UB/L 23641 10/10/03 1651 KJK UB/L UB/L UB/L UB/L UB/L UB/L UB/L UB/L	
EST RESULTS	### #### #############################	Page 3
LABORATORY	Labo Date Time ND	-
	Jub Number: Exposers Family, Phillips AND MOLNAR Customer Sample 10: W-2 Customer Sample 10: W-2 Time Sampled: 10:00 Time Sampled: Groundwater Sample Matrix: Groundwater Sample Matrix: Groundwater Chlorobenzene Chlorobenzene Ethylbenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane Xylenes (total)	* 12 Description = Dry Wgt.
	STOMER: FANNING, PHILLIPS AN EXCUSTOMER: FANNING, PHILLIPS AN Date Sample 1D: W-2 Customer Sample do 10: Time Sample Matrix Grosample Matrix Grosamp	

\* In Description = Dry Wgt.

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TEST RES	N-HOLT Laboratory Sample ID: Date Received	EAGS.
ORATORY		SAMPLE RESULT OR NO
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	Job Number: 204887  R: FANNING, PHILLIPS AND MOLNAR  Customer Sample ID: W-3  Loston Sampled	Time Sampled: 11:00  Time Sample Matrix: Groundwater  Sample Matrix: Groundwater  Sample Matrix: Groundwater  Some Mether  Chloromethane  Vinyl chloride  Bromomethane  (1,1-Dichloroethene  1,1-Dichloroethene  Trans-1,2-Dichloroethene  Trans-1,2-Dichloroethene  (2:-1,2-Dichloroethene  Cis-1,2-Dichloroethene  Trichloroform  1,1,1-Trichloroethene  Trichloroethene  1,2-Dichloroethene  Trichloroethene  1,2-Dichloroethene  Trichloroethene  Trichloroethene  Trichloroethene  Trichloroethene  Trichloroethene  1,2-Dichloroethene  Trichloroethene  Trichloroet
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\* In Description = Dry Wgt.

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204887 S. AND. MOLNAR Nu-4 10/01/2003 11:40 Groundwater Groundwater conomethane etrachloroet total)	Descri
Job Number: 204887  Strower: FANNING, PHILLIPS AND MOLNAR  Customer Sample ID: W-4  Customer Sampled: 10/01/2003  Date Sampled: 11:40  Time Sampled: Groundwater  Sample Matrix: Groundwater  Chilorobenzene  Ethylbenzene  Ethylbenzene  Ethylbenzene  Styrene  Bromoform  1,1,2,2-Tetrachloroethane  Xylenes (total)  Xylenes (total)	* In
Job Number: 2  Customer Sample ID: Uster Sample Matrix: Sample Matrix: Sample Matrix: Ethylbenze Styrene Bromoform 1,1,2,2-Te Xylenes (1)	_
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Customer Sample ID: W-3D Date Sampled 11.05	
	S AND MOLNAR  Laboratory Sample 1D: 204887-4  Laboratory Sample 1D: 204887-4  Laboratory Sample 1D: 204887-4  10/02/2003  11:05  Groundwater  BATE/TIME  BATEH DT DATE/TIME

5.5	DT DATE/TIME PECH 10/10/03 1243 kjk 10/10/03 1243 kjk 10/10/03 1243 kjk 10/10/03 1243 kjk 10/10/03 1243 kjk 10/10/03 1243 kjk 10/10/03 1243 kjk
Date: 10/22/2003 ATTN: John Bukoski	UNITS BATCH D  UG/L 23641  UG/L 23641  UG/L 23641  UG/L 23641  UG/L 23641  UG/L 23641
. 204887-4 : 10/02/2003 : 09:20	RL 1.00000 5 1.00000 5 1.00000 5 1.00000 5 1.00000 5 1.00000
TEST RESULTS WIN-HOLF Laboratory Sample TD: Date Received	Page 9
LABORATORY PROJECT: WA	SAMPLE RESULT 9 0 U U U U U U U U U U U U U U U U U U
204887 S. AND MOLNAR W-3D 10/01/2003	ed: 11:05  rix: Groundwater  paraweter/TEST DESERPTION  pibromochloromethane  chlorobenzene  Ethylbenzene  Styrene  Bromoform  1,1,2,2-Tetrachloroethane  xylenes (total)  xylenes (total)  * In Description = Dry Wgt.
Job Number: 204887 JSTOMER: FANNING, PHILLIPS AND MOLNAR Customer Sample ID: W-3D	

0/22/2003 John Bukoski	### BATCH   10/10/03 1312 kjk   15541   10/10/03 1312 kjk   10/10/
Date: 10/22/2003	00000
T S 10: 204887-5 10: 10/02/2003 1: 09:20	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
r RESUL	HAGS WOL.  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
BORATORY TESPROLECT: WIN-HOLF	SAMPLE RESULT OF ULL ULL ULL ULL ULL ULL ULL ULL ULL UL
V	RIPTS GN
Job Number: 204887 STOMER: FANNING, PHILLIPS AND MOLNAR Customer Sample ID: TB100103	NETHOD  METHOD  Wolatile Organics (5mL Purge)  COOB  Chloromethane Vinyl chloride  Bromomethane Carbon disulfide  Acetone  Methylene chloride  Methylene chloride  I,1-Dichloroethane Cis-1,2-Dichloroethene  trans-1,2-Dichloroethene  Cis-1,2-Dichloroethene  Cis-1,2-Dichloroethene  I,2-Dichloroethene  I,2-Dichloroethene  Carbon disulfide  Acetone  Methylene chloride  Benzene  I,1-Dichloroethene  I,2-Dichloropropane  Benzene  I,2-Dichloropropane  I,2-Dichloropropane  Irichloroethene  I,2-Dichloropropane  I,2-Dichloropropane  I,2-Dichloropropane  I,2-Dichloropropane  I,2-Dichloropropane  I,2-Dichloropropane  I,2-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,2-Dichloropropane  I,2-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,2-Dichloropropane  I,2-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,2-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,2-Dichloropropane  I,2-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,2-Dichloropropane  I,2-Dichloropropane  I,2-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,2-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,1-Dichloropropane  I,2-Dichloropropane  I,1-Dichloropropane  I,2-Dichloropropane  I,1-Dichloropropane  I,1-Dic
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Date: 10/22/2003  ATTN: John Buk ug/L 23641	
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S T R E S L Laboratory Samp Date Received. Time Received. 0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	
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ELIPS AND MOLNAR  1D: TB100103  10:00  10/01/2003  00:00  Groundwater  Groundwater  Groundwater  Groundwater  10/01/2003  2.2-Tetrachloroethane  proform  2,2-Tetrachloroethane  2,2-Tetrachloroethane  1,2-Tetrachloroethane  2,2-Tetrachloroethane  2,2-Tetrachloroethane  2,2-Tetrachloroethane  2,2-Tetrachloroethane	* In Description = DIY was
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04887 AND 10/01, 00:00 Groun Groun Ezene ene etracl total	uu.
Number: 204887  In thieles and Moenar  ample ID: TB100103  ed	-
Job Number: 204887  Lustomer Sample 1D: T8100103  Customer Sample 1D: T8100103  Date Sampled	
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	10/10/03 1342 kik 10/10/03 1342 kik
Date:10/22/2003 ATTN: John Bukoski	UB/L 23641 UB/L 23641
7-6	1.00000 1.00000
S T R E S U L T S  11.1  Laboratory Sample ID: 204887-6  Date Received	MOL
A T O R Y T E S T  PROJECT: WIN HOLT  Labora' Date R Time R	ESULT O ELAGS  U U U U U U U U U U U U U U U U U U
LABORA	SAMPLE: RESULE.  NO
Job Number: 204887 JSTOMER: FTANNING, PHILLIPS AND MOLNAR Customer Sample ID: W-5F	
Job Number: JSTONER: FANNING, PHILLIP CUSTOMER Sample 10:	Sample Matrix  Sample Matrix  Sample Matrix  Sample Matrix  Sample Matrix  Sample Matrix  Wolatile Chorometh  Chlorometh  Trichlon  1,1-Dichl  1,1-Dichl  Chlorof  Chlorometh  Chlorof  Chlorof  Chlorometh  Chlorof  Chlorometh  Chlorof  Chlorometh  Chlorof  Chlorometh  Chlorof  Chlorometh  Chlor

	DATE/FIME	10/10/03 1342 kjk 10/10/03 1342 kjk 10/10/03 1342 kjk 10/10/03 1342 kjk 10/10/03 1342 kjk 10/10/03 1342 kjk 10/10/03 1342 kjk	
Date: 10/22/2003	ATTN: John Bukoski		
	2003	2 1.00000 5 1.00000 5 1.00000 5 1.00000 5 1.00000	
RESULTS	ry Sample ID:		
TORY TEST	PRDJECT: WIN*HOLF	RESULT: O FLAGS	רו אמשל
LABORA		SAMPLE ND ND N	
	Job Number: 204887  USTOMER: FANNING, PHILLIPS AND MOENAR  Customer Sample ID: W-5F  Date Sampled 12:10  Time Sampled Groundwater  Sample Matrix Groundwater	parametrane Dibromochlorometrane Chlorobenzene Styrene Bromoform 1,1,2,2-Tetrachloroethane Xylenes (total)	- Dry Lat.
	Job Number: 20488 USTOMER: FANNING, PHILLIPS AND Date Sampled 10/0 Time Sampled 12:11 Time Sample Matrix Grou	0000014	

\* in Description = Dry Wgt.

	### DATCH: DATE   DATE   10/10/03 1441   Kijk   10/10/03 1441   Kijk	
TORY TEST RESULTS  PROJECT: WIN-HOLT  Laboratory Sample ID: 204887-7  Laboratory Sample ID: 10/02/2003  pate Received 09:20	Land   Record   Rec	Page 14
LABORA	Sample Matrix browners  Sample Matrix browners  TEST METHOD  Volatile Organics (5mL Purge)  Chloromethane Vind chloroethene  Chloromethane Vind chloroethene  Chloromethane Vind chloroethene  Chloroethene	The state of the s

	0ATE/TINE TECH 10/10/03 1441 KJK 10/10/03 1441 KJK 10/10/03 1441 KJK 10/10/03 1441 KJK 10/10/03 1441 KJK 10/10/03 1441 KJK	
Date: 10/22/2003 ATTN: John Bukoski	UNITS BATCH OF UG/L 23641	
204887-7 10/02/2003 09:20	RE DILLUTION   120   25.00000   120   25.00000   120   25.00000   120   25.00000   120   25.00000   120   25.00000   120   25.00000   120   25.00000   120   25.00000   120   25.00000   120   25.00000   120   25.00000   120   25.00000   120   25.00000   25.00000   25.00000   25.00000   25.00000   25.0000000   25.0000000   25.0000000   25.000000   25.0000000   25.0000000   25.0	
RESULTS ratory Sample ID: Received	7. T & & D D 5 % %	<u>.</u>
A T O R Y T E S T PROJECT: WIN-HOLT Labo Date Time	Lans	ci page i
L A B O R	SAMPLEE. RE ND	
Job Number: 204887  Tring, PHILEIPS AND MOLNAR  Tr Sample 1D: W-6  10/01/2003	1 12 2 4 2 2 2	* In Description = Dry Wgt.
Job Number: 204887  STOMER: FANNING, PHILEIPS AND MOLNAR  Customer Sample ID: W-6  10/01/2003	Date Sampledsample Matrixsample Matrix	

TEC	44444444444444444444444444444444444444
DATE/HTME TE	10/10/03 1411 kjk 10/10/03 141
iyio	23641 10/ 23641 23
Date:10/22/2003	7/6n 00/1/6n 0
The state of the s	
10/6	R. W. W. W. W. D. W. W. W. W. D. W.
ST RESULTS  SIT Laboratory Sample ID: Date Received	1 1 2 3 6.08 0.08 0.06 0.06 0.04 0.07 0.07 0.05 0.06 0.06 0.06 0.07
TEST RIHOLT	Page 16
T O R Y PROJECT: WIT	
LABORA	SAMPLE RESIDENCE NO
	Mgt.
JAR 3	PARAMETER/TEST DESCRIBTION Organics (5ml. Purge) hane oride hane loroethene isulfide cetate cetate cotate cotocthane orne (MEK) orm richloroethane chloroethane chloroethane chloroethane isulfide achloroethane chloroethane chloroethane chloroethane inchloroethane chloroethane achloroethane chloroethane irichloromethane ichloropropane ichloropropane ichloropropane ichloroethane schloroethane ichloroethane
204887 LIPS AND MOENA D: W-7 10/01/2003 13:30	Volatile Organics (5ml. Purge) Volatile Organics (5ml. Purge) Chloromethane Chloromethane Chlorothane Chlorothane Carbon disulfide Acetone Methylene chloride Vinyl acetate Vinyl acetate Cis-1,2-Dichloroethane 1,1-Dichloroethane Carbon tetrachloride Carbon tetrachloroethane 1,2-Dichloropropane Trichloroethane 1,2-Dichloropropane Trichloroethane 1,2-Dichloropropane Trichloroethane 1,2-Frichloroethane Toluene Tetrachloroethene
Job Number: 204887  TOWER: FANNING, PHIELIPS AND MOENAR  Customer Sample ID: W-7  Customer Sampled	Volt Chicking Med
Cust Date Time	Somble Solution Solut

Date:10/22/2003 ATTN: John Bukoski	MITS BATCH DT DATE/FIME TECH  19/1. 23641 10/10/03 1411 KjK	
T R E S U L T S  oratory Sample ID: 204887-8  ie Received 09:20	0 FLAGS MOL. RLL DILUTION UNITS 0 0.2 5 1.00000 UG/L 0 0.3 5 1.00000 UG/L 0 0.4 5 1.00000 UG/L 0 0.7 6 1.000000 UG/L 0 0.7 6 1.00000 UG/L 0 0.7 6 1.00000 UG/L 0 0.7 6 1.000000  UG/L 0 0.7 6 1.000000 UG/L 0 0.7 6 1.000000 UG/L 0 0.7 6 1.0000000 UG/L 0 0.7 6 1.000000  UG/L 0 0.7 6 1.000000 UG/L 0 0.7 6 1.000000 UG/L 0 0.7 6 1.0000000 UG/L 0 0.7 6 1.000000 UG/L 0 0.7 6 1.0000000 UG/L 0 0.7 6 1.000000 UG/L 0 0.7 6 1.0000000 UG/L 0	
Job Number: 204887  Job Number: 204887  USTOWER: FANNING PHILLIPS AND MOENAR  Lab  Customer Sample ID: W-7  Dat  Tin	Groundwater Groundwater Groundwater SAMPLE RESULT SAMPLE RESULT SAMPLE RESULT SAMPLE RESULT ND	* In Description = Dry Wgt.

	AATE AT TAME	10/09/03 1740 kjk 10/09/03 1740 kjk
Date:10/22/2003	John Bukaski	23359 23359
Date:	ATTN	1.00000 ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L
s	5: 204887-9 5: 10/02/2003 5: 09:20	#
T RESULT	Laboratory Sample ID: Date Received	MDL.  1  1  3  0.8  0.6  0.6  0.6  0.7  0.7  0.6  0.6  0.6
YTES	PROSECT: WIN-HOLT Labor Date Time	Page 18
BORATOR	PROJIEC	SAMPLE RESULT ND N
L A		
		Organics (5mL Purge) thane loride hane hane hane loroethene lisulfide cetate -Dichloroethene cetate -Dichloroethene richloroethane richloroethane chance haloroethane richloroethane richloroethane richloroethane richloroethane haloroethane richloroethane tetrachloride -Dichloroethane haloroethane
	Job Number: 204887  NG, PHIELPS AND MOENAR  Sample ID: W-5  spled12:15  Atrix	Volatile Organics (5mL Purge) Chloromethane Vinyl chloride Bromomethane Chloroethane (1,1-Dichloroethene Carbon disulfide Acetone Methylene chloride trans-1,2-Dichloroethene (is-1,2-Dichloroethene Cis-1,2-Dichloroethene Vinyl acetate Cis-1,2-Dichloroethene (is-1,2-Dichloroethene Cis-1,2-Dichloroethene Cis-1,2-Dichloroethene (is-1,2-Dichloroethene Cis-1,2-Dichloroethene Carbon tetrachloride Benzene (hloroform 1,1,1-Trichloroethene 1,2-Dichloroethene Cis-1,3-Dichloropropene Cis-1,3-Dichloropropene Trichloroethene Cis-1,3-Dichloropropene Trans-1,2-Pentanone (MIBK) Toluene Tetrachloroethene 1,1,2-Trichloroethene Tetrachloroethene 2-Mexanone
	Job Number: Customer Sample ID: Date Sampled Time Sampled	9

	The state of the s	222	
	<del>5</del> .	ug/L 23359 ug/L 23359 ug/L 23359 ug/L 23359 ug/L 23359 ug/L 23359	
\$ 1	204887-9 10/02/2003 09:20	RL. DILLUTION 55 1.00000 55 1.00000 55 1.00000 55 1.00000 55 1.00000 55 1.00000 55 1.00000	
TEST RESUL	WIN-MOLT Laboratory Sampl Date Received Time Received	0   0.2   0.2   0.2   0.4   0.4   0.4   0.4   0.4   0.4   0.4   0.7   0.	Page 19
LABORATORY	PROJECT:	SAMPLE RESULT  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	-
	ID: W-5 10: W-5 10: W-5 10: W-5 10: 12:15 10: Groundwater	Dibromochloromethane Chlorobenzene Ethylbenzene Styrene 1,1,2,2-retrachloroethane Xylenes (total)	* In Description = Dry Wgt.
	Job Number: 204887 Job Number: 204887 JSSOMER: FANNING, BHILLIPS AND MOLNAR Customer Sample ID: W-5 Date Sampled 12:15 Time Sampled 12:15	Sample Matrix	

# CHRONICLE LABORATORY

Job Number: 204887

Date: 10/22/2003

Job Number: 204887	
	ATTN: John Bukoski
PROJEC	T: WIN-HOLE
COSTONER: FANNING, PHILLIPS AND MOLNAR PROGRE	Date Recvd: 10/02/2003 Sample Date: 10/01/2003  RUN# BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION  200,000
Lab ID: 204887-1 Client ID: W-2 DESCRIPTION METHOD 5030 5 mL Purge Prep	1 23586 1 23641 23586 10/10/2003 1651 200.000
METHOD DESCRIPTION 5030 5 mL Purge Prep 5030A Volatile Organics (5mL Purge)	Date Recvd: 10/02/2003 Sample Date: 10/01/2003  RUN# BATCH# - PREP BT #(S) DATE/TIME ANALYZED DILUTION  RUN# 37594
Lab ID: 204887-2 Client ID: W-3  METHOD DESCRIPTION  5030A 5030 5 mL Purge Prep  8260B Volatile Organics (5mL Purge)	1 23586 10/10/2003 1213
5030A Volatile Organics (5mL Purge) 8260B	Data Recycl: 10/02/2003 Sample Date: 10/01/2003
Lab ID: 204887-3 Client ID: W-4 DESCRIPTION	1 23357 1 23359 23357 1 1 23359 23357
5030 5 mL Purge Prep 5030A volatile Organics (5mL Purge)	Date Recvd: 10/02/2003 Sample Date: 10/01/2003  RUN# BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION
Lab ID: 204887-4 Client ID: W-3D DESCRIPTION DESCRIPTI	1 23586 10/10/2003 1245 1.00000
METHOD 5030A 5030 5 mL Purge Prep Volatile Organics (5mL Purge)  Lab ID: 204887-5 METHOD 5030A 8260B  Lab ID: 204887-5 Volatile Organics (5mL Purge) Volatile Organics (5mL Purge)	Date Recvd: 10/02/2003 Sample Date: 10/01/2003  RUN# BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION  RUN# BATCH# PREP BT #(S) DATE/TIME ANALYZED 1 00000
Lab ID: 204887-5 Client ID: 18100103  DESCRIPTION  METHOD F030 5 mi Purge Prep	1 23586 1 23641 23586 1 10/10/2003 1312 1.00000
5030A Volatile Organics (5mL Purge) 8260B	Date Recvd: 10/02/2003 Sample Date: 10/01/2003  RUN# BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION 1 23586 1 23641 23586 10/10/2003 1342 1.00000  Date Recvd: 10/02/2003 Sample Date: 10/01/2003  Date Recvd: 10/02/2003 Sample Date: 10/01/2003
Lab ID: 204887-6 Client ID: W-5F DESCRIPTION METHOD DESCRIPTION FORD 5 mt Purple Prep	RUN# BATCH# PRCF 37 1.00000 1 23586 10/10/2003 1342 1.00000 1 23641 23586
5030 5 mL Purge Prep 5030A Volatile Organics (5mL Purge) 8260B	1 23586 1 23641 23586 10/10/2003 1342 1.00000 Date Recvd: 10/02/2003 Sample Date: 10/01/2003 RUN# BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION 1 23586 1 23641 23586 10/10/2003 1441 25.0000 Date Recvd: 10/02/2003 Sample Date: 10/01/2003 Date Recvd: 10/02/2003 Sample Date: 10/01/2003
Lab ID: 204887-7 Client ID: W-6 DESCRIPTION METHOD F030 5 mt Purge Prep	1 23586 1 23641 23586 10/10/2003 1441 25.0000
5030A Volatile Organics (5mL Purge) 8260B	Date Recvd: 10/02/2003 Sample Date: 10/01/2003  RUN# BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION
Lab ID: 204887-8 Client ID: WETHOD DESCRIPTION DESCRIPTION	1 23586 10/10/2003 1411 1.00000 1 23641 23586
8260B Volatile Organics (SML Purge)	Date Recvd: 10/02/2003 Sample Date: 10/01/2003  RUN# BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION  RUN# BATCH# PREP BT #(S) DATE/TIME ANALYZED DILUTION
Lab ID: 204887-9 Client ID: W-5  METHOD DESCRIPTION  5030A 5030 5 mL Purge Prep  8260B Volatile Organics (5mL Purge)	RUN# BATCH# PREP BT #107 1 23357 1 23359 23357 10/09/2003 1740 1.00000
. 8260B Volatile Organics (SML Purge)	

# QUALITY ASSUPANCE METHODS

# REFERENCES AND NOTES

# Report Date: 10/22/2003

- 1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
- 2) Soil, sediment and studge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
- 3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 4) The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert. ID# 10604 5) According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.

# Glossary of flags, qualifiers and abbreviation

- Inorganic Qualifiers (Q-Column) Analyte was not detected at or above the reporting limit.
  - Not detected at or above the reporting limit.
- Result is less than the RL, but greater than or equal to the method detection limit.
  - Result is less than the CRDL/RL, but greater than or equal to the IDL/MDL.
- Result was determined by the Method of Standard Additions.

- ICV,CCV,ICB,CCB,ISA,ISB,CRI,CRA,MRL: Instrument related QC exceed th upper or lower control limits. Inorganic Flags (Flag Column)
- LCS, LCD, MD: Batch QC exceeds the upper or lower control limits.
- MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
- MB, EB: Batch QC is greater than reporting limit or had a negative instrument reading lower than the Ε absolute value of the reporting limit.
- MS, MSD: Spike recovery exceeds the upper or lower control limits.
- PS: Post-digestion spike was outside 85-115% control limits.

# Organic Qualifiers (Q - Column)

- Analyte was not detected at or above the reporting limit.
- ND
- Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).
- Result was qualitatively confirmed, but not quantified.
- Pesticide identification was confirmed by GC/MS.
  - The chromatographic response resembles a typical fuel pattern.
- The chromatographic response does not resemble a typical fuel pattern. Result exceeded calibration range, secondary dilution required.
- Organic Flags (Flags Column)
- LCS, LCD, CCV, MS, MSD, Surrogate, RS:Batch QC exceeds the upper or lower control limits.
- Concentration exceeds the instrument calibration range or below the reporting limit.
- Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D.
- Alternate peak selection upon analytical review
- Indicates the presence of an interfence, recovery is not calculated.
- The lower of the two values is reported when the % difference between the results of two GC columns is greater than 25%.

# QUALITY ASSURANCE METHODS

# REFERENCES AND NOTES

Designation given to identify a specific extraction, digestion, preparation set, or analysis set

Report Date: 10/22/2003

### Abbreviations

Batch

```
CAP
        Capillary Column .....
         Continuing Calibration Blank
CCB
         Continuing Calibration Verification
CCV
         Confirmation Analysis
CF
         Low Level Standard Check - GFAA; Mercury
CRA
         Low Level Standard Check - ICP
CRI
        Dilution Factor
Dil Fac
         Secondary dilution and analysis
DL
         Detection Limit Factor
DLFac
         Distilled Standard - High Level
DSH
         Distilled Standard - Low Level
DSL
         Distilled Standard - Medium Level
DSM
         Extraction Blank
EΒ
         Initial Calibration Blank
TCB
         Initial Calibration Verification
ICV
         Instrument Detection Limit
IDL
         Interference Check Sample A
ISA
         Interference Check Sample B
I SB
         The first six digits of the sample ID which refers to a specific client, project and sample group
Job No.
         An 8 number unique laboratory identification
Lab ID
          Laboratory Control Standard Duplicate
LCD
          Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
LCS
MB
          Method Blank or (PB) Preparation Blank
          Method Duplicate
MD
MDL
          Method Detection Limit
          Medium Level Extraction Blank
 MLE
          Method Reporting Limit Standard
 MRL
          Method of Standard Additions
 MSA
          Matrix Spike
 MS
          Matrix Spike Duplicate
 MSD
          Not Detected
 ND
          Packed Column
 PACK
          Preparation factor used by the Laboratory's Information Management System (LIMS)
 PREPF
 PS
          Post Spike
 PSD
          Post Spike Duplicate
          Re-analysis
 RA
          Re-extraction and analysis
 RE
          Reporting Limit
 RL
          Relative Percent Difference of duplicate (unrounded) analyses
 RPD
 RRF
          Relative Response Factor
          Reference Standard
 RS
          Retention Time
 RΤ
          Retention Time Window
 RTW
 SampleID A 9 digit number unique for each sample, the first six digits are referred as the job number
          Seeded Control Blank
 SCB
          Serial Dilution
 SD
          Unseeded Control Blank
 UCB
```

One or a combination of these data qualifiers and abbreviations may appear in the analytical report.

# STL-Connecticut Certification Summary (as of September 2003)

category of testing such as drinking water or wastewater analysis. The laboratory should be contacted directly if parameter specific certification information is required. The laboratory identification numbers for the STL-Connecticut laboratory are provided in the following table. Many states certify laboratories for specific parameters or tests within a category (i.e. method 325.2 for wastewater). The information in the following table indicates the lab is certified in a general

		Geriffication	Expiration Date	Lab Number
State	Responsible Agency		10/12/01	PH-0497
	Services	Drinking Water, Wastewater	17/31/01	
Connecticut	Department of treatment	Wastewater/Solid,		CCC.
	Department of Health and	Drinking Walet, reserved Hazardous Waste	04/18/04	C1023
Maine	Ellymont of Fivironmental	Potable/Non-Potable Water	06/30/04	C1023
Massachusetts	Department of Language Protection			2528
Transpire	Department of Environmental	Drinking Water, Wastewater	08/29/04	
New Hampsung	Services	TIT .	CO COI S	46410
New Jersey	Department of Environmental	Drinking Water, Wastewater	06/30/03	
	Protection	Wastewafer.	701104	
	nontiment of Health	CLP, Drinking water, waste Solid/ Hazardous Waste	to/10/10	10602
New York	Department of treasure	NELAC	3. Table 1	388
	The state of Environmental	Wastewater	12/31/03	
North Carolina	Management			
		ChemistryNon- Potable Water	12/30/03	A43
•	Denortment of Health	and	· -	
Rhode Island	Department	Wastewater	05/17/02	2032614458
	To the state of Health	RCRA	ZNI CICO	
Utah	Department of trees.			

STL-8122 REMARKS ON SAMPLE RECEIRT CUSTODY SEALS CAT. B Deliverables (Disregard sumple W-1) SEE REMARKS SEALS INTACT GENERAL REMARKS Blank SAMPLIE REMARKS OSW/ PRESERVED ☐ BOTTLES INTACT CHILED CHILED / | NO. 9.2019A N / X 占 DATE/TIME 10/21/2003 DATE/TIME 10/02/03 3.000 PAGE Z \ \ FANNING, PHILLIPS AND MOLNAR JOHN BUKOSKI WIN-HOLT N / × 204887 I THESE LA CHAIN OF CUSTODY RECORD N / X RECEIVED IN LAB, BY BOTTLES REC'D BY SIGNATURE × / № By Keski 191/03 1500 DATE/TIME 40 ml He1 VOCS N / X  $\mathcal{C}$ 7 コピ 7 Z John Shakoshi 3 10/1/03 1000 AB (OL) 8 9 3 STL Connecticut 128 Long Hill Cross Road Shelton, CT 06484 Tel: (203) 929-8140. Fax: (203) 929-8142 SAMPLES COLLECTED BY OF M SIGNATURE 33 300 77 1400 1100 MATRIX CODES 105 1140 **DUE DATE** SIGNATURE FB - FIELD BLANK TB - TRIP BLANK Johanna <u>2</u> FPM Group Win-Holt SL - SLUDGE TRIF BLANK - OTHER . WPE CLIENTISAMPLE ID MW-5 W-5F W-30 Ø - W 1-M YES W-3 7-1 12 - W . DRUM WASTE PROJECT MGR: ERN RNE NT vq - Aqueous - COMPLEX ECT ID: ¥SQ 38#

rpjsckl Job Sample Receipt Checklist Report		V2
Job Number:: 204887 Location:: 57207 Check List Number:: 1 Description:: Customer Job ID: Job Check List Date:: Project Number:: 20000743 Project Description:: Win-Holt Customer: FANNING, PHILLIPS AND MOLNAR Contact:: John Bukoski	Date of the Report: Project Manager:	
Questions ? (Y/N) Comments		
Chain-of-Custody Present? Y		
If "yes", completed properly? Y		
Custody seal on shipping container? Y		
If "yes", custody seal intact? Y		
Custody seals on sample containers? N		
If "yes", custody seal intact?		
Samples iced? Y		
Temperature of cooler acceptable? (4 deg C +/- 2). Y 3.0C		
Samples received intact (good condition)? Y		
Volatile samples acceptable? (no headspace) Y		
Correct containers used? Y		
Adequate sample volume provided? Y		
Samples preserved correctly?		
Samples received within holding-time? Y		
Agreement between COC and sample labels? Y		
Radioactivity at or below background levels? Y	<b>\-</b>	-
A Sample Discrepancy Report (SDR) was needed? N		
Comments		
If samples were shipped was there an air bill #? Y FE 8413 4909 1473	,	
Sample Custodian Signature/Date	10/04/03	



# **Technical Report**

prepared for

**FPM Group** 909 Marconi Avenue Ronkonkoma, New York 11779 Attention: John Bukoski

Report Date: 4/28/2003 Re: Client Project ID: Win-Holt York Project No.: 03040489

CT License No. PH-0723 New York License No. 10854 Mass. License No. M-CT106 Rhode Island License No. 93 NJ License No. CT401



Report Date: 4/28/2003 Client Project ID: Win-Holt York Project No.: 03040489

# **FPM Group**

909 Marconi Avenue Ronkonkoma, New York 11779 Attention: John Bukoski

# **Purpose and Results**

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 04/17/03. The project was identified as your project "Win-Holt".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables .

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

# Analysis Results

Client Sample ID			W-7 Cuttings	
York Sample ID			03040489-01	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
TCL Volatiles soil	SW846-8260	ug/Kg		
1,1,1-Trichloroethane			Not detected	25
1,1,2,2-Tetrachloroethane			Not detected	25
1,1,2-Trichloroethane			Not detected	25
1,1-Dichloroethane		<u> </u>	Not detected	25
1,1-Dichloroethylene			Not detected	25
1,2-Dichloroethane			Not detected	25
1,2-Dichloroethylene (Total)			Not detected	25
1,2-Dichloropropane			Not detected	25
2-Butanone		1	Not detected	50
2-Hexanone			Not detected	50
4-Methyl-2-pentanone			Not detected	50 -
Acetone			Not detected	50
Benzene			Not detected	25
Bromodichloromethane			Not detected	25
Bromoform			Not detected	25
Bromomethane			Not detected	50



Client Sample ID			W-7 Cuttings	
York Sample ID			03040489-01	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Carbon disulfide			Not detected	25
Carbon tetrachloride			Not detected	25
Chlorobenzene			Not detected	25
Chloroethane			Not detected	50
Chloroform			Not detected	25
Chloromethane			Not detected	50
cis-1,3-Dichloropropylene			Not detected	25
Dibromochloromethane			Not detected	25
Ethylbenzene			Not detected	25
Methylene chloride			Not detected	25
Styrene			Not detected	25
Tetrachloroethylene			Not detected	25
Toluene			Not detected	25
trans-1,3-Dichloropropylene			Not detected	25
Trichloroethylene		,	Not detected	25
Vinyl acetate			Not detected	50
Vinyl chloride			Not detected	50
Xylene (Total)			Not detected	25

Client Sample ID			Excavated Soil	
York Sample ID		· · · · · ·	03040489-02	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Volatiles-8260 list	SW846-8260	ug/Kg		
1,1,1,2-Tetrachloroethane			Not detected	1
1,1,1-Trichloroethane			Not detected	1
1,1,2,2-Tetrachloroethane			Not detected	1
1,1,2-Trichloroethane			Not detected	1
1,1-Dichloroethane			Not detected	1
1,1-Dichloroethylene			Not detected	1
1,1-Dichloropropylene			Not detected	1
1,2,3-Trichlorobenzene			Not detected	1
1,2,3-Trichloropropane			Not detected	1
1,2,3-Trimethylbenzene			Not detected	1
1,2,4-Trichlorobenzene			Not detected	1
1,2,4-Trimethylbenzene			Not detected	1
1,2-Dibromo-3-chloropropane			Not detected	1
1,2-Dibromoethane			Not detected	1
1,2-Dichlorobenzene			Not detected	1
1,2-Dichloroethane		****	Not detected	1
1,2-Dichloroethylene (Total)			11(cis-)	1
1,2-Dichloropropane			Not detected	1
1,3,5-Trimethylbenzene	İ		Not detected	1
1,3-Dichlorobenzene			Not detected	1
1,3-Dichloropropane			Not detected	1
1,4-Dichlorobenzene			Not detected	1
1-Chlorohexane			Not detected	1
2,2-Dichloropropane			Not detected	1
2-Chlorotoluene			Not detected	1



Client Sample ID		<del></del>	Everyated Sail	
York Sample ID			Excavated Soil 03040489-02	!
Matrix				
Parameter	Method	Units	SOIL Results	MODI
4-Chlorotoluene	Method	Units	Not detected	MDL
Benzene		<del> </del>	Not detected	1
Bromobenzene			Not detected  Not detected	1
Bromochloromethane			Not detected  Not detected	1
Bromodichloromethane				
Bromoform			Not detected	1
Bromomethane			Not detected  Not detected	1
Carbon tetrachloride			Not detected  Not detected	<b></b>
Chlorobenzene			Not detected  Not detected	1
Chloroethane		<del> </del>		
Chloroform			Not detected	1 1
Chloromethane			Not detected	1
cis-1,3-Dichloropropylene			Not detected	1
Dibromochloromethane			Not detected	1
Dibromomethane			Not detected	1
Dichlorodifluoromethane		- · · · · · · · · · · · · · · · · · · ·	Not detected	1
Ethylbenzene			Not detected	1
Hexachlorobutadiene			Not detected	1
Isopropylbenzene		· · · · · · · · · · · · · · · · · · ·	Not detected	1
Methylene chloride		<del> </del>	Not detected	1
Naphthalene			Not detected	1
			Not detected	1
n-Butylbenzene			Not detected	1
n-Propylbenzene	-	<del></del>	Not detected	1
o-Xylene p- & m-Xylenes		<del></del>	Not detected	1 1
p-Isopropyltoluene		<del></del>	Not detected	1
sec-Butylbenzene			Not detected	1
		<u> </u>	Not detected	11
Styrene tort Partylhonous			Not detected	1
tert-Butylbenzene			Not detected	1
Tetrachloroethylene			Not detected	1
Toluene trans-1,3-Dichloropropylene			Not detected	1
	•		Not detected	1
Trichloroethylene			Not detected	1
Trichlorofluoromethane			Not detected	1 1
Vinyl chloride	CTT70.4°C 00.70	/rr	Not detected	1
BNA-8270 List soil	SW846-8270	ug/Kg	37 / 1 / 1	
1,2,4-Trichlorobenzene		_	Not detected	330
1,2-Dichlorobenzene	<u> </u>	<u> </u>	Not detected	330
1,3-Dichlorobenzene		<u> </u>	Not detected	330
1,4-Dichlorobenzene			Not detected	330
2,4,5-Trichlorophenol			Not detected	330
2,4,6-Trichlorophenol			Not detected	330
2,4-Dichlorophenol			Not detected	330
2,4-Dimethylphenol			Not detected	330
2,4-Dinitrophenol			Not detected	330
2,4-Dinitrotoluene	1		Not detected	330
2,6-Dinitrotoluene			Not detected	330
2-Chloronaphthalene	<del>                                     </del>		Not detected	330
2-Chlorophenol	<u> </u>		Not detected	330
2-Methylnaphthalene			Not detected	330
2-Methylphenol	<u> </u>	}	Not detected	330



Client Sample ID		,	Excavated Soil	
York Sample ID			03040489-02	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
2-Nitroaniline			Not detected	330
2-Nitrophenol			Not detected	330
3,3'-Dichlorobenzidine			Not detected	330
3-Nitroaniline			Not detected	330
4,6-Dinitro-2-methylphenol			Not detected	330
4-Bromophenyl phenyl ether			Not detected	330
4-Chloro-3-methyl phenol			Not detected	330
4-Chloroaniline			Not detected	330
4-Chlorophenyl phenyl ether			Not detected	330
4-Methylphenol			Not detected	330
4-Nitroaniline			Not detected	330
4-Nitrophenol			Not detected	330
Acenaphthene			Not detected	330
Acenaphthylene			Not detected	330
Anthracene			Not detected	330
Benzidine			Not detected	330
Benzo(a)anthracene			Not detected	330
Benzo(a)pyrene			Not detected	330
Benzo(b)fluoranthene			Not detected	330
Benzo(g,h,i)perylene			Not detected	330
Benzo(k)fluoranthene	-		Not detected	330
Benzyl alcohol			Not detected	330
Bis(2-chloroethoxy)methane			Not detected	330
Bis(2-chloroethyl)ether			Not detected	330
Bis(2-chloroisopropyl)ether			Not detected	330
Bis(2-ethylhexyl)phthalate			Not detected	330
Butyl benzyl phthalate			Not detected	330
Chrysene			Not detected	330
Dibenz(a,h)anthracene			Not detected	330
Dibenzofuran			Not detected	330
Diethylphthalate			Not detected	330
Dimethylphthalate			Not detected	330
Di-n-butylphthalate			Not detected	330
Di-n-octylphthalate			Not detected	330
Fluoranthene			340	330
Fluorene			Not detected	330
Hexachlorobenzene			Not detected	330
Hexachlorobutadiene			Not detected	330
Hexachlorocyclopentadiene			Not detected	330
Hexachloroethane			Not detected	330
Indeno(1,2,3-cd)pyrene			Not detected	330
Isophorone			Not detected	330
Naphthalene			Not detected	330
Nitrobenzene			Not detected	330
N-Nitrosodi-n-propylamine			Not detected	330
N-Nitrosodiphenylamine			Not detected	330
Pentachlorophenol			Not detected	330
Phenanthrene			Not detected	330
Phenol			Not detected	330
Pyrene			Not detected	330



Client Sample ID			Excavated Soil	•
York Sample ID			03040489-02	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Total RCRA Metals	SW846	mg/kG		
Arsenic, total			5.71	1.00
Barium, total			49.7	0.50
Cadmium, total			9.98	0.50
Chromium, total			13.7	0.50
Lead, total			239	0.50
Selenium, total			Not detected	1.00
Silver, total			Not detected	0.50
Mercury	SW846-7471	mg/kG	0.22	0.10
Flash Point	EPA 1010M	Degrees F	>200	

Units Key:

For Waters/Liquids: mg/L = ppm; ug/L = ppb

For Soils/Solids: mg/kg = ppm; ug/kg = ppb

### Notes for York Project No. 03040489

- 1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
- 2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
- 3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
- 4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
- 5. All samples were received in proper condition for analysis with proper documentation.
- 6. All analyses conducted met method or Laboratory SOP requirements.
- 7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By

Robert Q. Bradley Managing Director Date: 4/28/2003



### **QA/QC Summary Report**

Associated Samples: AB75957

28-Apr-03

Client: FPM Group

Analysis Name: BNA QC-soils Unit of Measure: ug/kg

Batch Name: \$BNAS-10799

QA Sample #: AB75957 York's Sample ID: 03040489-02

Dougastan		11			Matrix Spik	(e		Spike Duplicate	•
Parameter	LCS(%)	Unspiked Result	Blank	Amount	Result	Recovery, %	Duplicate	Recovery,%	Precision, RPD
Phenol	42	Not detected	Not detected	200	82	41.000	85	42.500	3.593
1,2,4-Trichlorobenze	70	Not detected	Not detected	100	68	68.000	72	72.000	5.714
Pyrene	71	Not detected	Not detected	100	69	69,000	72	72.000	4.255
Pentachlorophenol	59	Not detected	Not detected	200	114	57.000	119	59.500	4.292
N-Nitroso-di-n-propyl	71	Not detected	Not detected	100	69	69,000	73	73.000	5.634
Acenapthene	66	Not detected	Not detected	100	. 64	64.000	67	67.000	4.580
4-Nitrophenol	62	Not detected	Not detected	200	124	62.000	125	62,500	0.803
4-Chloro-3-methylph	61	Not detected	Not detected	200	119	59.500	126	63,000	5.714
2-Chiorophenol	50	Not detected	Not detected	200	97	48.500	102	51.000	5.025
2,4-Dinitrotoluene	83	Not detected	Not detected	100	80	80.000	85	85,000	6.061
1,4-Dichlorobenzene	62	Not detected	Not detected	100	60	60.000	65	65.000	8.000



### Analytical Laboratories, Inc.

### QA/QC Summary Report

Associated Samples: AB75957

28-Apr-03

Client: FPM Group

Analysis Name: Metals, Target Analyte List(TAL)
Unit of Measure: ppm Batch Name: \$MTS-10800 QA Sample #: AB75957 York's Sample ID: 03040489-02

Parameter		المماليميا			Matrix Spike	<b>)</b>	;	Spike Duplicate	
Falametei	LCS(%)	Unspiked Result	Blank	Amount	Result	Recovery, %	Duplicate	Recovery,%	Precision, RPD
Iron	Not detected	Not detected	Not detected	Not detected	Not detected		Not detected		Not detected
Antimony	Not detected	Not detected	Not detected	Not detected	Not detected		Not detected		Not detected
Arsenic	99.5	4.75	Not detected	200	218	106.63	5.14		7.89
Barium	101	41.4	Not detected	200	256	107.30	41.9		1.20
Beryllium	Not detected	Not detected	Not detected	Not detected	Not detected		Not detected		Not detected
Cadmium	94.4	8.30	Not detected	5.0	13.3	100.000	8.36		0.720
Calcium	Not detected	Not detected	Not detected	Not detected	Not detected	•	Not detected		Not detected
Chromium	94.0	11.4	Not detected	20.0	31.7	101.500	11.6		1.739
Aluminum	Not detected	Not detected	Not detected	Not detected	Not detected		Not detected		Not detected
Sodium	Not detected	Not detected	Not detected	Not detected	Not detected		Not detected		Not detected
Zinc	Not detected	Not detected	Not detected	Not detected	Not detected		Not detected		Not detected
Cobalt	Not detected	Not detected	Not detected	Not detected	Not detected		Not detected		Not detected
Thallium	Not detected	Not detected	Not detected	Not detected	Not detected		Not detected		Not detected
Copper	Not detected	Not detected	Not detected	Not detected	Not detected		Not detected		Not detected
Silver	103	0	Not detected	5.0	4.38	87.60	0	•	0.0
Selenium	98.0	0	Not detected	200	202	101.00	0		0,0
Potassium	Not detected	Not detected	Not detected	Not detected	Not detected		Not detected		Not detected
Nickel	Not detected	Not detected	Not detected	Not detected	Not detected		Not detected		Not detected
Manganese	Not detected	Not detected	Not detected	Not detected	Not detected		Not detected		Not detected
Magnesium	Not detected	Not detected	Not detected	Not detected	Not detected		Not detected		Not detected
Lead	96.9	199	Not detected	50.0	248	98.00	200		0.50
Vanadium	Not detected	Not detected	Not detected	Not detected	Not detected		Not detected		Not detected



Analytical Laboratories, Inc.

### **QA/QC Summary Report**

Associated Samples: AB75957

Client: FPM Group

28-Apr-03

Analysis Name: VOA QC Soils

Unit of Measure: ug/kg

Batch Name: \$VOAS-10801

**QA Sample #:** AB75957 York's Sample ID: 03040489-02

Parameter		Unspiked			Matrix Spik	(e		Spike Duplicate	:
	LCS(%)	Result	Blank	Amount	Result	Recovery, %	Duplicate	Recovery,%	Precision, RPD
1,1-Dichloroethylene	118	Not detected	Not detected	50	60	120.0	59	118,0	1.7
Benzene	112	Not detected	Not detected	50	60	120.0	60	120.0	0.0
Chlorobenzene	108	Not detected	Not detected .	50	55	110.0	57	114.0	3.6
Toluene	116	Not detected	Not detected	50	59	118.0	61	122.0	3.3
Trichloroethylene	102	Not detected	Not detected	50	52	104.0	53	106.0	1.9

Associated Samples: AB75957

Client: FPM Group

28-Apr-03

Analysis Name: Flash Point Unit of Measure: Degrees F

Batch Name: FLASH\_S-10802

QA Sample #: AB75957

York's Sample ID: 03040489-02

Recovery,% Precision, RPD

Matrix Spike

**Parameter** 

LCS(%)

Unspiked Result

Blank

Amount

Result Recovery, % Duplicate

Spike Duplicate

FLASH\_S

>200

Associated Samples: AB75957

28-Apr-03

Unit of Measure: mg/kG

Analysis Name: Mercury

Client: FPM Group

Batch Name: HG\_S-10803

QA Sample #: AB75957

York's Sample ID: 03040489-02

Parameter		Unspiked			Matrix Spil	ke		Spike Duplicate	
raiametei	LCS(%)	Result	Blank	Amount	Result	Recovery, %	Duplicate	Recovery,%	Precision, RPD
HG_S	101		Not detected	2.5	3.10	115	0.24		
HG_S		0.22							8.7

YORK
ANALYTICAL LABORATORIES, INC.

# ORK AL LABORATORIES, INC. DATE: 4/17/63 DATE: 4/17/63 Telephone Contact Summary

Client F.P.+M	Project No.
Contact John Bukosi	Phone No  FAX No
Conversation Notes _	Sample on hold- (Win-HoH) 8260 8270 RCRA metals Flash Pf.
Action Required $\mathcal{P}_{\epsilon}$	use log in
cc: John	signed M.

YORK
ANALYTIGAL LABORATORIES, INC.
ONE RESEARCH DRIVE

Field Chain-of-Custody Record

<u>jo</u>

0-070707

STAMFORD, GT 06906 (203) 325-1371 FAX (203) 357-0166

Company Name	Name	Report To:	. <u>To:</u>	Invoice	ce To:		Pro	Project ID/No.	15 7/0	The Sheer
FPM	u.	Tolan Bukach	S. Vach.	\$ *	3 3 3		\\ \text{\sqrt{2}}	Win- Holt	Samples Colle	cted By (Signature)
		7 0000	10/05K.		)				Ophin Bulkosk, Name (Printed)	BUKOSK; Name (Printed)
Sample No.	:	Location/ID	Date Sampled	peldu	Sa Water	Sample Matrix	Matrix Air ÓTHER	ANALYSES REQUESTED	EQUESTED	Container Description(s)
/	M-7	W-7 cuttings	4/11/03, 1300	1300		X		5701 72L	Cs	20K (1)
8	Excava	Excavated soil	4/11/03 1305	1305		×		John Bukoski will contact la 4/15/03 for analyses request.	Bukoski will contact lab by 03 for analyses request.	(1) 4oz
									o de la companya de l	
The state of the s								-		
Chain-of-Custody Record	dy Record				150		Hlulos	7,7		
Bottles Relinquished from Lab by	ned from Lab by	Date/Time	<u> </u>	Sample Relinquished by	uished by		Date/Time	7	Sample Repeived by	U-(5-03//030
Bottles Received in Field by	d in Field by	Date/Time		Sample Relinquished by	lished by		Date/Time		Sample Received in LAB by	Date/Fime
Comments/Special Instructions	ial Instructic	SUC		Canada and Canada				Tur	Turn-Around Time	
								X > 1, b	X Standard RUS	RUSH(define)

### **APPENDIX C**

### DATA QUALITY ASSURANCE/QUALITY CONTROL AND DATA USABILITY SUMMARY REPORT



### APPENDIX C DATA QUALITY ASSURANCE/QUALITY CONTROL AND DATA USABILITY SUMMARY REPORT

The Data Quality Objectives (DQOs) for the Investigation were applicable to all data-gathering activities at the Site. DQOs were incorporated into sampling, analysis, and quality assurance tasks associated with the investigation. The primary data user for this project is FPM. A copy of the data is also provided for the NYSDEC. No other data users are anticipated. The collected data were used to assess the nature and extent of groundwater impacts and soil vapor impacts at the Site.

For this project, field screening was performed during drilling and groundwater sampling. Field screening included monitoring for organic vapors in the soil cuttings as they were generated by the drill rig and in the air in the work zone using a Photovac MicroTIP PID, and visual observations of soil and/or groundwater characteristics. All readings and observations were recorded by the FPM hydrogeologist in either a field notebook or on the boring log.

#### C.1 Applicable or Relevant and Appropriate Requirements

The following applicable or relevant and appropriate requirements for the Site have been identified:

- The NYSDEC Recommended Soil Cleanup Objectives (TAGM #HWR-94-4046, 1995) which are used to evaluate soil sample chemical analytical results; and
- The NYSDEC Class GA Ambient Water Quality Standards (1998), which are used to evaluate the groundwater chemical analytical results.
- The USEPA Draft Subsurface Vapor Intrusion Guidance (November 29, 2002), which is used to evaluate the soil vapor analytical results.

FPM

### C.2 Quality Assurance/Quality Control Procedures

Quality Assurance/Quality Control (QA/QC) procedures were utilized during the performance of the investigation field work to ensure that the resulting chemical analytical data accurately represent subsurface conditions at the Site. The following sections include descriptions of the QA/QC procedures utilized and the QA/QC sample results.

#### C.2.1 Equipment Decontamination Procedures

All non-disposable downhole equipment (i.e., Geoprobe rods, split-spoon samplers, submersible pump) used during the subsurface investigation were decontaminated by washing in a potable water and Alconox solution and rinsing in potable water prior to use at each location to reduce the potential for cross contamination. All sampling equipment was either dedicated disposable equipment or decontaminated prior to use at each location. For groundwater well sampling, dedicated disposable bailers were used to obtain groundwater samples and for the direct-push groundwater sampling, disposable tubing with decontaminated check valves were used for sampling. For the soil vapor sampling, dedicated disposable tubing was used to obtain samples. The decontamination procedures utilized for all non-disposable equipment sampling equipment were as follows:

- The equipment was scrubbed in a bath of potable water and low-phosphate detergent followed by a potable water rinse;
- 2. The equipment was rinsed with distilled water; and
- 3. The equipment was allowed to air dry, if feasible, and wrapped for storage and transportation.

#### C.2.2 QA/QC Samples

QA/QC samples were collected and utilized to evaluate the potential for field or laboratory contamination and to evaluate the laboratory's analytical precision and accuracy. The specific types of QA/QC samples collected are described below.

The decontamination procedures were evaluated by the use of equipment blank samples.

These samples consisted of aliquots of laboratory-supplied water that were poured over or through the dedicated or decontaminated sampling equipment and then submitted to the laboratory for analysis. An

equipment blank sample was prepared for each day that groundwater sampling was conducted at the Site and the sample was analyzed for the target constituents for that day. The equipment blanks were labeled in a manner to prevent identification by the analytical laboratory. The summarized analytical results are shown in Table C.2.2.1. The equipment blank sample results indicate that no targeted analytes were detected above the NYSDEC Standards; therefore, the decontamination procedures used appear to have been satisfactory.

Trip blank samples were utilized to evaluate the potential for VOC cross-contamination between samples in the same cooler. Trip blank samples associated with groundwater samples consisted of aliquots of laboratory water that were sealed in sample bottles at the laboratory and were then transported to the field with the empty sample bottles. Trip blank samples associated with soil vapor samples consisted of laboratory-provided, filled Tedlar bags that were transported with the other Tedlar bags. A trip blank was placed in each cooler containing samples to be analyzed for VOCs and was managed in the field and analyzed in the laboratory in the same manner as the primary environmental samples. The summarized trip blank sample results for groundwater are shown in Table C.2.2.2. The summarized trip blank results for soil gas are shown in Table C.2.2.3. The groundwater trip blank results indicate that no VOCs were detected in any of the samples with the exception of a trace concentration of methylene chloride in sample W-5F collected on October 1, 2003. This detection is B-qualified, indicating that it was detected in an associated laboratory blank sample and is, therefore, likely to be a laboratory contaminant. The soil gas trip blank results indicate that only trace concentrations of methylene chloride, carbon disulfide, and toluene were detected. The detected concentrations were well below the USEPA's Target Shallow Soil Gas Concentrations. Based on the concentrations detected in both the soil gas and groundwater trip blank samples, it does not appear that any cross contamination among the samples is likely.

Blind duplicate samples were obtained at a frequency of at least one per every 10 environmental samples (10 percent) and were used to attest to the precision of the laboratory. A blind duplicate consisted of a separate aliquot of sample collected at the same time, in the same manner,

### TABLE C.2.2.1 EQUIPMENT BLANK SAMPLES WIN-HOLT EQUIPMENT CORPORATION 592 AND 606 BROOK STREET, GARDEN CITY, NEW YORK

Sample ID	FB-1	FB-2	W-6F	W-5F	NYSDEC Class GA
Sample Date	4/9/03	4/9/03	4/17/03	10/1/03	Water Quality Standards
Parameter					
Volatile Organic Compounds in					AV DECEMBER 1987 00 FEBRUARY (\$170 FEBRUARY 173 - 110 FEBRUARY 173 FEBRUARY (\$170 FEBRUARY 173 FEBRUARY 173 FEB
Carbon Tetrachloride	ND	ND	ND	ND	5
1,1,1-Trichloroethane	ND	ND	ND	ND	5
1,1-Dichloroethane	ND	ND	ND	ND	5
1,1-Dichloroethylene	ND	ND	ND	ND	5
1,2,4-Trimethylbenzene	ND	ND	ND	NA	5
1,2-Dichloroethylene (total)	ND	ND	ND	ND	5
1,3,5-Trimethylbenzene	ND	ND	ND	NA	5
1,2-Dichloroethane	ND	ND	ND	ND	0.6
Chloroethane	ND	ND	ND -	ND	5
Ethylbenzene	ND	ND	ND	ND	5
Isopropylbenzene	ND	ND	ND	NA	5
Methylene Chloride	ND	ND	ND	2 JB	5
Naphthalene	ND	ND	ND	NA	10
n-Butylbenzene	ND	ND	ND	NA	5
n-Propylbenzene	ND	ND	ND	NA	5
Xylenes (total)	ND	ND	ND	ND	5
sec-Butylbenzene	ND	ND	ND	NA	5
tert-Butylbenzene	ND	ND	ND	NA	5
Tetrachloroethylene	ND	ND	ND	ND	5
Toluene	ND	ND	ND	ND	5
Trichloroethylene	ND	ND	ND	ND	5
Acetone	ND	ND	ND	ND	50
Chloroform	ND	ND	ND	ND	7
Bromoform	ND	ND	ND	ND	50
2-Butanone	ND	ND	ND	ND	50

### Notes:

ND = Not detected.

NA = Not analyzed.

J = Result is an estimated value below the reporting limit.

B = Compound was detected in an associated blank sample.



# TABLE C.2.2.2 GROUNDWATER TRIP BLANK SAMPLES WIN-HOLT EQUIPMENT CORPORATION 592 AND 606 BROOK STREET, GARDEN CITY, NEW YORK

Sample ID	TB040903	TB041703	TB100103	NYSDEC Class GA Water
Sample Date	4/9/03	4/17/03	10/1/03	Quality Standards
Parameter				
Volatile Organic Compounds in microgra	ams per liter			
Carbon Tetrachloride	ND	ND	ND	5
1,1,1-Trichloroethane	ND	ND	ND	5
1,1-Dichloroethane	ND	ND	ND	5
1,1-Dichloroethylene	ND	ND	ND	5
1,2,4-Trimethylbenzene	NA	NA	NA	5
1,2-Dichloroethylene (total)	ND	ND	ND	5
1,3,5-Trimethylbenzene	NA	NA	NA	5
1,2-Dichloroethane	ND	ND	ND	0.6
Chloroethane	ND	ND	ND	5
Ethylbenzene	ND	ND	ND	5
Isopropylbenzene	ND	ND	ND	5
Methylene Chloride	ND	ND	1 JB	5
Naphthalene	NA	NA	NA	10
n-Butylbenzene	NA	NA	NA	5
n-Propylbenzene	NA	NA	NA	5
Xylenes (total)	ND	ND	ND	5
sec-Butylbenzene	NA	NA	NA	5
tert-Butylbenzene	NA	NA	NA	5
Tetrachloroethylene	ND	ND	ND	5
Toluene	ND	ND	ND	5
Trichloroethylene	ND	ND	ND	5
Acetone	ND	ND	ND	50
Chloroform	ND	ND	ND	7
Bromoform	ND	ND	ND	50
2-Butanone	ND	ND	ND	50

#### Notes:

ND = Not detected.

NA = Not analyzed.

J = Result is an estimated value below the reporting limit.

B = Compound was detected in an associated blank sample.



## TABLE C.2.2.3 SOIL GAS TRIP BLANK SAMPLE WIN-HOLT EQUIPMENT CORPORATION 592 BROOK STREET, GARDEN CITY, NEW YORK

Sample Location Sample Date	Trip Blank 4/9/03	USEPA Target Shallow Soil Gas Concentration
Parameter		Risk 1x10 <sup>6</sup>
Volatile Organic Compounds in parts per l	oillion by volume	
1,1,1-Trichloroethane	ND	4,000
1,2,4-Trimethylbenzene	ND	12
1,3,5-Trimethylbenzene	ND	12
Ethylbenzene	ND	5.1
o-Xylene	ND	-
p- & m-Xylenes	ND	-
Toluene	0.67	1,100
Benzene	ND	0.98
Styrene	ND	2,300
1,3 Butadiene	ND	0.039
Carbon Disulfide	2.7	2,200
4-Ethyltoluene	ND	-
n-Hexane	ND	570
n-Heptane	ND	-
Dichlorodifluoromethane	ND	400
Methylene Chloride	0.83	15,

### Notes:

ND = Not detected.

- = No Target Shallow Soil Gas Concentration established.



and analyzed for the same parameters as the primary environmental sample. The blind duplicate samples were labeled in a manner such that they could not be identified by the laboratory. The sample results were compared to those of the primary environmental sample to evaluate if the results are similar. The summarized groundwater duplicate results are shown in Table C.2.2.4. The summarized soil gas duplicate results are shown in Table C.2.2.5. Both the groundwater and soil gas duplicate samples appear to be very similar to the results from their associated primary samples; therefore, it appears that the laboratory results are acceptably precise.

Matrix spike/matrix spike duplicate (MS/MSD) samples were collected at a frequency of one per 20 environmental groundwater samples. The purpose of the MS/MSD samples is to confirm the accuracy and precision of laboratory results based on a particular matrix. The MS/MSD results were evaluated during the preparation of the Data Usability Summary Report (DUSR) as discussed below.

#### C.2.3 Chain-of-Custody Procedures

For each day of sampling, chain-of-custody (COC) sheets were completed and submitted to the laboratory with the samples collected that day. A copy of each COC sheet was retained by FPM for sample tracking purposes. Each COC sheet included the project name, the sampler's signature, the sampling locations and intervals, and the analytical parameters requested. Completed COC sheets are included with the laboratory reports in Appendix B.

### C.3 Data Usability Summary Report

All chemical analytical results were evaluated using the sample data packages, sample data summary packages, and case narratives provided by the analytical laboratory. The data evaluation was performed to verify that the analytical results are of sufficient quality to be relied upon to assess the potential contamination in the soil vapor and groundwater at the Site. This DUSR was prepared in accordance with the "Guidance for the Development of Data Usability Summary Reports" provided by the NYSDEC.

### TABLE C.2.2.4 GROUNDWATER DUPLICATE SAMPLES WIN-HOLT EQUIPMENT CORPORATION 592 AND 606 BROOK STREET, GARDEN CITY, NEW YORK

Sample ID	GP-13	GP-13D Duplicate	W-2	W-2D Duplicate	W-3	W-3D Duplicate	
Sample Date	4/9/03	4/9/03	4/17/03	4/17/03	10/1/2003	10/1/2003	
Parameter	ada Adaba	al Gall Magnifer	all about the second			Brone Grove	
Volatile Organic Compounds in micrograms per liter							
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	
1,1,1-Trichloroethane	ND	ND	ND	ND	4 J	4 J	
1,1-Dichloroethane	ND	ND	ND	ND	5 J	4 J	
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	
1,2-Dichloroethylene (total)	ND	ND	ND	ND	3 J(cis)	3 J(cis)	
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA	
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	
Chloroethane	NA	NA	NA	NA	ND	ND	
Ethylbenzene	ND	ND	210	560	ND	ND	
Isopropylbenzene	NA	NA	NA	NA	NA	NA	
Methylene Chloride	ND	0.6 J	21 JB	45 J	ND	ND	
Naphthalene	NA	NA	NA	NA	NA	NA	
n-Butylbenzene	NA	NA	NA	NA	NA	NA	
n-Propylbenzene	NA	NA	NA	NA	NA	NA	
Xylenes (total)	ND	ND	7,100	10,000	ND	ND	
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	
tert-Butylbenzene	NA	NA	NA	NA	NA	NA	
Tetrachloroethylene	0.6 J	0.6 J	ND	28 J	1 J	0.9 J	
Toluene	0.9 J	1 J	180	230	ND	ND	
Trichloroethylene	ND	ND	21 J	25 J	16	15	
Acetone	17 B	18 B	ND	ND	ND	ND	
Chloroform	0.5 J	ND	ND	ND	ND	ND	
Bromoform	ND	ND	ND	ND	ND	ND	
2-Butanone	ND	ND	ND	ND	ND	ND	

### Notes:

ND = Not detected.

NA = Not analyzed.

J = Result is an estimated value below the reporting limit.

B = Compound was detected in an associated blank sample.



## TABLE C.2.2.5 SOIL GAS DUPLICATE SAMPLE DATA WIN-HOLT EQUIPMENT CORPORATION 592 BROOK STREET, GARDEN CITY, NEW YORK

Sample Location Sample Depth (in feet)	SG-4 2	SG-4D. 2				
Sample Date	i03					
Parameter.						
Volatile Organic Compounds in parts per billion						
1,1,1-Trichloroethane	2.0	15				
1,2,4-Trimethylbenzene	100	120				
1,3,5-Trimethylbenzene	24	24				
Ethylbenzene	21	17				
o-Xylene	50	43				
p- & m-Xylenes	100	88				
Toluene	15	11				
Benzene	3.1	ND				
Styrene	2.0	ND				
1,3 Butadiene	4.6	1.8				
Carbon Disulfide	ND	ND				
4-Ethyltoluene	88	89				
n-Hexane	2.2	ND				
n-Heptane	ND	ND				
Dichlorodifluoromethane	2.0	ND				
Methylene Chloride	ND	ND				

### Note:

ND = Not detected.



The groundwater samples were analyzed in three sample delivery groups (SDGs) and the soil vapor samples were analyzed in one SDG. Each SDG contained up to 20 primary environmental samples, one set of MS/MSD samples, up to two duplicate samples, and associated laboratory method blank and control samples. The groundwater samples were extracted and analyzed for TCL VOCs by purge and trap GC/MS using guidance provided in Method 5030B/8260B. The soil vapor samples were analyzed for VOCs using guidance provided in Method TO-14A Modified.

The samples were all received by the lab in good condition and at proper temperature. The extractions and analyses were all reported to have been performed within the required holding times. The laboratory QC data, including blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, and laboratory controls were reported to have been within the protocol-required limits and specifications with the following exceptions:

- For groundwater SDG 203464 the following discrepancies were reported: Samples W-7 and W-2 were analyzed at 1:2 and 1:20 dilutions, respectively, due to high target compound concentrations. The MS/MSD %R for 1,1,1-trichloroethane (1,1,1-TCA) was below acceptable limits and, therefore, concentrations of 1,1,1-TCA in the associated environmental samples may be underestimated. The MSB %R for 1,2-dichloropropane slightly exceeded the acceptable limit and, therefore, the concentrations of 1,2-dichloropropane in the associated environmental samples may be overestimated. Methylene chloride was detected in an associated laboratory blank sample; the samples results were appropriately flagged.
- For groundwater SDG 203431 the following discrepancies were reported: the spike compound percent recoveries were within the laboratory-generated guidelines in the independent source quality control samples except for chloromethane, bromoform, and dibromochloromethane. Several samples were diluted prior to analysis due to high target compound concentrations. The samples and their corresponding dilution factors are: W-2D at 1:20, W-5 at 1:2, and W-6 at 1:10. The MS %Rs for toluene and dibromochloromethane slightly exceeded the acceptable

limits and, therefore, the concentrations of these compounds in the associated environmental samples may be overestimated. The MSB %R for bromoform slightly exceeded the acceptable limit and, therefore, the concentrations of bromoform in the associated environmental samples may be overestimated. Methylene chloride was detected in an associated laboratory blank sample; the samples results were appropriately flagged.

- For groundwater SDG 204887 the following discrepancies were reported: Samples W-2 and W-6 were analyzed at 1:200 and 1:25 dilutions, respectively, due to high target compound concentrations. The MSD RPD for bromomethane was slightly over the acceptable limit, indicating that the results for this compound may vary out of the acceptable range. Methylene chloride was detected in an associated laboratory blank sample; the samples results were appropriately flagged.
- For soil vapor SDG 203449 the following discrepancies were noted: The blank spike duplicate sample X9LCSD exhibited a %R for hexachlorobutadiene marginally below the acceptable range. The associated blank spike sample yielded an acceptable %R for this compound. The responses for 1,2,4-trichlorobenzene and hexachlorobutadiene in the initial calibration check exceeded the acceptable relative standard deviation limit. However, these compounds were not detected in the associated environmental samples. Several samples, including SG-2 6, SG-3 2, SG-4 6, SG-12 and SG-16 were reanalyzed at appropriate dilutions due to the presence of select target compounds at concentrations that exceeded the calibration range of the analytical equipment. The dilution analyses yielded results that were within the calibration range of the instrument. Samples SG-2 2, SG-3 6, SG-4 2, SG-5 2, SG-5 6 and SG-6 6 were analyzed at appropriate dilutions based on the initial screening data. The dilution analyses yielded results within the calibration range of the instrument.

The raw data were spot-checked against the results provided on the data summary sheets and on the quality control verification forms and no discrepancies were noted. The data flagging was also checked and it was found that the correct data qualifiers have been applied.

Based on this evaluation of the laboratory QA/QC data, the associated analytical data for the environmental samples may be relied upon to assess the soil vapor and groundwater conditions at the site.

