### RCRA FACILITY INVESTIGATION REPORT CARRIER CORPORATION, THOMPSON ROAD FACILITY SYRACUSE, NEW YORK

EnSafe Project No. 3133-031

**Prepared for:** 

UTC Shared Remediation Services Hartford, Connecticut

**Prepared by:** 



EnSafe Inc. 220 Athens Way, Suite 410 Nashville, Tennessee 37228 (615) 255-9300 www.ensafe.com

September 19, 2001 Revised: December 21, 2001 Revised: September 30, 2002

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### Acronyms Frequently Used in this Report

µg/L	micrograms per liter
AOC	area of concern
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DCE	dichloroethene
DMR	Discharge Monitoring Report
DPT	direct push technology
gpd	gallons per day
I.D.	inner diameter
MCL	maximum contaminant level
MW	monitoring well
ND	not detected
NYSDEC	New York State Department of Environmental Conservation
OSHA	Occupational Safety and Health Administration
PCB	polychlorinated biphenyls
PEL	permissible exposure limit
PID	photoionization detector
ppb	parts per billion
ppm	parts per million
PSA	potential source area
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
SAP	Sampling and Analysis Plan
SPDES	state pollutant discharge elimination system
SWMU	solid waste management unit
TCE	trichloroethene
TLV	threshold limit value
TWA	time-weighted average
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound



### **1.0 INTRODUCTION**

This report summarizes the activities performed and findings of a RCRA Facility Investigation (RFI) at the Carrier Corporation facility at Thompson Road, Syracuse, New York. The RFI Work Plan previously submitted was requested by the New York State Department of Environmental Conservation (NYSDEC) in conjunction with EPA, Region 2, to investigate certain findings of a 1997 RCRA Facility Assessment (RFA) prepared by A.T. Kearney, Inc. on behalf of United States Environmental Protection Agency (USEPA) Region 2.

This investigation addresses the solid waste management units and the area of concerns (SWMUs and AOCs) identified in the RFA that are the subject of NYSDEC comments (December 1, 2000). Many of these comments were addressed in the *Release Assessment Report*, (EnSafe, January 17, 2001), which documented findings of investigations conducted by Carrier since the RFA was prepared. The previously submitted RFI Work Plan (EnSafe, 2001) and Carrier's response to NYSDEC comments (May 17, 2001) addresses comments not adequately addressed by the *Release Assessment Report*. All RFI activities were performed in accordance with the NYSDEC-approved work plan. In addition, NYSDEC provided oversight during a portion of the RFI field activities.

#### **1.1** History of Site Investigations

In 1986, Dames & Moore was contracted by Carrier Corporation to study soil and groundwater conditions (*Phase I and Phase II Groundwater Evaluation Reports*) surrounding an underground storage tank area at Carrier's Syracuse, New York, facility. Because closure of one of the tanks (a 20,000-gallon cement tank) was being considered by Carrier, it was thought that data collected from such a study would support the tank closure application. This investigation is briefly summarized below.

<u>Phase I Groundwater Evaluation Report, 1986</u> – This study included the installation of five monitoring wells, one upgradient (MW-1) and four downgradient (MW-2, MW-3S, MW-3D, and MW-4) in the underground storage tank area. (SWMUs 1 to 4 are located in this area, which is referred to in other reports as potential source area [PSA]-1). Results indicated that



volatile organic compounds (VOCs) are in groundwater near the tank and were probably attributed to the tank.

<u>Phase II Groundwater Evaluation Report, 1987</u> – To further define the extent of groundwater contamination, a second phase was performed. In this investigation, two downgradient shallow wells (MW-5 and MW-6) were installed. Results indicated that these wells did not appear to have been affected by SWMUs 1 to 4.

In the initial discharge monitoring report (DMR) submitted to NYSDEC as part of Carrier's State Pollutant Discharge Elimination System (SPDES) 1989 permit, Carrier reported trichloroethene (TCE) in Outfalls 002 and 007 and phenol in Outfall 005 at concentrations exceeding the permit limits.

- <u>SPDES Permitted Outfall Evaluation Report, 1989</u> In this evaluation, Blasland & Bouck Engineers analyzed the discharges from the permitted outfalls.
- <u>Storm Sewer System Report, 1990</u> Because TCE and phenol concentrations in several outfalls exceeded permit limits, Blasland & Bouck Engineers evaluated the existing storm sewer system.

In 1990, the NYSDEC and Carrier entered into a Consent Order as a result of the TCE detections in storm water discharges from the facility. A hydrogeologic evaluation was conducted by Blasland & Bouck Engineers to satisfy some requirements of this Order and a stormwater capture system was designed and installed under NYSDEC review.

<u>Hydrogeologic Evaluation, 1991</u> – Two soil borings (B-1 and B-2) and three monitoring wells (MW-7 to MW-9) were installed during this evaluation to supplement the five monitoring wells installed for the Phase I and II groundwater evaluations. Results confirmed the presence of VOCs in soils and shallow groundwater, the report concluded that contamination detected at the PSAs is confirmed by the geology and influenced by the storm sewer system.

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In 1997, a RFA was initiated by the USEPA Region 2 (and prepared by A.T. Kearney). The following summarizes reports generated since the RFA was initiated.

- <u>RCRA Facility Assessment Report, 1997</u> The report summarizes a visual site inspection in which 17 SWMUs and 2 AOCs were identified. The RFA determined that most of these units identified at the facility are located indoors over concrete. The RFA further states that there is minimal potential for release from these units and that they require no further action. Those units where it was concluded there is more than a minimal potential for release are SWMUs 1 to 6, which include two former 20,000-gallon concrete storage tanks (SWMUs 1 and 2), two former 8,000-gallon steel storage tanks (SWMUs 3 and 4) located in the immediate area of SMWUs 1 and 2, and two former 8,000-gallon concrete storage tanks (SWMUs 5 and 6).
- <u>Release Assessment Report, 2001</u> Investigations were performed by EnSafe to further evaluate groundwater contamination. These investigations started in 1999 with a shallow groundwater investigation, combined with a storm sewer capture evaluation. Based on the results of the shallow groundwater investigation, a supplemental shallow groundwater investigation was also performed in 1999 to gain a better understanding of the shallow groundwater system. When the shallow groundwater investigations were completed, a third phase of groundwater investigation in 2000 focused on deep groundwater, both in the area of PSA-1 and at the northern Carrier property boundary. The findings of these investigations are summarized in the *Release Assessment Report*.
- <u>Carrier Thompson Road Facility RFI Report, September 2001</u> This report summarizes an investigation by EnSafe to assist Carrier in determining the overall extent of impact to areas of concern, as outlined in the NYSDEC comments on the *Release Assessment Report* of (January 17, 2001) and the *RFI Work Plan* of (January 16, 2001). The primary objectives of this investigation were to determine: (1) the extent of PCB impact to sediments in Sanders Creek and manholes at the facility, (2) the extent of TCE impact to soils at SWMUs 5 and 6 and at PSA-2, and (3) if TCE was migrating offsite and to Sanders Creek near the current storm sewer outfalls. These areas were investigated as part of the RFI process under the direction of NYSDEC. Results are summarized in this report.



- <u>Carrier Thompson Road Facility RFI Report, Revised December 2001</u> The purpose of this investigation and report was to follow up on outstanding issues left in the September 2001 RFI Report. Areas of investigation included: (1) SWMUs 5 and 6; (2) continued site-wide groundwater monitoring, and 3) a descriptive history of the Carrier-DeWitt Landfill.
- <u>Carrier Thompson Road Facility RFI Report, Revised September 2002</u> This report summarizes the most recent investigation by EnSafe to: (1) further evaluate the extent of contamination at SWMUs 5 and 6, (2) establish site-specific background soils concentrations for metals, (3) address potential air contamination issues in Buildings TR-18 and TR-18S, and (4) address potential surface water contamination at the Carrier-DeWitt Landfill.

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### 2.0 BACKGROUND

### 2.1 Facility Description

The Carrier Thompson Road Facility is located in the northeast portion of Syracuse, New York, approximately one mile south of the New York State Thruway (Figure 2.1 – Site Location Map). The facility is bordered by Sanders Creek to the north, Thompson Road to the west, Kinne Street to the east, and a residential area to the south. The property slopes slightly north toward Sanders Creek. The facility property covers approximately 175 acres and most is either paved or covered by manufacturing and office buildings.

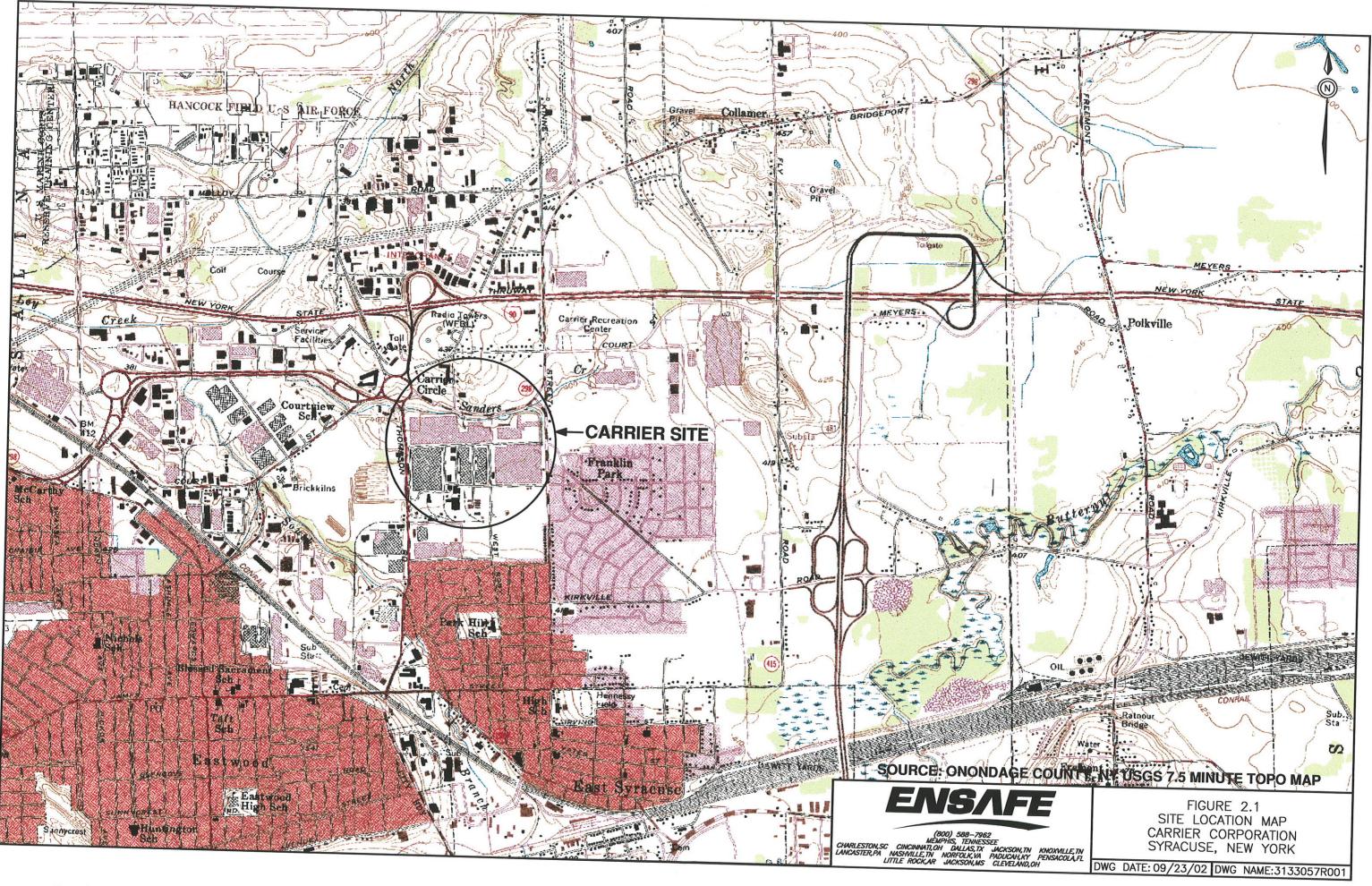
### 2.2 Facility History

The facility was purchased in the 1950s by Carrier. The Carrier Syracuse facility produces or has produced a variety of products associated with the HVAC (heating, ventilation, air conditioning units) industry for home and commercial applications over the years. Operations include or have included the manufacture and assembly of various components associated with these HVAC units. Carlyle compressors are also manufactured at the facility.

The RCRA Facility Assessment Report for the Carrier facility prepared by A.T. Kearney, Inc. (January 6, 1997) describes pre-1950 use of the property as follows: "Prior to the purchase of the facility by Carrier, the existing facility was owned and operated by the General Electric Corporation, which was built in 1942 for defense purposes; Defense Corporation, a government-owned World War II manufacturing facility; and Syracuse University. Prior to World War II, the property was utilized as farmland." Additionally, a Phase II Groundwater Evaluation Report prepared by Dames & Moore (January 16, 1987) states that "….two concrete tanks were installed around 1945 by General Electric (G.E.), former owner of the site."

### 2.3 Local Geology

The local bedrock near of the Carrier facility consists primarily of Silurian-age carbonates and shales. The Vernon Shale Member of the Salina Group underlies the area. The Vernon Shale is a red shale 600 to 800 feet thick. The top of the bedrock onsite is approximately 40 to 60 feet below ground surface (bgs).



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Overlying the Vernon Shale are sandy silts, clayey silts, fine-grained sands, and clays. Descriptions of soils from installation of groundwater monitoring wells and piezometers at the facility indicate a relatively uniform lithologic section across the site (see *Release Assessment Report*, Appendix A for well logs and for cross-sections).

Silts and clayey silts are the predominant soils throughout the site. These silts are generally stiff to very stiff, dense, and brittle. The silts are brown to brownish gray and commonly contain iron staining and yellow-red mottling throughout. Fine-grained sands and dense clays were frequently intermixed with the silts observed during drilling. These deposits are interpreted to represent lacustrine deposits.

The upper 1 to 4 feet of most borings consisted of fill material including roots, rock fragments up to 1 inch in diameter, and loose, unconsolidated sands and gravels. In borings installed through asphalt, a gravel and sand base 1 to 2 feet thick was found below the asphalt. In some piezometer borings, fill material was encountered over the total depth of the boring. These borings were near buildings or in areas that had been filled during construction at the facility.

Beneath the fill, saturated silts and sands with minor amounts of clay become prevalent. In the northern area of the facility a peaty, organic-rich layer occurs. Till is encountered below the silts and sands over the entire facility. The till is encountered at depths ranging from approximately 29 to approximately 40 bgs.

### 2.4 Local Hydrogeology

Groundwater occurs at approximately 6 feet bgs in the southern portion of the facility to approximately 9 feet bgs near the northern property boundary. Groundwater is present in the "native" silty clays and silty sands, beneath the fill material and throughout the lacustrine and glacial till material encountered with depth. The saturated interval continues to the top of bedrock, which ranges from approximately 40 to 60 feet bgs across the facility.

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Water level measurements from the piezometer and groundwater monitoring well network, and the elevations of the storm sewer lines located throughout the facility indicate that the main lines of the storm sewer are located below the water table. Based on previous water level elevation data collected, the potentiometric surface map of the facility indicates that the storm sewer system is exerting a influence over the local groundwater flow system. This influence is demonstrated by the flow lines (arrows which are perpendicular to the groundwater elevation lines) indicating groundwater flowing toward the main storm sewer lines, as opposed to north toward Sanders Creek.

The most reliable portion of the maps is that area between the main lines identified as Lines 001, 002, and 007. The data indicates that the influence of the storm sewer lines reach essentially from sewer line to sewer line in this area. While there is a good deal of interpretation in the areas not covered by the piezometer transects, the data along the transects is very definitive.

The influence of the main sewer lines appears to be stronger in the southern part of the facility than in the northern area around Buildings TR-2 and TR-3. The influence of the storm sewer system in the northern area is also appears to be controlled by the sewer system, although not as definitive as in the southern portion of the facility.

### 3.0 INVESTIGATION APPROACH AND RESULTS

This section outlines the various investigative activities conducted at the SWMUs and AOCs identified for further evaluation in the *Draft RCRA Facility Assessment Report (1997)*. In some cases, SWMUs and AOCs were previously investigated by Carrier as part of separate investigations not conducted as part of the most recent RFI activities. The results of these historic investigations are summarized in the previously submitted *Release Assessment Report* (EnSafe, 2001) and RCRA *Facility Investigation Report* (September 19, 2001, Revised December 21, 2001). For those SWMUs being investigated for the first time as part of the RFI, all activities performed are described and data are presented in this section. Figure 3.1 illustrates the areas investigated during the RFI.

RFI activities performed at the Carrier facility were in accordance with the NYSDEC-approved work plan. Samples were collected in accordance with the approved Sampling and Analysis Plan (SAP) and the Quality Assurance Project Plan (QAPP) previously submitted to NYSDEC as part of the work plan. All samples were sent to Accutest Laboratories, Dayton, New Jersey (New York Certification Number 10983) for analysis.

Well identification numbers were not consecutive in previous investigations and reports; therefore, they were renumbered, as shown in Table 3.1. July 2001 sample ID numbers and the wells from which they were collected are listed in Table 3.2. June 2002 sample ID numbers are listed in Table 3.2B.

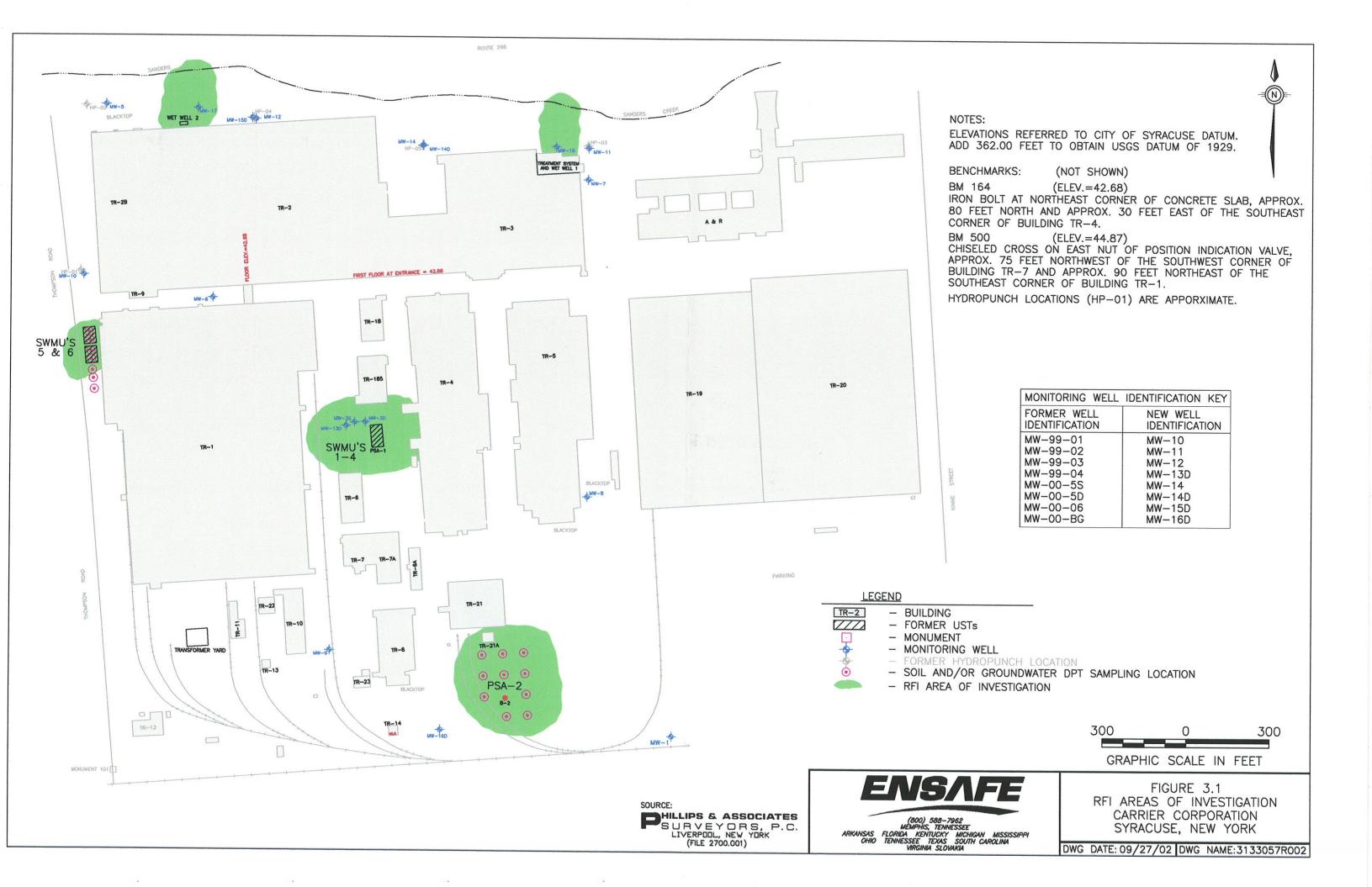
Wel	Table 3.1 I Identifications
Former Well Identification	New Well Identification
MW-99-01	MW-10
MW-99-02	MW-11
MW-99-03	MW-12
MW-99-04	MW-13D
MW-005S	MW-14
MW-00-5D	MW-14D
MW-00-06	MW-15D
MW-00-BG	MW-16D



Sample/Groundwat	Table 3.2 er Monitoring Well Correlations July 2001
Sample Identification	Well Identification
ENS-SYR-TMP-MW01-CARGMW0104	MW-01
ENS-SYR-TMP-MW3S-CARGMW3S04	MW-03S
ENS-SYR-TMP-MW3D-CARGMW3D04	MW-03D
ENS-SYR-TMP-MW05-CARGMW0504	MW-05
ENS-SYR-TMP-MW06-CARGMW0006	MW-06
ENS-SYR-TMP-MW06-CARHMW0006	MW-06 duplicate
ENS-SYR-TMP-MW07-CARGMW0704	MW-07
ENS-SYR-TMP-MW08-CARGMW0804	MW-08
ENS-SYR-TMP-MW08-CARHMW0804	MW-08 duplicate
ENS-SYR-TMP-MW09-CARGMW0904	MW-09
ENS-SYR-TMP-9901-CARG990104	MW-10
ENS-SYR-TMP-9902-CARG990204	MW-11
ENS-SYR-TMP-9903-CARG990304	MW-12
ENS-SYR-TMP-BAG-CARG990403	MW-13D (diffusion bag sample)
ENS-SYR-TMP-9904-CARG990401	MW-13D (discrete sample)
ENS-SYR-TMP-9904-CARH990408	MW-13D (discrete sample duplicate)
ENS-SYR-TMP-005S-CARGMW5S04	MW-14
ENS-SYR-TMP-005D-CARGMW5D04	MW-14D
ENS-SYR-TMP-0006-CARG000604	MW-15D
ENS-SYR-TMP-00BG-CARGMW5604	MW-16D
ENS-SYR-TMP-0107-CARG010704	MW-17
ENS-SYR-TMP-0108-CARG010804	MW-18



Sample/Groundwater I	able 3.2B Monitoring Well Correlations me 2002
Sample Identification	Well Identification
ENS-SYR-TMP-MW01-CARGMW0105	MW-01
ENS-SYR-TMP-MW3S-CARGMW3S05	MW-03S
ENS-SYR-TMP-MW3S-CARHMW3S05	MW-03S duplicate
ENS-SYR-TMP-MW3D-CARGMW3D05	MW-03D
ENS-SYR-TMP-MW05-CARGMW0505	MW-05
ENS-SYR-TMP-MW06-CARGMW0605	MW-06
ENS-SYR-TMP-MW07-CARGMW0705	MW-07
ENS-SYR-TMP-MW08-CARGMW0805	MW-08
ENS-SYR-TMP-MW09-CARGMW0905	MW-09
ENS-SYR-TMP-MW10-CARGMW1005	MW-10
ENS-SYR-TMP-MW11-CARGMW1105	MW-11
ENS-SYR-TMP-MW12-CARGMW1205	MW-12
ENS-SYR-TMP-MW13D01-CARG13D001	MW-13D (diffusion bag sample-first interval[10 total intervals therefore 01 through 10])
ENS-SYR-TMP-MW13D-DUP-CARH13D006	MW-13D (diffusion bag sample-duplicate)
ENS-SYR-TMP-MW14-CARGMW1405	MW-14
ENS-SYR-TMP-MW14D-CARGMW14D05	MW-14D
ENS-SYR-TMP-MW14D-CARHMW14D05	MW-14D duplicate
ENS-SYR-TMP-MW15D-CARGMW15D05	MW-15D
ENS-SYR-TMP-MW16D-CARGMW16D05	MW-16D
ENS-SYR-TMP-MW17-CARGMW1705	MW-17
ENS-SYR-TMP-MW18-CARGMW1805	MW-18
ENS-SYR-TMP-MW19-CARGMW1901	MW-19



### 3.1 SWMUs 1 to 4

NYSDEC Comment 1: The extent, nature and rate of migration of contamination beneath the former 20,000- gallon concrete storage tanks and the former 8,000-gallon steel storage tanks (SWMUs 1-4) must be documented, and the efficacy of any past remedial activities assessed.

To evaluate the impact of any releases from SWMUs 1 to 4, previous investigations were performed and monitoring wells have been installed. The *Release Assessment Report* (EnSafe, 2001) summarizes the data collected from these wells in the immediate area of the former tanks and data collected from an area soil-gas survey and soil sampling. The historical data indicates that releases from these former tanks are largely limited to the tank area. A monitoring well at the facility boundary does not show contamination has migrated to that point.

In a continued effort to monitor the groundwater conditions at PSA-1 and throughout the site, and to ensure that significant fluctuations in the contaminant concentrations are not occurring, the work plan proposed collecting groundwater samples from all existing groundwater monitoring wells, and analyzing for VOCs.

Depth-to-groundwater was measured using an electronic water level indicator to the nearest 0.01 foot from the top of the well casing in all existing groundwater monitoring wells and temporary piezometers installed as part of the 1999 storm sewer investigation. In addition, monitoring wells at the facility were sampled for VOCs. Prior to sampling, an attempt was made to purge the wells using Micro Purge techniques, as outlined in Attachment 1 of the *Response to Comments on the Carrier Thompson Road Facility RFI Work Plan, 2001.* The recharge rate of many wells did not permit a stable drawdown to be sustained. In these cases, an attempt to purge three well volumes was made. Some wells were purged dry during this process and allowed to recharge before sampling. Sampling was carried out at each well using a dedicated, disposable polypropylene bailer and nylon rope.

Table 3.3 and Figure 3.2 show the analytical results from the July 2001 RFI sampling, as well as recent historic sampling at the facility. A copy of the laboratory analytical data sheets is included in Appendix B. The RFI results are consistent with previous sampling results, especially near SWMUs 1 to 4. Water data are summarized in Table 3.4. The piezometers not measured had been damaged due to snow removal and other activities at the Carrier facility. The potentiometric surface developed from July 2001 depth-to-water measurements is included as Figure 3.3. The April 2000 shallow groundwater potentiometric surface (Figure 3.4) is included as a basis for comparison. Flow directions and water quality data were consistent with previous observations for the historical wells. In addition, a deep groundwater potentiometric map, presented as Figure 3.3B, was generated based on depth-to-groundwater measurements from wells screened at the top of bedrock at the facility.

A cross-section was constructed — using water level measurements taken in shallow wells and piezometers in the area of SWMUs 1 to 4 — to depict the groundwater flow across the former tank area, storm water sewer line 002, and shallow groundwater monitoring wells downgradient of the former tank locations. Figure 3.3C shows that shallow groundwater in the former tank area intercepts the tanks or is just below their former locations. The concrete tanks were known to be approximately one foot higher than the surrounding ground surface and have a depth of 8 feet deep. Contamination from these tanks would be intercepted by the shallow groundwater and then by the storm sewer system (Line 002 as shown on Figure 3.3C) and ultimately treated through the treatment facility operated by Carrier. The cluster of wells (MW-3S, MW-3D, and MW-13D) installed downgradient from the SWMUs 1 to 4 area monitor the entire saturated thickness of the shallow groundwater. Contamination from the SWMUs would be detected by these three wells as shown in Figure 3.3C. Historical groundwater quality data for the three wells is also presented on Figure 3.3C.

3-6

# ENISAFE

Well Number	Sample Identification	Sample Date	Acetone μg/L	Benzene μg/L	Carbon disulfide µg/L	MEK µg/L	Chloro- form µg/L	Chloro ethane μg/L		1,2- DCA μg/L	1,1-DCE μg/L	Total 1,2-ĐCE μg/L	trans- 1,2-DCl μg/L	cis- E 1,2-DC μg/L	CE MC μg/L	1,1,1- TCA μg/L	1,1,2- TCA μg/L	TCE μg/L	Vinyl Chloride μg/L	Ethyl benzene μg/L	Toluene μg/L	Total Xylenes μg/L	Sulfate mg/L	TOC mg/L
NYSDEC Sta	andard 🗌		50 G	1	50	7	50 G	5	7	0.6	5		.5	5	5	5	1	5	2	5	5	5		
AW-19	CARGMW1901	6-28-02	ND	ND	ND	ND	0.32 J	ND	ND	ND	ND	NA	ND	1.2 J	ND	ND	ND	0.71 J	ND	ND	ND	ND	NA	NA
AM-10	CARG990101	4-25-99	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
MW-99-01)	CARGW99103	4-19-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARG990104	7-11-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NÐ	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW1005	6-24-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
/IW-11	CARG990201	4-25-99	6.5	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
MW-99-02)	CARGW99203	5-02-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARG990204	7-11-01	45.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW1105	6-25-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
AW-12	CARG990301	4-25-99	6.1	ND	ND	ND	ND	ND	ND	ND	ND	NA	14.1	5.2	ND	ND	ND	2.9	ND	ND	ND	ND	NA	NA
MW-99-03)	CARGW99303	4-18-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.5	NA	NA	ND	ND	ND	1.4	ND	ND	ND	ND	NA	NA
	CARG9903-04	7-11-01	26.5	ND	ND	ND	ND	ND	ND	ND	ND	5.8 J	1.9 J	3.9 J	ND	ND	ND	1.1	ND		ND	ND		a transformation of the
	CARGMW1205	6-25-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA NA
4W-13D	CARG-990401	10-11-99	ND	ND	ND	ND	ND	ND	128	ND	17.7 J	NA	ND	2,440	ND	ND	ND	21.8	568	ND	ND	ND	NA	NA
MW-99-04)	CARGW99401	5-02-00	ND	3.0 J	ND	ND	ND	ND	160	ND	26	3,900	NA	NA	ND	ND	1.1 J	36	610	ND	ND	ND	NA	NA
Diffusion	CARG990401	7-13-01	ND	ND	ND	ND	ND	ND	34.4 J	ND	9.7 J	1,210	ND	1,210	ND	ND	ND	ND	199	ND	ND	ND	NA	NA
amples)	CARG13D001	8-13-02	66.8	1.4 J	ND	ND	ND	ND	32.6	ND	1.7 J	NA	ND	530	ND	ND	ND	2.4 J	26.9	ND	ND	ND	NA	NA
	CARG-99402	10-11-99	ND	ND	ND	ND	ND	ND	247 J	ND	57.9 J	NA	ND	6,940	ND	ND	ND	ND	1,850	ND	ND	ND	NA	NA
	CARGW99402	5-02-00	ND	1.1 J	ND	ND	ND	ND	180	ND	45	6,000	NA	NA	ND	ND	2.5 J	12	970	ND	ND	ND	NA	NA
	CARG990402	07-13-01	ND	ND	ND	ND	ND	ND	32.0 J	ND	ND	NA	ND	1,160	ND	ND	ND	ND	190	ND	ND	ND	NA	NA
	CARG13D002	08-13-02	ND	ND	ND	ND	ND	ND	163 J	ND	41.1 J	NA	ND	5,570	ND	ND	ND	ND	680	ND	ND	ND	NA	NA
	CARG-99403	10-11-99	ND	ND	ND	ND	ND	ND	230 J	ND	55.9 J	NA	ND	6,520	ND	ND	ND	ND	1,720	ND	ND	ND	NA	NA
	-	5-02-00	ND	ND	ND	ND	ND	ND	160	ND	34	5,200	NA	NA	ND	ND	2.6 J	7.3	830	ND	ND	ND	NA	NA
iffusion Imple	CARG990403	07-13-01	ND	ND	ND	ND	ND	ND	137	ND	ND	NA	22.1 J	4,080	ND	ND	ND	ND	500	ND	ND	ND	NA	NA
ow-flow	CARG990403	07-13-01	ND	ND	ND	ND	ND	ND	45.1 J	ND	10.3 J	NA	ND	1,600	6.8 J	ND	ND	ND	230	ND	ND	ND	NA	NA
iff. sample	CARG13D003	08-13-02	ND	ND	ND	ND	ND	ND	174 J	ND	41.8 J	NA	ND	6,170	ND	ND	ND	ND	730		ND	ND	NA	NA
	CARG-990404	10-11-99	ND	ND	NÐ	ND	ND	ND	225 J	ND	51.8	NA	ND	6,130	ND	ND	ND	ND	1,580	ND	ND	ND	NA	NA
	CARGW99404	5-02-00	4.6 J	ND	ND	ND	ND	ND	160	1.1 J	40	5,500	NA	NA	ND	ND	2.3 J	8.2	690	ND	ND	ND	NA	NA
	CARG990404	07-13-01	ND	ND	ND	ND	ND	ND	69.9 J	ND	ND	NA	ND	2,390	15.0 J	ND	ND	ND	338	ND	ND	ND	NA	NA
	CARG13D004	08-13-02	ND	ND	ND	ND	ND	ND	135 J	ND	36.7 J	NA	ND	5,140	ND	ND	ND	ND	573	ND		ND	NA	NA
	CARG-99405	10-11-99	ND	ND	ND	ND	ND	ND	225 J	ND	56.0 J	NA	ND	6,310	ND	ND	ND	ND	1,670			ND	NA	NA

 Table 3.3
 Groundwater Laboratory Analytical Results

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Well Number	Sample Identification	Sample Date	Acetone μg/L	Benzene μg/L	Carbon disulfide µg/L	MEK μg/L	Chioro- form µg/L	Chloro ethane μg/L	1,1-DCA μg/L	1,2- DCA μg/L	1,1-DCE μg/L	Total 1,2-DCE μg/L	trans- 1,2-DC μg/L	cis- Έ 1,2-DC μg/L	EMC μg/L	1,1,1- TCA μg/L	1,1,2- ΤCA μg/L	TCE μg/L	Vinyl Chloride μg/L	Ethyl benzene μg/L	Toluene μg/L	Total Xylenes μg/L	Sulfate mg/L	TOC mg/L
NYSDEC Sta	indard 🖂		50 G	1	50	7	50 G	5	.7	0.6	5		5	5	5	5	1	5	2	5	5	5		
	CARGW99405	5-02-00	ND	ND	ND	ND	ND	ND	170	1.1 J	44	5,600	NA	NA	ND	ND	2.3 J	8.7	880	ND	ND	ND	NA	NA
	CARG990405	07-13-01	ND	ND	ND	ND	ND	ND	52.0	ND	11.2 J	NA	ND	1,730	8.5 J	ND	ND	ND	259	ND	ND	ND	NΛ	NA
	CARG13D005	08-13-02	ND	ND	ND	ND	ND	ND	147 J	ND	34.4 J	NA	ND	5,360	ND	ND	ND	ND	607	ND	ND	ND	NA	NA
	CARG-99406	10-11-99	NS	NS	ND	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	CARGW99406	5-02-00	ND	ND	ND	ND	ND	ND	120	ND	29	4,800	NA	NA	ND	ND	2.0 J	5.7	760	ND	ND	ND	NA	NA
Diffusion sample	CARG990406	07-13-01	ND	ND	ND	ND	ND	ND	182 J	ND	ND	NA	ND	6,720	ND	ND	ND	ND	1,090	ND	ND	ND	NA	NA
ow flow	CARG990406	07-13-01	ND	ND	ND	ND	ND	ND	52.7	ND	11.2 J	NA	ND	1,810	ND	ND	ND	ND	256	ND	ND	ND	NA	NA
Diff. sample	CARG13D006	08-13-02	ND	ND	ND	ND	ND	ND	149 J	ND	36.2 J	NA	ND	5,350	ND	ND	ND	ND	692	ND	ND	ND	NA	NA
	CARH13D006	08-13-02	ND	ND	ND	ND	ND	ND	149	ND	30.0 J	NA	ND	5,390	ND	ND	ND	ND	630	ND	ND	ND	NA	NA
	CARG-99407	10-11-99	NS	NS	ND	NS	NS	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	CARGW99407	5-02-00	ND	ND	ND	ND	ND	ND	89	ND	20	2,900	NA	NA	ND	ND	1.5 J	3.9 J	390	ND	ND	ND	NA	NA
	CARG990407	07-13-01	ND	ND	ND	ND	ND	ND	61.1 J	ND	ND	NA	ND	2,070	14.8 J	ND	ND	ND	332	ND	ND	ND	NA	NA
	CARG13D007	08-13-02	ND	ND	ND	ND	ND	ND	76.4 J	ND	17.8 J	NA	ND	2,780	ND	ND	ND	ND	337	ND	ND	ND	NA	NA
-	CARG-990408	10-11-99	ND	ND	ND	ND	ND	ND	138 J	ND	30.2 J	NA	ND	4,290	ND	ND	ND	ND	1,060	ND	ND	ND	NA	NA
	CARGW99408	5-02-00	ND	ND	ND	ND	ND	ND	61	ND	14	1,900	NA	NA	ND	ND	ND	2.6 J	280	ND	ND	ND	NA	NA
	CARG990408	07-13-01	ND	ND	ND	ND	ND	ND	53.7	ND	11.6 J	NA	ND	1,870	8.5 J	ND	ND	ND	282	ND	ND	ND	NA	NA
	CARH990408	07-13-01	ND	ND	ND	ND	ND	ND	54.4	ND	12.0 J	NA	ND	1,850	ND	ND	ND	ND	281	ND	ND	ND	NA	NA
	CARG13D008	08-13-02	ND	ND	ND	ND	ND	ND	69.8 J	ND	16.0 J	NA	ND	2,660	ND	ND	ND	ND	310	ND	ND	ND	NA	NA
	CARG-990409	10-11-99	ND	ND	ND	ND	ND	ND	110 J	ND	24.7 J	NA	ND	3,230	ND	ND	ND	ND	822	ND		ND	NA	1.6
	CARGW99409	05-02-00	ND	ND	ND	ND	ND	ND	41	ND	9.6	1,500	NA	NA	4.8 J	ND	ND	2.0 J	190	ND	ND	1.3 J	NA	NA
	CARG990409	07-13-01	ND	ND	ND	ND	ND	ND	60.4 J	ND	ND	NA	ND	1,950	ND	ND	ND	ND	268	ND	ND	ND	NA	NA
	CARG13D009	08-13-02	ND	ND	ND	ND	ND	ND	61.4 J	ND	14.3 J	NA	ND	2,340	ND	ND	ND	ND	273	ND	ND	ND	NA	NA
	CARG-990410	10-11-99	ND	ND	ND	ND	ND	ND	82.8 J	ND	18.8 J	NA	ND	2,360	ND	ND	ND	ND	601	ND	ND	ND	ND	NA
	CARGW994010	5-02-00	ND	ND	ND	ND	ND	ND	13	ND	3.1 J	390	NA	NA	ND	ND	ND	ND	66	ND	ND	ND	NΛ	NA
	CARG990410	07-13-01	ND	ND		ND	ND	ND	43.4 J	ND	ND	NA	ND	1,480	7.1 J	ND	ND	ND	219	ND	ND	ND	NA	NA
	CARG13D010	08-13-02	ND	ND	ND	ND	ND	ND	50.1	ND	10.7	NA	ND	1,720	ND	ND	ND	ND	231	ND	ND	ND	NA	NA
AW-17 MW-01-07)	CARG010704*	07-13-01	6.0	ND	ND	ND	ND	ND	ND	ND	ND	NA	2.5 J	249	ND	ND	ND	42.6	11.0	ND	ND	ND	NA	NA

 Table 3.3
 Groundwater Laboratory Analytical Results

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Well Number	Sample Identification	Sample Date	Acetone μg/L	Benzene μg/L	Carbon disulfide µg/L	MEK µg/L	Chioro- form μg/L	Chlorø ethane μg/L	1,1-DCA μg/L	1,2- DCA μg/L	1,1-DCE μg/L	Total 1,2-DCE μg/L	trans- 1,2-DCE μg/L	cis- E 1,2-DCl µg/L	EMC μg/L	1,1,1- ΤCA μg/L	1,1,2- ΤCA μg/L	TCE μg/L	Vinyl Chloride μg/L	Ethyl benzene μg/L	Toluene μg/L	Total Xylenes μg/L	Sulfate mg/L	TOC mg/L
NYSDEC Sta	ndard 🗔		50 G	1	50	7	50 G	5	.7	0.6	5		5	5	5	5	1	5	2	5	5	5		
	CARGMW1705	06-26-02	ND	ND	ND	NÐ	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
MW-18 (MW-01-08)	CARG010804*	07-13-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	29.2 J	7,020	ND	ND	ND	8,760	505	ND	ND	ND	NA	NA
MW-18 cont.	CARGMW1805	06-26-02	ND	ND	ND	ND	ND	ND	10.6 J	ND	15.4 J	NA	35.7 J	2,770	ND	ND	ND	5,580	233	ND	ND	ND	NA	NA
MW-14 (MW-00-5S)	CARGMW005S	4-27-00	28	ND	ND	6.5 J	ND	ND	2.2J	ND	ND	1.9 J	NA	NA	ND	ND	ND	ND	6.0	ND	ND	ND	32	15
	CARGMW5S04	7-11-01	ND	ND	ND	ND	ND	ND	1.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND	ND	ND	NA	NA
	CARGMW5S05	06-24-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
MW-14D (MW-00-5D)	CARGMW005D	4-28-00	8.1 J	ND	ND	ND	3.0 J	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
*	CARGMW5D04	7-11-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW1405	6-25-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARHMW1405	6-25-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
MW-15D (MW-00-06)	CARGMW006	4-28-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARG000604	7-11-01	7.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARH000604	7-11-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW15D05	6-25-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
MW-16D	CARGMW00BG	4-27-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	1,500	ND
(MW-00-BG)	CARGMW5604	07-10-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW16D05	06-24-02	76.8	ND	ND	7.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
MW-01	MW-01	12-31-85	NA	NA	ND	NA	NA	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	MW-1	11-16-90	NA	NA	ND	NA	NA	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	MW-1 (DUP)	11-16-90	NA	NA	ND	NA	ND	ND	ND	ND	ND	NA	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW0103		ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW0104	07-12-01		ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW0105	06-24-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
MW-03S	MW-3S	12-31-85	NA	NA	ND	NA	ND	ND	78	ND	15	NA	982	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
	MW-3S	11-16-90	NA	NA	ND	NA	NA	ND	490	7.6	100.0	NA	6.4	NA	120	17	9.5	11.0	1,600	ND	14	ND	NA	NA
	MW-3S (DUP)	11-16-90	NA	NA	ND	NA	NA	ND	1,100	12.0	250.0	NA	12.0	NA	3.3	ND	10	15.0	1,200	ND	20	ND	NA	NA
	CARGMW3S03	4-20-00	ND	ND	ND	ND	ND	ND	240	1.8 J	60	8,100	NA	NA	ND	ND	3.7 J	4.6 J	1,100	ND	ND	ND	46	2.8

Table 3.3 Groundwater Laboratory Analytical Results

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Well Number	Sample Identification	Sample Date	Acetone μg/L	Benzene μg/L	Carbon disulfide µg/L	MEK μg/L	Chloro- form μg/L	Chloro ethane μg/L	1,1-DCA μg/L	1,2- DCA μg/L	1,1-DCE μg/L	Total 1,2-DCE μg/L	trans- 1,2-DCF μg/L	cis- 2 1,2-DCI µg/L	EMC μg/L	1,1,1- ΤCA μg/L	1,1,2- ΤCA μg/L	TCE μg/L	Vinyl Chloride μg/L	Ethyl benzene μg/L	Toluene μg/L	Total Xylenes μg/L	Sulfate mg/L	TOC mg/L
NYSDEC Sta	undard 🔅		50 G	1	50	7	50 G	5	7	0.6	5		5	5	5	5	1	5	2	5	5	5		
	CARGMW3S04	07-12-01	ND	ND	ND	ND	ND	ND	164	ND	38.3 J	ND	13.9 J	5,780	ND	ND	ND	ND	567	ND	ND	ND	NA	NA
	CARGMW3S05	06-25-02	ND .	ND	ND	ND	ND	ND	163	ND	34.0	ND	ND	5,410 E	ND	ND	ND	2.6 J	746	ND	ND	ND	NA	NA
	CARHMW3S05	06-25-02	ND	ND	ND	ND	ND	ND	159	ND	34.0	ND	ND	5,320 E	ND	ND	ND	2.2 J	739	ND	ND	ND	NA	NA
MW-03D	MW-3D	12-31-85	NA	NA	ND	NA	ND	ND	ND	ND	ND	NA	39	NA	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
MW-03D	CARGW03D03	5-2-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.0	NA	NA	ND	ND	ND	ND	1.1 J	ND	ND	ND	1,000	ND
Cont.	CARGMW3D04	07-12-01	ND	ND	ND	ND	ND	ND	0.72 J	ND	ND	NA	1.2 J	23.2	ND	ND	ND	ND	ND	ND	ND	ND	NA	<1.0
	CARGMW3D05	06-25-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	6.2	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
MW-05	MW-5	11-16-90	NA	NA	ND	NA	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW0503	5-02-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW0504	07-12-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW0505	06-24-02	117	ND	1.4 J	ND	ND	ND	ND	ND	ND	ND	ND	0.24 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
MW-06	MW-6	11-16-90	NA	NA	ND	NA	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW0603	4-18-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	110	1
	CARGMW0604	07-12-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW0605	06-24-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
MW-07	MW-7	11-16-90	NA	NA	ND	NA	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW0703	4-18-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW0704	07-11-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW0705	06-24-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
MW-08	MW-8	11-16-90	NA	NA	ND	NA	NA	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW0803	4-18-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW0804	07-12-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	1.2 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARHMW0804	07-12-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	1.2 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGMW0805	06-25-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
MW-09	MW-9	11-16-90	NA	NA	ND	NA	NA	ND	2.4	1.6	ND	NA	ND	NA	3.0	8.8	ND	2.8	ND	ND	ND	ND	NA	NA
	CARGMW0903	4-18-00	ND	ND	ND	ND	ND	ND	1.9 J	ND	ND	2.9 J	NA	NA	ND	3.7 J	ND	4.43	ND	ND	ND	ND	NA	NA
	CARGMW0904	7-10-01	ND	ND	NÐ	ND	ND	ND	2.4 J	ND	ND	4.51 J	0.61 J	3.9 J	ND	6.6	ND	6.2	ND	ND	ND	ND	NA	NA
	CARGMW0905	6-25-02	ND	ND	ND	ND	ND	ND	1.9 J	ND	ND	ND	ND	3.3 J	ND	5.9	ND	6.6	ND	ND	ND	ND	NA	NA

Table 3.3 Groundwater Laboratory Analytical Results

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Well Number	Sample Identification	Sample Date	Acetone μg/L	Benzene μg/L	Carbon disulfide µg/L	MEK µg/L	Chloro- form µg/L	Chloro ethane µg/L	,	1,2- DCA μg/L	1,1-DCE μg/L	Total 1,2-DCE μg/L	1,2-DCE	cis- 1,2-DC μg/L	E MC µg/L	1,1,1- ΤCA μg/L	1,1,2- ΤCA μg/L	TCE μg/L	Vinyl Chloride μg/L	Ethyl benzene μg/L	Toluene μg/L	Total Xylenes μg/L	Sulfate mg/L	TOC mg/L
NYSDEC Sta	andard 📃		50 G	1	50	7	50 G	5	7	0.6	5		.5	5	.5	5	1	5	2	5	5	5		
Hydropunch #1	UTCGHP0124 20-24'	4-17-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	UTCGHP0134 30-34'	4-18-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	UTCGHP0144 40-44'	4-18-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Hydropunch #2	UTCGHP0214 10-14	4-18-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Hydropunch #2 cont.	UTCGHP0224 20-24'	4-18-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	UTCGHP0226 24-26'	4-18-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Hydropunch #3	UTCGHP0330 26-30'	4-19-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	NÐ	ND	NA	NA
	UTCGHP0340 36-40'	4-19-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	UTCGHP0350 46-50'	4-19-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Hydropunch #4	UTCGHP0424 20-24'	4-20-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	UTCGHP0434 32-34'	4-20-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	UTCGHP0435 34-35'	4-20-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Hydropunch #5	UTCGHP0516 12-16'	4-21-00	12	ND	ND	ND	ND	ND	2.5 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	14	ND	ND	ND	NA	NA
×	UTCGHP0536 32-36'	4-21-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	UTCGHP0545 42-45.7'	4-21-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Hydropunch #6	CARGHP0610 10-14'	6-24-02	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	31,900	ND	ND	ND	13,500	ND	ND	ND	ND	NA	NA
	CARGHP0620 20-24'	6-24-02	54.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	271 E	ND	ND	ND	39.2	ND	ND	ND	ND	NA	NA
	CARGHP0630 30-24'	6-24-02	5.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA

Table 3.3 Groundwater Laboratory Analytical Results

mheflin\wp\Carrier\RFI WP& Report\Table 3-3-RFLdoc

Well Number	Sample Identification	Sample Date	Acetone μg/L	Benzene μg/L	Carbon disulfide µg/L	MEK μg/L	Chloro- form µg/L	Chloro ethane μg/L	1,1-DCA μg/L	1,2- DCA μg/L	1,1-DCE μg/L	Total 1,2-DCE μg/L		cis- E 1,2-DCI µg/L	EMC μg/L	1,1,1- ΤCA μg/L	1,1,2- TCA μg/L	TCE μg/L	Vinyl Chloride μg/L	Ethyl benzene μg/L	Toluene μg/L	Total Xylenes μg/L	5 Sulfate mg/L	TOC mg/L
NYSDEC Sta	andard 🙄		50 G	1	50	7	50 G	5	7	0.6	5		5	5	5	5	1	5	2	5	5	5	~	U
Hydropunch #7	CARGHP0710 10-14'	6-25-02	9.0 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.53 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGHP0720 20-24'	6-26-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.91 J	ND	ND	ND	ND	ND	ND	ND	NA	NA
	CARGHP0730 30-34'	6-26-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Hydropunch #8	CARGHP0814 14-17'	6-27-02	ND	ND	ND	ND	ND	ND	0.73 J	ND	ND	ND	ND	3.1 J	ND	ND	ND	0.70 J	ND	ND	ND	ND	NA	NA
	CARGHP0821 21-24	6-27-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Hydropunch #9	CARGHP0910 -10-14'	6-28-02	ND	ND	ND	ND	0.65 J	ND	21.2	ND	10.9	NA	1.9 J	629 E	ND	15.8	0.43 J	184	7.8	ND	ND	ND	NA	NA
	CARGHP0920 20-24'	6-28-02	ND	ND	ND	ND	ND	ND	3.4 J	ND	0.55 J	ND	ND	ND	ND	ND	ND	1.7	ND	ND	ND	ND	NA	NA
Hydropunch #10	CARGHP1002 2-4'	7-01-02	12.0	ND	ND	2.4 J	ND	12.5	23.0	ND	ND	NA	1.6 J	9.4	ND	1.2 J	ND	2.4	2.7	2.9	3.6	9.6	NA	NA
	CARGHP1010 10-14'	7-01-02	ND	ND	ND	ND	ND	ND	122	ND	48.0	ND	ND	2,490 E	ND	ND	ND	14.7	114	ND	ND	2.8	NA	NA
	CARGHP1020 20-24'	7-01-02	7.0 J	ND	ND	ND	ND	ND	0.60 J	ND	0.66 J	ND	ND	5.3	ND	ND	ND	15.8	ND	ND	ND	NÐ	NA	NA
	CARHHP1020 20-24'	7-01-00	8.3 J	ND	ND	ND	ND	ND	0.46 J	ND	ND	ND	NA	4.5 J	ND	ND	ND	13.7	ND	ND	ND	ND	NA	NA

 Table 3.3
 Groundwater Laboratory Analytical Results

Notes:

Well Identifications changed for the following monitoring wells: MW-99-01 = MW-10MW-00-5D = MW-14DMW-99-02 = MW-11MW-00-06 = MW-15DMW-99-03 = MW-12MW-00-BG = MW-16DMW-99-04 = MW-13DMW-01-07 = MW-17MW-00-5S = -MW-14MW-01-08 = MW-18ND = Not detected above method detection limits NA = Not Analyzed mg/L = milligrams per liter  $\mu g/L = micrograms per liter$ Detections highlighted in BOLD J value indicates concentration is estimated and is below method detection limits.

E indicates concentration exceeds calibration range of the instrument.

XXAII	847.11	G ()	Top of	Well	<b>.</b>	w no	June 2		July		April	2000	Octobe	er 1999	April 1999	
Well Number	Well Depth	Surface Elevation	Casing Elevation	Screen Length	Riser Length	Well Screen Depth Interval	Depth to Water From TOC	Groundwater Elevation								
MW-10 (MW-99-01)	14	40.41	39.66	10	4	4 to 14	6.74	32.92	7.11	32.55	6.84	32.82	7.37	32.29	6.60	33.06
MW-11 (MW-99-02)	16	41.52	40.82	10	6	6 to 16	8.89	31.93	9.20	31.62	8.60	32.22	8.19	32.63	7.07	33.75
MW-12 (MW-99-03)	16	39.62	38.82	10	6	6 to 16	8.88	29.94	9.68	29.14	6.38	32.44	9.71	29.11	9.19	30.43
MW-01* <sup>1</sup>	17.70	47.00	49.44	10	6.2	4 to 14	10.03	39.41	9.90	39.54	9.45	39.99	NM	NM	9.32	40.12
MW-3S*	14.35	41.53	43.13	10	5.2	3 to 13	6.64	36.49	6.69	36.44	6.40	36.73	6.79	36.34	6.26	36.87
MW-3D*	29.87	41.55	44.23	5	24.2	22 to 27	7.71	36.52	8.78	35.45	7.11	37.12	9.63	34.60	7.82	36.41
MW-05* <sup>1</sup>	17.15	33.40	35.70	10	7.2	5 to 15	3.50	32.20	3.83	31.87	3.48	32.22	5.27	30.43	3.15	32.55
MW-06*1	17.05	42.60	44.80	10	7.2	5 to 15	11.35	33.45	11.56	33.24	11.30	33.50	11.75	33.05	11.40	33.40
MW-07* <sup>1</sup>	14.70	41.60	41.40	10	5	5 to 15	6.52	34.88	6.28	35.12	5.68	35.72	3.98	37.42	5.12	36.28
MW-08* <sup>1</sup>	14.78	42.90	42.59	10	5	5 to 15	6.57	36.02	5.64	36.95	5.35	37.24	5.87	36.72	5.55	37.04
MW-09* <sup>1</sup>	17.45	43.20	44.79	10	7.2	5 to 15	9.86	37.31	7.53	37.26	6.87	37.92	7.15	37.64	NM	NM
WE-06A	10	43.55	43.05	1	9	9 to 10	NM	NM	NM	NM	DRY	NM	5.07	37.98	4.60	38.45
WE-06B	5.5	43.55	42.50	1	4.5	4.5 to 5.5	6.85	35.65	6.80	35.70	6.73	35.77	6.45	35.74	6.90	35.50
WE-07	8	41.90	41.07	1	7	7 to 8	NM	NM	NM	NM	6.95	34.12	6.76	34.31	7.02	34.05
WE-08	8	43.10	42.88	1	7	7 to 8	3.31	39.57	3.23	39.65	3.20	39.68	3.25	39.63	3.36	39.52
WE-09	8	41.99	41.89	1	7	7 to 8	2.73	39.16	2.80	39.09	2.72	39.26	3.15	38.74	2.87	39.02
WE-10	8	42.54	42.88	1	7	7 to 8	3.43	39.45	3.49	39.39	3.43	39.45	3.75	39.13	3.59	39.29
WE-11	8	42.71	43.33	1	7	7 to 8	NM	NM	NM	NM	5.47	37.86	5.84	37.49	5.78	37.55
WE-12	8	42.67	42.96	1	7	7 to 8	NM	NM	NM	NM	4.32	38.64	5.27	37.69	4.11	38.85
WE-13	8	42.59	42.95	1	7	7 to 8	5.91	37.04	6.19	36.76	4.77	38.18	5.93	37.02	4.08	38.87
WE-14	8	42.53	43.13	1	7	7 to 8	6.72	36.41	6.79	36.34	6.24	36.89	6.67	36.46	6.16	36.97
WE-15	8	42.43	42.91	1	7	7 to 8	6.54	36.37	6.78	36.13	5.73	37.18	6.53	36.38	5.00	37.91
WE-16	8	42.49	43.06	1	7	7 to 8	5.73	37.33	6.39	36.67	4.82	38.24	5.96	37.10	4.75	38.31
WE-17	8	43.08	43.46	1	7	7 to 8	5.73	37.73	6.04	37.02	4.97	38.49	5.86	37.60	4.81	38.65
WE-18	8	42.72	43.17	5	3	3 to 8	NM	NM	3.08	40.09	NM	NM	4.28	38.89	3.85	39.32
WE-19	8	42.56	43.17	1	7	7 to 8	4.87	38.30	4.59	38.58	4.77	38.40	5.25	37.92	4.89	38.28
WE-20	8	42.50	42.38	1	7	7 to 8	NM	NM	NM	NM	NM	NM	NM	NM	6.26	36.12
WE-21	8	42.41	42.95	1	7	7 to 8	NM	NM	NM	NM	NM	NM	7.27	35.68	7.43	35.52

# Table 3.4 Summary of Piezometer and Groundwater Data

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			Top of	Well			June 2	2002	July	2001	April	2000	Octobe	er 1999	April 1999	
Well Number	Well Depth	Surface Elevation	Casing Elevation	Screen Length	Riser Length	Well Screen Depth Interval	Depth to Water From TOC	Groundwater Elevation								
WE-22	10	42.55	43.11	5	5	5 to 10	NM	NM	NM	NM	8.59	34.52	8.66	34.45	8.62	34.49
WE-23A	8	42.19	42.10	1	7	7 to 8	7.14	34.96	NM	NM	7.19	34.99	7.29	34.81	7.17	34.93
WE-23B	16	42.19	42.21	1	15	15 to 16	7.17	35.04	NM	NM	6.97	35.24	7.03	35.18	7.96	34.25
WE-24	9	42.38	42.87	2	7	7 to 9	NM	NM	NM	NM	NM	NM	7.84	35.03	7.94	34.93
WE-25	7.3	42.20	42.72	1	6.3	6.3 to 7.3	10.12	32.60	7.16	35.56	7.02	35.70	7.04	35.68	6.73	35.99
WE-26	8	42.00	41.99	1	7	7 to 8	NM	NM	NM	NM	5.98	36.01	6.04	35.95	5.36	36.63
WE-27	8	42.20	42.98	2	4	4 to 6	5.94	37.04	6.19	36.79	6.20	36.78	6.15	36.83	6.05	36.93
WE-28	8	42.50	42.75	I	7	7 to 8	NM	NM	NM	NM	NM	NM	6.17	36.58	5.70	37.05
WE-29	8	42.10	43.17	2	6	6 to 8	4.90	38.27	4.89	38.28	5.03	38.14	4.59	38.58	3.44	39.73
WE-30	8	41.85	40.94	2	6	6 to 8	NM	NM	NM	NM	5.05	35.89	5.15	35.79	1.26	40.94
WE-31	8	42.02	42.27	2	6	6 to 8	NM	NM	NM	NM	5.26	37.01	5.28	36.99	4.85	40.94
WE-32	8	42.16	41.43	5	5	3 to 8	NM	NM	NM	NM	5.12	36.31	5.34	36.09	4.20	37.73
SO-01	9	45.24	45.37	Prove	8	8 to 9	7.12	38.25	7.01	38.36	NM	NM	7.17	38.20	6.80	38.57
SO-02	8	43.42	44.73	ł	7	7 to 8	5.05	39.68	5.40	39.33	5.40	39.33	6.30	38.43	6.27	38.46
SO-03	8	43.75	43.93	1	7	7 to 8	NM	NM	NM	NM	6.70	37.23	6.98	36.95	7.13	36.80
SO-04A	8	42.40	43.10	1	7	7 to 8	7.11	35.99	7.13	35.97	6.71	36.39	6.73	36.37	3.26	39.84
SO-04B	16	42.40	43.08	5	11	11 to 16	NM	NM	6.14	36.94	5.78	37.30	6.25	36.83	5.98	37.10
SO-05	8	42.52	42.64	1	7	7 to 8	6.54	36.10	6.99	35.65	NM	NM	6.24	36.40	NM	NM
SO-06	7	NA	42.08	l	6	6 to 7	NM	NM	NM	NM	NM	NM	6.45	35.63	4.14	37.94
SO-07	12	43.12	42.87	5	7	7 to 12	NM	NM	NM	NM	NM	NM	8.25	34.62	7.89	34.98
SO-08	8	40.09	39.44	I	7	7 to 8	NM	NM	NM	NM	NM	NM	NM	NM	5.71	33.73
EW-01	8	43.30	43.87	5	3	5 to 10	DRY	NM	DRY	NM	NM	NM	DRY	NM	NI	NI
EW-02	10	40.30	48.78	5	5	5 to 10	NM	NM	NM	NM	5.07	43.71	11.69	37.09	NI	NI
EW-03	8.3	38.58	38.30	5	3.3	3.3 to 8.3	NM	NM	NM	NM	NM	NM	3.53	34.77	NI	NI
EW-04	10.75	42.30	43.41	5	5.35	5.35 to 10.75	8.03	35.38	7.93	35.48	NM	NM	7.68	35.73	NI	NI
EW-05	10.7	42.60	42.60	5	5.7	5.7 to 10.7	6.05	36.55	4.75	37.85	5.27	37.33	5.70	36.90	NI	NI
EW-06	10	42.50	43.14	5	5	5 to 10	4.05	39.09	NM	NM	NM	NM	4.16	38.98	NI	NI
EW-07	10.75	41.80	41.45	5	5.75	5.75 to 10.75	7.00	34.45	8.42	33.03	5.69	35.76	7.93	33.52	NI	NI
EW-08	8	38.40	38.13	5	3	3 to 8	3.86	34.27	3.89	34.21	3.89	34.24	3.99	34.14	NI	NI
EW-09	9.8	38.27	38.02	5	4.8	4.8 to 9.8	6.65	31.37	6.88	31.14	6.58	31.44	6.97	31.05	NI	NI

 Table 3.4

 Summary of Piczometer and Groundwater Data

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#### NOTES:

ELEVATIONS REFERRED TO CITY OF SYRACUSE DATUM. ADD 362.00 FEET TO OBTAIN USGS DATUM OF 1929. BENCHMARKS: (NOT SHOWN)

BM 164 (ELEV.=42.68) IRON BOLT AT NORTHEAST CORNER OF CONCRETE SLAB, APPROX. 80 FEET NORTH AND APPROX. 30 FEET EAST OF THE SOUTHEAST CORNER OF BUILDING TR-4.

BM 500 (ELEV.=44.87) CHISELED CROSS ON EAST NUT OF POSITION INDICATION VALVE, APPROX. 75 FEET NORTHWEST OF THE SOUTHWEST CORNER OF BUILDING TR-7 AND APPROX. 90 FEET NORTHEAST OF THE SOUTHEAST CORNER OF BUILDING TR-1.

11-16-90 GROUNDWATER SAMPLING PERFORMED AS PART OF AN INVESTIGATION CONDUCTED BY BLASLAND & BOUCH ENGINEERS, P.C. IN LATE 1990.

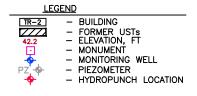
12-31-85 GROUNDWATER SAMPLING PERFORMED AS PART OF AN INVESTIGATION CONDUCTED BY DAMES & MOORE IN LATE 1985.

LATE 1985. ALL RESULTS ARE IN MICROGRAMS PER LITER (ug/L)1,1-DCA - 1,1-DICHLOROETHANE 1,1-DCE - 1,1-DICHLOROETHENE cis-1,2-DCE - cis-1,2-DICHLOROETHENE trans-1,2-DCE - trans-1,2-DICHLOROETHENE 1,2-DCA - 1,2-DICHLOROETHENE 1,1,1-TCA - 1,1,1-TRICHLOROETHANE 1,1,2-TCA - 1,1,2-TRICHLOROETHANE 1,1,2-TCA - 1,1,2-TRICHLOROETHANE TCE - TRICHLOROETHENE MC - METHYLENE CHLORIDE VC - VINYL CHLORIDE NA - NOT ANALYZED ND - NOT REPORTED ABOVE METHOD DETECTION LIM

ND - NOT SAMPLED ABOVE METHOD DETECTION LIMITS NS - NOT SAMPLED J VALUE INDICATES RESULTS ESTIMATED FROM LABORATORY

LOCATIONS OF MONITORING WELLS MW-1 AND MW-5 ARE APPROXIMATE.

MONITORING WELL	IDENTIFICATION KEY
FORMER WELL	NEW WELL
IDENTIFICATION	IDENTIFICATION
MW-99-01	MW-10
MW-99-02	MW-11
MW-99-03	MW-12
MW-99-04	MW-13D
MW-00-5S	MW-14
MW-00-5D	MW-14D
MW-00-06	MW-15D
MW-00-BG	MW-16D



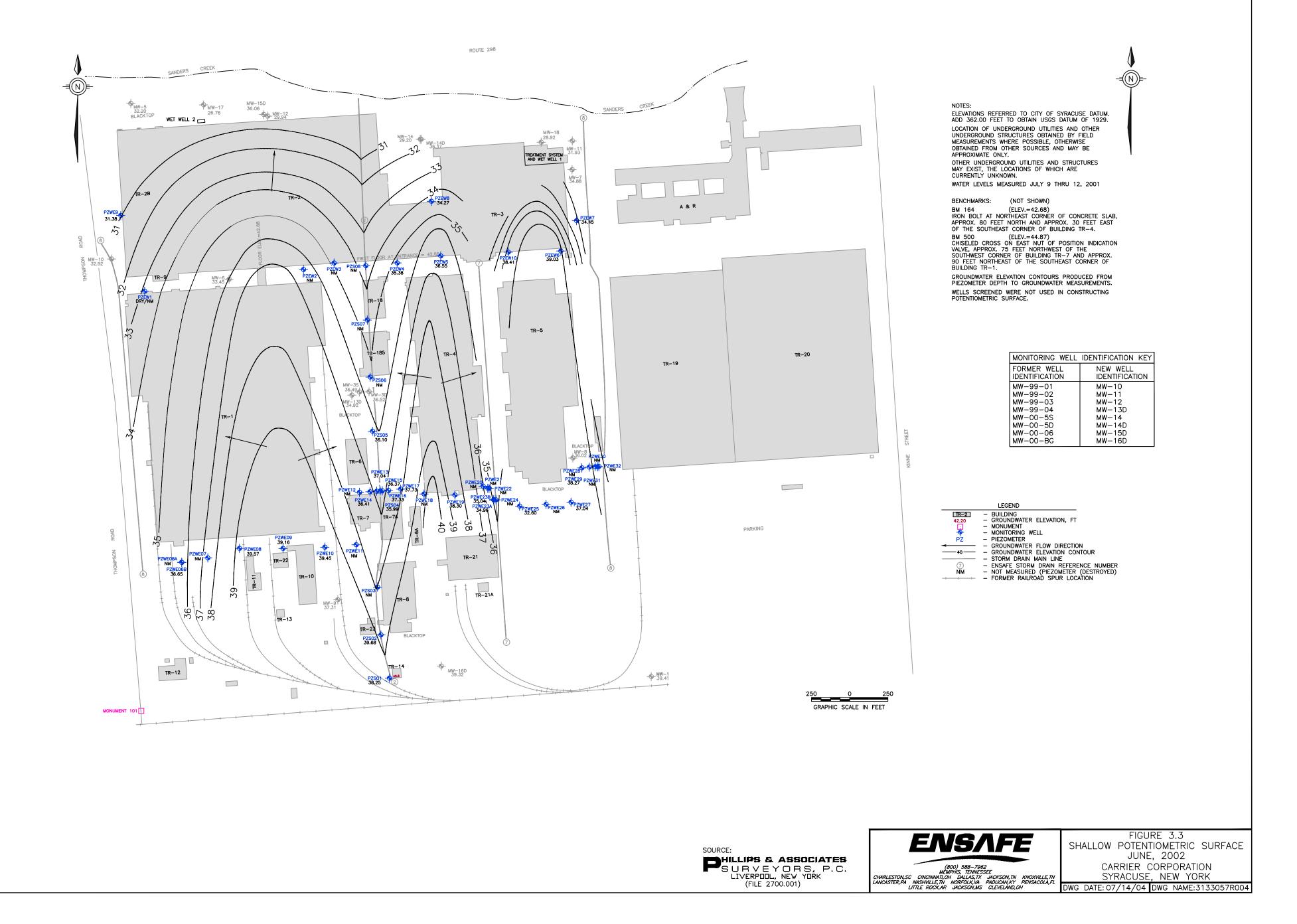
250 250 0

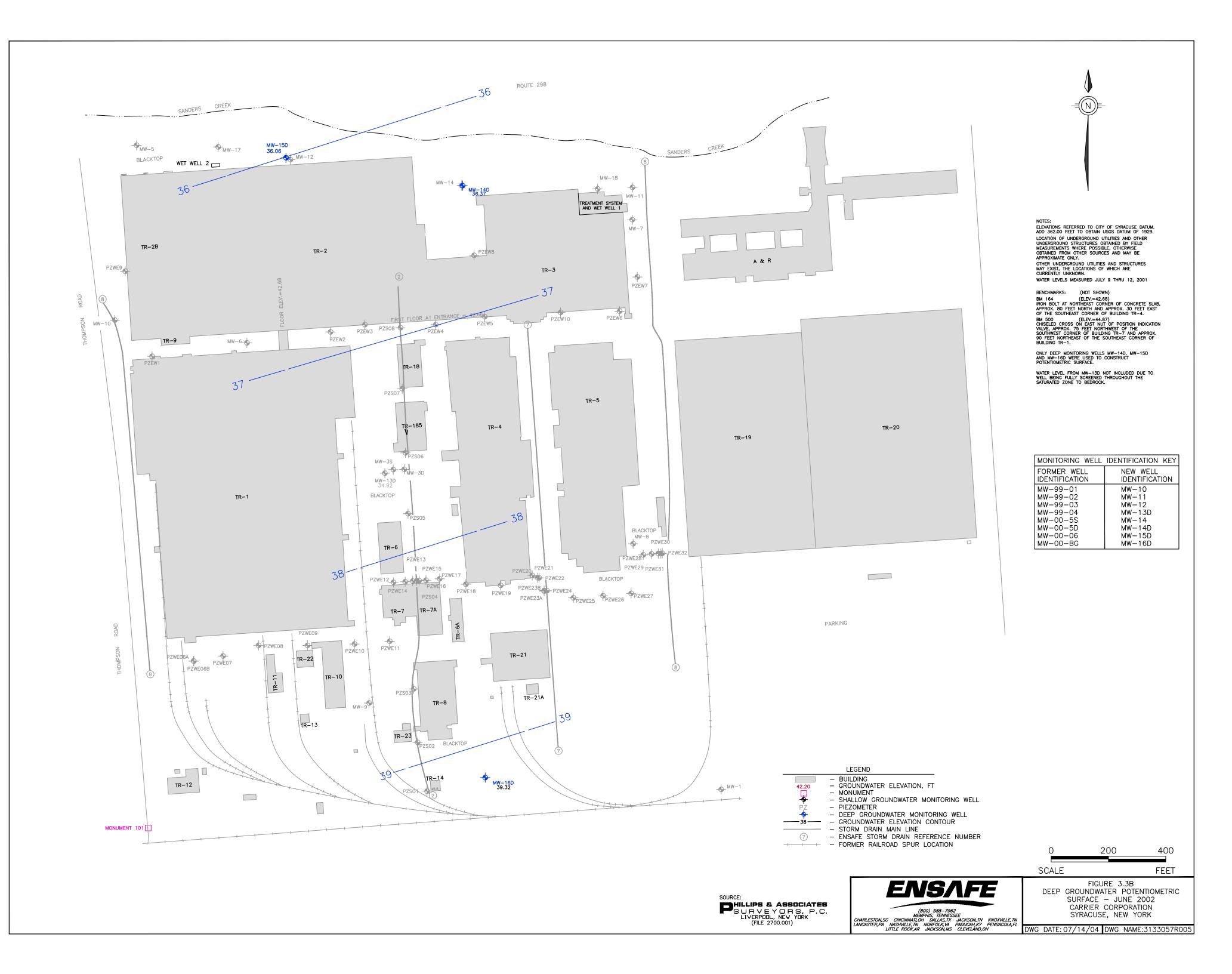
GRAPHIC SCALE IN FEET

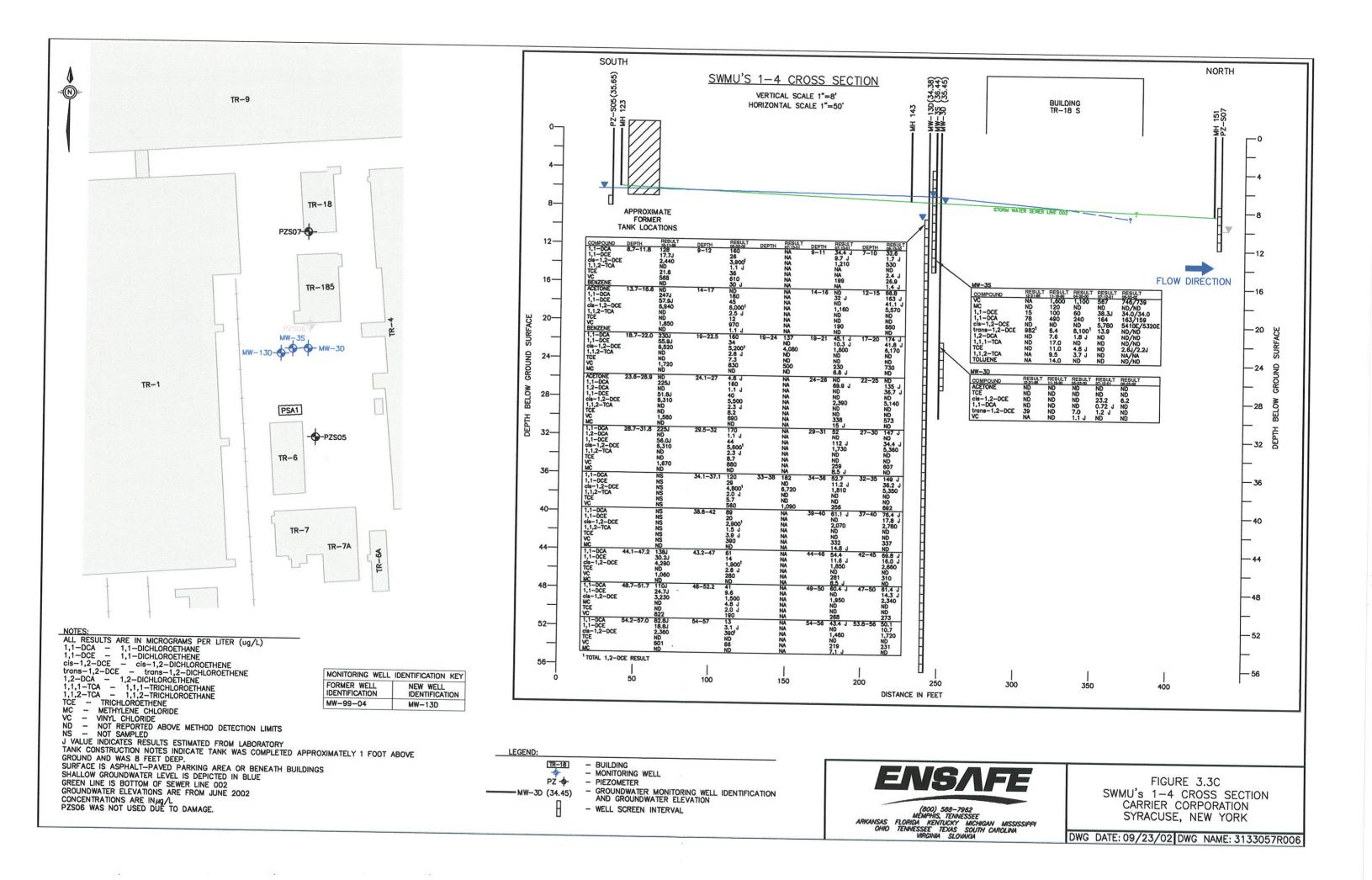
SOURCE: PHILLIPS & ASSOCIATES SURVEYORS, P.C. LIVERPOL, NEW YORK (FILE 2700.001)

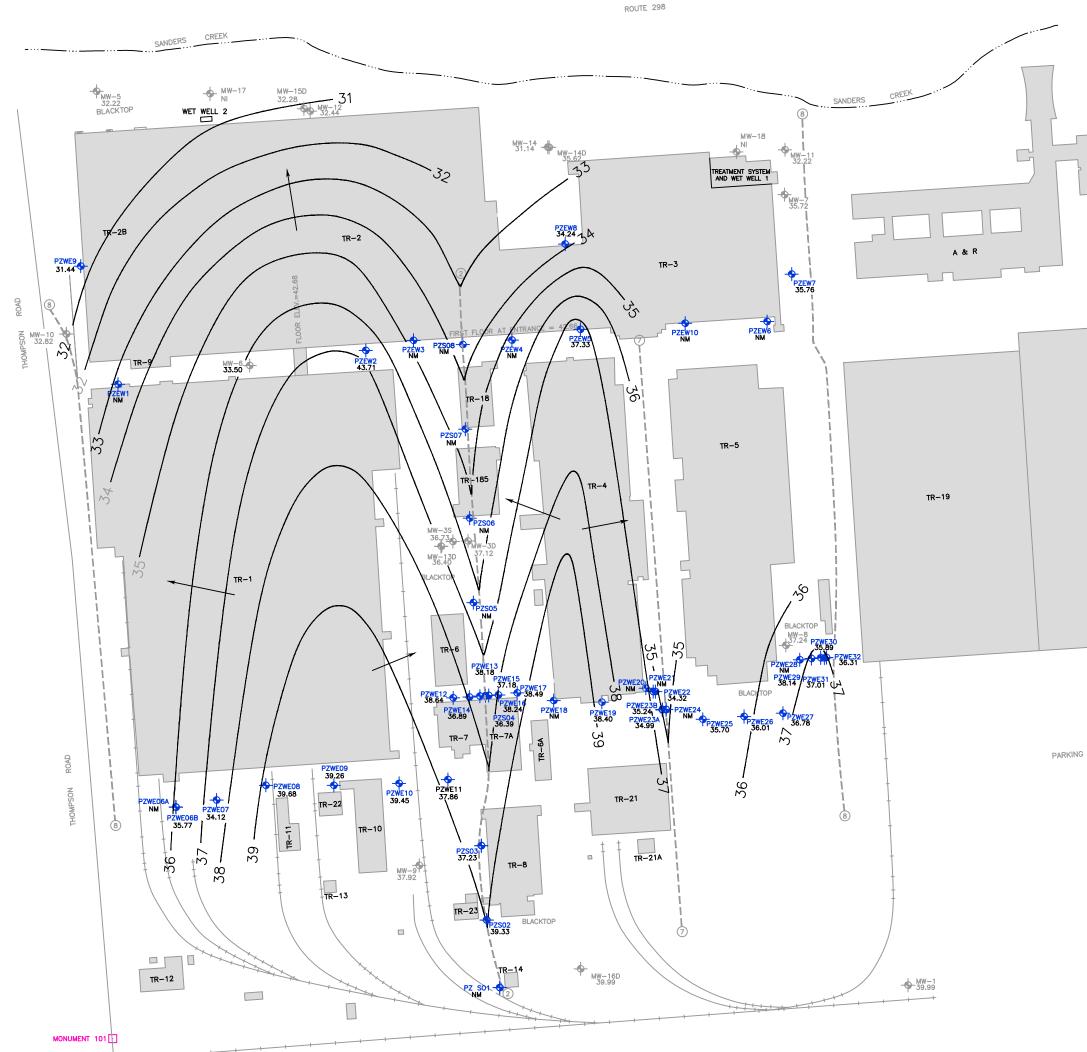


FIGURE 3.2 VOCs IN GROUNDWATER 2002 CARRIER CORPORATION SYRACUSE, NEW YORK DWG DATE: 07/14/04 DWG NAME:3133057R003











#### NOTES:

ELEVATIONS REFERRED TO CITY OF SYRACUSE DATUM. ADD 362.00 FEET TO OBTAIN USGS DATUM OF 1929. LOCATION OF UNDERGROUND UTILITIES AND OTHER UNDERGROUND STRUCTURES OBTAINED BY FIELD MEASUREMENTS WHERE POSSIBLE, OTHERWISE OBTAINED FROM OTHER SOURCES AND MAY BE APPROXIMATE ONLY. OTHER UNDERGROUND UTILITIES AND STRUCTURES MAY EXIST, THE LOCATIONS OF WHICH ARE CURRENTLY UNKNOWN. WATER LEVELS MEASURED APRIL 17, 2000

BENCHMARKS: (NOT SHOWN) BM 164 (ELEV.=42.68) IRON BOLT AT NORTHEAST CORNER OF CONCRETE SLAB, APPROX. 80 FEET NORTH AND APPROX. 30 FEET EAST OF THE SOUTHEAST CORNER OF BUILDING TR-4. BM 500 (ELEV.=44.87) CHISELED CROSS ON EAST NUT OF POSITION INDICATION VALVE, APPROX. 75 FEET NORTHWEST OF THE SOUTHWEST CORNER OF BUILDING TR-7 AND APPROX. 90 FEET NORTHEAST OF THE SOUTHEAST CORNER OF BUILDING TR-1.

WELLS SCREENED GRAY WERE NOT USED IN CONSTRUCTING POTENTIOMETRIC SURFACE.

MONITORING WELL	IDENTIFICATION KEY
FORMER WELL	NEW WELL
IDENTIFICATION	IDENTIFICATION
MW-99-01	MW-10
MW-99-02	MW-11
MW-99-03	MW-12
MW-99-04	MW-13D
MW-00-55	MW-14
MW-00-50	MW-14D
MW-00-06	MW-15D
MW-00-BG	MW-16D

	LEGEND
	- BUILDING
42.20	<ul> <li>ELEVATION, FT</li> </ul>
· ·	– MONUMENT
	<ul> <li>MONITORING WELL</li> </ul>
ΡŻ	<ul> <li>PIEZOMETER</li> </ul>
←	<ul> <li>GROUNDWATER FLOW DIRECTION</li> </ul>
<b>4</b> 0	- GROUNDWATER ELEVATION CONTO
	- STORM DRAIN MAIN LINE
7	<ul> <li>ENSAFE STORM DRAIN REFERENCI</li> </ul>
•	NUMBER
NM	<ul> <li>NOT MEASURED</li> </ul>
NI	- WELL NOT INSTALLED AT THIS TIN
++	- FORMER RAILROAD SPUR LOCATIO





TR-20

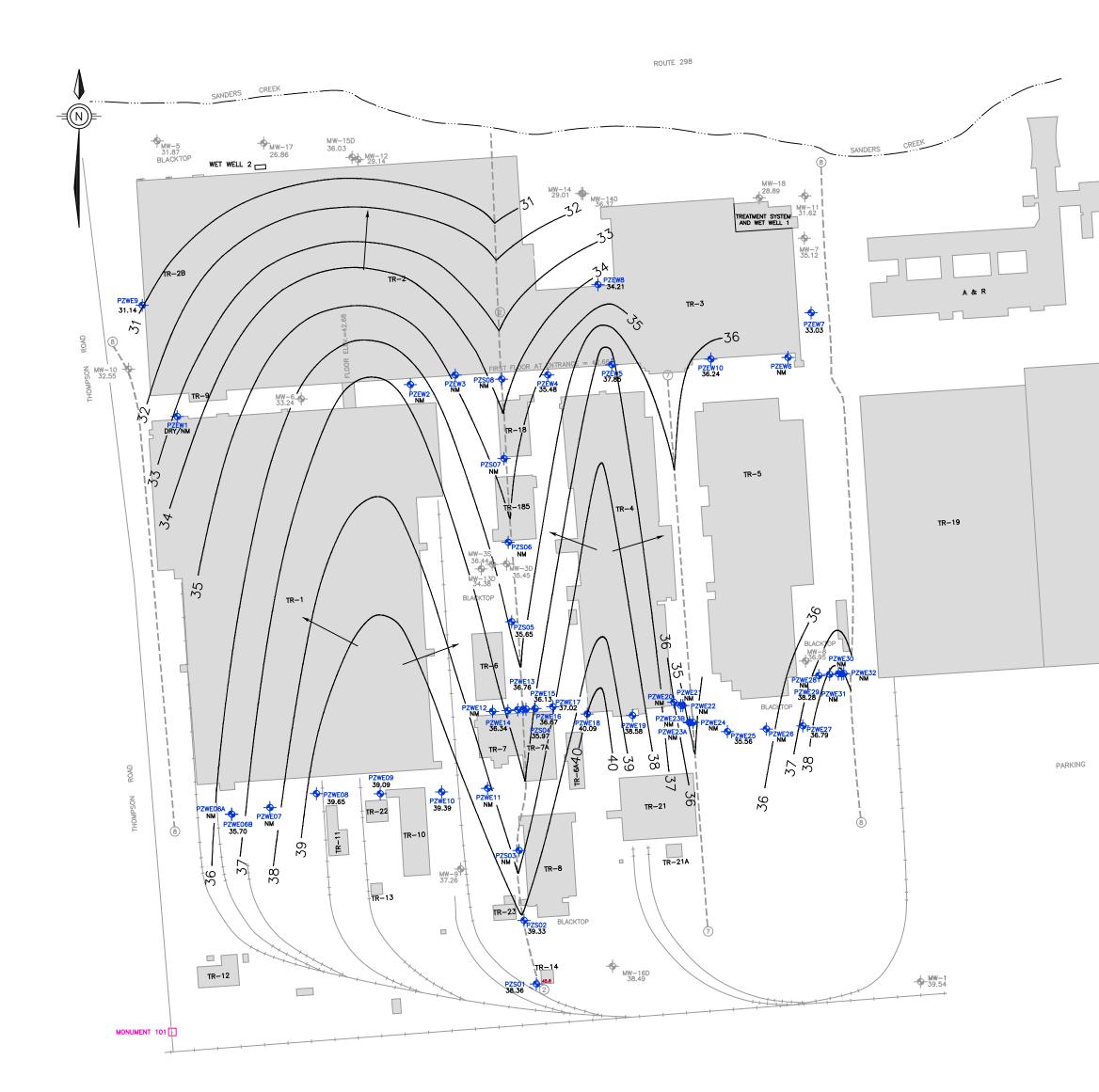


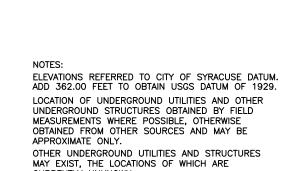
FIGURE 3.4 POTENTIOMETRIC SURFACE MAP APRIL, 2000 CARRIER CORPORATION SYRACUSE, NEW YORK DWG DATE: 09/27/02 DWG NAME:3133057R009

#### June 2002 Investigation and Sampling

As part of the most recent investigation, continued sampling of wells in the SWMU 1 through 4 area was performed. Table 3.3 and Figure 3.2 show the analytical results from the June 2002 RFI sampling, as well as recent historic sampling at the facility. A copy of the laboratory analytical data sheets is included in Appendix B. As illustrated in Figure 3.2, the June 2002 results are consistent with previous historic sampling results, especially near SWMUs 1 to 4.

Depth to groundwater data are summarized in Table 3.4. The piezometers without measurements had been damaged due to snow removal and other activities at the Carrier facility. The potentiometric surface developed from June 2002 depth-to-water measurements is included as Figure 3.3. In addition, a deep groundwater potentiometric map, presented as Figure 3.3B, was generated based on depth-to-groundwater measurements from wells screened over the 10-foot interval immediately above the top of bedrock at the facility. The July 2001 shallow groundwater potentiometric surface (Figure 3.3D) and the July 2001 deep groundwater potiotometric surface maps (Figure 3.3E) are included as a basis for comparison, as is the April 2000 shallow potentiometric surface (Figure 3.4). Flow directions and water quality data for 2002 were consistent with previous observations for the historical wells. Shallow groundwater flow continues to be toward the storm sewers across the site. This direction varies, and can be to the west, northwest, north, and northeast depending on the specific location. However, in general, the shallow groundwater flow is to the north toward Sanders Creek. Deep groundwater across the site flows to the north-northwest.





CURRENTLY UNKNOWN. WATER LEVELS MEASURED JULY 9 THRU 12, 2001

#### BENCHMARKS: (NOT SHOWN)

BM 164 (ELEV.=42.68) IRON BOLT AT NORTHEAST CORNER OF CONCRETE SLAB, APPROX. 80 FEET NORTH AND APPROX. 30 FEET EAST OF THE SOUTHEAST CORNER OF BUILDING TR-4.

BM 500 (ELEV.=44.87) CHISELED CROSS ON EAST NUT OF POSITION INDICATION VALVE, APPROX. 75 FEET NORTHWEST OF THE SOUTHWEST CORNER OF BUILDING TR-7 AND APPROX. 90 FEET NORTHEAST OF THE SOUTHEAST CORNER OF BUILDING TR-1.

GROUNDWATER ELEVATION CONTOURS PRODUCED FROM PIEZOMETER DEPTH TO GROUNDWATER MEASUREMENTS. WELLS SCREENED WERE NOT USED IN CONSTRUCTING POTENTIOMETRIC SURFACE.

MONITORING WELL	IDENTIFICATION KEY
FORMER WELL	NEW WELL
IDENTIFICATION	IDENTIFICATION
MW-99-01	MW-10
MW-99-02	MW-11
MW-99-03	MW-12
MW-99-04	MW-13D
MW-00-55	MW-14
MW-00-5D	MW-14D
MW-00-06	MW-15D
MW-00-BG	MW-16D



LEGEND – BUILDING – GROUNDWATER ELEVATION, FT MONUMENT
 MONITORING WELL
 PIEZOMETER 

 PZ
 PIEZOMETER

 GROUNDWATER FLOW DIRECTION

 GROUNDWATER ELEVATION CONTOUR

 STORM DRAIN MAIN LINE

 ⑦
 ENSAFE STORM DRAIN REFERENCE NUMBER

 NM
 NOT MEASURED (PIEZOMETER (DESTROYED)

 FORMER RAILROAD SPUR LOCATION



150 0

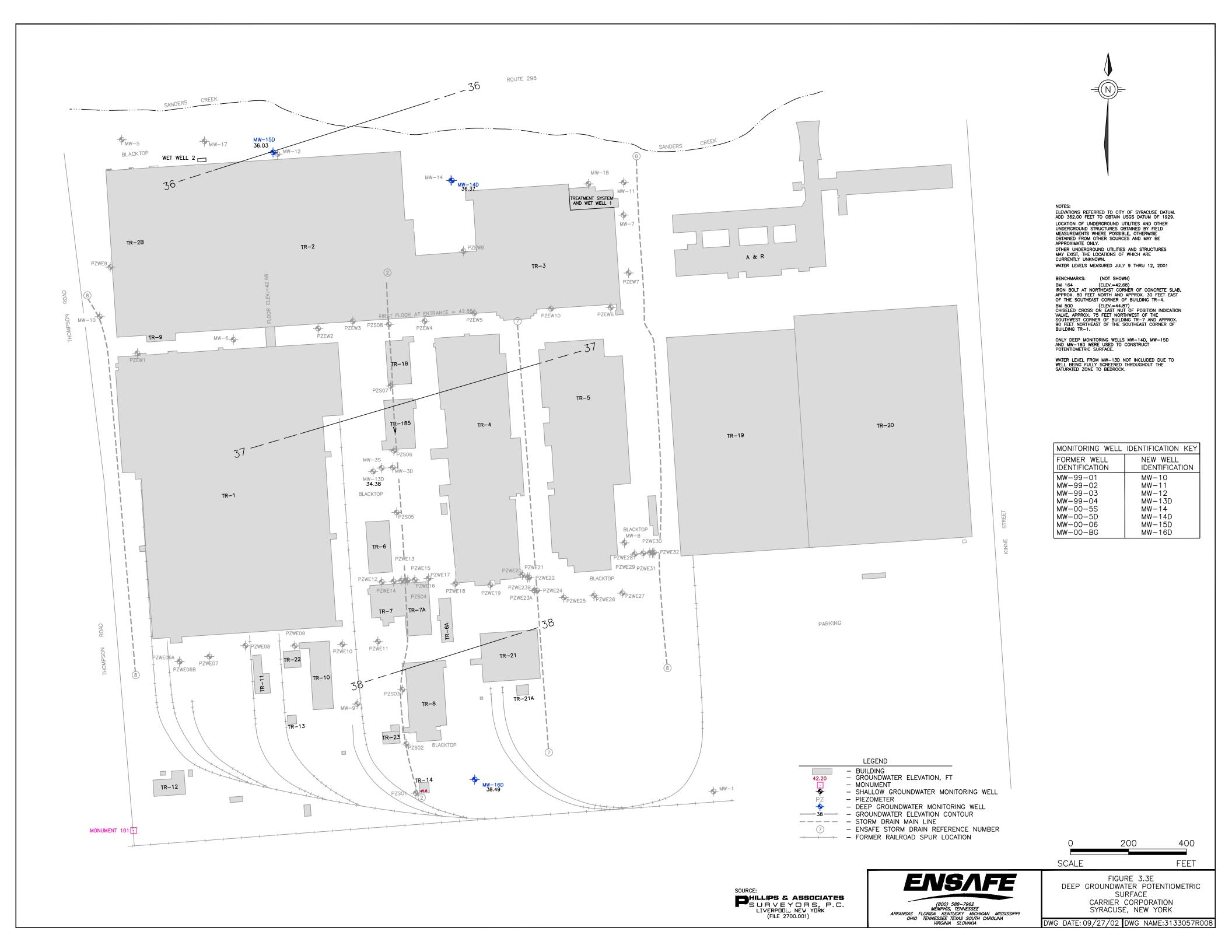
GRAPHIC SCALE IN FEET

150

TR-20



FIGURE 3.3D SHALLOW POTENTIOMETRIC SURFACE JULY, 2001 CARRIER CORPORATION SYRACUSE, NEW YORK DWG DATE: 09/23/02 DWG NAME: 3133057R007



## ENSAFE

### 3.2 Bedding Material beneath Sewer Lines

NYSDEC Comment 2: Demonstrate that offsite migration is not occurring through the storm sewers or through the bedding material beneath the sewer lines; or if this demonstration cannot be made, assess the nature and extent of any on-site or off-site contamination that has occurred.

The possible pathways for contaminated groundwater to migrate offsite are through the storm sewer system piping discharges or through groundwater flow. The *Release Assessment Report* (EnSafe, 2001) further details the previous investigations into the storm sewer (1999) and onsite groundwater quality at the northern property boundary (2000).

During the RFI, two groundwater monitoring wells were installed in the bedding material of the storm sewer lines leading to Outfalls 010 and 011. The wells (MW-17 and MW-18) were installed downgradient of Carrier's existing storm water collection system and air stripper treatment system, near the storm sewers' discharge point to Sanders Creek. MW-17 was installed south of Outfall 010 and MW-18 was installed south of Outfall 011. Both were installed by Parratt-Wolfe of Syracuse, New York, using hollow-stem auger drilling techniques. Soil samples were collected continuously by direct-push methods using 4-foot-long plastic sample sleeves inside macro-core rods. Logs of the monitoring well borings are presented in Appendix A.

In MW-17, fill and topsoil material were encountered to a depth of 2.5 feet bgs followed by coarse gravel consisting of angular limestone rock fragments to a depth of 11.5 feet bgs. A thin silt to clayey silt unit was encountered from 11.5 to 12 feet, which abruptly graded into coarse gravel from 12 to 14 feet bgs. Silt was encountered from 14 to 15 feet bgs with a minor amount of perched water. The dry silt was in sharp contact with a tan wet silt to 15.5 feet bgs.

In MW-18, beneath the approximately 2-foot thick topsoil materials, coarse gravel composed of angular limestone rock fragments was intermixed with finer gravel and sand-sized material to the 15-foot bgs total depth of the well. The gravel became wet at approximately 10 feet bgs.

Both groundwater monitoring wells were constructed using stainless-steel components installed inside the hollow-stem augers. A 5-foot stainless steel, 0.010-inch slot screen with end cap was used as well as 10 feet of stainless steel riser in each well. A locking expansion cap was placed at the top of the riser. Filter sand was installed around the well materials from total depth to 2 feet above the top of the screen. A 2-foot thick seal of bentonite pellets was placed above the sand in each well. The bentonite pellets were hydrated with potable water and allowed to stand for at least four hours prior to continuing well construction activities. The remaining annular space was filled with a bentonite-cement grout mixture. Each well was finished flush with the ground surface using a bolt-down protective cover set to a depth of 2 feet bgs in a 2-foot by 2 foot by 2-foot concrete pad.

Both wells were developed until the water was visually clear and sampled the following day using techniques described above. Groundwater sample results (Appendix B) are summarized in Table 3.3 and shown on Figure 3.2. *cis*-1,2-DCE, *trans*-1,2-DCE, TCE, and vinyl chloride were detected in the samples collected from each well. Concentrations of *cis*-1,2-DCE, TCE, and vinyl chloride exceeded their New York State Ambient Water Quality Standards and Guidance Values/Principal Organic Contaminant Standards of 5 ug/L, 5 ug/L, and 2 ug/L, respectively, in both wells. *Trans*-1,2-DCE exceeded standard of 5 ug/L in MW-18.

Currently, the only wells impacted with VOC detections in the vicinity of the storm water lines are MW-17 and MW-18. MW-5, MW-12, MW-14, and MW-14D — along the northern Carrier property boundary in the vicinity of MW-17 — do not exhibit substantial concentrations of chlorinated solvents. These compounds were not detected in MW-5, MW-12, and only low concentrations of these compounds were detected in MW-15. Also, no detectable concentrations of VOCs were found in groundwater samples collected in the deep Hydropunch boring HP-02 near well MW-5.

Wells MW-07, MW-11, MW-14, MW-14D — located in the vicinity of well MW-18 — exhibit low to no dissolved concentrations of chlorinated solvents, as does the deep Hydropunch boring HP-04 near MW-12. No chlorinated solvents have been detected in MW-07, MW-11, or in the adjacent deeper Hydropunch boring HP-03. Farther west of MW-18, no solvents have been

detected in groundwater from deep monitoring well MW-14D and only low concentrations have been identified in shallow well MW-14. Low concentrations of chlorinated solvents were detected in the sample collected from the shallow interval within the Hydropunch boring installed at this location (HP-05). No chlorinated solvents were detected in samples collected from deeper intervals in this boring.

The CMS report will evaluate as a remedy the collection and treatment of water found in the sewer line bedding material. Carrier currently operates a treatment system consisting of two air strippers with a maximum capacity 1,440,000 gpd (SPDES permit limit is 1.5 million gpd). This system is being used to treat storm water and groundwater that is collected by the site-wide network of storm sewers. The average daily flow in 2001 (as of September 2001) for both air strippers is 293,000 gpd, which includes rainfall days. Typical non-rainfall day flows range from 70,000 to 150,000 gpd. While it is not known the rate at which groundwater will be recovered from the bedding material at outfalls 010 and 011, it is anticipated that the existing treatment system will have sufficient capacity to accommodate these flows. An evaluation of expected recovery rates will be performed as part of remedy evaluation.

#### June 2002 Investigation and Sampling

No additional investigation was performed in this area as part of the June 2002 RFI activities. However, continued sampling of MW-17 and MW-18 was performed. Analytical data shows a significant decrease in contaminant concentrations over this sampling period. A brief summary of the contaminants found are presented below.

(all results in ug/L)										
Well Number	Date Sampled	acetone	cis-1,2-DCE	TCE	vinyl chloride					
MW-17	7-13-01	6.0	249	42.6	11.0					
	6-26-02	ND	ND	ND	ND					
MW18	7-13-01	ND	7,020	8,760	505					
	6-26-02	ND	2,770	5,580	233					

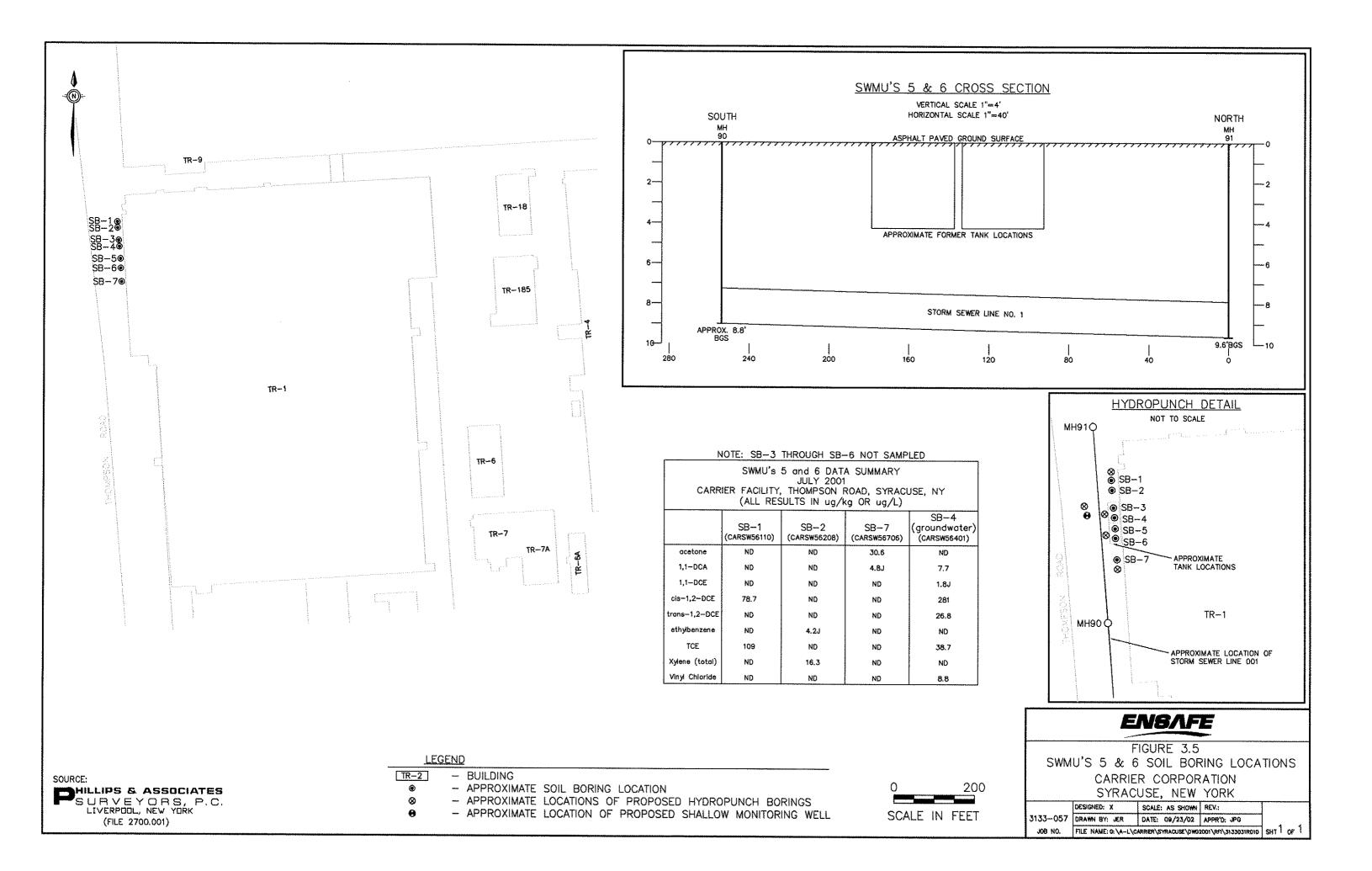
Summany of Contaminants Found at Outfalls 010 and 011

#### 3.3 SWMUs 5 and 6

NYSDEC Comment 3: The extent, nature and rate of migration of contamination beneath the former 8,000 gallon concrete Storage Tanks #1 and #2 (SWMUs 5 and 6) must be assessed.

As outlined in the RFI Work Plan, a direct push technology (DPT) investigation was proposed at these SWMUs with four to six DPT borings installed to groundwater in and around the tank-hold (Figure 3.5). Seven DPT borings were installed to groundwater or refusal as part of the RFI activities. In accordance with the approved work plan, soil samples were collected from three of the borings at depths estimated to be below the former tanks. Samples were analyzed for pH, cyanide, VOCs, and the metals identified in Carrier's SPDES permit copper, lead, manganese, and nickel.

Two soil borings (SB-1 and SB-2) were installed and sampled continuously to groundwater north (immediately downgradient) of the former tank location. Groundwater was encountered at approximately 8 to 10 feet bgs at these two locations. Additional soil borings SB-3 to SB-6 were installed south of the initial two borings. During drilling, refusal was encountered at approximately 6 feet bgs and a perched water zone — thought to be the water collected by the former tank-hold — was identified in all four borings. This refusal may represent the bottoms of the former concrete tanks, indicating the tanks may have been left in place and backfilled with fill material. A sample of the perched "groundwater" was collected from SB-4 at the direction of Mr. Tim DiGiulio, who provided oversight for the NYSDEC. Boring SB-7, located immediately south of the former tanks, was installed and sampled continuously to groundwater (approximately 10 feet bgs). Following the work plan protocols, one soil sample was collected from borings SB-1, SB-2, and SB-7 from the 2-foot interval above the first indication of groundwater. The groundwater sample collected from SB-4 was submitted for the same analyses as the soil samples.



**VOCs and Metals in Soil** – The VOC results from SWMUs 5 and 6 are summarized in Table 3.5 and on Figure 3.5. None of the VOCs detected in soils exceeded the New York soil cleanup objectives protective of groundwater. Except for copper (SB-2) and nickel (SB-7), none of the metals exceeded the New York soil cleanup objectives. The New York soil cleanup objectives for lead and manganese are site background values, which have not been established at the Carrier facility. However, the metals concentrations detected at SWMUs 5 and 6 as part of the preliminary investigation were below the USEPA Region 9 Preliminary Remediation Goals (PRGs) for both industrial and residential soils (see Table 3.5).

#### June 2002 Investigation and Sampling

Background Soil Metals – A soil sampling program was initiated in June 2002 to establish background concentrations of selected metals in soils at the Carrier Thompson Road facility. related to soil sampling conducted in July 2001 at SWMUs 5 and 6. Four locations within the facility boundaries, BG-01 to BG-04, were sampled (Figure 3.5B). These locations were selected by Carrier personnel and estimated to be free of impact from Carrier's industrial activities. All utilities at each location were cleared with Carrier facility personnel as well as individual utility providers prior to initiating the investigation. The borings were installed using a tractor-mounted direct-push technology (DPT) drilling rig. Two samples from each of the four borings were collected: one sample at the 0 to 2 foot interval and another at the 6 to 8 foot depth interval. NYSDEC approved the locations and sampling depth during their site visit. Follow-up correspondence dated July 10, 2002, from Mr. Bill Penn (UTC) to Mr. Larry Rosenmann (NYSDEC), confirmed agreement on sampling locations, depth, and number of samples. Samples were collected and shipped via overnight courier using chain-of-custody procedures to Accutest Laboratories in Dayton, New Jersey and analyzed using United States Environmental Protection Agency (USEPA) method SW-846 6010 for total arsenic, copper, iron, lead, manganese, and nickel. Analytical results are summarized in Table 3.5B below. The concentrations of all metals analyzed in the July 2001 investigation were within the range of site background values established for the site.



	Table 3.5         SWMU 5 and 6 Soils and Groundwater Analytical Data         (soil in mg/kg; groundwater in ug/l)												
	Copper	Lead <sup>1</sup>	Manganese	Nickel	Arsenic	Iron	pH	1,1-DCA	cis-1,2-DCE	trans-1,2- DCE	TCE	Vinyl Chloride	
Region 9 PRGs (Residential/Ind ustrial)	2,900/76,000	400/1,000	1,800/32,000	1,600/41,000									
NY soil cleanup objective	25.5	Site backgrou nd	Site background	13									
Site Background (6 to 8 ft interval)	15.1 to 27.1	3.6 to 9.4	254 to 780	10.0 to 26.4									
Naturally occurring in NY soils	<del>3.0 to 70</del>	ND to 50	<del>2 to 7,000</del>	ND to 30					_				
Naturally occurring in US soils	<del><i 700<="" del="" to=""></i></del>	<del>&lt;10 to</del> <del>300</del>	< <del>2 to 7,000</del>	< <del>5 to 700</del>					_				
SB-1	15.9	3.7	308	10.7									
SB-2	25.7	3.4	525	8.9						—			
SB-7	23.6	9.2	312	23.3									
Background Monitoring Well (MW-1)		<3		<40				ND	ND	ND	ND	ND	
SB-4 (gw)		13.1	4,600	272	5.2	29,000	11.1	7.7	281	26.8	38.7	8.8	

1 Appendix A of <u>TAGM #4046</u>; TABLE 4 - Recommended soil cleanup objectives (mg/kg or ppm) Heavy Metals: Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan o suburban areas or near highways are much higher and typically range from 200-500 ppm.



background son metals Concentrations											
Sample Identification	Depth Interval	Arsenic	Copper	Iron	Lead	Manganese	Nickel				
CARSBG0100	0 to 2	3.2	12.4	25,500	8.4	377	17.4				
CARSBG0106	6 to 8	6.2	27.1	19,700	9.4	780	26.4				
CARSBG0200	0 to 2	4.3	49.0	10,000	20.4	248	11.2				
CARSBG0206	6 to 8	4.4	25.0	18,400	7.3	418	19.7				
CARSBG0300	0 to 2	3.8	26.6	25,200	9.3	410	25.6				
CARSBG0306	6 to 8	2.5	16.7	10,800	3.6	254	10.2				
CARCBG0306	6 to 8	5.2	23.2	16,600	6.0	426	22.0				
CARSBG0400	0 to 2	5.2	28.7	24,500	9.8	1,150	31.3				
CARSBG0406	6 to 8	2.0	15.1	13,200	4.1	384	10.0				
Range of Conc.	0 to 2	3.2 to 5.2	12.4 to	10,000 to	8.4 to 20.4	248 to 1,150	11.2 to				
			49.0	25,500		-	31.3				
Range of Conc.	6 to 8	2.0 to 6.2	15.1 to	10,800 to	3.6 to 9.4	254 to 780	10.0 to				
			27.1	19,700			26.4				

# Table 3.5B Background Soil Metals Concentrations

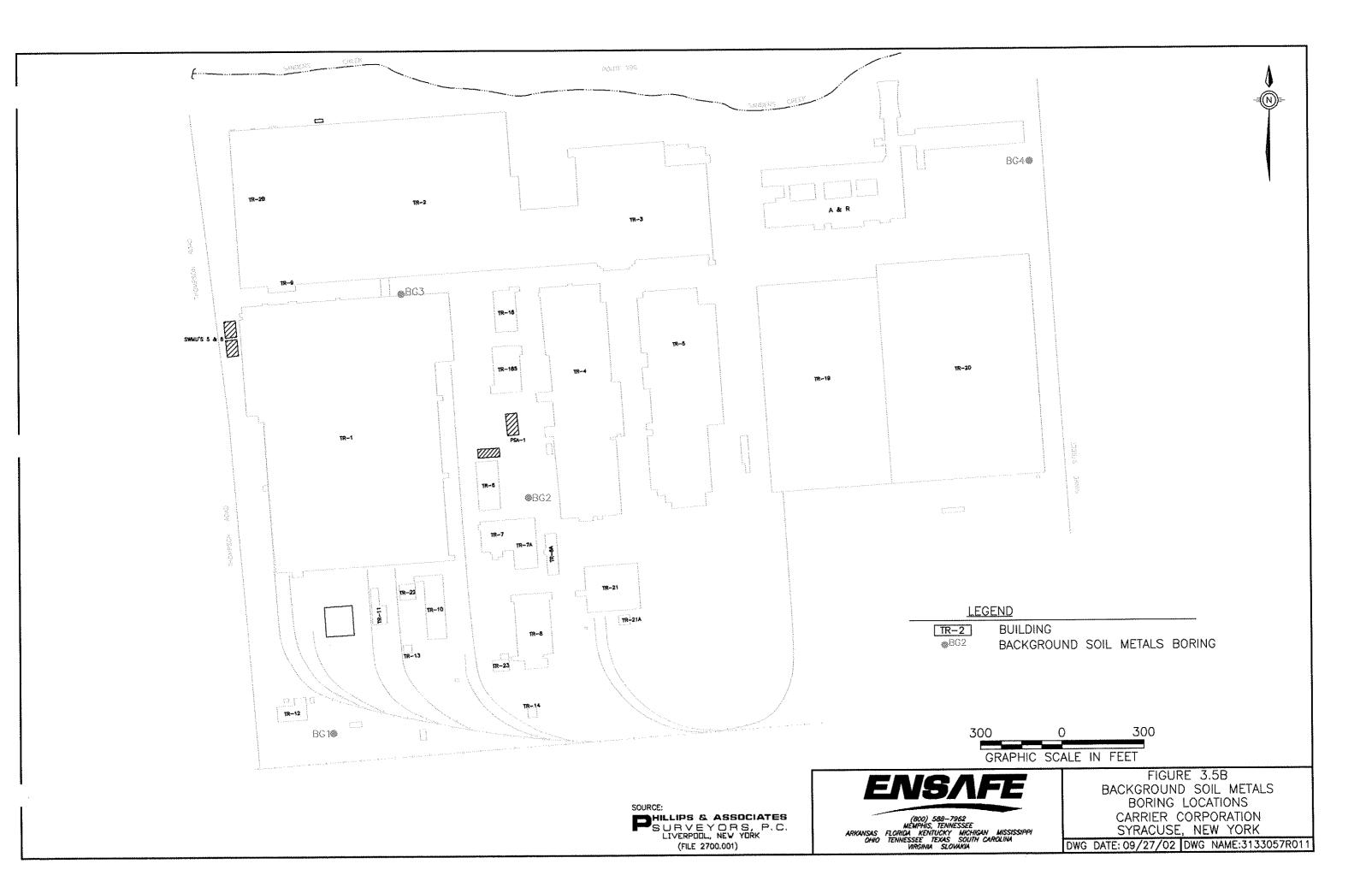
Notes:

All results are reported in milligrams per kilogram (mg/kg)

Depth interval range is in feet below ground surface (bgs)

CARCBG0306 – Duplicate sample

SB – Site Background



The four background soil borings generally consisted of stiff, brown clayey silts with traces of fine-grained sand. Samples were moist to wet when collected. The analytical results indicate the range of metals concentrations for the background soil borings are consistent with the metals concentrations found in DPT borings SB-1, SB-2 and SB-7 from SWMUs 5 and 6. Concentrations for copper, lead, manganese, and nickel from SB-1, SB-2, and SB-7 are within the range of concentrations detected in the background soil borings and are considered background levels. Based on the laboratory analytical results from the background soil samples, no further action is deemed necessary for metals in the site soils at SWMUs 5 and 6.

**VOCs and Metals in Groundwater** –A perched "groundwater" sample from a depth of 2 feet bgs was collected from boring SB-4 and contained the VOCs 1,1-DCE at 1.8J  $\mu$ g/L, *cis*-1,2-DCE at 281  $\mu$ g/L, *trans*-1,2-DCE at 26.8  $\mu$ g/L, TCE at 38.7  $\mu$ g/L, and vinyl chloride at 8.8  $\mu$ g/L. This sample is not a true "groundwater" sample, but likely represents water that collected in tank-hold that was trapped due to the higher permeability of the fill material. All constituents except 1,1-DCE exceed their respective New York State standards. However, concentrations of these VOCs in the perched water at this location are consistent with groundwater concentrations in other areas of the site.

The groundwater sample had a pH of 11.1 and contained several metals in dissolved concentrations: arsenic (5.2  $\mu$ g/L), iron (29,000  $\mu$ g/L), lead (13.1  $\mu$ g/L), manganese (4,600  $\mu$ g/L), and nickel (272  $\mu$ g/L). As the data indicate, the metals concentrations in the grab sample are higher in this sample than those of MW-1 – located southeast of the main developed area of the facility and considered a background monitoring well. The higher metals concentrations are partly attributed to the turbidity of the sample, which had a high fraction of suspended clay and silt-sized particles due to the nature of the backfill material in the borehole sampled.

The groundwater flow direction in this area of the facility was reviewed. Using the available groundwater elevation information from nearby shallow groundwater piezometers and monitoring wells, shallow groundwater flows northwest. Based on the information obtained during field investigations, the water perched in the former tanks/tank-hold has the potential to



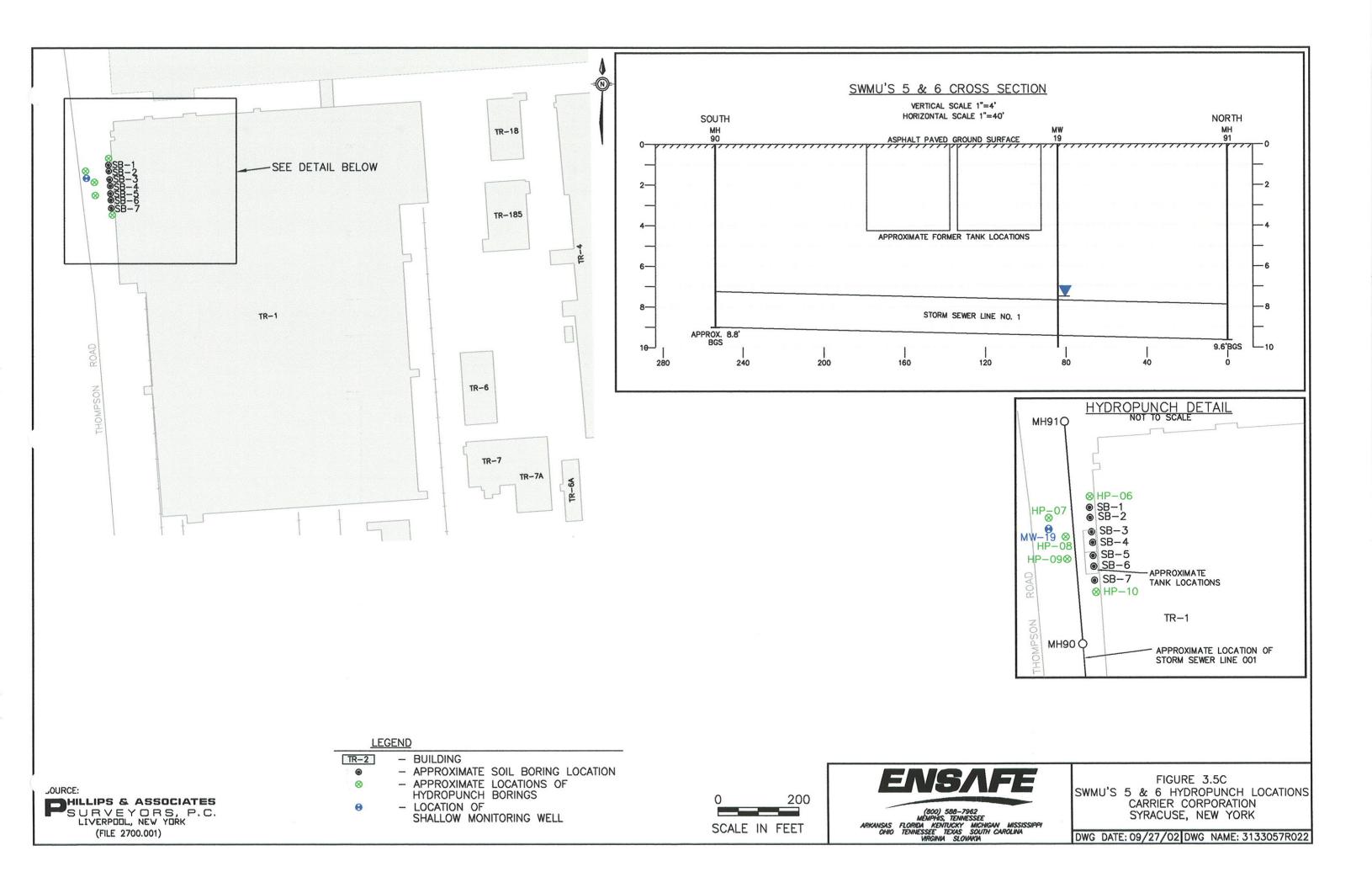
infiltrate into the storm sewer system (see Figure 3.5). During the DPT drilling program, refusal occurred at approximately 6 feet bgs, and it is thought that the tank bottoms were encountered. Sewer line 001 is west of the former tanks and is between 8 and 9 feet bgs in this area. The northwesterly flow direction of shallow groundwater and the depth of the storm sewer line make it likely that water infiltrating into the tanks/tank-hold is hydraulically connected to the groundwater at the storm sewer.

Carrier has investigated the groundwater at SMWUs 5 and 6 by installing two Hydropunch soil borings downgradient of the former tank locations, one Hydropunch boring upgradient from the former tank locations, and two Hydropunch soil boring adjacent to the former tank-hold (see Figure 3.5C). Groundwater was sampled every 10 feet in the Hydropunch boring and analyzed for VOCs. In addition to sampling for VOCs, a total and dissolved metals sample was collected from the five borings. Metals analyzed were the same as those analyzed in the previous investigation conducted at SWMUs 5 and 6 in July 2001.

#### June 2002 Investigation and Sampling

A shallow and intermediate depth groundwater investigation was implemented in June 2002 at SWMUs 5 and 6 as a result of a shallow soil investigation of these SMWUs in July 2001 which identified several metals in site soils along with low concentrations of VOCs in perched water samples.

Five soil borings (HP-06 through HP-10) of varying depths and one groundwater monitoring well were installed using hollow-stem auger drilling techniques at the SWMUs. Hydropunch borings were installed both downgradient and upgradient from the two former tank locations to determine if contaminants had migrated from the tanks and to determine the vertical profile of the contamination in this area, if present. Continuous split-spoon soil samples were described and logged during the drilling (boring logs in Appendix A), and groundwater samples were collected every ten feet to obtain a vertical profile of water quality to total depth. Groundwater samples were collected using Hydropunch sampling techniques. Groundwater was encountered between 4 and 8 feet bgs in the borings during drilling. Originally, all five borings were to be installed to the top of the bedrock; however, in a conference with Mr. Larry Rosenmann,



NYSDEC, on Monday June 24, 2002, the work plan for these SWMUs was modified to focus on the shallow groundwater. Follow-up correspondence dated July 10, 2002, from Mr. Bill Penn (UTC) to Mr. Larry Rosenmann (NYSDEC), confirmed agreement on Hydropunch locations, depth, and number of groundwater samples. Total sampling depths for the two downgradient borings (north and northwest of the former tanks) were modified to 34 feet bgs. Three groundwater samples were collected from these two borings; one sample each from approximately 10 to 14 feet bgs, 20 to 24 feet bgs, and 30 to 34 feet bgs. The total sampling depths of the remaining three borings (west and south of the former tank locations) were modified to 24 feet bgs. Two groundwater samples were collected using Hydropunch techniques from borings HP-08 and HP-09 from approximate depths of 10 to 14 feet bgs and 20 to 24 feet bgs. Three groundwater samples were collected using Hydropunch techniques from boring HP-08 and HP-09 from approximate depths of 10 to 14 feet bgs. Three groundwater samples were collected using Hydropunch techniques from boring HP-08 and HP-09 from approximate depths of 10 to 14 feet bgs. Three groundwater samples were collected using Hydropunch techniques from boring HP-08 to 24 feet bgs, 10 to 14 feet bgs, and 20 to 24 feet bgs.

All Hydropunch groundwater samples were collected and shipped via overnight courier using chain-of-custody procedures to Accutest Laboratories in Dayton, New Jersey. Each sample was analyzed for VOCs using USEPA SW-846 method 8260. In addition, after each boring was drilled a grab groundwater sample was collected for total and dissolved metals analysis using USEPA SW-846 method 6010. Metals analyzed include arsenic, chromium, iron, lead, manganese, nickel, and selenium.

One Hydropunch location (HP-07) was identified in the December 2001 RFI Investigation Report (EnSafe, 2001) for installation of a shallow groundwater monitoring well. The location was downgradient (northwest) of the former tanks, along Thompson Road. A separate borehole was drilled approximately seven feet south from the original Hydropunch location, and a groundwater monitoring well was installed.

The shallow groundwater well was constructed using a stainless steel riser and 0.010 slot stainless steel screen. A well screen 10 feet in length was installed. A sand filter pack extending from total depth to two feet above the top of the well screen was placed in the annular space between the screen and the borehole. A bentonite seal two feet thick was set on top of the sand pack and the remainder of the boring was grouted to the surface. The well was then completed with a flush mount, bolt-down steel protective casing and a two foot by two foot concrete pad. Groundwater data are presented in Table 3.2 and presented on Figure 3.2. Copies of laboratory data sheets are included in Appendix B.

Results indicate the northern-most Hydropunch boring HP-06 contains several VOCs in the shallow groundwater sample collected at 10 to 14 feet bgs (Table 3.3). The concentration of *cis*-1,2-DCE in this boring was the highest of all samples collected. TCE was also detected in this sample at the highest concentration of all five borings. 1,1-DCA and 1,1-DCE were also detected in the sample at much lower concentrations. The groundwater sample collected from approximately 20 to 23 feet bgs contained acetone – a common laboratory artifact – *cis*-1,2-DCE, and TCE. The deeper groundwater sample collected at 30 to 34 feet bgs contained only the laboratory artifact acetone. Based on these results, laboratory analytical results suggest that the TCE and *cis*-1,2-DCE detected in the uppermost sampling interval (10 to 14 ft. bgs) were quickly attenuated as concentration in the deeper two sampling intervals decreased dramatically.

Hydropunch boring HP-07 groundwater samples were non-detect for VOCs except for very low estimated concentrations of acetone and *cis*-1,2-DCE in the 10 to 14 feet bgs sample, and methylene chloride in the 20 to 24 feet bgs sample. All USEPA SW-846 method 8260 VOCs were non-detect in the 30 to 32 feet bgs groundwater sample collected from HP-07.

Very minor estimated concentrations of 1,1-DCA, *cis*-1,2-DCE, and TCE were detected in the groundwater sample collected from HP-08 at 14 to 17 feet bgs. The depth interval for samples collected from this boring were altered slightly due to the lack of water infiltrating the temporary screen over the 10 to 13 feet bgs interval. No VOCs were detected in the groundwater sample collected from the 21 to 24 feet bgs interval.

In HP-09, the groundwater sample collected from 10 to 14 feet bgs contained several VOCs including chloroform (estimated concentration), 1,1-DCA, 1,1-DCE, *cis*-1,2-DCE, 1,1,1-TCA, TCE, and vinyl chloride. In the 20 to 24 feet bgs groundwater sample, the VOCs detected included 1,1-DCA and 1,1-DCE (estimated concentrations), and *cis*-1,2-DCE and TCE at concentrations lower than detected in the overlying sample.

Several VOCs were identified in the shallow groundwater sample collected from 2 to 4 feet bgs in Hydropunch boring HP-10. A sample was collected from this perched groundwater interval due to an observed sheen on the 2 to 4 foot interval split spoon sample when retrieved from the boring. Table 3.2 shows concentrations of acetone (laboratory artifact), methyl ethyl ketone, chloroethane, 1,1-DCA, *cis*-1,2-DCE, *trans*-1,2-DCE, ethylbenzene, toluene, 1,1,1-TCA, TCE, vinyl chloride, and xylenes were identified in the sample. 1,1-DCA, 1,1-DCE, *cis*-1,2-DCE, TCE, vinyl chloride, and xylenes were identified in the 10 to 14 feet bgs interval (Table 3.3). Various compounds were identified in the 20 to 24 feet interval but their concentrations were estimated due to the concentrations being lower than the method detection limit for the sample. These compounds include acetone, 1,1-DCA, 1,1-DCE, and *cis*-1,2-DCE. TCE was also detected. Estimated concentrations of acetone, 1,1-DCA, and *cis*-1,2-DCE were identified in the duplicate sample collected from the 20 to 24 feet bgs interval at concentrations lower than detected in the overlying sample.

The trip blank, equipment blank, and field blanks associated with the Hydropunch samples contained minor concentrations of chloroform. The chloroform is thought to have originated from the water source used for these samples and is a by-product of the chlorination process.

Sample results from MW-19 identified estimated concentrations of chloroform, *cis*-1,2-DCE, and TCE. Concentrations of chloroform, *cis*-1,2-DCE, and TCE are below their respective NYSDEC Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitation of 7  $\mu$ g/L, 5  $\mu$ g/L, and 5  $\mu$ g/L, respectively.

Currently, the storm sewer lines located immediately west of the Hydropunch locations and east of MW-19 are exerting influence on the shallow groundwater in this area, as indicated by potentiometric surface maps of the facility (see *Release Assessment Report, January 17, 2000* for more information on influence of storm sewer system on shallow groundwater). The shallow groundwater flow direction is toward the storm sewer lines at SWMUs 5 and 6. Deep groundwater flows to the north-northwest across the site. The case for capture of shallow groundwater by the storm sewer is supported by the fact that low concentrations of facilityassociated VOCs were detected in newly installed well MW-19, immediately downgradient of

the former tanks and that facility-associated VOCs are non-detect in wells MW-10 and MW-6 downgradient of the SWMU 5 and 6 area.

#### **Metals in Groundwater Discussion**

Dissolved and total metals samples were collected from each Hydropunch boring installed at SWMUs 5 and 6. Metals samples were collected after the deepest groundwater sample was collected for VOC analysis and all drilling equipment was removed from the boring. No attempt was made to minimize the turbidity of the groundwater recovered as the study's focus was the comparison of total metals concentrations versus filtered (dissolved) metals concentrations in the groundwater of this area. Samples were collected using a dedicated disposable bailer and nylon cord. Samples were subsequently placed in laboratory-provided plastic containers which were preserved for total metals analysis and unpreserved for dissolved metals analysis. The laboratory filtered and subsequently preserved the dissolved metals sample after arrival.

In all five locations, the total metals sample contained the highest concentrations of each constituent; which is directly related to the turbidity of the collected sample. Samples were collected shortly after removing drilling equipment from the borehole which mobilized the silt and silty clay into suspension in the groundwater creating high turbidity in each of the samples. and samples were arsenic, chromium, iron, lead, manganese, and nickel were detected in the total metals sample from each boring (Table 3.5C). Concentrations of all these constituents from each of the borings are above their respective New York State Ambient Water Quality Standards and Guidance Values (NYSAWQSGV) for groundwater. The filtered or dissolved metals sample for the five locations displayed drastically reduced concentrations of each constituent. Arsenic (HP-06 and HP-10), iron (HP-06 and HP-10), lead (HP-06), and manganese (HP-06 through HP-10) were detected in the filtered samples at low concentrations (Table 3.5C). All arsenic concentrations in the filtered samples are well below the New York State Ambient Water Quality Standard and Guidance Value (NYSAWQSGV) of 25 µg/L for groundwater. Iron concentrations in HP-06 and HP-10 filtered samples are below the NYSAWQSGV of 300 µg/L. The lead detection in the filtered sample from HP-06 is below the NYSAWQSGV of 25 µg/L. Manganese in filtered samples from only borings HP-08 and HP-09 exceeds the NYSAWOSGV of 300 µg/L.

Results also indicate that total metals concentrations of chromium, iron, lead, and manganese were detected in MW-19 (Table 3.5C). Arsenic, nickel, and selenium concentrations were below method detection limits. Chromium and lead concentrations do not exceed their respective NYSAWQSGVs. Iron and manganese concentrations in MW-19 do exceed their respective NYSAWQSGVs. The sample collected from this well contained low turbidity and Carrier believes that the iron and manganese concentrations are inherent in the groundwater system at the site.

Carrier believes the groundwater metals issue at SWMUs 5 and 6 has been comprehensively studied and thus proposes no further recommendations for collecting groundwater samples for selected metals analysis at the site.

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					Table 3.5C		<b>v</b> .		
Hydro-	Lab	Sample	Hyd	ropunch Groui	ndwater Metals	Analytical Resu	lits		
punch ID	Sample ID	Date	Arsenic	Chromium	Iron	Lead	Manganese	Nickel	Selenium
Hydropunch	CARGHP0601								
#6	(total)	6-25-02	811	2,560	3,990,000	2,160	182,000J	4,320	<250
	CARGHP0601								
	(dissolved	6-25-02	7.8	<10	115	3.5	59.8	<40	<5.0
Hydropunch	CARGHP0701								
#7	(total)	6-26-02	578	1,850	2,640,000	1,250	108,000	2,870	<130
	CARGHP0701								
	(dissolved)	6-26-02	<5.0	<10	<100	<3.0	130	<40	<5.0
Hydropunch	CARGHP0801								
#8	(total)	6-27-02	151	591	660,000	306	17,300	765	<20
	CARGHP0801								
	(dissolved)	6-27-02	<5.0	<10	<100	<3.0	1,360	<40	<5.0
Hydropunch	CARGHP0901								
#9	(total)	6-28-02	294	1,350	1,600,000	796	45,400	1,990	<25
	CARGHP0901								
	(dissolved)	6-28-02	<5.0	<10	<100	<3.0	1,380	<40	<5.0
Hydropunch	CARGHP1001								
#10	(total)	7-01-02	461	2,340	2,300,000	1,040	54,900	2,300	<100
	CARGHP1001								
	(dissolved)	7-01-02	6.8	<10	196	<3.0	144	<40	5.4
MW-19	CARGMW1901								
	(total)	6-28-02	<5.0	20.7	19,000	13.9	542	<40	<5.0
	CARGMW1901								
	(dissolved)	6-28-02	<5.0	<10	<100	<3.0	152	<40	<5.0

Notes:

All results are reported in micrograms per liter ( $\mu g/L$ ) Samples are grab samples from water infiltrating into Hydropunch boring after removal of drilling equipment.

BOLD indicates detections above method detection limits.

Filtered (or dissolved) metals samples were filtered and subsequently preserved at analytical laboratory.

#### 3.4 PSA-2

NYSDEC Comment 4: The extent and nature of contamination reported in the area of PSA-2, (Hydrogeologic Evaluation; Carrier Corporation, Syracuse New York January 1991 boring B-2) must be assessed. This should include an investigation into the possible origin of this contamination.

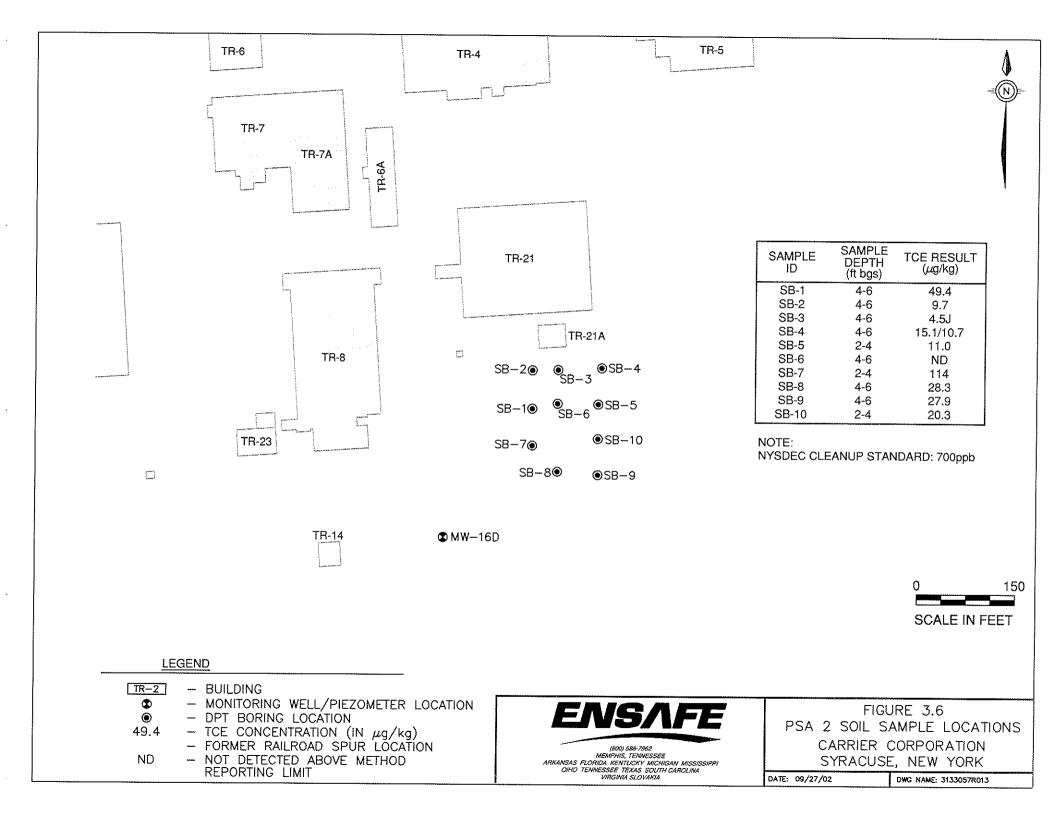
During a hydrogeologic evaluation conducted by Blasland, Bouck, and Lee, halogenated VOCs were found in soil boring B-2. This soil boring encountered a local confining layer and was terminated at 22 feet. Vinyl chloride was detected at two depths (89 ppb at 15 to 17 feet and 200 ppb at 20 to 22 feet). Two compounds were detected in the soil sample from the local clay confining unit at 20 to 22 feet: 1,1-dichloroethane (130 ppb) and 1,1,1-trichloroethane (33 ppb).

To determine the possible origin of groundwater contamination in B-2, a shallow soil investigation with a DPT rig was undertaken as part of the RFI. Ten DPT soil borings were advanced at locations shown on Figure 3.6. The borings were continuously sampled for lithology to the water table. Soil samples were screened for VOCs at 2-foot intervals using a photoionization detector (PID). One sample from each boring was sent to an offsite laboratory for VOC analysis. The field screening data were used to determine which sample from each boring was retained for laboratory analysis. However, if field-screening data did not indicate the presence of VOCs, the bottom most soil sample was submitted to the laboratory for analysis. In most cases, the bottom-most sample was used.

VOCs concentrations are also shown on Figure 3.6. The only VOC detected in any sample was TCE. No VOCs were detected in sample SB-6. TCE was detected in all other borings at concentrations ranging from 4.5 J  $\Box$ g/kg to 114  $\Box$ g /kg. These concentrations are below the New York soil cleanup objectives protective of groundwater (700  $\Box$ g/kg) and the New York soil cleanup objective concentrations (also 700  $\Box$ g/kg).

#### June 2002 Investigation and Sampling

No additional investigation or sampling was required in this area as part of the June 2002 RFI activities.



#### 3.5 Source of PCBs in Sanders Creek

NYSDEC Comment 5: The NYSDEC sediment sampling program in 1996 and 1997 suggests that Carrier may be the source of elevated PCB levels found in Sanders Creek. The RFI must characterize this contamination and determine if Carrier is the source.

In November 1996, two sediment samples (L17, L18) were taken by NYSDEC in Sanders Creek downgradient of the Carrier facility. Aroclor-1260 was present in L18. In October 1997, the NYSDEC performed a second round of sediment sampling in Sanders Creek. Seven sediment samples (L101, L102, L103, L104, L105, L106, and L113) were collected both upgradient and downgradient of the Carrier facility (see Detail 1 and 2 of Figure 3.7). Three PCBs were detected in these sediment samples aroclor-1016, aroclor-1254, and aroclor-1260 (Table 3.6). In December 2000, EnSafe collected four upgradient sediment samples (SD01 to SD04) from Sanders Creek (see Detail 1 of Figure 3.7) to determine if upgradient sediments contained PCBs, and if so, their possible source. The samples were collected using a decontaminated hand auger from two discrete zones ranging from 0 to 6-inches and 6 to 12-inches below ground surface. Each sample was homogenized using a decontaminated spoon and bowl prior to being placed in the sample container. Analytical results from these samples did not indicate the presence of PCBs (Table 3.6).

Table 3.6 Summary of Sediment Sampling In Sanders Creek (All results in mg/kg)											
Sediment Sample ID	Aroclor-1016	PCBs Aroclor-1254	Aroclor-1260	тос	Sampled by:						
MH-39	ND	ND	1.27	NA	EnSafe, 07-2001						
MH-76	ND	ND	10.2	NA	EnSafe, 07-2001						
MH-77	ND	0.437	0.477	NA	EnSafe, 07-2001						
MH-97	ND	0.441	0.38	NA	EnSafe, 07-2001						
MH-101	ND	ND	ND	NA	EnSafe, 07-2001						
MH-102	ND	ND	0.105	NA	EnSafe, 07-2001						
MH-115	ND	ND	0.964	NA	EnSafe, 07-2001						
MH-116	ND	ND	0.411	NA	EnSafe, 07-2001						
MH-256	ND	0.0798	0.062	NA	EnSafe, 07-2001						
001 (0-6")	ND	ND	1.4	NA	EnSafe, 07-2001						
002 (0-6") (6-12")	ND ND	ND ND	ND ND	NA NA	EnSafe, 07-2001						



			Table	3.6							
Summary of Sediment Sampling In Sanders Creek											
(All results in mg/kg)											
Sedir	ment Sample ID		PCBs		тос	Sampled by:					
	ment Sample ID	Aroclor-1016	Aroclor-1254	Aroclor-1260		Sampled by.					
03	(0-6")	ND	ND	0.27	NA	EnSafe, 07-2001					
	(6-12")	ND	3.66	ND	NA						
04	(0-6")	ND	ND	0.8	NA	EnSafe, 07-2001					
	(6-12")	ND	ND	0.468	NA						
05	(0-6")	ND	ND	ND	NA	EnSafe, 07-2001					
	(6-12")	ND	ND	1.18	NA						
006	(0-6")	ND	ND	0.603	NA	EnSafe, 07-2001					
007	(0-6")	ND	ND	2.22	NA	EnSafe, 07-2001					
008	(0-6")	ND	ND	0.65	NA	EnSafe, 07-2001					
	(6-12")	ND	ND	0.046	NA						
CARS	SD0000	ND	ND	ND	4,300	EnSafe, 12-2000					
CARS	SD0100	ND	ND	ND	7,900	EnSafe, 12-2000					
CARS	SD0101	ND	ND	ND	7,800	EnSafe, 12-2000					
CARS	SD0200	ND	ND	ND	3,900	EnSafe, 12-2000					
CARS	SD0201	ND	ND	ND	3,700	EnSafe, 12-2000					
CARS	SD0300	ND	ND	ND	10,000	EnSafe, 12-2000					
CARS	SD0301	ND	ND	ND	3,500	EnSafe, 12-2000					
CARS	SD0400	ND	ND	ND	3,800	EnSafe, 12-2000					
CARS	SD0401	ND	ND	ND	4,900	EnSafe, 12-2000					
CARM	ISD0400	ND	ND	ND	9,600	EnSafe, 12-2000					
L17		ND	ND	ND	NA	NYSDEC, 11-1996					
L18		ND	ND	0.016 J	NA	NYSDEC, 11-1996					
L101		ND	ND	ND	К	NYSDEC, 10-1997					
L102		0.034 JP	2.133 D	7.4 D	33,900 K	NYSDEC, 10-1997					
L103		0.068 PJN	1.8 D	7.9 D	24,900 K	NYSDEC, 10-1997					
L105		ND	ND	ND	20,700 K	NYSDEC, 10-1997					
L113		NA	NA	NA	NA	NYSDEC, 10-1997					

Notes:

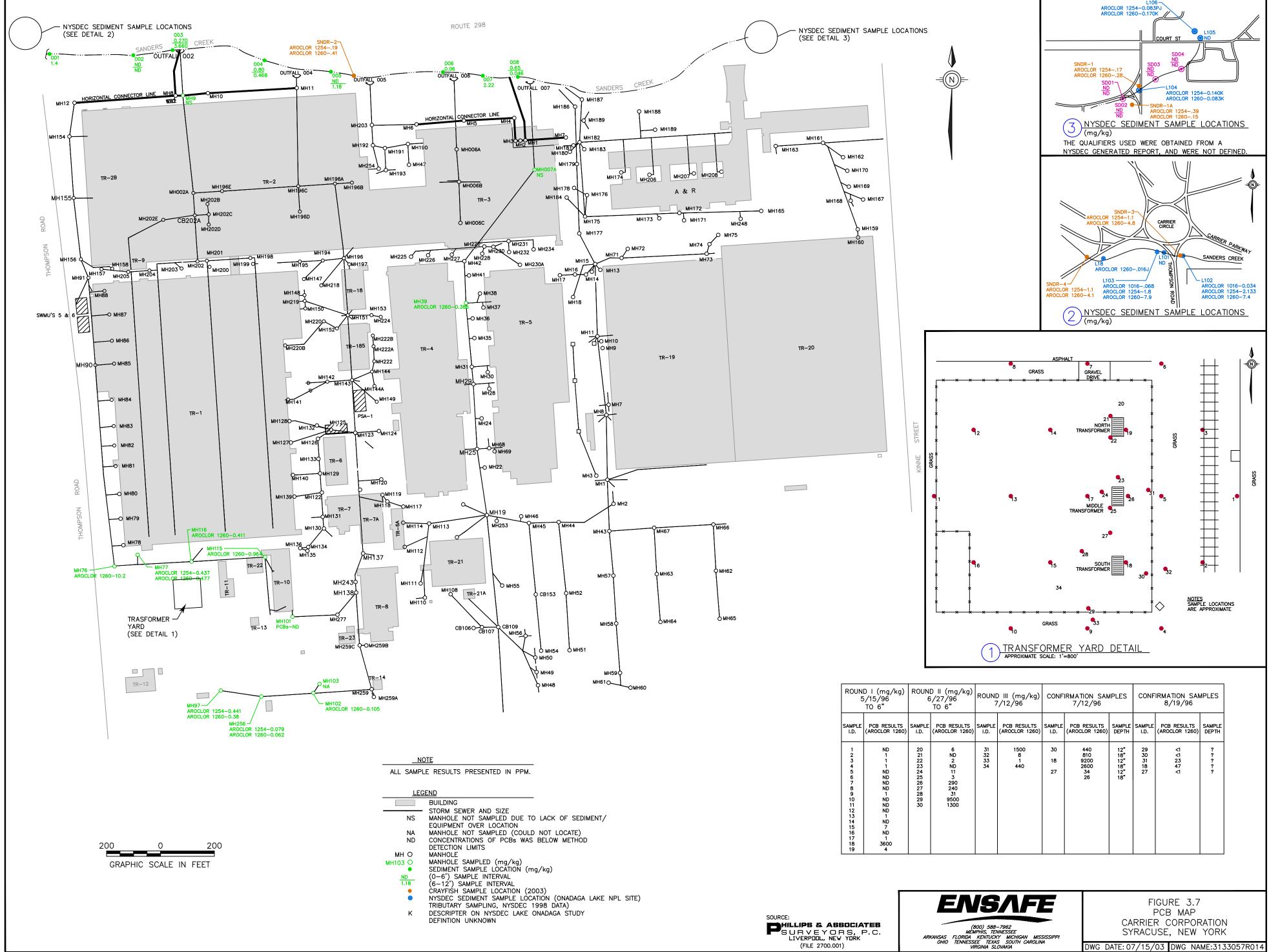
U

NA — Not Available

ND — Not Detected

— The material was analyzed, but the parameter was not detected above the listed quantitation limit.

PJ, K — The NYSDEC data presented in this table is from a report entitled "Onondaga Lake NPL Site Tributary Sampling First Round Report, Onondaga Lake NPL Site Remedial Program" New York State Department of Environmental Conservation, October 1997 and sampling data collected in 1998. These qualifiers are not defined.



DWG DATE: 07/15/03 DWG NAME:3133057R014

The July 2001 RFI focused on two areas of investigation in an effort to better ascertain and determine the potential source and scope of PCBs in the Sanders Creek sediments was the Transformer Yard which is shown on Figure 3.7.

- In 1995, as part of Carrier's Leak Inspection Program in 1990, several transformers in the Transformer Yard were identified as having leaks. Remedial activities involved repairing and cleaning the transformers and excavating PCB-contaminated soil as follows:
  - Previously, the transformers were repaired and were reclassified as non-PCB-containing as part of a retrofill project. The mineral oil in the transformers were resampled and contained PCBs ranging from 9 ppm to 29 ppm.
  - The contaminated gravel and soil were removed and the concrete bases of the transformers were cleaned.
  - Two composite samples were obtained from the area of suspected PCB contamination. Analytical results showed these samples to contain 52 mg/kg and 61 mg/kg PCBs. Contaminated soil was excavated and stockpiled in the Transformer Yard. The soil was placed in a container and properly disposed of Figure 3.8 shows the approximate layout of the Transformer Yard and the original excavation area.
  - In 1996, a sampling plan based on the *EPA Field Manual for Grid Sampling of PCB Spill Sites to Verify Cleanup* was prepared, and soil confirmation soil samples were collected from the Transformer Yard, as shown on Figure 3.7. The sampling locations and results are summarized in Table 3.7. PCB-contaminated soil estimated at a depth of 1 to 2 feet (totaling approximately 242 cubic yards) was removed and disposed of at the CWM landfill in Model City, New York.

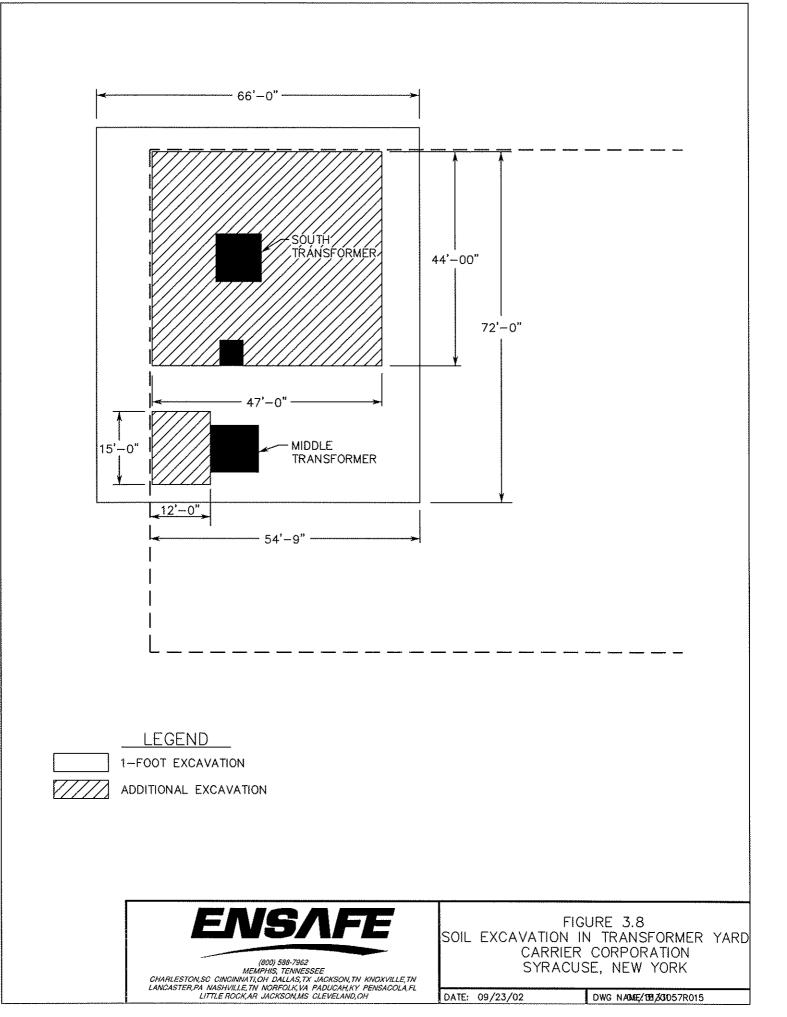
To investigate whether the Transformer Yard is a possible source of PCBs to the storm water systems, sediment samples were sampled from select onsite manholes. The nine manholes containing enough sediment to be sampled are identified on Figure 3.7 MH-39,

RCRA Facility Investigation Report Carrier Corporation Syracuse, New York Revised September 30, 2002



				S		Table 3. Soil Sampling results mg/kg A	in Transfor	0)				
	Round I 5/15/96			Roun 6/27		Roun 7/12		Con	firmation Sa 7/12/96	mples	Confirmati 8/23	
Location	PCB	Location	PCB	Location	PCB	Location	PCB	Location	Depth	РСВ	Location	PCB
1	ND	11	ND	20	6	31	1500	18	12" 18"	9200 2600	18	47
2	1	12	ND	21	ND	32	8	27	12" 18"	34 26	27	<1
3	1	13	1	22	2	33	1	30	12" 18"	440 810	29	<1
4	1	14	ND	23	ND	34	440	l l	Ì		30	<1
5	ND	15 1	7	24	11	1			i	*	31	23
6	ND	16	ND	25	3			Î				
7	ND	17	1	26	290			İ				
8	ND	18	3600	27	240							
9	1	19	4	28	31							
10	ND			29	9500							
				30	1300							

\* Round I and II samples were collected from a depth of 6 inches.





MH-76, MH-77, MH-97, MH-101, MH-102, MH-115, MH-116, and MH-256. One manhole proposed for sampling in the RFI Work Plan could not be sampled due to lack of access (MH-007A). Three manholes could not be sampled due to the lack of sediments (MH-9, MH-78, and MH-103). The proposed manholes were chosen because they appear to either collect storm water runoff from the Transformer Yard area or were the last manhole throughout which storm water from this area flows prior to treatment and discharge to Sanders Creek.

Samples were collected by lowering a stainless-steel spoon or hand auger attached to steel hand-auger pole extensions into the manhole and collecting any sediment present.

When sufficient sample volume was obtained, each sample was homogenized in a stainless-steel bowl prior to transferring the soil from the bowl to the individual sample container. All sampling equipment was decontaminated according to methods and procedures outlined in the RFI Work Plan.

PCB sampling results shown on Figure 3.7 indicate both aroclor 1254 and aroclor 1260 are present at low concentrations in some of the manholes. Aroclor 1254 was identified in a select number of manholes with concentrations ranging from 0.079 mg/kg to 0.441 mg/kg. Aroclor 1260 concentrations were detected in all samples with concentrations from 0.062 mg/kg to 10.2 mg/kg. All concentrations except the concentration of 10.2 mg/kg at MH-76 are below 1 ppm.

2. The second area of investigation focused on sediment sampling in Sanders Creek, primarily because of the results of NYSDEC sampling downgradient of the Carrier facility as described above.

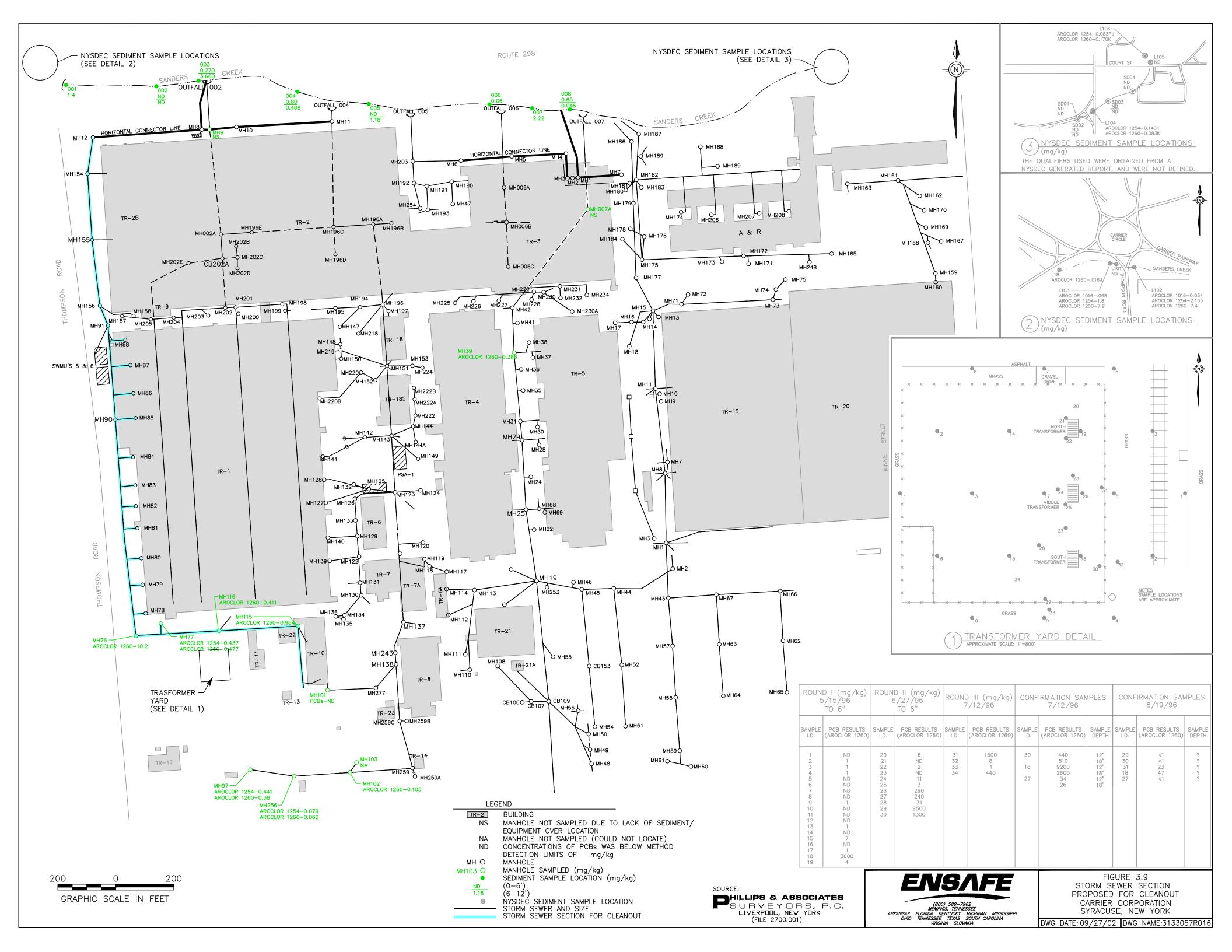
Eight locations in and adjacent to Sanders Creek along the Carrier facility northern property were sampled for PCBs. These locations were identified and agreed upon during an earlier site visit between personnel from the Carrier facility, NYSDEC, and EnSafe. Sediment samples were collected from the 0 to 6-inch depth interval and, where possible, from the 6 to

12-inch depth interval at each location. Both depth intervals were sampled at five of the eight locations. Figure 3.7 shows their locations. Samples were collected with either a stainless steel spoon/trowel at locations within the stream or with a stainless-steel hand auger for locations away from the stream. All samples were homogenized using a stainless-steel spoon and bowl prior to placing them in the sample container. The sampling equipment was decontaminated before collecting each sample using the procedures outlined in the RFI Work Plan.

Low concentrations of PCBs were detected within the sediment in Sanders Creek near the former storm sewer outfalls from the facility. Concentrations range from 0.046 mg/kg in sample 008 from 6 to 12 inches to 3.66 mg/kg in sample 003 from 6 to 12-inches. These concentrations are in the same range as those previously identified by NYSDEC downstream in Sanders Creek. The average concentration of the 12 samples collected in and adjacent to the creek is less than 1 ppm. Table 3.6 summarizes the analytical results from all manhole and Sanders Creek sampling events, starting with the most recent sampling event.

As part of the Carrier facility permit, select groundwater monitoring wells at the facility are sampled semiannually for PCBs and other constituents. These samples were collected during the RFI field activities. The monitoring network includes MW-1, MW-3S, MW-3D, MW-5, and MW-6. No PCBs were detected in the groundwater samples collected from these wells during the RFI.

Based on the findings of manholes in the storm sewer system, Carrier will undertake source-control measures to remove sediments in the storm water lines and manholes shown on Figure 3.9. These lines will be cleaned using a high-pressure, hot-water washer and commercially available concrete cleaner such as Kleen Green. After they are cleaned, sediments (if present) from the manholes MH-76 and MH-9 will be sampled annually for two years and analyzed for PCBs to determined if the Transformer Yard is a continual source of contamination of PCBs to Sanders Creek. If no sediments are present in the designated manhole, then a sample will be taken from the next manhole upstream in which sediments are present. If the PCB concentrations in sediments of the selected manholes exceed 1 ppm,





an evaluation will be done to determine if further action is necessary. However, if after two years, PCB concentrations are less than 1 ppm, no further actions will be taken.

Because the soils in the Transformer Yard were cleaned to federal guideline at the time of 50 ppm and not the NYSDEC guideline of 10 ppm, Carrier will evaluate potential remedies for the Transformer Yard, which may include deed restrictions on its use.

#### June 2002 Investigation and Sampling

No additional investigation or sampling was required in this area as part of the June 2002 RFI activities.

#### 3.6 Carrier-DeWitt Landfill

Comment 6: In a November 9, 1998, letter, Catherine E. Moyik of the USEPA determined that Superfund had completed its assessment at the Carrier-DeWitt Landfill and that no further remedial action was required under CERCLA. However, the May 1987 Phase 1 Investigation of the same landfill recommended that, "test pits and soil sampling be done to identify waste characteristics," and to the best of our knowledge, these have never been done. While we understand that test pits into the waste may no longer be possible or appropriate, Carrier must conduct an investigation of the site that will assess the nature and extent of any potential impacts to the environment posed by this site.

The landfill was not invasively investigated as part of the initial RFI field activities. A Freedom of Information Act request submitted to USEPA's offices revealed only one document on file pertaining to this facility prepared by Wehran Engineering, P.C. for the NYSDEC – Engineering Investigation at Inactive Hazardous Waste Site in the State of New York, Phase I investigations, Carrier-DeWitt, DeWitt, Onondaga County, New York, Site Code: 734005, May 1987. A search of Carrier's facility files identified the following (included in Appendix E):

 <u>Boring logs</u> – These 1949 borings were advanced when Carrier was selecting a location for a new building – ultimately the TR-2 facility. These boring logs indicate that the parking lot fill was essentially sand, gravel, clay and brick. The borings indicate that the virgin soil is predominantly yellow sand in this area.

 <u>Aerial photos</u> – The 1979 aerial photo indicates the areas where construction debris from the TR-4 renovation and TR-21 construction was placed, predominantly south and west of the parking lot. The main debris pile is located in an area that is now the oil-change business and the Goodyear tire business. That material was removed prior to the construction of the buildings that currently exist on that site.

The yellow sand indicated as the top soil layer in the boring logs from the area appears to be visible in the aerial photos in the unvegetated areas of this landfill. This area was also used in winter time as a location to which Carrier trucked snow from inside the Thompson Road facility and plowed snow from Parking Lot A when the heavy winter snows made removal from inside the fence line necessary.

The rectangular yellow building at the bottom right of the photo is on property that Carrier's 1970 records indicate belonged to Onondaga County Sanitary Sewer and Public Works Commission. Notable also is the use of the Carrier property for access to the building. Some of the debris that is visible today includes asphalt from a road with a thick yellow strip, consistent with public roads, but inconsistent with either parking lot or internal roadways on the Carrier Thompson Road facility. Other piles include some extremely thick concrete with very heavy reinforcing steel. The appearance of some of the debris, coupled with the property ownership issue, suggests that some highway construction debris from the county may have been deposited in this area.

Other debris piles appear to be consistent with Carrier's "hard fill" use of the property including concrete, concrete block, asphalt material, and similar materials.

 Topographical map – The 1958 map of the parking lot and areas south and west indicates that no significant filing of the area has occurred. This is consistent with Carrier's knowledge of the use of this area as a location to dispose of construction debris in the 1970s.

The piles of debris that remain today and that are visible in the area west of the south end of the parking lot are concrete, asphalt and similar "hard fill" materials (see Figure 3.10). Visually comparing the current condition of this area with the topographical map supports Carrier's contention that piles of hard fill were disposed of in this area.

Carrier proposed up to four surface water locations – along the toe of the fill area – be sampled for VOCs and analyzed using SW-846 Method 8260, consistent with other VOC sampling performed at the site.

#### June 2002 Investigation and Sampling

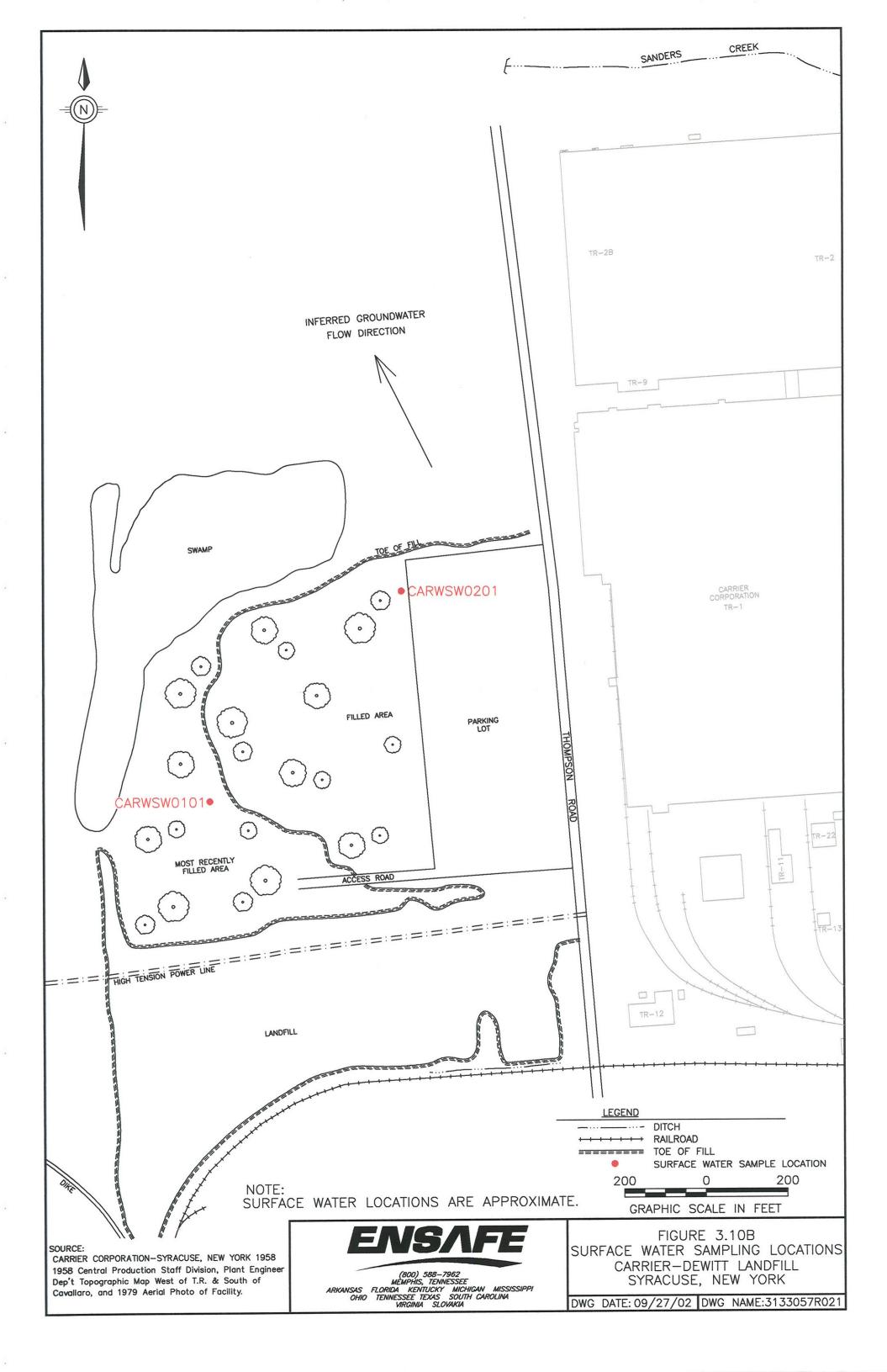
Two surface water samples were collected on June 24, 2002 from two distinct areas of the Carrier-DeWitt Landfill, across Thompson Road from the Carrier facility. EnSafe, UTC-Carrier, and NYSDEC personnel identified and concurred on each sampling location (Figure 3.10B). A total of four locations were initially slated for sampling. Because the proposed sampling locations were inaccessible due to heavy vegetation, an NYSDEC representative, Mr. Larry Rosenmann, agreed to a modification of the work plan and allowed sampling to be conducted at two locations. Follow-up correspondence dated July 10, 2002, from Mr. Bill Penn (UTC) to Mr. Larry Rosenmann (NYSDEC), confirmed changes to the sampling locations and number of locations sampled.

The first water sample was collected from a western area of the landfill, west of the southwestern corner of the former employee parking area, in the immediate area of the fill area referenced in the 1987 NYSDEC report. The actual sampling location was heavily overgrown and near several concrete and asphalt debris piles. The sample was collected from one edge of a large pool of water. This sample was analyzed for VOCs using USEPA SW-846 method 8260 and found to contain only low concentrations (8.2  $\mu$ g/L) of toluene (Table 3.8), which is not a contaminant of concern associated with this site.. No further action is required.



Table 3.8										
Carrier-DeWitt Landfill										
	Summarized Surface Water Analytical Results									
Sample ID	Sample Location	Date Collected	Toluene							
CARWSW0101	SW01	6-26-02	8.2							
CARWSW0201	SW02	6-26-02	ND							





#### 3.7 Indoor Air Monitoring

Indoor air monitoring will be conducted to address VOC-contaminated groundwater that is present beneath the facility. Carrier will collect up to two air samples in each of the TR-18S and TR-18 buildings (see Figure 3.11). The exact sample locations within the building will be determined in the field on the day that the samples are collected. The buildings in which the sample(s) will be collected were selected based on their location relative to the groundwater contaminant plume at SWMUs 1 to 4.

Each of the samples will be collected and analyzed using the Modified EPA Method TO1/TO2. Samples will be collected during the standard work day period of approximately 8 a.m. to 4 p.m. Low-volume sampling pumps and laboratory-provided sample media will be used to collect the samples. All sampling pumps will be calibrated prior to and following sample collection with a primary air-flow meter. The air samples will be regularly checked during the 8-hour sample collection period. Observations related to weather conditions, work activities by others, and other relevant items will be documented. Samples will be submitted with chain-of-custody documentation to a New York-accredited analytical laboratory for analysis.

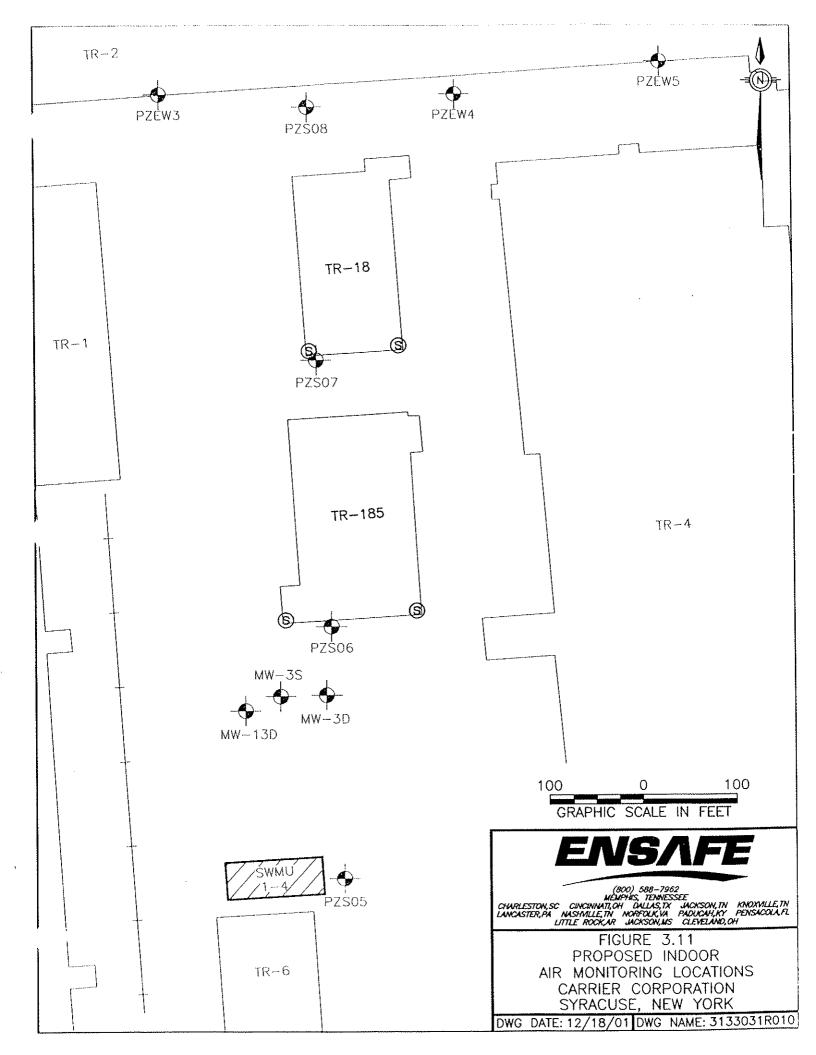
Samples will be analyzed for the following:

- 1,1-Dichloroethane
- 1,1-Dichloroethene
- cis-1,2-Dichloroethene

- *trans*-1,2-Dichloroethene
- Trichloroethene
- Vinyl chloride

For quality control purposes, field blanks will be prepared and submitted along with the samples for laboratory analysis.

The Action Level to which each air contaminant result will be compared will be the Occupational Safety & Health Administration (OSHA) Permissible Exposure Limit (PEL) or the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV). The PEL and TLV are Time-Weighted Average (TWA) values that are based on 8-hour



# ENSAFE

exposures. The air contaminants, exposure limits, Action Levels, and analytical limits of detection are listed in Table 3.9.

Air G	Table 3.9 Contaminant Exposure Limits and	Limits of Detection
Air Contaminant	Exposure Limit	Analytical Limit of Detection
1,1-Dichloroethane	PEL/TLV 100 ppm	0.0001 ppm
1,1-Dichloroethene	TLV 5 ppm	0.0001 ppm
cis-1,2-Dichloroethene	PEL/TLV 200 ppm	0.0001 ppm
trans-1,2-Dichloroethene	PEL/TLV 200 ppm	0.0001 ppm
Trichloroethene	TLV 50 ppm	0.00009 ppm
Vinyl Chloride	PEL/TLV 1 ppm	0.0002 ppm

#### June 2002 Investigation and Sampling

Indoor air quality (IAQ) monitoring was performed in Buildings 18 and 18S. The primary objective of the IAQ monitoring was to provide information to determine if VOCs from contaminated groundwater are present in the work areas of these buildings.

To ensure that interior building conditions represented a worst-case scenario prior to air sampling (i.e., negative pressure), the air handlers for the two buildings (TR-18 and 18S) were operated so that the return air circulation was maximized, thus minimizing fresh air intake. This scenario was thought to maximize negative pressures within the buildings. As was observed by Carrier, UTC, EnSafe, and NYSDEC personnel, the operation of the air system, even under normal conditions (normal fresh air intake), induced a strong negative pressure. Based on these observations and the fact the buildings are surrounded by paved parking area, worst case conditions are thought to have been met.

The indoor air assessment and sampling was performed on June 25, 2002 by Mr. Bill Bradshaw of EnSafe Inc. The areas sampled were the south sides of Buildings TR-18 and TR-18S. A total of four air samples were collected in the areas of concern, as shown on Figure 3.12. Sampling locations were selected by agreement of NYSDEC, Carrier and UTC personnel. Follow-up correspondence dated July 10, 2002, from Mr. Bill Penn (UTC) to Mr. Larry Rosenmann (NYSDEC), confirmed agreement on sample locations.

# ENSAFE

Samples were collected on VOC thermal desorption tubes and submitted to DataChem laboratories for analysis. Each sample was collected with a SKC industrial hygiene pump calibrated to approximately 1 liter per minute. The samples were blank corrected.

Table 3.10 presents a summary of the target VOC results for the samples collected on June 25, 2002, and compares them to the OSHA permissible exposure limits (PEL). Sample results indicated fugitive contaminant concentrations are orders of magnitude below OSHA PELs.

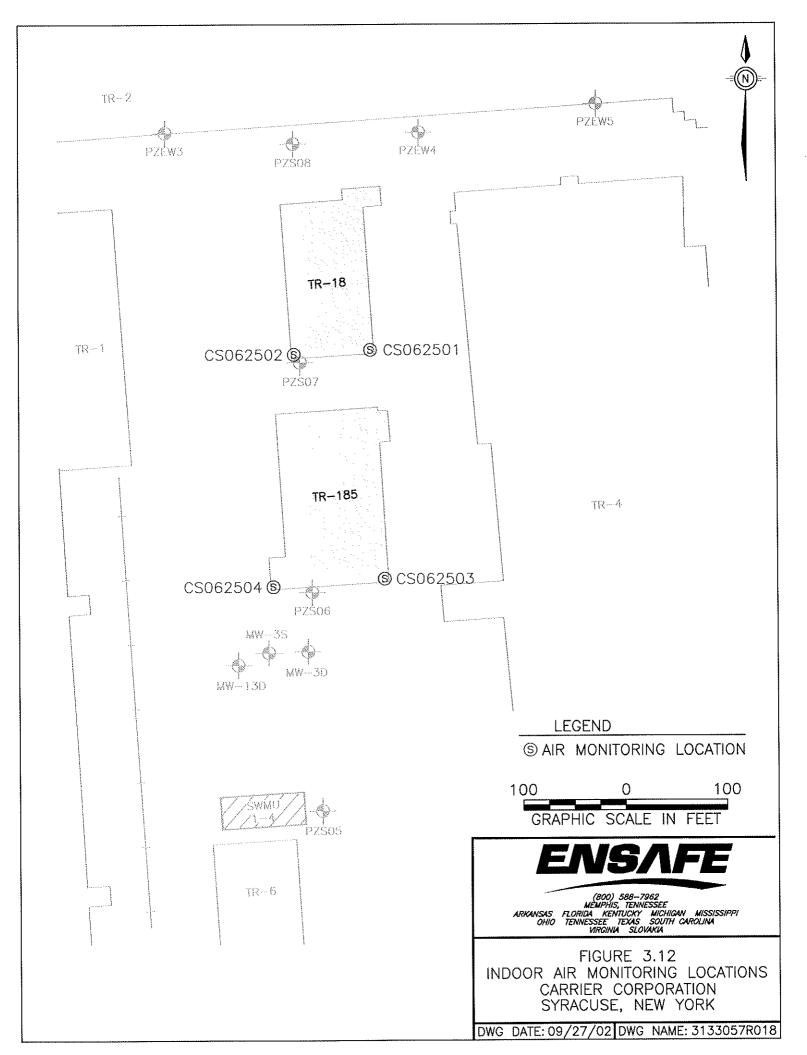
Sample Location	Sample ID	Volume (Liters)	Target Compound	Measured Concentration	OSHA Pe Exposui (pp	re Limit
					ppm,	ug/m3
Building	CS062501	40.29	Trichloroethene	1.8 ug/m <sup>3</sup>	100	546,248
185	SE Corner		cis-1,2-dichloroethene	$2.2 \text{ ug/m}^3$	200	805,986
Building	CS062502	47.20	Trichloroethene	$1.0 \text{ ug/m}^3$	100	546,248
185	SW Corner		cis-1,2-dichloroethene	$1.8 \text{ ug/m}^3$	200	805,986
Building	CS062403	39.90	Trichloroethene	1.0 ug/m <sup>3</sup>	100	546,248
18	Medical SE		cis-1,2-dichloroethene	$5.2 \text{ ug/m}^3$	200	805,986
Building	CS062404	33.15	Trichloroethene	ND	100	546,248
18	Medical SW		cis-1,2-dichloroethene	2.6 ug/m <sup>3</sup>	200	805,986

# Table 3.10Detected Analytical Results — Air QualityJune 25, 2002

Notes:

ND = Non-detect; sample is below the laboratory's detection limit for compound.

PPM = Parts per million



# ENISAFE

# 4.0 CONCLUSIONS

Recommendations for the five areas investigated as part of this RFI at the Carrier Thompson Road facility are outlined below. The Carrier-DeWitt Landfill is also discussed.

# 4.1 SMWUs 1 to 4

The groundwater data collected near of SWMUs 1 to 4 suggest that the concentrations of chlorinated solvents have remained relatively consistent during the past two years. The CMS Work Plan will propose additional field testing for the CMS. The CMS will evaluate appropriate remedial technologies to reduce the mass of this contamination in the area of SWMUs 1 to 4.

# 4.2 Bedding Material Monitoring Wells

Results of the samples collected from the two wells installed as a part of the RFI indicate dissolved concentrations of chlorinated solvents within the bedding material beneath the storm sewer outfalls at the Carrier facility. As discussed in Section 3, chlorinated solvents in these wells exceeded their New York State standards.

Currently, the only wells impacted in this area are MW-17 and MW-18. Concentrations of TCE and other constituents in other wells in the vicinity are non-detect or at much lower levels. Carrier is currently reviewing the capacity of the existing storm water treatment system to evaluate whether the system could be used to treat groundwater recovered from the bedding material as an interim and possibly long term remedial measure. The CMS Work Plan will propose additional field testing for the CMS.

# 4.3 SWMUs 5 and 6

The borings installed within this area indicate negligible impact to soil. A shallow perched "groundwater" interval was discovered in the former tank area due to the tanks being left in place and backfilled with fill material. The "groundwater" sample had detections of TCE and other VOCs found in groundwater at the facility. Although the sample contained dissolved concentrations of several metals as well as a relatively high pH, these metals are attributed to the suspended materials contained in the turbid water sample. Impacts, if any, appear localized to

# ENSAFE

this area, because shallow well down gradient to the north (MW-10) does not contain concentrations of the organic compounds identified and has a relatively neutral pH of 7.39 pH units. A deeper Hydropunch boring near MW-10 also did not contain dissolved concentrations of VOCs.

The sampling method used, coupled with the representativeness of the perched "groundwater" sample, suggests that the metals concentrations may be lower than data indicate. As mentioned in Section 3.3, further Hydropunch investigation in the area was planned.

#### June 2002 Investigation and Sampling

Results from groundwater samples collected from the five Hydropunch borings suggest impact in three boring locations in shallow groundwater. The impact to groundwater in the vicinity of SWMUs 5 and 6 is localized to the northwest corner of Building TR-1 area and relatively shallow as indicated by the results of the Hydropunch sampling. Wells surrounding (side and down-gradient) the SWMUs 5 and 6 area (MW-6 and MW-10) are non-detect for chlorinated solvents. Wells at the northern perimeter of the site (MW-5, MW-12, and MW-15D) do not indicate significant chlorinated solvent impact. The previous Hydropunch borings (HP-01, HP-02, and HP-04) installed north and downgradient of SWMUs 5 and 6 is localized with no evidence of offsite migration.

Currently, there is a defacto site-wide monitoring well sampling program under which these wells are monitored. At such a time that a formal groundwater monitoring program is established, these wells will be included, which will allow identification of any plume migration from the area. Therefore, no further action is deemed necessary at this time.

Metals concentrations in soils identified in the July 2001 investigation at SWMUs 5 and 6 are within the range of site background concentrations established for the site (June 2002). Therefore, no further action is necessary.

Metals in groundwater identified in Hydropunch borings HP-06 through HP-10 were consistent with those identified in the previous 2001 investigation and are a result of distinct turbidity in the sample created by the drilling process for these boring locations. No further action is warranted for metals concentrations in groundwater at SMWUs 5 and 6.

# 4.4 PSA-2

The analytical results of soil samples collected from PSA-2 indicate minimal impact to soil from TCE. Although TCE was detected in 9 of 10 soil samples from the area, TCE concentrations in the soil are well below the New York soil cleanup objectives protective of groundwater and are also below the TCE soil cleanup objective. Since all soil data is below the state cleanup objectives, no further action is proposed for soil and groundwater at this location.

# 4.5 Source of PCBs in Sanders Creek

PCBs detected in Sanders Creek were consistent with the upstream results collected by the NYSDEC. One of the samples from a manhole in the facility had PCB concentrations in excess of one ppm and this data indicates that current and future PCB impact to Sanders Creek is minimal. Carrier will clean the affected storm sewer lines as described in Section 3.5.

Appropriate remedial actions for the PCB contamination will be evaluated in the CMS to ensure that this area will not pose a hazard to human health and the environment in the future.

# 4.6 Carrier-DeWitt Landfill

# June 2002 Investigation and Sampling

Based on the results of surface water sampling at the Carrier-DeWitt Landfill, no further action is necessary.

# 4.7 Indoor Air Monitoring

Carrier obtained two air samples from Buildings TR-18 and TR-18S to determine if VOCcontaminated groundwater is affecting indoor air quality. All results were below OSHA PELs. Based on the results of this investigation, no further action is necessary.

# APPENDIX A

RFI Boring Logs July 2001 June 2002

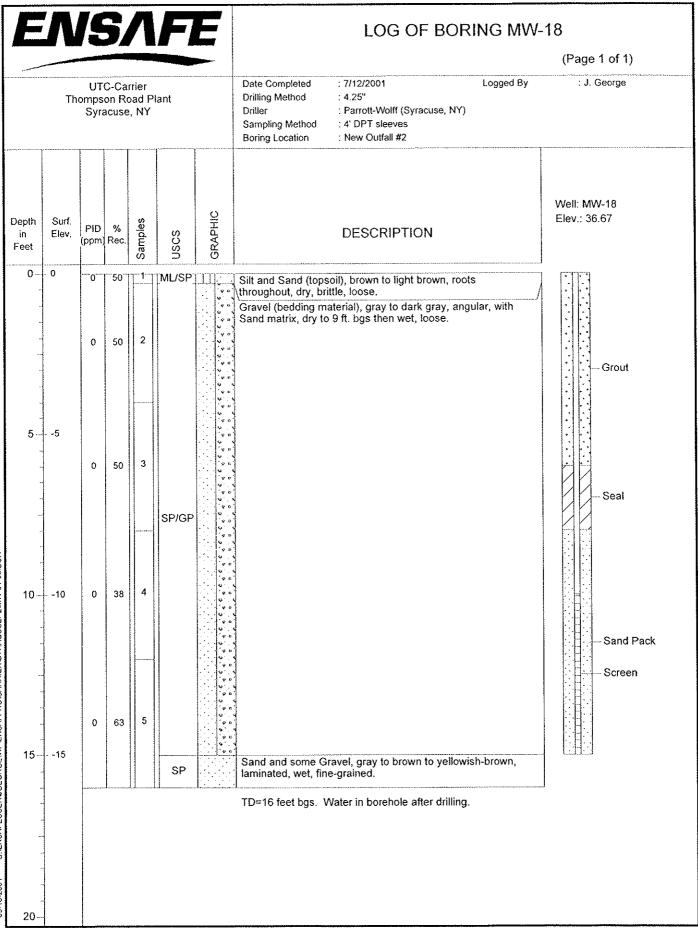
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# APPENDIX A

RFI Boring Logs (July 2001)

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	Thompson	Carrier Road P Ise, NY	lant		Drilling N Driller Sampling	(Page 1 of 1) Date Completed : 7/11/2001 Logged By : J. George Drilling Method : 4.25" Driller : Parrott-Wolff (Syracuse, NY) Sampling Method : 4' DPT sleeves Boring Location : New Outfall #1					
Depth Sur in Elev Feet	0/	PID (ppm)	Samples	s S S	GRAPHIC	DESCRIPTION	Well: MW-17 Elev.: 36.18				
00	63	0	1	SP/GP		Sand and Gravel (fill), brown, loose, dry, roots throughout, gravel is angular limestone rock fragments.					
	63	0	2	CL		Gravel (bedding material), gray to dark gray, angular, very little Sand matrix, dry, very loose.					
5	75	0	3	ML/SP		Gravel and Sand (bedding material), brown to yellowish-brown, dry, loose, gravel is angular.	Grout				
*	75	0	4	CL/SP	U U U U U U	Sand and Clay, brown, mottled to yellow-brown, sli. moist, roots throughout, brittle, dense. Gravel and Sand (bedding material), brown to dark gray, dry to 11.3 then wet, loose.					
	75	0	5	SP/GP							
-	100	0	6	ML.		Silt, brown, malleable, fine, dense, wet, with very fine-grained Sand at top.	Sand Pack				
	100	0	7	SP/GP		Gravel and Sand (bedding material), brown, loose, wet.	Screen				
	100	o	8	ML		Silt, dark gray to brown, very moist, dense, fine. Silt, color changes to light buff to light gray, wet, dense, fine-grained.					
		.t	<u> </u> ]]	J	<u> ]            </u>	TD=15.5 feet bgs. Water in borehole after drilling.					



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			SAFE		LOG OF BO	KING Pa	DAZ C	(Page 1 of 1)		
	TI	nompso	-Carrier n Road Plant cuse, NY	Date Completed Drilling Method Driller Sampling Method Boring Location	Drilling Method : Direct Push Driller : Parrott-Wolff Sampling Method : 4' DPT sleeve		Logged By			
Depth in Feet	nscs	GRAPHIC		DESCRIPTION I (topsoil), brown to gray, dry, roots throughout,		Lab No.	PID (ppm)	% Recovery		
0	SP/GP		loose. Grades to a brown to Silt, brown to yellowi	psoil), brown to gray, dry, o yellowish-brown Silt. sh-brown to gray, moist to d unit at 7 ft. bgs, wet, fine	wet at 5 ft, bgs.		0	75		
  -							0	75		
5	ML					001	0	88		
							0	88		
10	SP		Sand, brown, fine-gra	ained, saturated.			0	100		
	ML		Silt, gray mottled to b	prown, dense, wet.			0	100		
			End of Boring at 12 f	eet bgs.		<u> </u>				

07-18-200- G IENSAFEUSERUGEORGEWIPIENSAFPROICARRIERISYRACUSEP21BORPSA25B1 BOR

				FE				(Page	e 1 of 1)
	Th	ompsor	Carrier Road use, N	Plant	Date Completed Drilling Method Driller Sampling Method Boring Location	: 7/12/2001 : Direct Push : Parrott-Wolff : 4' DPT sleeve : PSA 2	Logged By	: J.	George
Depth in Feet	Surf. Elev.	uscs	GRAPHIC		DESCRIPTION vel (fill) beneath asphalt, brown to gray, dry, loose.		Lab No.	PIÐ (ppm)	% Recovery
0	. 0	SP/GP				I (fill) beneath asphalt, brown to gray, dry, loose. wn to yellowish-brown Silt. Ilowish-brown to gray, laminated dry then wet at sli. stiff. Trace of Gravel. sli. plastic.			75
i i i i i i i i i i i i i i i i i i i				Silt, brown to y 5 ft. bgs, densi	enowish-brown to gray e, sli. stiff. Trace of Gr	, laminated dry then we	et at	0	75
5	-5	ML		End of Boring	at 8 feet bgs.		001	0	83
						. 1917 1919 AN 1819 191 191 191 191 191 191 191 191 19		0	83
				N 64					

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					Date Completed	: 7/12/2001	Logged By		1 of 1)
	Th	ompsor	-Carrie n Road nuse, N	Plant	Dilling Method Driller Sampling Method Boring Location	Logged by	Logged By : J. George		
Depth in Feet	Surf. Elev.	nscs	GRAPHIC		DESCRIPTION vel (fill) beneath asphalt, brown to gray, fine- to d, dry, loose.		Lab No.	PID (ppm)	% Recovery
0		SP/GP	9 0 9 0 9 0 9 0 9 0 9 0	Sand and Grave coarse-grained, o	(fill) beneath asphal Iry, loose.	it, brown to gray, fine- to		0	75
				SIL SUIT. TRACE O	f Gravel. sli. plástic.			0	75
5	-5	ML		End of Boring at	8 feet bgs.		001	0	83
								0	83

		15	5/	FE		LOG OF BO	ORING PSA 2		e 1 of 1)
	Th	ompsor	-Carrier n Road :use, N'	Plant	Date Completed Drilling Method Driller Sampling Method Boring Location	Drilling Method : Direct Push Driller : Parrotl-Wolff Sampling Method : 4' DPT sleeve			George
)epth in Feet	Surf. Elev.	uscs	GRAPHIC		DESCRIP	TION	Lab No.	PID (ppm)	% Recovery
0	- 0	SP/GP		Sand and Grav coarse-grained	el (fill) beneath asphal , dry, loose.	t, gray to dark gray, f	ine- to	0	63
				Silt, brown to g sli, stiff. Minor	ray, laminated, dry the Sand (fine) and trace	n wet at 6.5 ft. bgs, d of Gravel troughout.	iense,	3.9	63
5	5	ML.					001	6.0	83
-				End of Boring a	it 8 feet bgs.			2.1	83

07-18-2001 G'IENSAFEUSERUGEORGEWIPIENSAFPROICARRIERISYRACUSEP21BORPSA2SB4.BOR

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E		15	5/	IFE		LOG OF BO	RING PSA 2		e 1 of 1)
	Th	ompsor	Carrie n Road use, N	Plant	Date Completed       : 7/12/2001         Drilling Method       : Direct Push         Driller       : Parrott-Wolff         Sampling Method       : 4' DPT sleeve         Boring Location       : PSA 2		Logged By	Logged By : J. George	
Depth in Feet	Surf. Elev.	uscs	GRAPHIC		DESCRIP	TION	Lab No.	PID (ppm)	% Recovery
0		SP/GP	Ϋ́ο Ϋ́ο Ϋ́ο Ϋ́ο Ϋ́ο Ϋ́ο Ϋ́ο	coarse-grained	el (fill) beneath asphalt , dry, loose. rownish-gray to yellowi ft. bgs, dense, sli. stiff.	sh-brown, laminated, o		0	92
							001	0	92
5	5	ML						0	83
				End of Boring a	t 8 feet bgs.			0	83

.

	Th	ompsor	-Carrie 1 Road use, N	Plant	Date Completed Drilling Method Driller Sampling Method Boring Location	: 7/12/2001 : Direct Push : Parrott-Wolff : 4' DPT sleeve : PSA 2	Logged By		e 1 of 1) George
)epth in Feet	Surf. Elev.	USCS	GRAPHIC		DESCRIP	DESCRIPTION		PID (ppm)	% Recovery
0	. 0	ML		brittle, loose.	then wet at 5 ft. bgs, (	o gray, dry, roots throughoi dense, sli. stiff. Minor	ut,	0	25
								0	25
5	5	ML					001	0	100
- - - - 				End of Boring	at 8 feet bgs.			0	100
						10 111 111 111 111 111 111 111 111 111			

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	VS					(Page 1 of 1)	
-	lhompso	-Carrier n Road :use, N <sup>\</sup>	Plant Date Comp Plant Drilling Met Driller Sampling M Boring Loca	hod : Direct Push : Parrott-Wolff lethod : 4' DPT sleeve	Logged By	; J.	George
Depth Surf in Elev Feet		GRAPHIC	DES	SCRIPTION	Lab No.	PID (ppm)	% Recovery
0 0	0 0 SP/GP 5 Sand and Gravel (fill), brown, loose, Sand is fine- to coarse-grained, Gravel is fine, angular; dry overall, root throughout. Sand and Silt, brown to yellowish-brown, brittle, modera dry to 4 ft. bgs, trace of Gravel, sli. elastic.		, angular; dry overail, roots vish-brown, brittle, moderately	loose,	2.1	100	
5					001	21.6	100
55	ML/SP		End of Boring at 8 feet bgs.			6.6	100
						3.6	100

								(Page 1 of 1)		
	Th	ompsor	Carrier Road use, N	Plant	Date Completed Drilling Method Driller Sampling Method Boring Location	: 7/12/2001 : Direct Push : Parrott-Wolff : 4' DPT sleeve : PSA 2	Logged By	: J.	George	
Depth in Feet	Surf. Elev.	uscs	GRAPHIC		DESCRIP	TION	Lab No.	PID (ppm)	% Recovery	
0	0	SP/GP		coarse-graine throughout. Sand and Silt, dry to 3.7 ft. b	vel (fill), brown, loose, S d, Gravel is fine, angula brown to yellowish-bro gs then moist to 5 ft. bg astic, trace of roots.	Sand is fine- to r; dry overall, roots wn, brittle, moderately loose, is then saturated, trace of		0	100	
								o	100	
5	5	ML/SP		End of Boring	at 8 feet bgs.		001	0	100	
								0	100	

	<u>Л</u>	15	5/	FE		LOG OF BO	RING PSA 2		1 of 1)	
() ((1)))))) ((1))) ((1)))))))))))))))))	Th	ompsoi	-Carrie n Road cuse, N	Plant	Date Completed       : 7/12/2001         Drilling Method       : Direct Push         Driller       : Parrott-Wolff         Sampling Method       : 4' DPT sleeve         Boring Location       : PSA 2		Logged By	Logged By : J. George		
Depth in Feet	Surf. Elev.	uscs	GRAPHIC		DESCRIP	TION	Lab No.	PID (ppm)	% Recovery	
0	. 0	SP/GF		Sand and Grav, coarse-grained,	el (fill), brown, loose, s dry overall, roots thr	Sand is fine- to oughout.		1.5	83	
				drv to 4 ft. bos f	brown to yellowish-bro hen moist to 5.5 ft. bç tic, trace of roots.	wn, brittle, moderately l is then saturated, trace	of	0.3	83	
5	-5	ML/SP					001	1.3	100	
-				End of Boring a	t 8 feet bgs.			0	100	

07-18-20 GIENSAFEUSERUGEORGEWPIENSAFPROICARRIERISYRACUSEP2180RPSA2SB9.BOR

	Th	ompsor	-Carrier n Road use, N	Plant Drilling Method : Direct Push	Logged By		1 of 1) George
Depth in Feet	Surf. Elev.	uscs	GRAPHIC	DESCRIPTION	Lab No.	PID (ppm)	% Recovery
0	- 0	SP/GP		Sand and Gravel (fill), brown, loose, Sand is fine- to coarse-grained, dry overall, roots throughout. Sand and Silt, brown to yellowish-brown, brittle, moderately loose, dry to 3.8 ft. bgs then moist to 5 ft. bgs then saturated, Sand is fine-grained, trace of Gravel, sli. elastic, dense in saturated interval.		0	100
					001	0	100
5	5	ML/SP		End of Boring at 8 feet bgs.		0	75
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~						0	75

			Carrier	FE	Date Completed	: 7/11/2001	Logged By		1 of 1) George
	Th	ompsor		Plant	Drilling Method Driller Sampling Method Boring Location	: Direct Push : Parrott-Wolff : 4' DPT sleeve : SWMU 5 and 6			
Depth in Feet	Surf. Elev.	uscs	GRAPHIC		DESCRIP	TION	Lab No.	PiD (ppm)	% Recovery
0	- 0	ASPH GP	\$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$ 0 \$	Gravel base, da dark brown to d Sandy Silt with	minor Clay, brown, br	1-inch diam., loose, wi ghtly moist, dense.		0	75
-		ML ML/SP		at 3.5 feet bgs a	and grading to more C angish-brown, mallea	lay. ble, sli. plastic, sli. we		0	75
5	5	SP/GP		Orange-brown s is fine to med fr Silt.	Sand with minor Grave om 6.9 to 7.5. Wet at	el, dense to sli. loose. 6.9 feet bgs, intermixe	Sand ed with	0	88
-  				Silt and Clay wi	the minor Sand and Or	avel, reddish-brown, n	oist	0	88
-  10	-10	ML/SP		malleable to sli. bgs; saturated i	brittle, gravel is roun	ded. Sandy interval at	12 ft.	4.5	75
- - -				As above, wet, bgs, wet, brittle		ng to fine Sand at 14.5	001 ft.	25.9	75
15	15	ML/SP		End of Boring a	t 16.5 feet bgs.				
			11_1	Le  oc  oc  oc  oc  oc  oc  oc  oc  oc			J		<u></u>
20									

07-18-2001 GIENSAFEUSERUGEORGEWIPIENSAFPROICARRIERISYRACUSEP2IBORSWMU56SB1 BOR

E	Ί	15	5/	FE	L	.OG OF BOF	RING SV	VMU 58		
	Th	ompsor	Carrier Road use, N	Plant	Date Completed Drilling Method Driller Sampling Method Boring Location	: 7/11/2001 : Direct Push : Parrott-Wolff : 4' DPT sleeve : SWMU 5 and 6		Logged By		1 of 1) George
Depth in Feet	Surf. Elev.	USCS	GRAPHIC		DESCRIP	TION		Lab No.	PID (ppm)	% Recovery
0	. 0	ASPH GP	φ         ψ         υ         υ           ψ         ψ         ψ         ψ           ψ         ψ         ψ         ψ           ψ         ψ         ψ         ψ           ψ         ψ         ψ         ψ           ψ         ψ         ψ         ψ           ψ         ψ         ψ         ψ           ψ         ψ         ψ         ψ           ψ         ψ         ψ         ψ           ψ         ψ         ψ         ψ           ψ         ψ         ψ         ψ           ψ         ψ         ψ         ψ           ψ         ψ         ψ         ψ           ψ         ψ         ψ         ψ           ψ         ψ         ψ         ψ	Gravel base, da	surface with gravel ba rk gray to gray, up to ay Silty Clay, slightly	1-inch diam., loose,	with		2.8	75
		ML/SP		Sandy Silt with r with depth, malle	ninor Clay, brown, bri eable.  Grading to mo	ttle, moist. Becomin re Sand with depth.	g sandier		0	75
5	∝ <b>-</b> 5	SP		Sand, fine to me gray staining wit	dium, brown to browr h odor on Sand from	lish-gray, moist to w 7.5 to 8.5 ft. bgs.	et. Dark		21.6	88
,			Ĥ	Clay and Sand v dark gray staining	vith minor Silt, reddish ag and odor from 9.5 t	n-brown, sli. wet, ma	lleable, ecoming		21.4	88
10 	-10	ML/SP		more prevalent i	near bottom of return.		3	001	38.9	88
		ML		Silt with Sand, fi End of Boring at	ne, reddish-brown, we 12.5 feet bgs.	et, dense.			13.4	88
15	-15									
-										

07-18-2001 GIENSAFEUSERUGEORGEWPIENSAFPROICARRIERISYRACUSEP2IBORSWMU58S82.80R

E	Ί	15	5/	FE	L	.OG OF BOR	ING SWMU		3 1 of 1)		
	Th	ompsoi	-Carrier n Road suse, N'	Plant	Date Completed Drilling Method Driller Sampling Method Boring Location	: 7/11/2001 : Direct Push : Parrott-Wolff : 4' DPT sleeve : SWMU 5 and 6	Logged B	Logged By : J. George			
Depth in Feet	Surf. Elev.	USCS	GRAPHIC		DESCRIP	TION	Lab No	PID (ppm) 5.	% Recovery		
0	- 0	ASPH		Asphalt parking	surface with gravel ba	356.		NA	0		
5	5	GP		End of Boring a	rn due to saturated na	ature and gravel.		23.4	25		
			φο'φο' ψ								
10											

07-18-2001 GIENSAFEUSERUGEORGEWIPIENSAFPROICARRIERISYRACUSEP2IBORSWMU66SB3 BOR

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				FE			1/0-1/	(Page	1 of 1)		
	Th	ompsoi	-Carrier n Road suse, N	Plant	Date Completed Drilling Method Driller Sampling Method Boring Location	: 7/11/2001 : Direct Push : Parrott-Wolff : 4' DPT sleeve : SWMU 5 and 6	Logged By	Logged By : J. George			
Depth in Feet	Surf. Elev.	USCS	GRAPHIC		DESCRIP	TION	Lab No.	PID (ppm)	% Recovery		
0	. 0	ASPH		Asphalt parki	ng surface with gravel b	ase.		NA	0		
	5	GP			eturn due to saturated n 9 at 6 feet bgs.			19.4	13		
			ive'ye'	L							

07-18-20 GAENSAFEUSERVIGEORGEWIPIENSAFPROICARRIERISYRACUSEP2180RSWMU56SB4.B0R

UTC-Carrier Thompson Road Plant Syracuse, NY       Date Completed       : 7/11/2001       Logged By       : J. George         Drilling Method       : Direct Push Driller       : Parroll-Wolff       : Swmping Method       : 4' DPT sleeve Boring Location       : SWMU 5 and 6         Depth in Feet       Surf. Elev.       0       0       Image: Completed in the supervision of the supe	% pvery
0       0       Asphalt parking surface with gravel base.       NA       0         ASPH       Gravel, Sand, and minor Silt, dark gray to gray, up to 1-inch diam., saturated, very loose.       NA       0         V       V       V       V       V       V         V       V       V       V       V       V         V       V       V       V       V       V       V	overy
ASPH Asphalt parking surface with gravel base. NA C	
saturated, very loose.	}
GP	;5
	25

07-18-20v GIENSAFEUSERUGEORGEWPIENSAFPROICARRIERISYRACUSEP2IBORSWMU56SB5 BOR

		5/					(Page	e 1 of 1)
3	Thompso	C-Carrie on Road cuse, N	Plant	Date Completed Drilling Method Driller Sampling Method Boring Location	: 7/11/2001 : Direct Push : Parrott-Wolff : 4' DPT sleeve : SWMU 5 and 6	Logged By	: J.	George
Depth Su in Ele Feet		GRAPHIC		DESCRIP	TION	Lab No.	PID (ppm)	% Recovery
0 0	ASPI	4	Asphalt parki	ng surface with gravel ba	ise.		NA	0
	GP		gravel at 2 ft. End of Boring	at 5.2 feet bgs.			136.3	38
5		ώς (τοίς π (τοίς π)	· ·				NA	0

									e 1 of 1)
	Th	ompsoi	-Carrier n Road suse, N`	Plant	Date Completed Drilling Method Driller Sampling Method Boring Location	: 7/11/2001 : Direct Push : Parrott-Wolff : 4' DPT sleeve : SWMU 5 and 6	Logged B	y : J.	George
Depth in Feet	Surf. Elev.	nscs	GRAPHIC		DESCRIP	TION	Lab N	PID (ppm) 0.	% Recovery
0	- 0	ASPH		Asphalt parking	surface with gravel ba	ise.			
		GP		Gravel, dark gray brown to gray Si	/ to gray, up to 1.5-in ty Clay, slightly mois	ch diam., loose, with d t, malleable.	ark	14.3	75
* 		CL/SP		Sand with Clay, Gravel.	orown to dark gray, n	alleable, moist, minor		10.8	75
5	-5	SP		Sand, fine to me medium-grained	dium, brown to browr from 7.8 to 8.0 ft. bg:	ish-gray, sli. moist. Sa s.	and is	9.1	88
~				Clay, reddish-bro	wn, dry to sli. moist,	brittle.	001	156.9	88
	10	CL						24	88
-		SP	िर्निषनं	dense.	eddish-brown, wet, fii e, wet then dry at bot	e-grained, odor prese	nt,		
		ML		End of Boring at		IONI OI PETURA.		25.7	88

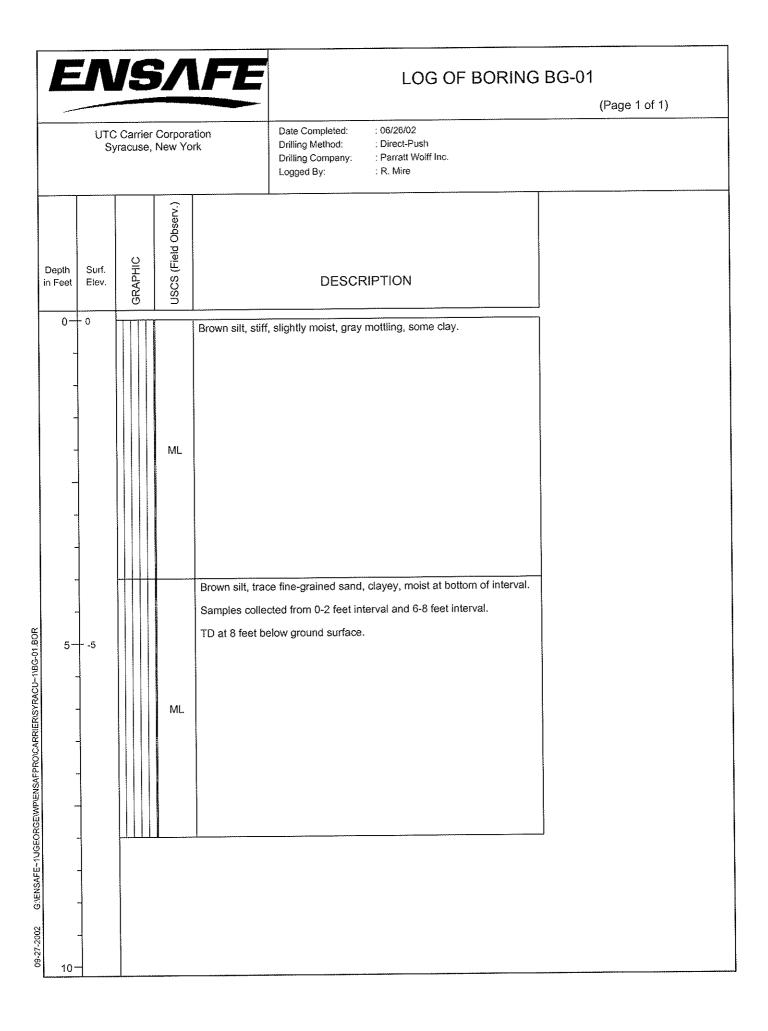
G'ENSAFEUSERUGEORGEWPPIENSAFPROICARRIERISYRACUSEP2IBORSWMU66SB7.BOR

07-18-4

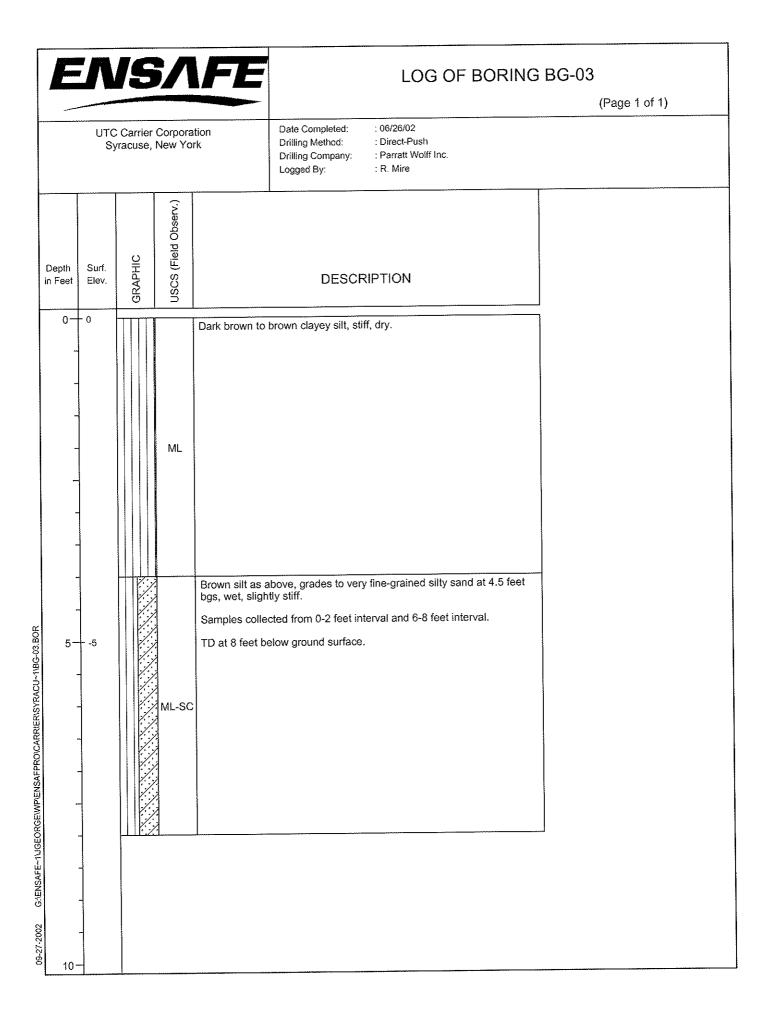
5

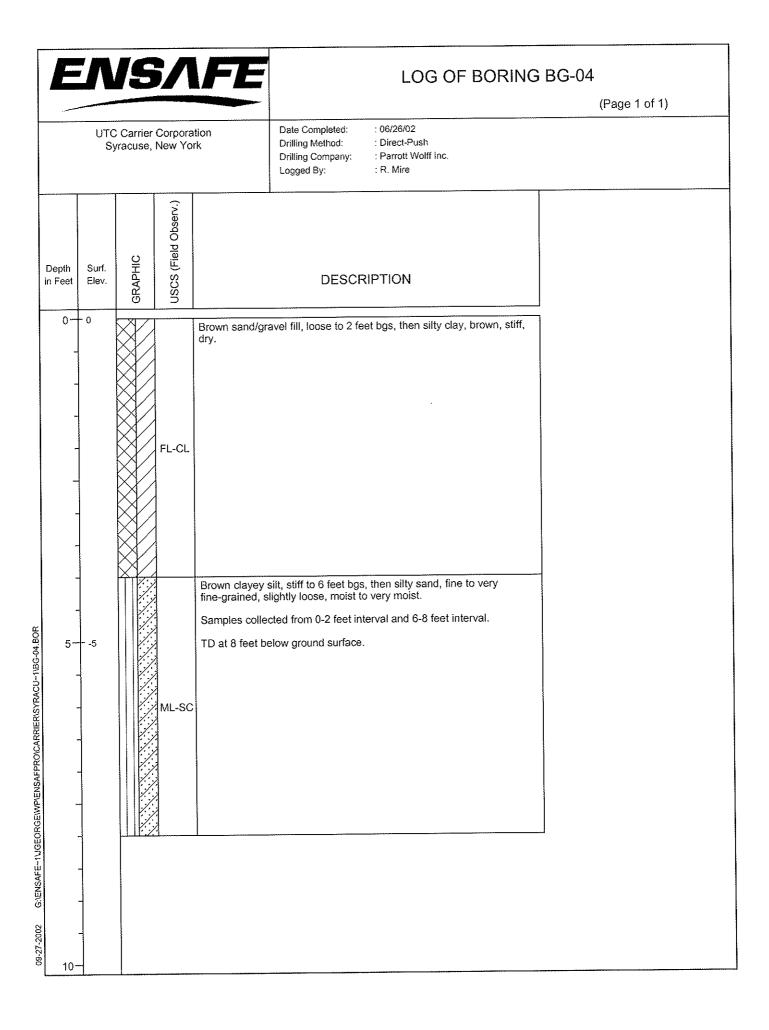
# APPENDIX A

RFI Boring Logs (June 2002)



				FE			(Page 1 of 1)
	UTC Sy	Carrier racuse,	Corpora New Yo	ation rk	Date Completed: Drilling Method: Drilling Company: Logged By:	: 06/26/02 : Direct-Push : Parratt Wolff Inc. : R. Mire	
Depth n Feet	Surf. Elev.	GRAPHIC	USCS (Field Observ.)		DESCF	RIPTION	
0 - - - - - -	- 0		ML	Brown silt, loo feet bgs, moi	ose, fill, wood chips, ro	oots, becomes stiff silt and terval.	d clay at 2
5	5		ML	Samples coll	v silt, moist to very mo	terval and 6-8 feet interval	Ι.
10-							





EA							(Page 1 of 1)
TI	nompson	Carrier Road Pl ise, NY	ant	Date Drillir Drille Sam Borir	ng Mo er pling	etho Meti	ed : 6/25/2002 Logged By : J. George : HSA : Parrott-Wolff (Syracuse, NY) nod : Split Spoon
Depth Surf. n Feet Elev. Feet	% Rec- overy	PID (ppm)	Błow Count	USCS (Field Observ.)			DESCRIPTION
00	12.5	0	16-8-7				Asphalt and LS gravel to 0.6' bgs, dry, then red-brown clay and silt, slightly moist to dry, brittle, slightly dense.
	50	0	3-6-7-8	ML			Brown to reddish-brown silt and minor fine-grained sand, moist to wet at 4' bgs, dense, stiff, malleable, trace medium-grained sand.
5	25		8-11-17-19	ML			Brown silt as above, angular gravel in lower portion of return, stiff, slightly moist.
	75		6-7-9-12	ML-SM			Brown silt, fine-grained sand stringers at 7.4' and 7.8' bgs, stiff, trace gravel, water at 7' bgs, sand is poorly graded, loose.
- - - 1010	79	0	10-10-21-34	ML			Brown to slightly reddish-brown silt, trace gravel, very stiff, till, dry to slightly moist. Hydropunch #1 @1635 to 1655
	83	0	12-28-40-46 2-24-41-100/.37	SM			Brown to slightly reddish-brown sand, fine-grained, dense, wet, poorly graded, laminated. Brown to reddish-brown sand and silt, fine-grained, very dense, hard, wet
		8	28-90-83-100/.4	SM			Reddish-brown silt and sand, fine-grained, very dense, hard, wet.
2020							Hydropunch #2 @ 20-23' bgs, 700 blows for 3'.
2525	83		31-46-34-68	ML.			Red-brown silt, minor sand, wet, very dense, poorly graded, conchoidal fracture.
	83		30-78-100/.2	ML.			Red-brown silt, wet, very hard, poorly graded, conchoidal fracture.
30	100			ML			Red-brown silt, wet, very hard, conchoidal as above.
							Hydropunch #3 @1052 TD at 34 feet bgs.

							(Page 1 of 1)
	The	UTC-0 ompson Syracu	Road Pl	ant	Drilli Drille Sam	Complete ng Methoo pling Methon ng Locatio	d : HSA : Parrott-Wolff (Syracuse, NY) nod : Split Spoon
epth Feet	Surf. Elev.	% Rec- overy	PID (ppm)	Blow Count	USCS (Field Observ.)	GRAPHIC	DESCRIPTION
0	- 0	12.5		7-4-5			Asphalt and LS gravel to 0.5' bgs, dry, loose. Dark brown to dark gray gravel and sand up to 1" dia., well graded.
1 1 1 1		83		6-7-5-8	SM		Reddish-brown silty sand, fine-grained, dry, dense, stiff, brittle.
5-	5	75		7-16-18-21	SM		Reddish-brown silty sand as above, dry, brittle, dense. Reddish-brown sand, fine-grained, silty, poorly graded,
-		75		11-18-20-22	SM		subrounded to subangular gravel, wet, very stiff, dense.
- - 10-	10	12.5		14-16-18-20	SM		Hydropunch #1 @1615
	-15	83		7-25-31-48	SM		Red-brown sand, some silt, fine-grained, wet, moderately dense, some conchoidal fracture.
		79		20-100/.3	SM		Red-brown sand and silt, wet, very hard, brittle, dry, minor rounded to subrounded gravel.
-				40-46-48-50/.3	SM		Reddish-brown sand and silt, very dense, wet, laminated.
20-	20						Hydropunch #2 @0910
25-	25	100		21-26-41-57	ML		Brown to slightly reddish-brown, silt, minor sand, wet, dense, brittle, conchoidal fracture appearance.
-		100		17-24-48-50/.1	ML		Red-brown to brown silt, minor sand in upper part of interval, wet, hard, trace clay, conchoidal fractures.
- 00		100		26-28-41-40	ML		Silt as above with very fine-grained sand throughout, wet, hard.
30-	+ -30 - -						Hydropunch #3 @1050. TD at 32.5 feet bgs.
	-	1		1			

				-		(Page 1 of 1)
1	hompson	Carrier Road Pl ise, NY	ant	Drilli Drille Sam	Complete ng Metho er pling Methong Location	I : HSA : Parrott-Wolff (Syracuse, NY) nod : Split Spoon
Depth Surf n Feet Elev Feet	%	PID (ppm)	Blow Count	USCS (Field Observ.)	GRAPHIC	DESCRIPTION
00 - - -	33	0	10-12			Asphalt and concrete to 1.0' bgs. Red-brown to brown sand, fine-grained, slightly loose, LS gravel to 1.5" dia., loose.
	50	0	4-7-9-14	ML-CL		Brown to yellow-brown silt and clay, trace fine-grained sand, dry, stiff, brittle, iron staining and mottling in clayey lower portion of return.
- - 5	50	0	4-7-7-9	CL-ML		Dark brown to dark gray clay to 4.5' bgs, dry, organic, malleable, grades to brown to red-brown silt, very fine-grained, stiff, grades to very fine-grained sand, dry to moist, dense, trace gravel.
-	87.5	0	15-15-12-15	ML-SM		Reddish brown to brown silt, gravel, sand, wet in lower portion of return, fine-grained sand, subrounded gravel, till.
	50	0	10-9-8-17	SM-ML		Red-brown sand, very fine-grained, dense, wet, grades to clay and silt, wet, very stiff, LS gravel throughout, till.
						Hydropunch #1 @1030. No water, drill to 14' bgs
15						Hydropunch #1 @1150 to 1300 14 to 17' bgs
	100		25-29-27-29	SM		Red-brown to brown sand and silt, very fine-grained, dense, wet, minor yellow mottling.
2020	83	0	24-26-28-23	ML-SN		Red-brown to brown silt and very fine-grained sand, wet, dense, trace gravel, brittle.
						Hydropunch #2 TD at 24 feet bgs.

				FE			(Page 1 of 1)
UTC-Carrier Thompson Road Plant Syracuse, NY						Completing Methor r pling Met g Locatio	d : HSA : Parrott-Wolff (Syracuse, NY) hod : Split Spoon
Depth in Feet Feet	Surf. Elev.	% Rec- overy	PID (ppm)	Blow Count	USCS (Field Observ.)	GRAPHIC	DESCRIPTION
0-	- 0	50		14-21	FL-CL		Concrete from 0 to 1.0'. Brown to red-brown silt, clay, and LS gravel, slightly loose to loose, stiff in clay interval.
- 		50		12-5-5-10	CL-ML		Red-brown to brown to gray clay and silt, slightly moist, malleable, stiff, minor gravel.
- - 5-	-5	92		6-4-3-4 ℕ	IL-SM-C	L	Red-brown to brown silt, sand, and clay. Silt in upper portion, sand in middle to lower portion, very fine-grained, poorly graded, grades to clay with sand in lower 6 inches.
- - 		100		1-3-4-7	CL-ML		Brown to red-brown clay from 6 to 7.5' bgs, moist to wet, malleable, stiff, yellow-brown mottling. From 7.5 to 8' bgs silt, very stiff, dense, trace sand.
- - - -		75		6-8-12-14	CL-ML		Dark brown clay from 8 to 8.5' bgs, malleable, moist, slightly plastic, from 8.5 to 9.0' bgs red-brown to brown silt, wet, stiff, grades to red-brown to brown sand, fine to very fine-grained, poorly graded, dense.
	-						Hydropunch #1 10-14' @0902
15-	- 	100		14-25-46-68	SM-ML		Brown to red-brown sand and silt, fine to very fine-grained, dense, wet, trace dark gray quartzite gravel.
	-  -  -	100		5-8-10-36	ML-SM		Reddish-brown silt, saturated, soft, trace sand to 17.2' bgs, grades to very fine-grained sand, dense, hard, trace quartzite gravel.
		100		14-11-16-22	ML-SM		Red-brown silt and sand, very fine-grained, wet, soft, grades to dense, sand with silt, wet, poorly graded, trace quartzite gravel.
20-	+ -20 - - -						Hydropunch #2 20-23' @1000 TD at 23 feet bgs.

The					(Page 1 of 1)							
Thompson Road Plant Syracuse, NY					Date Completed       : 7/1/2002       Logged By       : J. G.         Drilling Method       : HSA         Driller       : Parrott-Wolff (Syracuse, NY)         Sampling Method       : Split Spoon         Boring Location       : Asphalt 12' South of 5th bldg brace west side of TR-1							
Surf. Elev.	% Rec- overy	PID (ppm)	Blow Count	USCS (Field Observ.)	GRAPHIC	DESCRIPTION						
- 0	33	3.2	6-5			Asphalt and Gravel to 1.5' bgs. Red-brown to brown silt and clay, dry, loose limestone gravel, stiff silt and clay.						
	37.5	4.7	7-10-11-14	GM-CL		Dark brown gravel to 2.5', then dark brown clay and silt, wet, hydrocarbon odor from wet interval. Collected VOC sample for laboratory analysis.						
5	50		4-6-4-7	CL		Red-brown to brown silty clay, stiff, wet, hydrocarbon sheen on outside of spoon.						
	100		8-8-7-8	CL-SM		Brown clay from 6 to 7' bgs, moist, very stiff, grades to reddish-brown sandy clay at 7.4' bgs to fine sand from 7.4 to 7.8' bgs, poorly graded, wet, hydrocarbon odor throughout. Clay and minor silt from 7.8-8' bgs, wet, malleable, stiff, plastic.						
	83		9-13-19	ML		Yellow-brown to brown silt, wet, dense to 9.8' bgs then reddish-brown clay and silt with trace gravel till, stiff, dense, dry to moist.						
10						Hydropunch #1 10 to 14' bgs @ 0915.						
15	100		19-37-37	ML-SM		Reddish-brown silt and minor sand, very stiff, wet, trace gravel- rounded to subrounded quartzite, till.						
	75		13-42-42-70	GM		Till as above, reddish-brown, very dense, hard, wet, rounded to subrounded, gravel with silt and minor sand from 16-17.8' bgs. Red-brown sand from 17.8 to 18' bgs, very fine-grained, dense, wet, poorly graded.						
20	100		8-19-20-19	SM		Reddish-brown sand and silt, very fine-grained, dense.						
						Hydropunch #2 20 to 24' bgs @ 1023-1030. TD at 24 feet bgs.						
	Elev.	Elev. % Rec- overy - 0 - 33 5 50 100 83 10 15 100 75 100	Elev. % PID Rec. overy (ppm) - 0 33 3.2 37.5 4.7 5 50 100 83 10 83 10 75 100	Elev. $\frac{9}{0}{\text{Rec-}}$ PID (ppm)         Blow Count           - 0         33         3.2         6-5           37.5         4.7         7-10-11-14          5         50         4-6-4-7           100         8-8-7-8           83         9-13-19          10         100         19-37-37           - 15         100         19-37-37           100         8-19-20-19         100	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	5 50 4-6-4-7 CL 100 8-8-7-8 CL-SM 83 9-13-19 ML 15 100 19-37-37 ML-SM 75 13-42-42-70 GM 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						

						(Page 1 of 1) Date Completed : 6/26/2002 Logged By : J. George						
UTC-Carrier Thompson Road Plant Syracuse, NY					Drill Drill San	ing Metho	d : HSA : Parrott-Wolff (Syracuse, NY) hod : Split Spoon					
· 1	Surf. Elev.	% Rec- overy	PID (ppm)	Blow Count	USCS (Field Observ.)	GRAPHIC	DESCRIPTION	Well: MW-19 Elev.:				
0-+ - - -	0	12.5		7-4-5			Asphalt and LS gravel to 0.5' bgs, dry, loose. Dark brown to dark gray gravel and sand up to 1" dia., well graded.	Grout				
		83		6-7-5-8	SM		Reddish-brown silty sand, fine-grained, dry, dense, stiff, brittle.	Seal Riser				
5	-5	75		7-16-18-21	SM		Reddish-brown silty sand as above, dry, brittle, dense.					
		75		11-18-20-22	SM		Reddish-brown sand, fine-grained, silty, poorly graded, subrounded to subangular gravel, wet, very stiff, dense.					
- - - 10-+	-10	12.5		14-16-18-20	SM		Reddish-brown sand and silt, wet.	Sand Pac				
	-10							Screen				
- - - 15	· -15	83		7-25-31-48	SM		Red-brown sand, some silt, fine-grained, wet, moderately dense, some conchoidal fractures. TD at 15.5 feet bgs.					
								]				

# APPENDIX B

Laboratory Analytical Data Sheets July 2001 June 2002

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APPENDIX B

Laboratory Analytical Data Sheets (July 2001)



07/30/01

# Technical Report for

United Technology Corporation

ENSTNN: Carrier, Syracuse, NY

UARP #NS-07/03/01-MMH-01

Accutest Job Number: E94826

Report to:

Ensafe 311 Plus Park Suite 130 Nashville, TN 37217

ATTN: May Heflin

Total number of pages in report: 123



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

√incent J. Pugliese President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, MA, MD, NC, PA, RI, SC, VA This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

# Sample Summary

United Technology Corporation

Job No: E94826

ENSTNN: Carrier, Syracuse, NY Project No: UARP #NS-07/03/01-MMH-01

Sample Number	Collected Date	Time By	Received	Matri Code		Client Sample ID
E94826-1	07/09/01	16:10 KOC	07/12/01	SO	Solid	ENS-SYR-TMP-MH77-CARMH7701
E94826-2	07/09/01	16:45 KOC	07/12/01	SO	Solid	ENS-SYR-TMP-MH97-CARMH9701
E94826-3	07/09/01	15:35 KOC	07/12/01	SO	Solid	ENS-SYR-TMP-MH115- CARMH11501
E94826-4	07/09/01	17:40 KOC	07/12/01	SO	Solid	ENS-SYR-TMP-MH101- CARMH10101
E94826-5	07/09/01	17:00 KOC	07/12/01	SO	Solid	ENS-SYR-TMP-MH256- CARMH25601
E94826-6	07/09/01	16:30 KOC	07/12/01	SO	Solid	ENS-SYR-TMP-MH76-CARMH7601
È94826-7	07/09/01	15:55 KOC	07/12/01	SO	Solid	ENS-SYR-TMP-MH116- CARMH11601
E94826-8	07/09/01	00:00 KOC	07/12/01	SO :	Solid	ENS-SYR-TMP-MH102- CARMH10201

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# Laboratory Deliverables

١.	Cover Page, Title Page Listing Certification #, Facility Name and Address, and	
	Date of Report.	ļ
2.	Table of Contents.	
3.	Summary Sheets listing analytical results for all targeted and non-targeted compounds.	$\checkmark$
4.	Summary Table cross-referencing field ID #?s vs. lab ID #?s	M
5.	Document bound, paginated and legible.	
6	Chain of Custody	
7.	Methodology Summary	LT
8.	Laboratory Chronicle and Holding Time Check.	1
9.	Results submitted on a dry weight basis (if applicable)	1
10.	Method Detection Limits.	$\square$
11.	Lab certified by NJDEPE for parameters or appropriate category of parameters or a member of the USEPA CLP.	Ĩ
12.	Non-Conformance Summary.	

Jan hua Tang

7/30/2001 -----Date

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New Jersey - Fresh Ponds Corporate Village - Building B - 2235 Boule 130 - Dayton, NJ 08810 - Tel 732 329 0200 - tax: 732-329 3499 - bttp://www.accutest.com



# Percent Solids Determination

Accutest Laboratories employs a modified version of ASTM Method 4643-93 for the determination of percent solids to calculate dry weight. All data for solid matrices is reported on a dry weight basis by applying the percent solids data from this determination.

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## Table Of Contents Reduced Laboratory Data Deliverables For Non-USEPA/CLP Methods

Title/Cover Page

#### Deliverable Checklist

#### Table Of Contents

#### Section 1 General

- A. Results Summary
- B. Chain of Custody
- C. Laboratory Chronicles

# Section 2 GC/MS Support Data (grouped by fraction)

- A. Methodology Review
- B. Conformance/Non-conformance Summary
- C. Surrogate Recovery Results Summary
- D. Matrix Spike/Matrix Spike Duplicate Summary
- E. Method Blank Summary
- F. Tune Results Summary
- G. Calibration Summary (sorted by Instrument)
  - Initial Calibration Check Summary
    - Continuing Calibration Check Summary
- H. Internal Standard Summary
- 1. Sample and Blank Chromatograms, Quant Reports, Mass Spectra, and Library Search Data

#### Section 3 GC Support Data

- A. Methodology Review
- B. Conformance/Non-conformance Summary
- C. Surrogate Recovery Results Summary
- D. Matrix Spike/Matrix Spike Duplicate Summary
- E. Method Blank Summary
- F. Calibration Summary (sorted by Instrument)
  - Initial Calibration Check Summary
    - Continuing Calibration Check Summary
- G. Retention Time Shift Summary
- H. Sample, Blank and Multi-peak Standard Chromatograms and Quant Reports

# Section 4 Metals Support Data (sorted by Instrument Type - ICP, Furnace, Flame, Mercury)

- A. Methodology Review
- B. Conformance/Non-conformance Summary
- C. Blank Results Summary
  - Initial and Continuing Calibration Blank Summary
- Method Blank Summary
- D. Batch Quality Control Summary
  - Matrix Spike and Duplicate Results Summary
    - Spike Blank and Lab Control Sample Summary
  - Serial Dilution Results Summary
- E. Calibration Summary
  - Calibration Check Standards Summary
    - Interfering Elements Check Standard Summary

# Section 5 General Chemistry/Petroleum Hydrocarbon Support Data

- A. Methodology Review
- B. Conformance/Non-Conformance Summary
- C. Batch Quality Control Summary
  - Method Blank and Spike Blank Results Summary
  - Matrix Spike Results Summary
    - Duplicate Results Summary
- D. Raw Data and IR Spectra (Petroleum Hydrocarbons)
- E. Raw Data and Run Record (Hexavalent Chromium)

# Results

	Report of Analysis										
Client Sam Lab Sampl Matrix: Method: Project;	e ID: E9 SC SV	94826-1 D - Solid W846 8082	IP-MH77-CARMH SW846 3550B rrier, Syracuse, NY		Date Sampl Date Receiv Percent Soli						
Run #1 Run #2	File ID CD50847.	DF D 1	<b>Analyzed</b> 07/24/01	By LLP	Prep Date 07/13/01	Prep Batch OP9779	Analytical Batch GCD1934				
PCB List			19, 19, 20, 20, 20, 20, 20, 20, 20, 20, 20, 20			1888-2005					
CAS No.	Compour	bd	Result	RL	Units Q						
12674-11-2	Aroclor 1		ND	25	ug/kg						
11104-28-2 11141-16-5	Aroclor 1 Aroclor 1		ND ND	25 25	ug/kg ug/kg						
53469-21-9 12672-29-6	Aroclor 1 Aroclor 1		ND ND	25	ug/kg						
11097-69-1 11096-82-5	Aroclor 1 Aroclor 1	254	437 477	25 25 25	ug/kg ug/kg						
CAS No.		e Recoveries		25 Run# 2	ug/kg Limits						
877-09-8 877-09-8		ro-m-xylene ro-m-xylene	60 <i>%</i> 94 <i>%</i>		26-126% 26-126%						
2051-24-3 2051-24-3		obiphenyl	74% 102%		23-149% 23-149%						

- E = Indicates value exceeds calibration range
- J = Indicates an estimated value

B = Indicates analyte found in associated method blank

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Page 1 of 1

	Report of Analysis											
Client Sam Lab Sampl Matrix: Method: Project:	e ID: E9482 SO - S SW840	5-2 olid 5 8082 - S'	MH97-CARMH W846 3550B er, Syracuse, NY		Date Sampled: 07/09/01 Date Received: 07/12/01 Percent Solids: 84.2							
Run #1 Run #2	<b>File ID</b> CD50848.D	DF 1	<b>Analyzed</b> 07/24/01	By LLP	Prep Date 07/13/01	Prep Batch OP9779	Analytical Batch GCD1934					
PCB List												
CAS No.	Compound		Result	RL	Units Q							
12674-11-2	Aroclor 1016		ND	21	ug/kg							
11104-28-2	Aroclor 1221		ND	21	ug/kg							
11141-16-5	Aroclor 1232		ND	21	ug/kg							
53469-21-9	Aroclor 1242		ND	21	ug/kg							
12672-29-6	Aroclor 1248		ND	21	ug/kg							
11097-69-1	Aroclor 1254		441	21	ug/kg							
11096-82-5	Aroclor 1260		380	21	ug/kg							
CAS No.	Surrogate Rec	overies	Run# 1	Run# 2	Limits							
877-09-8	Tetrachloro-m-	xylene	72%		26-126%							
877-09-8	Tetrachloro-m-	xylene	121%		26-126%							
2051-24-3	Decachlorobip	ienyl	172 % 3		23-149%							
2051-24-3	Decachlorobip	ieny <b>l</b>	155 % a		23-149%							

(a) Outside control limits due to matrix interference.

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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Accutest Laboratories

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·····	Report of Analysis									
Client Sample ID: Lab Sample ID: Matrix: Method: Project:		394826-3 30 - Solid 3W846 808	TMP-MH115-C 2 SW846 355( Carrier, Syracus	)B	501	Date Sampl Date Receiv Percent Sol	ed: 07/12/01			
Run #1 Run #2	File ID CD50849	D.D 1	F Analy 07/24/	•	y LP	Prep Date 07/13/01	Prep Batch OP9779	Analytical Batch GCD1934		
PCB List		Aktadak			· · · · · · · · · · · · · · · · · · ·					
CAS No.	Compou	md	Res	ult	RL	Units Q				
12674-11-2	Aroclor	1016	ND		24	ug/kg				
11104-28-2	Aroclor	1221	ND		24	ug/kg				
11141-16-5	Aroclor	1232	ND		24	ug/kg				
53469-21-9	Aroclor	1242	ND		24	ug/kg				
12672-29-6	Aroclor	-	ND		24	ug/kg				
11097-69-1	Aroclor i	1254	ND		24	ug/kg				
11096-82-5	Aroclor ]	1260	964		24	ug/kg				
CAS No.	Surrogat	e Recover	ies Rur	1	Run# 2	Limits				
377-09-8	Tetrachlo	oro-m-xyle	ne 63 %	)		26-126%				
377-09-8		iro-m-xylei				26-126%				
2051-24-3		robiphenyl				23-149%				
2051-24-3		robiphenyl				23-149%				

Report of Analysi

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

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	Report of Analysis									
Client Sam Lab Sampl Matrix: Method: Project:	e ID: E94826-4 SO - Solid SW846 8082 S	P-MH101-CARM SW846 3550B ier, Syracuse, N		Date Sampl Date Receiv Percent Soli	red: 07/12/01					
Run #1 Run #2	File ID         DF           CD50850.D         1	<b>Analyzed</b> 07/24/01	By LLP	<b>Prep Date</b> 07/13/01	Prep Batch OP9779	Analytical Batch GCD1934				
PCB List										
CAS No.	Compound	Result	RL	Units Q						
12674-11-2	Aroclor 1016	ND	23	ug/kg						
11104-28-2	Aroclor 1221	ND	23	ug/kg						
11141-16-5	Aroclor 1232	ND	23	ug/kg						
53469-21-9	Aroclor 1242	ND	23	ug/kg						
12672-29-6	Aroclor 1248	ND	23	ug/kg						
11097-69-1	Aroclor 1254	ND	23	ug/kg						
11096-82-5	Aroclor 1260	ND	23	ug/kg						
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits						
877-09-8	Tetrachloro-m-xylene	78%		26-126%						
377-09-8	Tetrachloro-m-xylene	122%		26-126%						
2051-24-3	Decachlorobiphenyl	99%		23-149%						
2051-24-3	Decachlorobiphenyl	291% a		23-149%						

(a) Outside control limits due to matrix interference.

- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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Client Sam Lab Sample Matrix: Method: Project:	e ID: E94826-5 SO - Solid SW846 8082	P-MH256-CARM SW846 3550B rier, Syracuse, NY		Date Sampl Date Receiv Percent Soli					
Run #1 Run #2	File IDDFCD50851.D1	Analyzed 07/24/01	By LLP	<b>Prep Date</b> 07/13/01	Prep Batch OP9779	Analytical Batch GCD1934			
PCB List									
CAS No.	Compound	Result	RL	Units Q					
2674-11-2	Aroclor 1016	ND	25	ug/kg					
1104-28-2	Aroclor 1221	ND	25	ug/kg					
1141-16-5	Aroclor 1232	ND	25	ug/kg					
3469-21-9	Aroclor 1242	ND	25	ug/kg					
2672-29-6	Aroclor 1248	ND	25	ug/kg					
1097-69-1	Aroclor 1254	79.8	25	ug/kg					
1096-82-5	Aroclor 1260	62.0	25	ug/kg					
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits					
77-09-8	Tetrachloro-m-xylene	60%		26-126%					
77-09-8	Tetrachloro-m-xylene	103%		26-126%					
051-24-3	Decachlorobiphenyl	91%		23-149%					
051-24-3	Decachlorobiphenyl	116%		23-149%					

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Page 1 of 1

Accutest Laboratories

P	Report of Analysis											
Lab Sample ID:E94826-0Matrix:SO - SoliMethod:SW846 8			6 id 3082 ;	P-MH76-CARMH SW846 3550B rier, Syracuse, NY		Date Sampled: 07/09/01 Date Received: 07/12/01 Percent Solids: 81.0						
Run #1 Run #2	<b>File ID</b> CD5090 CD5092		<b>DF</b> 1 10	Analyzed 07/25/01 07/26/01	By LLP LLP	<b>Prep Date</b> 07/13/01 07/13/01	<b>Prep Batch</b> OP9779 OP9779	Analytical Batch GCD1938 GCD1938				
PCB List												
CAS No.	Сотро	und		Result	RL	Units Q						
12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5	Aroclor Aroclor Aroclor Aroclor Aroclor Aroclor Aroclor	1221 1232 1242 1248 1254		ND ND ND ND ND 10200 <sup>a</sup>	20 20 20 20 20 20 20 200	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg						
CAS No.	Surroga	ite Recor	veries	Run# 1	Run# 2	Limits						
877-09-8 877-09-8 2051-24-3 2051-24-3		010-m-xy 010-m-xy probiphe probiphe	/lene nyl	71 % 92 % 82 % 107 %	58% 83% 75% 104%	26-126% 26-126% 23-149% 23-149%						

(a) Result is from Run# 2

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



	Report of Analysis										
Client Sample ID:ENS-SYR-TMPLab Sample ID:E94826-7Matrix:SO - SolidMethod:SW846 8082Project:ENSTNN: Carrie			¥846 3550B		Date Sampl Date Receiv Percent Soli	Page 1 o					
Run #1 Run #2	<b>File ID</b> CD50907.D	DF 1	<b>Analyzed</b> 07/25/01	By LLP	Prep Date 07/13/01	Prep Batch OP9779	Analytical Batch GCD1938				
PCB List				<u> </u>							
CAS No.	Compound		Result	RL	Units Q						
12674-11-2	Aroclor 1016		ND	21	ug/kg						
11104-28-2	Aroclor 1221		ND	21	ug/kg						
11141-16-5	Aroclor 1232		ND	21	ug/kg						
53469-21-9	Aroclor 1242		ND	21	ug/kg						
2672-29-6	Aroclor 1248		ND	21	ug/kg						
1097-69-1	Aroclor 1254		ND	21	ug/kg						
1096-82-5	Aroclor 1260		411	21	ug/kg						
CAS No.	Surrogate Reco	veries	Run#1	Run# 2	Limits						
377-09-8	Tetrachloro-m-x	ylene	61%		26-126%						
377-09-8	Tetrachloro-m-x		73%		26-126%						
2051-24-3	Decachlorobiphe		84%		23-149%						
2051-24-3	Decachlorobiphe		77%		23-149%						

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

Report of Analysis										
e ID: E94826-8 SO - Solid SW846 8082	SW846 3550B		Date Receiv							
File ID         DF           CD50692.D         1	<b>Analyzed</b> 07/18/01	By LLP	<b>Prep Date</b> 07/16/01	Prep Batch OP9792	Analytical Batch GCD1929					
			A							
Compound	Result	RL	Units Q							
Aroclor 1016	ND	24	na/ko							
Aroclor 1221										
Aroclor 1232			÷ c							
Aroclor 1242			- 0							
Aroclor 1248										
Aroclor 1254	ND		· ·							
Aroclor 1260	105	24	ug/kg ug/kg							
Surrogate Recoveries	Run# 1	Run# 2	Limits							
Tetrachloro-m-xylene	82%		26 1260							
Decachlorobiphenvl		·.								
Decachlorobiphenyl	83%		23-149% 23-149%							
	e ID: E94826-8 SO - Solid SW846 8082 ENSTNN: Car File ID DF CD50692.D 1 Compound Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1254 Aroclor 1254 Aroclor 1260 Surrogate Recoveries Tetrachloro-m-xylene Tetrachloro-m-xylene Decachlorobiphenyl	ple ID:ENS-SYR-TMP-MH102-CARMIe ID:E94826-8SO - SolidSW846 8082SW846 3550BENSTNN: Carrier, Syracuse, NYFile IDDFAnalyzedCD50692.D107/18/01CompoundResultAroclor 1016NDAroclor 1221NDAroclor 1232NDAroclor 1248NDAroclor 1254NDAroclor 1260105Surrogate RecoveriesRun# 1Tetrachloro-m-xylene84%Decachlorobiphenyl83%	ple ID:ENS-SYR-TMP-MH102-CARMH10201e ID:E94826-8SO - SolidSW846 8082SW846 3550BENSTNN: Carrier, Syracuse, NYFile IDDFAnalyzedByCD50692.D107/18/01LLPCompoundResultRLAroclor 1016NDAroclor 1221NDAroclor 1232ND24Aroclor 1242NDAroclor 1248NDAroclor 1254NDAroclor 126010524Aroclor 126010524Aroclor 126082 %Tetrachloro-m-xylene82 %Tetrachloro-m-xylene84 %Decachlorobiphenyl83 %	ple ID:ENS-SYR-TMP-MH102-CARMH10201 e ID:Date Sampl Date Receiv SW846 8082Date Sampl Date Receiv Percent Sol ENSTNN: Carrier, Syracuse, NYFile IDDFAnalyzed 07/18/01By LLPPrep Date 07/16/01CompoundResultRLUnits UnitsQAroclor 1016 Aroclor 1221 Aroclor 1232 Moclor 1242 Moclor 1242 Mroclor 1244 MDDATE 24 Ug/kg MD 24 Ug/kg MD 24 Ug/kg MD 24 Ug/kg MD Moclor 1244 MD MD Moclor 1254 MD MD Moclor 1260LimitsSurrogate RecoveriesRun#1 Rum#1 Rum#2Rum#2 LimitsTetrachloro-m-xylene Tetrachloro-m-xylene Ba3% Decachlorobiphenyl Decachlorobiphenyl83 % Sa % Sa %23-149%	ple ID:       ENS-SYR-TMP-MH102-CARMH10201         e ID:       E94826-8         SO - Solid       Date Sampled:       07/09/01         SW846 8082       SW846 3550B       Percent Solids:       73.8         File ID       DF       Analyzed       By       Prep Date       Prep Batch         CD50692.D       1       07/18/01       LLP       07/16/01       OP9792         Compound       Result       RL       Units       Q         Aroclor 1016       ND       24       ug/kg         Aroclor 1221       ND       24       ug/kg         Aroclor 1232       ND       24       ug/kg         Aroclor 1242       ND       24       ug/kg         Aroclor 1248       ND       24       ug/kg         Aroclor 1240       ND       24       ug/kg         Aroclor 1248       ND       24       ug/kg         Aroclor 1254       ND       24       ug/kg         Aroclor 1260       105       24       ug/kg         Surrogate Recoveries       Rum# I       Rum# 2       Limits         Tetrachloro-m-xylene       82%       26-126%       26-126%         Decachlorobiphenyl       83%					

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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ACCUTEST JOB 4: E94 826 ACCUTEST QUOTE 4:		· · · ·	<b>}</b> ; <b>-</b>	2111 H.	777	rt				COMMENI SHEMAHAS		
CHAIN Or CUSTODY 2235 ROUTE 130, DAYTON, NJ 08810 732-329-0200 FAX: 732-329-34997480	WITC - Carrier RET ECT NAME SURAME SURAME JISS - 031 BISS - 031 BI	COLLECTION COLLECTION TIME SAWPLED A COLLECTION CO	1610 Crt. 402 Sy 1			1630	7 2321				SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY       DATE TIME:       DATE TIME:     RECEIVED BY:       RECEIVED BY:     RELINQUISHED BY:       DATE TIME:     LO () 2.00       DATE TIME:     RECEIVED BY:       DATE TIME:     RECEIVED BY:       DATE TIME:     RECEIVED BY:       DATE TIME:     RECEIVED BY:	
ACCUTEST.	Purce le 37228 37228 219	ACCUTEST FIELD ID / POINT OF COLLECTION DATE	BUCARTIMP-MHTT-CARAMHTTOI	Z ENC-SYR-THE-MUST-CAREMH9701 7-9-01 Z ENC-SYRETMP-MULIC-CARMH (ICO) 7-9-01		+	1	ENS-SYK-TMP-MHIDL-CARMHIDDOI 1-20			HIP BO	

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# ACCUTEST.

08/03/01

Technical Report for

United Technology Corporation

ENSTNN: Carrier, Syracuse, NY

UARP #NS-07/03/01-MMH-01

Accutest Job Number: E94827

Report to:

Ensafe 311 Plus Park Suite 130 Nashville, TN 37217

ATTN: May Heflin

Total number of pages in report: 171



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, MA, MD, NC, PA, RI, SC, VA This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. .....

# Sample Summary

# United Technology Corporation

Job No: E94827

ENSTNN: Carrier, Syracuse, NY Project No: UARP #NS-07/03/01-MMH-01

Sample Number	Collected Date	Time By	Received	Matri Code		Client Sample ID
E94827-1	07/10/01	13:00 JPG	07/12/01	SO	Solid	ENS-SYR-TMP-STRM1- CARMSM0101
E94827-2	07/10/01	13:00 JPG	07/12/01	SO	Solid	ENS-SYR-TMP-STRM1- CARMSM0101
E94827-3	07/10/01	13:15 JPG	07/12/01	SO	Solid	ENS-SYR-TMP-STRM2- CARMSM0201
È94827-4	07/10/01	13:17 JPG	07/12/01	SO	Solid	ENS-SYR-TMP-ST202- CARMSM0202
E94827-5	07/10/01	13:35 JPG	07/12/01	SO	Solid	ENS-SYR-TMP-STRM3- CARMSM0301
E94827-6	07/10/01	13:40 JPG	07/12/01	SO	Solid	ENS-SYR-TMP-ST302- CARMSM0302
E94827-7	07/10/01	14:05 JPG	07/12/01	SO	Solid	ENS-SYR-TMP-STRM4- CARMSM0401
E94827-8	07/10/01	14:10 JPG	07/12/01	SO	Solid	ENS-SYR-TMP-ST402- CARMSM0402
E94827-9	07/10/01	14:35 JPG	07/12/01	SO	Solid	ENS-SYR-TMP-STRM-CARMSM0501
E94827-10	07/10/01	14:35 JPG	07/12/01	SO	Solid	ENS-SYR-TMP-ST502- CARMSM0502
E94827-11	07/10/01	14:50 JPG	07/12/01	SO	Solid	ENS-SYR-TMP-STRM6- CARMSM0601
E94827-12	07/10/01	15:00 JPG	07/12/01	SO	Solid	ENS-SYR-TMP-STRM7- CARMSM0701
E94827-13	07/10/01	15:10 JPG	07/12/01	SO	Solid	ENS-SYR-TMP-STRM8- CARMSM0801

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# Sample Summary (continued)

United Technology Corporation

ENSTNN: Carrier, Syracuse, NY Project No: UARP #NS-07/03/01-MMH-01

Sample Number		Time By	Received	Matri Code		Client Sample ID
E94827-14	07/10/01	15:15 JPG	07/12/01	SO	Solid	ENS-SYR-TMP-ST800- CARMSM0802

Job No: E94827

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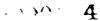


# Laboratory Deliverables

ł.	Berkenning Contraction of Linear and Linear cost and	
	Date of Report.	
2.	Table of Contents.	$(\land)$
3.	Summary Sheets listing analytical results for all targeted and non-targeted compounds.	
4.	Summary Table cross-referencing field ID #'s vs. lab ID #'s.	M
5	Document bound, paginated and legible	$\square$
6.	Chain of Custody	VI
7	Methodology Summary	1/1
δ.	Laboratory Chronicle and Holding, Fime Check	1/1
9.	Results submitted on a dry weight basis (if applicable)	$( \land$
10	Method Detection Limits	
	Lab certified by NIDEPE for parameters or appropriate category of parameters or a member of the USEPA CLP.	i/i
12.1	Non-Conformance Summary.	X

Draw Jua Var QC Reviewer

8/3/2001 Date



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No. 5 June 2 + Fresh Point, Carporate Village + Bailding (0 + 27.85 Route 130 + Dayton, #2.00810 + 14 / 32 379.0200 + 16 / 32 379.379 3493 + http://www.accute.if.com



# **Percent Solids Determination**

Accutest Laboratories employs a modified version of ASTM Method 4643-93 for the determination of percent solids to calculate dry.weight. All data for solid matrices is reported on a dry weight basis by applying the percent solids data from this determination.

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## **Table Of Contents Reduced Laboratory Data Deliverables** For Non-USEPA/CLP Methods

Title/Cover Page

#### **Deliverable Checklist**

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- Surrogate Recovery Results Summary С.
- D. Matrix Spike/Matrix Spike Duplicate Summary
- E. Method Blank Summary
- F. Tune Results Summary G.
  - Calibration Summary (sorted by Instrument)
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      - Continuing Calibration Check Summary
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#### .Section.3.GC-Support-Data

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    - Matrix Spike Results Summary
    - Duplicate Results Summary
- D Raw Data and IR Spectra (Petroleum Hydrocarbons)
- Raw Data and Run Record (Hexavalent Chromium) E.



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Report	of	Analysis
report	01	7 <b>1 1 1 1 1 1 1 1</b> 1 1 1 1 1 1 1 1 1 1 1

Client Sam Lab Sample Matrix: Method: Project:	E94827-1 SO - Solid SW846 8082	P-STRM1-CARM SW846 3550B rrier, Syracuse, NY		Date Sampled: 07/10/01 Date Received: 07/12/01 Percent Solids: 73.4				
Run #1 Run #2	File IDDFAB28371.D1	<b>Anałyzed</b> 07/26/01	By KLS	<b>Prep Date</b> 07/13/01	Prep Batch OP9780	Analytical Batch GAB1595		
PCB List								
CAS No.	Compound	Result	RL	Units Q				
12674-11-2	Aroclor 1016	NĎ	23	ug/kg				
11104-28-2	Aroclor 1221	ND	23	ug/kg				
11141-16-5	Aroclor 1232	ND	23	ug/kg				
53469-21-9	Aroclor 1242	ND	23	ug/kg				
12672-29-6		ND	23	ug/kg				
11097-69-1	Aroclor 1254	ND	23	ug/kg				
11096-82-5	Aroclor 1260	1320	23	ug/kg				
CAS No.	Surrogate Recoverie	s Run#1	Run# 2	Limits				
877-09-8	Tetrachloro-m-xylene	79%		26-126%				
877-09-8	Tetrachloro-m-xylene			26-126%				
2051-24-3	Decachlorobiphenyl	42%	· .	23-149%				
2051-24-3	Decachlorobiphenyl	47 %		23-149%				

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

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	Report of Analysis										
Client Sam Lab Sampl Matrix: Method: Project:											
	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch				
Run #1 Run #2	AB28357.D EF32870.D	1 5	07/25/01 07/26/01	KLS YYX	07/13/01 07/13/01	OP9780 OP9780	GAB1595 GEF1868				
PCB List											
CAS No.	Compound		Result	RL	Units Q						
12674-11-2	Aroclor 1016		ND	22	ug/kg						
11104-28-2	Aroclor 1221		ND	22	ug/kg						
11141-16-5	Aroclor 1232		ND	22	ug/kg						
53469-21-9	Aroclor 1242		ND	22	ug/kg						
12672-29-6	Aroclor 1248		ND	22	ug/kg						
11096-82-5	Aroclor 1260		1400 a	110	ug/kg						
CAS No.	Surrogate Rec	overies	Run#1	Run# 2	Limits						
877-09-8	Tetrachloro-m-	xylene	70%	57%	26-126%						
877-09-8	Tetrachloro-m-	xylene	36%	127% b	26-126%						
2051-24-3	Decachlorobipl		87%	88%	23-149%						
2051-24-3	Decachlorobipl	nenyl	99%	62 %	23-149%						

(a) Result is from Run# 2

(b) Outside control limits due to dilution.

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

ND = Not detected

RL = Reporting Limit

N = Indicates presumptive evidence of a compound

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Accutest Laboratories

	ragerori						
Client Samj Lab Sample Matrix: Method: Project:	e <b>ID:</b> E94827 SO - So SW846	7-3 olid 98082 SY	STRM2-CARM W846 3550B er, Syracuse, NY		Date Sample Date Receiv Percent Soli	ed: 07/12/01	
Run #1 Run #2	File ID AB28358.D	DF 1	<b>Analyzed</b> 07/25/01	By KLS	<b>Prep Date</b> 07/13/01	Prep Batch OP9780	Analytical Batch GAB1595
PCB List				<u>, , , , , , , , , , , , , , , , , , , </u>			
CAS No.	Compound		Result	RL	Units Q		
12674-11-2	Aroclor 1016		ND	22	ug/kg		
11104-28-2	Aroclor 1221		ND	22	ug/kg		
11141-16-5	Aroclor 1232		ND	22	ug/kg		
53469-21-9	Aroclor 1242		ND	22	ug/kg		
12672-29-6	Aroclor 1248		ND	22	ug/kg		
11097-69-1	Aroclor 1254		ND	22	ug/kg		
11096-82-5	Aroclor 1260		ND	22	ug/kg		
CAS No.	Surrogate Rec	overies	Run# 1	Run# 2	Limits		
877-09-8	Tetrachloro-m-	xylene	78%		26-126%		
877-09-8	Tetrachloro-m-	xylene	100%		26-126%		
2051-24-3	Decachlorobipl		86%		23-149%		
2051-24-3	Decachlorobip	henyl	102%		23-149%		

**Report of Analysis** 

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

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		x		0		b	
Client Sam Lab Sample Matrix: Method: Project:	e ID: E94827-4 SO - Solid SW846 808	MP-ST202-CARMS 2 SW846 3550B Carrier, Syracuse, NY	Date Sampled: 07/10/01 Date Received: 07/12/01 Percent Solids: 75.8				
Run #1 Run #2	File ID         DI           AB28359.D         1	7 <b>Analyzed</b> 07/25/01	By KLS	Prep Date 07/13/01	Prep Batch OP9780	Analytical Batch GAB1595	
PCB List							
CAS No.	Compound	Result	RL	Units Q			
12674-11-2	Aroclor 1016	ND	22	ug/kg			
11104-28-2	Aroclor 1221	ND	22	ug/kg			
11141-16-5	Aroclor 1232	ND	22	ug/kg			
53469-21-9	Aroclor 1242	ND	22	ug/kg			
12672-29-6	Aroclor 1248	ND	22	ug/kg			
11097-69-1	Aroclor 1254	ND	22	ug/kg			
11096-82-5	Aroclor 1260	ND	22	ug/kg			
CAS No.	Surrogate Recover	ies Run#1	Run# 2	Limits			
877-09-8	Tetrachloro-m-xyle	ne 71%		26-126%			
877-09-8	Tetrachloro-m-xyle	ne 90%		26-126%			
2051-24-3	Decachlorobipheny	1 80%		23-149%			
2051-24-3	Decachlorobipheny	1 107%		23-149%			

**Report of Analysis** 

- ND = Not detected RL = Reporting Limit
- E = Indicates value exceeds calibration range
- J = Indicates an estimated value

B = Indicates analyte found in associated method blank

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	Report of Analysis											
Client Sam Lab Sample Matrix: Method: Project:	e <b>ID:</b> E9482 SO - So SW846	7-5 oliđ 5 8082 – SV	STRM3-CARM V846 3550B r, Syracuse, NY		Date Sampl Date Receiv Percent Soli	ed: 07/12/01						
Run #1 Run #2	File ID AB28362.D	DF 1	<b>Analyzed</b> 07/26/01	By KLS	<b>Prep Date</b> 07/13/01	Prep Batch OP9780	Analytical Batch GAB1595					
PCB List												
CAS No.	Compound		Result	RL	Units Q							
12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248		ND ND ND ND ND	30 30 30 30 30	ug/kg ug/kg ug/kg ug/kg ug/kg							
11097-69-1 11096-82-5	Aroclor 1254 Aroclor 1260		ND 270	30 30	ug/kg ug/kg							
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Limits							
877-09-8 877-09-8 2051-24-3 2051-24-3	Tetrachloro-m Tetrachloro-m Decachlorobip Decachlorobip	-xylene henyl	71 % 74 % 79 % 86 %		26-126% 26-126% 23-149% 23-149%							

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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L.	Report of Analysis											
Client Sam Lab Sampl Matrix: Method: Project:	e ID: E9482 SO - S SW84	27-6 Solid 6 8082 – SW	ST302-CARMS /846 3550B r, Syracuse, NY		Date Sampl Date Receiv Percent Soli	ed: 07/12/01						
Run #1 Run #2	<b>File ID</b> AB28363.D EF32871.D	DF 1 10	Analyzed 07/26/01 07/26/01	By KLS YYX	Prep Date 07/13/01 07/13/01	<b>Prep Batch</b> OP9780 OP9780	Analytical Batch GAB1595 GEF1868					
PCB List												
CAS No.	Compound		Result	RL	Units Q							
12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260		ND ND ND ND 3660 <sup>a</sup> ND	24 24 24 24 24 24 240 24	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg							
CAS No.	Surrogate Ro	coveries	Run#1	Run# 2	Limits							
877-09-8 877-09-8 2051-24-3 2051-24-3	Tetrachloro-n Tetrachloro-n Decachlorobij Decachlorobij	n-xylene phenyl	86% 48% 81% 86%	69% 122% 140% 92%	26-126% 26-126% 23-149% 23-149%							

(a) Result is from Run# 2

13

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

7

	Report of Analysis										
Client Sam Lab Sampl Matrix: Method: Project:	e ID: E9482 SO - S SW846	: ENS-SYR-TMP-STRM4-CARMSM0401 E94827-7 Date Sampled: SO - Solid Date Received: SW846 8082 SW846 3550B Percent Solids: ENSTNN: Carrier, Syracuse, NY									
Run #1 Run #2	File ID AB28364.D	DF 1	<b>Analyzed</b> 07/26/01	By KLS	<b>Prep Date</b> 07/13/01	Prep Batch OP9780	Analytical Batch GAB1595				
PCB List		*****									
CAS No.	Compound		Result	RL	Units Q						
12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	Aroclor 1221 Aroclor 1232 Aroclor 1242		ND ND ND ND ND	47 47 47 47 47 47 47	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg						
11096-82-5 CAS No.		coveries	800 Run# 1	47 47 Run# 2	ug/kg Limits						
877-09-8 877-09-8 2051-24-3 2051-24-3	Tetrachloro-m Tetrachloro-m Decachlorobig Decachlorobig	-xylene -xylene blenyl	34 % 38 % 42 % 36 %		26-126% 26-126% 23-149% 23-149%						

ND = Not detected RL = Reporting Limit  $\mathbf{E}$  = Indicates value exceeds calibration range

3 J = Indicates an estimated value



Page 1 of 1

B = Indicates analyte found in associated method blank

	Page 1 of						
Client Sam Lab Sampl Matrix: Method: Project:	e ID: E94827-8 SO - Soli SW846 8	3 d 082 SV	ST402-CARMS W846 3550B Et, Syracuse, NY		Date Sampl Date Receiv Percent Soli		
Run #1 Run #2	File ID CD51015.D	DF 1	Analyzed 07/30/01	By LLP	<b>Prep Date</b> 07/28/01	Prep Batch OP9880	Analytical Batch GCD1942
PCB List				·····			
CAS No.	Compound		Result	RL	Units Q		
12674-11-2	Aroclor 1016		ND	23	ug/kg		
11104-28-2	Aroclor 1221		ND	23	ug/kg		
11141-16-5	Aroclor 1232		ND	23	ug/kg		
53469-21-9	Aroclor 1242		ND	23	ug/kg		
12672-29-6	Aroclor 1248		ND	23	ug/kg		
11097-69-1	Aroclor 1254		ND	23	ug/kg		
11096-82-5	Aroclor 1260		468	23	ug/kg		
CAS No.	Surrogate Recov	eries	Run#1	Run#2	Limits		
877-09-8	Tetrachloro-m-xy	lene	55%		26-126%		
077 00 0	101	_					

	Surregue Recordines		$\operatorname{Kun} \mathcal{L}$	Lannis
877-09-8 877-09-8 2051-24-3 2051-24-3	Tetrachloro-m-xylene Tetrachloro-m-xylene Decachlorobiphenyl Decachlorobiphenyl	55% 58% 114% 103%		26-126% 26-126% 23-149% 23-149%

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

15

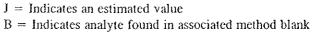
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Client Sam Lab Sample Matrix: Method: Project:	e <b>ID:</b> E94827-9 SO - Soli SW846 8	) d 082 SV	STRM-CARMS V846 3550B r, Syracuse, NY		Date Sample Date Receive Percent Soli	ed: 07/12/01	
Run #1 <sup>a</sup> Run #2		DF 5	<b>Analyzed</b> 07/26/01	By YYX	<b>Prep Date</b> 07/13/01	Prep Batch OP9780	Analytical Batch GEF1868
PCB List			-,				
CAS No.	Compound		Result	RL	Units Q		
12674-11-2	Aroclor 1016		ND	180	ug/kg		
11104-28-2	Aroclor 1221		ND	180	ug/kg		
11141-16-5	Aroclor 1232		ND	180	ug/kg		
53469-21-9	Aroclor 1242		ND	180	ug/kg		
12672-29-6	Aroclor 1248		ND	180	ug/kg		
11097-69-1	Aroclor 1254		ND	180	ug/kg		
11096-82-5	Aroclor 1260		ND	180	ug/kg		
CAS No.	Surrogate Reco	veries	Run# 1	Run# 2	Limits		
877-09-8	Tetrachloro-m-x	ylene	62%		26-126%		
877-09-8	Tetrachloro-m-x	ylene	42%		26-126%		
2051-24-3	Decachlorobiphe	nyl	41%		23-149%		
2051-24-3	Decachlorobiphe	nyl	37%		23-149%		
	*						

**Report of Analysis** 

(a) Dilution required due to sample high viscous matrix.

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range



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Accutest Laboratories

	<b>Report of Analysis</b>							
Client Sam Lab Sampl Matrix: Method: Project:	e ID: E9482 SO - S SW84	D: ENS-SYR-TMP-ST502-CARMSM0502 E94827-10 SO - Solid SW846 8082 SW846 3550B ENSTNN: Carrier, Syracuse, NY				Date Sampled: 07/10/01 Date Received: 07/12/01 Percent Solids: 48.5		
Run #1 Run #2	File ID AB28366.D	DF 1	<b>Analyzed</b> 07/26/01	By KLS	<b>Prep Date</b> 07/13/01	Prep Batch OP9780	Analytical Batch GAB1595	
PCB List								
CAS No.	Compound		Result	RL	Units Q			
12674-11-2 11104-28-2			ND ND	35 35	ug/kg			
11141-16-5 53469-21-9	Aroclor 1232		ND	35	ug/kg ug/kg			
12672-29-6 11097-69-1			ND ND	35 35	ug/kg ug/kg			
11097-09-1	· · · · · · · · · · · · · · · · · · ·		ND 1180	35 35	ug/kg ug/kg			
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Limits			
877-09-8 877-09-8 2051-24-3 2051-24-3	Tetrachloro-n Tetrachloro-n Decachlorobij Decachlorobij	h-xylene Shenyl	73 % 33 % 42 % 50 %		26-126% 26-126% 23-149% 23-149%			

ND = Not detected RL = Reporting Limit

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E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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Client Sam Lab Sampl Matrix: Method: Project:	e ID: E94827 SO - Sc SW846	7-11 blid 8082 SV	STRM6-CARM W846 3550B 17, Syracuse, N		Date Sampl Date Receiv Percent Soli		
Run #1 Run #2	File ID AB28367.D	DF 1	<b>Analyzed</b> 07/26/01	By KLS	<b>Prep Date</b> 07/13/01	Prep Batch OP9780	Analytical Batch GAB1595
PCB List							·
CAS No.	Compound		Result	RL	Units Q		
12674-11-2	Aroclor 1016		ND	20	ug/kg		
11104-28-2	Aroclor 1221		ND	20	ug/kg		
11141-16-5	Aroclor 1232		ND	20	ug/kg		
53469-21-9	Aroclor 1242		ND	20	ug/kg		
12672-29-6	Aroclor 1248		ND	20	ug/kg		
11097-69-1	Aroclor 1254		ND	20	ug/kg		
11096-82-5	Aroclor 1260		60.3	20	ug/kg		
CAS No.	Surrogate Reco	overies	Run#1	Run# 2	Limits		
377-09-8	Tetrachloro-m-;	xylene	77%		26-126%		
377-09-8	Tetrachloro-m-		73%		26-126%		
2051-24-3	Decachlorobiph		43%		23-149%		
2051-24-3	Decochlorohinh	•	10 70		ムリーエーナフ /0		

45%

2051-24-3 Decachlorobiphenyl

J = Indicates an estimated value

23-149%

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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Client Sam Lab Sampl Matrix: Method: Project:	e ID: E948 SO - SW84	27-12 Solid 16 8082 - S'	-STRM7-CARM W846 3550B er, Syracuse, N		Date Sampl Date Receiv Percent Soli	red: 07/12/01	
Run #1 Run #2	File ID AB28368.D EF32872.D	<b>DF</b> 1 5	Analyzed 07/26/01 07/26/01	By KLS YYX	<b>Prep Date</b> 07/13/01 07/13/01	<b>Prep Batch</b> OP9780 OP9780	Analytical Batch GAB1595 GEF1868
PCB List CAS No.	Compound		Result	RL	Units Q		
12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260		ND ND ND ND ND 2220 <sup>a</sup>	21 21 21 21 21 21 21 100	ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg ug/kg		
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Limits		
377-09-8 377-09-8 2051-24-3 2051-24-3	Tetrachloro-m Tetrachloro-m Decachlorobip Decachlorobip	-xylene bhenyl	91% 48% 47% 54%	79% 199% b 108% 89%	26-126% 26-126% 23-149% 23-149%		

(a) Result is from Run# 2

(b) Outside control limits due to dilution.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

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		Repor	rt of An	alysis		Page 1 of
Client Sam Lab Samph Matrix: Method: Project:	e ID: E94827-13 SO - Solid SW846 8082	P-STRM8-CARMS SW846 3550B tier, Syracuse, NY		Date Sampi Date Receiv Percent Soli		
Run #1 Run #2	File ID         DF           AB28369.D         1	<b>Analyzed</b> 07/26/01	By KLS	<b>Prep Date</b> 07/13/01	Prep Batch OP9780	Analytical Batch GAB1595
PCB List						
CAS No.	Compound	Result	RL	Units Q		
12674-11-2	Aroclor 1016	ND	20	ug/kg		
11104-28-2	Aroclor 1221	ND	20	ug/kg		
11141-16-5	Aroclor 1232	ND	20	ug/kg		
53469-21-9	Aroclor 1242	ND	20	ug/kg		
12672-29-6	Aroclor 1248	ND	20	ug/kg		
11097-69-1	Aroclor 1254	ND	20	ug/kg		
11096-82-5	Aroclor 1260	650	20	ug/kg		
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
377-09-8	Tetrachloro-m-xylene	74%		26-126%		
377-09-8	Tetrachloro-m-xylene	42%		26-126%		
2051-24-3	Decachlorobiphenyl	39%	•	23-149%		
2051-24-3	Decachlorobiphenyl	45%		23-149%		

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- J = Indicates an estimated value

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

12672-29-6 Aroclor 1248

11097-69-1 Aroclor 1254

11096-82-5 Aroclor 1260

Surrogate Recoveries

Tetrachloro-m-xylene

Tetrachloro-m-xylene

Decachlorobiphenyl

Decachlorobiphenyl

CAS No.

877-09-8

877-09-8

2051-24-3

2051-24-3

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Client Sam Lab Sampl- Matrix: Method: Project:	e ID: E9482 SO - S SW84	:7-14 Solid 6 8082 - S'	-ST800-CARMS W846 3550B er, Syracuse, N		Date Samp Date Receiv Percent Sol	ved: 07/12/01	
₹un #1 ₹un #2	File ID AB28370.D	DF 1	<b>Analyzed</b> 07/26/01	By KLS	<b>Prep Date</b> 07/13/01	Prep Batch OP9780	Analytical Batch GAB1595
CB List			<u> </u>				
CAS No.	Compound		Result	RL	Units Q		
2674-11-2	Aroclor 1016		ND	: 24	ug/kg		
1104-28-2	Aroclor 1221		ND	24	ug/kg		
1141-16-5	Aroclor 1232		ND	24	ug/kg		
3469-21-9	Aroclor 1242		ND	24	ug/kg		
2672 29 6	Avodov 1040				······································		

24

24

24

Run# 2

ug/kg

ug/kg

ug/kg

Limits

26-126%

26-126%

23-149%

23-149%

ND

ND

46.0

94%

50%

52%

50%

Run#1

**Report of Analysis** 

#### ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

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		MATRIX CODES	DW. DRINKING WATER GW. GROUND WATER WW. WATER SG. SOIL SL. SLUDGE OI- OIL	LIQ - OTHER LIQUID SOL - OTHER SOLIS	LAB USE ONLY			(	222						000		MH 102 . Corn H 10201 *	1221-5 EN					
ACCUTEST JOB *: E94827	ACCUTEST QUOTE #:	ANALYTICAL INFORMATION				, , , , , , , , , , , , , , , , , , ,	DIPLICATE		· · · · · · · · · · · · · · · · · · ·	·, ZI-9	9-0	6+12"	یر ۹ ۱ ۲	6121.	Ste	COMMENTS/REMARKS	RECD. ENS- 418-740- 441 102. C	-JA) - NOT ON C-C-C		POSSESION, INCLUDING COURIER DELIVERY		RECEIVED BY:	PRESERVE WHERE APPUCABLE ON ICE
ODY		A	0,823	<mark>ا تا</mark> ا	<u>,9</u>	>	>	>	> >	`	 	7	~	2			V 057V	(X222		SESION, INCLU	DATE TINE: 7-12.01 /000	DATE TIME:	PRESERVE
CHAIN C CUSTO	732-329-0200 FAX: 732-329-3499/3480	FACILITY INFORMATION	PROJECT NAME CARRIER UTT GOORD ARENER LOCATION JONGON NY PROJECT NO 3133-031	-934C	DATE TIME SAMPLED TE C T 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	7-10-01 13W 196 Jan Sol 20 X	7-10-01 1300	7-10-01 1315 1 X	X 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			X 1 1 0-01-L	X-10-01 1435	X I I A A JEFI M-OFL		DATA DELIVERABLE INFORMATION	00	FULL CLP DISK DELIVERABLE		OCUMENTED BELOW EACH TIME SAMPLES CHANGE		RELINOUISHED BY:	SEAL #
		CLIENT INFORMATION	- Hellin c/o Encle uc vay ste 410 TN 37228 STATE ZIP		FIELD ID / POINT OF COLLECTION	GUC-SYR-TIMP-STAMI - CAR MSMOICI	ENS-SURTIME STRMI - CARR SIN DI OI		4	ENG-SUR THE STED - CARMENDES DE	WI-SYRJANP-STRMY - CARMSMOUSI	art-syr-time-stan-carmenous		CHS-SUR-TWP-STSO2 - CARMEMORDA	Are a	DATA TURNAROUND INFORMATION	DARD APPROVED BY:	GENCY	21 DAY TURNAROUND HARDCOPY. EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED	SAMPLE CUSTODY MUST BE D	I CON 1. U	RECEIVED 3.	DATE TIME: RECEIVED BY: 5.
		C State State State State	NAME MC 460 220 Atrauc V ADDRESS Jacki Vile	PHONE # 01	SAMPLE # F	5-3ND ] -				-The entry	15-18 (-	28 SL-210	-2 ENG-SV	2-2 CM 2-2		DATA TU	<ul> <li>✓ 21 DAYS STANDARD</li> <li>✓ 14 DAYS RUSH</li> </ul>	C 7 DAYS EMERGENCY	21 DAY TURNAROUND DATA UNLESS PREVIO		BELLINOUIS REPAIR	RELINGUISHED BY: 3.	RELINQUISHED BY: 5.

 $\sum$ 

		MATRIX CODES	DW. DRINKING WATER WATER WATER WW. WATER WW. WATER SO. SOIL SOIL SOIL SOIL SOIL SOUD SOUD SOUD	LAB USE ONLY		222						
ACCUTEST JOB #: E94827	ACCUTEST QUOTE #:	ANALYTICAL INFORMATION						COMMENTS/REMARKS		UDING COURIER DELIVERY	A RECEIVED BY:	PRESERVE WHERE APPUCABLE ON ICE
<b>JSTODY</b>	81U 3480		PRESERVATION	DC A BNON HRO3					ž Ž	ANGE POSSESION, INCL	DATE TIME: 7-73-01 /	PRESERV
IN C CUST	2235 MUULE 130, UATIUN, NJ U8810 732-329-0200 FAX: 732-329-3499/3480	FACILITY INFORMATION		КА ВОТТЕ ВОТТЕ ВОТТЕ ВОТТЕ ВОТТЕ	Itajetti Sul I			DATA DELIVERABLE INFORMATION	COMMERCIAL "A" COMMERCIAL "B" STATE FORMS .E	ACH TIME SAMPLES CH	RELINQUISHED BY: 2. UPS RELINQUISHED BY:	4. SEAL #
CHAIN	20 L 732-329	FACIL	PROJECT NAME ULTC - CO LOCATION SUNC ULTC - CO ULTC - CO FROJECT NO. CO FAX # 6 US - 2137- FAX # 6 US - 2137- COLLECTION		CC FI				NJ REDUCED NJ Fui FULL CLP DISK DELIVERABLE OTHER (SPECIFY)	DOCUMENTED BELOW E	ج *	γ:
ł			с state 410 state 21228	FIELD ID / POINT OF COLLECTION	OVERVE-THE-STRING-CARINIMOLOL	Provention - Company - Children Molecular	ALTING THE STROZ - CARMENDED 2	DATA TURNAROUND INFORMATION	X     21 DAYS STÁNDARD     APPROVED BY:       14 DAYS RUSH     14 DAYS RUSH       17 DAYS EMERGENCY	USTODY I	DATE TIME: RECEIVED BY: 7-11-01 1800 1. UPS DATE TIME: RECEIVED BY:	3. DATE TIME: RECEIVED BY: 5.
	Z ALLU		NAME LAND HERAN ADDRESS ATTLOND W CITY, CITY, SEND REPORT TO: MENHLAN SEND REPORT TO: MENHLAN PHONE # 615-25	ACCUTEST SAMPLE # FIELD ID	- 11 CNC-CNB-TIMP			DATA TURNARO	X       21 DAYS STÁNDARD         14 DAYS RUSH       14 DAYS RUSH         7 DAYS EMERGENCY       0THER         21 DAY TURNAROUND HARDCO       21 DAY TURNAROUND HARDCO		RELINQUISHED BY SAMPLER: 1. CONTRACTOR DAY RELINCOUSHED BY:	3. RELINQUISHED BY: 5.

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# ACCUTEST.

08/15/01

# Technical Report for

United Technology Corporation

ENSTNN: Carrier, Syracuse, NY

UARP #NS-07/03/01-MMH-01

Accutest Job Number: E94828

Report to:

Ensafe 220 Athens Way Suite 410 Nashville, TN 37217

ATTN: May Heflin

Total number of pages in report: 217



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, MA, MD, NC, PA, RI, SC, VA This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

# Sample Summary

Job No:

E94828

United Technology Corporation

ENSTNN: Carrier, Syracuse, NY Project No: UARP #

Sample Number	Collected Date	Time By	Received	Matr Code		Client Sample ID
E94828-1	07/11/01	09:30 JPG	07/12/01	SO	Soil	ËNS-SYR-TMP-SB1-CARSW56110
E94828-2	07/11/01	10:15 JPG	07/12/01	SO	Soil	ENS-SYR-TMP-SB2-CARSW56208
E94828-3	07/11/01	12:20 JPG	07/12/01	SO	Soil	ENS-SYR-TMP-SB7-CARSW56706
E94828-4	07/11/01	11:50 JPG	07/12/01	AQ	Ground Water	ENS-SYR-TMP-SB4-CARSW56401
E94828-4A	07/11/01	11:50 JPG	07/12/01	AQ	Groundwater Filtered	ENS-SYR-TMP-SB4-CARSW56401

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# Laboratory Deliverables

I.	Cover Page, Title Page Listing Certification #, Facility Name and Address, and Date of Report.	11
2.	Table of Contents.	
3.	Summary Sheets listing analytical results for all targeted and non-targeted compounds.	1
4.	Summary Table cross-referencing field ID #2s vs. lab ID #2s.	1
5.	Document bound, paginated and legible.	1/1
6.	Chain of Custody.	
7.	Methodology Summary	1/1
8.	Laboratory Chronicle and Holding Time Check.	1/1
9.	Results submitted on a dry weight basis (if applicable)	1
10.	Method Detection Limits.	1/1
H.	Lab certified by NJDEPE for parameters or appropriate category of parameters or a member of the USEPA CLP.	$\mathbf{N}$
12.	Non-Conformance Summary.	M

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8/7/2001 Date

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New Jersey - Fresh Ponds Corporate Valage - Boilding B - 2235 Route 138 - Dayton, HJ 08810 - tel 732 329 0200 - tax 732-329 3499 - http://www.accutest.com



# Percent Solids Determination

Accutest Laboratories employs a modified version of ASTM Method 4643-93 for the determination of percent solids to calculate dry weight. All data for solid matrices is reported on a dry weight basis by applying the percent solids data from this determination.

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#### Table Of Contents Reduced Laboratory Data Defiverables For Non-USEPA/CLP Methods

Tille/Cover Page

#### Deliverable Checklist

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- A. Results Summary
- B. Chain of Custody
- C. Laboratory Chronicles

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- B. Conformance/Non-conformance Summary
- C. Surrogate Recovery Results Summary
- D Matrix Spike/Matrix Spike Duplicate Summary
- E Method Blank Summary
- F. Tune Results Summary
- G Calibration Summary (sorted by Instrument)
  - Initial Calibration Check Summary
    - Continuing Calibration Check Summary
- H. Internal Standard Summary
- 1 Sample and Blank Chromatogranis, Quant Reports, Mass Spectra, and Library Search Data

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  - Continuing Calibration Clicck Summary
- G. Retention Time Shift Summary
- H. Sample, Blank and Multi-peak Standard Chromatograms and Quant Reports

#### Section 4 Metals Support Data (sorted by Instrument Type - ICP, Furnace, Flame, Mercury)

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- C. Blank Results Summary
  - Initial and Continuing Calibration Blank Summary
- Mediod Blank Summary
- D. Batch Quality Control Summary
  - Matrix Spike and Duplicate Results Summary
    - Spike Blank and Lab Control Sample Summary
  - Social Dilution Results Summary
- $E_{\rm c} \sim Calibration \ Summary$ 
  - Calibration Chock Standards Summary
    - Interfering Elements Check Standard Summary

#### Section 5 General Chemister/Tetrolenm Hydrocarbon Support Data

- A. Methodology Review
- 8. Conformance/Non-Conformance Summary
- C. Batch Quality Control Summary
  - Mothod Blank and Spike Blank Results Summary
  - Matrix Spike Results Summary
  - Duplicate Results Summary
- D. Raw Data and IR Spectra (Petroleum Hydrocarbons) E. Raw Data and Run Record (Hexavalent Chromium)

# Results

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Client Sa Lab Sam Matrix: Method: Project:	-	E9482 SO - S SW84	28-1 Soil 6 8260B	SB1-CARSW56 er, Syracuse, N'		Date Sampled:07/11/01Date Received:07/12/01Percent Solids:89.7				
Run #1	File ID		DF	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch		
Run #2	K44998		1	07/15/01	DFT	n/a	n/a	VK1556		

**Report of Analysis** 

#### **VOA TCL List**

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	5.6	ug/kg
71-43-2	Benzene	ND	2.2	ug/kg
75-27-4	Bromodichloromethane	ND	5.6	ug/kg
75-25-2	Bromoform	ND	5.6	ug/kg
74-83-9	Bromomethane	ND	5.6	ug/kg
78-93-3	2-Butanone (MEK)	ND	5.6	ug/kg
75-15-0	Carbon disulfide	ND	5.6	ug/kg
56-23-5	Carbon tetrachloride	ND	5.6	ug/kg
108-90-7	Chlorobenzene	ND	5.6	ug/kg
75-00-3	Chloroethane	ND	5.6	ug/kg
67-66-3	Chloroform	ND	5.6	ug/kg
74-87-3	Chloromethane	ND	5.6	ug/kg
124-48-1	Dibromochloromethane	ND	5.6	ug/kg
75-34-3	1,1-Dichloroethane	ND	5.6	ug/kg
107-06-2	1,2-Dichloroethane	ND and	5.6	ug/kg
75-35-4	1,1-Dichloroethene	ND	5.6	ug/kg
156-59-2	cis-1,2-Dichloroethene	78.7	5.6	ug/kg
156-60-5	trans-1,2-Dichloroethene	ND	5.6	ug/kg
78-87-5	1,2-Dichloropropane	ND	5.6	ug/kg
10061-01-5	cis-1,3-Dichloropropene	ND	5.6	ug/kg
10061-02-6	trans-1,3-Dichloropropene	ND	5.6	ug/kg
100-41-4	Ethylbenzene	ND	5.6	ug/kg
591-78-6	2-Hexanone	ND	5.6	ug/kg
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.6	ug/kg
75-09-2	Methylene chloride	ND	5.6	ug/kg
100-42-5	Styrene	ND	5.6	ug/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.6	ug/kg
127-18-4	Tetrachloroethene	ND	5.6	ug/kg
108-88-3	Toluene	ND	5.6	ug/kg
71-55-6	1,1,1-Trichloroethane	ND	5.6	ug/kg
79-00-5	1,1,2-Trichloroethane	ND	5.6	ug/kg
79-01-6	Trichloroethene	109	5.6	ug/kg
75-01-4	Vinyl chloride	ND	5.6	ug/kg
1330-20-7	Xylene (total)	ND and	5.6	ug/kg

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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[Client Sample ID:	ENS-SYR-TMP-SB1-CARSW56110		
Lab Sample ID:	E94828-1	Date Sampled:	07/11/01
Matrix:	SO - Soil	Date Received:	
Method:	SW846 8260B	Percent Solids:	
Project:	ENSTNN: Carrier, Syracuse, NY		09.7
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#### **VOA TCL List**

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CAS No.	Surrogate Recoveries	Run#1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		55-132%
17060-07-0	1,2-Dichloroethane-D4	98%		54-129%
2037-26-5	Toluene-D8	96%		65-133%
460-00-4	4-Bromofluorobenzene	111%		58-137%

B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

		e e		14601011
Client Sample ID: Lab Sample ID: Matrix:	ENS-SYR-TMP-SB1-CARSW56110 E94828-1 SO - Soil	Date Sampled: Date Received:		
Project:	ENSTNN: Carrier, Syracuse, NY	Percent Solids:	89.7	

Metals Analysis

Analyte	Result	RL	Units	DF	Ргер	Analyzed By	Method
Copper	15.9	2.7	mg/kg	1	07/16/01	07/19/01 EK	SW846 6010B
Lead	3.7	1.1	mg/kg	1	07/16/01	07/19/01 EK	SW846 6010B
Manganese	308	1.6	mg/kg	1	07/16/01	07/19/01 EK	SW846 6010B
Nickel	10.7	4.3	mg/kg	1	07/16/01	07/19/01 EK	SW846 6010B

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Client Sample ID: Lab Sample ID: Matrix:	ENS-SYR-TMP-SB1- E94828-1 SO - Soil	CARSW56	5110		Sampled: 07/11/ Received: 07/12/	
Project:	ENSTNN: Carrier, S	Y	Perce	nt Solids: 89.7		
General Chemistry						
Analyte	Result	RL	Units	DF	Analyzed By	Method
Cyanide Solids, Percent pH <sup>a</sup>	<1.1 89.7 8.6	1.1	mg/kg % su	1 1 1	07/23/01 эк 07/14/01 тм 07/16/01 экт	SW846 9012 M ASTM 4643-00 SW846 9045

(a) Sample received beyond holding time.

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RL = Reporting Limit

Page 1 of 1

Chent San Lab Samj Matrix: Method: Project:		E9482 SO - 5 SW84	28-2 Soil 6 8260B	SB2-CARSW56 er, Syracuse, NY		•	led: 07/11/01 ved: 07/12/01 ids: 88.0	
Run #1	File ID		DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	K45039		1	07/16/01	DFT	n/a	n/a	VK1557

#### **VOA TCL List**

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	5.7	ug/kg
71-43-2	Benzene	ND	2.3	ug/kg
75-27-4	Bromodichloromethane	ND	5.7	ug/kg
75-25-2	Bromoform	ND	5.7	ug/kg
74-83-9	Bromomethane	ND	5.7	ug/kg
78-93-3	2-Butanone (MEK)	ND	5.7	ug/kg
75-15-0	Carbon disulfide	ND	5.7	ug/kg
56-23-5	Carbon tetrachloride	ND	5.7	ug/kg
108-90-7	Chlorobenzene	ND	5.7	ug/kg
75-00-3	Chloroethane	ND	5.7	ug/kg
67-66-3	Chloroform	ND	5.7	ug/kg
74-87-3	Chloromethane	ND	5.7	ug/kg
124-48-1	Dibromochloromethane	ND	5.7	ug/kg
75-34-3	1,1-Dichloroethane	ND	5.7	ug/kg
107-06-2	1,2-Dichloroethane	ND	5.7	ug/kg
75-35-4	1,1-Dichloroethene	ND	5.7	ug/kg
156-59-2	cis-1,2-Dichloroethene	ND	5.7	ug/kg
156-60-5	trans-1,2-Dichloroethene	ND	5.7	ug/kg
78-87-5	1,2-Dichloropropane	ND	5.7	ug/kg
10061-01-5	cis-1,3-Dichloropropene	ND	. 5.7	ug/kg
10061-02-6	trans-1,3-Dichloropropene	ND	5.7	ug/kg
100-41-4	Ethylbenzene	4.2	5.7	ug/kg J
591-78-6	2-Hexanone	ND -	5.7	ug/kg
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.7	ug/kg
75-09-2	Methylene chloride	ND	5.7	ug/kg
100-42-5	Styrene	ND	5.7	ug/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.7	ug/kg
127-18-4	Tetrachloroethene	ND	5.7	ug/kg
108-88-3	Toluene	ND	5.7	ug/kg
71-55-6	1,1,1-Trichloroethane	ND	5.7	ug/kg
79-00-5	1,1,2-Trichloroethane	ND	5.7	ug/kg
79-01-6	Trichloroethene	ND	5.7	ug/kg
75-01-4	Vinyl chloride	ND	5.7	ug/kg
1330-20-7	Xylene (total)	16.3	5.7	ug/kg

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

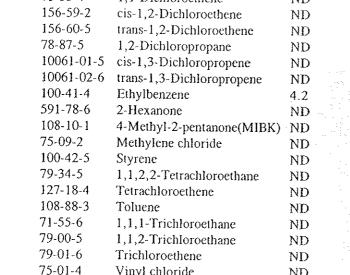
B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

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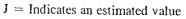


	Client Sample ID:	ENS-SYR-TMP-SB2-CARSW56208		
	Lab Sample ID:	E94828-2	Date Sampled:	07/11/01
- 1	Matrix:	SO - Soil	Date Received:	
	Method:	SW846 8260B	Percent Solids:	
	Project:	ENSTNN: Carrier, Syracuse, NY		
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#### **VOA TCL List**

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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104 %		55-132%
17060-07-0	1,2-Dichloroethane-D4	106 %		54-129%
2037-26-5	Toluene-D8	95 %		65-133%
460-00-4	4-Bromofluorobenzene	116 %		58-137%



B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

Client Sample ID:ENS-SYR-TMP-SB2-CARSW56208Lab Sample ID:E94828-2Date Sampled:07/11/01Matrix:SO - SoilDate Received:07/12/01Project:ENSTNN: Carrier, Syracuse, NYPercent Solids:88.0

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method
Copper	25.7	2.8	mg/kg	1	07/16/01	07/19/01 EK	SW846 6010B
Lead	3.4	1.1	mg/kg	1	07/16/01	07/19/01 EK	SW846 6010B
Manganese	525	1.7	mg/kg	1	07/16/01	07/19/01 EK	SW846 6010B
Nickeł	8.9	4.4	mg/kg	1	07/16/01	07/19/01 EK	SW846 6010B

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Client Sample ID: Lab Sample ID:	ENS-SYR-TMP-SB2 E94828-2	CARSW50	5208	Dates	Sampled: 07/11/	01	
Matrix:	SO - Soil				Received: 07/12/		
Project:	ENSTNN: Carrier, S	yracuse, N	Y	Perce	nt Solids: 88.0		
General Chemistry							
Analyte	Result	RL	Units	DF	Analyzed By	Method	
Cyanide	< 1.1	1.1	mg/kg	1	07/23/01 јк	SW846 9012 M	
Solids, Percent	88		%	1	07/14/01 тм	ASTM 4643-00	

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07/16/01 JKT SW846 9045

**Report of Analysis** 

us, Percent 88 pH <sup>a</sup> 8.1

(a) Sample received beyond holding time.

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Client San Lab Samp Matrix: Method: Project:	ole ID: E9482 SO - S SW84	8-3 Soil 6 8260B	B7-CARSW56		Date Sampled: 07/11/01 Date Received: 07/12/01 Percent Solids: 82.9		
Run #1 Run #2	<b>File ID</b> K45000.D	DF 1	<b>Analyzed</b> 07/15/01	By DFT	Prep Date n/a	Prep Batch n/a	Analytical Batch VK1556
VOA TCL	List						
CAS No.	Compound		Result	RL	Units Q		
67-64-1	Acetone		30.6	6.0	ug/kg		
71-43-2	Benzene		ND	2.4	ug/kg		
75-27-4	Bromodichlor	omethane	ND	6.0	ug/kg		
75-25-2	Bromoform		ND	6.0	ug/kg		
74-83-9	Bromomethar	ne	ND	6.0	ug/kg		
78-93-3	2-Butanone (]	MEK)	ND	6.0	ug/kg		
75-15-0	Carbon disulf	īde	ND	6.0	ug/kg		
56-23-5	Carbon tetrac	hloride	ND	6.0	no/ko		

71-43-2	Benzene	ND	2.4	ug/kg
75-27-4	Bromodichloromethane	ND	6.0	ug/kg
75-25-2	Bromoform	ND	6.0	ug/kg
74-83-9	Bromomethane	ND	6.0	ug/kg
78-93-3	2-Butanone (MEK)	ND	6.0	ug/kg
75-15-0	Carbon disulfide	ND	6.0	ug/kg
56-23-5	Carbon tetrachloride	ND	6.0	ug/kg
108-90-7	Chlorobenzene	ND	6.0	ug/kg
75-00-3	Chloroethane	ND	6.0	ug/kg
67-66-3	Chloroform	ND	6.0	ug/kg
74-87-3	Chloromethane	ND	6.0	ug/kg
124-48-1	Dibromochloromethane	ND	6.0	ug/kg
75-34-3	1,1-Dichloroethane	4.8	6.0	ug/kg J
107-06-2	1,2-Dichloroethane	ND	6.0	ug/kg
75-35-4	1,1-Dichloroethene	ND	6.0	ug/kg
156-59-2	cis-1,2-Dichloroethene	ND	6.0	ug/kg
156-60-5	trans-1,2-Dichloroethene	ND -	6.0	ug/kg
78-87-5	1,2-Dichloropropane	ND	6.0	ug/kg
10061-01-5	cis-1,3-Dichloropropene	$ND^{-1} \equiv$	6.0	ug/kg
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	ug/kg
100-41-4	Ethylbenzene	ND	6.0	ug/kg
591-78-6	2-Hexanone	ND	6.0	ug/kg
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.0	ug/kg
75-09-2	Methylene chloride	ND	6.0	ug/kg
100-42-5	Styrene	ND	6.0	ug/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	ug/kg
127-18-4	Tetrachloroethene	ND	6.0	ug/kg
108-88-3	Toluene	ND	6.0	ug/kg
71-55-6	1,1,1-Trichloroethane	ND	6.0	ug/kg
79-00-5	1,1,2-Trichloroethane	ND	6.0	ug/kg
79-01-6	Trichloroethene	ND	6.0	ug/kg
75-01-4	Vinyl chloride	ND	6.0	ug/kg
1330-20-7	Xylene (total)	ND	6.0	ug/kg

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Client Sample ID:	ENS-SYR-TMP-SB7-CARSW56706		
Lab Sample ID:	E94828-3	Date Sampled:	07/11/01
Matrix:	SO - Soil	Date Received:	
Method:	SW846 8260B	Percent Solids:	82,9
Project:	ENSTNN: Carrier, Syracuse, NY		

#### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		55-132%
17060-07-0	1,2-Dichloroethane-D4	92%		54-129%
2037-26-5	Toluene-D8	99%		65-133%
460-00-4	4-Bromofluorobenzene	97%		58-137%

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- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Client Sample ID:	ENS-SYR-TMP-SB7-CARSW56706		
Lab Sample ID:	E94828-3	Date Sampled:	07/11/01
Matrix:	SO - Soil	Date Received:	
Project:	ENSTNN: Carrier, Syracuse, NY	Percent Solids:	82.9

Metals Analysis

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Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method
Copper Lead Manganese Nickel	23.6 9.2 312 23.3	3.1 1.2 1.8 4.9	mg/kg mg/kg mg/kg mg/kg				SW846 6010B SW846 6010B SW846 6010B SW846 6010B

Page 1 of 1

Client Sample ID; Lab Sample ID; Matrix:	ENS-SYR-TMP-SB7- E94828-3 SO - Soil	CARSW56	5706		Sampled: 07/11/ Received: 07/12/	
roject:	ENSTNN: Carrier, S	ENSTNN: Carrier, Syracuse, NY				
General Chemistry						
Analyte	Result	RL	Units	DF	Analyzed By	Method
Cyanide	<1.2		mg/kg	1	07/23/01 эк	SW846 9012 M
Solids, Percent	82.9 7.8		%	1	07/14/01 тм	ASTM 4643-00
pH a	7.8		su	1	07/16/01 јкт	SW846 9045

**Report of Analysis** 

(a) Sample received beyond holding time.

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07/16/01 jkt sw846 9045

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Client San Lab Samj Matrix: Method: Project:		E9482 AQ - 0 SW84	28-4 Ground Wa 6 8260B	SB4-CARSW56 iter er, Syracuse, N		-	ed: 07/11/01 /ed: 07/12/01 ids: n/a	
Run #1	File ID		DF	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	E47135		1	07/16/01	GTT	n/a	n/a	VE2513

#### **VOA TCL List**

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	4.0	ug/l	
74-83-9	Bromomethane	ND	5.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	2.0	ug/l	
75-00-3	Chloroethane	ND	5.0	ug/l	
67-66-3	Chloroform	ND	5.0	ug/l	
74-87-3	Chloromethane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	ug/l	
75-34-3	1,1-Dichloroethane	7.7	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/I	
75-35-4	1,1-Dichloroethene	1.8	2.0	ug/l	J
156-59-2	cis-1,2-Dichloroethene	281	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	26.8	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l	
79-01-6	Trichloroethene	38.7	1.0	ug/l	
75-01-4	Vinyl chloride	8.8	1.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Client Sample ID:	ENS-SYR-TMP-SB4-CARSW56401		
Lab Sample ID:	E94828-4	Date Sampled:	07/11/01
Matrix:	AQ - Ground Water	Date Received:	
Method:	SW846 8260B	Percent Solids:	
Project:	ENSTNN: Carrier, Syracuse, NY		1

#### VOA TCL List

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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104 %		81-118%
17060-07-0	1,2-Dichloroethane-D4	108 %		68-124%
2037-26-5	Toluene-D8	97 %		85-119%
460-00-4	4-Bromofluorobenzene	99 %		75-127%

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Client Sample ID: Lab Sample ID: Matrix:	ENS-SYR-TMP-SB4 E94828-4 AQ - Ground Water	-CARSW56	6401	Date ]	Sampled: 07/11/ Received: 07/12/		
Project:	ENSTNN: Carrier, Syracuse, NY			Percent Solids: n/a			
General Chemistry							
Analyte	Result	RL	Units	DF	Analyzed By	Method	
pH a	11.1		su	1	07/12/01 Fab	EPA 150.1	

(a) Sample received out of holding time for pH analysis.

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Accutest Laboratories

Report	of	Analysis	

Client Sample ID:	ENS-SYR-TMP-SB4-CARSW56401		
Lab Sample ID: Matrix:	E94828-4A AQ - Groundwater Filtered	Date Sampled: Date Received:	
Project:	ENSTNN: Carrier, Syracuse, NY	Percent Solids:	n/a

Metals Analysis

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Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method
Arsenic Chromium Iron Lead <sup>a</sup> Manganese Nickel Selenium	5.2 <10 29000 13,1 4600 272 <5.0	5.0 10 100 9.0 15 40 5.0	ug/l ug/l ug/l ug/l ug/l ug/l ug/l	1 1 3 1 1	07/13/01 07/13/01 07/13/01 07/13/01 07/13/01 07/13/01 07/13/01	07/17/01 ND 07/17/01 ND 07/17/01 ND 07/18/01 ND 07/17/01 ND 07/17/01 ND 07/17/01 ND	SW846 6010B SW846 6010B SW846 6010B SW846 6010B SW846 6010B SW846 6010B SW846 6010B

(a) Elevated detection limit due to dilution required for high interfering element.

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		CHAIN	IN OF CUSTODY	ΛQC	ACCUTEST JOB #:	E94828	
	R	<b>Gu</b> ) 732-3	732-329-0200 FAX: 732-329-3499/3480		ACCUTEST QUOTE #:	*	
CLIENTIN		FAC	FACILITY INFORMATION		ANALYTICAL INFOR	INFORMATION	MATRIX CODES
NAME ENSOLA INC			م أكمن				DW - DRINKING WATER GW - GROUND WATER
5	Nau Sto 410	8	LA arrigo	*0			
)le	TE	PROJECT NO.	2-031	928	ا <del>چ</del>		
PHONE # CINCA Had	5-1300	FAX # 61(-2)	1755-72	<u> </u>	pine Jet		LIQ OTHER LIQUID SOL OTHER
		COLLECTION		E F	שיי		SOLID
SAMPLE # FIELD ID	FIELD ID / POINT OF COLLECTION	DATE TIME					LAB USE ONLY
	ENSIGETINP-SEI-CARSWSEIIO	0 7-11-01 0930	uelan so a	/ /   ×		221-2,01 182	223 1487
-2 energyertmp-sez	2-562 - CAR SUSE 2 D8	2101 10-11-2 80	lee/cry so 2		2	2 8.0	
	WI-SHR THP. SAT - CARSWISH OG	6 7-11-01 12:20	200 (CTh 50 a	X V V	2	ė	
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07/27/01

Technical Report for

United Technology Corporation

ENSTNN: Carrier, Syracuse, NY

UARP #NS-07/03/01-MMH-01

Accutest Job Number: E94829

Report to:

Ensafe 311 Plus Park Suite 130 Nashville, TN 37217

ATTN: May Heflin

Total number of pages in report: 83



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, MA, MD, NC, PA, RJ, SC, VA This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

# Sample Summary

United Technology Corporation

Job No: E94829

ENSTNN: Carrier, Syracuse, NY Project No: UARP #NS-07/03/01-MMH-01

Sample Number	Collected Date	Time By	Received	Mati Code		Client Sample ID
E94829-1	07/10/01	14:30 BH	07/12/01	AQ	Ground Water	ENS-SYR-TMP-MW9-CARGMW0904
E94829-2	07/10/01	16:20 BH	07/12/01	AQ	Ground Water	ENS-SYR-TMP-MW00BG- CARGMW5604
E94829-3	07/11/01	08:15 BH	07/12/01	AQ	Ground Water	ENS-SYR-TMP-0006-CARG000604
E94829-4	07/11/01	08:15 BH	07/12/01	AQ	Ground Water	ENS-SYR-TMP-0006-CARH000604
E94829-5	07/11/01	08:45 BH	07/12/01	AQ	Ground Water	ENS-SYR-TMP-9903-CARG990304
E94829-6	07/11/01	09:30 BH	07/12/01	AQ	Ground Water	ENS-SYR-TMP-9901-CARG990104
E94829-7	07/11/01	11:48 BH	07/12/01	AQ	Ground Water	ENS-SYR-TMP-MW5D-CARGMW5D0
E94829-8	07/11/01	11:45 BH	07/12/01	AQ	Ground Water	ENS-SYR-TMP-MW5S-CARGMW5S04
E94829-9	07/11/01	14:00 BH	07/12/01	AQ	Ground Water	ENS-SYR-TMP-9902-CARG990204
E94829-10	07/11/01	14:45 BH	07/12/01	AQ	Ground Water	ENS-SYR-TMP-MW07-CARGMW0704
E94829-11	07/11/01	00:00 BH	07/12/01	AQ	Trip Blank Water	ENS-SYR-TMP-TRIPBLK- CART071101



# Laboratory Deliverables

- L. Cover Page, Title Page Listing Certification #, Facility Name and Address, and Date of Report.
- 2. Table of Contents.
- 3. Summary Sheets listing analytical results for all targeted and non-targeted compounds.
- 4. Summary Table cross-referencing field ID #'s vs. lab ID #'s
- 5 Document bound, paginated and legible.
- 6 Chain of Custody
- 7 Methodology Summary
- 8 Laboratory Chronicle and Holding Time Check
- 9. Results submitted on a dry weight basis (if applicable)
- 10. Method Detection Limits.
- 11. Lab certified by NJDEPE for parameters or appropriate category of parameters or a member of the USEPA CLP.
- 12. Non-Conformance Summary.

Trua QC Reviewer

26/2001 Date

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New Jackey - Fresh Pandy Carporate Village - Building B - 2235 Route 130 - Dayton, NJ 08810 - tel 732 329 0200 - fax: 732 329 3499 - http://www.accutest.com



#### Table Of Contents Reduced Laboratory Data Deliverables For Non-USEPA/CLP Methods

#### Title/Cover Page

#### **Deliverable Checklist**

#### Table Of Contents

#### Section 1 General

- A. Results Summary
- B. Chain of Custody
- C. Laboratory Chronicles

#### Section 2 GC/MS Support Data (grouped by fraction)

- A. Methodology Review
- B. Conformance/Non-conformance Summary
- C. Surrogate Recovery Results Summary
- D. Matrix Spike/Matrix Spike Duplicate Summary
- E. Method Blank Summary
- F. Tune Results Summary
- G. Calibration Summary (sorted by Instrument)
  - Initial Calibration Check Summary
  - Continuing Calibration Check Summary
- H. Internal Standard Summary
- 1. Sample and Blank Chromatograms, Quant Reports, Mass Spectra, and Library Search Data

#### Section 3 GC Support Data

- A. Methodology Review
- B. Conformance/Non-conformance Summary
- C. Surrogate Recovery Results Summary
- D. Matrix Spike/Matrix Spike Duplicate Summary
- E. Method Blank Summary
- F. Calibration Summary (sorted by Instrument)
  - Initial Calibration Check Summary
    - Continuing Calibration Check Summary
- G. Retention Time Shift Summary
- H. Sample, Blank and Multi-peak Standard Chromatograms and Quant Reports

#### Section 4 Metals Support Data (sorted by Instrument Type - ICP, Furnace, Flame, Mercury)

- A. Methodology Review
- B. Conformance/Non-conformance Summary
- C. Blank Results Summary
  - Initial and Continuing Calibration Blank Summary
  - Method Blank Summary
- D. Batch Quality Control Summary
  - Matrix Spike and Duplicate Results Summary
    - Spike Blank and Lab Control Sample Summary
  - Scrial Dilution Results Summary
- E. Calibration Summary
  - Calibration Check Standards Summary
    - Interfering Elements Check Standard Summary

#### Section 5 General Chemistry/Petroleum Hydrocarbon Support Data

- A. Methodology Review
- B. Conformance/Non-Conformance Summary
- C. Batch Quality Control Summary
  - Method Blank and Spike Blank Results Summary
  - Matrix Spike Results Summary
  - Duplicate Results Summary
- D. Raw Data and IR Spectra (Petroleum Hydrocarbons)
- E. Raw Data and Run Record (Hexavalent Chromium)



Client Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-MW9-CARGMW0904 E94829-1 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY				^	ed: 07/10/01 red: 07/12/01 ids: n/a	
Run #1	File ID	D	DF	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	E47136		1	07/16/01	GTT	n/a	n/a	VE2513

#### **VOA TCL List**

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	4.0	ug/l	
74-83-9	Bromomethane	ND	5.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	2.0	ug/l	
75-00-3	Chloroethane	ND	5.0	ug/l	
67-66-3	Chloroform	ND	5.0	ug/l	
74-87-3	Chloromethane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	ug/l	
75-34-3	1,1-Dichloroethane	2.4	5.0	ug/l	J
107-06-2	1,2-Dichloroethane	ND	2.0	ug/I	
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	3.9	5.0	ug/l	J
156-60-5	trans-1,2-Dichloroethene	0.61	5.0	ug/I	J
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	6.6	5.0	ug/I	
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l	
79-01-6	Trichloroethene	6.2	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	ug/l	

ND = Not detected

RL = Reporting Limit

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

- E = Indicates value exceeds calibration range
- N = Indicates presumptive evidence of a compound

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Accutest Laboratories

### **Report of Analysis**

Client Sample ID:ENS-SYR-TMP-MW9-CARGMW0904Lab Sample ID:E94829-1Date Sampled:07/10/01Matrix:AQ - Ground WaterDate Received:07/12/01Method:SW846 8260BPercent Solids:n/aProject:ENSTNN: Carrier, Syracuse, NYProject:Name

#### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		81-118%
17060-07-0	1,2-Dichloroethane-D4	112%		68-124%
2037-26-5	Toluene-D8	95%		85-119%
460-00-4	4-Bromofluorobenzene	98%		75-127%

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

Page 2 of 2

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-MW00BG-CARGMW5604 E94829-2 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY			04 Date Sampled: 07/10/01 Date Received: 07/12/01 Percent Solids: n/a			
Run #1	File ID		DF	Analyzed	<b>Ву</b>	Prep Date	<b>Prep Batch</b>	Analytical Batch
Run #2	E47137		1	07/16/01	GTT	n/a	n/a	VE2513

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**Report of Analysis** 

### **VOA TCL List**

CAS No.	Compound	Result	RL	Units
67-64-1	Acetone	ND	5.0	ug/l
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	4.0	ug/l
74-83-9	Bromomethane	ND	5.0	ug/l
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l
75-15-0	Carbon disulfide	ND	5.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	2.0	ug/l
75-00-3	Chloroethane	ND	5.0	ug/l
67-66-3	Chloroform	ND	5.0	ug/l
74-87-3	Chloromethane	ND	5.0	ug/l
124-48-1	Dibromochloromethane	ND	5.0	ug/l
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/1
100-41-4	Ethylbenzene	ND	1.0	ug/l
591-78-6	2-Hexanone	ND	5.0	ug/l
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l
75-09-2	Methylene chloride	ND	2.0	ug/l
100-42-5	Styrene	ND	5.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l
127-18-4	Tetrachloroethene	ND .	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/I
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-01-4	Vinyl chloride	ND	1.0	ug/l
1330-20-7	Xylene (total)	ND	5.0	ug/l

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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## **Report of Analysis**

Client Sample ID:	ENS-SYR-TMP-MW00BG-CARGMW5604		
Lab Sample ID:	E94829-2	Date Sampled:	07/10/01
Matrix:	AQ - Ground Water	Date Received:	
Method:	SW846 8260B	Percent Solids:	
Project:	ENSTNN: Carrier, Syracuse, NY		
	•		

### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104 %		81-118%
17060-07-0	1,2-Dichloroethane-D4	112 %		68-124%
2037-26-5	Toluene-D8	96 %		85-119%
460-00-4	4-Bromofluorobenzene	98 %		75-127%

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

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Client Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-0006-CARG000604 E94829-3 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY			Date Sampled: 07/11/01 Date Received: 07/12/01 Percent Solids: n/a			
Run #1	File ID	.D	DF	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	E47138		1	07/16/01	GTT	n/a	n/a	VE2513

**Report of Analysis** 

### **VOA TCL List**

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	7.2	5.0	ug/l
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	4.0	ug/l
74-83-9	Bromomethane	ND	5.0	ug/l
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l
75-15-0	Carbon disulfide	ND	5.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	2.0	ug/l
75-00-3	Chloroethane	ND	5.0	ug/l
67-66-3	Chloroform	ND	5.0	ug/l
74-87-3	Chloromethane	ND	5.0	ug/l
124-48-1	Dibromochloromethane	ND	5.0	ug/l
75-34-3	I, I-Dichloroethane	ND	5.0	ug/l
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l
75-35-4	1,1-Dichloroethene	ND	2.0	ug/I
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
591-78-6	2-Hexanone	ND	5.0	ug/l
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l
75-09-2	Methylene chloride	ND	2.0	ug/l
100-42-5	Styrene	ND	5.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-01-4	Vinyl chloride	ND	1.0	ug/l
1330-20-7	Xylene (total)	ND	5.0	ug/l

- RL = Reporting Limit
- E = Indicates value exceeds calibration range
- $\mathbf{J} = \mathbf{Indicates}$  an estimated value
- B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

Page 1 of 2

Client Sample ID:	ENS-SYR-TMP-0006-CARG000604			
	E94829-3	Date Sampled:	07/11/01	
Matrix:	AQ - Ground Water	Date Received:		
Method:	SW846 8260B	Percent Solids:	n/a	
Project:	ENSTNN: Carrier, Syracuse, NY			

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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108 %		81-118%
17060-07-0	1,2-Dichloroethane-D4	111 %		68-124%
2037-26-5	Toluene-D8	97 %		85-119%
460-00-4	4-Bromofluorobenzene	100 %		75-127%

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

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Client Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-0006-CARH000604 E94829-4 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY			Date Sampled: 07/11/01 Date Received: 07/12/01 Percent Solids: n/a			
Run #1	File ID		DF	<b>Analyzed</b>	By	Prep Date	Prep Batch	Anałytical Batch
Run #2	E47139		1	07/16/01	GTT	n/a	n/a	VE2513

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### **VOA TCL List**

CAS No.	Compound	Result	RL	Units
67-64-1	Acetone	ND	5.0	ug/l
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	4.0	ug/l
74-83-9	Bromomethane	ND	5.0	ug/l
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l
75-15-0	Carbon disulfide	ND	5.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	2.0	ug/l
75-00-3	Chloroethane	ND	5.0	ug/l
67-66-3	Chloroform	ND	5.0	ug/l
74-87-3	Chloromethane	ND	5.0	ug/l
124-48-1	Dibromochloromethane	ND	5.0	ug/l
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/I
591-78-6	2-Hexanone	ND	5.0	ug/l
108-10-1	4-Methyl-2-pentanone(MIBK)		5.0	ug/l
75-09-2	Methylene chloride	ND	2.0	ug/l
100-42-5	Styrene	ND	5.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	- 3.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-01-4	Vinyl chloride	ND	1.0	ug/l
1330-20-7	Xylene (total)	ND	5.0	ug/l

- RL = Reporting Limit
- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	ENS-SYR-TMP-0006-CARH000604		
Lab Sample ID:	E94829-4	Date Sampled:	07/11/01
Matrix:	AQ - Ground Water	Date Received:	07/12/01
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109 %		81-118%
17060-07-0	1,2-Dichloroethane-D4	111 %		68-124%
2037-26-5	Toluene-D8	109 %		85-119%
460-00-4	4-Bromofluorobenzene	102 %		75-127%

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ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

Chent Sa Lab Sam Matrix: Method: Project:	ple ID: E9 A( SV	ENS-SYR-TMP-9903-CARG990304 E94829-5 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY			Date Sampled: 07/11/01 Date Received: 07/12/01 Percent Solids: n/a		
Run #1	<b>File ID</b>	DF	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	E47140.D	1	07/16/01	GTT	n/a	n/a	VE2513

## **Report of Analysis**

### **VOA TCL List**

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	26.5	5.0	ug/l	
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	4.0	ug/l	
74-83-9	Bromomethane	ND	5.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	2.0	ug/l	
75-00-3	Chloroethane	ND	5.0	ug/l	
67-66-3	Chloroform	ND	5.0	ug/l	
74-87-3	Chloromethane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.9	5.0	ug/l	J
156-60-5	trans-1,2-Dichloroethene	3.9	5.0	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l	
79-01-6	Trichloroethene	1.1	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	ug/I	

ND = Not detected

RL = Reporting Limit

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

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Method:SW846 8260BPercent Solids:n/aProject:ENSTNN: Carrier, Syracuse, NY	
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### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1 Run# 2	Limits
1868-53-7 17060-07-0 2037-26-5 460-00-4	Dibromofluoromethane 1,2-Dichloroethane-D4 Toluene-D8 4-Bromofluorobenzene	99% 101% 97% 100%	81-118% 68-124% 85-119% 75-127%

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

B = Indicates analyte found in associated method blank

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Client Sa	mula ID.	ENC C	VD TMD			······		
Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-9901-CARG990104 E94829-6 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY			Date Sampled: 07/11/01 Date Received: 07/12/01 Percent Solids: n/a			
Run #1 Run #2	File ID E47141	.D	DF 1	<b>Analyzed</b> 07/16/01	By GTT	Prep Date n/a	Prep Batch n/a	Analytical Batch VE2513

### VOA TCL List

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	5.0	ug/l
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	4.0	ug/l
74-83-9	Bromomethane	ND	5.0	ug/l
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l
75-15-0	Carbon disulfide	ND	5.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	2.0	ug/l
75-00-3	Chloroethane	ND	5.0	ug/l
67-66-3	Chloroform	ND	5.0	ug/l
74-87-3	Chloromethane	ND	5.0	ug/l
124-48-1	Dibromochloromethane	ND	5.0	ug/l
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
591-78-6	2-Hexanone	ND	5.0	ug/l
108-10-1	4-MethyI-2-pentanone(MIBK)	ND	5.0	ug/l
75-09-2	Methylene chloride	ND	2.0	ug/l
100-42-5	Styrene	ND	5.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-01-4	Vinyl chloride	ND	1.0	ug/l
1330-20-7	Xylene (total)	ND	5.0	ug/l

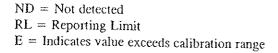
- RL = Reporting Limit
- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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Client Sample ID:	ENS-SYR-TMP-9901-CARG990104			
Lab Sample ID:	E94829-6	Date Sampled:	07/11/01	
Matrix:	AQ - Ground Water	Date Received:		
Method:	SW846 8260B	Percent Solids:		
Project:	ENSTNN: Carrier, Syracuse, NY			
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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%		81-118%
17060-07-0	1,2-Dichloroethane-D4	115%		68-124%
2037-26-5	Toluene-D8	98%		85-119%
460-00-4	4-Bromofluorobenzene	100%		75-127%



- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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	Report of Analysis						Page 1 of	
Client Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-MW5D-CARGMW5D04 E94829-7 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY			Date Sampled:07/11/01Date Received:07/12/01Percent Solids:n/a			
Run #1 Run #2	File ID E47142		<b>DF</b> 1	<b>Analyzed</b> 07/16/01	By GTT	Prep Date n/a	Prep Batch n/a	Analytical Batch VE2513

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	5.0	ug/l
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	4.0	ug/l
74-83-9	Bromomethane	ND	5.0	ug/l
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l
75-15-0	Carbon disulfide	ND	5.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	2.0	ug/l
75-00-3	Chloroethane	ND	5.0	ug/l
67-66-3	Chloroform	ND	5.0	ug/l
74-87-3	Chloromethane	ND	. 5.0	ug/l
124-48-1	Dibromochloromethane	ND	5.0	ug/l
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l
107-06-2	I,2-Dichloroethane	ND	2.0	ug/l
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
591-78-6	2-Hexanone	ND	5.0	ug/l
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l
75-09-2	Methylene chloride	ND	2.0	ug/I
100-42-5	Styrene	ND	5.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-01-4	Vinyl chloride	ND	1.0	ug/l
1330-20-7	Xylene (total)	ND	5.0	ug/I

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

 $\mathbf{J} =$ Indicates an estimated value

B = Indicates analyte found in associated method blank

## **Report of Analysis**

	Client Sample ID:	ENS-SYR-TMP-MW5D-CARGMW5D04		
	Lab Sample ID:	E94829-7	Date Sampled:	07/11/01
	Matrix:	AQ - Ground Water	-	
	Method:		Date Received:	
		SW846 8260B	Percent Solids:	n/a
-	Project:	ENSTNN: Carrier, Syracuse, NY		

### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run#1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	116%		81-118%
17060-07-0	1,2-Dichloroethane-D4	114%		68-124%
2037-26-5	Toluene-D8	98%		85-119%
460-00-4	4-Bromofluorobenzene	101%		75-127%

B = Indicates analyte found in associated method blank

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Client Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-MW5S-CARGMW5S04 E94829-8 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY			Date Sampled: 07/11/01 Date Received: 07/12/01 Percent Solids: n/a			
Run #1	<b>File ID</b>	.D	DF	<b>Analyzed</b>	By	Prep Date	<b>Prep Batch</b>	Analytical Batch
Run #2	E47143		1	07/16/01	GTT	n/a	n/a	VE2513

**Report of Analysis** 

### **VOA TCL List**

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
71-43-2	Benzene	NÐ	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	4.0	ug/I	
74-83-9	Bromomethane	ND	5.0	ug/I	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/I	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	2.0	ug/l	
75-00-3	Chloroethane	ND	5.0	ug/l	
67-66-3	Chloroform	ND	5.0	ug/I	
74-87-3	Chloromethane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	ug/l	
75-34-3	l,l-Dichloroethane	1.2	5.0	ug/l	J
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND of the	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND ·	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/ł	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/I	
75-01-4	Vinyl chloride	5.2	1.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	ug/l	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

## **Report of Analysis**

Client Sample ID:	ENS-SYR-TMP-MW5S-CARGMW5S04		
Lab Sample ID:	E94829-8	Date Sampled:	07/11/01
Matrix:	AQ - Ground Water	Date Received:	
Method:	SW846 8260B	<b>Percent Solids:</b>	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run#1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		81-118%
17060-07-0	1,2-Dichloroethane-D4	111%		68-124%
2037-26-5	Toluene-D8	97%		85-119%
460-00-4	4-Bromofluorobenzene	100%		75-127%

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-9902-CARG990204 E94829-9 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY			Date Sampled: 07/11/01 Date Received: 07/12/01 Percent Solids: n/a			
	File ID		DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 Run #2	E47144.	D	1	07/16/01	GTT	n/a	n/a	VE2513

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	45.9	5.0	ug/l
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	4.0	ug/l
74-83-9	Bromomethane	ND	5.0	ug/l
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l
75-15-0	Carbon disulfide	ND	5.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	2.0	ug/l
75-00-3	Chloroethane	ND	5.0	ug/l
67-66-3	Chloroform	ND	5.0	ug/l
74-87-3	Chloromethane	ND	5.0	ug/l
124-48-1	Dibromochloromethane	ND	5.0	ug/l
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
591-78-6	2-Hexanone	ND	5.0	ug/l
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l
75-09-2	Methylene chloride	ND	2.0	ug/l
100-42-5	Styrene	ND	5.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-01-4	Vinyl chloride	ND	1.0	ug/l
1330-20-7	Xylene (total)	ND	5.0	ug/l

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 1 of 2

Client Sample ID:	ENS-SYR-TMP-9902-CARG990204		
Lab Sample ID:	E94829-9	Date Sampled:	07/11/01
Matrix:	AQ - Ground Water	Date Received:	
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		81-118%
17060-07-0	1,2-Dichloroethane-D4	115%		68-124%
2037-26-5	Toluene-D8	97%		85-119%
460-00-4	4-Bromofluorobenzene	98%		75-127%

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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				Repo	ort of A	nalysis		Page 1 of 2
Client Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-MW07-CARGMW0704 E94829-10 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY			Date Sampled: 07/11/01 Date Received: 07/12/01 Percent Solids: n/a			
Run #1 Run #2	File ID E47147		DF 1	<b>Analyzed</b> 07/16/01	By GTT	<b>Prep Date</b> n/a	Prep Batch n/a	Analytical Batch VE2513

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	5.0	ug/l
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	4.0	ug/l
74-83-9	Bromomethane	ND	5.0	ug/l
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l
75-15-0	Carbon disulfide	ND	5.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	2.0	ug/l
75-00-3	Chloroethane	ND	5.0	ug/l
67-66-3	Chloroform	ND	5.0	ug/I
74-87-3	Chloromethane	ND	5.0	ug/l
124-48-1	Dibromochloromethane	ND	5.0	ug/l
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l
107-06-2	1,2-Dichloroethane	ND .	2.0	ug/I
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
591-78-6	2-Hexanone	ND	5.0	ug/l
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l
75-09-2	Methylene chloride	ND	2.0	ug/l
100-42-5	Styrene	ND	5.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-01-4	Vinyl chloride	ND	1.0	ug/l
1330-20-7	Xylene (total)	ND	5.0	ug/l

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Client Sample ID:	ENS-SYR-TMP-MW07-CARGMW0704			
Lab Sample ID:	E94829-10	Date Sampled:	07/11/01	
Matrix:	AQ - Ground Water	Date Received:		
Method:	SW846 8260B	Percent Solids:	n/a	
Project:	ENSTNN: Carrier, Syracuse, NY			
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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104 %		81-118%
17060-07-0	1,2-Dichloroethane-D4	100 %		68-124%
2037-26-5	Toluene-D8	105 %		85-119%
460-00-4	4-Bromofluorobenzene	98 %		75-127%

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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Client Sa Lab Sam Matrix: Method: Project:	ple ID:	E94829 AQ - T SW846	-11 rip Blank 8260B	TRIPBLK-CAR Water 21, Syracuse, NY			ed: 07/11/01 ed: 07/12/01 ids: n/a	
Run #1	File ID	D	DF	Analyzed	By	<b>Prep Date</b>	Prep Batch	Analytical Batch
Run #2	E47148		1	07/16/01	GTT	n/a	n/a	VE2513

**Report of Analysis** 

### **VOA TCL List**

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	5.0	ug/l
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	4.0	ug/l
74-83-9	Bromomethane	ND	5.0	ug/l
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l
75-15-0	Carbon disulfide	ND	5.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	2.0	ug/l
75-00-3	Chloroethane	ND	5.0	ug/l
67-66-3	Chloroform	ND	5.0	ug/I
74-87-3	Chloromethane	ND	5.0	ug/l
124-48-1	Dibromochloromethane	ND	5.0	ug/l
75-34-3	1,1-Dichloroethane	ND	5.0	ug/I
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
591-78-6	2-Hexanone	ND	5.0	ug/l
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l
75-09-2	Methylene chloride	ND	2.0	ug/l
100-42-5	Styrene	ND	5.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND .	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-01-4	Vinyl chloride	ND	1.0	ug/l
1330-20-7	Xylene (total)	ND	5.0	ug/l

ND = Not detected

RL = Reporting Limit

J = Indicates an estimated value

B = Indic

E = Indicates value exceeds calibration range

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

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Client Sample ID:	ENS-SYR-TMP-TRIPBLK-CART071101		
Lab Sample ID:	E94829-11	Date Sampled:	07/11/01
Matrix:	AQ - Trip Blank Water	Date Received:	
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		81-118%
17060-07-0	1,2-Dichloroethane-D4	116%		68-124%
2037-26-5	Toluene-D8	98%		85-119%
460-00-4	4-Bromofluorobenzene	95%		75-127%

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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# ACCUTEST.

Technical Report for

United Technology Corporation

ENSTNN: Carrier, Syracuse, NY

UARP # 3133-031

Accutest Job Number: E94945

Report to:

Ensafe 311 Plus Park Suite 130 Nashville, TN 37217

ATTN: May Heflin

Total number of pages in report: 329



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Vincent J. Pugliese President

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, MA, MD, NC, PA, RI, SC, VA This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. ·

## Sample Summary

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United Technology Corporation

Job No: E94945

ENSTNN: Carrier, Syracuse, NY Project No: UARP # 3133-031

Sample Number	Collected Date	Time By	Received	Matri Code		Client Sample ID
E94945-1	07/12/01	12:55 JPB	07/13/01	SO	Soil	1 ENS-SYR-TMP-PSA2/SB1- CARS20104
E94945-2	07/12/01	13:13 JPB	07/13/01	SO	Soil	2 ENS-SYR-TMP-PSA2/SB2- CARS20204
E94945-3	07/12/01	13:32 JPB	07/13/01	SO	Soil	3 ENS-SYR-TMP-PSA2/SB3- CAR\$20304
E94945-4	07/12/01	14:30 JPB	07/13/01	SO	Soil	4 ENS-SYR-TMP-PSA2/SB4- CARS20404
E94945-5	07/12/01	14:30 JPB	07/13/01	SO	Soil	4 ENS-SYR-TMP-PSA2/SB4- CARS20404
E94945-6	07/12/01	13:55 JPB	07/13/01	SO	Soil	5 ENS-SYR-TMP-PSA2/SB5- CAR\$20502
E94945-7	07/12/01	14:11 JPB	07/13/01	SO	Soil	6 ENS-SYR-TMP-PSA2/SB6- CARS20604
E94945-8	07/12/01	14:58 JPB	07/13/01	SO	Soil	7 ENS-SYR-TMP-PSA2/SB7- CARS20702
E94945-9	07/12/01	15:20 JPB	07/13/01	SO	Soil	8 ENS-SYR-TMP-PSA2/SB8- CARS20804
E94945-10	07/12/01	15:38 JPB	07/13/01	SO	Soil	9 ENS-SYR-TMP-PSA2/SB9- CARS20904
E94945-11	07/12/01	15:48 JPB	07/13/01	SO	Soil	10 ENS-SYR-TMP-PSA2/SB10- CARS21002
E94945-12	07/12/01	00:00 JPB	07/13/01	AQ	Trip Blank Soil	11 ENS-SYR-TRIP BLK- CART071201
E94945-13	07/12/01	08:05 JPB	07/13/01	AQ	Ground Water	12 ENS-SYR-TMP-MW01- CARGMW0104 <b>2</b>

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## Sample Summary (continued)

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United Technology Corporation

ENSTNN: Carrier, Syracuse, NY Project No: UARP # 3133-031

Sample Number	Collected Date	Time By	Received	Matri Code		Client Sample ID	
E94945-14	07/12/01	09:25 JPB	07/13/01	AQ	Ground Water	13 ENS-SYR-TMP-MW06- CARGMW0604	
E94945-15	07/12/01	10:35 JPB	07/13/01	AQ	Ground Water	14 ENS-SYR-TMP-MW05- CARGMW0504	
E94945-16	07/12/01	12:35 JPB	07/13/01	AQ	Ground Water	15 ENS-SYR-TMP-MW3D- CARGMW3D04	
E94945-17	07/12/01	13:15 JPB	07/13/01	AQ	Ground Water	16 ENS-SYR-TMP-MW3S- CARGMW3S04	
E94945-18	07/12/01	14:15 JPB	07/13/01	AQ	Ground Water	17 ENS-SYR-TMP-MW08- CARGMW0804	
E94945-19	07/12/01	14:15 JPB	07/13/01	AQ	Ground Water	18 ENS-SYR-TMP-MW08- CARHMW0804	
E94945-137	A07/12/01	08:05 JPB	07/13/01	AQ	Groundwater Filtered	12 ENS-SYR-TMP-MW01- CARGMW0104	
E94945-147	Å07/12/01	09:25 JPB	07/13/01	AQ	Groundwater Filtered	13 ENS-SYR-TMP-MW06- CARGMW0604	0381 2020
E94945-157	07/12/01	10:35 JPB	07/13/01	AQ	Groundwater Filtered	14 ENS-SYR-TMP-MW05- CARGMW0504	
E94945-167	A07/12/01	12:35 JPB	07/13/01	AQ	Groundwater Filtered	15 ENS-SYR-TMP-MW3D- CARGMW3D04	
E94945-177	\07/12/01	13:15 JPB	07/13/01	AQ	Groundwater Filtered	16 ENS-SYR-TMP-MW3S- CARGMW3S04	

Job No: E94945

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BACCUTEST.

## Laboratory Deliverables

1.	Cover Page, Title Page Listing Certification II, Facility Name and Address, and	
• .	Date of Report.	1
2.	Table of Contents.	
3.	Summary Sheets listing analytical results for all targeted and non-targeted compounds.	(/1)
4.	Summary Table cross-referencing field ID #'s vs. lab ID #'s	M
5	Document bound, paginated and legible.	FI
6	Chain of Custody	LT
7	Methodology Summary	M
8	Laboratory Chronicle and Holding Time Check	$\square$
9	Results submitted on a dry weight basis (if applicable)	5
10.	Method Detection Limits.	K
II.	Lab certified by NIDEPE for parameters or appropriate category of parameters or a member of the USEPA CLP.	$\geq$
12.	Non-Conformance Summary.	IT

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### Percent Solids Determination

Accutest Laboratories employs a modified version of ASTM Method 4643-93 for the determination of percent solids to calculate dry.weight. All data for solid matrices is reported on a dry weight basis by applying the percent solids data from this determination.

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### Table Of Contents Reduced Laboratory Data Deliverables For Non-USEPA/CLP Methods

Title/Cover Page

Deliverable Checklist

### Table Of Contents

#### Section 1 General

- A. Results Summary
- B. Chain of Custody
- C. Laboratory Chronicles

### Section 2 GC/MS Support Data (grouped by fraction)

- A. Methodology Review
- B. Conformance/Non-conformance Summary
- C. Surrogate Recovery Results Summary
- D. Matrix Spike/Matrix Spike Duplicate Summary
- E. Method Blank Summary
- F. Tune Results Summary
- G. Calibration Summary (sorted by Instrument)
  - Initial Calibration Check Summary
    - Continuing Calibration Check Summary
- H. Internal Standard Summary
- L. Sample and Blank Chromatograms, Quant Reports, Mass Spectra, and Library Search Data

### Section 3 GC Support Data

- A. Methodology Review
- B. Conformance/Non-conformance Summary
- C. Surrogate Recovery Results Summary
- D. Matrix Spike/Matrix Spike Duplicate Summary
- E. Method Blank Summary
- F. Calibration Summary (sorted by Instrument)
  - Initial Calibration Check Summary
  - Continuing Calibration Check Summary
- G. Retention Time Shift Summary
- H. Sample, Blank and Multi-peak Standard Chromatograms and Quant Reports

## Section 4 Metals Support Data (sorted by Instrument Type - ICP, Furnace, Flame, Mercury)

- A. Methodology Review
- B. Conformance/Non-conformance Summary
- C. Blank Results Summary
  - Initial and Continuing Calibration Blank Summary
  - Method Blank Summary
- D. Batch Quality Control Summary
  - Matrix Spike and Duplicate Results Summary
  - Spike Blank and Lab Control Sample Summary
  - Scrial Dilution Results Summary
- E. Calibration Summary
  - Calibration Check Standards Summary
    - Interfering Elements Check Standard Summary

## Section 5 General Chemistry/Petroleum Hydrocarbon Support Data

- A. Methodology Review
- B. Conformance/Non-Conformance Summary
- C. Batch Quality Control Summary
  - Method Blank and Spike Blank Results Summary
  - Matrix Spike Results Summary
  - Duplicate Results Summary
- D. Raw Data and IR Spectra (Petroleum Hydrocarbons)
- E. Raw Data and Run Record (Hexavalent Chromium)

New Jersey + Fresh Ponds Corporate Village + Building 8 + 2235 Route 130 + Dayton, NJ 08810 + tel 908-329 0200 + tax: 908-329 - 3499 + http://www.accutest.com



Client San Lab Samj Matrix: Method: Project:	ple ID:	E94945- SO - Soi SW846	1 1 3260B	-PSA2/SB1-CA		-	led: 07/12/01 /ed: 07/13/01 ids: 82.3	
Run #1	File ID	.D	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	K45289		1	07/23/01	DFT	n/a	n/a	VK1562

### **VOA TCL List**

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	5.9	ug/kg
71-43-2	Benzene	ND	2.4	ug/kg
75-27-4	Bromodichloromethane	ND	5.9	ug/kg
75-25-2	Bromoform	ND	5.9	ug/kg
74-83-9	Bromomethane	ND	5.9	ug/kg
78-93-3	2-Butanone (MEK)	ND	5.9	ug/kg
75-15-0	Carbon disulfide	ND	5.9	ug/kg
56-23-5	Carbon tetrachloride	ND	5.9	ug/kg
108-90-7	Chlorobenzene	ND	5.9	ug/kg
75-00-3	Chloroethane	ND	5.9	ug/kg
67-66-3	Chloroform	ND	5.9	ug/kg
74-87-3	Chloromethane	ND	5.9	ug/kg
124-48-1	Dibromochloromethane	ND	: 5.9	ug/kg
75-34-3	1,1-Dichloroethane	ND	5.9	ug/kg
107-06-2	1,2-Dichloroethane	ND	5.9	ug/kg
75-35-4	1,1-Dichloroethene	ND	5.9	ug/kg
156-59-2	cis-1,2-Dichloroethene	ND	5.9	ug/kg
156-60-5	trans-1,2-Dichloroethene	ND	5.9	ug/kg
78-87-5	1,2-Dichloropropane	ND	5.9	ug/kg
10061-01-5	cis-1,3-Dichloropropene	ND	5.9	ug/kg
10061-02-6	trans-1,3-Dichloropropene	ND	5.9	ug/kg
100-41-4	Ethylbenzene	ND	5.9	ug/kg
591-78-6	2-Hexanone	ND	5.9	ug/kg
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.9	ug/kg
75-09-2	Methylene chloride	ND	5.9	ug/kg
100-42-5	Styrene	ND	5.9	ug/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.9	ug/kg
127-18-4	Tetrachloroethene	ND	5.9	ug/kg
108-88-3	Toluene	ND	5.9	ug/kg
71-55-6	1,1,1-Trichloroethane	ND	5.9	ug/kg
79-00-5	1,1,2-Trichloroethane	ND	5.9	ug/kg
79-01-6	Trichloroethene	49.4	5.9	ug/kg
75-01-4	Vinyl chloride	ND	5.9	ug/kg
1330-20-7	Xylene (total)	ND	5.9	ug/kg

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 2

**Report of Analysis** 

## **Report of Analysis**

2				
Client Sample ID:	1 ENS-SYR-TMP-PSA2/SB1-CARS20104			
Lab Sample ID:	E94945-1	Date Sampled:	07/12/01	
Matrix:	SO - Soil	Date Received:	07/13/01	
Method:	SW846 8260B	Percent Solids:	82.3	
Project:	ENSTNN: Carrier, Syracuse, NY			

### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102 %		55-132%
17060-07-0	1,2-Dichloroethane-D4	109 %		54-129%
2037-26-5	Toluene-D8	97 %		65-133%
460-00-4	4-Bromofluorobenzene	99 %		58-137%

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ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Page 2 of 2

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		2 ENS-SYR-TN E94945-2 SO - Soil SW846 8260B	4 <b>P-PSA2/</b> SB2-C7	AR S20204	Date Sampled: 07/12/01 Date Received: 07/13/01 Percent Solids: 84.5		
		ENSTNN: Carrier, Syracuse, NY					
тъ <i>и</i> т	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 Run #2	K45290.)	D I	07/23/01	DFT	n/a	n/a	VK1562

**Report of Analysis** 

### **VOA TCL List**

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	5.8	ug/kg
71-43-2	Benzene	ND	2.3	ug/kg
75-27-4	Bromodichloromethane	ND	5.8	ug/kg
75-25-2	Bromoform	ND	5.8	ug/kg
74-83-9	Bromomethane	ND	5.8	ug/kg
78-93-3	2-Butanone (MEK)	ND	5.8	ug/kg
75-15-0	Carbon disulfide	ND	5.8	ug/kg
56-23-5	Carbon tetrachloride	ND	5.8	ug/kg
108-90-7	Chlorobenzene	ND	5.8	ug/kg
75-00-3	Chloroethane	ND	5.8	ug/kg
67-66-3	Chloroform	ND :	5.8	ug/kg
74-87-3	Chloromethane	ND	5.8	ug/kg
124-48-1	Dibromochloromethane	ND	5.8	ug/kg
75-34-3	1,1-Dichloroethane	ND	5.8	ug/kg
107-06-2	1,2-Dichloroethane	ND	5.8	ug/kg
75-35-4	1,1-Dichloroethene	ND	5.8	ug/kg
156-59-2	cis-1,2-Dichloroethene	ND .	5.8	ug/kg
156-60-5	trans-1,2-Dichloroethene	ND	5.8	ug/kg
78-87-5	1,2-Dichloropropane	ND	5.8	ug/kg
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	ug/kg
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	ug/kg
100-41-4	Ethylbenzene	ND	5.8	ug/kg
591-78-6	2-Hexanone	ND	5.8	ug/kg
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.8	ug/kg
75-09-2	Methylene chloride	ND	5.8	ug/kg
100-42-5	Styrene	ND	5.8	ug/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	ug/kg
127-18-4	Tetrachloroethene	ND	5.8	ug/kg
108-88-3	Toluene	ND	5.8	ug/kg
71-55-6	1,1,1-Trichloroethane	ND	5.8	ug/kg
79-00-5	1,1,2-Trichloroethane	ND	5.8	ug/kg
79-01-6	Trichloroethene	9.7	5.8	ug/kg
75-01-4	Vinyl chloride	ND	5.8	ug/kg
1330-20-7	Xylene (total)	ND	5.8	ug/kg

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 2

### **Report of Analysis**

Client Sample ID:2 ENS-SYR-TMP-PSA2/SB2-CARS20204Lab Sample ID:E94945-2Date Sampled:07/12/01Matrix:SO - SoilDate Received:07/13/01Method:SW846 8260BPercent Solids:84.5Project:ENSTNN: Carrier, Syracuse, NYPercent Solids:84.5

### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run#1 Run#	2 Limits
1868-53-7	Dibromofluoromethane	100%	55-132%
17060-07-0	1,2-Dichloroethane-D4	106%	54-129%
2037-26-5	Toluene-D8	98%	65-133%
460-00-4	4-Bromofluorobenzene	114%	58-137%

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

Page 2 of 2

Client Sa Lab Samj Matrix: Method: Project:	-	E9494 SO - 5 SW84	15-3 Soil 6 8260B	P-PSA2/SB3-C/ er, Syracuse, N		·	led: 07/12/01 ved: 07/13/01 ids: 82.7	
Run #1	File ID		DF	<b>Anałyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	K45325		1	07/24/01	DFT	n/a	n/a	VK1563

## **Report of Analysis**

Page 1 of 2

### **VOA TCL List**

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	5.8	ug/kg
71-43-2	Benzene	ND and se	2.3	ug/kg
75-27-4	Bromodichloromethane	ND	5.8	ug/kg
75-25-2	Bromoform	ND	5.8	ug/kg
74-83-9	Bromomethane	ND	5.8	ug/kg
78-93-3	2-Butanone (MEK)	ND	5.8	ug/kg
75-15-0	Carbon disulfide	ND	5.8	ug/kg
56-23-5	Carbon tetrachloride	ND	5.8	ug/kg
108-90-7	Chlorobenzene	ND	5.8	ug/kg
75-00-3	Chloroethane	ND	5.8	ug/kg
67-66-3	Chloroform	ND	5.8	ug/kg
74-87-3	Chloromethane	ND	5.8	ug/kg
124-48-1	Dibromochloromethane	ND	5.8	ug/kg
75-34-3	1,1-Dichloroethane	ND	5.8	ug/kg
107-06-2	1,2-Dichloroethane	ND	5.8	ug/kg
75-35-4	1,1-Dichloroethene	ND	5.8	ug/kg
156-59-2	cis-1,2-Dichloroethene	ND	5.8	ug/kg
156-60-5	trans-1,2-Dichloroethene	ND	5.8	ug/kg
78-87-5	1,2-Dichloropropane	ND	5.8	ug/kg
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	ug/kg
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	ug/kg
100-41-4	Ethylbenzene	ND	5.8	ug/kg
591-78-6	2-Hexanone	ND	5.8	ug/kg
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.8	ug/kg
75-09-2	Methylene chloride	ND	5.8	ug/kg
100-42-5	Styrene	ND	5.8	ug/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	ug/kg
127-18-4	Tetrachloroethene	ND	5.8	ug/kg
108-88-3	Toluene	ND	5.8	ug/kg
71-55-6	1,1,1-Trichloroethane	ND	5.8	ug/kg
79-00-5	1,1,2-Trichloroethane	ND	5.8	ug/kg
79-01-6	Trichloroethene	4.5	5.8	ug/kg J
75-01-4	Vinyl chloride	ND	5.8	ug/kg
1330-20-7	Xylene (total)	ND	5.8	ug/kg

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ND = Not detected

RL = Reporting Limit

- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Client Sample ID:	3 ENS-SYR-TMP-PSA2/SB3-CARS20304			
Lab Sample ID:	E94945-3	Date Sampled:	07/12/01	
Matrix:	SO - Soil	Date Received:	07/13/01	
Method:	SW846 8260B	Percent Solids:	82.7	
Project:	ENSTNN: Carrier, Syracuse, NY			
1				

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7 17060-07-0	Dibromofluoromethane 1,2-Dichloroethane-D4	104 % 114 %		55-132%
2037-26-5	Toluene-D8	114% 94%		54-129% 65-133%
460-00-4	4-Bromofluorobenzene	102 %		58-137%

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- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Page 2 of 2

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		4 ENS-SYR-TMP-PSA2/SB4-CARS20404 E94945-4 SO - Soil SW846 8260B ENSTNN: Carrier, Syracuse, NY			Date Sampled:07/12/01Date Received:07/13/01Percent Solids:83.9			
Run #1	File ID	D	<b>DF</b>	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	K45292.		1	07/23/01	DFT	n/a	n/a	VK1562

**Report of Analysis** 

### **VOA TCL List**

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	5.8	ug/kg
71-43-2	Benzene	ND	2.3	ug/kg
75-27-4	BromodichIoromethane	ND	5.8	ug/kg
75-25-2	Bromoform	ND	5.8	ug/kg
74-83-9	Bromomethane	ND	5.8	ug/kg
78-93-3	2-Butanone (MEK)	ND	5.8	ug/kg
75-15-0	Carbon disulfide	ND	5.8	ug/kg
56-23-5	Carbon tetrachloride	ND	- 5.8	ug/kg
108-90-7	Chlorobenzene	ND	5.8	ug/kg
75-00-3	Chloroethane	ND	5.8	ug/kg
67-66-3	Chloroform	ND	5.8	ug/kg
74-87-3	Chloromethane	ND	5.8	ug/kg
124-48-1	Dibromochloromethane	ND	5.8	ug/kg
75-34-3	1,1-Dichloroethane	ND	5.8	ug/kg
107-06-2	1,2-Dichloroethane	ND	5.8	ug/kg
75-35-4	1,1-Dichloroethene	ND	5.8	ug/kg
156-59-2	cis-1,2-Dichloroethene	ND	5.8	ug/kg
156-60-5	trans-1,2-Dichloroethene	ND	5.8	ug/kg
78-87-5	1,2-Dichloropropane	ND	5.8	ug/kg
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	ug/kg
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	ug/kg
100-41-4	Ethylbenzene	ND	5.8	ug/kg
591-78-6	2-Hexanone	ND	5.8	ug/kg
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.8	ug/kg
75-09-2	Methylene chloride	ND	5.8	ug/kg
100-42-5	Styrene	ND	5.8	ug/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	ug/kg
127-18-4	Tetrachloroethene	ND	5.8	ug/kg
108-88-3	Toluene	ND	5.8	ug/kg
71-55-6	1,1,1-Trichloroethane	ND	5.8	ug/kg
79-00-5	1,1,2-Trichloroethane	ND	5.8	ug/kg
79-01-6	Trichloroethene	15.1	5.8	ug/kg
75-01-4	Vinyl chloride	ND	5.8	ug/kg
1330-20-7	Xylene (total)	ND	5.8	ug/kg

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Page 1 of 2

## **Report of Analysis**

Client Sample ID:4 ENS-SYR-TMP-PSA2/SB4-CARS20404Lab Sample ID:E94945-4Date Sampled:07/12/01Matrix:SO - SoilDate Received:07/13/01Method:SW846 8260BPercent Solids:83.9Project:ENSTNN: Carrier, Syracuse, NYParcent Solids:83.9

### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		55-132%
17060-07-0	1,2-Dichloroethane-D4	101%		54-129%
2037-26-5	Toluene-D8	97%		65-133%
460-00-4	4-Bromofluorobenzene	115%		58-137%

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- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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Client Sample ID: Lab Sample ID: Matrix: Method: Project:		4 ENS-SYR-TMP-PSA2/SB4-CARS20404 E94945-5 SO - Soil SW846 8260B ENSTNN: Carrier, Syracuse, NY			4 Date Sampled: 07/12/01 Date Received: 07/13/01 Percent Solids: 83.9			
Run #1	<b>File ID</b>	.D	DF	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	K45308		1	07/24/01	DFT	n/a	n/a	VK1563

## **Report of Analysis**

Page 1 of 2

### **VOA TCL List**

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	5.8	ug/kg
71-43-2	Benzene	ND	2.3	ug/kg
75-27-4	Bromodichloromethane	ND	5.8	ug/kg
75-25-2	Bromoform	ND	5.8	ug/kg
74-83-9	Bromomethane	ND	5.8	ug/kg
78-93-3	2-Butanone (MEK)	ND	5.8	ug/kg
75-15-0	Carbon disulfide	ND	5.8	ug/kg
56-23-5	Carbon tetrachloride	ND	5.8	ug/kg
108-90-7	Chlorobenzene	ND	5.8	ug/kg
75-00-3	Chloroethane	ND	5.8	ug/kg
67-66-3	Chloroform	ND	5.8	ug/kg
74-87-3	Chloromethane	NĐ	5.8	ug/kg
124-48-1	Dibromochloromethane	ND	5.8	ug/kg
75-34-3	1,1-Dichloroethane	ND	5.8	ug/kg
107-06-2	1,2-Dichloroethane	ND	5.8	ug/kg
75-35-4	1,1-Dichloroethene	ND	5.8	ug/kg
156-59-2	cis-1,2-Dichloroethene	ND	5.8	ug/kg
156-60-5	trans-1,2-Dichloroethene	ND	5.8	ug/kg
78-87-5	1,2-Dichloropropane	ND	5.8	ug/kg
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	ug/kg
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	ug/kg
100-41-4	Ethylbenzene	ND	5.8	ug/kg
591-78-6	2-Hexanone	ND	5.8	ug/kg
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.8	ug/kg
75-09-2	Methylene chloride	ND	5.8	ug/kg
100-42-5	Styrene	ND	5.8	ug/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	ug/kg
127-18-4	Tetrachloroethene	ND	5.8	ug/kg
108-88-3	Toluene	ND	5.8	ug/kg
71-55-6	1,1,1-Trichloroethane	ND	5.8	ug/kg
79-00-5	1,1,2-Trichloroethane	ND	5.8	ug/kg
79-01-6	Trichloroethene	10.7	5.8	ug/kg
75-01-4	Vinyl chloride	ND	5.8	ug/kg
1330-20-7	Xylene (total)	ND	5.8	ug/kg

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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## **Report of Analysis**

Client Sample ID:4 ENS-SYR-TMP-PSA2/SB4-CARS20404Lab Sample ID:E94945-5Date Sampled:07/12/01Matrix:SO - SoilDate Received:07/13/01Method:SW846 8260BPercent Solids:83.9Project:ENSTNN: Carrier, Syracuse, NYParcent Solids:83.9

## VOA TCL List

CAS No.	Surrogate Recoveries	Run#1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		55-132 <i>%</i>
17060-07-0	1,2-Dichloroethane-D4	103%		54-129 <i>%</i>
2037-26-5	Toluene-D8	95%		65-133 <i>%</i>
460-00-4	4-Bromofluorobenzene	109%		58-137 <i>%</i>

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ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 2 of 2

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		5 ENS-SYR-TMP-PSA2/SB5-CARS20502 E94945-6 SO - Soil SW846 8260B ENSTNN: Carrier, Syracuse, NY			2 Date Sampled: 07/12/01 Date Received: 07/13/01 Percent Solids: 85.5		
Run #1	<b>File ID</b>	DF	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	K45296.	D 1	07/23/01	DFT	n/a	n/a	VK1562

**Report of Analysis** 

### VOA TCL List

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	5.8	ug/kg
71-43-2	Benzene	ND	2.3	ug/kg
75-27-4	Bromodichloromethane	ND	5.8	ug/kg
75-25-2	Bromoform	ND	5.8	ug/kg
74-83-9	Bromomethane	ND	5.8	ug/kg
78-93-3	2-Butanone (MEK)	ND	5.8	ug/kg
75-15-0	Carbon disulfide	ND	5.8	ug/kg
56-23-5	Carbon tetrachloride	ND	5.8	ug/kg
108-90-7	Chlorobenzene	ND	5.8	ug/kg
75-00-3	Chloroethane	ND	5.8	ug/kg
67-66-3	Chloroform	ND	5.8	ug/kg
74-87-3	Chloromethane	ND	5.8	ug/kg
124-48-1	Dibromochloromethane	ND	5.8	ug/kg
75-34-3	1,1-Dichloroethane	ND	5.8	ug/kg
107-06-2	1,2-Dichloroethane	ND	5.8	ug/kg
75-35-4	1,1-Dichloroethene	ND	5.8	ug/kg
156-59-2	cis-1,2-Dichloroethene	ND	5.8	ug/kg
156-60-5	trans-1,2-Dichloroethene	ND	5.8	ug/kg
78-87-5	1,2-Dichloropropane	ND	5.8	ug/kg
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	ug/kg
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	ug/kg
100-41-4	Ethylbenzene	ND	5.8	ug/kg
591-78-6	2-Hexanone	ND	5.8	ug/kg
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.8	ug/kg
75-09-2	Methylene chloride	ND	5.8	ug/kg
100-42-5	Styrene	ND	5.8	ug/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	ug/kg
127-18-4	Tetrachloroethene	ND	5.8	ug/kg
108-88-3	Toluene	ND	- 5.8	ug/kg
71-55-6	1,1,1-Trichloroethane	ND	5.8	ug/kg
79-00-5	1,1,2-Trichloroethane	ND	5.8	ug/kg
79-01-6	Trichloroethene	11.0	5.8	ug/kg
75-01-4	Vinyl chloride	ND	5.8	ug/kg
1330-20-7	Xylene (total)	ND	5.8	ug/kg

- RL = Reporting Limit
- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

## **Report of Analysis**

Client Sample ID:5 ENS-SYR-TMP-PSA2/SB5-CARS20502Lab Sample ID:E94945-6Date Sampled:07/12/01Matrix:SO - SoilDate Received:07/13/01Method:SW846 8260BPercent Solids:85.5Project:ENSTNN: Carrier, Syracuse, NYPercent Solids:85.5

## **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		55-132%
17060-07-0	1,2-Dichloroethane-D4	105%		54-129%
2037-26-5	Toluene-D8	98%		65-133%
460-00-4	4-Bromofluorobenzene	116%		58-137%

RL = Reporting Limit E = Indicates value exceeds calibration range

ND = Not detected

Page 2 of 2



	Page 1 of 2					
Client Sample ID:6 ENS-SYR-TMP-PSLab Sample ID:E94945-7Matrix:SO - SoilMethod:SW846 8260BProject:ENSTNN: Carrier, S				Date Samp Date Receiv Percent Sol	ed: 07/13/01	
	File ID DF K45297.D 1	<b>Analyzed</b> 07/24/01	By DFT	<b>Prep Date</b> n/a	Prep Batch n/a	Analytical Batch VK1562
VOA TCL I	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	5.8	ug/kg		
71-43-2	Benzene	ND	2.3	ug/kg		
75-27-4	Bromodichloromethane	ND	5.8	ug/kg		
75-25-2	Bromoform	ND	5.8	ug/kg		
74-83-9	Bromomethane	ND	5.8	ug/kg		
78-93-3	2-Butanone (MEK)	ND	5.8	ug/kg		
75-15-0	Carbon disulfide	ND	5.8	ug/kg		
56-23-5	Carbon tetrachloride	ND	5.8	ug/kg		
108-90-7	Chlorobenzene	ND	5.8	ug/kg		
75-00-3	Chloroethane	ND	5.8	ug/kg		
67-66-3	Chloroform	ND	5.8	ug/kg		
74-87-3	Chloromethane	ND	5.8	ug/kg		
124-48-1	Dibromochloromethane	ND	5.8	ug/kg		
75-34-3	1,1-Dichloroethane	ND	5.8	ug/kg		
107-06-2	1,2-Dichloroethane	ND	5.8	ug/kg		
75-35-4	1,1-Dichloroethene	ND	5.8	ug/kg		
156-59-2	cis-1,2-Dichloroethene	ND	5.8	ug/kg		
156-60-5	trans-1,2-Dichloroethene	ND	5.8	ug/kg		
78-87-5	1,2-Dichloropropane	ND	5.8	ug/kg		
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	ug/kg		
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	ug/kg		
100-41-4	Ethylbenzene	ND	5.8	ug/kg		
591-78-6	2-Hexanone	ND	5.8	ug/kg		
108-10-1	4-Methyl-2-pentanone(MIB	K) ND	5.8	ug/kg		
75-09-2	Methylene chloride	ND	5.8	ug/kg		
100-42-5	Styrene	ND	5.8	ug/kg		
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	ug/kg		
127-18-4	Tetrachloroethene	ND	5.8	ug/kg		
108-88-3	Toluene	ND	5.8	ug/kg		
71-55-6	1,1,1-Trichloroethane	ND	5.8	ug/kg		
79-00-5	1,1,2-Trichloroethane	ND	5.8	ug/kg		
79-01-6	Trichloroethene	ND	5.8	ug/kg		
75-01-4	Vinyl chloride	ND	5.8	ug/kg		
1330-20-7	Xylene (total)	ND	5.8	ug/kg		

- RL = Reporting Limit
- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

# **Report of Analysis**

1				
Client Sample ID:	6 ENS-SYR-TMP-PSA2/SB6-CARS20604			
Lab Sample ID:	E94945-7	Date Sampled:	07/12/01	
Matrix:	SO - Soil	Date Received:	07/13/01	
Method:	SW846 8260B	Percent Solids:	83.7	
Project:	ENSTNN: Carrier, Syracuse, NY			
1				

## **VOA TCL List**

CAS No.	Surrogate Recoveries	Run#1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		55-132%
17060-07-0	1,2-Dichloroethane-D4	101%		54-129%
2037-26-5	Toluene-D8	97%		65-133%
460-00-4	4-Bromofluorobenzene	111%		58-137%

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Client Sa	mple ID:	7 ENS	-SYR-TMI	P-PSA2/SB7-C/	ARS20702			
Lab Sam	ple ID:	E9494	5-8			Date Sampl	ed: 07/12/01	
Matrix:		SO - S	oil			Date Receiv	ed: 07/13/01	
Method:		SW846	5 8260B			Percent Sol	ids: 84.0	
Project:		ENSTI	NN: Carrie	er, Syracuse, N	Y			
	File ID		DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 Run #2	K45298	.D	a na	07/24/01	DFT	n/a	n/a	VK1562

## **VOA TCL List**

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	6.0	ug/kg
71-43-2	Benzene	ND	2.4	ug/kg
75-27-4	Bromodichloromethane	ND	6.0	ug/kg
75-25-2	Bromoform	ND	6.0	ug/kg
74-83-9	Bromomethane	ND	6.0	ug/kg
78-93-3	2-Butanone (MEK)	ND	6.0	ug/kg
75-15-0	Carbon disulfide	ND	6.0	ug/kg
56-23-5	Carbon tetrachloride	ND	6.0	ug/kg
108-90-7	Chlorobenzene	ND	6.0	ug/kg
75-00-3	Chloroethane	ND	6.0	ug/kg
67-66-3	Chloroform	ND	. 6.0	ug/kg
74-87-3	Chloromethane	ND	6.0	ug/kg
124-48-1	Dibromochloromethane	ND	6.0	ug/kg
75-34-3	1,1-Dichloroethane	ND	6.0	ug/kg
107-06-2	1,2-Dichloroethane	ND	6.0	ug/kg
75-35-4	1,1-Dichloroethene	ND	6.0	ug/kg
156-59-2	cis-1,2-Dichloroethene	ND	6.0	ug/kg
156-60-5	trans-1,2-Dichloroethene	ND	6.0	ug/kg
78-87-5	1,2-Dichloropropane	ND	6.0	ug/kg
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	ug/kg
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	ug/kg
100-41-4	Ethylbenzene	ND	6.0	ug/kg
591-78-6	2-Hexanone	ND	6.0	ug/kg
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.0	ug/kg
75-09-2	Methylene chloride	ND	6.0	ug/kg
100-42-5	Styrene	ND	6.0	ug/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	ug/kg
127-18-4	Tetrachloroethene	ND	6.0	ug/kg
108-88-3	Toluene	ND	6.0	ug/kg
71-55-6	1,1,1-Trichloroethane	ND ····	6.0	ug/kg
79-00-5	1,1,2-Trichloroethane	ND	6.0	ug/kg
79-01-6	Trichloroethene	114	6.0	ug/kg
75-01-4	Vinyl chloride	ND	6.0	ug/kg
1330-20-7	Xylene (total)	ND	6.0	ug/kg

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ND = Not detected

- RL = Reporting Limit
- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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**Report of Analysis** 

Client Sample ID:7 ENS-SYR-TMP-PSA2/SB7-CARS20702Lab Sample ID:E94945-8Date Sampled:07/12/01Matrix:SO - SoilDate Received:07/13/01Method:SW846 8260BPercent Solids:84.0Project:ENSTNN: Carrier, Syracuse, NYY

## **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		55-132%
17060-07-0	1,2-Dichloroethane-D4	106%		54-129%
2037-26-5	Toluene-D8	98%		65-133%
460-00-4	4-Bromofluorobenzene	115%		58-137%

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Sample ID: Lab Sample ID: Matrix: Method: Project:		E94945-9 SO - Soil SW846 8260	FMP-PSA2/SB8-C/ 3 arrier, Syracuse, N		Date Sampled:07/12/01Date Received:07/13/01Percent Solids:82.1		
Run #1	File ID	DF	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	K45299.	D 1	07/24/01	DFT	n/a	n/a	VK1562

## **VOA TCL List**

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	5.9	ug/kg
71-43-2	Benzene	ND	2.4	ug/kg
75-27-4	Bromodichloromethane	ND	5.9	ug/kg
75-25-2	Bromoform	ND	5.9	ug/kg
74-83-9	Bromomethane	ND	5.9	ug/kg
78-93-3	2-Butanone (MEK)	ND	5.9	ug/kg
75-15-0	Carbon disulfide	ND	5.9	ug/kg
56-23-5	Carbon tetrachloride	ND	5.9	ug/kg
108-90-7	Chlorobenzene	ND	5.9	ug/kg
75-00-3	Chloroethane	ND	- 5,9	ug/kg
67-66-3	Chloroform	ND	5.9	ug/kg
74-87-3	Chloromethane	ND	5.9	ug/kg
124-48-1	Dibromochloromethane	ND	5.9	ug/kg
75-34-3	1,1-Dichloroethane	ND	. 5.9	ug/kg
107-06-2	1,2-Dichloroethane	ND	5.9	ug/kg
75-35-4	1,1-Dichloroethene	ND	5.9	ug/kg
156-59-2	cis-1,2-Dichloroethene	ND	5.9	ug/kg
156-60-5	trans-1,2-Dichloroethene	ND	5.9	ug/kg
78-87-5	1,2-Dichloropropane	ND	5.9	ug/kg
10061-01-5	cis-1,3-Dichloropropene	ND	5.9	ug/kg
10061-02-6	trans-1,3-Dichloropropene	ND	5.9	ug/kg
100-41-4	Ethylbenzene	ND	5.9	ug/kg
591-78-6	2-Hexanone	ND	5.9	ug/kg
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.9	ug/kg
75-09-2	Methylene chloride	ND	5.9	ug/kg
100-42-5	Styrene	ND	5.9	ug/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.9	ug/kg
127-18-4	Tetrachloroethene	ND	5.9	ug/kg
108-88-3	Toluene	ND	5.9	ug/kg
71-55-6	1,1,1-Trichloroethane	ND	5.9	ug/kg
79-00-5	1,1,2-Trichloroethane	ND	5.9	ug/kg
79-01-6	Trichloroethene	28.3	5.9	ug/kg
75-01-4	Vinyl chloride	ND	5.9	ug/kg
1330-20-7	Xylene (total)	ND	5.9	ug/kg

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Client Sample ID:	8 ENS-SYR-TMP-PSA2/SB8-CARS20804		
Lab Sample ID:	E94945-9	Date Sampled:	07/12/01
Matrix:	SO - Soil	Date Received:	
Method:	SW846 8260B	<b>Percent Solids:</b>	82.1
Project:	ENSTNN: Carrier, Syracuse, NY		
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## VOA TCL List

CAS No.	Surrogate Recoveries	Run# 1 Run# 2	Limits
1868-53-7	Dibromofluoromethane	102 %	55-132%
17060-07-0	1,2-Dichloroethane-D4	104 %	54-129%
2037-26-5	Toluene-D8	97 %	65-133%
460-00-4	4-Bromofluorobenzene	106 %	58-137%

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- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Lab Sample ID: Matrix: Method: Project:			oil 8260B	er, Syracuse, N	Ý	04 Date Sampled: 07/12/01 Date Received: 07/13/01 Percent Solids: 82.7		
	<b>File ID</b> K45300.	D	DF 1	<b>Analyzed</b> 07/24/01	By DFT	Prep Date n/a	Prep Batch n/a	Analytical Batch VK1562

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	5.8	ug/kg
71-43-2	Benzene	ND	2.3	ug/kg
75-27-4	Bromodichloromethane	ND	5.8	ug/kg
75-25-2	Bromoform	ND	5.8	ug/kg
74-83-9	Bromomethane	ND	5.8	ug/kg
78-93-3	2-Butanone (MEK)	ND	5.8	ug/kg
75-15-0	Carbon disulfide	ND	5.8	ug/kg
56-23-5	Carbon tetrachloride	ND	5.8	ug/kg
108-90-7	Chlorobenzene	ND	5.8	ug/kg
75-00-3	Chloroethane	ND	5.8	ug/kg
67-66-3	Chloroform	ND	5.8	ug/kg
74-87-3	Chloromethane	ND	5.8	ug/kg
124-48-1	Dibromochloromethane	ND	5.8	ug/kg
75-34-3	1,1-Dichloroethane	ND	5.8	ug/kg
107-06-2	1,2-Dichloroethane	ND	5.8	ug/kg
75-35-4	1,1-Dichloroethene	ND	5.8	ug/kg
156-59-2	cis-1,2-Dichloroethene	ND	5.8	ug/kg
156-60-5	trans-1,2-Dichloroethene	ND	5.8	ug/kg
78-87-5	1,2-Dichloropropane	ND	5.8	ug/kg
10061-01-5	cis-1,3-Dichloropropene	ND	5.8	ug/kg
10061-02-6	trans-1,3-Dichloropropene	ND	5.8	ug/kg
100-41-4	Ethylbenzene	ND	5.8	ug/kg
591-78-6	2-Hexanone	ND	5.8	ug/kg
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.8	ug/kg
75-09-2	Methylene chloride	ND	5.8	ug/kg
100-42-5	Styrene	ND	5.8	ug/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.8	ug/kg
127-18-4	Tetrachloroethene	ND	5.8	ug/kg
108-88-3	Toluene	ND	5.8	ug/kg
71-55-6	1,1,1-Trichloroethane	ND	5.8	ug/kg
79-00-5	1,1,2-Trichloroethane	ND	5.8	ug/kg
79-01-6	Trichloroethene	27.9	5.8	ug/kg
75-01-4	Vinyl chloride	ND	5.8	ug/kg
1330-20-7	Xylene (total)	ND	5.8	ug/kg

### ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

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Client Sample ID:9 ENS-SYR-TMP-PSA2/SB9-CARS20904Lab Sample ID:E94945-10Date Sampled:07/12/01Matrix:SO - SoilDate Received:07/13/01Method:SW846 8260BPercent Solids:82.7Project:ENSTNN: Carrier, Syracuse, NYPercent Solids:82.7

## **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101 %		55-132%
17060-07-0	1,2-Dichloroethane-D4	111 %		54-129%
2037-26-5	Toluene-D8	98 %		65-133%
460-00-4	4-Bromofluorobenzene	114 %		58-137%

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Page 2 of 2

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		10 ENS-SYR-TMP-PSA2/SB10-CARS21002 E94945-11 SO - Soil SW846 8260B ENSTNN: Carrier, Syracuse, NY			Date Sampled: 07/12/01 Date Received: 07/13/01 Percent Solids: 83.9			
Run #1	File ID	.D	DF	<b>Analyzed</b>	By	<b>Prep Date</b>	Prep Batch	Analytical Batch
Run #2	K45301		1	07/24/01	DFT	n/a	n/a	VK1562

## **VOA TCL List**

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	6.0	ug/kg
71-43-2	Benzene	ND	2.4	ug/kg
75-27-4	Bromodichloromethane	ND	6.0	ug/kg
75-25-2	Bromoform	ND	6.0	ug/kg
74-83-9	Bromomethane	ND	6.0	ug/kg
78-93-3	2-Butanone (MEK)	ND	6.0	ug/kg
75-15-0	Carbon disulfide	ND	6.0	ug/kg
56-23-5	Carbon tetrachloride	ND	6.0	ug/kg
108-90-7	Chlorobenzene	ND	6.0	ug/kg
75-00-3	Chloroethane	ND	6.0	ug/kg
67-66-3	Chloroform	ND	6.0	ug/kg
74-87-3	Chloromethane	ND	6.0	ug/kg
124-48-1	Dibromochloromethane	ND	6.0	ug/kg
75-34-3	1,1-Dichloroethane	ND	6.0	ug/kg
107-06-2	1,2-Dichloroethane	ND	6.0	ug/kg
75-35-4	1,1-Dichloroethene	ND	6.0	ug/kg
156-59-2	cis-1,2-Dichloroethene	ND	6.0	ug/kg
156-60-5	trans-1,2-Dichloroethene	ND	6.0	ug/kg
78-87-5	1,2-Dichloropropane	ND	6.0	ug/kg
10061-01-5	cis-1,3-Dichloropropene	ND	6.0	ug/kg
10061-02-6	trans-1,3-Dichloropropene	ND	6.0	ug/kg
100-41-4	Ethylbenzene	ND	6.0	ug/kg
591-78-6	2-Hexanone	ND	6.0	ug/kg
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	6.0	ug/kg
75-09-2	Methylene chloride	ND	6.0	ug/kg
100-42-5	Styrene	ND	6.0	ug/kg
79-34-5	1,1,2,2-Tetrachloroethane	ND	6.0	ug/kg
127-18-4	Tetrachloroethene	ND	6.0	ug/kg
108-88-3	Toluene	ND	6.0	ug/kg
71-55-6	1,1,1-Trichloroethane	ND	6.0	ug/kg
79-00-5	1,1,2-Trichloroethane	ND	6.0	ug/kg
79-01-6	Trichloroethene	20.3	6.0	ug/kg
75-01-4	Vinyl chloride	ND	6.0	ug/kg
1330-20-7	Xylene (total)	ND	6.0	ug/kg

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Sample ID:	10 ENS-SYR-TMP-PSA2/SB10-CARS21002			
Lab Sample ID:	E94945-11	Date Sampled:	07/12/01	
Matrix:	SO - Soil	Date Received:	07/13/01	
Method:	SW846 8260B	Percent Solids:	83.9	
Project:	ENSTNN: Carrier, Syracuse, NY			
	•			

## **VOA** TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101 %		55-132 %
17060-07-0	1,2-Dichloroethane-D4	109 %		54-129 %
2037-26-5	Toluene-D8	99 %		65-133 %
460-00-4	4-Bromofluorobenzene	108 %		58-137 %

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		11 ENS-SYR-TRIP BLK-CART071201 E94945-12 AQ - Trip Blank Soil SW846 8260B ENSTNN: Carrier, Syracuse, NY				Date Sampled: 07/12/01 Date Received: 07/13/01 Percent Solids: n/a		
Run #1	<b>File ID</b>	D	DF	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	E47357.		1	07/20/01	GTT	n/a	n/a	VE2519

Q

**Report of Analysis** 

## **VOA TCL List**

CAS No.	Compound	Result	RL	Units
67-64-1	Acetone	ND	5.0	ug/l
71-43-2	Benzene	ND	- 1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	4.0	ug/l
74-83-9	Bromomethane	ND	5.0	ug/l
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l
75-15-0	Carbon disulfide	ND	5.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	2.0	ug/l
75-00-3	Chloroethane	ND -	5.0	ug/l
67-66-3	Chloroform	ND .	5.0	ug/l
74-87-3	Chloromethane	ND	5.0	ug/l
124-48-1	Dibromochloromethane	ND	5.0	ug/l
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
591-78-6	2-Hexanone	ND	5.0	ug/l
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l
75-09-2	Methylene chloride	ND	2.0	ug/l
100-42-5	Styrene	ND	5.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-01-4	Vinyl chloride	ND	1.0	ug/l
1330-20-7	Xylene (total)	ND	5.0	ug/l

- RL = Reporting Limit
- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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Client Sample ID:	11 ENS-SYR-TRIP BLK-CART071201		
Lab Sample ID:	E94945-12	Date Sampled:	07/12/01
Matrix:	AQ - Trip Blank Soil	Date Received:	07/13/01
Method:	SW846 8260B	<b>Percent Solids:</b>	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

## **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		81-118%
17060-07-0	1,2-Dichloroethane-D4	112%		68-124%
2037-26-5	Toluene-D8	100%		85-119%
460-00-4	4-Bromofluorobenzene	98%		75-127%

Page 2 of 2

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Lab Sample ID: Matrix: Method: Project:		12 ENS-SYR-TMP-MW01-CARGMW0104 E94945-13 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY			+ Date Sampl Date Receiv Percent Sol		
	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
Run #1 Run #2	E47349.D	) 1	07/20/01	GTT	n/a	n/a	VE2519

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**Report of Analysis** 

## **VOA TCL List**

CAS No.	Compound	Result	RL	Units
67-64-1	Acetone	ND	5.0	ug/l
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	4.0	ug/l
74-83-9	Bromomethane	ND	5.0	ug/l
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l
75-15-0	Carbon disulfide	ND	5.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	2.0	ug/l
75-00-3	Chloroethane	ND	5.0	ug/l
67-66-3	Chloroform	ND	5.0	ug/l
74-87-3	Chloromethane	ND	5.0	ug/l
124-48-1	Dibromochloromethane	ND	5.0	ug/l
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
591-78-6	2-Hexanone	ND	5.0	ug/l
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/1
75-09-2	Methylene chloride	ND	2.0	ug/l
100-42-5	Styrene	ND	5.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-01-4	Vinyl chloride	ND	1.0	ug/l
1330-20-7	Xylene (total)	ND	5.0	ug/l

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Sample ID:	12 ENS-SYR-TMP-MW01-CARGMW0104		
Lab Sample ID:	E94945-13	Date Sampled:	07/12/01
Matrix:	AQ - Ground Water	Date Received:	07/13/01
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

## **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104 %		81-118%
17060-07-0	1,2-Dichloroethane-D4	108 %		68-124%
2037-26-5	Toluene-D8	96 %		85-119%
460-00-4	4-Bromofluorobenzene	101 %		75-127%

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B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Client Sam Lab Samp Matrix: Method: Project:	ie ID: E94945 AQ - G SW846	5-13 fround Wa 8082 S	4P-MW01-CAR ater W846 3510C er, Syracuse, NY		Date Sampled: 07/12/01 Date Received: 07/13/01 Percent Solids: n/a				
Run #1 Run #2	File ID AB28277.D	DF 1	<b>Analyzed</b> 07/21/01	By KLS	<b>Prep Date</b> 07/19/01	Prep Batch OP9795	Analytical Batch GAB1592		
PCB List									
CAS No.	Compound		Result	RL	Units Q				
12674-11-2	Aroclor 1016		ND	0.52	ug/l				
11104-28-2	Aroclor 1221		ND	0.52	ug/l				
11141-16-5	Aroclor 1232		ND	0.52	ug/l				
53469-21-9	Aroclor 1242		ND	0.52	ug/l				
12672-29-6	Aroclor 1248		ND	0.52	ug/l				
11097-69-1	Aroclor 1254		ND	0.52	ug/l				

CAS No.	Compound	Result	RL	Units Q
12674-11-2	Aroclor 1016	ND	0.52	ug/l
11104-28-2	Aroclor 1221	ND	0.52	ug/l
11141-16-5	Aroclor 1232	ND	0.52	ug/l
53469-21-9	Aroclor 1242	ND	0.52	ug/l
12672-29-6	Aroclor 1248	ND	0.52	ug/l
11097-69-1	Aroclor 1254	ND	0.52	ug/l
11096-82-5	Aroclor 1260	ND	0.52	ug/l
CAS No.	Surrogate Recoveries	Run#1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	76%		25-134%
877-09-8	Tetrachloro-m-xylene	98%		25-134%
2051-24-3	Decachlorobiphenyl	80%		14-150%
2051-24-3	Decachlorobiphenyl	97 %		14-150%

J = Indicates an estimated value

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	12 ENS-SYR-TMP-MW01-CARGMW0104 E94945-13	Date Sampled:	07/12/01
Matrix:	AQ - Ground Water	Date Received:	07/13/01
Project:	ENSTNN: Carrier, Syracuse, NY	Percent Solids:	n/a

## Metals Analysis

Analyte	Result	RL	Units	<b>ĐF</b>	Prep	Analyzed I	By	Method
Arsenic	< 5.0	5.0	ug/l	I	07/18/01		EK	EPA 200.7
Chromium	<10	10	ug/l	1	07/18/01	07/19/01 1	EK	EPA 200.7
Iron	275	100	ug/l	1	07/18/01	07/19/01 г	EK	EPA 200.7
Lead	<3.0	3.0	ug/l	1	07/18/01	07/19/01 н	EK	EPA 200.7
Magnesium	52800	5000	ug/l	1	07/18/01	07/19/01 н	EK.	EPA 200.7
Nickel	<40	40	ug/l	1	07/18/01	07/19/01 н	EK	EPA 200.7
Selenium	< 5.0	5.0	ug/l	1	07/18/01	07/19/01 1	EK	EPA 200.7

C-77 ...

Client Sample ID:12 ENS-SYR-TMP-MW01-CARGMW0104Lab Sample ID:E94945-13Date Sampled:07/12/01Matrix:AQ - Ground WaterDate Received:07/13/01Project:ENSTNN: Carrier, Syracuse, NYn/a

## **General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed By	Method
Fluoride	< 0.40	0.40	mg/l	1	07/26/01 VI.	EPA 300/SW846 9056
HEM Oil and Grease	< 5.0	5.0	mg/l	1	07/28/01 sig	EPA 1664
Nitrogen, Nitrate <sup>a</sup>	< 0.11	0.11	mg/l	1	08/02/01 эк	EPA353.2/SM184500
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	08/02/01 јк	EPA 353.2
Nitrogen, Nitrite <sup>b</sup>	< 0.010	0.010	mg/l	1	07/16/01 ky	SM18 4500NO2B
Phenols	< 0.050	0.050	mg/l	1	07/31/01 эк	EPA 420.2
Total Organic Carbon	10.6	1.0	mg/l	1	07/19/01 AMS	415.1/9060 M/5310B M
Total Organic Halides	< 0.050	0.050	mg/l	1	08/02/01 лу	SW846 9020

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

(b) Analysis done out of holding time as per client request.

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		-	e
Chent Sample ID:	12 ENS-SYR-TMP-MW01-CARGMW0104		
Lab Sample ID:	E94945-13A	Date Sampled:	07/12/01
Matrix:	AQ - Groundwater Filtered	Date Received:	
		<b>Percent</b> Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		
{			

Metals Analysis

Analyte	Result	RL	Units	ÐF	Prep	Analyzed By	Method
Arsenic	<5.0	5.0	ug/l	1	07/18/01	07/19/01 ек	EPA 200.7
Chromium	<10	10	ug/l	]	07/18/01	07/19/01 ек	EPA 200.7
Iron	<100	100	ug/l	1	07/18/01	07/19/01 EK	EPA 200.7
Lead	<3.0	3.0	ug/l	1	07/18/01	07/19/01 EK	EPA 200.7
Magnesium	51200	5000	ug/l	1	07/18/01	07/19/01 EK	EPA 200.7
Nickel	<40	40	ug/l	1	07/18/01	07/19/01 EK	EPA 200.7
Selenium	<5.0	5.0	ug/l	1	07/18/01	07/19/01 EK	EPA 200.7

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Client Sample ID: Lab Sample ID: Matrix: Method: Project:		E94945 AQ - G SW846	-14 round Wa 8260B			Date Sampled: 07/12/01 Date Received: 07/13/01 Percent Solids: n/a			
Run #1	File ID	.D	DF	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch	
Run #2	E47352		1	07/20/01	GTT	n/a	n/a	VE2519	

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## **VOA TCL List**

CAS No.	Compound	Result	RL	Units
67-64-1	Acetone	ND	5.0	ug/l
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	4.0	ug/l
74-83-9	Bromomethane	ND	5.0	ug/l
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l
75-15-0	Carbon disulfide	ND	5.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chłorobenzene	ND	2.0	ug/l
75-00-3	Chloroethane	ND	5.0	ug/ł
67-66-3	Chloroform	ND	5.0	ug/I
74-87-3	Chloromethane	ND	5.0	ug/l
124-48-1	Dibromochloromethane	ND	5.0	ug/l
75-34-3	I,1-Dichloroethane	ND	5.0	ug/l
107-06-2	1,2-Dichloroethane	ND	2.0	ug/I
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	- 1.0	ug/l
591-78-6	2-Hexanone	ND	5.0	ug/l
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l
75-09-2	Methylene chloride	ND	2.0	ug/l
100-42-5	Styrene	ND	5.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/I
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-01-4	Vinyl chloride	ND	1.0	ug/l
1330-20-7	Xylene (total)	ND	5.0	ug/l

RL = Reporting Limit

E = Indicates value exceeds calibration range

 $\mathbf{J} = \mathbf{Indicates}$  an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## **Report of Analysis**

- 38

[Chem Sample ID.	13 ENS-SYR-TMP-MW06-CARGMW0604		
Lab Sample ID:	E94945-14	Date Sampled:	07/12/01
Matrix:	AQ - Ground Water	Date Received:	07/13/01
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

## VOA TCL List

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CAS No.	Surrogate Recoveries	Run#1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		81-118%
17060-07-0	1,2-Dichloroethane-D4	113%		68-124%
2037-26-5	Toluene-D8	96%		85-119%
460-00-4	4-Bromofluorobenzene	98%		75-127%

- 39

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Sam Lab Sample Matrix: Method: Project:	e <b>ID:</b> E94945 AQ - Gi SW846	-14 round Wa 8082 SV	IP-MW06-CAR ter W846 3510C er, Syracuse, NY		Date Sample Date Receive Percent Soli	ed: 07/13/01	
Run #1 Run #2	File ID AB28278.D	DF 1	<b>Analyzed</b> 07/21/01	By KLS	<b>Prep Date</b> 07/19/01	Prep Batch OP9795	Analytical Batch GAB1592
PCB List							
CAS No.	Compound		Result	RL	Units Q		
12674-11-2	Aroclor 1016		ND	0.52	ug/l		
11104-28-2	Aroclor 1221		ND	0.52	ug/l		
11141-16-5	Aroclor 1232		ND	0.52	ug/l		
53469-21-9	Aroclor 1242		ND	0.52	ug/l		
12672-29-6	Aroclor 1248		ND	0.52	ug/l		
11097-69-1	Aroclor 1254		ND	0.52	ug/l		
11096-82-5	Aroclor 1260		ND	0.52	ug/l		
CAS No.	Surrogate Reco	overies	Run# 1	Run# 2	Limits		
877-09-8	Tetrachloro-m-;	xylene	89%		25-134%		
877-09-8	Tetrachloro-m-:	xylene	109%		25-134%		
2051-24-3	Decachlorobiph	enyl	70%		14-150%		
2051-24-3	Decachlorobiph						

**Report of Analysis** 

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J = Indicates an estimated value

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

-	13 ENS-SYR-TMP-MW06-CARGMW0604 E94945-14 AQ - Ground Water	Date Sampled: Date Received: Percent Solids:	07/13/01
Project:	ENSTNN: Carrier, Syracuse, NY		

**Metals Analysis** 

Analyte	Result	RL	Units	DF	Ргер	Analyzed By	Method
Arsenic	< 5.0	5.0	ug/l	1	07/18/01	07/19/01 ек	EPA 200.7
Chromium	< 10	10	ug/l	1	07/18/01	07/19/01 ек	EPA 200.7
Iron	1310	100	ug/l	1	07/18/01	07/19/01 EK	EPA 200.7
Lead	<3.0	3.0	ug/l	1	07/18/01	07/19/01 ек	EPA 200.7
Magnesium	41800	5000	ug/l	1	07/18/01	07/19/01 ек	EPA 200.7
Nickel	< 40	40	ug/l	1	07/18/01	07/19/01 EK	EPA 200.7
Selenium	< 5.0	5.0	ug/l	1	07/18/01	07/19/01 ек	EPA 200.7

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 Client Sample ID:
 13 ENS-SYR-TMP-MW06-CARGMW0604

 Lab Sample ID:
 E94945-14

 Matrix:
 AQ - Ground Water

 Project:
 ENSTNN: Carrier, Syracuse, NY

## **General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed By	Method
Fluoride HEM Oil and Grease	and the second	0.40	mg/l	1	07/26/01 VL	EPA 300/SW846 9056
Nitrogen, Nitrate <sup>a</sup>	<5.0 <0.11		mg/l mg/l	1	07/28/01 sjg 08/02/01 jk	EPA 1664 EPA353.2/SM184500
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	08/02/01 эк	EPA 353.2
Nitrogen, Nitrite Phenols	<0.010 <0.050	0.010	mg/l	1	07/13/01 кү	SM18 4500NO2B
Total Organic Carbon	<1.0	1.0	mg/l mg/l	1	— 07/31/01 јк — 07/19/01 амз	EPA 420.2 415.1/9060 M/5310B M
Total Organic Halides	< 0.050	0.050	mg/l	1	08/02/01 луу	SW846 9020

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

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	1			
	Client Sample ID:	13 ENS-SYR-TMP-MW06-CARGMW0604		
		E94945-14A	Date Sampled:	07/12/01
	Matrix:	AQ - Groundwater Filtered	Date Received:	
			Percent Solids:	n/a
	Project:	ENSTNN: Carrier, Syracuse, NY		
- 1				

Metals Analysis

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Analyte	Result	RL	Units	DF	Prep	Analyzed B	3y Method
Arsenic	< 5.0	5.0	ug/l	1	07/18/01	07/19/01 е	K EPA 200.7
Chromium	<10	10	ug/l	1	07/18/01	07/19/01 в	K EPA 200.7
Iron	<100	100	ug/l	1	07/18/01	07/19/01 е	K EPA 200.7
Lead	< 3.0	3.0	ug/l	1	07/18/01	07/19/01 е	K EPA 200.7
Magnesium	39800	5000	ug/l	1	07/18/01	07/19/01 Е	K EPA 200.7
Nickel	<40	- 40	ug/l	1	07/18/01	07/19/01 E	K EPA 200.7
Selenium	< 5.0	5.0	ug/l	1	07/18/01	07/19/01 E	K EPA 200.7

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Client Sa Lab Sam Matrix: Method: Project:	•	E9494 AQ - 0 SW84	5-15 Ground Wa 6 8260B	1P-MW05-CAR ner er, Syracuse, N <sup>a</sup>		Date Sampl	led: 07/12/01 /ed: 07/13/01 ids: n/a	
Run #1	File ID		DF	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	E47353		1	07/20/01	GTT	n/a	n/a	VE2519

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# **Report of Analysis**

### **VOA TCL List**

CAS No.	Compound	Result	RL	Units
67-64-1	Acetone	ND	5.0	ug/l
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	4.0	ug/l
74-83-9	Bromomethane	ND	5.0	ug/l
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l
75-15-0	Carbon disulfide	ND	5.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	2.0	ug/l
75-00-3	Chloroethane	ND	5.0	ug/l
67-66-3	Chloroform	ND	5.0	ug/l
74-87-3	Chloromethane	ND	5.0	ug/l
124-48-1	Dibromochloromethane	ND	5.0	ug/I
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
591-78-6	2-Hexanone	ND	5.0	ug/l
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l
75-09-2	Methylene chloride	ND	2.0	ug/1
100-42-5	Styrene	ND	5.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/I
75-01-4	Vinyl chloride	ND	1.0	ug/l
1330-20-7	Xylene (total)	ND	5.0	ug/l

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Client Sample ID:	14 ENS-SYR-TMP-MW05-CARGMW0504			
Lab Sample ID:	E94945-15	Date Sampled:	07/12/01	
Matrix:	AQ - Ground Water	Date Received:	07/13/01	
Method:	SW846 8260B	Percent Solids:	n/a	
Project:	ENSTNN: Carrier, Syracuse, NY			
	-			

## **VOA TCL List**

	CAS No.	Surrogate Recoveries	Run# 1 Run# 2	Limits
17060-07-01,2-Dichloroethane-D4108%68-122037-26-5Toluene-D898%85-119	17060-07-0 2037-26-5	1,2-Dichloroethane-D4 Toluene-D8	108% 98%	81-118% 68-124% 85-119% 75-127%

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		Repo				
Client Sam Lab Sample Matrix: Method: Project:	e ID: E94945-15 AQ - Groun SW846 808	R-TMP-MW05-CAR nd Water 2 SW846 3510C Carrier, Syracuse, NY		Date Sample Date Receive Percent Soli	ed: 07/13/01	
Run #1 Run #2	File IDDAB28279.D1	F Analyzed 07/21/01	By KLS	<b>Prep Date</b> 07/19/01	Prep Batch OP9795	Analytical Batch GAB1592
PCB List						
CAS No.	Compound	Result	RL	Units Q		
12674-11-2	Aroclor 1016	ND	0.52	ug/l		
11104-28-2	Aroclor 1221	ND	0.52	ug/l		
11141-16-5	Aroclor 1232	ND	0.52	ug/l		
53469-21-9	Aroclor 1242	NÐ	0.52	ug/l		
12672-29-6	Aroclor 1248	ND	0.52	ug/l		
11097-69-1	Aroclor 1254	ND	0.52	ug/l		
11096-82-5	Aroclor 1260	ND	0.52	ug/l		
CAS No.	Surrogate Recove	ries Run#1	Run# 2	Limits		
877-09-8	Tetrachloro-m-xyl	ene 84 %		25-134%		
877-09-8	Tetrachloro-m-xyl	ene 74.%		25-134%		
2051-24-3	Decachlorobipheny	yl 90%	j.	14-150%		
2051-24-3	Decachlorobipheny	yl 86%		14-150%		

**Report of Analysis** 

Page 1 of 1

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Lab Sample ID:	14 ENS-SYR-TMP-MW05-CARGMW0504 E94945-15 AQ - Ground Water	Date Sampled: Date Received:	07/13/01
Project:	ENSTNN: Carrier, Syracuse, NY	Percent Solids:	n/a

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method
Arsenic	14.8	5.0	ug/l	1	07/18/01	07/19/01 ек	EPA 200.7
Chromium	45.3	10	ug/l	1	07/18/01	07/19/01 ek	EPA 200.7
Iron	67000	100	ug/l	1	07/18/01	07/19/01 EK	EPA 200.7
Lead	21.0	3.0	ug/l	1	07/18/01	07/19/01 ek	EPA 200.7
Magnesium	103000	5000	ug/l	1	07/18/01	07/19/01 EK	EPA 200.7
Nickel	<40	40	ug/l	1	07/18/01	07/19/01 ek	EPA 200.7
Selenium	< 5.0	5.0	ug/l	1	07/18/01	07/19/01 ек	EPA 200.7

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# **Report of Analysis**

	Client Sample ID:	14 ENS-SYR-TMP-MW05-CARGMW0504			
		E94945-15	Date Sampled:	07/12/01	
	Matrix:	AQ - Ground Water	Date Received:		
		and mater			
			Percent Solids:	n/a	
	Project:	ENSTNN: Carrier, Syracuse, NY			
1					

## **General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed By	Method
Fluoride	< 0.40	0.40	mg/l	1	07/26/01 VL	EPA 300/SW846 9056
HEM Oil and Grease	< 5.0	5.0	mg/l	1	07/28/01 sjg	EPA 1664
Nitrogen, Nitrate <sup>a</sup>	< 0.11	0.11	mg/l	1	08/02/01 јк	EPA353.2/SM184500
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	08/02/01 јк	EPA 353.2
Nitrogen, Nitrite	< 0,010	0.010	mg/l	1	07/13/01 кү	SM18 4500NO2B
Phenols	< 0.050	0.050	mg/l	1	07/31/01 эк	EPA 420.2
Total Organic Carbon	15.8	1.0	mg/l	1	07/19/01 AMS	415.1/9060 M/5310B M
Total Organic Halides <sup>b</sup>	0.47	0.20	mg/l	4	ytt 10/60/80	SW846 9020

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

(b) Second column analysis indicates possible matrix interference.

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Client Sample ID:	14 ENS-SYR-TMP-MW05-CARGMW0504		
Lab Sample ID:	E94945-15A	Date Sampled:	07/12/01
Matrix:	AQ - Groundwater Filtered	Date Received:	
		Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

Metals Analysis

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Chromium $<10$ 10ug/l107/18/0107/19/01EIron.5190100ug/l107/18/0107/19/01ELead $<3.0$ 3.0ug/l107/18/0107/19/01EMagnesium.95400.5000ug/l107/18/0107/19/01ENickel $<40$ 40ug/l107/18/0107/19/01E	<ul> <li>EK EPA 200.7</li> </ul>

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Lab Sample ID: Matrix: Method: Project:					Date Sampled: 07/12/01 Date Received: 07/13/01 Percent Solids: n/a			
Run #1	File ID		DF	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	E47354		1	07/20/01	GTT	n/a	n/a	VE2519

### VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	4.0	ug/l	
74-83-9	Bromomethane	ND	5.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	2.0	ug/l	
75-00-3	Chloroethane	ND	5.0	ug/l	
67-66-3	Chloroform	ND	5.0	ug/l	
74-87-3	Chloromethane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	ug/l	
75-34-3	1,1-Dichloroethane	0.72	5.0	ug/l	J
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	23.2	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.2	5.0	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	ug/l	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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3				
Client Sample ID:	15 ENS-SYR-TMP-MW3D-CARGMW3D04			
Lab Sample ID:	E94945-16	Date Sampled:	07/12/01	
Matrix:	AQ - Ground Water	Date Received:	07/13/01	
Method:	SW846 8260B	<b>Percent Solids:</b>	n/a	
Project:	ENSTNN: Carrier, Syracuse, NY			

## **VOA TCL List**

CAS No.	Surrogate Recoveries	Run#1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		81-118%
17060-07-0	1,2-Dichloroethane-D4	120%		68-124%
2037-26-5	Toluene-D8	96%		85-119%
460-00-4	4-Bromofluorobenzene	98%		75-127%



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B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

J = Indicates an estimated value



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Client Samp Lab Samplo Matrix: Method: Project:	E <b>ID:</b> E94945- AQ - Gr SW846 8	16 ound Wat 3082 SW	P-MW3D-CAR er /846 3510C -, Syracuse, NY		Date Sample Date Receiv Percent Soli	ed: 07/13/01	
Run #1 Run #2	File ID AB28280.D	DF 1	<b>Analyzed</b> 07/21/01	By KLS	<b>Prep Date</b> 07/19/01	Prep Batch OP9795	Analytical Batch GAB1592
PCB List							
CAS No.	Compound		Result	RL	Units Q		
12674-11-2	Aroclor 1016		ND	0.52	ug/l		
11104-28-2	Aroclor 1221		ND	0.52	ug/ <b>l</b>		
11141-16-5	Aroclor 1232		ND	0.52	ug/l		
53469-21-9	Aroclor 1242		ND	0.52	ug/l		
12672-29-6	Aroclor 1248		ND	0.52	ug/l		
11097-69-1	Aroclor 1254		ND	0.52	ug/l		
11096-82-5	Aroclor 1260		ND	0.52	ug/l		
CAS No.	Surrogate Reco	overies	Run#1	Run#2	Limits		
877-09-8	Tetrachloro-m-	vlene	106%		25-134%		
877-09-8	Tetrachloro-m-:	cylene	120%	· · · ·	25-134%		
2051-24-3	Decachlorobiph	enyl	99%		14-150%		
2051-24-3	Decachlorobiph	enyl	116%	····	14-150%		

 $\mathbf{E} =$  Indicates value exceeds calibration range

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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Client Sample ID:	15 ENS-SYR-TMP-MW3D-CARGMW3D04		
Lab Sample ID:	E94945-16	Date Sampled:	07/12/01
Matrix:	AQ - Ground Water	Date Received:	07/13/01
		Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method
Arsenic	7.1	5.0	ug/l	1	07/18/01	07/19/01 ek	EPA 200.7
Chromium	<10	10	ug/ <b>l</b>	1	07/18/01	07/19/01 ek	EPA 200.7
Iron	2370	100	ug/l	1	07/18/01	07/19/01 EK	EPA 200.7
Lead	< 3.0	3.0	ug/l	1	07/18/01	07/19/01 ек	EPA 200.7
Magnesium	49300	5000	ug/l	1	07/18/01	07/19/01 ек	EPA 200.7
Nickel	<40	40	ug/l	1	07/18/01	07/19/01 ek	EPA 200.7
Selenium	< 5.0	5.0	ug/l	I	07/18/01	07/19/01 ек	EPA 200.7

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Client Sample ID:	15 ENS-SYR-TMP-MW3D-CARGMW3D04		
1 m m m m m m m m m m m m m m m m m m m	E94945-16	Date Sampled:	07/12/01
Matrix:	AQ - Ground Water	Date Received:	
		Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		
L			

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Fluoride	< 0.40	0.40	mg/l	1	07/26/01 VL	EPA 300/SW846 9056
HEM Oil and Grease	< 5.0	5.0	mg/l	1	07/28/01 sjg	EPA 1664
Nitrogen, Nitrate <sup>a</sup>	< 0.11	0.11	mg/l	1	08/02/01 јқ	EPA353.2/SM184500
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	08/02/01 јк	EPA 353.2
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	07/13/01 ку	SM18 4500NO2B
Phenols	< 0.050	0.050	mg/l	1	07/31/01 эк	EPA 420.2
Total Organic Carbon	<1.0	1.0	mg/l	1	07/19/01 AMS	415.1/9060 M/5310B M
Total Organic Halides	< 0.050	0.050	mg/l	1	08/02/01 луу	SW846 9020

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

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Client Sample ID:	15 ENS-SYR-TMP-MW3D-CARGMW3D04		
Lab Sample ID:	E94945-16A	Date Sampled:	07/12/01
Matrix:	AQ - Groundwater Filtered	Date Received:	07/13/01
Project:	ENSTNN: Carrier, Syracuse, NY	Percent Solids:	n/a

#### Metals Analysis

Arsenic <5.0 5.0 ug/l 1 07/18/01 07/19/01 EK	
Chromium $< 10$ $10$ $ug/l$ $l$ $07/18/01$ $07/19/01$ $EK$ Iron $< 100$ $100$ $ug/l$ $l$ $07/18/01$ $07/19/01$ $EK$ Lead $< 3.0$ $3.0$ $ug/l$ $l$ $07/18/01$ $07/19/01$ $EK$ Magnesium $48700$ $5000$ $ug/l$ $l$ $07/18/01$ $07/19/01$ $EK$ Nickel $< 40$ $40$ $ug/l$ $l$ $07/18/01$ $07/19/01$ $EK$ Selenium $< 5.0$ $5.0$ $ug/l$ $l$ $07/18/01$ $07/19/01$ $EK$	EPA 200.7 EPA 200.7 EPA 200.7 EPA 200.7 EPA 200.7 EPA 200.7 EPA 200.7

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Client Sample ID: Lab Sample ID: Matrix: Method: Project:		16 ENS-SYR-TMP-MW3S-CARGMW3S04 E94945-17 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY				4 Date Sampled: 07/12/01 Date Received: 07/13/01 Percent Solids: n/a		
Run #1	File ID		DF	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	E47348		20	07/20/01	GTT	n/a	n/a	VE2519

#### **VOA TCL List**

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	100	ug/l	
71-43-2	Benzene	ND	20	ug/l	
75-27-4	Bromodichloromethane	ND	20	ug/l	
75-25-2	Bromoform	ND	80	ug/l	
74-83-9	Bromomethane	ND	100	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	ug/l	
75-15-0	Carbon disulfide	ND	100	ug/I	
56-23-5	Carbon tetrachloride	ND	20	ug/l	
108-90-7	Chlorobenzene	ND	40	ug/l	
75-00-3	Chloroethane	NÐ	100	ug/l	
67-66-3	Chloroform	ND	100	ug/l	
74-87-3	Chloromethane	ND	100	ug/l	
124-48-1	Dibromochloromethane	ND	100	ug/l	
75-34-3	1,1-Dichloroethane	164	100	ug/l	
107-06-2	1,2-Dichloroethane	ND	40	ug/l	
75-35-4	1,1-Dichloroethene	38.3	40	ug/l	J
156-59-2	cis-1,2-Dichloroethene	5780	100	ug/I	
156-60-5	trans-1,2-Dichloroethene	13.9	100	ug/I	J
78-87-5	1,2-Dichloropropane	ND	20	ug/I	
10061-01-5	cis-1,3-Dichloropropene	ND	20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	ug/I	
100-41-4	Ethylbenzene	ND	20	ug/l	
591-78-6	2-Hexanone	ND	100	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	100	ug/l	
75-09-2	Methylene chloride	ND	40	ug/l	
100-42-5	Styrene	ND	100	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	40	ug/I	
127-18-4	Tetrachloroethene	ND	20	ug/l	
108-88-3	Toluene	ND	20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/I	
79-00-5	1,1,2-Trichloroethane	ND	60	ug/l	
79-01-6	Trichloroethene	ND	20	ug/l	
75-01-4	Vinyl chloride	567	20	ug/I	
1330-20-7	Xylene (total)	ND	100	ug/l	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $\mathbf{B} =$  Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Lab Sample ID:E94945-17Date Sampled:07/12/01Matrix:AQ - Ground WaterDate Received:07/13/01Method:SW846 8260BPercent Solids:n/a	Client Sample ID:	16 ENS-SYR-TMP-MW3S-CARGMW3S04		
	Lab Sample ID:	E94945-17	Date Sampled:	07/12/01
Method: SW846 8260B Percent Solids: n/a	Matrix:	AQ - Ground Water	Date Received:	07/13/01
	Method:	SW846 8260B	Percent Solids:	n/a
Project: ENSTNN: Carrier, Syracuse, NY	Project:	ENSTNN: Carrier, Syracuse, NY		

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		81-118%
17060-07-0	1,2-Dichloroethane-D4	112%		68-124%
2037-26-5	Toluene-D8	111%		85-119%
460-00-4	4-Bromofluorobenzene	98%		75-127%

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ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

<b>Report of Analysis</b>							Page 1 of 1	
Client Sam Lab Sample Matrix: Method: Project:	e ID: E94945- AQ - Gi SW846	17 round Wat 8082 SW	P-MW3S-CARGMW3S04 er /846 3510C r, Syracuse, NY		Date Sampl Date Receiv Percent Sol	ed: 07/13/01		
Run #1 Run #2	File ID AB28281.D	DF 1	<b>Analyzed</b> 07/21/01	By KLS	<b>Prep Date</b> 07/19/01	Prep Batch OP9795	Analytical Batch GAB1592	
PCB List								
CAS No.	Compound		Result	RL	Units Q			
12674-11-2	Aroclor 1016		ND	0.50	ug/l			
11104-28-2	Aroclor 1221		ND	0.50	ug/l			
11141-16-5	Aroclor 1232		ND	0.50	ug/l			
53469-21-9	Aroclor 1242		ND	0.50	ug/l			
12672-29-6	Aroclor 1248		ND	0.50	ug/l			
11097-69-1	Aroclor 1254		NÐ	0.50	ug/l			
11096-82-5	Aroclor 1260		ND	0.50	ug/l			
CAS No.	Surrogate Rec	overies	Run# 1	Run# 2	Limits			

CAS No.	Surrogate Recoveries	Run#1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	79%		25-134%
877-09-8	Tetrachloro-m-xylene	90%		25-134%
2051-24-3 Decachlorobiphenyl		74%		14-150%
2051-24-3	Decachlorobiphenyl	88%		14-150%

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- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Client Sample ID:	16 ENS-SYR-TMP-MW3S-CARGMW3S04		
Lab Sample ID:		Date Sampled:	07/12/01
Matrix:	AQ - Ground Water	Date Received:	07/13/01
		Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method
Arsenic	7.9	5.0	ug/l	1	07/18/01	07/19/01 ек	EPA 200.7
Chromium	< 10	10	ug/l	1	07/18/01	07/19/01 ek	EPA 200.7
Iron	8270	100	ug/l	1	07/18/01	07/19/01 ек	EPA 200.7
Lead	< 3.0	3.0	ug/l	1	07/18/01	07/19/01 ек	EPA 200.7
Magnesium	73400	5000	ug/l	1	07/18/01	07/19/01 ek	EPA 200.7
Nickel	<40	40	ug/l	]	07/18/01	07/19/01 ек	EPA 200.7
Selenium	< 5.0	5.0	ug/l	1	07/18/01	07/19/01 ек	EPA 200.7

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	Client Sample ID:	16 ENS-SYR-TMP-MW3S-CARGMW3S04		
		E94945-17	Date Sampled:	07/12/01
	Matrix:	AQ - Ground Water	Date Received:	
			Percent Solids:	
	Project:	ENSTNN: Carrier, Syracuse, NY		337.44
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#### **General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed By	Method
Fluoride	< 0.40	0.40	mg/l	1	07/26/01 VL	EPA 300/SW846 9056
HEM Oil and Grease	<5.0	5.0	mg/l	I	07/28/01 sig	EPA 1664
Nitrogen, Nitrate <sup>a</sup>	< 0.11	0.11	mg/l	1	08/02/01 јк	EPA353.2/SM184500
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	08/02/01 јк	EPA 353.2
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	07/13/01 ку	SM18 4500NO2B
Phenols	< 0.050	0.050	mg/l	1	07/31/01 эк	EPA 420.2
Total Organic Carbon	2.8	1.0	mg/l	1	07/19/01 AMS	415.1/9060 M/5310B M
Total Organic Halides <sup>b</sup>	8.6	2.0	mg/l	40	08/02/01 JJY	SW846 9020

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

(b) Second column analysis indicates possible matrix interference.

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Client Sample ID:	16 ENS-SYR-TMP-MW3S-CARGMW3S04		
	E94945-17A	Date Sampled:	07/12/01
Matrix:	AQ - Groundwater Filtered	Date Received:	07/13/01
		Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

#### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method
Arsenic		5.0	ug/l	1	07/18/01	07/23/01 ND	EPA 200.7
Chromium	< 10	10	ug/l	1	07/18/01	07/23/01 ND	EPA 200.7
lron	<100	100	ug/l	1	07/18/01	07/23/01 ND	EPA 200.7
Lead	<3.0	3.0	ug/l	1	07/18/01	07/23/01 ND	EPA 200.7
Magnesium	69800	5000	ug/l	1	07/18/01	07/23/01 ND	EPA 200.7
Nickel	<40	40	ug/I	1	07/18/01	07/23/01 ND	EPA 200.7
Selenium	< 5.0	5.0	ug/l	1	07/18/01	07/23/01 ND	EPA 200.7

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Client Sample ID:17 ENS-SYR-TMP-MW08-CARGMW0804Lab Sample ID:E94945-18Matrix:AQ - Ground WaterMethod:SW846 8260BProject:ENSTNN: Carrier, Syracuse, NY			Date Sampled: 07/12/01 Date Received: 07/13/01 Percent Solids: n/a					
Run #1	<b>File ID</b>		DF	Analyzed	By	<b>Prep Date</b>	Prep Batch	Analytical Batch
Run #2	E47355.		1	07/20/01	GTT	n/a	n/a	VE2519

#### **VOA TCL List**

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bremoform	ND	4.0	ug/l	
74-83-9	Bromomethane	ND	5.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	2.0	ug/l	
75-00-3	Chloroethane	ND	5.0	ug/l	
67-66-3	Chloroform	ND	5.0	ug/l	
74-87-3	Chloromethane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.2	5.0	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	ug/l	

RL = Reporting Limit

J = Indicates an estimated value

E = Indicates value exceeds calibration range

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Client Sample ID:	17 ENS-SYR-TMP-MW08-CARGMW0804		
Lab Sample ID:	E94945-18	Date Sampled:	07/12/01
Matrix:	AQ - Ground Water	Date Received:	07/13/01
Method:	SW846 8260B	<b>Percent Solids:</b>	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

#### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0 2037-26-5	Dibromofluoromethane 1,2-Dichloroethane-D4 Toluene-D8 4-Bromofluorobenzene	105% 110% 98% 98%		81-118% 68-124% 85-119% 75-127%

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ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

Report	$\mathbf{of}$	Analysis
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Client San Lab Samp Matrix: Method: Project:	ple ID:	E94943 AQ - C SW846	5-19 Fround Wa 5 8260B	IP-MW08-CAR iter rr, Syracuse, NY		Date Sampl	ed: 07/12/01 red: 07/13/01 ids: n/a	
Rบก #1	<b>File ID</b>	D	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	E47356.		1	07/20/01	GTT	n/a	n/a	VE2519

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	5.0	ug/l	
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND Prov	1.0	ug/l	
75-25-2	Bromoform	ND	5-4.0	ug/l	
74-83-9	Bromomethane	ND	5.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND -	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	2.0	ug/l	
75-00-3	Chloroethane	ND	5.0	ug/l	
67-66-3	Chloroform	ND	5.0	ug/l	
74-87-3	Chloromethane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.2	5.0	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/I	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	ug/l	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Client Sample ID:	18 ENS-SYR-TMP-MW08-CARHMW0804		
Lab Sample ID:	E94945-19	Date Sampled:	07/12/01
Matrix:	AQ - Ground Water	Date Received:	07/13/01
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

#### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1 Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%	81-118%
17060-07-0	1,2-Dichloroethane-D4	114%	68-124%
2037-26-5	Toluene-D8	96%	85-119%
460-00-4	4-Bromofluorobenzene	99%	75-127%

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ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range J = Indicates an estimated value

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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# ACCUTEST.

## Technical Report for

United Technology Corporation

ENSTNN: Carrier, Syracuse, NY

UARP # 3133-031

Accutest Job Number: E95042

Report to:

Ensafe 220 Athens Way Suite 410 Nashville, TN 37217

ATTN: May Heflin

Total number of pages in report: 288



And Man

Vincent J. Pugliese President

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, MA, MD, NC, PA, RI, SC, VA This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories. ·

## Sample Summary

#### United Technology Corporation

Job No: E95042

ENSTNN: Carrier, Syracuse, NY Project No: UARP # 3133-031

Sample Number	Collected Date	Time By	Received	Matri Code		Client Sample ID
E95042-1	07/13/01	12:16 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-9904-CARG990409
E95042-2	07/13/01	11:46 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-9904-CARG990410
E95042-3	07/13/01	13:55 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-9904-CARG990405
E95042-4	07/13/01	13:37 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-9904-CARG990406
E95042-5	07/13/01	12:40 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-9904-CARH990408
E95042-6	07/13/01	12:40 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-9904-CARG990408
E95042-7	07/13/01	14:15 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-9904-CARG990404
E95042-8	07/13/01	13:00 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-9904-CARG990407
E95042-9	07/13/01	14:35 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-9904-CARG990403
E95042-10	07/13/01	10:35 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-BAG-CARG990403
E95042-11	07/13/01	10:40 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-BAG-CARG990406
E95042-12	07/13/01	14:55 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-9904-CARG990402
E95042-13	07/13/01	08:00 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-0108-CARG010804

## Sample Summary (continued)

United Technology Corporation

Job No: E95042

ENSTNN: Carrier, Syracuse, NY Project No: UARP # 3133-031

Sample Number	Collected Date	Time By	Received	Matri Code		Client Sample ID
E95042-14	07/13/01	08:25 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-0107-CARG010704
E95042-15	07/13/01	10:05 KC	07/14/01	AQ	Field Blank Water	ENS-SYR-TMP-FB-CARF071301
E95042-16	07/13/01	09:55 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-EQUIP-CARE0715P
E95042-17	07/13/01	09:45 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-EQUIP- CARE0701WL
E95042-18	07/13/01	15:20 KC	07/14/01	AQ	Ground Water	ENS-SYR-TMP-9904-CARG071301
E95042-19	07/13/01	00:00 KC	07/14/01	AQ	Trip Blank Water	ENS-SYR-TMP-TB-CART071301
E95042-20	07/13/01	09:15 KC	07/14/01	SO	Solid	ENS-SYR-TMP-MH39-CARMH03901
E95042-21	07/13/01	09:15 KC	07/14/01	SO	Solid	ENS-SYR-TMP-MH39-CARRM03901

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## Laboratory Deliverables

1.	Cover Page, Title Page Listing Certification #, Facility Name and Address, and	
	Date of Report.	
2.	Table of Contents.	VI
3.	Summary Sheets listing analytical results for all targeted and non-targeted compounds.	$\left( \right)$
4.	Summary Table cross-referencing field ID #'s vs. fab ID #'s.	1
5	Document bound, paginated and legible.	$\bigvee$
6	Chain of Custody.	$\square$
7	Methodology Summary	
8.	Laboratory Chronicle and Holding Time Check	1/
9.	Results submitted on a dry weight basis (if applicable)	$\checkmark$
10	Method Detection Limits.	$[\land]$
11.	Lab certified by NJDEPE for parameters or appropriate category of parameters or a member of the USEPA CLP.	VI
12.	Non-Conformance Summary.	1/1

Jan hua Tang

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8/1/2001 Date

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New Jersey - Fresh Ponds Corporate Village - Building 8 - 2235 Route 130 - Dayton, NJ 08810 - tet 732 329 0200 - tax: 732-329 3499 - http://www.accutest.com



#### Percent Solids Determination

Accutest Laboratories employs a modified version of ASTM Method 4643-93 for the determination of percent solids to calculate dry.weight. All data for solid matrices is reported on a dry weight basis by applying the percent solids data from this determination.

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**Table Of Contents Reduced Laboratory Data Deliverables** For Non-USEPA/CLP Methods

Title/Cover Page

#### **Deliverable Checklist**

#### **Table Of Contents**

#### Section 1 General

- A. Results Summary
- Chain of Custody В.
- C. Laboratory Chronicles

#### Section 2 GC/MS Support Data (grouped by fraction)

- A. Methodology Review
- В. Conformance/Non-conformance Summary
- $\mathbf{C}$ . Surrogate Recovery Results Summary
- D. Matrix Spike/Matrix Spike Duplicate Summary
- E. Method Blank Summary
- Tune Results Summary F.
- G. Calibration Summary (sorted by Instrument)
  - Initial Calibration Check Summary
  - Continuing Calibration Check Summary
- H Internal Standard Summary Ĩ
- Sample and Blank Chromatograms, Quant Reports, Mass Spectra, and Library Search Data

#### Section 3.GC.Support Data

- Λ. Methodology Review
- Conformance/Non-conformance Summary В.
- C. Surrogate Recovery Results Summary
- D. Matrix Spike/Matrix Spike Duplicate Summary
- E. Method Blank Summary
- Calibration Summary (sorted by Instrument) F.
  - Initial Calibration Check Summary
    - Continuing Calibration Check Summary
- G. Retention Time Shift Summary
- H. Sample, Blank and Multi-peak Standard Chromatograms and Quant Reports

## Section 4 Metals Support Data (sorted by Instrument Type - ICP, Furnace, Flame, Mercury)

- A. Methodology Review
- ₿. Conformance/Non-conformance Summary
- C. Blank Results Summary
  - Initial and Continuing Calibration Blank Summary
- Method Blank Summary
- Batch Quality Control Summary D.
  - Matrix Spike and Duplicate Results Summary
    - Spike Blank and Lab Control Sample Summary
  - Serial Dilution Results Summary
- Calibration Summary E.
  - Calibration Check Standards Summary
    - Interfering Elements Check Standard Summary

## Section 5 General Chemistry/Petroleum Hydrocarbon Support Data

- Methodology Review Α.
- В. Conformance/Non-Conformance Summary C.
  - Batch Quality Control Summary
    - Method Blank and Spike Blank Results Summary
    - Matrix Spike Results Summary
    - Duplicate Results Summary
- D. Raw Data and IR Spectra (Petroleum Hydrocarbons)
- Raw Data and Run Record (Hexavalent Chromium) E.

# Results

Accutest Laboratories

Client Sa	mple ID:	ENS-S	YR-TMP-	9904-CARG990	)409			
Lab Sam	ple ID:	E9504	2-1			Date Sampl	ed: 07/13/01	
Matrix:	•	AQ - Q	Ground Wa	iter		Date Receiv	ed: 07/14/01	
Method:		SW840	6 8260B			Percent Sol	ids: n/a	
Project:		ENST	NN: Carrie	er, Syracuse, N	Y			
	File ID		DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A47252	.D	20	07/25/01	MRD	n/a	n/a	VA1240
Run #2								

**Report of Analysis** 

#### **VOA TCL List**

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	100	ug/l	
71-43-2	Benzene	ND	20	ug/l	
75-27-4	Bromodichloromethane	ND	20	ug/l	
75-25-2	Bromoform	ND	80	ug/l	
74-83-9	Bromomethane	ND	100	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	ug/l	
75-15-0	Carbon disulfide	ND	100	ug/l	
56-23-5	Carbon tetrachloride	ND	20	ug/l	
108-90-7	Chlorobenzene	ND	40	ug/l	
75-00-3	Chloroethane	ND	100	ug/l	
67-66-3	Chloroform	ND	100	ug/l	
74-87-3	Chloromethane	ND	100	ug/l	
124-48-1	Dibromochloromethane	ND	100	ug/l	
75-34-3	1,1-Dichloroethane	60.4	100	ug/l	J
107-06-2	1,2-Dichloroethane	ND	40	ug/l	
75-35-4	1,1-Dichloroethene	ND	40	ug/l	
156-59-2	cis-1,2-Dichloroethene	1950	100	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	100	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	ug/l	
100-41-4	Ethylbenzene	ND	20	ug/l	
591-78-6	2-Hexanone	ND	100	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	100	ug/l	
75-09-2	Methylene chloride	ND	40	ug/l	
100-42-5	Styrene	ND	100	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	40	ug/l	
127-18-4	Tetrachloroethene	ND	20	ug/l	
108-88-3	Toluene	ND	20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND -	100	ug/l	
79-00-5	1,1,2-Trichloroethane	ND .	60	ug/l	
79-01-6	Trichloroethene	ND	20	ug/ <b>l</b>	
75-01-4	Vinyl chloride	268	20	ug/l	
1330-20-7	Xylene (total)	ND	100	ug/l	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 2

Accutest Laboratories

Chant Comple ID.	ENC OVD THE COOL OF DODO 100			
Chent Sample D:	ENS-SYR-TMP-9904-CARG990409			
Lab Sample ID:	E95042-1	Date Sampled:	07/13/01	
Matrix:	AQ - Ground Water	Date Received:		
Method:	SW846 8260B	Percent Solids:		
Project:	ENSTNN: Carrier, Syracuse, NY		~~~~~	

#### **VOA TCL List**

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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	81 %		81-118%
17060-07-0	1,2-Dichloroethane-D4	79 %		68-124%
2037-26-5	Toluene-D8	86 %		85-119%
460-00-4	4-Bromofluorobenzene	105 %		75-127%

ND = Not detectedRL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
  - N = Indicates presumptive evidence of a compound



Client Sampl Lab Sample Matrix: Method: Project:	ID: E95 AQ SW8	042-2 - Ground Wa 846 8260B	9904-CARG990 1ter er, Syracuse, N`			led: 07/13/01 ved: 07/14/01 ids: n/a	
]	ile ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
Run #1 /	47253.D	10	07/25/01	MRD	n/a	n/a	VA1240
Run #2							

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	50	ug/l	
71-43-2	Benzene	ND	10	ug/l	
75-27-4	Bromodichloromethane	ND	10	ug/l	
75-25-2	Bromoform	ND	40	ug/l	
74-83-9	Bromomethane	ND	50	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	ug/l	
75-15-0	Carbon disulfide	ND	50	ug/l	
56-23-5	Carbon tetrachloride	ND	10	ug/l	
108-90-7	Chlorobenzene	ND	20	ug/l	
75-00-3	Chloroethane	ND	50	ug/l	
67-66-3	Chloroform	NÐ	50	ug/l	
74-87-3	Chloromethane	ND	50	ug/l	
124-48-1	Dibromochloromethane	ND	50	ug/l	
75-34-3	1,1-Dichloroethane	43.4	50	ug/l	J
107-06-2	1,2-Dichloroethane	ND	20	ug/I	
75-35-4	1,1-Dichloroethene	ND	20	ug/l	
156-59-2	cis-1,2-Dichloroethene	1480	50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	50	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	ug/l	
100-41-4	Ethylbenzene	ND	10	ug/l	
591-78-6	2-Hexanone	ND	50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	ug/l	
75-09-2	Methylene chloride	7.1	20	ug/l	J
100-42-5	Styrene	ND	50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	. 20	ug/l	
127-18-4	Tetrachloroethene	ND	10	ug/l	
108-88-3	Toluene	ND	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	30	ug/l	
79-01-6	Trichloroethene	ND	10	ug/l	
75-01-4	Vinyl chloride	219	10	ug/l	
1330-20-7	Xylene (total)	ND	50	ug/I	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 1 of 2

Accutest Laboratories

lient Sample ID:	ENS-SYR-TMP-9904-CARG990410			
ab Sample ID:	E95042-2	Date Sampled:	07/13/01	
1atrix:	AQ - Ground Water	Date Received:		
lethod:	SW846 8260B	Percent Solids:	n/a	
roject:	ENSTNN: Carrier, Syracuse, NY			

#### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	82 %		81-118%
17060-07-0	1,2-Dichloroethane-D4	80 %		68-124%
2037-26-5	Toluene-D8	86 %		85-119%
460-00-4	4-Bromofluorobenzene	104 %		75-127%

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ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Page 2 of 2

Client Sa Lab Sam Matrix: Method: Project:	ple ID:	E95042-3 AQ - Gro SW846 8	3 9und Wa 260B	9904-CARG990 ner er, Syracuse, NY		-	ed: 07/13/01 ed: 07/14/01 ids: n/a	
Run #1	File ID		<b>DF</b>	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	A47254.		10	07/25/01	MRD	n/a	n/a	VA1240

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	50	ug/l	
71-43-2	Benzene	ND	10	ug/l	
75-27-4	Bromodichloromethane	ND	10	ug/l	
75-25-2	Bromoform	ND	40	ug/l	
74-83-9	Bromomethane	ND	50	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	ug/l	
75-15-0	Carbon disulfide	ND	50	ug/l	
56-23-5	Carbon tetrachloride	ND	10	ug/l	
108-90-7	Chlorobenzene	ND	20	ug/l	
75-00-3	Chloroethane	ND	50	ug/l	
67-66-3	Chloroform	ND	50	ug/l	
74-87-3	Chloromethane	ND .	50	ug/l	
124-48-1	Dibromochloromethane	ND	50	ug/l	
75-34-3	1,1-Dichloroethane	52.0	50	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	ug/l	
75-35-4	1,1-Dichloroethene	11.2	20	ug/l	J
156-59-2	cis-1,2-Dichloroethene	1730	50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	50	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	ug/l	
100-41-4	Ethylbenzene	ND	10	ug/l	
591-78-6	2-Hexanone	ND	50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	ug/l	
75-09-2	Methylene chloride	8.5	20	ug/l	J
100-42-5	Styrene	ND	50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	ug/l	
127-18-4	Tetrachloroethene	ND	10	ug/l	
108-88-3	Toluene	NÐ	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	30	ug/l	
79-01-6	Trichloroethene	ND	10	ug/l	
75-01-4	Vinyl chloride	259	10	ug/l	
1330-20-7	Xylene (total)	ND	50	ug/l	

ND = Not detected

RL = Reporting Limit

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Accutest Laboratories

Client Sample ID:	ENS-SYR-TMP-9904-CARG990405		
Lab Sample ID:	E95042-3	Date Sampled:	07/13/01
Matrix:	AQ - Ground Water	Date Received:	07/14/01
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

#### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run#1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	82%		81-118%
17060-07-0	1,2-Dichloroethane-D4	79%		68-124%
2037-26-5	Toluene-D8	87%		85-119%
460-00-4	4-Bromofluorobenzene	103%		75-127%

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range Page 2 of 2

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Client Samı Lab Sample Matrix: Method: Project:	EID: E A S	95042 Q - G W846	-4 round Wa 8260B	9904-CARG990 Her er, Syracuse, NY		•	led: 07/13/01 red: 07/14/01 ids: n/a	
Run #1	File ID	)	<b>DF</b>	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	A47255.I	}	10	07/25/01	MRD	n/a	n/a	VA1240

#### **VOA TCL List**

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	50	ug/l	
71-43-2	Benzene	ND	10	ug/l	
75-27-4	Bromodichloromethane	ND	10	ug/l	
75-25-2	Bromoform	ND	40	ug/l	
74-83-9	Bromomethane	ND	50	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	ug/l	
75-15-0	Carbon disulfide	ND	50	ug/l	
56-23-5	Carbon tetrachloride	ND	10	ug/l	
108-90-7	Chlorobenzene	ND	20	ug/l	
75-00-3	Chloroethane	ND	50	ug/l	
67-66-3	Chloroform	ND	50	ug/l	
74-87-3	Chloromethane	ND	50	ug/l	
124-48-1	Dibromochloromethane	ND	50	ug/l	
75-34-3	1,1-Dichloroethane	52.7	50	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	ug/l	
75-35-4	1,1-Dichloroethene	11.2	20	ug/l	J
156-59-2	cis-1,2-Dichloroethene	1810	50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	50	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	ug/l	
100-41-4	Ethylbenzene	ND	10	ug/l	
591-78-6	2-Hexanone	ND	50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	ug/l	
75-09-2	Methylene chloride	ND	20	ug/l	
100-42-5	Styrene	ND	50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	ug/l	
127-18-4	Tetrachloroethene	ND	10	ug/l	
108-88-3	Toluene	ND	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	30	ug/l	
79-01-6	Trichloroethene	ND	10	ug/l	
75-01-4	Vinyl chloride	256	10	ug/l	
1330-20-7	Xylene (total)	ND	50	ug/l	

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- ND = Not detected
- RL = Reporting Limit
- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Accutest Laboratories

#### **Report of Analysis**

Client Sample ID:ENS-SYR-TMP-9904-CARG990406Lab Sample ID:E95042-4Date Sampled:07/13/01Matrix:AQ - Ground WaterDate Received:07/14/01Method:SW846 8260BPercent Solids:n/aProject:ENSTNN: Carrier, Syracuse, NYPercent Solids:n/a

#### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1 Run# 2	Limits
1868-53-7	Dibromofluoromethane	82%	81-118%
17060-07-0	1,2-Dichloroethane-D4	79%	68-124%
2037-26-5	Toluene-D8	87 <i>%</i>	85-119%
460-00-4	4-Bromofluorobenzene	102 <i>%</i>	75-127%

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ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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<i>,</i>				Repo	rt of A	nalysis		Page 1 of
Client Sa Lab Sam Matrix: Method: Project:	•	E95042 AQ - G SW846	2-5 iround Wa 8260B	9904-CARH99( iter er, Syracuse, N <sup>v</sup>		•	led: 07/13/01 /ed: 07/14/01 ids: n/a	
Run #1 Run #2	<b>File ID</b> A47256		<b>DF</b> 10	<b>Analyzed</b> 07/25/01	<b>By</b> MRD	Prep Date n/a	Prep Batch n/a	Analytical Batch VA1240

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	50	ug/l	
71-43-2	Benzene	ND	10	ug/l	
75-27-4	Bromodichloromethane	ND	10	ug/l	
75-25-2	Bromoform	ND	40	ug/l	
74-83-9	Bromomethane	ND	50	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	ug/l	
75-15-0	Carbon disulfide	ND	50	ug/l	
56-23-5	Carbon tetrachloride	ND	10	ug/l	
108-90-7	Chlorobenzene	ND	20	ug/l	
75-00-3	Chloroethane	ND	50	ug/l	
67-66-3	Chloroform	ND	50	ug/l	
74-87-3	Chloromethane	ND	50	ug/l	
124-48-1	Dibromochloromethane	ND	50	ug/l	
75-34-3	1,1-Dichloroethane	54.4	50	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	ug/l	
75-35-4	1,1-Dichloroethene	11.6	20	ug/l	J
156-59-2	cis-1,2-Dichloroethene	1850	50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	50	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	ug/l	
100-41-4	Ethylbenzene	ND	10	ug/l	
591-78-6	2-Hexanone	ND	50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	ug/l	
75-09-2	Methylene chloride	ND	20	ug/l	
100-42-5	Styrene	ND	50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	ug/l	
127-18-4	Tetrachloroethene	ND	10	ug/l	
108-88-3	Toluene	ND	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	30	ug/l	
79-01-6	Trichloroethene	ND	10	ug/l	
75-01-4	Vinyl chloride	281	10	ug/l	
1330-20-7	Xylene (total)	ND	50	ug/l	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

#### Page 1 of 2

	ENS-SYR-TMP-9904-CARH990408		
Lab Sample ID:	E95042-5	Date Sampled:	07/13/01
Matrix:	AQ - Ground Water	Date Received:	07/14/01
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	81%		81-118%
17060-07-0	1,2-Dichloroethane-D4	79%		68-124%
2037-26-5	Toluene-D8	86%		85-119%
460-00-4	4-Bromofluorobenzene	102%		75-127%

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ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Chent Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-9904-CARG990408 E95042-6 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY			Date Sampled:07/13/01Date Received:07/14/01Percent Solids:n/a			
	File ID	DI	?	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A47257.1	D 10		07/25/01	MRD	n/a	n/a	VA1240
Run #2								

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	50	ug/l	
71-43-2	Benzene	ND	10	ug/l	
75-27-4	Bromodichloromethane	ND	10	ug/l	
75-25-2	Bromoform	ND	40	ug/l	
74-83-9	Bromomethane	ND	50	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	ug/l	
75-15-0	Carbon disulfide	ND	50	ug/l	
56-23-5	Carbon tetrachloride	ND	10	ug/l	
108-90-7	Chlorobenzene	ND	20	ug/l	
75-00-3	Chloroethane	ND	50	ug/l	
67-66-3	Chloroform	ND	50	ug/l	
74-87-3	Chloromethane	ND	50	ug/l	
124-48-1	Dibromochloromethane	ND	50	ug/l	
75-34-3	1,1-Dichloroethane	53.7	50	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	ug/l	
75-35-4	1,1-Dichloroethene	12.0	20	ug/l	J
156-59-2	cis-1,2-Dichloroethene	1870	50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	50	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	ug/l	
100-41-4	Ethylbenzene	ND	10	ug/l	
591-78-6	2-Hexanone	ND	50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	ug/l	
75-09-2	Methylene chloride	8.5	20	ug/l	J
100-42-5	Styrene	ND	50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	ug/l	
127-18-4	Tetrachloroethene	ND	10	ug/l	
108-88-3	Toluene	ND	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	30	ug/l	
79-01-6	Trichloroethene	ND	10	ug/l	
75-01-4	Vinyl chloride	282	10	ug/l	
1330-20-7	Xylene (total)	ND	50	ug/l	

- RL = Reporting Limit
- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Accutest Laboratories

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Client Sample ID:	ENS-SYR-TMP-9904-CARG990408		
Lab Sample ID:	E95042-6	Date Sampled:	07/13/01
Matrix:	AQ - Ground Water	Date Received:	07/14/01
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

#### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	82%		81-118%
17060-07-0	1,2-Dichloroethane-D4	79%		68-124%
2037-26-5	Toluene-D8	86%		85-119%
460-00-4	4-Bromofluorobenzene	100%		75-127%

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- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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Client Sample ID: Lab Sample ID: Matrix: Method: Project:		E9504 AQ - C SW840	2-7 Ground Wa 5 8260B			Date Sampled: 07/13/01 Date Received: 07/14/01 Percent Solids: n/a		
Run #1	File ID	.D	DF	<b>Analyzed</b>	<b>B</b> y	Prep Date	Prep Batch	Analytical Batch
Run #2	A47258		20	07/25/01	MRD	n/a	n/a	VA1240

**Report of Analysis** 

#### **VOA TCL List**

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	100	ug/l	
71-43-2	Benzene	ND .	20	ug/l	
75-27-4	Bromodichloromethane	ND	20	ug/l	
75-25-2	Bromoform	ND	80	ug/l	
74-83-9	Bromomethane	ND	100	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	ug/l	
75-15-0	Carbon disulfide	ND	100	ug/l	
56-23-5	Carbon tetrachloride	ND	20	ug/l	
108-90-7	Chlorobenzene	ND	40	ug/l	
75-00-3	Chloroethane	ND	100	ug/l	
67-66-3	Chloroform	ND	100	ug/l	
74-87-3	Chloromethane	ND	100	ug/l	
124-48-1	Dibromochloromethane	ND	100	ug/l	
75-34-3	1,1-Dichloroethane	69.9	100	ug/l	J
107-06-2	1,2-Dichloroethane	ND	40	ug/l	
75-35-4	1,1-Dichloroethene	ND	40	ug/l	
156-59-2	cis-1,2-Dichloroethene	2390	100	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	100	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	ug/l	
100-41-4	Ethylbenzene	ND	20	ug/l	
591-78-6	2-Hexanone	ND	100	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	100	ug/l	
75-09-2	Methylene chloride	15.0	40	ug/l	J
100-42-5	Styrene	ND	100	ug/I	
79-34-5	1,1,2,2-Tetrachloroethane	ND	40	ug/l	
127-18-4	Tetrachloroethene	ND	20	ug/l	
108-88-3	Toluene	ND	20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	60	ug/l	
79-01-6	Trichloroethene	ND	20	ug/l	
75-01-4	Vinyl chloride	338	20	ug/l	
1330-20-7	Xylene (total)	ND	100	ug/l	

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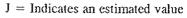
- RL = Reporting Limit
- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

ENS-SYR-TMP-9904-CARG990404		
E95042-7	Date Sampled:	07/13/01
AQ - Ground Water	Date Received:	07/14/01
SW846 8260B	Percent Solids:	n/a
ENSTNN: Carrier, Syracuse, NY		
	E95042-7 AQ - Ground Water SW846 8260B	E95042-7Date Sampled:AQ - Ground WaterDate Received:SW846 8260BPercent Solids:

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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	82%		81-118%
17060-07-0	1,2-Dichloroethane-D4	78%		68-124%
2037-26-5	Toluene-D8	87%		85-119%
460-00-4	4-Bromofluorobenzene	99%		75-127%

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range



B = Indicates analyte found in associated method blank

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Client Sa	mple ID:	ENS-S	SYR-TMP-	9904-CARG990	)407			
Lab Sample ID:E95042-8Matrix:AQ - Ground Wate:		E9504	12-8			Date Sampled: 07/13/01		
		iter	Date Received: 07/14/01					
Method:	fethod: SW846 8260B Percent Solids: n/a							
Project:		ENST	'NN: Carrie	er, Syracuse, NY	Y			
	File ID		DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A47259	D.D	20	07/25/01	MRD	n/a	n/a	VA1240
Run #2								

# **Report of Analysis**

#### **VOA TCL List**

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	100	ug/l	
71-43-2	Benzene	ND	20	ug/l	
75-27-4	Bromodichloromethane	ND	20	ug/l	
75-25-2	Bromoform	ND	80	ug/l	
74-83-9	Bromomethane	ND	100	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	ug/l	
75-15-0	Carbon disulfide	ND	100	ug/l	
56-23-5	Carbon tetrachloride	ND	20	ug/l	
108-90-7	Chlorobenzene	ND	40	ug/l	
75-00-3	Chloroethane	ND	100	ug/l	
67-66-3	Chloroform	ND	100	ug/l	
74-87-3	Chloromethane	ND	100	ug/l	
124-48-1	Dibromochloromethane	ND	100	ug/l	
75-34-3	1,1-Dichloroethane	61.1	100	ug/l	J
107-06-2	1,2-Dichloroethane	ND	40	ug/l	
75-35-4	1,1-Dichloroethene	ND	40	ug/l	
156-59-2	cis-1,2-Dichloroethene	2070	100	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	100	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	ug/l	
100-41-4	Ethylbenzene	ND	20	ug/l	
591-78-6	2-Hexanone	ND	100	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	100	ug/l	
75-09-2	Methylene chloride	14.8	40	ug/l	J
100-42-5	Styrene	ND	100	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	40	ug/l	
127-18-4	Tetrachloroethene	ND	20	ug/l	
108-88-3	Toluene	ND	20	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	100	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	60	ug/l	
79-01-6	Trichloroethene	ND	20	ug/l	
75-01-4	Vinyl chloride	332	20	ug/l	
1330-20-7	Xylene (total)	ND	100	ug/l	

RL = Reporting Limit

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Lab Sample ID: Matrix: Method:	ENS-SYR-TMP-9904-CARG990407 E95042-8 AQ - Ground Water SW846 8260B ENSTNN: Carrier Syracuse, NY	Date Sampled: Date Received: Percent Solids:	07/14/01
Project:	ENSTNN: Carrier, Syracuse, NY		

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	82%		81-118%
17060-07-0	1,2-Dichloroethane-D4	78%		68-124%
2037-26-5	Toluene-D8	86%		85-119%
460-00-4	4-Bromofluorobenzene	98%		75-127%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		E95042-9 AQ - Grov SW846 82	und Wa 260B			Date Sampled: 07/13/01 Date Received: 07/14/01 Percent Solids: n/a		
Run #1	<b>File ID</b>		<b>DF</b>	<b>Analyzed</b>	<b>By</b>	Prep Date	Prep Batch	Analytical Batch
Run #2	A47260.		10	07/26/01	MRD	n/a	n/a	VA1240

**Report of Analysis** 

#### **VOA TCL List**

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	50	ug/l	
71-43-2	Benzene	ND	10	ug/l	
75-27-4	Bromodichloromethane	ND	10	ug/l	
75-25-2	Bromoform	ND	40	ug/l	
74-83-9	Bromomethane	ND	50	ug/I	
78-93-3	2-Butanone (MEK)	ND	50	ug/l	
75-15-0	Carbon disulfide	ND	50	ug/l	
56-23-5	Carbon tetrachloride	ND	10	ug/l	
108-90-7	Chlorobenzene	ND	20	ug/I	
75-00-3	Chloroethane	ND	50	ug/l	
67-66-3	Chloroform	ND	50	ug/l	
74-87-3	Chloromethane	ND	- 50	ug/l	
124-48-1	Dibromochloromethane	ND	50	ug/l	
75-34-3	1,1-Dichloroethane	45.1	. 50	ug/l	J
107-06-2	1,2-Dichloroethane	ND	20	ug/l	
75-35-4	l,l-Dichloroethene	10.3	20	ug/l	J
156-59-2	cis-1,2-Dichloroethene	1600	50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	50	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	. 10	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	ug/l	
100-41-4	Ethylbenzene	ND	10	ug/l	
591-78-6	2-Hexanone	ND	50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	ug/l	
75-09-2	Methylene chloride	6.8	20	ug/l	J
100-42-5	Styrene	ND	50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	ug/l	
127-18-4	Tetrachloroethene	ND	10	ug/l	
108-88-3	Toluene	ND	10	ug/I	
71-55-6	1,1,1-Trichloroethane	ND	50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	30	ug/l	
79-01-6	Trichloroethene	ND	10	ug/l	
75-01-4	Vinyl chloride	230	10	ug/l	
1330-20-7	Xylene (total)	ND	50	ug/l	

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- ND = Not detected
- RL = Reporting Limit
- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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Clier	nt Sample ID:	ENS-SYR-TMP-9904-CARG990403		
Lab	Sample ID:	E95042-9	Date Sampled:	07/13/01
Mati	rix:	AQ - Ground Water	Date Received:	
Metl	hod:	SW846 8260B	Percent Solids:	
Proj	ect:	ENSTNN: Carrier, Syracuse, NY		

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	82%		81-118%
17060-07-0	1,2-Dichloroethane-D4	77%		68-124%
2037-26-5	Toluene-D8	86%		85-119%
460-00-4	4-Bromofluorobenzene	99%		75-127%

ND = Not detectedRL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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Client San Lab Sam Matrix: Method: Project:	ple ID:	E95042- AQ - Gr SW846 8	10 ound Wa 3260B	BAG-CARG990 ter r, Syracuse, NY		Date Sampled: 07/13/01 Date Received: 07/14/01 Percent Solids: n/a			
Run #1	File ID	D	<b>DF</b>	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch	
Run #2	A47261		25	07/26/01	MRD	n/a	n/a	VA1240	

### VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	120	ug/l	
71-43-2	Benzene	ND	25	ug/l	
75-27-4	Bromodichloromethane	ND	25	ug/l	
75-25-2	Bromoform	ND	100	ug/l	
74-83-9	Bromomethane	ND	120	ug/l	
78-93-3	2-Butanone (MEK)	ND	120	ug/l	
75-15-0	Carbon disulfide	ND	120	ug/l	
56-23-5	Carbon tetrachloride	ND	25	ug/l	
108-90-7	Chlorobenzene	ND	50	ug/l	
75-00-3	Chloroethane	ND	120	ug/l	
67-66-3	Chloroform	ND	120	ug/l	
74-87-3	Chloromethane	ND	120	ug/l	
124-48-1	Dibromochloromethane	ND	120	ug/l	
75-34-3	1,1-Dichloroethane	137	120	ug/l	
107-06-2	1,2-Dichloroethane	ND	. 50	ug/l	
75-35-4	1,1-Dichloroethene	ND	. 50	ug/l	
156-59-2	cis-1,2-Dichloroethene	4080	120	ug/l	_
156-60-5	trans-1,2-Dichloroethene	22.1	120	ug/l	J
78-87-5	1,2-Dichloropropane	ND	25	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	25	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	25	ug/l	
100-41-4	Ethylbenzene	ND	25	ug/l	
591-78-6	2-Hexanone	ND	120	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	120	ug/l	
75-09-2	Methylene chloride	ND	50	ug/l	
100-42-5	Styrene	ND	120	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	50	ug/l	
127-18-4	Tetrachloroethene	ND	25	ug/l	
108-88-3	Toluene	ND	25	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	120	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	75	ug/l	
79-01-6	Trichloroethene	ND	25	ug/l	
75-01-4	Vinyl chloride	500	25	ug/l	
1330-20-7	Xylene (total)	ND	120	ug/l	

RL = Reporting Limit

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- E = Indicates value exceeds calibration range
- N = Indicates presumptive evidence of a compound

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Client Sample ID:	ENS-SYR-TMP-BAG-CARG990403		
Lab Sample ID:	E95042-10	Date Sampled:	07/13/01
Matrix:	AQ - Ground Water	Date Received:	07/14/01
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

#### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
	Dibromofluoromethane 1,2-Dichloroethane-D4 Toluene-D8 4-Bromofluorobenzene	83% 77% 86% 99%		81-118% 68-124% 85-119% 75-127%

Page 2 of 2

ND = Not detectedRL = Reporting LimitE = Indicates value exceeds calibrat

E = Indicates value exceeds calibration range

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Client Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-BAG-CARG990406 E95042-11 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY			Date Sampl Date Receiv Percent Sol			
Run #1	File ID	.D	<b>DF</b>	<b>Analyzed</b>	<b>B</b> y	Prep Date	Prep Batch	Analytical Batch
Run #2	A47262		50	07/26/01	MRD	n/a	n/a	VA1240

#### **VOA TCL List**

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	250	ug/l	
71-43-2	Benzene	ND	50	ug/l	
75-27-4	Bromodichloromethane	ND	50	ug/l	
75-25-2	Bromoform	ND	200	ug/l	
74-83-9	Bromomethane	ND	250	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	ug/l	
75-15-0	Carbon disulfide	ND	250	ug/l	
56-23-5	Carbon tetrachloride	ND	50	ug/l	
108-90-7	Chlorobenzene	ND	100	ug/l	
75-00-3	Chloroethane	ND	250	ug/l	
67-66-3	Chloroform	ND	250	ug/l	
74-87-3	Chloromethane	ND	250	ug/I	
124-48-1	Dibromochloromethane	ND	250	ug/l	
75-34-3	1,1-Dichloroethane	182	250	ug/l	J
107-06-2	1,2-Dichloroethane	ND	100	ug/l	
75-35-4	1,1-Dichloroethene	ND	100	ug/l	
156-59-2	cis-1,2-Dichloroethene	6720	250	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	250	ug/l	
78-87-5	1,2-Dichloropropane	ND	50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	ug/l	
100-41-4	Ethylbenzene	ND	50	ug/l	
591-78-6	2-Hexanone	ND	250	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	250	ug/l	
75-09-2	Methylene chloride	ND	100	ug/l	
100-42-5	Styrene	ND	250	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/l	
127-18-4	Tetrachloroethene	ND	50	ug/l	
108-88-3	Toluene	ND	- 50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	250	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	150	ug/l	
79-01-6	Trichloroethene	ND	50	ug/l	
75-01-4	Vinyl chloride	1090	50	ug/l	
1330-20-7	Xylene (total)	ND	250	ug/l	

- ND = Not detected
- RL = Reporting Limit

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- E = Indicates value exceeds calibration range
- N =Indicates presumptive evidence of a compound

Client Sample ID:	ENS-SYR-TMP-BAG-CARG990406		
Lab Sample ID:	E95042-11	Date Sampled:	07/13/01
Matrix:	AQ - Ground Water	Date Received:	07/14/01
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	82 %		81-118%
17060-07-0	1,2-Dichloroethane-D4	77 %		68-124%
2037-26-5	Toluene-D8	87%		85-119%
460-00-4	4-Bromofluorobenzene	98%		75-127%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-9904-CARG990402 E95042-12 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY			Date Sampled: 07/13/01 Date Received: 07/14/01 Percent Solids: n/a			
Run #1	File ID		<b>DF</b>	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	A47263		10	07/26/01	MRD	n/a	n/a	VA1240

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	50	ug/l	
71-43-2	Benzene	ND	10	ug/l	
75-27-4	Bromodichloromethane	ND	10	ug/l	
75-25-2	Bromoform	ND	40	ug/l	
74-83-9	Bromomethane	ND	50	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	ug/l	
75-15-0	Carbon disulfide	ND	50	ug/l	
56-23-5	Carbon tetrachloride	ND	10	ug/l	
108-90-7	Chlorobenzene	ND	20	ug/l	
75-00-3	Chloroethane	ND	50	ug/l	
67-66-3	Chloroform	ND	50	ug/l	
74-87-3	Chloromethane	ND	50	ug/l	
124-48-1	Dibromochloromethane	ND	50	ug/l	
75-34-3	1,1-Dichloroethane	32.0	50	ug/l	J
107-06-2	1,2-Dichloroethane	ND	20	ug/l	
75-35-4	1,1-Dichloroethene	ND	20	ug/l	
156-59-2	cis-1,2-Dichloroethene	1160	50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	50	ug/I	
78-87-5	1,2-Dichloropropane	ND	10	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	ug/l	
100-41-4	Ethylbenzene	ND	10	ug/l	
591-78-6	2-Hexanone	ND	50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	ug/l	
75-09-2	Methylene chloride	ND	20	ug/I	
100-42-5	Styrene	ND	50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	ug/l	
127-18-4	Tetrachloroethene	ND - List	10	ug/I	
108-88-3	Toluene	ND	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	- 50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	30	ug/l	
79-01-6	Trichloroethene	ND	10	ug/l	
75-01-4	Vinyl chloride	190	10	ug/l	
1330-20-7	Xylene (total)	ND	50	ug/l	

- ND = Not detected
- RL = Reporting Limit

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- E = Indicates value exceeds calibration range
- N = Indicates presumptive evidence of a compound

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Client Sample ID:	ENS-SYR-TMP-9904-CARG990402		
Lab Sample ID:	E95042-12	Date Sampled:	07/13/01
Matrix:	AQ - Ground Water	Date Received:	07/14/01
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		
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#### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		81-118%
17060-07-0	1,2-Dichloroethane-D4	78%		68-124%
2037-26-5	Toluene-D8	86%		85-119%
460-00-4	4-Bromofluorobenzene	98%		75-127%

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-0108-CARG010804 E95042-13 AQ - Ground Water SW846 8260B ENSTNN: Carrier, Syracuse, NY			Date Sampled: 07/13/01 Date Received: 07/14/01 Percent Solids: n/a			
Run #1	File ID	.D	<b>DF</b>	<b>Analyzed</b>	By	Prep Date	Prep Batch	Analytical Batch
Run #2	A47264		50	07/26/01	MRD	n/a	n/a	VA1240

## **Report of Analysis**

#### **VOA TCL List**

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	250	ug/l	
71-43-2	Benzene	ND	50	ug/l	
75-27-4	Bromodichloromethane	ND	50	ug/l	
75-25-2	Bromoform	ND	200	ug/l	
74-83-9	Bromomethane	ND	250	ug/l	
78-93-3	2-Butanone (MEK)	ND	250	ug/l	
75-15-0	Carbon disulfide	ND	250	ug/l	
56-23-5	Carbon tetrachloride	ND	50	ug/l	
108-90-7	Chlorobenzene	ND	100	ug/l	
75-00-3	Chloroethane	ND	250	ug/l	
67-66-3	Chloroform	ND	250	ug/l	
74-87-3	Chloromethane	ND	250	ug/l	
124-48-1	Dibromochloromethane	ND	250	ug/l	
75-34-3	1,1-Dichloroethane	ND	250	ug/l	
107-06-2	1,2-Dichloroethane	ND .	100	ug/l	
75-35-4	1,1-Dichloroethene	ND	100	ug/l	
156-59-2	cis-1,2-Dichloroethene	7020	250	ug/l	
156-60-5	trans-1,2-Dichloroethene	29.2	250	ug/l	J
78-87-5	1,2-Dichloropropane	ND	50	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	50	ug/l	
100-41-4	Ethylbenzene	ND	50	ug/l	
591-78-6	2-Hexanone	ND	250	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	250	ug/l	
75-09-2	Methylene chloride	ND	100	ug/l	
100-42-5	Styrene	ND	250	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	ug/l	
127-18-4	Tetrachloroethene	ND	50	ug/l	
108-88-3	Toluene	ND	50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	250	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	150	ug/l	
79-01-6	Trichloroethene	8760	50	ug/l	
75-01-4	Vinyl chloride	505	50	ug/I	
1330-20-7	Xylene (total)	ND	250	ug/I	

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- ND = Not detected
- RL = Reporting Limit

- $\mathbf{J} = \mathbf{I}$ ndicates an estimated value
- imit
- E = Indicates value exceeds calibration range
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Client Sample ID:	ENS-SYR-TMP-0108-CARG010804		
Lab Sample ID:	E95042-13	Date Sampled:	07/13/01
Matrix:	AQ - Ground Water	Date Received:	07/14/01
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84 %		81-118%
17060-07-0	1,2-Dichloroethane-D4	77 %		68-124%
2037-26-5	Toluene-D8	87 %		85-119%
460-00-4	4-Bromofluorobenzene	98 %		75-127%

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range  $\mathbf{v} \sim \mathbf{c}$ 

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Client Sa Lab Samj Matrix: Method: Project:	ple ID:	E95042-14 AQ - Grou SW846 82	and Wat 60B	107-CARG010 er -, Syracuse, NY		-	ed: 07/13/01 red: 07/14/01 ids: n/a	
	File ID	I	)F	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A47265.	D I		07/26/01	MRD	n/a	n/a	VA1240
Run #2	A47296.	D 2		07/26/01	MRD	n/a	n/a	VA1240

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	6.0	5.0	ug/l	
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	. 1.0	ug/I	
75-25-2	Bromoform	ND	4.0	ug/l	
74-83-9	Bromomethane	ND	5.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	2.0	ug/l	
75-00-3	Chloroethane	ND	5.0	ug/l	
67-66-3	Chloroform	ND	5.0	ug/l	
74-87-3	Chloromethane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	249 <sup>a</sup>	10	ug/l	
156-60-5	trans-1,2-Dichloroethene	2.5	5.0	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/I	
79-01-6	Trichloroethene	42.6	1.0	ug/l	
75-01-4	Vinyl chloride	11.0	1.0	ug/l	
1330-20-7	Xylene (total)	ND	5.0	ug/l	

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- ND = Not detected
- RL = Reporting Limit

J = Indicates an estimated value

- ting Limit
- E = Indicates value exceeds calibration range
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Client Sample ID:	ENS-SYR-TMP-0107-CARG010704		
Lab Sample ID:	E95042-14	Date Sampled:	07/13/01
Matrix:	AQ - Ground Water	Date Received:	07/14/01
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		
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#### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run#1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%	81%	81-118%
	1,2-Dichloroethane-D4		77%	
2037-26-5	Toluene-D8	85%	86%	85-119%
460-00-4	4-Bromofluorobenzene	95%	105%	75-127%

(a) Result is from Run# 2

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ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

2051-24-3

2051-24-3

			Repor	rt of An	alysis		Page 1 of 1
Client Sample ID:ENS-SYR-TMP-Lab Sample ID:E95042-15Matrix:AQ - Field BlankMethod:SW846 8082Project:ENSTNN: Carrie			Water ∀846 3510C		Date Sampl Date Receiv Percent Soli	ed: 07/14/01	
Run #1 Run #2	File ID WW25328.D	DF 1	Analyzed 07/17/01	<b>Ву</b> ҮҮХ	<b>Prep Date</b> 07/17/01	Prep Batch OP9795	Analytical Batch GWW851
PCB List							
CAS No.	Compound		Result	RL	Units Q		
12674-11-2	Aroclor 1016		ND	1.7	ug/l		
11104-28-2	Aroclor 1221		ND	1.7	ug/l		
11141-16-5	Aroclor 1232		ND	1.7	ug/l		
53469-21-9	Aroclor 1242		ND	1.7	ug/l		
12672-29-6	Aroclor 1248		ND	1.7	ug/l		
11097-69-1	Aroclor 1254		ND	1.7	ug/l		
11096-82-5	Aroclor 1260		ND	1.7	ug/l		
CAS No.	Surrogate Rec	overies	Run#1	Run# 2	Limits		
877-09-8	Tetrachloro-m-	xylene	79%	:	25-134%		
877-09-8	Tetrachloro-m-		82%		25-134%		
2051 24 2	D		3 6 44				

44%

50%

Decachlorobiphenyl

Decachlorobiphenyl

 $\mathbf{J} =$  Indicates an estimated value

14-150%

14-150%

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Client Sa Lab Sam Matrix: Method: Project:	ple ID: E A S	895042-16 AQ - Ground W SW846 8260B	-EQUIP-CARE0 ater er, Syracuse, N		-	led: 07/13/01 ved: 07/14/01 ids: n/a	
	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
Run #1 Run #2	A47271.I	D 1	07/26/01	MRD	n/a	n/a	VA1240

**Report of Analysis** 

#### **VOA TCL List**

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	7.6	5.0	ug/l
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND .	1.0	ug/l
75-25-2	Bromoform	ND	4.0	ug/l
74-83-9	Bromomethane	ND	5.0	ug/l
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l
75-15-0	Carbon disulfide	ND	5.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND -	2.0	ug/l
75-00-3	Chloroethane	ND	5.0	ug/ <b>l</b>
67-66-3	Chloroform	ND	5.0	ug/l
74-87-3	Chloromethane	ND	- 5.0	ug/l
124-48-1	Dibromochloromethane	ND	5.0	ug/l
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l
107-06-2	1,2-Dichloroethane	ND .	2.0	ug/l
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l
78-87-5	1,2-Dichloropropane	ND .	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	് 1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
591-78-6	2-Hexanone	ND	5.0	ug/l
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l
75-09-2	Methylene chloride	ND	2.0	ug/I
100-42-5	Styrene	ND	5.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l
127-18-4	Tetrachloroethene	ND	्री.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-01-4	VinyI chloride	ND	1.0	ug/l
1330-20-7	Xylene (total)	ND	5.0	ug/l

ND = Not detected

RL = Reporting Limit

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- E = Indicates value exceeds calibration range
- N = Indicates presumptive evidence of a compound

Page 1 of 2

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Client Sample ID:	ENS-SYR-TMP-EQUIP-CARE0715P		
Lab Sample ID:	E95042-16	Date Sampled:	07/13/01
Matrix:	AQ - Ground Water	Date Received:	
Method:	SW846 8260B	Percent Solids:	
Project:	ENSTNN: Carrier, Syracuse, NY		xa/ 14

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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	83 %		81-118%
17060-07-0	1,2-Dichloroethane-D4	77 %		68-124%
2037-26-5	Toluene-D8	87 %		85-119%
460-00-4	4-Bromofluorobenzene	98 %		75-127%

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range



J = Indicates an estimated value

B = Indicates analyte found in associated method blank

Client Sam Lab Samp Matrix: Method: Project:	QUIP-CARE0 er , Syracuse, N <sup>4</sup>		Date Samp Date Receiv Percent Sol	ed: 07/14/01		
Run #1 Run #2	File ID         DF           A47272.D         1	Analyzed 07/26/01	By MRD	Prep Date n/a	Prep Batch n/a	Analytical Batch VA1240
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	10.1	5.0	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/I		
74-83-9	Bromomethane	ND	5.0	ug/I		
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/I		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5	5 cis-1,3-Dichloropropene	ND	1.0	ug/l		
10061-02-0	5 trans-1,3-Dichloropropen	e ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(M	IBK) ND	5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		

5.0

2.0

1.0

1.0

5.0

3.0

1.0

1.0

5.0

ug/l

ug/l

ug/l

ug/l

ug/l

ug/l

ug/l

ug/l

ug/l

ND

ND

ND

ND

ND

ND

ND

ND

ND

ND = Not detected

100-42-5

79-34-5

127-18-4

108-88-3

71-55-6 79-00-5

79-01-6

75-01-4

1330-20-7

Styrene

Toluene

1,1,2,2-Tetrachloroethane

Tetrachloroethene

Trichloroethene

Vinyl chloride

Xylene (total)

1,1,1-Trichloroethane

1,1,2-Trichloroethane

RL = Reporting Limit

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

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E = Indicates value exceeds calibration range

Client Sample ID:	ENS-SYR-TMP-EQUIP-CARE0701WL			
Lab Sample ID:	E95042-17	Date Sampled:	07/13/01	
Matrix:	AQ - Ground Water	Date Received:		
Method:	SW846 8260B	Percent Solids:	n/a	
Project:	ENSTNN: Carrier, Syracuse, NY			

CAS No.	Surrogate Recoveries	Run#1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		81-118%
17060-07-0	1,2-Dichloroethane-D4	78%		68-124%
2037-26-5	Toluene-D8	86%		85-119%
460-00-4	4-Bromofluorobenzene	99%		75-127%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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Client Sa	mple ID:	ENS-S	YR-TMP-	9904-CARG071	301			
Lab Sample ID:E95042-18Matrix:AQ - Ground WaterMethod:SW846 8260BProject:ENSTNN: Carrier, Syracuse, NY			Date Sampled: 07/13/01					
		Date Received: 07/14/01						
					Percent Sol			
		ENST	NN: Carrie	er, Syracuse, N	Ŷ			
	File ID		DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	A47273	.D	10	07/26/01	MRD	n/a	n/a	VA1240
Run #2								

**Report of Analysis** 

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#### **VOA TCL List**

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	50	ug/l	
71-43-2	Benzene	ND	10	ug/I	
75-27-4	Bromodichloromethane	ND	10	ug/l	
75-25-2	Bromoform	ND	40	ug/l	
74-83-9	Bromomethane	ND .	50	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	ug/l	
75-15-0	Carbon disulfide	ND	50	ug/l	
56-23-5	Carbon tetrachloride	ND	10	ug/l	
108-90-7	Chlorobenzene	ND	20	ug/l	
75-00-3	Chloroethane	ND	50	ug/l	
67-66-3	Chloroform	ND	50	ug/l	
74-87-3	Chloromethane	ND	50	ug/I	
124-48-1	Dibromochloromethane	ND	50	ug/l	
75-34-3	1,1-Dichloroethane	34.4	50	ug/l	J
107-06-2	1,2-Dichloroethane	ND	20	ug/l	
75-35-4	1,1-Dichloroethene	9.7	20	ug/l	J
156-59-2	cis-1,2-Dichloroethene	1210	50	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	50	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	ug/l	
100-41-4	Ethylbenzene	ND	10	ug/l	
591-78-6	2-Hexanone	ND	50	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	50	ug/l	
75-09-2	Methylene chloride	ND	20	ug/l	
100-42-5	Styrene	ND	50	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	ug/l	
127-18-4	Tetrachloroethene	ND	10	ug/l	
108-88-3	Toluene	ND	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	50	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	30	ug/l	
79-01-6	Trichloroethene	ND	10	ug/l	
75-01-4	Vinyl chloride	199	10	ug/l	
1330-20-7	Xylene (total)	ND	50	ug/l	

ND = Not detected

RL = Reporting Limit

- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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Client Sample ID:	ENS-SYR-TMP-9904-CARG071301		
	E95042-18	Date Sampled:	07/13/01
Matrix:	AQ - Ground Water	Date Received:	
Method:	SW846 8260B	Percent Solids:	
Project:	ENSTNN: Carrier, Syracuse, NY		
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#### **VOA TCL List**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	83%		81-118%
17060-07-0	1,2-Dichloroethane-D4	78%		68-124%
2037-26-5	Toluene-D8	86%		85-119%
460-00-4	4-Bromofluorobenzene	98%		75-127%

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ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

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Client Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-TB-CART071301 E95042-19 AQ - Trip Blank Water SW846 8260B ENSTNN: Carrier, Syracuse, NY			Date Sampled: 07/13/01 Date Received: 07/14/01 Percent Solids: n/a			
Run #1	File ID	.D	DF	<b>Anałyzed</b>	<b>By</b>	<b>Prep Date</b>	Prep Batch	Analytical Batch
Run #2	A47274		1	07/26/01	MRD	n/a	n/a	VA1240

**Report of Analysis** 

#### VOA TCL List

CAS No.	Compound	Result	RL	Units Q
67-64-1	Acetone	ND	5.0	ug/l
71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	4.0	ug/l
74-83-9	Bromomethane	ND	5.0	ug/l
78-93-3	2-Butanone (MEK)	ND	5.0	ug/l
75-15-0	Carbon disulfide	ND	5.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	2.0	ug/l
75-00-3	Chloroethane	ND	5.0	ug/l
67-66-3	Chloroform	ND	5.0	ug/I
74-87-3	Chloromethane	ND	5.0	ug/l
124-48-1	Dibromochloromethane	ND	5.0	ug/l
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
591-78-6	2-Hexanone	ND	5.0	ug/l
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l
75-09-2	Methylene chloride	ND	2.0	ug/l
100-42-5	Styrene	ND	5.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/I
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l
75-01-4	Vinyl chloride	ND	1.0	ug/l
1330-20-7	Xylene (total)	ND	5.0	ug/l

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

 $\mathbf{J} = \mathbf{Indicates}$  an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Sample ID:	ENS-SYR-TMP-TB-CART071301		
Lab Sample ID:	E95042-19	Date Sampled:	07/13/01
Matrix:	AQ - Trip Blank Water	Date Received:	07/14/01
Method:	SW846 8260B	Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

#### VOA TCL List

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CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		81-118%
17060-07-0	1,2-Dichloroethane-D4	77%		68-124%
2037-26-5	Toluene-D8	87%		85-119%
460-00-4	4-Bromofluorobenzene	97%		75-127%

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range

B = Indicates analyte found in associated method blank

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Client Sam Lab Sampl Matrix: Method: Project:	e ID: E95042-20 SO - Solid SW846 8082 S	-MH39-CARMH W846 3550B ier, Syracuse, NY		Date Sampl Date Receiv Percent Soli	ed: 07/14/01	
Run #1 Run #2	File IDDFCD50909.D1	Analyzed 07/25/01	By LLP	<b>Prep Date</b> 07/17/01	Prep Batch OP9802	Analytical Batch GCD1938
PCB List	Aleman and a good and a local second and a se					······································
CAS No.	Compound	Result	RL	Units Q		
12674-11-2	Aroclor 1016	ND	33	ug/kg		
11104-28-2	Aroclor 1221	ND	33	ug/kg		
11141-16-5	Aroclor 1232	ND	33	ug/kg		
53469-21-9	Aroclor 1242	ND	33	ug/kg		
12672-29-6	Aroclor 1248	ND	33	ug/kg		
11097-69-1	Aroclor 1254	ND	33	ug/kg		
11096-82-5	Aroclor 1260	1270	33	ug/kg		
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
877-09-8	Tetrachloro-m-xylene	73%		26-126%		
877-09-8	Tetrachloro-m-xylene	84 %		26-126%		
2051-24-3	Decachlorobiphenyl	114%		23-149%		
2051-24-3	Decachlorobiphenyl	81%		23-149%		

**Report of Analysis** 

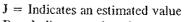
- J = Indicates an estimated value
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Run #1 Run #2	File ID         DF           CD50910.D         1	Analyzed 07/25/01	By LLP	<b>Prep Date</b> 07/17/01	Prep Batch OP9802	Analytical Batch GCD1938
PCB List			T			
CAS No.	Compound	Result	RL	Units Q		
12674-11-2	Aroclor 1016	ND	28	ug/kg		
11104-28-2	Aroclor 1221	ND	28	ug/kg		
11141-16-5	Aroclor 1232	ND	28	ug/kg		
53469-21-9	Aroclor 1242	ND	28	ug/kg		
12672-29-6	Aroclor 1248	ND	28	ug/kg		
11097-69-1	Aroclor 1254	ND	28	ug/kg		
11096-82-5	Aroclor 1260	386	28	ug/kg		
CAS No.	Surrogate Recoveries	Run#1	Run# 2	Limits		
877-09-8	Tetrachloro-m-xylene	78%		26-126%		
877-09-8	Tetrachloro-m-xylene	80%		26-126%		
2051-24-3	Decachlorobiphenyl	116%		23-149%		
2051-24-3	Decachlorobiphenyl	93%		23-149%		

**Report of Analysis** 



B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

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-2 ENS-SMZ	ENS-57R-TA-P-99 04- CARG-990410	0110	2/1			<u> </u>		7		14		
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-> K-192-2464	-NSSYRTZNO. 9964 . CARGA 90405	40405	2	237		$\frac{1}{2}$		9			Q.A	
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SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY       DATE TIME:       RECEIVED BY:       C       C       DATE TIME:       RECEIVED BY:       DATE TIME:       RECEIVED BY:       RECEIVED BY:       DATE TIME:       RECEIVED BY:    <	21 DAY TURNAR	OUND HARDCOPY, EMERGENCY OR RUSH IS FAX REVIOUSLY APPROVED		MLC.	X alie	- Kcele	
Contract     Date That:     Received BY:     Relinvoidance of:       Abert     7-15-01     173.0     1.       Abert     7-15-01     173.0     2.       Abert     7-15-01     173.0     2.       Abert     7-15-01     173.0     2.       A     7.     7.     7.       Date That:     Received BY:     7.       A     4.     7.			DOCUMENTED BELOW P	ACH TIME SAUDI ES CUANOE D		3 -18 & /4. 11	
A X Hord         7-55-01         175-01         175-01         175-01         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         7         2.         2. <th2.< th="">         2.         <th2.< th="">         2.</th2.<></th2.<>		ANDER PATE THE RECEIVED	BY: ( ]. /	RELINOUTHED TY:	DATE THE		
DATE TIME: RECEIVED 8Y: 4. PRESERVE BY: 4. PRESERVE WHERE APPLICABLE ON 15	14	c 22	ITAV *	2. (c & g	8	2.	
DATE TIME: RECEIVED 8Y: RELATOR AND AVENT APPLICABLE ON 102	3.7			4.			
	2. <b>8</b>			+ TY28	um Rayyerid	ENE APPLICABLE ON ICE	

### APPENDIX B

Laboratory Analytical Data Sheets (June 2002)

GROUNDWATER MONITORING WELL ANALYTICAL DATA (site-wide) June 2002

# **Report of Analysis**

Page 1 of 2

Client Sam Lab Sample Matrix: Method: Project:				Date Samp Date Receiv Percent Sol	ved: 06/26/02	
Run #1 Run #2		Analyzed 07/05/02	By JMC	Prep Date n/a	Prep Batch n/a	Analytical Batch VU726
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND () ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBH		5.0	ug/1		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND ND	5.0 3.0	ug/l		
79-00-5	1,1,2-Trichloroethane Trichloroethene	ND ND	3.0 1.0	ug/l ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blankN = Indicates presumptive evidence of a compound

#### Client Sample ID: ENS-SYR-TMP-MW01 CARGMW0105 Date Sampled: 06/24/02 Lab Sample ID: N17045-17R Date Received: 06/26/02 Matrix: AQ - Ground Water SW846 8260B Percent Solids: n/a Method: ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List Units Q Compound Result RL CAS No. 75-01-4 Vinyl chloride ND 1.0 ug/l ug/l Xylene (total) ND 1.0 1330-20-7 Run#1 Run# 2 Limits CAS No. Surrogate Recoveries 109% 83-118% Dibromofluoromethane 1868-53-7 17060-07-0 1,2-Dichloroethane-D4 106% 69-127% 99% 82-119% Toluene-D8 2037-26-5 81-121% 4-Bromofluorobenzene 460-00-4 104%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 2 of 2

### **Report of Analysis**

# **Report of Analysis**

Page 1 of 2

Client Sam Lab Sampl Matrix: Method: Project:		N1704 AQ - SW84	SYR-TMP-MW 45-18R Ground Water 6 8260B 'NN: Carrier, S			Date Samp Date Receiv Percent Sol	ved: 06/26/02	
Run #1 Run #2	File ID U23173			Analyzed 07/04/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU724
Run #1 Run #2	Purge ` 5.0 ml	Volume	2					
VOA TCL	List							
CAS No.	Comp	ound		Result	RL	Units Q		
67-64-1	Acetor			ND	10	ug/1		
71-43-2	Benzer			ND	1.0	ug/l		
75-27-4			romethane	ND	1.0	ug/1		
75-25-2	Bromo			ND	4.0	ug/l		
74-83-9		methar		ND	5.0	ug/l		
78-93-3		none (l		ND	10	ug/l		
75-15-0		n disulf		ND	5.0	ug/l		
56-23-5			hloride	ND	1.0	ug/l		
108-90-7		obenzer		ND	2.0	ug/l		
75-00-3		bethane		ND	5.0	ug/l		
67-66-3	Chlore			ND	5.0	ug/l		
74-87-3		ometha		ND	5.0	ug/1		
124-48-1			romethane	ND	5.0	ug/l		
75-34-3		chloro		ND	5.0	ug/l		
107-06-2		chloro		ND	2.0	ug/l		
75-35-4		chloro		ND	2.0	ug/l		
156-59-2			oroethene	ND	5.0	ug/1		
156-60-5			hloroethene	ND	5.0	ug/l		
78-87-5			propane	ND	1.0	ug/l		
10061-01-5			oropropene	ND	1.0	ug/l		
			hloropropene	ND	1.0	ug/l		
100-41-4		enzene		ND ND	1.0 5.0	ug/l		
591-78-6	2-Hex		ontonon «/N /IIY)I/	ND () ND	5.0 5.0	ug/l		
108-10-1			entanone(MIBK Jorido	ND ND	3.0 2.0	ug/l		
75-09-2		lene ch	nonue	ND ND	2.0 5.0	ug/l		
100-42-5	Styren	ሆ ጋ ጥልቀ።	ahlaraathana	ND ND	5.0 2.0	ug/l		
79-34-5		2-1 etra hloroet	chloroethane	ND ND	2.0 1.0	ug/l		
127-18-4			нене	ND	1.0	ug/l		
108-88-3			roothono	ND ND	5.0	ug/l		
71-55-6			roethane	ND	5.0 3.0	ug/l		
79-00-5			roethane			ug/l		
79-01-6	i richl	oroethe	sne	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

			1		5		Ÿ
Client Samp Lab Sample Matrix: Method: Project:		ENS-SYR-TMP-MWI N17045-18R AQ - Ground Water SW846 8260B ENSTNN: Carrier, Sy		1000	Date Sampled: Date Received: Percent Solids:	06/24/02 06/26/02 n/a	
VOA TCL	List						
CAS No.	Comp	ound	Result	RL	Units Q		
75-01-4 1330-20-7		chloride e (total)	ND ND	1.0 1.0	ug/l ug/l		
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7 17060-07-0 2037-26-5 460-00-4	1,2-D Tolue	mofluoromethane ichloroethane-D4 ne-D8 mofluorobenzene	114% 116% 102% 106%		83-118% 69-127% 82-119% 81-121%		

**Report of Analysis** 

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

 $\boldsymbol{J}=\boldsymbol{I}\boldsymbol{n}\boldsymbol{d}\boldsymbol{i}\boldsymbol{c}\boldsymbol{a}\boldsymbol{t}\boldsymbol{e}\boldsymbol{s}$  an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 2 of 2

# Report of Analysis

Page 1 of 2

Client Sam Lab Sample Matrix: Method: Project:				Date Samp Date Receiv Percent Sol	ved: 06/26/02	
Run #1 Run #2		Analyzed 07/05/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU725
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	100	ug/l		
71-43-2	Benzene	ND	10	ug/l		
75-27-4	Bromodichloromethane	ND	10	ug/l		
75-25-2	Bromoform	ND	40	ug/l		
74-83-9	Bromomethane	ND	50	ug/l		
78-93-3	2-Butanone (MEK)	ND	100	ug/l		
75-15-0	Carbon disulfide	ND	50	ug/l		
56-23-5	Carbon tetrachloride	ND	10	ug/l		
108-90-7	Chlorobenzene	ND	20	ug/l		
75-00-3	Chloroethane	ND	50	ug/l		
67-66-3	Chloroform	ND	50	ug/l		
74-87-3	Chloromethane	ND	50	ug/l		
124-48-1	Dibromochloromethane	ND	50	ug/l		
75-34-3	1,1-Dichloroethane	163	50	ug/l		
107-06-2	1,2-Dichloroethane	ND	20	ug/l		
75-35-4	1,1-Dichloroethene	34.0	20	ug/l		
156-59-2	cis-1,2-Dichloroethene	5410	50	ug/l E		
156-60-5	trans-1,2-Dichloroethene	ND	50	ug/l		
78-87-5	1,2-Dichloropropane	ND	10	ug/l		
10061-01-5	· · · ·	ND	10	ug/l		
10061-02-6		ND	10	ug/l		
100-41-4	Ethylbenzene	ND	10	ug/l		
591-78-6	2-Hexanone	ND	50	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBK		50	ug/l		
75-09-2	Methylene chloride	ND	20	ug/l		
100-42-5	Styrene	ND	50	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	ug/l		
127-18-4	Tetrachloroethene	ND	10	ug/l		
108-88-3	Toluene	ND	10	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	50	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	30	ug/l		
79-01-6	Trichloroethene	2.6	10	ug/l J		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

460-00-4

#### **Report of Analysis** Client Sample ID: ENS-SYR-TMP-MW3S CARGMW3S05 Date Sampled: 06/25/02 Lab Sample ID: N17045-9R Date Received: 06/26/02 Matrix: AQ - Ground Water Percent Solids: Method: SW846 8260B n/a ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List RL Units Q Compound Result CAS No. 746 10 ug/l 75-01-4 Vinyl chloride ND 10 ug/l 1330-20-7 Xylene (total) Run#1 Run# 2 Limits CAS No. Surrogate Recoveries Dibromofluoromethane 115% 83-118% 1868-53-7 69-127% 17060-07-0 1,2-Dichloroethane-D4 118% 103% 82-119% 2037-26-5 Toluene-D8 4-Bromofluorobenzene 110% 81-121%

RL = Reporting Limit

- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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# **Report of Analysis**

Page 1 of 2

Client Sam Lab Sampl Matrix: Method: Project:	e ID: N17045-10R AQ - Ground Water SW846 8260B	AQ - Ground Water			Date Sampled: 06/25/02 Date Received: 06/26/02 Percent Solids: n/a			
Run #1 Run #2		Analyzed 07/05/02	Ву ХАН	Prep Date n/a	Prep Batch n/a	Analytical Batch VU725		
Run #1 Run #2	Purge Volume 5.0 ml							
VOA TCL	List							
CAS No.	Compound	Result	RL	Units Q				
67-64-1	Acetone	ND	100	ug/l				
71-43-2	Benzene	ND	10	ug/l				
75-27-4	Bromodichloromethane	ND	10	ug/l				
75-25-2	Bromoform	ND	40	ug/l				
74-83-9	Bromomethane	ND	50	ug/l				
78-93-3	2-Butanone (MEK)	ND	100	ug/l				
75-15-0	Carbon disulfide	ND	50	ug/l				
56-23-5	Carbon tetrachloride	ND	10	ug/l				
108-90-7	Chlorobenzene	ND	20	ug/l				
75-00-3	Chloroethane	ND	50	ug/l				
67-66-3	Chloroform	ND	50	ug/l				
74-87-3	Chloromethane	ND	50	ug/l				
124-48-1	Dibromochloromethane	ND	50	ug/l				
75-34-3	1,1-Dichloroethane	159	50	ug/l				
107-06-2	1,2-Dichloroethane	ND	20	ug/l				
75-35-4	1,1-Dichloroethene	34.0	20	ug/l				
156-59-2	cis-1,2-Dichloroethene	5320	50	ug/l E				
156-60-5	trans-1,2-Dichloroethene	ND	50 10	ug/1				
78-87-5	1,2-Dichloropropane	ND	10	ug/l				
10061-01-5		ND	10	ug/l				
10061-02-6		ND ND	10	ug/l				
100-41-4	Ethylbenzene	ND	10 50	ug/l				
591-78-6	2-Hexanone 4-Methyl-2-pentanone(MIBF	ND () ND	50 50	ug/l ug/l				
108-10-1 75-09-2	Methylene chloride	ND	50 20	ug/1 ug/1				
		ND	20 50	ug/1 ug/l				
100-42-5	Styrene 1,1,2,2-Tetrachloroethane	ND	30 20	ug/l				
79-34-5	Tetrachloroethene	ND	10	ug/l				
127-18-4 108-88-3	Toluene	ND	10	ug/l				
71-55-6	1,1,1-Trichloroethane	ND	10 50	ug/l				
79-00-5	1,1,2-Trichloroethane	ND	30 30	ug/l				
79-00-5	Trichloroethene	2.2	10	ug/l J				

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

460-00-4

**Report of Analysis** ENS-SYR-TMP-MW3S CARHMW3505 Client Sample ID: Date Sampled: 06/25/02 Lab Sample ID: N17045-10R Date Received: 06/26/02 Matrix: AQ - Ground Water Percent Solids: n/a Method: SW846 8260B Project: ENSTNN: Carrier, Syracuse, NY VOA TCL List RL Units Q CAS No. Compound Result Vinyl chloride 739 10 ug/l 75-01-4 10 ug/l 1330-20-7 Xylene (total) ND Surrogate Recoveries Run#1 Run# 2 Limits CAS No. Dibromofluoromethane 117% 83-118% 1868-53-7 1,2-Dichloroethane-D4 69-127% 17060-07-0 120% **Toluene-D8** 102% 82-119% 2037-26-5 4-Bromofluorobenzene 109% 81-121%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# **Report of Analysis**

Page 1 of 2

Client Sam Lab Sample Matrix: Method: Project:	e ID: N17045-11R AQ - Ground Water SW846 8260B	AQ - Ground Water			Date Sampled: 06/25/02 Date Received: 06/26/02 Percent Solids: n/a		
Run #1 Run #2		Analyzed 07/05/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU725	
Run #1 Run #2	Purge Volume 5.0 ml						
VOA TCL	List						
CAS No.	Compound	Result	RL	Units Q			
67-64-1	Acetone	ND	10	ug/l			
71-43-2	Benzene	ND	1.0	ug/l			
75-27-4	Bromodichloromethane	ND	1.0	ug/l			
75-25-2	Bromoform	ND	4.0	ug/l			
74-83-9	Bromomethane	ND	5.0	ug/l			
78-93-3	2-Butanone (MEK)	ND	10	ug/l			
75-15-0	Carbon disulfide	ND	5.0	ug/l			
56-23-5	Carbon tetrachloride	ND	1.0	ug/l			
108-90-7	Chlorobenzene	ND	2.0	ug/l			
75-00-3	Chloroethane	ND	5.0	ug/l			
67-66-3	Chloroform	ND	5.0	ug/l			
74-87-3	Chloromethane	ND	5.0	ug/l			
124-48-1	Dibromochloromethane	ND	5.0	ug/l			
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l			
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l			
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l			
156-59-2	cis-1,2-Dichloroethene	6.2	5.0	ug/l			
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l			
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l			
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l			
	trans-1,3-Dichloropropene	ND	1.0	ug/l			
100-41-4	Ethylbenzene	ND	1.0	ug/l			
591-78-6	2-Hexanone	ND	5.0	ug/l			
108-10-1	4-Methyl-2-pentanone(MIBF	K) ND	5.0	ug/l			
75-09-2	Methylene chloride	ND	2.0	ug/l			
100-42-5	Styrene	ND	5.0	ug/l			
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l			
127-18-4	Tetrachloroethene	ND	1.0	ug/l			
108-88-3	Toluene	ND	1.0	ug/l			
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l			
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l			
79-01-6	Trichloroethene	ND	1.0	ug/l			

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

**Report of Analysis** Client Sample ID: ENS-SYR-TMP-MW3D CARGMW3D05 Lab Sample ID: Date Sampled: 06/25/02 N17045-11R Date Received: 06/26/02 Matrix: AQ - Ground Water Percent Solids: n/a Method: SW846 8260B ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List Units Q Result RL CAS No. Compound 75-01-4 Vinyl chloride ND 1.0 ug/l Xylene (total) ND 1.0ug/l 1330-20-7

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	117%		83-118%
17060-07-0	1,2-Dichloroethane-D4	122%		69-127%
2037-26-5	Toluene-D8	101%		82-119%
460-00-4	4-Bromofluorobenzene	108%		81-121%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 1 of 2

Client Sam Lab Sampl Matrix: Method: Project:				Date Samp Date Recei Percent So	ved: 06/26/02	
Run #1 Run #2	File ID DF U23177.D 1	Analyzed 07/04/02	Ву ХАН	Prep Date n/a	Prep Batch n/a	Analytical Batch VU724
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	117	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	1.4	5.0	ug/l J		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	0.24	5.0	ug/l J		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIB		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

	0						
Client Samp Lab Sample Matrix: Method: Project:		ENS-SYR-TMP-MW N17045-19R AQ - Ground Water SW846 8260B ENSTNN: Carrier, S		V0505	Date Sampled: Date Received: Percent Solids:	06/24/02 06/26/02 n/a	
VOA TCL	List						
CAS No.	Comp	ound	Result	RL	Units Q		
75-01-4 1330-20-7	-	chloride e (total)	ND ND	1.0 1.0	ug/l ug/l		
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7 17060-07-0 2037-26-5 460-00-4	1,2-D Tolue	mofluoromethane ichloroethane-D4 ne-D8 mofluorobenzene	106% 103% 100% 103%		83-118% 69-127% 82-119% 81-121%		

**Report of Analysis** 

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# **Report of Analysis**

Page 1 of 2

Client Sam Lab Sample Matrix: Method: Project:				Date Sampl Date Receiv Percent Sol	red: 06/26/02	<u></u>
Run #1 Run #2		Analyzed 07/05/02	By JMC	Prep Date n/a	Prep Batch n/a	Analytical Batch VU726
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBH	() ND	5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

			*		5		0
Client Samp Lab Sample Matrix: Method: Project:		ENS-SYR-TMP-MW0 N17045-16R AQ - Ground Water SW846 8260B ENSTNN: Carrier, Sy		¥0605	Date Sampled: Date Received: Percent Solids:	06/24/02 06/26/02 n/a	
VOA TCL I	List						
CAS No.	Comp	ound	Result	RL	Units Q		
75-01-4 1330-20-7	5	chloride e (total)	ND ND	1.0 1.0	ug/l ug/l		
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7 17060-07-0 2037-26-5 460-00-4	1,2-D Tolue	mofluoromethane ichloroethane-D4 ne-D8 mofluorobenzene	106% 99% 100% 102%		83-118% 69-127% 82-119% 81-121%		

**Report of Analysis** 

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# **Report of Analysis**

Page 1 of 2

Client Samj Lab Sample Matrix: Method: Project:				Date Sampl Date Receiv Percent Sol		
Run #1 Run #2		Analyzed 07/09/02	By NM	Prep Date n/a	Prep Batch n/a	Analytical Batch VA1617
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	25	ug/l		
71-43-2	Benzene	ND	2.5	ug/l		
75-27-4	Bromodichloromethane	ND	2.5	ug/l		
75-25-2	Bromoform	ND	10	ug/l		
74-83-9	Bromomethane	ND	13	ug/l		
78-93-3	2-Butanone (MEK)	ND	25	ug/l		
75-15-0	Carbon disulfide	ND	13	ug/l		
56-23-5	Carbon tetrachloride	ND	2.5	ug/l		
108-90-7	Chlorobenzene	ND	5.0	ug/l		
75-00-3	Chloroethane	ND	13	ug/l		
67-66-3	Chloroform	ND	13	ug/l		
74-87-3	Chloromethane	ND	13	ug/l		
124-48-1	Dibromochloromethane	ND	13	ug/l		
75-34-3	1,1-Dichloroethane	ND	13	ug/l		
107-06-2	1,2-Dichloroethane	ND	5.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	5.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	13	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	13	ug/l		
78-87-5	1,2-Dichloropropane	ND	2.5	ug/l		
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	ug/l		
		ND	2.5	ug/l		
100-41-4	Ethylbenzene	ND	2.5	ug/l		
591-78-6	2-Hexanone	ND	13	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBH	() ND	13	ug/l		
75-09-2	Methylene chloride	ND	5.0	ug/l		
100-42-5	Styrene	ND	13	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ug/l		
127-18-4	Tetrachloroethene	ND	2.5	ug/l		
108-88-3	Toluene	ND	2.5	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	13	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	7.5	ug/l		
79-01-6	Trichloroethene	ND	2.5	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Client Sample ID: ENS-SYR-TMP-MW07 CARGMW0705 Date Sampled: 06/25/02 Lab Sample ID: N17045-4R Date Received: 06/26/02 AQ - Ground Water Matrix: Percent Solids: n/a Method: SW846 8260B ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List Result RL Units Q CAS No. Compound 2.575-01-4 Vinyl chloride ND ug/l 1330-20-7 Xylene (total) ND 2.5 ug/l CAS No. Surrogate Recoveries Run#1 Run# 2 Limits Dibromofluoromethane 1868-53-7 88% 83-118% 1,2-Dichloroethane-D4 69-127% 17060-07-0 91% 82-119% 2037-26-5 **Toluene-D8** 90% 460-00-4 4-Bromofluorobenzene 103% 81-121%

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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### Report of Analysis

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# Report of Analysis

Page 1 of 2

Client Sam Lab Sampl Matrix: Method: Project:				Date Samp Date Receiv Percent Sol	/ed: 06/26/02	
Run #1 Run #2		Analyzed 07/05/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU725
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBI		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/1		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit E = Indicates value exceeds calibration range

 $\begin{array}{l} J = \mbox{ Indicates an estimated value} \\ B = \mbox{ Indicates analyte found in associated method blank} \\ N = \mbox{ Indicates presumptive evidence of a compound} \end{array}$ 

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#### **Report of Analysis** Client Sample ID: ENS-SYR-TMP-MW08 CARGMW0805 Date Sampled: 06/24/02 Lab Sample ID: N17045-15R 06/26/02 Date Received: Matrix: AQ - Ground Water Percent Solids: n/a SW846 8260B Method: ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List Units Q Compound Result RL CAS No. ug/l 75-01-4 Vinyl chloride ND 1.0 ug/l Xylene (total) ND 1.0 1330-20-7 Run#1 Run# 2 Limits Surrogate Recoveries CAS No. 83-118% Dibromofluoromethane 112% 1868-53-7 69-127% 1.2-Dichloroethane-D4 113% 17060-07-0 82-119% Toluene-D8 102% 2037-26-5 81-121% 106% 4-Bromofluorobenzene 460-00-4

ND = Not detected RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Page 1 of 2

Client Sam Lab Sampl Matrix: Method: Project:				Date Sampled: 06/25/02 Date Received: 06/26/02 Percent Solids: n/a			
Run #1 Run #2		Analyzed 07/04/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU724	
Run #1 Run #2	Purge Volume 5.0 ml						
VOA TCL	List						
CAS No.	Compound	Result	RL	Units Q			
67-64-1	Acetone	ND	10	ug/l			
71-43-2	Benzene	ND	1.0	ug/l			
75-27-4	Bromodichloromethane	ND	1.0	ug/l			
75-25-2	Bromoform	ND	4.0	ug/l			
74-83-9	Bromomethane	ND	5.0	ug/l			
78-93-3	2-Butanone (MEK)	ND	10	ug/l			
75-15-0	Carbon disulfide	ND	5.0	ug/l			
56-23-5	Carbon tetrachloride	ND	1.0	ug/l			
108-90-7	Chlorobenzene	ND	2.0	ug/l			
75-00-3	Chloroethane	ND	5.0	ug/l			
67-66-3	Chloroform	ND	5.0	ug/l			
74-87-3	Chloromethane	ND	5.0	ug/l			
124-48-1	Dibromochloromethane	ND	5.0	ug/l			
75-34-3	1,1-Dichloroethane	1.9	5.0	ug/l J			
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l			
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l			
156-59-2	cis-1,2-Dichloroethene	3.3	5.0	ug/l J			
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l			
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l			
10061-01-5		ND	1.0	ug/l			
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l			
100-41-4	Ethylbenzene	ND	1.0	ug/l			
591-78-6	2-Hexanone	ND	5.0	ug/l			
108-10-1	4-Methyl-2-pentanone(MIBF		5.0	ug/l			
75-09-2	Methylene chloride	ND	2.0	ug/l			
100-42-5	Styrene	ND	5.0	ug/l			
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l			
127-18-4	Tetrachloroethene	ND	1.0	ug/l			
108-88-3	Toluene	ND	1.0	ug/l			
71-55-6	1,1,1-Trichloroethane	5.9	5.0	ug/l			
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l			
79-01-6	Trichloroethene	6.6	1.0	ug/l			

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Samp Lab Sample Matrix: Method: Project:		ENS-SYR-TMP-MW N17045-8R AQ - Ground Water SW846 8260B ENSTNN: Carrier, Sy		/0905	Date Sampled: Date Received: Percent Solids:	06/25/02 06/26/02 n/a	
VOA TCL I	List						
CAS No.	Comp	ound	Result	RL	Units Q		
75-01-4 1330-20-7	Ŷ	chloride e (total)	ND ND	1.0 1.0	ug/l ug/l		
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7 17060-07-0 2037-26-5 460-00-4	1,2-D Tolue	mofluoromethane ichloroethane-D4 ne-D8 mofluorobenzene	111% 127% 100% 106%		83-118% 69-127% 82-119% 81-121%		

Report of Analysis

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# **Report of Analysis**

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		X					
Client Sample ID:ENS-SYR-TMP-MW1Lab Sample ID:N17045-3RMatrix:AQ - Ground WaterMethod:SW846 8260BProject:ENSTNN: Carrier, Sy				Date Receiv	Date Sampled: 06/25/02 Date Received: 06/26/02 Percent Solids: n/a		
Run #1 Run #2		Analyzed 07/03/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU724	
Run #1 Run #2	Purge Volume 5.0 ml						
VOA TCL	List						
CAS No.	Compound	Result	RL	Units Q			
67-64-1	Acetone	ND	10	ug/l			
71-43-2	Benzene	ND	1.0	ug/l			
75-27-4	Bromodichloromethane	ND	1.0	ug/l			
75-25-2	Bromoform	ND	4.0	ug/1			
74-83-9	Bromomethane	ND	5.0	ug/l			
78-93-3	2-Butanone (MEK)	ND	10	ug/l			
75-15-0	Carbon disulfide	ND	5.0	ug/l			
56-23-5	Carbon tetrachloride	ND	1.0	ug/l			
108-90-7	Chlorobenzene	ND	2.0	ug/l			
75-00-3	Chloroethane	ND	5.0	ug/l			
67-66-3	Chloroform	ND	5.0	ug/l			
74-87-3	Chloromethane	ND	5.0	ug/l			
124-48-1	Dibromochloromethane	ND	5.0	ug/l			
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l			
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l			
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l			
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l			
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l			
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l			
10061-01-5		ND	1.0	ug/l			
	trans-1,3-Dichloropropene	ND	1.0	ug/l			
100-41-4	Ethylbenzene	ND	1.0	ug/l			
591-78-6	2-Hexanone	ND	5.0	ug/l			
108-10-1	4-Methyl-2-pentanone(MIBF		5.0	ug/l			
75-09-2	Methylene chloride	ND	2.0	ug/l			
100-42-5	Styrene	ND	5.0	ug/l			
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l			
127-18-4	Tetrachloroethene	ND	1.0	ug/l			
108-88-3	Toluene	ND	1.0	ug/l			
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l			
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l			
79-01-6	Trichloroethene	ND	1.0	ug/l			

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

460-00-4

Client Sample ID: ENS-SYR-TMP-MW11 CARGMW1105 06/25/02 Date Sampled: Lab Sample ID: N17045-3R Date Received: 06/26/02 Matrix: AQ - Ground Water Percent Solids: n/a Method: SW846 8260B ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List Units Q Result RL CAS No. Compound ND 1.0 ug/l 75-01-4 Vinyl chloride ND 1.0 ug/l 1330-20-7 Xylene (total) Surrogate Recoveries Run#1 Run# 2 Limits CAS No. Dibromofluoromethane 106% 83-118% 1868-53-7 69-127% 1,2-Dichloroethane-D4 17060-07-0 116% 102% 82-119% 2037-26-5 **Toluene-D8** 

81-121%

105%

**Report of Analysis** 

ND = Not detected

RL = Reporting Limit

E =Indicates value exceeds calibration range

4-Bromofluorobenzene

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# **Report of Analysis**

Page 1 of 2

Client Sam Lab Sampl Matrix: Method: Project:				Date Sampl Date Receiv Percent Sol	ved: 06/26/02	
Run #1 Run #2		Analyzed 07/03/02	Ву ХАН	Prep Date n/a	Prep Batch n/a	Analytical Batch VU724
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
	cis-1,3-Dichloropropene	ND	1.0	ug/l		
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBh		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

		Rep	ort of An	alysis		Page 2 of 2
Client Sam Lab Sample Matrix: Method: Project:	e ID: N17045-2R AQ - Grou SW846 820	nd Water		Date Sampled: Date Received: Percent Solids:	06/25/02 06/26/02 n/a	
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
75-01-4 1330-20-7	Vinyl chloride Xylene (total)	ND ND	1.0 1.0	ug/l ug/l		
CAS No.	Surrogate Recove	ries Run# 1	I Run# 2	Limits		
1868-53-7 17060-07-0 2037-26-5 460-00-4	Dibromofluoromet 1,2-Dichloroethan Toluene-D8 4-Bromofluoroben	e-D4 113% 100%		83-118% 69-127% 82-119% 81-121%		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# **Report of Analysis**

Page 1 of 2

Client Sample ID: ENS-SYR-TMP-MW1 Lab Sample ID: N17045-7R Matrix: AQ - Ground Water Method: SW846 8260B Project: ENSTNN: Carrier, Sy				Date Sampl Date Receiv Percent Sol		
Run #1 Run #2		Analyzed 07/04/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU724
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/1		
108-10-1	4-Methyl-2-pentanone(MIBk		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

460-00-4

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## Report of Analysis

Client Samp Lab Sample Matrix: Method: Project:		ENS-SYR-TMP-MW N17045-7R AQ - Ground Water SW846 8260B ENSTNN: Carrier,		V1405	Date Sampled: Date Received: Percent Solids:	06/25/02 06/26/02 n/a
VOA TCL I	List					
CAS No.	Comp	ound	Result	RL	Units Q	
75-01-4 1330-20-7	-	chloride e (total)	ND ND	$\begin{array}{c} 1.0\\ 1.0\end{array}$	ug/l ug/l	
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7 17060-07-0 2037-26-5		mofluoromethane ichloroethane-D4 ne-D8	112% 127% 102%		83-118% 69-127% 82-119%	

81-121%

106%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

4-Bromofluorobenzene

J = Indicates an estimated value

 $\mathbf{B}=\mathbf{Indicates}$  analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

Page 1 of 2

Client Sam Lab Sample Matrix:		/14D CARG	MW14D05	Date Sample Date Receive		
Method: Project:	SW846 8260B ENSTNN: Carrier, S	Syracuse, NY	ć	Percent Solic		
Run #1 Run #2	File ID DF A59302.D 1	Analyzed 07/09/02	By NM	Prep Date n/a	Prep Batch n/a	Analytical Batch VA1617
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIB)	K) ND	5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E =Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

460-00-4

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Client Sa Lab Sam Matrix: Method: Project:	•	ENS-SYR-TMP-MV N17045-5R AQ - Ground Water SW846 8260B ENSTNN: Carrier,		1W14D05	Date Sampled: Date Received: Percent Solids:	06/25/02 06/26/02 n/a	
VOA TO	CL List						
CAS No.	. Comj	oound	Result	RL	Units Q		
75-01-4 1330-20-	Ų	chloride e (total)	ND ND	1.0 1.0	ug/l ug/l		
CAS No.	. Surro	gate Recoveries	Run# 1	Run# 2	Limits		
1868-53- 17060-07 2037-26-	7-0 1,2-D	mofluoromethane ichloroethane-D4 ne-D8	91% 96% 91%		83-118% 69-127% 82-119%		

81-121%

104%

4-Bromofluorobenzene

Report of Analysis

ND = Not detected

RL = Reporting Limit

- J = Indicates an estimated value
- $\mathbf{B}=\mathbf{Indicates}$  analyte found in associated method blank
- E = Indicates value exceeds calibration range N =

N = Indicates presumptive evidence of a compound

# **Report of Analysis**

Page 1 of 2

Client Sample ID:ENS-SYR-TMP-MWLab Sample ID:N17045-6RMatrix:AQ - Ground WaterMethod:SW846 8260BProject:ENSTNN: Carrier, System				Date Sampl Date Receiv Percent Sol	/ed: 06/26/02	
Run #1 Run #2		Analyzed 07/04/02	Ву ХАН	Prep Date n/a	Prep Batch n/a	Analytical Batch VU724
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBF		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

460-00-4

4-Bromofluorobenzene

Client Sample ID: ENS-SYR-TMP-MW14D CARHMW14D05 Date Sampled: 06/25/02 Lab Sample ID: N17045-6R Date Received: 06/26/02 Matrix: AQ - Ground Water Percent Solids: n/a Method: SW846 8260B ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List Result RL Units Q CAS No. Compound 75-01-4 Vinyl chloride ND 1.0 ug/l 1330-20-7 Xylene (total) ND 1.0 ug/l Limits CAS No. Surrogate Recoveries Run#1 Run# 2 Dibromofluoromethane 1868-53-7 115% 83-118% 1,2-Dichloroethane-D4 69-127% 117% 17060-07-0 82-119% 2037-26-5 Toluene-D8 100%

81-121%

107%

**Report of Analysis** 

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

	Page 1 of 2					
Client Sam Lab Sampl Matrix: Method: Project:				Date Sampl Date Receiv Percent Sol	ved: 06/26/02	
Run #1 Run #2		Analyzed 07/03/02	Ву ХАН	Prep Date n/a	Prep Batch n/a	Analytical Batch VU724
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1 71-43-2 75-27-4	Acetone Benzene Bromodichloromethane	ND ND ND	10 1.0 1.0	ug/l ug/l ug/l		
75-25-2 74-83-9	Bromoform Bromomethane	ND ND	4.0 5.0	ug/l ug/l		
78-93-3 75-15-0	2-Butanone (MEK) Carbon disulfide Carbon tetrachloride	ND ND ND	10 5.0 1.0	ug/l ug/l ug/l		
56-23-5 108-90-7 75-00-3	Chlorobenzene Chloroethane	ND ND ND	2.0 5.0	ug/l ug/l		
67-66-3 74-87-3	Chloroform Chloromethane	ND ND	5.0 5.0	ug/l ug/l		
124-48-1 75-34-3 107-06-2	Dibromochloromethane 1,1-Dichloroethane 1,2-Dichloroethane	ND ND ND	$5.0 \\ 5.0 \\ 2.0$	ug/l ug/l ug/l		
75-35-4 156-59-2	1,1-Dichloroethene cis-1,2-Dichloroethene	ND ND	2.0 5.0	ug/l ug/l		
156-60-5 78-87-5	trans-1,2-Dichloroethene 1,2-Dichloropropane	ND ND	5.0 1.0	ug/l ug/l		
10061-01-5 10061-02-6 100-41-4	· · ·	ND ND ND	1.0 1.0 1.0	ug/l ug/l ug/l		
591-78-6 108-10-1	2-Hexanone 4-Methyl-2-pentanone(MIBH	ND	5.0 5.0	ug/l ug/l		
75-09-2 100-42-5	Methylene chloride Styrene	ND ND	2.0 5.0	ug/l ug/l		
79-34-5 127-18-4 108-88-3	1,1,2,2-Tetrachloroethane Tetrachloroethene Toluene	ND ND ND	2.0 1.0 1.0	ug/l ug/l ug/l		
71-55-6 79-00-5 79-01-6	1,1,1-Trichloroethane 1,1,2-Trichloroethane Trichloroethene	ND ND ND	5.0 3.0 1.0	ug/l ug/l ug/l		

ND = Not detected

RL = Reporting LimitE = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

460-00-4

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#### Client Sample ID: ENS-SYR-TMP-MW15D CARGMW15D05 Date Sampled: 06/25/02 Lab Sample ID: N17045-1R Date Received: 06/26/02 AQ - Ground Water Matrix: Percent Solids: SW846 8260B n/a Method: ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List RL Units Q Compound Result CAS No. ND 1.0 ug/l Vinyl chloride 75-01-4 1.0 ug/l Xylene (total) ND 1330-20-7 Run#1 Run# 2 Limits Surrogate Recoveries CAS No. 101% 83-118% Dibromofluoromethane 1868-53-7 69-127% 1,2-Dichloroethane-D4 106% 17060-07-0 100% 82-119% **Toluene-D8** 2037-26-5 102% 81-121% 4-Bromofluorobenzene

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

I = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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### **Report of Analysis**

# Report of Analysis

Page 1 of 2

	SW846 8260B ENSTNN: Carrier, S	Syracuse, N	Y	Date Sampl Date Receiv Percent Sol	ved: 06/26/02	
Run #1 Run #2	File ID DF U23304.D 1	Analyzed 07/07/02	By JMC	Prep Date n/a	Prep Batch n/a	Analytical Batch VU728
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	76.8	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	7.5	10	ug/l J		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5	· · ·	ND	1.0	ug/l		
	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/1		
591-78-6	2-Hexanone	ND	5.0	ug/1		
108-10-1	4-Methyl-2-pentanone(MIBI		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND ND	1.0	ug/l		
108-88-3	Toluene	ND ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND ND	5.0	ug/l		
79-00-5 79-01-6	1,1,2-Trichloroethane Trichloroethene	ND ND	3.0 1.0	ug/l ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B =Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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Client Samp Lab Sample Matrix: Method: Project:		ENS-SYR-TMP-MW N17045-14R AQ - Ground Water SW846 8260B ENSTNN: Carrier, S		IW16D05	Date Sampled: Date Received: Percent Solids:	06/24/02 06/26/02 n/a	
VOA TCL I	List						
CAS No.	Comp	ound	Result	RL	Units Q		
75-01-4 1330-20-7	~	chloride e (total)	ND ND	1.0 1.0	ug/l ug/l		
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7 17060-07-0 2037-26-5 460-00-4	1,2-D Toluer	nofluoromethane chloroethane-D4 1e-D8 nofluorobenzene	116% 126% 102% 111%		83-118% 69-127% 82-119% 81-121%		
400-00-4	4-DI0	nonuoi openzene	111/0		01 101/0		

Report of Analysis

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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# Report of Analysis

Page 1 of 2

Client Sam Lab Sample Matrix: Method: Project:				Date Sampl Date Receiv Percent Sol	ved: 06/27/02	
Run #1 Run #2		Analyzed 07/06/02	Ву ЈМС	Prep Date n/a	Prep Batch n/a	Analytical Batch VU727
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
10061-02-6		ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIB)		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound

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Client Sample ID: ENS-SYR-TMP-MW17 CARGMW1705 Date Sampled: 06/26/02 Lab Sample ID: N17120-1R Date Received: 06/27/02 AQ - Ground Water Matrix: Percent Solids: n/a Method: SW846 8260B ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List Compound Result RL Units Q CAS No. ND 1.0 ug/l 75-01-4 Vinyl chloride ND 1.0 ug/l 1330-20-7 Xylene (total) Limits Run#1 Run# 2 Surrogate Recoveries CAS No. 83-118% 111% Dibromofluoromethane 1868-53-7 69-127% 112% 1,2-Dichloroethane-D4 17060-07-0 82-119% 100% 2037-26-5 Toluene-D8 81-121% 4-Bromofluorobenzene 106% 460-00-4

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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**Report of Analysis** 

## **Report of Analysis**

Page 1 of 2

Client Sample ID:ENS-SYR-TMP-MLab Sample ID:N17120-2RMatrix:AQ - Ground WateMethod:SW846 8260BProject:ENSTNN: Carrier				Date Receiv	Date Sampled: 06/26/02 Date Received: 06/27/02 Percent Solids: n/a		
		Analyzed	By	Prep Date	Prep Batch	Analytical Batch	
Run #1		07/05/02	JMC	n/a	n/a	VU726	
Run #2 <sup>a</sup>	U23654.D 50	07/17/02	LY	n/a	n/a	VU738	
	Purge Volume						
Run #1	5.0 ml						
Run #2	5.0 ml						
VOA TCL	List						
CAS No.	Compound	Result	RL	Units Q			
67-64-1	Acetone	ND	100	ug/l			
71-43-2	Benzene	ND	10	ug/l			
75-27-4	Bromodichloromethane	ND	10	ug/l			
75-25-2	Bromoform	ND	40	ug/l			
74-83-9	Bromomethane	ND	50	ug/l			
78-93-3	2-Butanone (MEK)	ND	100	ug/l			
75-15-0	Carbon disulfide	ND	50	ug/l			
56-23-5	Carbon tetrachloride	ND	10	ug/l			
108-90-7	Chlorobenzene	ND	20	ug/l			
75-00-3	Chloroethane	ND	50	ug/l			
67-66-3	Chloroform	ND	50	ug/l			
74-87-3	Chloromethane	ND	50	ug/l			
124-48-1	Dibromochloromethane	ND	50	ug/l			
75-34-3	1,1-Dichloroethane	10.6	50	ug/l J			
107-06-2	1,2-Dichloroethane	ND	20	ug/l			
75-35-4	1,1-Dichloroethene	15.4	20	ug/l J			
156-59-2	cis-1,2-Dichloroethene	2770 <sup>b</sup>	250	ug/l			
156-60-5	trans-1,2-Dichloroethene	35.7	50	ug/l J			
78-87-5	1,2-Dichloropropane	ND	10	ug/l			
10061-01-5		ND	10	ug/l			
10061-02-6		ND	10	ug/l			
100-41-4	Ethylbenzene	ND	10	ug/l			
591-78-6	2-Hexanone	ND	50	ug/l			
108-10-1	4-Methyl-2-pentanone(MIBI		50	ug/l			
75-09-2	Methylene chloride	ND	20	ug/l			
100-42-5	Styrene	ND	50	ug/l			
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	ug/l			
127-18-4	Tetrachloroethene	ND	10	ug/l			
108-88-3	Toluene	ND	10	ug/l			
71-55-6	1,1,1-Trichloroethane	ND	50	ug/l			
79-00-5	1,1,2-Trichloroethane	ND	30	ug/l			
79-01-6	Trichloroethene	5580 <sup>b</sup>	50	ug/l			

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

 $\begin{array}{l} J = \mbox{ Indicates an estimated value} \\ B = \mbox{ Indicates analyte found in associated method blank} \\ N = \mbox{ Indicates presumptive evidence of a compound} \end{array}$ 

Report of Analysis

Client Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-MV N17120-2R AQ - Ground Water SW846 8260B ENSTNN: Carrier, S		V1805	Date Sampled: Date Received: Percent Solids:	06/26/02 06/27/02 n/a	
VOA TCL I	List						
CAS No.	CAS No. Compound		Result	RL	Units Q		
75-01-4 1330-20-7	<b>v</b>		233 ND	10 10	ug/l ug/l		
CAS No.	S No. Surrogate Recoveries		Run# 1	Run# 2	Limits		
1868-53-7 17060-07-0 2037-26-5 460-00-4	1,2-D Tolue	mofluoromethane ichloroethane-D4 ne-D8 mofluorobenzene	111% 115% 101% 107%	113% 122% 118% 118%	83-118% 69-127% 82-119% 81-121%		

(a) ORIGINAL RUN WITHIN HOLDING TIME.

(b) Result is from Run# 2

ND = Not detected

RL = Reporting Limit

E =Indicates value exceeds calibration range

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## **Report of Analysis**

Page 1 of 2

Client Sam Lab Sample Matrix: Method: Project:	•			Date Sa Date Ro Percent	eceived: 06/28/02	
Run #1 Run #2		Analyzed 07/10/02	By XAH	Prep Da n/a	te Prep Batch n/a	Analytical Batch VU731
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Ç	)	
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	0.32	5.0	ug/l J		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	1.2	5.0	ug/l J		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l		
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBK		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	0.71	1.0	ug/l J		

ND = Not detected

RL = Reporting LimitE = Indicates value exceeds calibration range

J = Indicates an estimated value

			Ttopox.		ang olo		0
Client Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TWP-MW N17331-4R AQ - Ground Water SW846 8260B ENSTNN: Carrier, S		V1901	Date Sampled: Date Received: Percent Solids:	06/28/02 06/28/02 n/a	
VOA TCL I	List						
CAS No.	No. Compound		Result	RL	Units Q		
75-01-4 1330-20-7	~	chloride e (total)	ND ND	$\begin{array}{c} 1.0\\ 1.0\end{array}$	ug/l ug/l		
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7 17060-07-0 2037-26-5 460-00-4	1,2-D Tolue	mofluoromethane ichloroethane-D4 ne-D8 mofluorobenzene	104% 113% 99% 103%		83-118% 69-127% 82-119% 81-121%		

**Report of Analysis** 

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

**Report of Analysis** 

		*	1.01.1	5		-
Client Sam Lab Sample Matrix: Method: Project:	e ID: N17120-3R AQ - Trip Blank Wat SW846 8260B	): N17120-3R AQ - Trip Blank Water				
Run #1 Run #2		Analyzed 07/06/02	Ву ЈМС	Prep Date n/a	Prep Batch n/a	Analytical Batch VU727
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l		
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBK	) ND	5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

 $N = \mbox{Indicates presumptive evidence of a compound}$ 

Page 1 of 2

Report	of	Analysis
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Client Sample ID: Lab Sample ID: Matrix: Method: Project:		TRIP BLANK N17120-3R AQ - Trip Blank Wa SW846 8260B ENSTNN: Carrier, 5			Date Sampled: Date Received: Percent Solids:	06/26/02 06/27/02 n/a
VOA TCL I	List					
CAS No.	CAS No. Compound		Result	RL	Units Q	
75-01-4 1330-20-7	5		ND ND	1.0 1.0	ug/l ug/l	
CAS No.	AS No. Surrogate Recoveries		Run# 1	Run# 2	Limits	
1868-53-7 17060-07-0 2037-26-5 460-00-4	060-07-0 1,2-Dichloroethane-D4 37-26-5 Toluene-D8		111% 111% 100% 107%		83-118% 69-127% 82-119% 81-121%	

ND = Not detected

RL = Reporting LimitE = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

HYDROPUNCH ANALYTICAL DATA SWMUs 5 and 6 June 2002

### **Report of Analysis**

Page 1 of 2

Client Sam Lab Sample Matrix: Method: Project:				Date Sampl Date Receiv Percent Sol	/ed: 06/26/02	
Run #1 Run #2	U23186.D 200	Analyzed 07/04/02 07/06/02	By XAH JMC	Prep Date n/a n/a	Prep Batch n/a n/a	Analytical Batch VU725 VU728
	Purge Volume					
Run #1	5.0 ml					
Run #2	5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	2000	ug/l		
71-43-2	Benzene	ND	200	ug/l		
75-27-4	Bromodichloromethane	ND	200	ug/l		
75-25-2	Bromoform	ND	800	ug/l		
74-83-9	Bromomethane	ND	1000	ug/l		
78-93-3	2-Butanone (MEK)	ND	2000	ug/l		
75-15-0	Carbon disulfide	ND	1000	ug/l		
56-23-5	Carbon tetrachloride	ND	200	ug/l		
108-90-7	Chlorobenzene	ND	400	ug/l		
75-00-3	Chloroethane	ND	1000	ug/l		
67-66-3	Chloroform	ND	1000	ug/l		
74-87-3	Chloromethane	ND	1000	ug/l		
124-48-1	Dibromochloromethane	ND	1000	ug/l		
75-34-3	1,1-Dichloroethane	ND	1000	ug/l		
107-06-2	1,2-Dichloroethane	ND	400	ug/l		
75-35-4	1,1-Dichloroethene	ND	400	ug/l		
156-59-2	cis-1,2-Dichloroethene	31900 a	2500	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	1000	ug/l		
78-87-5	1,2-Dichloropropane	ND	200	ug/l		
10061-01-5		ND	200	ug/l		
	trans-1,3-Dichloropropene	ND	200	ug/l		
100-41-4	Ethylbenzene	ND	200	ug/l		
591-78-6	2-Hexanone	ND	1000	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBI	() ND	1000	ug/l		
75-09-2	Methylene chloride	ND	400	ug/l		
100-42-5	Styrene	ND	1000	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	400	ug/l		
127-18-4	Tetrachloroethene	ND	200	ug/l		
108-88-3	Toluene	ND	200	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	1000	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	600	ug/l		
79-01-6	Trichloroethene	13500	200	ug/l		

ND = Not detected

RL = Reporting LimitE = Indicates value exceeds calibration range

 $\begin{array}{l} J = \mbox{ Indicates an estimated value} \\ B = \mbox{ Indicates analyte found in associated method blank} \\ N = \mbox{ Indicates presumptive evidence of a compound} \end{array}$ 

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### Report of Analysis

Client Samp Lab Sample Matrix: Method: Project:		ENS-SYR-TMP-HP( N17021-3R AQ - Water SW846 8260B ENSTNN: Carrier, S		0610	Date Sampled: Date Received: Percent Solids:	06/24/02 06/26/02 n/a
VOA TCL I	ist					
CAS No.	Comp	ound	Result	RL	Units Q	
75-01-4 1330-20-7	~	chloride e (total)	ND ND	200 200	ug/l ug/l	
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7 17060-07-0 2037-26-5 460-00-4	1,2-Di Toluer	nofluoromethane chloroethane-D4 1e-D8 nofluorobenzene	113% 113% 103% 107%	109% 112% 102% 107%	83-118% 69-127% 82-119% 81-121%	

(a) Result is from Run# 2

ND = Not detected

RL = Reporting Limit

- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

# Report of Analysis

Page 1 of 2

Client Sample ID:ENS-SYR-TMP-HP00Lab Sample ID:N17021-4RMatrix:AQ - WaterMethod:SW846 8260BProject:ENSTNN: Carrier, Sy				Date Sampl Date Receiv Percent Sol	/ed: 06/26/02	
Run #1 Run #2		Analyzed 07/04/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU725
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	54.4	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	271	5.0	ug/l E		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l		
	trans-1,3-Dichloropropene	ND ND	1.0	ug/l ug/l		
100-41-4	Ethylbenzene 2-Hexanone	ND	$1.0 \\ 5.0$	ug/l ug/l		
591-78-6 108-10-1	4-Methyl-2-pentanone(MIBF		$5.0 \\ 5.0$	ug/l ug/l		
108-10-1 75-09-2		ND ND	3.0 2.0	ug/1 ug/1		
100-42-5	Methylene chloride Styrene	ND	2.0 5.0	ug/l		
100-42-5 79-34-5	1,1,2,2-Tetrachloroethane	ND	3.0 2.0	ug/1 ug/1		
19-34-5	Tetrachloroethene	ND	1.0	ug/l		
127-18-4	Toluene	ND	1.0	ug/l		
108-88-5 71-55-6	1,1,1,1-Trichloroethane	ND	5.0	ug/l		
71-55-6 79-00-5	1,1,2-Trichloroethane	ND	3.0 3.0	ug/l		
19-00-9	Trichloroethene	39.2	3.0 1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

**Report of Analysis** Client Sample ID: ENS-SYR-TMP-HP0620-CARGHP0620 Lab Sample ID: Date Sampled: 06/25/02 N17021-4R Date Received: 06/26/02 Matrix: AQ - Water Percent Solids: Method: n/a SW846 8260B ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List RL Units Q CAS No. Compound Result 75-01-4 Vinyl chloride ND 1.0 ug/l 1330-20-7 Xylene (total) ND 1.0 ug/l

	<b>J</b>			0
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	113%		83-118%
17060-07-0	1,2-Dichloroethane-D4	115%		69-127%
2037-26-5	Toluene-D8	103%		82-119%
460-00-4	4-Bromofluorobenzene	105%		81-121%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

### **Report of Analysis**

Page 1 of 2

Client Sample ID:ENS-SYR-TMP-HP06Lab Sample ID:N17021-5RMatrix:AQ - WaterMethod:SW846 8260BProject:ENSTNN: Carrier, Sy				Date Sampl Date Receiv Percent Sol	ved: 06/26/02	
Run #1 Run #2		Analyzed 07/04/02	Ву ХАН	Prep Date n/a	Prep Batch n/a	Analytical Batch VU725
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	5.2	10	ug/l J		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBH		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting LimitE = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

#### **Report of Analysis** Client Sample ID: ENS-SYR-TMP-HP0630-CARHP0630 Date Sampled: 06/25/02 Lab Sample ID: N17021-5R Date Received: 06/26/02 Matrix: AQ - Water Percent Solids: n/a SW846 8260B Method: ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List RL Units Q Compound Result CAS No. ND 1.0 ug/l 75-01-4 Vinyl chloride 1.0 ug/l Xylene (total) ND 1330-20-7 Run# 1 Run# 2 Limits CAS No. Surrogate Recoveries 115% 83-118% Dibromofluoromethane 1868-53-7 69-127% 17060-07-0 1,2-Dichloroethane-D4 117% 104% 82-119% **Toluene-D8** 2037-26-5 107% 81-121% 4-Bromofluorobenzene 460-00-4

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

I = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# Report of Analysis

Page 1 of 2

Client Sample ID:ENS-SYR-TMP-HP0Lab Sample ID:N17021-7RMatrix:AQ - WaterMethod:SW846 8260BProject:ENSTNN: Carrier, S				Date Samp Date Receiv Percent Sol	ved: 06/26/02	
Run #1 Run #2		Analyzed 07/04/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU725
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	9.0	10	ug/l J		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	0.53	5.0	ug/l J		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBH		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $B=\mbox{ Indicates analyte found in associated method blank}$ 

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Samp Lab Sample Matrix: Method: Project:	ID: N17021-7R AQ - Water SW846 8260B	-HP07-CARGHP0 ier, Syracuse, NY	710	Date Sampled: Date Received: Percent Solids:	06/25/02 06/26/02 n/a
VOA TCL I	List				
CAS No.	Compound	Result	RL	Units Q	
75-01-4 1330-20-7	Vinyl chloride Xylene (total)	ND ND	1.0 1.0	ug/l ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7 17060-07-0 2037-26-5 460-00-4	Dibromofluoromethane 1,2-Dichloroethane-D4 Toluene-D8 4-Bromofluorobenzene	83% 119% 103% 107%		83-118% 69-127% 82-119% 81-121%	

ND = Not detected RL = Reporting Limit E = Indicates value exceeds calibration range J = Indicates an estimated value

 $\mathbf{B}=\mathbf{Indicates}$  analyte found in associated method blank

N = Indicates presumptive evidence of a compound

	Page 1 of 2					
Client Sam Lab Sampl- Matrix: Method: Project:				Date Samp Date Receiv Percent Sol	ved: 06/27/02	
Run #1 Run #2		Analyzed 07/09/02	By GTT	Prep Date n/a	Prep Batch n/a	Analytical Batch VT1192
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1 71-43-2	Acetone Benzene	ND ND	10 1.0	ug/i ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/1		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/1		
107-06-2	1,2-Dichloroethane	ND	2.0 2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND ND	2.0 5.0	ug/l ug/l		
156-59-2	cis-1,2-Dichloroethene trans-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	•	ND	1.0	ug/l		
78-87-5 10061-01-5	1,2-Dichloropropane cis-1,3-Dichloropropene	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBI		5.0	ug/l		
75-09-2	Methylene chloride	0.91	2.0	ug/l J		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $\tilde{B}$  = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

460-00-4

4-Bromofluorobenzene

Client Sample ID: ENS-SYR-TMP-HP0720-CARGHP0720 06/26/02 Lab Sample ID: Date Sampled: N17121-1R Date Received: 06/27/02 AQ - Ground Water Matrix: Percent Solids: Method: n/a SW846 8260B ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List RL Units Q Compound Result CAS No. ug/l 75-01-4 Vinyl chloride ND 1.0 1330-20-7 Xylene (total) ND 1.0 ug/l CAS No. Surrogate Recoveries Run#1 Run# 2 Limits 1868-53-7 Dibromofluoromethane 96% 83-118% 69-127% 1,2-Dichloroethane-D4 100% 17060-07-0 82-119% 2037-26-5 Toluene-D8 99%

81-121%

102%

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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### Report of Analysis

### Report of Analysis

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Client Sample ID:ENS-SYR-TMP-HP07Lab Sample ID:N17121-2RMatrix:AQ - Ground WaterMethod:SW846 8260BProject:ENSTNN: Carrier, Sy				Date Sampl Date Receiv Percent Sol	/ed: 06/27/02	
Run #1 Run #2		Analyzed 07/09/02	By GTT	Prep Date n/a	Prep Batch n/a	Analytical Batch VT1192
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBH		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/I		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/I		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

Toluene-D8

4-Bromofluorobenzene

2037-26-5

460-00-4

Client Sample ID: ENS-SYR-TMP-HP0720-CARGHP0720 Date Sampled: 06/26/02 Lab Sample ID: N17121-2R Date Received: 06/27/02 AQ - Ground Water Matrix: Percent Solids: n/a Method: SW846 8260B ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List RL Units Q Result CAS No. Compound Vinyl chloride ND 1.0 ug/l 75-01-4 Xylene (total) ND 1.0 ug/l 1330-20-7 Surrogate Recoveries Run#1 Run# 2 Limits CAS No. Dibromofluoromethane 98% 83-118% 1868-53-7 69-127% 1,2-Dichloroethane-D4 106% 17060-07-0 82-119%

81-121%

100%

104%

RL = Reporting Limit

- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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### **Report of Analysis**

**Report of Analysis** 

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Client Sample ID: ENS-SYR-TMP-H Lab Sample ID: N17331-1R Matrix: AQ - Ground Wate Method: SW846 8260B Project: ENSTNN: Carrier				Date Sampl Date Receiv Percent Sol	/ed: 06/28/02	
Run #1 Run #2	File IDDFU23413.D1	Analyzed 07/10/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU731
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	0.73	5.0	ug/l J		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	3.1	5.0	ug/l J		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l		
10061-02-6		ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIE		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	0.70	1.0	ug/l J		

ND = Not detected

RL = Reporting LimitE = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

460-00-4

**Report of Analysis** Client Sample ID: ENS-SYR-TMP-HP0814-CARGHP0814 Date Sampled: 06/27/02 Lab Sample ID: N17331-1R Date Received: 06/28/02 Matrix: AQ - Ground Water Percent Solids: n/a Method: SW846 8260B ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List RL Units Q Result Compound CAS No. ND 1.0 ug/l 75-01-4 Vinyl chloride ND 1.0 ug/l 1330-20-7 Xylene (total) Surrogate Recoveries Run#1 Run# 2 Limits CAS No. Dibromofluoromethane 101% 83-118% 1868-53-7 69-127% 1,2-Dichloroethane-D4 102% 17060-07-0 82-119% Toluene-D8 98% 2037-26-5

81-121%

102%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

4-Bromofluorobenzene

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# **Report of Analysis**

Page 1 of 2

Client Sample ID:ENS-SYR-TMP-HP08Lab Sample ID:N17331-2RMatrix:AQ - Ground WaterMethod:SW846 8260BProject:ENSTNN: Carrier, Sy				Date Sampled: 06/27/02 Date Received: 06/28/02 Percent Solids: n/a		
Run #1 Run #2		Analyzed 07/10/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU731
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/1		
75-15-0	Carbon disulfide	ND	5.0	ug/1		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/1		
75-00-3	Chloroethane	ND	5.0	ug/1		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/1		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
	trans-1,3-Dichloropropene	ND	1.0	ug/1		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBI		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

460-00-4

Client Sample ID: ENS-SYR-TMP-HP0821-CARGHP0821 Date Sampled: 06/27/02 Lab Sample ID: N17331-2R Date Received: 06/28/02 Matrix: AQ - Ground Water Percent Solids: n/a Method: SW846 8260B ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List Units Q Result RL Compound CAS No. ND 1.0 ug/l 75-01-4 Vinyl chloride ND 1.0 ug/l 1330-20-7 Xylene (total) Run#1 Run# 2 Limits CAS No. Surrogate Recoveries Dibromofluoromethane 103% 83-118% 1868-53-7 69-127% 17060-07-0 1,2-Dichloroethane-D4 110% 98% 82-119% 2037-26-5 Toluene-D8 4-Bromofluorobenzene 103% 81-121%

**Report of Analysis** 

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# **Report of Analysis**

Page 1 of 2

Client Sample ID:ENS-SYR-TWP-HP09Lab Sample ID:N17331-5RMatrix:AQ - Ground WaterMethod:SW846 8260BProject:ENSTNN: Carrier, Sy				Date Sampled: 06/28/02 Date Received: 06/28/02 Percent Solids: n/a		
Run #1 Run #2		Analyzed 07/10/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU731
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	0.65	5.0	ug/l J		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	21.2	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	10.9	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	629	5.0	ug/l E		
156-60-5	trans-1,2-Dichloroethene	1.9	5.0	ug/l J		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBI		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND ND	1.0	ug/l		
108-88-3	Toluene		1.0	ug/1		
71-55-6	1,1,1-Trichloroethane	15.8	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	0.43	3.0	ug/l J		
79-01-6	Trichloroethene	184	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

**Report of Analysis** 

-	ethod: SW846 8260B		P0910	Date Sampled: 06/28/02 Date Received: 06/28/02 Percent Solids: n/a		
VOA TCL I	List					
CAS No.	Comp	oound	Result	RL	Units Q	
75-01-4 1330-20-7		chloride e (total)	7.8 ND	1.0 1.0	ug/l ug/l	
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7 17060-07-0 2037-26-5 460-00-4	1,2-D Tolue	mofluoromethane ichloroethane-D4 ne-D8 mofluorobenzene	105% 115% 99% 105%		83-118% 69-127% 82-119% 81-121%	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

# **Report of Analysis**

Page 1 of 2

Client Sam Lab Sample Matrix: Method: Project:				Date Sampl Date Receiv Percent Sol	ved: 06/28/02	
Run #1 Run #2		Analyzed 07/10/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU731
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	3.4	5.0	ug/l J		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	0.55	2.0	ug/l J		
156-59-2	cis-1,2-Dichloroethene	29.8	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBI		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	1.7	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

460-00-4

Client Sample ID: ENS-SYR-TMP-HP0920-CARGHP0920 Date Sampled: 06/28/02 Lab Sample ID: N17331-6R Date Received: 06/28/02 Matrix: AQ - Ground Water Percent Solids: n/a SW846 8260B Method: ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List Units Q RL Compound Result CAS No. ND 1.0 ug/l 75-01-4 Vinyl chloride 1.0 ug/l 1330-20-7 Xylene (total) ND Run#1 Run# 2 Limits CAS No. Surrogate Recoveries Dibromofluoromethane 106% 83-118% 1868-53-7 69-127% 17060-07-0 1,2-Dichloroethane-D4 116% 98% 82-119% Toluene-D8 2037-26-5

81-121%

104%

**Report of Analysis** 

4-Bromofluorobenzene

ND = Not detectedRL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

	Page 1 of					
Client Samp Lab Sample Matrix: Method: Project:				Date Samp Date Receiv Percent Sol	ved: 07/02/02	
		Analyzed 07/12/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU733
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1 71-43-2	Acetone Benzene	12.0 ND	10 1.0	ug/l ug/l		
75-27-4 75-25-2	Bromodichloromethane Bromoform	ND ND	1.0 4.0	ug/l ug/l		
74-83-9 78-93-3	Bromomethane 2-Butanone (MEK)	ND 2.4	5.0 10	ug/l ug/l J		
75-15-0	Carbon disulfide	ND ND	5.0	ug/l		
56-23-5 108-90-7	Carbon tetrachloride Chlorobenzene	ND	1.0 2.0	ug/l ug/l		
75-00-3 67-66-3	Chloroethane Chloroform	12.5 ND	5.0 5.0	ug/l ug/l		
74-87-3 124-48-1	Chloromethane Dibromochloromethane	ND ND	5.0 5.0	ug/l ug/l		
75-34-3 107-06-2	1,1-Dichloroethane 1,2-Dichloroethane	23.0 ND	5.0 2.0	ug/l ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2 156-60-5	cis-1,2-Dichloroethene trans-1,2-Dichloroethene	$\begin{array}{c} 9.4 \\ 1.6 \end{array}$	5.0 5.0	ug/l ug/l J		
78-87-5 10061-01-5	1,2-Dichloropropane cis-1,3-Dichloropropene	ND ND	1.0 1.0	ug/l ug/l		
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4 591-78-6	Ethylbenzene 2-Hexanone	2.9 ND	$\begin{array}{c} 1.0 \\ 5.0 \end{array}$	ug/l ug/l		
108-10-1 75-09-2	4-Methyl-2-pentanone(MIB) Methylene chloride	K) ND ND	5.0 2.0	ug/l ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5 127-18-4	1,1,2,2-Tetrachloroethane Tetrachloroethene	ND ND	2.0 1.0	ug/l ug/l		
108-88-3	Toluene	3.6 1.2	1.0 5.0	ug/l ug/l J		
71-55-6 79-00-5	1,1,1-Trichloroethane 1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	2.4	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

460-00-4

#### Client Sample ID: ENS-SYR-TMP-HP1002-CARGHP1002 Date Sampled: 07/01/02 Lab Sample ID: N17424-1R Date Received: 07/02/02 Matrix: AQ - Ground Water Percent Solids: n/a Method: SW846 8260B ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List RL Units Q Result CAS No. Compound Vinyl chloride 2.7 1.0 ug/l 75-01-4 Xylene (total) 9.6 1.0 ug/l 1330-20-7 Surrogate Recoveries Run#1 Run# 2 Limits CAS No. Dibromofluoromethane 105% 83-118% 1868-53-7 69-127% 1,2-Dichloroethane-D4 103% 17060-07-0 82-119% **Toluene-D8** 113% 2037-26-5 4-Bromofluorobenzene 104% 81-121%

**Report of Analysis** 

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# **Report of Analysis**

Page 1 of 2

Client Sam Lab Sample Matrix: Method: Project:				Date Sampl Date Receiv Percent Sol	/ed: 07/02/02	
Run #1 Run #2		Analyzed 07/11/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU731
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	50	ug/l		
71-43-2	Benzene	ND	5.0	ug/l		
75-27-4	Bromodichloromethane	ND	5.0	ug/l		
75-25-2	Bromoform	ND	20	ug/I		
74-83-9	Bromomethane	ND	25	ug/l		
78-93-3	2-Butanone (MEK)	ND	50	ug/l		
75-15-0	Carbon disulfide	ND	25	ug/l		
56-23-5	Carbon tetrachloride	ND	5.0	ug/l		
108-90-7	Chlorobenzene	ND	10	ug/l		
75-00-3	Chloroethane	ND	25	ug/l		
67-66-3	Chloroform	ND	25	ug/l		
74-87-3	Chloromethane	ND	25	ug/l		
124-48-1	Dibromochloromethane	ND	25	ug/l		
75-34-3	1,1-Dichloroethane	122	25	ug/l		
107-06-2	1,2-Dichloroethane	ND	10	ug/l		
75-35-4	1,1-Dichloroethene	48.0	10	ug/l		
156-59-2	cis-1,2-Dichloroethene	2490	25	ug/l E		
156-60-5	trans-1,2-Dichloroethene	ND	25	ug/l		
78-87-5	1,2-Dichloropropane	ND	5.0	ug/l		
10061-01-5		ND	5.0	ug/l		
10061-02-6		ND	5.0	ug/1		
100-41-4	Ethylbenzene	ND	5.0	ug/I		
591-78-6	2-Hexanone	ND	25	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBI		25	ug/l		
75-09-2	Methylene chloride	ND	10	ug/l		
100-42-5	Styrene	ND ND	25	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	$10 \\ 5.0$	ug/l		
127-18-4	Tetrachloroethene	ND ND	5.0	ug/l		
108-88-3	Toluene	ND ND	5.0 25	ug/l		
71-55-6	1,1,1-Trichloroethane	ND ND	25 15	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	15 5.0	ug/l ug/l		
79-01-6	Trichloroethene	14.7	0.0	ug/1		

ND = Not detected

RL = Reporting LimitE = Indicates value exceeds calibration range

J = Indicates an estimated value

460-00-4

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		1		5		
	Method: SW846 8260B		P1010	Date Sampled: Date Received: Percent Solids:	07/01/02 07/02/02 n/a	
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
75-01-4 1330-20-7	Vinyl chloride Xylene (total)	114 2.8	5.0 5.0	ug/l ug/l J		
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7 17060-07-0 2037-26-5	Dibromofluoromethane 1,2-Dichloroethane-D4 Toluene-D8	110% 127% 101%		83-118% 69-127% 82-119%		

106%

81-121%

Report of Analysis

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

4-Bromofluorobenzene

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# **Report of Analysis**

Page 1 of 2

Client Sample ID:ENS-SYR-TMP-HP10Lab Sample ID:N17424-3RMatrix:AQ - Ground WaterMethod:SW846 8260BProject:ENSTNN: Carrier, Sy				Date Sam Date Rece Percent S		
Run #1 Run #2		Analyzed 07/11/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU732
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	7.0	10	ug/l J		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	0.60	5.0	ug/l J		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	0.66	2.0	ug/l J		
156-59-2	cis-1,2-Dichloroethene	5.3	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBF	() ND	5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	15.8	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

460-00-4

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ENS-SYR-TMP-HP1020-CARGHP1020 Client Sample ID: Date Sampled: 07/01/02 Lab Sample ID: N17424-3R Date Received: 07/02/02 Matrix: AQ - Ground Water Percent Solids: n/a Method: SW846 8260B ENSTNN: Carrier, Syracuse, NY **Project:** VOA TCL List Units Q Result RL Compound CAS No. ND 1.0 ug/l 75-01-4 Vinyl chloride ND 1.0 ug/l 1330-20-7 Xylene (total) Surrogate Recoveries Run#1 Run# 2 Limits CAS No. Dibromofluoromethane 93% 83-118% 1868-53-7 91% 69-127% 17060-07-0 1,2-Dichloroethane-D4 85% 82-119% 2037-26-5 Toluene-D8 83% 81-121%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

4-Bromofluorobenzene

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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### **Report of Analysis**

### Report of Analysis

Page 1 of 2

Client Samj Lab Sample Matrix: Method: Project:				20 Date Samp Date Receiv Percent Sol	ved: 07/02/02	
Run #1 Run #2		Analyzed 07/12/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU733
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	8.3	10	ug/l J		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	ND	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	ND	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/I		
75-34-3	1,1-Dichloroethane	0.46	5.0	ug/l J		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	4.5	5.0	ug/l J		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
	· · ·	ND	1.0	ug/l		
	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBI		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/1		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/1		
79-01-6	Trichloroethene	13.7	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

**Toluene-D8** 

4-Bromofluorobenzene

2037-26-5

460-00-4

Client Sample ID: ENS-SYR-TMP-HP1020DUP-CARHHP1020 07/01/02 Date Sampled: Lab Sample ID: N17424-4R Date Received: 07/02/02 AQ - Ground Water Matrix: Percent Solids: n/a Method: SW846 8260B Project: ENSTNN: Carrier, Syracuse, NY VOA TCL List RL Units Q Result CAS No. Compound Vinyl chloride ND 1.0 ug/l 75-01-4 Xylene (total) ND 1.0 ug/l 1330-20-7 Surrogate Recoveries Run# 1 Run# 2 Limits CAS No. Dibromofluoromethane 105% 83-118% 1868-53-7 69-127% 1,2-Dichloroethane-D4 102% 17060-07-0

114%

109%

82-119%

81-121%

#### ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

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### Report of Analysis

### Report of Analysis

Page 1 of 2

	File ID DF U23423.D 1			Percent Sol		
	025425.D I	Analyzed 07/11/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU731
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	2.4	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	5.5	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/1		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/1		
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l		
	trans-1,3-Dichloropropene		1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MI		5.0	ug/l		
75-09-2	Methylene chloride	ND ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane		2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
	1,1,1-Trichloroethane	ND	5.0	ug/l		
71-55-6		ND	3.0	ug/l		
79-00-5 79-01-6	1,1,2-Trichloroethane Trichloroethene	ND	3.0 1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

460-00-4

Client Sample ID: ENS-SYR-TMP-TRIPBLK-CART070102 07/01/02 Date Sampled: Lab Sample ID: N17424-6R Date Received: 07/02/02 Matrix: AQ - Trip Blank Water Percent Solids: n/a Method: SW846 8260B ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List RL Units Q Result Compound CAS No. ug/l ND 1.0 75-01-4 Vinyl chloride ND 1.0 ug/l 1330-20-7 Xylene (total) Surrogate Recoveries Run#1 Run# 2 Limits CAS No. Dibromofluoromethane 108% 83-118% 1868-53-7 69-127% 1,2-Dichloroethane-D4 123% 17060-07-0 82-119% 100% 2037-26-5 Toluene-D8

81-121%

106%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

4-Bromofluorobenzene

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

#### Page 2 of 2

### Report of Analysis

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# **Report of Analysis**

Page 1 of 2

Client Sample ID:ENS-SYR-TMP-EQUILab Sample ID:N17424-7RMatrix:AQ - Field Blank WateMethod:SW846 8260BProject:ENSTNN: Carrier, Sy		ater		Date Sampl Date Receiv Percent Sol	ed: 07/02/02	
Run #1 Run #2	File IDDFU23424.D1	Analyzed 07/11/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU731
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	2.3	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	4.7	5.0	ug/l J		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l		
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIB		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/1		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

.

#### Client Sample ID: ENS-SYR-TMP-EQUIPBLK-CARE070102 Date Sampled: 07/01/02 Lab Sample ID: N17424-7R Date Received: 07/02/02 Matrix: AQ - Field Blank Water Percent Solids: n/a SW846 8260B Method: ENSTNN: Carrier, Syracuse, NY Project: VOA TCL List Units Q Result RL Compound CAS No. ND 1.0 ug/l 75-01-4 Vinyl chloride 1.0 ug/l 1330-20-7 Xylene (total) ND Run#1 Run# 2 Limits CAS No. Surrogate Recoveries 108% 83-118% Dibromofluoromethane 1868-53-7 69-127% 17060-07-0 1,2-Dichloroethane-D4 124% 99% 82-119% Toluene-D8 2037-26-5 107% 81-121% 4-Bromofluorobenzene 460-00-4

ND = Not detectedRL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 2 of 2

### Report of Analysis

# **Report of Analysis**

Page 1 of 2

Client Sample ID:ENS-SYR-TMP-FIELDLab Sample ID:N17424-8RMatrix:AQ - Field Blank WateMethod:SW846 8260BProject:ENSTNN: Carrier, Sy		ter		Date Sampl Date Receix Percent Sol	/ed: 07/02/02	
		Analyzed 07/11/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU731
	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1	Acetone	ND	10	ug/l		
71-43-2	Benzene	ND	1.0	ug/l		
75-27-4	Bromodichloromethane	2.3	1.0	ug/l		
75-25-2	Bromoform	ND	4.0	ug/l		
74-83-9	Bromomethane	ND	5.0	ug/l		
78-93-3	2-Butanone (MEK)	ND	10	ug/l		
75-15-0	Carbon disulfide	ND	5.0	ug/l		
56-23-5	Carbon tetrachloride	ND	1.0	ug/l		
108-90-7	Chlorobenzene	ND	2.0	ug/l		
75-00-3	Chloroethane	ND	5.0	ug/l		
67-66-3	Chloroform	5.2	5.0	ug/l		
74-87-3	Chloromethane	ND	5.0	ug/l		
124-48-1	Dibromochloromethane	ND	5.0	ug/l		
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l		
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l		
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l		
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l		
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l		
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l		
10061-01-5		ND	1.0	ug/l		
	trans-1,3-Dichloropropene	ND	1.0	ug/l		
100-41-4	Ethylbenzene	ND	1.0	ug/l		
591-78-6	2-Hexanone	ND () ND	5.0	ug/l		
108-10-1	4-Methyl-2-pentanone(MIBI		5.0	ug/l		
75-09-2	Methylene chloride	ND	2.0	ug/l		
100-42-5	Styrene	ND	5.0	ug/l		
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l		
127-18-4	Tetrachloroethene	ND	1.0	ug/l		
108-88-3	Toluene	ND	1.0	ug/l		
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l		
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l ug/l		
79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

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RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

	Report of Analysis							
Client Sample ID:ENS-SYR-TMP-FIELab Sample ID:N17424-8RMatrix:AQ - Field Blank WMethod:SW846 8260BProject:ENSTNN: Carrier, S			later		Date Sampled: Date Received: Percent Solids:	07/01/02 07/02/02 n/a		
VOA TCL	List							
CAS No.	Comp	oound	Result	RL	Units Q			
75-01-4 1330-20-7		chloride e (total)	ND ND	1.0 1.0	ug/l ug/l			
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Limits			
1868-53-7 17060-07-0 2037-26-5 460-00-4	1,2-D Tolue	mofluoromethane ichloroethane-D4 ne-D8 mofluorobenzene	110% 126% 99% 106%		83-118% 69-127% 82-119% 81-121%			

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

### SURFACE WATER ANALYTICAL DATA CARRIER-DEWITT LANDFILL June 2002

	Page 1 of 2					
Client Sam Lab Sampl Matrix: Method: Project:				Date Sampl Date Receiv Percent Sol	ved: 06/26/02	
Run #1 Run #2		Analyzed 07/04/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU725
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1 71-43-2 75-27-4 75-25-2 74-83-9	Acetone Benzene Bromodichloromethane Bromoform Bromomethane	ND ND ND ND ND	10 1.0 1.0 4.0 5.0	ug/l ug/l ug/l ug/l ug/l		
78-93-3 75-15-0 56-23-5 108-90-7	2-Butanone (MEK) Carbon disulfide Carbon tetrachloride Chlorobenzene	ND ND ND ND ND	10 5.0 1.0 2.0 5.0	ug/l ug/l ug/l ug/l		
75-00-3 67-66-3 74-87-3 124-48-1 75-34-3	Chloroethane Chloroform Chloromethane Dibromochloromethane 1,1-Dichloroethane	ND ND ND ND ND	5.0 5.0 5.0 5.0 5.0	ug/l ug/l ug/l ug/l ug/l		
107-06-2 75-35-4 156-59-2 156-60-5	1,2-Dichloroethane 1,1-Dichloroethene cis-1,2-Dichloroethene trans-1,2-Dichloroethene	ND ND ND ND	2.0 2.0 5.0 5.0	ug/l ug/l ug/l ug/l		
78-87-5 10061-01-5 10061-02-6 100-41-4	trans-1,3-Dichloropropene Ethylbenzene	ND ND ND ND	1.0 1.0 1.0 1.0	ug/l ug/l ug/l ug/l		
591-78-6 108-10-1 75-09-2 100-42-5	2-Hexanone 4-Methyl-2-pentanone(MIBł Methylene chloride Styrene	ND ND	5.0 5.0 2.0 5.0	ug/l ug/l ug/l ug/l		
79-34-5 127-18-4 108-88-3 71-55-6	1,1,2,2-Tetrachloroethane Tetrachloroethene Toluene 1,1,1-Trichloroethane	ND ND 8.2 ND	2.0 1.0 1.0 5.0	ug/l ug/l ug/l ug/l		
79-00-5 79-01-6	1,1,2-Trichloroethane Trichloroethene	ND ND	3.0 1.0	ug/l ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

			1.		J		
	1ethod: SW846 8260B			101	Date Sampled: Date Received: Percent Solids:	06/24/02 06/26/02 n/a	
VOA TCL I	List						
CAS No.	Comp	ound	Result	RL	Units Q		
75-01-4 1330-20-7	v	chloride e (total)	ND ND	1.0 1.0	ug/l ug/l		
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7 17060-07-0 2037-26-5 460-00-4	1,2-Di Toluer	mofluoromethane ichloroethane-D4 ne-D8 mofluorobenzene	111% 110% 102% 106%		83-118% 69-127% 82-119% 81-121%		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

 $\mathbf{B}=\mathbf{Indicates}$  analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Page 2 of 2

**Report of Analysis** 

Page 1 of 2

Client Sam Lab Sampl Matrix: Method: Project:				Date Receiv	Date Sampled: 06/24/02 Date Received: 06/26/02 Percent Solids: n/a		
Run #1 Run #2		Analyzed 07/04/02	Ву ХАН	Prep Date n/a	Prep Batch n/a	Analytical Batch VU725	
Run #1 Run #2	Purge Volume 5.0 ml						
VOA TCL	List						
CAS No.	Compound	Result	RL	Units Q			
67-64-1	Acetone	ND	10	ug/l			
71-43-2	Benzene	ND	1.0	ug/l			
75-27-4	Bromodichloromethane	ND	1.0	ug/l			
75-25-2	Bromoform	ND	4.0	ug/l			
74-83-9	Bromomethane	ND	5.0	ug/l			
78-93-3	2-Butanone (MEK)	ND	10	ug/l			
75-15-0	Carbon disulfide	ND	5.0	ug/l			
56-23-5	Carbon tetrachloride	ND	1.0	ug/l			
108-90-7	Chlorobenzene	ND	2.0	ug/l			
75-00-3	Chloroethane	ND	5.0	ug/l			
67-66-3	Chloroform	ND	5.0	ug/l			
74-87-3	Chloromethane	ND	5.0	ug/l			
124-48-1	Dibromochloromethane	ND	5.0	ug/l			
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l			
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l			
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l			
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l			
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l			
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l			
10061-01-5		ND	1.0	ug/l			
	trans-1,3-Dichloropropene	ND	1.0	ug/l			
100-41-4	Ethylbenzene	ND	1.0	ug/l			
591-78-6	2-Hexanone	ND	5.0	ug/l			
108-10-1	4-Methyl-2-pentanone(MIB)	K) ND	5.0	ug/l			
75-09-2	Methylene chloride	ND	2.0	ug/l			
100-42-5	Styrene	ND	5.0	ug/l			
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l			
127-18-4	Tetrachloroethene	ND	1.0	ug/l			
108-88-3	Toluene	ND	1.0	ug/l			
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l			
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l			
79-01-6	Trichloroethene	ND	1.0	ug/l			

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound

		<b>I</b>		<i>J</i>	
	lethod: SW846 8260B		201	Date Sampled: 06/24/02 Date Received: 06/26/02 Percent Solids: n/a	
VOA TCL I	List				
CAS No.	Compound	Result	RL	Units Q	
75-01-4 1330-20-7	Vinyl chloride Xylene (total)	ND ND	1.0 1.0	ug/l ug/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7 17060-07-0 2037-26-5 460-00-4	Dibromofluoromethane 1,2-Dichloroethane-D4 Toluene-D8 4-Bromofluorobenzene	112% 112% 101% 107%		83-118% 69-127% 82-119% 81-121%	

Report of Analysis

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

BACKGROUND SOIL SAMPLE ANALYTICAL DATA for SWMUs 5 and 6 June 2002

				~~~J		j ===			0
Client Sample Lab Sample I Matrix:	• 10 1 10	19-1	IP-BG01 (	CARS	BG0100		Rece	eived: 06/27/0	
Percent Solids: 85.3 Project: ENSTNN: Carrier, Syracuse, NY									
Metals Analy	sis								
Analyte	Result	RL	Units	DF	Prep	Analyzed	Ву	Method	Prep Method
Arsenic	3.2	1.1	mg/kg	1	06/28/02	07/03/02	ND	SW846 6010B	SW846 3050B
Copper	12.4	2.9	mg/kg	1	06/28/02	07/03/02	ND	SW846 6010B	SW846 3050B
Iron	25500	22	mg/kg	1	06/28/02	07/03/02	ND	SW846 6010B	SW846 3050B
Lead	8.4	1.1	mg/kg	1	06/28/02	07/03/02	ND	SW846 6010B	SW846 3050B
Manganese	377	1.7	mg/kg	1	06/28/02	07/03/02	ND	SW846 6010B	SW846 3050B
Nickel	17.4	4.6	mg/kg	1	06/28/02	07/03/02	ND	SW846 6010B	SW846 3050B

# **Report of Analysis**

Manganese

Nickel

780

26.5

1.9

5.0

mg/kg 1

mg/kg 1

#### Client Sample ID: ENS-SYR-TMP-BG01 CARSBG0106 Date Sampled: 06/26/02 Lab Sample ID: N17119-2 SO - Soil Date Received: 06/27/02 Matrix: Percent Solids: 80.2 ENSTNN: Carrier, Syracuse, NY Project: Metals Analysis Method Prep Method Prep Analyzed By Result RL Units DF Analyte SW846 3050B 6.2 1.2 mg/kg 1 06/28/02 07/03/02 ND SW846 6010B Arsenic 06/28/02 07/03/02 ND 27.13.1 mg/kg 1 SW846 6010B SW846 3050B Copper mg/kg 1 06/28/02 07/03/02 ND SW846 6010B SW846 3050B 19700 24 Iron mg/kg 1 06/28/02 07/03/02 ND SW846 3050B Lead 9.4 1.2 SW846 6010B

06/28/02 07/03/02 ND

06/28/02 07/03/02 ND

SW846 6010B

SW846 6010B

SW846 3050B

SW846 3050B

**Report of Analysis** 

	Report of Analysis									
Client Sample ID:ENS-SYR-TMP-BG02 CARSBG0200Lab Sample ID:N17119-3Matrix:SO - Soil						Date Sam Date Rec Percent S	2			
Project:	ENS	ГNN: Ca	rrier, Syra	icuse,	NY					
Metals Analys	sis			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method		
Arsenic <sup>a</sup>	4.3	2.3	mg/kg	2	06/28/02	07/03/02 ND	SW846 6010B	SW846 3050B		
Copper <sup>a</sup>	49.0	5.8	mg/kg	2	06/28/02	07/03/02 ND	SW846 6010B	SW846 3050B		
Iron <sup>a</sup>	10000	46	mg/kg	2	06/28/02	07/03/02 ND	SW846 6010B	SW846 3050B		
Lead <sup>a</sup>	20.4	2.3	mg/kg	2	06/28/02	07/03/02 ND	SW846 6010B	SW846 3050B		
Manganese <sup>a</sup>	248	3.5	mg/kg	2	06/28/02	07/03/02 ND	SW846 6010B	SW846 3050B		
Nickel <sup>a</sup>	11.2	9.3	mg/kg	2	06/28/02	07/03/02 ND	SW846 6010B	SW846 3050B		

(a) Elevated sample detection limit due to difficult sample matrix.

Lead

Nickel

Manganese

7.3

418

19.7

1.2

1.8

4.9

mg/kg 1

mg/kg 1

mg/kg 1

#### Client Sample ID: ENS-SYR-TMP-BG02 CARSBG0206 06/26/02 Date Sampled: Lab Sample ID: N17119-4 Date Received: 06/27/02 SO - Soil Matrix: Percent Solids: 80.4 ENSTNN: Carrier, Syracuse, NY Project: Metals Analysis Prep Method Method Units DF Prep Analyzed By Result RL Analyte SW846 3050B 06/28/02 07/03/02 ND SW846 6010B 4.41.2 mg/kg 1 Arsenic 06/28/02 07/03/02 ND SW846 3050B 25.03.1 mg/kg 1 SW846 6010B Copper mg/kg 1 06/28/02 07/03/02 ND SW846 6010B SW846 3050B Iron 18400 24 06/28/02 07/03/02 ND SW846 3050B

06/28/02 07/03/02 ND

06/28/02 07/03/02 ND

SW846 6010B

SW846 6010B

SW846 6010B

SW846 3050B

SW846 3050B

## **Report of Analysis**

Nickel

25.6

4.5

mg/kg 1

#### Client Sample ID: ENS-SYR-TMP-BG03 CARSBG0300 06/26/02 Date Sampled: Lab Sample ID: N17119-5 Date Received: 06/27/02 SO - Soil Matrix: Percent Solids: 89.4 ENSTNN: Carrier, Syracuse, NY Project: Metals Analysis Prep Method Analyzed By Method Units DF Prep Result RL Analyte SW846 3050B mg/kg 1 06/28/02 07/03/02 ND SW846 6010B 3.8 1.1 Arsenic 06/28/02 07/03/02 ND SW846 3050B 26.62.8 mg/kg 1 SW846 6010B Copper mg/kg 1 06/28/02 07/03/02 ND SW846 6010B SW846 3050B Iron 25200 22 06/28/02 07/03/02 ND SW846 6010B SW846 3050B Lead 9.3 1.1 mg/kg 1 SW846 3050B Manganese 410 1.7 mg/kg 1 06/28/02 07/03/02 ND SW846 6010B

06/28/02 07/03/02 ND

**Report of Analysis** 

Page 1 of 1

SW846 3050B

SW846 6010B

Manganese

Nickel

254

10.2

1.9

5.0

mg/kg 1

mg/kg 1

#### Client Sample ID: ENS-SYR-TMP-BG03 CARSBG0306 06/26/02 Date Sampled: Lab Sample ID: N17119-6 SO - Soil Date Received: 06/27/02 Matrix: Percent Solids: 80.0 Project: ENSTNN: Carrier, Syracuse, NY Metals Analysis **Prep Method** Analyzed By Method RL Units DF Prep Analyte Result SW846 3050B 06/28/02 07/03/02 ND SW846 6010B Arsenic 2.51.2 mg/kg 1 mg/kg 1 06/28/02 07/03/02 ND SW846 3050B Copper 16.7 3.1 SW846 6010B 06/28/02 07/03/02 ND mg/kg 1 SW846 6010B SW846 3050B Iron 10800 24 mg/kg 1 06/28/02 07/03/02 ND SW846 6010B SW846 3050B Lead 3.6 1.2 SW846 3050B 06/28/02 07/03/02 ND SW846 6010B

06/28/02 07/03/02 ND

## **Report of Analysis**

Page 1 of 1

SW846 3050B

SW846 6010B

#### **Report of Analysis** Client Sample ID: ENS-SYR-TMP-BG03 CARSBG0306 Date Sampled: 06/26/02 Date Received: 06/27/02 Lab Sample ID: Matrix: N17119-7 SO - Soil Percent Solids: 81.7 ENSTNN: Carrier, Syracuse, NY

Metals Analysis

Project:

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	5.2	1.2	mg/kg	1	• • • • • • • •	07/03/02 ND	SW846 6010B	SW846 3050B
Copper	23.2	3.0	mg/kg	1	06/28/02	07/03/02 ND	SW846 6010B	SW846 3050B
Iron	16600	24	mg/kg	1	06/28/02	07/03/02 ND	SW846 6010B	SW846 3050B
Lead	6.0	1.2	mg/kg	1	06/28/02	07/03/02 ND	SW846 6010B	SW846 3050B
Manganese	426	1.8	mg/kg	1	06/28/02	07/03/02 ND	SW846 6010B	SW846 3050B
Nickel	22.0	4.8	mg/kg	1	06/28/02	07/03/02 ND	SW846 6010B	SW846 3050B

Nickel

31.3

#### Client Sample ID: ENS-SYR-TMP-BG04 CARSBG0400 06/26/02 Date Sampled: Lab Sample ID: N17119-8 Matrix: SO - Soil Date Received: 06/27/02 Percent Solids: 83.4 ENSTNN: Carrier, Syracuse, NY Project: Metals Analysis Analyzed By Method **Prep Method** Result RL Units DF Prep Analyte mg/kg 1 5.2 1.2 06/28/02 07/03/02 ND SW846 6010B SW846 3050B Arsenic mg/kg 1 06/28/02 07/03/02 ND Copper 28.7 3.0 SW846 6010B SW846 3050B mg/kg 1 06/28/02 07/03/02 ND SW846 6010B SW846 3050B Iron 24500 24 mg/kg 1 06/28/02 07/03/02 ND SW846 6010B SW846 3050B Lead 9.8 1.2 mg/kg 1 06/28/02 07/03/02 ND SW846 3050B Manganese 1150 1.8 SW846 6010B

06/28/02 07/03/02 ND

SW846 6010B

SW846 3050B

mg/kg 1

4.7

**Report of Analysis** 

Nickel

10.0

#### Client Sample ID: ENS-SYR-TMP-BG04 CARSBG0406 Date Sampled: 06/26/02 Lab Sample ID: N17119-9 Date Received: 06/27/02 Matrix: SO - Soil Percent Solids: 86.6 ENSTNN: Carrier, Syracuse, NY Project: Metals Analysis Prep Method Method Units DF Prep Analyzed By Result RL Analyte mg/kg 1 06/28/02 07/03/02 ND SW846 6010B SW846 3050B 2.0 1.2 Arsenic mg/kg 1 06/28/02 07/03/02 ND SW846 3050B SW846 6010B Copper 15.1 2.9 mg/kg 1 06/28/02 07/03/02 ND 13200 SW846 6010B SW846 3050B Iron 24 mg/kg 1 06/28/02 07/03/02 ND SW846 6010B SW846 3050B Lead 4.1 1.2 06/28/02 07/03/02 ND SW846 3050B mg/kg 1 SW846 6010B Manganese 384 1.7

06/28/02 07/03/02 ND

mg/kg 1

4.6

**Report of Analysis** 

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SW846 3050B

SW846 6010B

FIELD, TRIP, AND EQUPIPMENT BLANK ANALYTICAL DATA June 2002

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	Page 1 of 2						
Client Sam Lab Sampl Matrix: Method: Project:		ter		Date Sampl Date Receiv Percent Sol	ved: 06/26/02		
Run #1 Run #2		Analyzed 07/05/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU725	
Run #1 Run #2	Purge Volume 5.0 ml		<u>.</u>				
VOA TCL	List						
CAS No.	Compound	Result	RL	Units Q			
67-64-1 71-43-2 75-27-4	Acetone Benzene Bromodichloromethane	6.9 ND ND	10 1.0 1.0	ug/l J ug/l ug/l			
75-25-2 74-83-9	Bromoform Bromomethane	ND ND ND	4.0 5.0 10	ug/l ug/l			
78-93-3 75-15-0 56-23-5	2-Butanone (MEK) Carbon disulfide Carbon tetrachloride	ND ND	$\begin{array}{c} 5.0 \\ 1.0 \end{array}$	ug/l ug/l ug/l			
108-90-7 75-00-3 67-66-3	Chlorobenzene Chloroethane Chloroform	ND ND ND	2.0 5.0 5.0	ug/l ug/l ug/l			
74-87-3 124-48-1 75-34-3	Chloromethane Dibromochloromethane 1,1-Dichloroethane	ND ND ND	$5.0 \\ 5.0 \\ 5.0 \\ 5.0$	ug/l ug/l ug/l			
107-06-2 75-35-4 156-59-2	1,2-Dichloroethane 1,1-Dichloroethene cis-1,2-Dichloroethene	ND ND ND	2.0 2.0 5.0	ug/l ug/l ug/l			
156-60-5 78-87-5	trans-1,2-Dichloroethene 1,2-Dichloropropane	ND ND	5.0 1.0	ug/l ug/l			
10061-01-5 10061-02-6 100-41-4	cis-1,3-Dichloropropene trans-1,3-Dichloropropene Ethylbenzene	ND ND ND	$1.0 \\ 1.0 \\ 1.0$	ug/l ug/l ug/l			
591-78-6 108-10-1 75-09-2	2-Hexanone 4-Methyl-2-pentanone(MIBK Methylene chloride	ND ) ND ND	$5.0 \\ 5.0 \\ 2.0$	ug/l ug/l ug/l			
100-42-5 79-34-5	Styrene 1,1,2,2-Tetrachloroethane	ND ND	$\begin{array}{c} 5.0 \\ 2.0 \end{array}$	ug/l ug/l			
127-18-4 108-88-3 71-55-6	Tetrachloroethene Toluene 1,1,1-Trichloroethane	ND 0.49 ND	$1.0 \\ 1.0 \\ 5.0$	ug/l ug/l J ug/l			
79-00-5 79-01-6	1,1,2-Trichloroethane Trichloroethene	ND ND	3.0 1.0	ug/l ug/l			

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

			▲		0		
Client Sample ID: Lab Sample ID: Matrix: Method: Project:		ENS-SYR-TMP-EB N17045-12R AQ - Field Blank W SW846 8260B ENSTNN: Carrier,	ater	5	Date Sampled: Date Received: Percent Solids:	06/25/02 06/26/02 n/a	
VOA TCL I	List						
CAS No.	Comp	ound	Result	RL	Units Q		
75-01-4 1330-20-7		chloride e (total)	ND ND	1.0 1.0	ug/l ug/l		
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Limits		
1868-53-7 17060-07-0 2037-26-5 460-00-4	1,2-Di Toluer	mofluoromethane ichloroethane-D4 1e-D8 nofluorobenzene	118% 122% 103% 109%		83-118% 69-127% 82-119% 81-121%		

**Report of Analysis** 

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Page 2 of 2

ND = Not detected RL = Reporting Limit

	Page 1 of 2					
Client Sam Lab Sample Matrix: Method: Project:		ter		Date Sampl Date Receiv Percent Sol	/ed: 06/26/02	
Run #1 Run #2		Analyzed 07/05/02	By XAH	Prep Date n/a	Prep Batch n/a	Analytical Batch VU725
Run #1 Run #2	Purge Volume 5.0 ml					
VOA TCL	List					
CAS No.	Compound	Result	RL	Units Q		
67-64-1 71-43-2 75-27-4	Acetone Benzene Bromodichloromethane	6.8 ND ND	10 1.0 1.0	ug/l J ug/l ug/l		
75-25-2 74-83-9	Bromoform Bromomethane	ND ND	4.0 5.0	ug/l ug/l		
78-93-3 75-15-0 56-23-5	2-Butanone (MEK) Carbon disulfide Carbon tetrachloride	ND ND ND	10 5.0 1.0	ug/l ug/l ug/l		
108-90-7 75-00-3	Chlorobenzene Chloroethane	ND ND	2.0 5.0	ug/l ug/l		
67-66-3 74-87-3 124-48-1	Chloroform Chloromethane Dibromochloromethane	ND ND ND	$5.0 \\ 5.0 \\ 5.0 \\ 5.0$	ug/l ug/l ug/l		
75-34-3 107-06-2 75-35-4	1,1-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethene	ND ND ND	5.0 2.0 2.0	ug/l ug/l ug/l		
156-59-2 156-60-5	cis-1,2-Dichloroethene trans-1,2-Dichloroethene	ND ND	5.0 5.0	ug/l ug/l		
78-87-5 10061-01-5 10061-02-6	1,2-Dichloropropane cis-1,3-Dichloropropene trans-1,3-Dichloropropene	ND ND ND	1.0 1.0 1.0	ug/l ug/l ug/l		
100-41-4 591-78-6	Ethylbenzene 2-Hexanone	ND ND	$\begin{array}{c} 1.0 \\ 5.0 \end{array}$	ug/l ug/l		
108-10-1 75-09-2 100-42-5	4-Methyl-2-pentanone(MIB) Methylene chloride Styrene	() ND ND ND	5.0 2.0 5.0	ug/l ug/l ug/l		
79-34-5 127-18-4	1,1,2,2-Tetrachloroethane Tetrachloroethene	ND ND	$\begin{array}{c} 2.0 \\ 1.0 \end{array}$	ug/l ug/l		
108-88-3 71-55-6 79-00-5	Toluene 1,1,1-Trichloroethane 1,1,2-Trichloroethane	0.53 ND ND	1.0 5.0 3.0	ug/l J ug/l ug/l		
79-00-5 79-01-6	Trichloroethene	ND	1.0	ug/l		

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

 $\begin{array}{l} J = \mbox{Indicates an estimated value} \\ B = \mbox{Indicates analyte found in associated method blank} \\ N = \mbox{Indicates presumptive evidence of a compound} \end{array}$ 

			• • • • • • • • • • • • •		0	Ť
	Method: SW846 8260B		ater	5	Date Sampled: Date Received: Percent Solids:	06/25/02 06/26/02 n/a
VOA TCL I	List					
CAS No.	Comp	ound	Result	RL	Units Q	
75-01-4 1330-20-7		chloride e (total)	ND ND	1.0 1.0	ug/l ug/l	
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7 17060-07-0 2037-26-5 460-00-4	1,2-Di Toluer	mofluoromethane ichloroethane-D4 ne-D8 mofluorobenzene	118% 122% 103% 109%		83-118% 69-127% 82-119% 81-121%	

Report of Analysis

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

Page 2 of 2

J = Indicates an estimated value

Client Sample ID: TRIP BLANK

**Report of Analysis** 

Lab Samp Matrix: Method: Project:	*		Y	Date Sampled: 06/25/02 Date Received: 06/26/02 Percent Solids: n/a			
Run #1 Run #2	File ID DF U23183.D 1	Analyzed 07/04/02	Ву ХАН	Prep Date n/a	Prep Batch n/a	Analytical Batch VU725	
Run #1 Run #2	Purge Volume 5.0 ml						
VOA TCL	, List						
CAS No.	Compound	Result	RL	Units Q			
67-64-1	Acetone	ND	10	ug/l			
71-43-2	Benzene	ND	1.0	ug/l			
75-27-4	Bromodichloromethane	ND	1.0	ug/l			
75-25-2	Bromoform	ND	4.0	ug/l			
74-83-9	Bromomethane	ND	5.0	ug/l			
78-93-3	2-Butanone (MEK)	ND	10	ug/l			
75-15-0	Carbon disulfide	ND	5.0	ug/l			
56-23-5	Carbon tetrachloride	ND	1.0	ug/l			
108-90-7	Chlorobenzene	ND	2.0	ug/l			

71-43-2	Benzene	ND	1.0	ug/l
75-27-4	Bromodichloromethane	ND	1.0	ug/l
75-25-2	Bromoform	ND	4.0	ug/l
74-83-9	Bromomethane	ND	5.0	ug/l
78-93-3	2-Butanone (MEK)	ND	10	ug/l
75-15-0	Carbon disulfide	ND	5.0	ug/l
56-23-5	Carbon tetrachloride	ND	1.0	ug/l
108-90-7	Chlorobenzene	ND	2.0	ug/l
75-00-3	Chloroethane	ND	5.0	ug/l
67-66-3	Chloroform	ND	5.0	ug/l
74-87-3	Chloromethane	ND	5.0	ug/l
124-48-1	Dibromochloromethane	ND	5.0	ug/l
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l
100-41-4	Ethylbenzene	ND	1.0	ug/l
591-78-6	2-Hexanone	ND	5.0	ug/l
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l
75-09-2	Methylene chloride	ND	2.0	ug/l
100-42-5	Styrene	ND	5.0	ug/l
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l
127-18-4	Tetrachloroethene	ND	1.0	ug/l
108-88-3	Toluene	ND	1.0	ug/l
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l
79-01-6	Trichloroethene	ND	1.0	ug/l

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Client Samp Lab Sample Matrix: Method: Project:		TRIP BLANK N17045-20R AQ - Trip Blank Wa SW846 8260B ENSTNN: Carrier, 5			Date Sampled: Date Received: Percent Solids:	06/25/02 06/26/02 n/a
VOA TCL I	List					
CAS No.	Comp	ound	Result	RL	Units Q	
75-01-4 1330-20-7	•	chloride e (total)	ND ND	1.0 1.0	ug/l ug/l	
CAS No.	Surro	gate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7 17060-07-0 2037-26-5 460-00-4	1,2-D Tolue	mofluoromethane ichloroethane-D4 ne-D8 mofluorobenzene	108% 106% 101% 106%		83-118% 69-127% 82-119% 81-121%	

 $\begin{array}{l} ND = Not \; detected \\ RL = Reporting \; Limit \\ E = Indicates \; value \; exceeds \; calibration \; range \end{array}$ 

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## **APPENDIX C**

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## APPENDIX D

Data Evaluation Report and Work Sheets

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APPENDIX D

Data Evaluation Report and Work Sheets (July 2001)

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## 1.0 DATA EVALUATION

This section presents analytical data collected from the Carrier Corporation, Thompson Road Facility Remedial Investigation (RI) and the quality assurance/quality control (QA/QC) evaluation of those data. Samples for the RI were collected between July 9, 2001 and July 13, 1999. Samples were submitted to Accutest of Dayton, New Jersey (New York certification number 10983). The samples collected and analyses performed on each sample are summarized in Attachment D-1 to this report. Samples were reported by the laboratories in six sample delivery groups (SDGs): E94826, E94827, E94828, E94829, E94945, and E95042. Analyses were conducted in accordance with the following documents:

- Test Methods For Evaluating Solid Waste, Physical/Chemical Methods, (SW-846) U.S. Environmental Protection Agency (USEPA) Office of Solid Waste and Emergency Response (OSWER), Third Edition, December 1996
- Methods for Chemical Analysis of Water and Wastes (EPA), USEPA Environmental Monitoring and Support Laboratory, (EPA-600/4-79-020, revised March 1983).
- Standard Methods for the Examination of Water and Wastewater (SM), American Public Health Association, 18<sup>th</sup> Edition, revised 1992.
- Method 1664 N-Hexane Extractable Material (HEM) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM) by Extraction and Gravimetry (Oil and Grease and Total Petroleum Hydrocarbons), USEPA Engineering and Analysis Division, (EPA-821-B-94-004, 1994)

Samples were analyzed and reported as definitive data and QC forms were submitted for data review. The elements of the data packages provided by the laboratory are presented in Table 1-1.

Tab	le 1-1
Data Packs	nge Elements
Completed chain-of-custody documentation Analytical results Tentatively identified compound results (volatiles) Sample receipt and log-in information Laboratory case narrative Blank data (trip, rinsate, and field) Soil moisture	<ul> <li>Metal QC summaries:         <ul> <li>Initial and calibration check summaries</li> <li>Laboratory blanks (initial, continuing, prep)</li> <li>Interference check samples</li> <li>Laboratory control samples</li> <li>Laboratory duplicates</li> <li>Matrix spikes</li> <li>Serial dilutions</li> </ul> </li> </ul>
<ul> <li>Organic QC summaries and raw data:</li> <li>&gt; Organic surrogate recoveries</li> <li>&gt; Volatile tuning data</li> <li>&gt; Matrix spike/matrix spike duplicates</li> <li>&gt; Laboratory control samples</li> <li>&gt; Laboratory blanks</li> <li>&gt; Initial and calibration check data</li> <li>&gt; Internal standard areas and retention times</li> <li>&gt; Retention time summaries</li> <li>&gt; Sample and QC quantitation reports</li> <li>&gt; Sample and QC spectra (volatiles)</li> <li>&gt; Raw calibration data</li> <li>&gt; Raw sample preparation bencheets</li> <li>&gt; Analytical run log</li> </ul>	<ul> <li>General Chemistry QC summaries:</li> <li>&gt; Laboratory blanks</li> <li>&gt; Laboratory control samples</li> <li>&gt; Laboratory duplicates</li> <li>&gt; Matrix spikes</li> </ul>

When the QC parameters did not fall within the specific method and laboratory guidelines, the data evaluator annotated or "flagged" the corresponding analytes where anomalies were found. The following flags were used to annotate data outside QC criteria during data evaluation.

U	<b>Undetected</b> – The analyte was present in a sample, but at a concentration less than 10 times the blank concentration for common organic constituents (methylene chloride, acetone, and 2-butanone) or five times the blank concentration for other constituents; the associated value shown is the quantitation limit after evaluation of the blank.
J	Estimated Value – At least one QC parameter was outside control limits.
UJ	<b>Undetected and Estimated</b> – The parameter was analyzed but not detected above the listed quantitation limit; the quantitation limit is estimated because one or more QC parameters was outside control limits.
R/UR	Unusable Data - At least one QC parameter grossly exceeded control limits.

These "flags" were applied to data where anomalies are noted during evaluation. The laboratory's "U" qualifier, defined as the target analyte was not detected above the laboratory's reporting limit, remained on the data unless superseded by the evaluation qualifier (e.g., "UJ" or "UR"). Attachment D-2 presents worksheets used during the data review process.

## 2.0 ORGANIC ANALYSES

Organic data evaluation for the Thompson Road Facility included the following parameters:

- Holding times\*
- Gas chromatograph/mass spectrometry (GC/MS) tuning (volatiles)\*
- Surrogate spike recoveries
- Instrument calibration
- Matrix spike/matrix spike duplicate (MS/MSD) recoveries
- MS/MSD precision
- Laboratory control spike (LCS) results\*
- Laboratory method blanks\*
- Field QC blanks (trip, rinsate, and field)
- GC/MS Internal standard (IS) performance (volatiles)\*
- Field duplicate precision

An asterisk (\*) above indicates that QC results were within criteria for both the volatile organic compounds (VOCs) and polychlorinated biphenyls (PCBs). Data were reviewed for completeness during the data evaluation process. When data were found to be incomplete or errors were observed, the laboratory was requested to re-submit the appropriate data so review could be completed. The following sections describes specific outliers which were qualified during the evaluation process for organic analyses. Data which were not flagged will not be discussed further in the following sections.

## 2.1 Surrogate Spikes

Individual sample performance for the organic analyses was monitored by assessing surrogate compound percent recovery data. Surrogate recoveries for samples that were outside QC limits during data evaluation are detailed in Table 2-1. All other VOC and PCB surrogates were within QC limits.

		P	Tabl CB Surrogate Re	e 2-1 covery Exceedance	s
SDG	Sample ID	Surrogate	Recovery (%) Col. 1 / Col. 2	QC Limits (%)	Action
E94826	CARMMH9701	DCB	172 / 155	23 - 143	Aroclor 1254 and Aroclor 1260 flagged "J"
E94826	CARMH10101	DCB	99 / 291	23 - 143	No action. All Aroclors were undetected.
E94827	CARMSM0701 (DL)	TCX	79 / 199	26 - 126	No action. Positive result reported off column 1, which was acceptable.

Notes:

Col. = column DCB = decachlorobiphenyl TCX = tetrachloro-m-xylene

DL = diluted sample

High surrogate recoveries in sample CARMMH9701 indicated potential high result bias and only positive results were flagged as estimated. Samples CARMH10101 and the diluted sample CARMSM0701 were not qualified because no adverse affects to data quality are expected due to these surrogate outliers.

## 2.2 Calibration

Instruments are initially and continually calibrated with standard solutions to verify that they can produce acceptable quantitative data for the compounds. In PCB SDG E94826, one check standard calibration for one column failed method acceptance criteria because the response was less than was observed in the initial calibration. However, the other column used during this calibration check was within method criteria and the laboratory reported all results from the compliant column. Therefore, no adverse affects to data quality are expected because of this calibration outlier. All other calibration criteria were met for VOCs and PCBs.

### 2.3 MS/MSDs

To assess the accuracy and precision of the analytical methods relative to the sample matrices, MS/MSD percent recoveries and relative percent differences (RPDs) were determined. Of the MS/MSDs reported with %R and RPD outliers, only two were reported from samples collected at the Thompson Road Facility. No action was taken for MS/MSD outliers when samples from another site was used because MS/MSDs are highly matrix dependent and the outliers may not be indicative of investigative samples collected during this RI.

Of the site samples that were used for MS/MSDs, the outliers detailed in Table 2-2 were observed. All other VOC and PCB MS/MSDs were within QC limits.

			Table 2-2 MS/MSD Out			
SDG	Analyte	Recovery (%) (MS / MSD)	MS/MSD QC Limits (%R)	RPD	RPD QC Limits	Action
E94826	cis-1,2-DCE	72*/10*	73 - 130	10	<14	cis-1,2-DCE flagged "J" in CARGMW3S04
E94826	acetone	203* / 223*	5 - 187	9	<35	No action — acetone was not detected and the bias was high
E94826	trans-1,3-DCP	58 / 72	53 - 135	20*	<18	No action — trans-1,3-DCP was not detected and the bias was high
E95042	cis-1,2-DCE	138 / 148	73 - 130	3	<14	cis-1,2-DCE flagged "J" in CARG990404

Notes:

cis-1,2-DCE = cis-1,2-dichloroethene \* = Outside QC limits trans-1,3-DCP = trans-1,3-dichloropropene

## 2.4 Blanks

Blanks help determine how much, if any, contamination was introduced in the laboratory or the field. All data associated with a particular blank were evaluated to determine whether there was inherent variability in the data, or if a problem was an isolated occurrence that did not affect the data. Acetone was detected in two equipment rinsate blanks at concentrations of 10.1 and 7.6 micrograms per liter (g/L). Acetone is believed to be from laboratory sources and not from site-related origin; therefore, it was flagged as undetected "U" in the following samples:CARG000604, CARG990204, CARG990304, CARSW56706, and CARG010704. All other laboratory method blanks, volatile trip blanks, and field blanks were free from contamination.

## 2.5 Field Duplicates

The RPDs for each field-duplicated samples were calculated to assess sampling method precision and matrix homogeneity. RPDs between the samples and duplicates were calculated and only one compound did not meet an RPD of <30 for water and <50 for soil. Aroclor 1260 in field duplicate pair CARMH03901 / CARMH03901 had an RPD of 106.8; therefore, both Aroclor 1260 results were flagged estimated "J." All other field duplicates showed acceptable precision.

## 3.0 INORGANIC ANALYSES

Metal and general chemistry data evaluation for the Thompson Road Facility included the following parameters:

- Holding Times
- Initial and calibration check\*
- Laboratory blanks\*
- Interference check samples\*
- Laboratory control samples\*
- Laboratory duplicates
- Matrix spikes
- Serial dilutions\*

An asterisk (\*) above indicates that QC results were within criteria for both the metals and general chemistry. Data were reviewed for completeness during the data evaluation process. When data were found to be incomplete or errors were observed, the laboratory was requested to re-submit the appropriate data so review could be completed. The following sections describes specific outliers which were qualified during the evaluation process for organic analyses. Data which were not flagged will not be discussed further in the following sections.

## 3.1 Holding Times

All metals and general chemistry technical holding times were met with one exception. Nitrite was analyzed two days outside of holding times in sample CARGMW0104 and the undetected value was flagged as estimated "UJ", indicating a potential low result bias.

## 3.2 Laboratory Duplicates

Precision of laboratory sample preparation and analytical methodology was assessed by comparing the analytical results between duplicated results. In SDG E94828, RPDs for copper (21.9), lead (45.5 and 41.4), manganese (72.8) and nickel (59.2), were above the <20 QC limit. Therefore, positive results for the elements outside QC criteria were flagged as estimated "J" in the following samples: CARSW56110, CARSW56208, and CARSW56706. All other laboratory duplicate criteria were met.

### 3.3 Matrix Spike

Samples are spiked with known quantities of analytes to evaluate the effect of the sample matrix on digestion and measurement procedures. The %R should be within 75% to 125%. However, when the sample concentration exceeds the spike concentration by a factor of four or more, spike recovery criteria are not applicable. In SDG E94828, manganese had a %R of 74.4, which was slightly below the QC limit of 75%, therefore, all manganese results were flagged as estimated "J", due to potential low result bias.

### 4.0 CONCLUSIONS

Data from the Thompson Road Facility were reviewed independently from the laboratory to assess data quality. When a QC parameter was outside the method and review criteria, the validator qualified the results to alert the data user. All of the results analyzed for the Thompson Road Facility were determined to be valid with few qualifications. There were 2,114 total analytes measured. No positive or undetected results were rejected; therefore analytical testing completeness was calculated to be 100.0%. Therefore, the data met the project analytical completeness goal. Very few analytes required qualification and no positive results were rejected; therefore, results are usable, with the appropriate qualification, as detailed previously. Results that were estimated may be biased high or low but are acceptable for interpretation.

Attachment D-1 Analytical Summary

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*****				Table D-1						
			`	Analytical Summary						
SDG	Sample ID	Sample Date	Lab ID	Sample Type/QA Indicator	PCBs	VOCs	Metals	Dissolved Metals	Cyanide	General Chem.
E94826	CARMMH7701	7/9/01	E94826-01	Sediment	×					
E94826	CARMMH9701	10/6/2	E94826-02	Sediment	Х					
E94826	CARMH11501	7/9/01	E94826-03	Sediment	х					
E94826	CARMH10101	7/9/01	E94826-04	Sediment	Х					
E94826	CARMH25601	7/9/01	E94826-05	Sediment	X					
E94826	CARMMH7601	7/9/01	E94826-06	Sediment	Х					
E94826	CARMH11601	7/9/01	E94826-07	Sediment	Х					
E94826	CARMH10201	10/6/2	E94826-08	Sediment	Х					
E94827	CARMSM0101	7/10/01	E94827-01	Sediment	Х					
E94827	CARRSM0101	7/10/01	E94827-02	Field Dup of CARMSM0101	Х					
E94827	CARMSM0201	7/10/01	E94827-03	Sediment	Х					
E94827	CARMSM0202	7/10/01	E94827-04	Sediment	х					
E94827	CARMSM0301	7/10/01	E94827-05	Sediment	Х					
E94827	CARMSM0302	7/10/01	E94827-06	Sediment	Х					
E94827	CARMSM0401	7/10/01	E94827-07	Sediment	Х					
E94827	CARMSM0402	7/10/01	E94827-08	Sediment	Х					
E94827	CARMSM0501	7/10/01	E94827-09	Sediment	Х					
E94827	CARMSM0502	10/01/2	E94827-10	Sediment	Х					
E94827	CARMSM0601	10/01/2	E94827-11	Sediment	X					
E94827	CARMSM0701	7/10/01	E94827-12	Sediment	Х					
E94827	CARMSM0801	7/10/01	E94827-13	Sediment	×					
E94827	CARMSM0802	7/10/01	E94827-14	Sediment	Х					
E94828	CARSW56110	7/11/01	E94828-01	Soil		×	×		×	
E94828	CARSW56208	7/11/01	E94828-02	Soil		X	Х		Х	
E94828	CARSW56706	7/11/01	E94828-03	Soil		x	×		×	
E94828	CARGW56401	7/11/01	E94828-04	Water (filtered metals)		×		Х		
E94829	CARGMW0904	7/10/01	E94829-01	Water		×				
E94829	CARGMWBG04	7/10/01	E94829-02	Water		×				
E94829	CARG000604	7/11/01	E94829-03	Water		×				
E94829	CARH000604	7/11/01	E94829-04	Field Dup of CARG000604		x				

Analytical Summary           Sample ID         Sample D         Sample Type(A Indicator         PCIs         Decisioned           Sample ID         Sample D         Sample D         Sample Type(A Indicator         PCIs         Decisioned           CARG990104         711101         E94829-05         Water         X         X         Decisioned           CARG990104         711101         E94829-06         Water         X         X         Decisioned           CARG90104         711101         E94829-06         Water         X         X         Decisioned           CARG0W0744         711001         E94829-03         Water         X         X         Decisioned           CARS00004         711201         E94945-01         Soil         X         X         Decisioned           CARS00004         711201         E94945-03         Soil         X         X         Decisioned           CARS00004         711201         E94945-05         Soil         X         X         X         Z           CARS00004         711201         E94945-05         Soil         X         X         X         X         X         X         X         X         X         X         X<					Table D-1						
Sample Ub         Sample Date         Lab ID         Sample TypeQA Indicator         PCBs         VOCs         Metals         Dissoved           C.ARG990104         711/101         E94829-05         Water         X         X         X         X         X           C.ARG990104         711/101         E94829-05         Water         X         X         X         X         X           C.ARG990104         711/101         E94829-05         Water         X				7	Analytical Summary						
CARG990304         71101         E94829-05         Water         X         X         X           CARG90104         711/01         E94829-05         Water         X         X         X         X           CARG90104         711/01         E94829-05         Water         X         X         X         X           CARGMW5704         711/01         E94829-05         Water         X         X         X         X           CARGMW704         711/01         E94829-10         Water         X         X         X         X           CARS20004         711/01         E94945-01         Soil         X         X         X         X         X           CARS201044         712/01         E94945-05         Field Dup of CARC204004         X <td>SDG</td> <td>Sample ID</td> <td>Sample Date</td> <td>Lab ID</td> <td>Sample Type/QA Indicator</td> <td></td> <td>VOCs</td> <td>Metals</td> <td>Dissolved Metals</td> <td>Cyanide</td> <td>General Chem.</td>	SDG	Sample ID	Sample Date	Lab ID	Sample Type/QA Indicator		VOCs	Metals	Dissolved Metals	Cyanide	General Chem.
	E94829	CARG990304	7/11/01	E94829-05	Water		X				
	E94829	CARG990104	10/11//2	E94829-06	Water		х				
	E94829	CARGMW5D04	7/11/01	E94829-07	Water		Х				
	E94829	CARGMW5S04	7/11/01	E94829-08	Water		х				
	E94829	CARG990204	7/11/01	E94829-09	Water		Х				
	E94829	CARGMW0704	7/11/01	E94829-10	Water		Х				
	E94945	CARS201004	7/12/01	E94945-01	Soil		Х				
	E94945	CARS202004	7/12/01	E94945-02	Soil		х				
	E94945	CARS203004	7/12/01	E94945-03	Soil		Х				
CARC204004         7/12/01         E94945-05         Field Dup of CARC204004         X         X         X           CARS205002         7/12/01         E94945-07         Soil         X         X         X           CARS205002         7/12/01         E94945-07         Soil         X         X         X           CARS206004         7/12/01         E94945-09         Soil         X         X         X           CARS207002         7/12/01         E94945-10         Soil         X         X         X           CARS209004         7/12/01         E94945-13         Water         X         X         X         X           CARS209004         7/12/01         E94945-13         Water         X         X         X         X           CARGMW0104         7/12/01         E94945-13         Water (filtered metals)         X         X         X         X           CARGMW0104         7/12/01         E94945-14         Water (filtered metals)         X	E94945	CARS204004	7/12/01	E94945-04	Soil		Х				
	E94945	CARC204004	7/12/01	E94945-05	Field Dup of CARC204004		Х				
	E94945	CARS205002	7/12/01	E94945-06	Soil		х				
	E94945	CARS206004	7/12/01	E94945-07	Soil		Х				
	E94945	CARS207002	7/12/01	E94945-08	Soil		x				
	E94945	CARS208004	7/12/01	E94945-09	Soil		Х				
CARS210002 $7/12/01$ E94945-11SoilXXCARGMW0104 $7/12/01$ E94945-13WaterXXXXCARGMW0104 $7/12/01$ E94945-13Water (filtered metals)XXXXCARGMW0604 $7/12/01$ E94945-14Water (filtered metals)XXXXCARGMW0604 $7/12/01$ E94945-14Water (filtered metals)XXXXCARGMW0504 $7/12/01$ E94945-15AWater (filtered metals)XXXXCARGMW0504 $7/12/01$ E94945-15AWater (filtered metals)XXXXCARGMW3504 $7/12/01$ E94945-16AWater (filtered metals)XXXXCARGMW3504 $7/12/01$ <td< td=""><td>E94945</td><td>CARS209004</td><td>7/12/01</td><td>E94945-10</td><td>Soil</td><td></td><td>х</td><td></td><td></td><td></td><td></td></td<>	E94945	CARS209004	7/12/01	E94945-10	Soil		х				
	E94945	CARS210002	7/12/01	E94945-11	Soil		×				
	E94945	CARGMW0104	7/12/01	E94945-13	Water	х	×	Х			X
	E94945	CARGMW0104	7/12/01	E94945-13A	Water (filtered metals)				×		
	E94945	CARGMW0604	7/12/01	E94945-14	Water	Х	Х	Х			Х
CARGMW0504       7/12/01       E94945-15       Water       Mater       X       X       X       X         CARGMW0504       7/12/01       E94945-15A       Water (filtered metals)       X       X       X       X         CARGMW3504       7/12/01       E94945-16A       Water (filtered metals)       X       X       X       X         CARGMW3504       7/12/01       E94945-16A       Water (filtered metals)       X       X       X       X         CARGMW3S04       7/12/01       E94945-17A       Water (filtered metals)       X       X       X       X         CARGMW3S04       7/12/01       E94945-17A       Water (filtered metals)       X       X       X       X         CARGMW3S04       7/12/01       E94945-17A       Water (filtered metals)       X       X       X       X         CARGMW3804       7/12/01       E94945-18       Water (filtered metals)       X       X       X       X         CARGMW0804       7/12/01       E94945-18       Water (filtered metals)       X       X       X       X         CARGMW0804       7/12/01       E94945-18       Water       X       X       X       X       X       X	E94945	CARGMW0604	7/12/01	E94945-14A	Water (filtered metals)				×		
CARGMW0504         7/12/01         E94945-15A         Water (filtered metals)             CARGMW3D04         7/12/01         E94945-16A         Water         X         X         X         X         X           CARGMW3D04         7/12/01         E94945-16A         Water (filtered metals)         X         X         X         X         X           CARGMW3S04         7/12/01         E94945-17         Water (filtered metals)         X         X         X         X         X           CARGMW3S04         7/12/01         E94945-17A         Water (filtered metals)         X         X         X         X         X           CARGMW0804         7/12/01         E94945-18         Water (filtered metals)         X<	E94945	CARGMW0504	7/12/01	E94945-15	Water	×	х	X			×
CARGMW3D04       7/12/01       E94945-16       Water       X       X       X       X         CARGMW3D04       7/12/01       E94945-16A       Water (filtered metals)       X       X       X       X         CARGMW3D04       7/12/01       E94945-17A       Water (filtered metals)       X       X       X       X         CARGMW3S04       7/12/01       E94945-17A       Water (filtered metals)       X       X       X       X         CARGMW3S04       7/12/01       E94945-17A       Water (filtered metals)       X       X       X       X         CARGMW0804       7/12/01       E94945-18       Water       Water       X       X       X       X         CARGMW0804       7/12/01       E94945-19       Field Dup of CARGMW0804       X       X       X       X         CARG990409       7/13/01       E95042-01       Water       X       X       X       X       X	E94945	CARGMW0504	7/12/01	E94945-15A	Water (filtered metals)				X		
CARGMW3D04       7/12/01       E94945-16A       Water (filtered metals)           CARGMW3S04       7/12/01       E94945-17       Water (filtered metals)       X       X       X         CARGMW3S04       7/12/01       E94945-17A       Water (filtered metals)       X       X       X       X         CARGMW3S04       7/12/01       E94945-17A       Water (filtered metals)       X       X       X       X         CARGMW0804       7/12/01       E94945-18       Water       Water       X       X       X       X         CARG90409       7/12/01       E94945-19       Field Dup of CARGMW0804       X       X       X       X       X         CARG990409       7/13/01       E95042-01       Water       X       X       X       X       X       X	E94945	CARGMW3D04	7/12/01	E94945-16	Water	x	Х	х			×
CARGMW3S04         7/12/01         E94945-17         Water         Kater         X         X         X         X           CARGMW3S04         7/12/01         E94945-17A         Water (filtered metals)         X	E94945	CARGMW3D04	7/12/01	E94945-16A	Water (filtered metals)				×		
CARGMW3S04         7/12/01         E94945-17A         Water (filtered metals)	E94945	CARGMW3S04	7/12/01	E94945-17	Water	×	X	Х			×
CARGMW0804         7/12/01         E94945-18         Water           CARHMW0804         7/12/01         E94945-19         Field Dup of CARGMW0804           CARG990409         7/13/01         E95042-01         Water	E94945	CARGMW3S04	7/12/01	E94945-17A	Water (filtered metals)				×		
CARHMW0804         7/12/01         E94945-19         Field Dup of CARGMW0804           CARG990409         7/13/01         E95042-01         Water	E94945	CARGMW0804	7/12/01	E94945-18	Water		×				
CARG990409 7/13/01 E95042-01 Water	E94945	CARHMW0804	7/12/01	E94945-19	Field Dup of CARGMW0804		×				
	E95042	CARG990409	7/13/01	E95042-01	Water		×				

				Table D-1						
				Allaly UVal Summaly				Dissolved		General
SDG	Sample ID	Sample Date	Lab ID	Sample Type/QA Indicator	PCBs	VOCs	Metals	Metals	Cvanide	Chem.
E95042	CARG990410	7/13/01	E95042-02	Water		×				
E95042	CARG990405	10/13/01	E95042-03	Water		Х				
E95042	CARG990406	7/13/01	E95042-04	Water		Х				
E95042	CARH990408	10/21//	E95042-05	Field Dup of CARG990406		Х				
E95042	CARG990408	7/13/01	E95042-06	Water		×				
E95042	CARG990404	7/13/01	E95042-07	Water		Х				
E95042	CARG990407	7/13/01	E95042-08	Water		х				
E95042	CARG990403	7/13/01	E95042-09	Water		х				
E95042	CARG9904B3	10/13/01	E95042-10	Water		X				
E95042	CARG9904B6	7/13/01	E95042-11	Water		x				
E95042	CARG990402	7/13/01	E95042-12	Water		x				
E95042	CARG010804	7/13/01	E95042-13	Water		Х				
E95042	CARG010704	7/13/01	E95042-14	Water		×				
E95042	CARG990401	7/13/01	E95042-18	Water		×			-	
E95042	CARMH03901	7/13/01	E95042-20	Sediment	×					
E95042	CARRM03901	7/13/01	E95042-21	Field Dup of CARMH03901	Х					
E94829	CART071101	7/11/01	E94829-11	Trip Blank		×				
E94945	CART071201	7/12/01	E94945-12	Trip Blank		×				
E95042	CARF071301	7/13/01	E95042-15	Field Blank	X					
E95042	CARE07150P	7/13/01	E95042-16	Water Equipment Rinsate Blank		×				
E95042	CARE0701WL	7/13/01	E95042-17	Soil Equipment Rinsate Blank		×				
E95042	CART071301	7/13/01	E95042-19	Trip Blank		×				
Notes:		-								
PCBs	= Polychi	Polychiorinated biphenyls	vis (PCBs) by SV	(PCBs) by SW-846 Method 8081A						
VOCs	-	e organic compou	inds (VOCs) by	Volatile organic compounds (VOCs) by SW-846 Method 8260B						
Metals		d metals and diss	olved (filtered) 1	Selected metals and dissolved (filtered) metals by SW-846 Method 6010B.						
Cyanide	= Cyanid	Cyanide by SW-846 9012	[2			7(T ¥))		1 TRA 1 7 6 6 7 1 1 6 00 NO NO 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	to the Cr.	1

Cyanide by SW-846 9012 Cyanide by SW-846 9012 General chemistry parameters: fluoride by EPA 300.0, HEM oil and grease by EPA 1664, nitrite by SM 4500-NO<sub>2</sub><sup>-</sup>B, nitrate + nitrite by EPA 353.2, nitrate determined by calculation ([nitrate + nitrite] - nitrite), phenols by EPA 420.2, total organic carbon EPA 415.1, total organic halides SW-846 9020 Sample was analyzed for the method(s) indicated in the column header.

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General Chem.

Attachment D-2 Data Evaluation Worksheets Attachment D-2 Data Evaluation Worksheets Data Evaluation Worksheets Sample Delivery Group E94826

PCBs

Validation	Worksheets	- PCBs
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Site: Carrier Corporation - Thompson Road Facility, Syracuse, NY	Project No. <u>3133-031-05-004-00</u>
SDG # <u>E94826</u> No. Samples <u>8</u> Matrix <u>Sediment</u>	Lab: Accutest - New Jersey
Attach Copy of Flagged Data Tables	
Method Reference: SW846 8082	
CRITERIA MET? YES NO	NONCOMPLIANCE NOTES
Data Completeness / Sample Receipt	Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this review.
I ■ Samples received in good condition	
	If any problems were noted with sample condition or receipt affecting data quality, attach discrepancy report or summarize problems and effects on data.
Hold Times Met water - 7 days to extraction/40 days to analysis; soil - 14 days to extraction/40 days to analysis	Attach list of samples which exceed hold times. Indicate total hold time and qualifiers.
Surrogate Recovery	Attach summary for noncompliant
All recoveries within criteria See attached	surrogate recoveries. Indicate outliers and qualifiers.
Matrix Spike/Matrix Spike Duplicate D Not Applicable	Attach summary for all noncompliant % Recoveries. Circle
MS/MSD performed for each matrix	all outliers and indicate qualifiers.
Recoveries for MS within lab limits See attached	
Recoveries for MSD within lab limits	
RPDs within lab limits	
Laboratory Control Samples (LCS) D Not Applicable	Attach summary for all
LCS %Rs within lab limits	noncompliant % Recoveries. Circle all outliers and indicate qualifiers.
Blanks: Method and Field	Attach copy of method blank summary. List all contaminants,
Method blank performed for each matrix?	concentrations and action levels.
Method blank clean?	Attach copy of results for any
Field blank clean? Not Applicable	associated field. Circle or highlight
Equip. blank clean?     Not Applicable	all contaminants and indicate action level. List all affected samples.

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Cource	RIA MET?			
YES				Noncompliance Notes
Calibr	ration - R	T Windows and Calibr	ation Factors	Attach copy of initial calibration form
đ	Ο	Initial Calibration forms (5-point cal. only require Other Aroclors are based	present for both columns d for Aroclors 1016 and 1260. I on 1 point cal.)	for noncompliant % RSDs Indicate noncompliances, qualifiers, and affected samples.
đ	Ū	Retention time criteria	met for both columns	
Ø		%RSD criteria met	%RSD <20% for ea. compound OR Ave. %RSD for all compounds of <20%	
Calib	ration Ve	rification		Attach copy of verification form
9		Calibration verification (Only required for Arocle	forms present for both columns rs 1016 and 1260)	which does not meet %D criteria. Indicate outliers, qualifiers, and affected samples.
Ø		Retention time criteria	met for both columns	
	IJ	All Arochlor compound %D <15% for ea. compound Ave. %D for all compounds		
Com	pound Id	entification	Not Applicable - all samples were undetected	List all samples with compounds containing peaks outside RT or no 2nd column confirmation. Indicate
9		Arochlors were proper both columns	qualifiers.	
		Retention time criteria	met	
	Duplica	tes	Not Applicable	Identify field duplicate pair and attach list of all compounds with noncompliant RPDs. Indicate
Samp	ole IDs	, Within RPD Criteria	35% water; 50% soil	qualifiers.
			00 / Water, 00 / 000	
Samı	ple IDs			
		Within RPD Criteria	35% water; 50% soil	
Sam	ple Resu	lts		Call (fax) lab for resubmittals. Attach
Ū		Reporting Limits adju sample volumes	sted for %moisture / dilutions /	all resubmittal correspondence to this review.

Reviewer's Signature:

Mantwell Date 10, 17,01

Semivolatile Surrogate Recovery Summary

Job Number:	E94826
Account:	UTC United Technology Corporation
Project:	ENSTNN: Carrier, Syracuse, NY

Method: SW846 8082 Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	SI ª S	S1 <sup>b</sup>	S2 a	S2 <sup>b</sup>	ACTION
E94826-1 E94826-2 E94826-3 E94826-4 E94826-5 E94826-6 E94826-6 E94826-7 E94826-7 E94826-8 OP9779-BS1 OP9779-MS1 OP9779-MSD OP97792-BS1 OP9792-BS1 OP9792-MS1 OP9792-MS1	CD50847.D CD50848.D CD50849.D CD50850.D CD50851.D CD50929.D CD50907.D CD50692.D CD50685.D CD50685.D CD50685.D CD50668.D CD50665.D CD50665.D CD50667.D CD50667.D CD50667.D	72.0       1         63.0       1         78.0       1         60.0       1         58.0       8         71.0       9         61.0       7         82.0       8         86.0       8         62.0       6         57.0       6         79.0       7         80.0       6	94.0         121.0       1         122.0         103.0         83.0         92.0         73.0         84.0         86.0         67.0         64.0         78.0         79.0         76.0         75.0	74.0 172.0* c 103.0 99.0 91.0 75.0 82.0 84.0 83.0 97.0 92.0 84.0 88.0 45.0 119.0 131.0	$ \begin{array}{c} 102.0 \\ 155.0* c \\ 127.0 \\ 291.0* c \\ 116.0 \\ 104.0 \\ 107.0 \\ 77.0 \\ 83.0 \\ 77.0 \\ 90.0 \\ 75.0 \\ 78.0 \\ 82.0 \\ 42.0 \\ 96.0 \\ 95.0 \\ \end{array} $	Positive Aroclor 1254 & 1260 Fragged "J" - No action all Aroclors where Non-detect in this Sample.
Surrogate Compounds S1 = Tetrachlor S2 = Decachlor	-	Recovery Limits 26-126% 23-149%				

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

(c) Outside control limits due to matrix interference.



## Matrix Spike/Matrix Spike Duplicate Summary

Job Number: Account: Project:	E94826 UTC United ENSTNN: C	Technolo	gy Corporatio			•• J					
Sample	File ID	DF	Analyzed	E	3у	Prep D	ate	Prep Bate		nalytical	Batch
OP9792-MS	CD50667.D	1	07/17/01		.LP	07/16/0	01	OP9792		CD1928	
OP9792-MSD	CD50668.D		07/17/01		LP	07/16/0		OP9792		CD1928	1
E93159-1	CD50669.D	1	07/17/01	I	LLP	07/16/	01	OP9792	C	GCD1928	4.
The QC repor	ted here appli	es to the f	following san	nple	s:			Method:	SW840	5 8082	J
E94826-8											
			E93159		Spike	MS	MS	MSD	MSD		Limits
CAS No. C	ompound		ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%	R₽D	Rec/RPD
12674-11-2 A	roclor 1016		ND		80.8	148	(183*	101	126	38* a	60-130/20
11104-28-2 A	roclor 1221		ND			ND		ND		nc	15-178/0
11141-16-5 A	roclor 1232		ND			ND	. •	ND		nc	10-215/2
53469-21-9 A	roclor 1242		ND			ND		ND		nc	39-150/12
12672-29-6 A	roclor 1248		ND			ND	1. 	ND		nc	38-158/12
11097-69-1 A	roclor 1254		ND			ND	a second marginal	ND		BC	29-131/20
11096-82-5 A	roclor 1260		125		80.8	504	(469*	<u>b</u> ) 299	(216*	b)51*b)	) 40-146/2′
CAS No. S	urrogate Reco	veries	MS		MSD	E	93159-1	Limits			
877-09-8 T	etrachloro-m-x	vlene	66%		68%		1%	26-126	%		

2051-24-3	Tetrachloro-m-xylene Tetrachloro-m-xylene Decachlorobiphenyl	66%         68%         94%         26-126%           76%         75%         95%         26-126%           119%         131%         151%* a         23-149%           06%         95%         115%         23-149%
2051-24-3	Decachlorobiphenyl	96% 95% 115% 23-149%

(a) Outside control limits due to matrix interference.

(b) Outside control limits due to presence of other Aroclor pattern.

Spiked sample performed was a batch OC Sample and was not from the Thompson Road Site. Therefore, no action was taken because MS/MSD Outliers may not be representative of site Conditions. Lab control samples were within lab's QC limits Indicating the system was in Control.

Page 1 of 1

#### Matrix Spike/Matrix Spike Duplicate Summary Job Number: F94826

Account: Project:	UTC United Technology Corporation ENSTNN: Carrier, Syracuse, NY									
Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch			
OP9779-MS	CD50687.D	1	07/18/01	LLP	07/13/01	OP9779	GCD1929			
OP9779-MSD	CD50688.D	I	07/18/01	LLP	07/13/01	OP9779	GCD1929			
E94874-2	CD50689.D	1	07/18/01	LLP	07/13/01	OP9779	GCD1929			

The QC reported here applies to the following samples:

Method: SW846 8082

E94826-1, E94826-2, E94826-3, E94826-4, E94826-5, E94826-6, E94826-7

CAS No.	Compound	E94874-2 ug/kg Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1260	ND ND ND ND ND ND	82.6 82.6	114 ND ND ND ND 244	(138*a) (295*a)	)105 ND ND ND ND 345	128 ( 421*a	8 nc nc nc nc nc 34*3	60-130/26 15-178/0 10-215/2 39-150/12 38-158/12 29-131/20 40-146/27
CAS No.	Surrogate Recoveries	MS	MSD	E	94874-2	Limits			
877-09-8 877-09-8 2051-24-3 2051-24-3	Tetrachloro-m-xylene Tetrachloro-m-xylene Decachlorobiphenyl Decachlorobiphenyl	62% 67% 92% 75%	57% 64% 84% 78%	55 82	)% )% !% !%	26-126 26-126 23-149 23-149	% %		

(a) Outside control limits due to matrix interference.

See note on previous page, which also applies to this MS/MSD.



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ECHNOI SYRA Field			
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UNITED		VAL	د <u>د د د د د</u>
þ	5-5-6		
	CAR-F-0713-01 CARF071301 CARF071301 E95042-15 CARF071301 07/17/01 07/17/01 07/17/01 Vater Vater VG/L	342	- 영상 - 양영·양영································
		E95042	
	SMPLE ID CRIGIMAL ID ID FROM REPORT SMPLE DATE DATE EATRACTED DATE AMALYZED MATRIX		
	D D D LLE ID ATE - ATE - ATE -		
	SAMPLE ID> ORIGINAL ID> LAB SAMPLE ID> ID FROM REPOXT> SAMPLE DATE> DATE ENTRACTED> DATE ENTRACTED> DATE ANALYZED>		
	887e8555		
			2223 242 260 254 254 254 254 254 254 254 254 254 254
		meter	Aroclor - 1016 Aroctor - 1221 Aroctor - 1242 Aroclor - 1248 Aroclor - 1260
1		CAS # Parameter	12674-11-2 Aroclor-1016 11104-28-2 Aroclor-1221 11141-16-5 Aroclor-1232 53469-21-9 Aroclor-1248 12672-29-6 Aroclor-1248 11096-82-5 Aroclor-1260 11096-82-5 Aroclor-1260
50		CAS #	12674-11-2 11104-28-2 53469-21-9 53469-21-9 12672-29-6 11096-82-5 11096-82-5
DATALCP3 10/17/01	8		12674-11-2 11104-28-2 53469-21-9-6 12672-29-6 11096-82-5 11096-82-5
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Data File : C:\HPCHEM\1\DATA\CD508 Acq On : 24 Jul 2001 7:42 am Sample : ECC1934-1000 isc : OP9779,GCD1934,1.0,977 ntFile : rteint.p		Vial: 26 Operator: lau Inst : GCC Multiplr: 1.0	D
Data File : C:\HPCHEM\1\DATA\CD508 Acq On : 24 Jul 2001 7:42 am Sample : CC1934-1000 Misc : OP9779,GCD1934,1.0,977 IntFile : rteint2.p		Vial: 26 Operator: lau Inst : GCC Multiplr: 1.0	CD
Method : C:\HPCHEM\1\METHODS Fitle : GC/ECD- PCB Last Update : Thu Jul 19 10:28:04 Response via : Multiple Level Cali	1 2001	tegrator	PY
Min. RRF : 0.000 Min. Rel. Max. RRF Dev : 15% Max. Rel.	Area : 50% Max. Area : 150%	R.T. Dev 0.5	Əmin
Compound	AvgRF CCRF	%Dev Area	
1 S Tetrachloro-m-xylene	54.856 50.907 128.309 119.592 185.110 183.444 85.022 81.640 51.404 51.009 63.490 63.458 148.779 165.487 170.851 192.531 96.575 108.854 94.983 108.412	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.00\\ 0.01\\ 0.01\\ 0.01\\ 0.01\\ 0.02\\ 0.01\\ 0.02\\ 0.01\\ 0.00 \end{array}$
Signal #2		Ave 10D > 15"	lo l
1 STetrachloro-m-xylene0AR1016-ANote1AR1016-BMoactim taken2AR1016-Cfor the Calibratim3AR1016-DVenfication orthers4AR1016-EAll Positive Aroclors5AR1016-FFeforted for the6AR1260-Aassociated Samples7AR1260-BIisted bulow were8AR1260-CFeforted off Column to the second off Colu	$   \begin{array}{r}     67.783 & 104.772 \\     67.393 & 103.878 \\     129.998 & 237.723 \\     1.896 & 2.256 E \\     \hline      \hline     \hline      \hline       $	$\begin{array}{c} -37.5 \# \\ -45.9 \# \\ -45.9 \# \\ 161 \\ -28.0 \# \\ 151 \\ -36.4 \# \\ 148 \\ -59.5 \# \\ 172 \\ -53.2 \# \\ 180 \\ -37.0 \# \\ 150 \\ -71.5 \# \\ 171 \\ -44.9 \# \\ 140 \\ -82.4 \# \\ 171 \\ -54.6 \# \\ 148 \\ -54.1 \# \\ 149 \\ -82.9 \# \\ 179 \\ -19.0 \# \\ 12 \\ F9 \sqrt{826} - \sqrt{and} \\ Founds \end{array}$	$\begin{array}{c} 0.02 \\ \# & 0.02 \\ \# & 0.03 \\ 0.02 \\ \# & 0.02 \\ 0 \# & 0.02 \\ 0 \# & 0.02 \\ 0 \# & 0.03 \\ $
Data File : C:\HPCHEM\1\DATA\CD50 Acq On : 24 Jul 2001 7:42 an Sample : ECC1934-1000 Misc : OP9779,GCD1934,1.0,97	n	Vial: 2 Operator: 1 Inst : G Multiplr: 1	aurap CCD

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Page: 1 Time: 14:59				
Page: Time:	CAR-M-MH76-01 CARMH7601 E94826-6 07/09/01 07/13/01 07/13/01 07/26/01 Sedmrt UG/KG		20. 20. 20. 20. 20.	
	A		22222	
	CAR-M-H256-01 CAR-M-H25601 E94826-5 07/09/01 07/13/01 07/13/01 07/13/01 Sedmnt UG/KG		35. 25. 25. 25. 25. 25. 25. 25. 25. 25. 2	
	4			
N	CAR-M-H116-01 E04826-7 07/09/01 07/13/01 07/13/01 07/13/01 07/25/01 Sedmrt UG/KG		21. 21. 21. 21.	
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TECHNOLOGIES CORPORATION SYRACUSE RFI	CAR-M-H115-01 CARMH11501 E94826-3 07/09/01 07/13/01 07/24/01 5edmnt UG/KG		24. 24. 24. 24. 24. 24. 26.	
OGIE	<			
	CAR-M-H102-01 CARMH10201 E94826-8 07/09/01 07/16/01 07/18/01 Sedant UG/KG		24. 24. 24. 24. 24. 24. 24. 25.	
UNITED	×			
ß	CAR-M-H101-01 CARMH10101 E94826-4 07/09/01 07/13/01 07/24/01 Sedmnt UG/KG		333. 33. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3	
	SAMPLE ID> ORIGINAL ID> LAB SAMPLE ID> SAMPLE DATE> DATE EXTRACTED> DATE ANALYZED> MATRIX> UNITS>			) )
		Parameter	<ul> <li>2 Aroclor-1016</li> <li>2 Aroclor-1221</li> <li>5 Aroclor-1232</li> <li>9 Aroclor-1242</li> <li>6 Aroclor-1248</li> <li>1 Aroclor-1260</li> <li>5 Aroclor-1260</li> </ul>	CUR 10/17/01
DATALCP2 10/17/01	E94826 PCB	CAS #	12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5	

\*\*\* Validation Required \*\*\*

Page: 2 Time: 14:59				
NO				*
JIES CORPORATION SE RFI	e v			Required **
TED TECHNOLOGIES SYRACUSE R		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	 	*** Validation
UNITED	CAR-M-MH77-01 CAR-M-MH7701 CARMMH7701 CAR264-1 07/09/01 07/03/01 07/24/01 Sedmut VG/KG	25. 25. 25. 25. 25. 437. 437.	 	*
	SAMPLE ID> CRIGIMAL ID> LAB SAMPLE ID> SAMPLE DATE> DATE EXTRACTED> MATRIX> UNITS>		je je	
~ ~ ~		Parameter 11-2 Aroclor-1016 28-2 Aroclor-1221 16-5 Aroclor-1232 29-6 Aroclor-1248 29-6 Aroclor-1248 59-1 Aroclor-1268 32-5 Aroclor-1260	Ma 10/17/61	
DATALCP2 10/17/01	E94826 PC8	CAS # 12674-11-2 11104-28-2 11141-16-5 53469-29-6 11097-69-1 11096-82-5	 	

Data Evaluation Worksheets Sample Delivery Group E94827

PCBs

#### Validation Worksheets - PCBs

Site: Carrier Corporation - Thompson Road Facility, Syracuse, NY	Project No. <u>3133-031-05-004-00</u>					
SDG # E94827 No. Samples 14 Matrix Sediment	Lab: Accutest - New Jersey					
Attach Copy of Flagged Data Tables						
Method Reference: SW846 8082						
Method Reference. SW040 8082						
CRITERIA MET?						
YES NO	NONCOMPLIANCE NOTES					
Data Completeness / Sample Receipt	Call (fax) lab for resubmittals. Attach all					
Data Complete	resubmittal correspondence to this review.					
Samples received in good condition	If any problems were noted with sample					
	condition or receipt affecting data					
	quality, attach discrepancy report or summarize problems and effects on					
	data.					
Hold Times Met water - 7 days to extraction/40 days	Attach list of samples which exceed hold times. Indicate total hold time					
to analysis; soil - 14 days to extraction/40 days to analysis	and qualifiers.					
Come and a Denergy	Attach summary for noncompliant					
$\square \square All recoveries within criteria \qquad See attached \\ \square \square \square All recoveries within criteria \qquad No a ction.$	surrogate recoveries. Indicate					
	outliers and qualifiers.					
Matrix Spike/Matrix Spike Duplicate 🔲 Not Applicable	Attach summary for all noncompliant % Recoveries. Circle					
MS/MSD performed for each matrix	all outliers and indicate qualifiers.					
Recoveries for MS within lab limits						
Recoveries for MSD within lab limits						
RPDs within lab limits						
Laboratory Control Samples (LCS)	Attach summary for all noncompliant % Recoveries. Circle					
LCS %Rs within lab limits	all outliers and indicate qualifiers.					
Blanks: Method and Field	Attach copy of method blank					
Method blank performed for each matrix?	summary. List all contaminants, concentrations and action levels.					
Method blank clean?						
9 D Field blank clean? D Not Applicable	Attach copy of results for any					
Equip. blank clean? Solar Applicable	associated field. Circle or highlight all contaminants and indicate action					
	level. List all affected samples.					

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CRITER YES	ia Met? NO			Noncompliance Notes
Calibra	ation - R	T Windows and Calibra	ation Factors	Attach copy of initial calibration form
Ø			present for both columns 1 for Aroclors 1016 and 1260. on 1 point cal.)	for noncompliant % RSDs Indicate noncompliances, qualifiers, and affected samples.
IJ	Ο	Retention time criteria	met for both columns	
		%RSD criteria met	%RSD <20% for ea. compound OR Ave. %RSD for all compounds of <20%	
Calibra	ation Ve	rification	Attach copy of verification form	
		Calibration verification (Only required for Aroclo	forms present for both columns is 1016 and 1260)	which does not meet %D criteria. Indicate outliers, qualifiers, and affected samples.
g		Retention time criteria	met for both columns	
9		All Arochlor compound %D <15% for ea. compound Ave. %D for all compounds		
Compound Identification			Not Applicable - all samples were undetected	List all samples with compounds containing peaks outside RT or no 2nd column confirmation. Indicate
Ū		Arochlors were proper both columns	y identified and quantitated on	qualifiers.
IJ		Retention time criteria		
Field I	Duplicat	es	Not Applicable	Identify field duplicate pair and attach list of all compounds with
Sampl	Sample IDs <u>CARMSM0101</u> ,		CARRSMOID 1	noncompliant RPDs. Indicate qualifiers.
IJ		Within RPD Criteria	35% water; 50% soil	quainers.
Sampl	e IDs			
		Within RPD Criteria	35% water; 50% soil	
Samo	le Resul	ts		Call (fax) lab for resubmittals. Attach
			ted for %moisture / dilutions /	all resubmittal correspondence to this review.

Reviewer's Signature:

Mantwell

Date 10, 17,0/

# Semivolatile Surrogate Recovery Summary

Job Number:	E94827
Account:	UTC United Technology Corporation
Project:	ENSTNN: Carrier, Syracuse, NY

Method:	SW846	8082
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Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 a	S1 <sup>b</sup>	S2 a	S2 <sup>b</sup>	
E94827-1	AB28371.D	79.0	52.0	42.0	47.0	
E94827-2	EF32870.D	57.0	127.0* <sup>c</sup>	88.0	62.0	
E94827-2	AB28357.D	70.0	36.0	87.0	99.0	
E94827-3	AB28358.D	78.0	100.0	86.0	102.0	
E94827-4	AB28359.D	71.0	90.0	80.0	107.0	
E94827-5	AB28362.D	71.0	74.0	79.0	86.0	
E94827-6	EF32871.D	69.0	122.0	140.0	92.0	
E94827-6	AB28363.D	86.0	48.0	81.0	86.0	
E94827-7	AB28364.D	34.0	38.0	42.0	36.0	
E94827-8	CD51015.D	55.0	58.0	114.0	103.0	
E94827-9	EF32869.D	62.0	42.0	41.0	37.0	
E94827-10	AB28366.D	73.0	33.0	42.0	50.0	
E94827-11	AB28367.D	77.0	73.0	43.0	45.0	no action. Only Ar 1260 was reported off this analysis and it was reported off of Column. Therefore, the
E94827-12 PL	EF32872.D	79.0	(199.0* c	) 108.0	89.0 🍣	no action. Hy sanaly sis
E94827-12	AB28368.D	91.0	48.0	47.0	54.0	and twas reported off of
E94827-13	AB28369.D	74.0	42.0	39.0	45.0	Astrony neve fore, the
E94827-14	AB28370.D	94.0	50.0	52.0	50.0	high 90R for TCMX
OP9780-BS1	AB28356.D	93.0	117.0	90.0	120.0	high for fa north
OP9780-MB1	AB28355.D	94.0	126.0	102.0	123.0	m Column 2 does
OP9780-MS	AB28402.D	77.0	93.0	83.0	82.0	not affect reported
OP9780-MSD	AB28403.D	80.0	94.0	81.0	88.0	
OP9880-BS2	CD51014.D	85.0	-93.0	103.0	104.0	results,
OP9880-MB2	CD51013.D	94.0	98.0	110.0	112.0	
OP9880-MS	AB28441.D	64.0	62.0	77.0	83.0	
OP9880-MSD	AB28442.D	64.0	62.0	78.0	81.0	
OP9880-MB1	AB28439.D	77.0	83.0	79.0	81.0	
Surrogate		Recov	+			
Compounds		Limits	6			
S1 = Tetrachlor	o-m-xylene	26-120				

S2 = Decachlorobiphenyl 23-149%

(a) Recovery from GC signal #1

(b) Recovery from GC signal #2

(c) Outside control limits due to dilution.



Page: 1 Time: 12:10		and a second	
RATION			
TECHNOLOGIES CORPORATION SYRACUSE RFI Field QC sample			
UNITED TECH SY Fie		VAL	
	SAMPLE ID> CAR-F-0713-01 ORIGINAL ID> CARF071301 LAB SAMPLE ID> E95042-15 ID FROM REPORT> CARF071301 SAMPLE DATE> 07/13/01 DATE ANALYZED> 07/17/01 DATE ANALYZED> 07/17/01 NATRIX> UG/L	E95042	
		CAS # Parameter	Aroctor-1016 Aroctor-1221 Aroctor-1242 Aroctor-1248 Aroctor-1260
DATALCP3 10/17/01	2	CAS # P	12674-11-2 Aroclor-1016 11104-28-2 Aroclor-1221 11141-16-5 Aroclor-1242 12672-29-6 Aroclor-1248 11096-82-5 Aroclor-1260 11096-82-5 Aroclor-1260

A         U         22:         U         30:         U         30:         U           U         22:         U         22:         U         30:         U         30:         U         20:         U			UNITE		TECHNOLOGIES CORPORATION SYRACUSE RFI	N		Page: 1 Time: 07:44
		SAMPLE ID> ORIGINAL ID> LAB SAMPLE ID> SAMPLE DATE> DATE EXTRACTED> DATE ANALYZED> MATRIX> UNITS>	10-10	CAR-R-SM01-01 CARRSM0101 E94827-2 07/10/01 07/15/01 07/25/01 Sedmt UG/KG	201 201 301 11	CAR-M-SM02-02 CARNSM0202 E94827-4 07/10/01 07/13/01 07/13/01 07/25/01 Sedmnt UG/KG	CAR-M-SM03-01 CARMSM0301 E94827-5 07/10/01 07/13/01 07/13/01 07/26/01 Sedmnt UG/KG	20-02
1     1       1 <td>ameter</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	ameter							
	cclor-1016 cclor-1221 cclor-1232 cclor-1242 cclor-1248 cclor-1264 cclor-1264							
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Page; Time;	CAR-M-SM07-01 E94827-12 07/10/01 07/13/01 07/26/01 07/26/01 07/26/01 07/26/01		21. 21. 21. 21. 21. 21.	
	4			
	CAR-M-SM06-01 CARMSM0601 E94827-11 07/10/01 07/13/01 07/13/01 07/13/01 07/26/01 Sedmnt UG/KG		20, 20, 20, 20, 20, 20, 20, 20, 20,	
	٩			
N	CAR-M-SMD5-02 CARMSMD502 E94827-10 07/10/01 07/13/01 07/13/01 07/13/01 07/13/01 07/13/01 07/13/01 07/13/01 07/13/01		35. 35. 35. 35. 35.	
ATIO	T			
TECHNOLOGIES CORPORATION SYRACUSE RFI	CAR-M-SMD5-01 CARMSH0501 E94827-9 07/10/01 07/13/01 07/26/01 Sedmnt UG/KG		180. 180. 180. 180. 180.	
OGIE	A		כככקכ	
	CAR-M-SM04-02 CARMSM0402 E94827-8 07/10/01 07/28/01 07/30/01 sedmnt UG/KG		8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
UNITED	đ			
5	CAR-M-SM04-01 CARMSM0401 E94827-7 07/10/01 07/13/01 07/13/01 07/13/01 sedmnt UG/KG		47. 47. 47. 47. 47. 800.	
	SAMPLE ID ORIGINAL ID LAB SAMPLE ID SAMPLE DATE DATE EXTRACTED DATE ANALYZED MATRIX			
-		eter	Aroclor-1016 Aroclor-1221 Aroclor-1221 Aroclor-1242 Aroclor-1248 Aroclor-1254 Aroclor-1254	no flags ouc 118/01
		Parameter		Ch II M
DATALCP2 10/18/01	E94827 PCB	CAS #	12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5	γ.

\*\*\* Lab Results \*\*\*

DATALCP2 10/18/01		UNITED		TECHNOLOGIES CORPORATION SYRACUSE RFI		Page: 3 Time: 07:44
E94827 PCB	SAMPLE ID> ORIGINAL ID> LAB SAMPLE ID> SAMPLE DATE> DATE EXTRACTED> DATE ANALYZED> MATRIX>	CAR-M-SM08-01 CAR-M-SM0801 E94827-13 07/10/01 07/13/01 07/26/01 Sedmnt UG/KG A	CAR-M-SM08-02 CARMSM0802 E94827-14 07/10/01 07/13/01 07/13/01 07/26/01 Sedmrt UG/KG			
CAS # Parameter						
12674-11-2 Aroclor-1016 11104-28-2 Aroclor-1221 11141-16-5 Aroclor-1232 53469-21-9 Aroclor-1242 12672-29-6 Aroclor-1248 11097-69-1 Aroclor-1254 11096-82-5 Aroclor-1260		20. 20. 20. 20. 20. 20. 20. 20. 20. 20.	24. 24. 24. 24. 24. 24. 24. 24. 24. 24.			
No Mags						
0118/0)						
			*** Lab Re	Results ***		

Data Evaluation Worksheets Sample Delivery Group E94828

**Volatile Organic Compounds** 

# Validation Worksheets - Volatile Organics

Site: Carr	rier Corporation - Thompson Road Facility, Syracuse, NY	Project No. <u>3133-031-05-004-00</u>					
SDG # <u>E94828</u> No. Samples <u>3</u> Matrix <u>Soic</u> Lab: <u>Accutest - New Jersey</u>							
	py of Flagged Data Tables						
Method Re	eference: SW-846 8260B						
	Method Reference: SW-846 8260B						
CRITERIA N		NONCOMPLIANCE NOTES					
	D Note: Forms cited may be equivalents	Call (fax) lab for resubmittals. Attach					
	Data Complete	all resubmittal correspondence to this					
	Samples received in good condition	review.					
	· · · · · · · · · · · · · · · · · · ·	If any problems were noted with sample condition or receipt affecting data quality, attach discrepancy report or summarize problems and effects on data.					
	Hold Times Met 14 days soil & preserved water, 7 days unpreserved water	Attach list of samples which exceed hold times. Indicate <u>total</u> hold time and qualifiers.					
System N	Ionitoring Compounds Recovery	Attach copy of Form II for all noncompliant surrogate recoveries.					
	Form II present for all samples	Circle all noncompliances and indicate					
	All recoveries within lab criteria	qualifiers.					
Matrix Sp	ike/Matrix Spike Duplicate  Not Applicable MS/MSD performed for each matrix MS %Rs within lab limits	Attach copy of Form III for all noncompliant % Recoveries. Circle all noncompliances and indicate qualifiers.					
		no frage appred based					
	RPDs within lab limits	No flags applied based on prosessional judgment. See attacked explainations.					
Laborato	ry Control Samples (LCS)  Not Applicable LCS %Rs within lab limits	Attach summary for all noncompliant % Recoveries. Circle all outliers and indicate qualifiers.					
Blanks: N	Method - Trip - Field Method blank performed for each matrix?	Attach copy of Form IV for all samples. List all contaminants, concentrations and action level.					
	J Method blank clean?	Attach copy of Form I for any associated field or trip blanks. Circle					
	J Field blank clean? D Not Applicable	all contaminants and indicate action level. List all affected samples.					
	_	acetoxe in CARSW50706					
	Equip. blank clean?	due to equipment black.					
9 C	<b>J</b> Trip blank clean? <b>D</b> Not Applicable	Was flagged "U" due to equipment block. All other samples were unaffected by acetone					
		in the blank be cause they were non-detect.					
	1	whe non-defect.					

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CRITERIA MET	?		Noncompliance Notes
GC/MS Instru	ment Performance Cl	neck (Form V)	Attach copy of Form V for
Ø J	All samples within 12		noncompliant tune. Indicate noncompliances and gualifiers.
go	All BFB m/z within cr	iteria	
GC/MS Initial	Calibration		Attach copy of Form VI for
Ø O	Form VI present for a	all samples	noncompliant % RSD or RRF. Circle each noncompliance and indicate
e o	%RSD criteria met	%RSD <15% for ea. compound OR Ave. %RSD for all compounds of <15%	qualifiers. List all affected samples on Form VI.
Ø O	RRF criteria met	SPCC RRFs >0.1 for: chloromethane, 1,1-DCA, bromoform, >0.3 for chlorobenzene, 1,1,2,2- tetrachloroethane	
GC/MS Conti	nuing Calibration		Attach copy of Form VII for noncompliant %D or RRF. Circle each
Ø D	Form VII (for all sam	ples)	noncompliance and indicate qualifiers.
Q D	%D criteria met	%Ds < 20% for CCCs: 1,1-DCE, chloroform, 1,2-DCP, toluene, ethylbenzene, vinyl chloride OR Ave. %D for all compounds of <20%.	List all affected samples in Form VII.
	RRF criteria met	Same as Initial Calib.	
Internal Stan	dard	****	Attach copy of Form VIII for all
	Form VIII present for	noncompliant areas and RTs. Circle all noncompliances and indicate	
	All IS area within lab	criteria	qualifiers.
	All retention times w		
Field Duplica	ites	I Not Applicable	Identify field duplicate pair and attach list of all compounds with noncompliant RPDs. Indicate qualifiers.
Sample Ids:		1	
	Within RPD Criteria	35% water; 50% soil	
Sample Ids:		1	
	Within RPD Criteria	35% water; 50% soil	
Sample Resu	ilts		Call (fax) lab for resubmittals. Attach
Ø	Reporting Limits adj sample volumes	usted for %moisture / dilutions /	all resubmittal correspondence to this review.

<u>C/Cantwelle</u> Date 101 1810/

DATALCP3		UNLTED		TECHNOLOGIES CORPORATION SYRACUSE RFI	Page: 1 Time: 11:58
10/01/01		Field QC	samples for	Water SDG E94828	
VOA	SAMPLE ID ORIGINAL ID ORIGINAL ID LD FROM REPORT> SAMPLE DATE> DATE ANALYZED> MATRIX> UNITS>	CAR-E-0701-WL CARE0701WL E95042-17 CARE0701WL 07/13/01 07/26/01 Water UG/L	CAR-T-0711-01 CART071101 E94829-11 CART071101 07/1/01 07/16/01 Water UG/L		
CAS # Parameter		E95042 VAL	E94829 VAL		
67-64-1 Acetone 71-43-2 Benzene 75-27-4 Bromodich	Acetone Benzene Bromodichl oromethane	= /0/ 10.1			
	ane a	5. U			
	e (MEK) sulfide	2 2 2 C	ວວສ • • • <del>•</del>		
20-2-2 USEDON LELEAU 108-90-7 Chlorobenzene 77-00-3 Chloroethane	carpon tetracintor rue Chlorobenzene Chloroethane	- 2 2			
	eren Briant Bria				 
	Dibromochloromethane	5. U			
107-06-2 1,2-Dichle 75-35-4 1,1-Dichle	1,2-Dichloroethane 1,1+Dichloroethene	2. 2.			
	cis-1,2-Dichloroethene trans-1,2-Dichloroethene	<b>0</b> ⊂			
	1,2-Dichloropropane cis-1,3-Dichloropropene	⊃ ⊃ : 			 
10061-02-6 trans-1,3-Dichl 100-41-4 Ethytbenzene 501-78-4 5-Uorannee	trans-1,3-Dichloropropene Ethylbenzene 2-Uoronoma				 
	4-Methyl+2-Pentanone (MI8K)		<u>)</u>		
		•			
79-34-5 1,1,2,2-Tetrachlor 127-18-4 Itetrachloroethene	1,1,2,2-Tetrachioroethane Tetrachioroethene				 
108-88-3 Toluene 7425522 11 1277124 Annathane	ch arnathana	1. U U	2°. ℃		 
79-00-5 1,1,2-Tri	1,1,2-Trichloroethane	.⊃ .∞			
	ethene		= -		
(330-20+7 Xytene (total)	orice otal)	- <b></b>			 

## Matrix Spike/Matrix Spike Duplicate Summary

Job	Number:	E94828

Account:	UTC United Technology Corporation
Project:	ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
E94772-14MS	K45044.D	1	07/16/01	DFT	n/a	n/a	VK1557
E94772-14MSE	) K45045.D	1	07/16/01	DFT	n/a	n/a	VK1557
E94772-14	K45043.D	1	07/16/01	DFT	n/a	n/a	VK1557
	111001010	Ŷ	077 207 07	~			

The QC reported here applies to the following samples:

Method: SW846 8260B

E94828-2

	CAS No.	Compound	E94772 ug/kg	-14 Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
	67-64-1	Acetone	58.5		54.5	144	157	147	161	2	5-187/35
		Benzene	ND		54.5	51.4	94	49.3	90	4	64-132/15
		Bromodichloromethane	ND		54.5	39.9	73	32.4	(59* a	21*a)	64-134/15
		Bromoform	ND		54.5	47.0	86	39.3	71	18	53-147/19
	74-83-9	Bromomethane	ND		54.5	48.6	89	43.6	79	11	45-132/19
	78-93-3	2-Butanone (MEK)	ND		54.5	90.1	165	89.3	162	1	27-169/35
	75-15-0	Carbon disulfide	ND		54.5	29.4	54	23.9	43* 3	>21	46-135/21
	56-23-5	Carbon tetrachloride	ND		54.5	50.6	93	51.9	94	2	54-143/19
	108-90-7	Chlorobenzene	ND		54.5	45.9	84	38.7	70	17	56-137/17
	75-00-3	Chloroethane	ND		54.5	56.0	103	53.6	97	4	33-140/22
	67-66-3	Chloroform	ND		54.5	56.4	103	53.6	97	-5	66-130/14
	74-87-3	Chloromethane	ND		54.5	53.3	98	52.2	95	2	46-137/22
	124-48-1	Dibromochloromethane	ND		54.5	43.7	80	36.2	66	(19* a)	61-138/15
	75-34-3	1,1-Dichloroethane	ND		54.5	58.3	107	55.7	101	4	67-131/15
	107-06-2	1,2-Dichloroethane	ND		54.5	52.0	95	47.2	86	10	61-135/14
	75-35-4	1,1-Dichloroethene	ND		54.5	84.2	(154* a	)88.0	(160* a	>₄	60-130/19
	156-59-2	cis-1,2-Dichloroethene	ND		54.5	46.9	86	38.4	70	(20* 1)	63-132/16
	156-60-5	trans-1,2-Dichloroethene	ND		54.5	38.1	70	31.5	57* a	19* a	)63-131/18
	78-87-5	1,2-Dichloropropane	ND		54.5	54.5	100	52.4	95	4	64-132/14
	10061-01-5	cis-1,3-Dichloropropene	ND		54.5	36.6	67	29.6	54* 2	21* 2	58-133/16
		trans-1,3-Dichloropropene	ND		54.5	30.9	57	22.5	41* a	31* ª)	53-138/18
	100-41-4	Ethylbenzene	ND		54.5	48.6	89	43.4	79	П	49-143/20
	591-78-6	2-Hexanone	ND		54.5	67.9	124	60.6	110	11	19-168/33
	108-10-1	4-Methyl-2-pentanone(MIBK)	ND		54.5	56.3	103	53.0	96	6	25-159/27
	75-09-2	Methylene chloride	ND		54.5	50.5	93	43.7	79	14	57-130/15
	100-42-5	Styrene	ND		54.5	42.9	79	34.2	62 (	22* a	44-152/18
	79-34-5	1,1,2,2-Tetrachloroethane	ND		54	ND	<u>()* a</u> )	ND	<u>()* a</u>	nc	41-135/23
	127-18-4	Tetrachloroethene	ND		54.5	79.7	146	73.1	133	9	27-207/27
	108-88-3	Toluene	ND		54.5	50.5	93	47.9	87	5	48-145/16
	71-55-6	1,1,1-Trichloroethane	ND		54.5	53.8	99	53.7	98	0	60-136/19
	79-00-5	1,1,2-Trichloroethane	ND		54.5	15.5	(28* a)	8.1	(15* a)	(63**)	62-131/15
	79-01-6	Trichloroethene	ND		54.5	88.2	(162* a		(152* a		59-146/18
	75-01-4	Vinyl chloride	ND		54.5	54.4	100	52.7	96	. 3.	49-142/20
	1330-20-7	Xylene (total)	1.8	J	164	143	86	125	75 .	.13	45-146/17
11	. /	to La La Car	- 110	1.1.		1.1		4	<b>n</b>		

No action was taken for MS/MSD outliers. The sample used for MS/MSD was not from the Thompson Road Site. Therefore, noaction was taken because MS/MSD outliers may not be representative of site. Also the LCS was within OC limits indicating the sitstem 37 Was in Control.

## Matrix Spike/Matrix Spike Duplicate Summary

Job Number:	E94828
Account:	UTC United Technology Corporation
Project:	ENSTNN: Carrier, Syracuse, NY

Sample	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
E94552-1MS	K44983.D	1	07/14/01	DFT	n/a	n/a	VK1556
E94552-1MSD	K44984.D	1	07/14/01	DFT	n/a	n/a	VK1556
E94552-1	K44982.D	1	07/14/01	DFT	n/a	n/a	VK1556

The QC reported here applies to the following samples:

Method: SW846 8260B

E94828-1, E94828-3

CAS No.	Compound	E94552- ug/kg	-1 Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		51	89.9	176	104	(200* 2)	14	5-187/35
71-43-2	Benzene	ND		51	39.7	78	43.1	83	8	64-132/15
75-27-4	Bromodichloromethane	ND		51	41.0	80	45.2	87	10	64-134/15
75-27-4	Bromoform	ND		51	40.4	79	42.9	82	6	53-147/19
73-23-2	Bromomethane	ND		51	44.8	88	48.0	92	7	45-132/19
78-93-3	2-Butanone (MEK)	ND		51	64.3	126	74.0	142	14	27-169/35
75-15-0	Carbon disulfide	ND		51	33.4	65	36.6	70	9.	46-135/21
56-23-5	Carbon tetrachloride	ND		51	42.7	84	46.6	90	9	54-143/19
108-90-7	Chlorobenzene	ND		51	33.8	66	37.0	71	9	56-137/17
75-00-3	Chloroethane	ND		51	45.0	88	48.1	92	7	33-140/22
67-66-3	Chloroform	ND		51	45.1	88	47.4	91	5	66-130/14
74-87-3	Chloromethane	ND		51	45.8	90	48.9	94	6	46-137/22
124-48-1	Dibromochloromethane	ND		51	41.0	80	46.3	89	12	61-138/15
75-34-3	1,1-Dichloroethane	ND		51	45.3	89	48.9	94	8	67-131/15
107-06-2	1,2-Dichloroethane	ND		51	42.7	84	44.5	86	4	61-135/14
75-35-4	1,1-Dichloroethene	ND		51	41.1	80	44.5	86	8	60-130/19
156-59-2	cis-1,2-Dichloroethene	ND		51	39.2	77	42.1	81	7	63-132/16
156-60-5	trans-1,2-Dichloroethene	ND		51	36.8	72	39.4	76	7	63-131/18
78-87-5	1,2-Dichloropropane	ND		51	43.6	85	46.9	90	7	64-132/14
	cis-1,3-Dichloropropene	ND		51	34.8	68	37.0	71	6	58-133/16
	trans-1,3-Dichloropropene	ND		51	32.0	63	32.0	62	0	53-138/18
100-41-4	Ethylbenzene	ND		51	35.3	69	38.3	74	8	49-143/20
591-78-6	2-Hexanone	ND		51	52.1	102	54.7	105	5	19-168/33
108-10-1	4-Methyl-2-pentanone(MIBK)			51	48.9	96	53.2	102	8	25-159/27
75-09-2	Methylene chloride	ND		51	45.3	89	49.1	94	8	57-130/15
100-42-5	Styrene	ND		51	31.4	62	33.2	64	6	44-152/18
79-34-5	1,1,2,2-Tetrachloroethane	ND		51	36.9	72	37.5	72	2	41-135/23
127-18-4	Tetrachloroethene	ND		51	60.1	118	65.9	127	9	27-207/27
108-88-3	Toluene	ND		51	37.4	73	40.3	78	7	48-145/16
71-55-6	1,1,1-Trichloroethane	ND		51	45.4	89	48.6	93	7	60-136/19
79-00-5	1,1,2-Trichloroethane	ND		51	42.7	84	46.1	89	8	62-131/15
79-01-6	Trichloroethene	ND		51	43.0	84	45.2	87.	5	59-146/18
75-01-4	Vinyl chloride	ND		51	44.4	87	47.8	92	7	49-142/20
1330-20-7	Xylene (total)	ND		153	107	70	118	76	10	. 45-146/17
Mr pata	1. K. Grante	MS	$\nabla$	n Aller	The	San	ple	Used	for	

No action taken for acetore MSD outlier. The sample used for MS/MSD was not from the Mompson Road site. Therefore No action was taken because MS/MSD outlier May not be representative of Site. Also the 2CS was within OC limits Indicating the system was in Control. 33

DATALCP3 10/18/01		UNITED Field QC	TECHNOL( SYRAC samples	DGIES CORPORATION USE RFI for Soil SDG E94828	Page: 1 Time: 11:58
NG	SAMPLE ID> CRIGIMAL ID> LAB SAMPLE ID> ID FROM REPORT> SAMPLE DATE> DATE AMALTZED> MATRIX> UNITS>	CAR-T-0711-01 CART071101 E94829-11 CATT071101 CATT071101 07/11/01 07/11/01 Mater UG/L	CAR-E-0715-0P CAR-0715P E95042-16 E95042-16 CARE0715P 07/15P 07/15P 07/26/01 Water UG/L		
CAS # Parameter		E94829 VAL	E95042 VAL		
<ul> <li>67-64-1 Acetone</li> <li>71-64-1 Acetone</li> <li>71-64-2 Benzene</li> <li>75-27-4 Bromoticruloromethane</li> <li>75-27-8 Bromoticrun</li> <li>75-27-8 Bromoticrun</li> <li>75-25-2 Bromoticrun</li> <li>75-25-2 Bromoticrun</li> <li>75-35-3 Bromoticrun</li> <li>75-90-3 Chlorobenzene</li> <li>75-90-5 Chlorobenzene</li> <li>75-90-5 Chlorobenzene</li> <li>75-54-5 J, 71-Dichlorobethene</li> <li>75-55-5 Listichlorobethene</li> <li>75-95-5 Cis-1, 2-Dichloropethene</li> <li>10064-01-5 Cis-1, 2-Dichloropethene</li> <li>10064-02-6 trans-1, 2-Dichloropethene</li> <li>100-2-6 trans-1, 2-Dichloropethene</li> <li>100-2-6 trans-1</li></ul>	thane thane (oríde atane ane corthene coropene tanone (MIBK) ríde torosthane se thane ene cethane	ישבטער בערבים ביש שיש איי איי איי איי איי איי איי איי א	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
133475036, Kytene (total)			, , ,		

			T JU DOODE NET		
SAMPLE         ID         CAR-S-W561           ORIGINAL         ID         CAR-S-W561           ORIGINAL         ID         CAR-S-W561           LAB         SAMPLE         ID         CAR-S-W561           SAMPLE         ID         CAR-S-W561         07           DATE         OR         07         07         07           DATE         OR         O7         07         07         07           DATE         OR         O7         07         07         07         07         07           UNITS         OF         OG         UG         VG         07         <	CAR-S-W561-10 CARSU56110 E94828+1 07/11/01 07/11/01 07/15/01 Soil	CAR-S-W562-08 CARSW56208 E94828-2 07/11/01 07/16/01 Soil UG/KG	CAR-G-W564-01 CARGW56401 E94828-4 07/11/01 07/16/01 Water Water	CAR-S-W567-06 CARSW56706 E94828-3 07/11/01 07/15/01 07/15/01 07/15/01 A UG/KG A	
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\*\*\* Validation Required \*\*\*

Data Evaluation Worksheets Sample Delivery Group E94828

Metals

#### Validation Worksheets - Metals

Site: <u>Carrier</u> (	Corporation - Thompson Road Facility, Syracuse, NY	Project No. <u>3133-031-05-004-00</u>
SDG # <u>E948</u>	28 No. Samples <u>3</u> Matrix <u>Sorc</u> 1 Water - di	Lab: Accutest - New Jersey
Attach Copy of	f Case Narrative, Lab Sample ID pages, and Flagged Data	a Tables
Method Refere	( 1 8)	46 7470A (solid Hg)
CRITERIA MET	?	
YES NO	NOTE: FORMS CITED MAY BE EQUIVALENTS	NONCOMPLIANCE NOTES
	eness / Sample Receipt	Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this review.
	Data Complete	If any problems were noted with sample
	Samples received in good condition	condition or receipt affecting data quality, attach discrepancy report or summarize problems and effects on data.
	Hold Times Met 6 Mos except Hg (28 days)	Attach list of samples which exceed hold times. Indicate total hold time and qualifiers.
Initial Calibra	tion Verification (Form II-Part 1)	Attach copy of Form II for all
G D	Calibrated daily	noncompliant initial calibration criteria. Circle or highlight noncompliances and
	ICP - Calibration Acceptable (At least a 2 point calibration and %Rs 90-110%)	indicate qualifiers. List all affected samples on Form II.
	Mercury - Calibration Acceptable	If calibration curve is not acceptable,
	(5 point calibration and %Rs 80-120%)	discuss deficiencies and qualifiers.
Continuing C	alibration Verification (Form II Part 1)	Attach copy of Form II for noncompliant cont. calb. stds. Circle or highlight
	Percent recoveries within limits Hg: 80-120%; others: 90-110%	outliers and indicate qualifiers. List all affected samples on Form II.
ICP Interferer	nce Check Sample (Form IV)	Attach copy of Form IV for all
	Performed at the proper frequency?	noncompliant %Rs Circle or highlight outliers & indicate qualifiers.
	All recoveries within criteria 80-120%	ouners & mulcate quamers.
Blanks - Labo	pratory and Field	Attach copy of Form III. Circle or highlight all contaminants associated with
	Lab blanks performed at proper frequency?	samples and indicate action level.
Y U	Initial calibration blanks associated with samples clean?	Attach copy of Form I for any associated
of o	Continuing calibration blank associated with samples	field blank. Circle or highlight all contaminants and indicate action levels.
	clean?	List all affected samples.
Image: Second se	Prep blank performed for each batch/matrix?	
	Prep blank clean?	
	Field blank clean? IV Not applicable	
	Equip. blank clean? IV Not applicable	

CRITERIA MET? YES NO			Noncompliance Notes
Spike Sample	Recoveries (Form V-P Performed at the prop Spike recoveries within See attacked	er frequency per matrix/level? n criteria? 75-125%	Attach copy of Form V for all noncompliant %Rs . Circle or highlight outliers and indicate qualifiers. Note: %Rs are acceptable if elements are detected greater than 4 times the spike level.
	plicates (Form VI) Performed at the prop RPD within criteria See attached	Not Applicable er frequency per matrix/level? <20%	Attach copy of Form V for all noncompliant RPDs. Circle or highlight outliers and indicate qualifiers. Note: RPDs are acceptable if elements are detected at a concentration less than 10 times the IDL.
	ontrol Sample (LCS) (F Performed at the prop %Recoveries within la water ± 20%;	er frequency?	Attach copy of Form VII for all noncompliant %Rs. Circle or highlight outliers and indicate qualifiers.
ICP Serial Dilu	<b>itions (Form IX)</b> Performed at the prop %D within criteria	er frequency per matrix/level? %D <10%	Attach copy of Form IX for all noncompliant %Ds. Circle or highlight outliers and indicate qualifiers. Note: serial dilution is applicable to elements with concentrations greater than 10 times the IDL after dilution. If concentrations are less than 10 times the IDL after dilution, no action is necessary.
Field Duplicat	es	Not Applicable	Identify field duplicate pair and attach list of all compounds with noncompliant RPDs. Indicate qualifiers.
Sample IDs: _	, Within RPD Criteria	35% water; 50% soil	
Sample IDs:	, Within RPD Criteria	35% water; 50% soil	
Sample Resul		Not Applicable Sted for %moisture / dilutions /	Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this review.

Reviewer's Signature:

Date 10, 18, 0/

.....

#### login Number: E94828 Account: UTC - United Technology Corporation Project: UTC16297 - ENSTNN: Carrier, Syracuse, NY

QC Batch ID:   Matrix Type:							ds: SW846 ( ts: mg/kg	5010B	
Prep Date:			07/16/01					07/16/01	
Metal	E94770-4 Original	DUP	RPD	QC Limits	E94770-4 Original	MS	Spikelot MPIRS1	1 Rec	QC Limits
Aluminum									
Antimony	anr								
Arsenic	anr								
Barium									
Beryllium	anr								
Cadmium	anr								
Calcium									
Chromium	anr								
Cobalt									
Copper	37.2	32.6	13.2	0-20	37.2	85.0	54.1	88.3	75-125
Iron									
Lead	184	280	(41.4*(a)	0-20	184	283	108	91.5	75-125
Magnesium				<i>,</i>					
Manganese	91.5	92.1	0.6	0-20	91.5	172	108 (	74.4N(C	)75-125
Molybdenum									
Nickel	17.0	13.2	25.2 (b)	0-20	17.0	118	108	93.3	75-125
Palladium									
Potassium						•			
Selenium	anr							1 - A	
Silicon									
Silver	anr								
Sodium			1.						
Thallium	anr			:					
Tin							·		
Vanadium									
Zinc	anr					1.00	1 and	man	anese " Id "UJ" ated Dample

(\*) Outside of QC limits(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) High rpd due to possible sample nonhomogeneity.(b) RPD acceptable due to low duplicate and sample concentrations.(c) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

#### MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

#### Login Number: E94828 Account: UTC - United Technology Corporation Project: UTC16297 - ENSTNN: Carrier, Syracuse, NY

QC Batch ID: MP15764 Matrix Type: SOLID

Methods: SW846 6010B Units: mg/kg

	E94770-5			QC	 	na ny sa manana amin'ny fanisa dia kaodim-paositra 1999. Ilay kaodim-paositra dia kaodim-pao			
ietal	Original		RPD	Limits					
luminum									
ntimony	anr								
rsenic	anr								
Barium									
Beryllium	anr								
admium.	anr								
alcium									
liromi um	anr								
Cobalt									
Copper	76.6	61.5	21.9*	(a) 0-20					
Iron				·					
Jead	259	163	45.5*	(a) 0-20					
Magnesium									
langanese	180	83.9	72.8*	-{a}))-20					
Molybdenum									
Nickel	26.5	14.4	59.2*	(a) 0-20					
Palladium									
Potassium									
Selenium	anr		· · ·						
Silicon									
Silver	anr								
Sodium									
Thallium	anr								
Tin									
Vanadium					1		Man	6 0	
	anr				Copper and "J" asso	, lead		jurile	2 C

 (anr) Analyte not requested
 (a) High rpd due to possible sample nonhomogeneity. Sample contains large pieces of chunk what appears to be asphalt.

		UNITE	ED TECHNOLOGIES CC SYRACUSE RFI	ES CORPORATION RFI	7	Page: 1 Time: 07:14
	SAMPLE ID> ORIGINAL ID> CRIGINAL ID> LAB SAMPLE ID> SAMPLE DATE> DATE EXTRACTED> DATE ANALYZED> MATRIX>	CAR-S-W561-10 CARSW56110 E94828-1 07/11/01 07/15/01 07/19/01 soil MG/KG A	CAR-S-W562-08 CARSW56208 E94828-2 07/11/01 07/15/01 07/16/01 07/19/01 soil soil soil	CAR-S-W567-06 CARSW56706 E94828-3 07/11/01 07/16/01 07/16/01 07/19/01 07/19/01 Soil MG/KG A		
			1- A HC			
		ы 8.6 2.7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	25 x 25 25 . 4 7 7 7 7	2.5 2.5 2.5 2.7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
6	Mn- Spike office Cow					
3	dup RPD outhers.					
~ \	10/18/01					
1						

\*\*\* Validation Required \*\*\*

DATALCP2 10/18/01		UNITED	D TECHNOLOGIES CORPORATION SYRACUSE RFI	CORPORATION		Page: 1 Time: 07:14
E94828 DISS METAL	SAMPLE ID> ORIGINAL ID> LAB SAMPLE ID> SAMPLE DATE> DATE EXTRACTED> DATE ANALYZED> MATRIX> UNITS>	CAR-G-W564-01 CARCW56401 E94828-4 07/11/01 07/17/07 Water Water UG/L A				
CAS # Parameter						
7440-33-2 Arsenic 7440-47-3 Chromium 7439-89-6 Iron 7439-92-1 Lead 7439-96-5 Manganese 7440-02-0 Nickel 7782-49-2 Selenium	, ,	5.2 13.1 4600. 272. 272. C				
no flags	42- 118101					
		¥ ★ ★ ★	Validation	Required ***		

**General Chemistry** 

#### Validation Worksheets - General Chemistry

Site: Carrier Corporation - Thompson Road Facility, Syracuse, NY	Project No. <u>3133-031-05-004-00</u>
SDG # <u>E94828</u> No. Samples <u>3</u> Matrix <u>Sor</u>	Lab: Accutest - New Jersey
Attach Copy of Case Narrative, Lab Sample ID pages, and Flagged Dat	a Tables
List Method(s)/Method number(s):	
Cyanide (SW-846 9012)	
CRITERIA MET? YES NO	NONCOMPLIANCE NOTES
Data Completeness / Sample Receipt	Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this review.
<ul> <li>Data Complete</li> <li>Samples received in good condition</li> </ul>	If any problems were noted with sample condition or receipt affecting data quality, attach discrepancy report or summarize problems and effects on data.
Hold Times Met	Attach list of samples which exceed hold times. Indicate total hold time and qualifiers.
Matrix Spike/Matrix Spike Duplicate       Instruction         Image: Spike Spi	List noncompliant %Rs and RPDs or attach form. Indicate all noncompliances and qualifiers.
Laboratory Duplicate  Not Applicable	
RPDs within lab limits	
Blanks: Method - Trip - Field	Attach copy of Form IV (or equiv.) for all samples. List all contaminants, concentrations and action level.
Method blank performed for each matrix?	
Method blank clean?	Attach copy of Form I (or equiv.) for any associated field or trip blanks. Circle all contaminants and indicate action level. List all
Image: Second state	affected samples.
Equip. blank clean?     Inot Applicable	
Field Duplicates	Identify field duplicate pair and attach list of all compounds with noncompliant RPDs. Indicate gualifiers.
Sample IDs:,,,,, Within RPD Criteria 35% water; 50% soil	
Sample Results     Invite Not Applicable       Image: Straig Limits adjusted for %moisture / dilutions / sample volumes	Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this review.

1 07:13			
Page: 1 Time: 07:13			
ATION	×		C
TECHNOLOGIES CORPORATION SYRACUSE RFI	CAR-S-W567-06 CARSW56706 E94828-3 07/11/01 07/21/01 07/23/01 07/23/01 Soil		
GIES ( JSE RF	CAR- CARS E948 07/1 07/2 07/2 07/2 Soil		
CHNOLOGIES CC SYRACUSE RFI	562-08 208 2208		
	CAR-S-W562-08 CAR-S-W56208 CARSW56208 E04828-2 07/11/01 07/23/01 07/23/01 Soil MG/KG		
UNITED	A A		
	CAR-S-W561-10 CARSW56110 E94828-1 07/11/01 07/21/01 07/23/01 07/23/01 soil		
	SAMPLE ID ***********************************		
	SAV DAT		18/01
		Parameter	no flags no flags
DATALCP2 10/18/01	E94828 CYANIDE	CAS # P	Jo 4
DATA 10/1		3	

Volatile Organic Compounds

#### Validation Worksheets - Volatile Organics

Site: Carrier Corporation - Thompson Road Facility, Syracuse, NY Project No. 3133-031-05-004-00

SDG # E94829 No. Samples 11 Matrix WATER Lab: Accutest - New Jersey

Attach Copy of Flagged Data Tables

Method Reference: SW-846 8260B

CRITER YES	RIA MET	? Note: Forms cited may be equivalents	NONCOMPLIANCE NOTES
Data C	Complet	teness / Sample Receipt Data Complete Samples received in good condition	Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this review. If any problems were noted with sample condition or receipt affecting data quality, attach discrepancy report or summarize problems and effects on data.
Ø		Hold Times Met 14 days soil & preserved water, 7 days unpreserved water	Attach list of samples which exceed hold times. Indicate <u>total</u> hold time and qualifiers.
Systen IY IY	n Moni	toring Compounds Recovery Form II present for all samples All recoveries within lab criteria	Attach copy of Form II for all noncompliant surrogate recoveries. Circle all noncompliances and indicate qualifiers.
Matrix	Spike/	Matrix Spike Duplicate D Not Applicable MS/MSD performed for each matrix MS %Rs within lab limits MSD %Rs within lab limits RPDs within lab limits	Attach copy of Form III for all noncompliant % Recoveries. Circle all noncompliances and indicate qualifiers.
Labora	atory C	ontrol Samples (LCS) D Not Applicable LCS %Rs within lab limits	Attach summary for all noncompliant % Recoveries. Circle all outliers and indicate qualifiers.
Blanks	s: Meth	od - Trip - Field         Method blank performed for each matrix?         Method blank clean?         Field blank clean?         Field blank clean?         Equip. blank clean?         Trip blank clean?         Not Applicable         Trip blank clean?	Attach copy of Form IV for all samples. List all contaminants, concentrations and action level. Attach copy of Form I for any associated field or trip blanks. Circle all contaminants and indicate action level. List all affected samples.

CRITEI YES	RIA MET' NO	?		Noncompliance Notes
GC/M	S Instru	iment Performance C	Check (Form V)	Attach copy of Form V for
Ø		All samples within 1		noncompliant tune. Indicate noncompliances and gualifiers.
I		All BFB m/z within c		noncomplances and qualitiers.
<u></u>				
GC/M	S Initial	Calibration		Attach copy of Form VI for
V		Form VI present for	all samples	noncompliant % RSD or RRF. Circle each noncompliance and indicate
বি		%RSD criteria met	%RSD <15% for ea. compound OR Ave. %RSD for all compounds of <15%	qualifiers. List all affected samples on Form VI.
Ø	٦	RRF criteria met	SPCC RRFs >0.1 for: chloromethane, 1,1-DCA, bromoform. >0.3 for chlorobenzene, 1,1,2,2-tetrachloroethane	
GC/M	S Conti	nuing Calibration		Attach copy of Form VII for
দ		Form VII (for all sar	nples)	noncompliant %D or RRF. Circle each noncompliance and indicate qualifiers.
র্ত্র	Ο	%D criteria met	%Ds < 20% for CCCs: 1,1-DCE, chloroform, 1,2-DCP, toluene, ethylbenzene, vinyl chloride OR Ave. %D for all compounds of <20%.	List all affected samples in Form VII.
Ø		RRF criteria met	Same as Initial Calib.	
Intern	al Stan	dard		Attach copy of Form VIII for all
đ	٦	Form VIII present for	or all samples	noncompliant areas and RTs. Circle all noncompliances and indicate
Y		All IS area within la	·	qualifiers.
T		All retention times v	vithin lab criteria	
	Duplica		Not Applicable	Identify field duplicate pair and attach list of all compounds with noncompliant RPDs. Indicate
Sample IDs: <u>CARGOOD604</u> , <u>CAR</u>				qualifiers.
		Within AFD Officia	55% water, 50% Soli	
Samp	le IDs:			
	<u> </u>	Within RPD Criteria	a 35% water; 50% soil	
Samp ப	le Resu		justed for %moisture / dilutions /	Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this review.
Revie	wer's Si	gnature:		

Altays	Date101701	
-v		

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Page: 2 Time: 10:35			
N			
IES CORPORATION SE RFI Field Blanks		e du le du le	
) TECHNOLOG SYRACUS ipment and	CAR-E-0715-0P CARE0715P E95042-16 CARE0715P CARE0715P 07/13/01 Water UG/L	Sort Hank	
Equ	CAR-E-0701-WL CARE0701WL E E05042-17 CARE0701WL CARE0701WL 07/13/01 07/13/01 07/13/01 07/26/01 Water UG/L B	<b>6</b> <b>7</b> <b>7</b> <b>7</b> <b>7</b> <b>7</b> <b>7</b> <b>7</b> <b>7</b> <b>7</b> <b>7</b>	
	SAMPLE ID> CRIGINAL ID> CRIGINAL ID> LAB SAMPLE ID> ID FROM REPORT> SAMPLE DATE> DATE ANALYZED> DATE ANALYZED>	Acetone Benzene Bromodichloromethane Bromodichloromethane Bromomethane Carbon disulfide Carbon disulfide Carbon tetrachloride Chlorobenzene Chlorobenzene Chloromethane Chloromethane (1,1-Dichloroethane (1,2-Dichloroethane (1,2-Dichloroethene (1,2-Dichloroethene (1,2-Dichloropene (1,2-Dichloropene (1,2-Dichloropene (1,2-Dichloropene (1,2-Dichloropene (1,2-Dichloropene (1,2-Dichloropene (1,2-Dichloropene (1,2-Dichloropene (1,2-Dichloropene (1,2-Dichloropene (1,2-Dichloropene (1,2,2-Tetrachloroethane (1,1,2,2-Tetrachloroethane (1,1,2,1-Trichloroethane (1,1,1-Trichloroethane (1,1,1-Trichloroethane	1,1,2-Trichloroethane Trichloroethene Vinyl chloride Xylehe (total)
DATALCP3 10/17/01	VOA	67-64-1 Acc 71-43-2 Brr 75-27-4 Brr 75-27-4 Brr 75-25-2 Brr 75-25-2 Brr 75-93-3 2-4 75-90-3 Chi 75-95-5 Cal 75-65-3 Chi 75-35-4 1,1 75-35-4 1,1 75-35-4 1,1 75-55-5 Cal 75-55-5 -5 Cal 75-55-50-5 Cal 75-55-50-5 Cal 75-55-50-5 Cal 75-55-50-5 Cal 75-55-50-5 Cal 75-55-50-50-5 Cal 75-55-50-50-5 Cal 75-55-50-50-5 Cal 75-55-50-50-50-50-50-50-50-50-50-50-50-50	79-00-5 1, 1 79-01-6 Tri 75-01-4 Vir 1330-20-7 XyU

LS CORPORATION RFI Time: 12:18	CAR-G-9901-04         CAR-G-9902-04         CAR-G-9903-04         CAR-G-9407-04           CARG990104         CARG990204         CARG990304         CARG90704           CARG990104         E94829-9         E94829-9         E94829-10           07/11/01         07/11/01         07/11/01         07/11/01         07/11/01           07/11/01         07/11/01         07/11/01         07/11/01         07/11/01           07/11/01         07/11/01         07/11/01         07/11/01         07/11/01           07/11/01         07/11/01         07/11/01         07/11/01         07/11/01           Water         Mater         Mater         Mater         A         Mater	7.       45.0       45.0       45.0         7.       7.       7.       7.       7.         7.       7.       7.       7.       7.       7.         7.       7.       7.       7.       7.       7.       7.         7.       7.       7.       7.       7.       7.       7.       7.       7.         7.
UNITED TECHNOLOGIES SYRACUSE R	CAR-H-0006-04 CARHD00604 E94829-4 07/11/01 07/11/01 07/16/01 Water A UG/L A	
Ð	SAMPLE ID         CAR-6-0006-04           ORIGINAL ID         CAR-6-000604           LAB SAMPLE ID         CAR-6000604           LAB SAMPLE DATE         CAR-6-000604           DATE ANALYZED         07/11/01           DATE ANALYZED         07/16/01           MATRIX         Water           UNITS         UG/L	Parameter       7.2         Acetone       7.2         Benzerie       7.2         Bernodichloromethane       4.         Bromomethane       7.         Bromomethane       7.         Bromomethane       7.         Bromomethane       5.         Bromomethane       5.         Bromomethane       5.         Carbon fetrachloride       5.         Carbon fetrachloride       5.         Carbon fetrachloroethane       5.         Chloroethane       1.         Dichloroethane       5.         Dichloroethane       6.         1.1.5.Dichloroethane       1.         1.2.Dichloroethane       6.         1.2.Dichloroethane       6.         1.2.Dichloroethane       6.         1.2.Dichloroethane       6.         1.2.Dichloroethane       6.         1.2.Dichloroethane       7.         Stytene       6.         Stytene       6.         1.1.2.Dichloroethane       7.         1.2.2.Dichloroethane       7.         1.2.2.Dichloroethane       7.         1.2.2.Dichloroethane       7.         1.2.2.Dichlorooethane
DATALCP2 10/18/01	E94829 VOA	CAS # Parameter 67-64-1 Acetone 71-43-2 Benzene 71-43-2 Benzene 71-43-2 Bromodichloromethane 75-27-4 Bromomethane 75-27-4 Bromomethane 76-00-3 Chlorobenzene 78-93-3 2-Butañone (MEK) 75-15-0 Carbon disulfide 56-23-5 Carbon tetrachloride 108-90-7 Chlorobenzene 75-00-3 Chlorobenzene 75-00-3 Chlorobenzene 75-00-3 Chlorobenzene 75-00-3 Chlorobenzene 75-00-3 Chlorobenzene 75-00-3 Chlorobenzene 75-00-3 Chlorobenzene 75-55-4 1,1-Dichloroethane 75-55-4 1,1-Dichloroethane 75-55-2 cis-1,2-Dichloroethane 124-48-1 Dibromochloromethane 75-55-4 1,1-Dichloroethane 75-55-4 1,1-Dichloroethane 75-55-4 1,1-Dichloroethane 75-55-57-5 cis-1,2-Dichloropropene 10061-01-5 cis-1,2-Dichloroethane 76-01-4 tethylenzene 10061-01-5 cis-1,2-Dichloroethane 77-75-55 1,1,2-Tetrachloroethane 77-138-4 Tetrachloroethane 77-138-4 Tetrachloroethane 77-138-4 Tetrachloroethane 77-138-5 1,1,2-Tetrachloroethane 77-130-20-7 Xylene (total) 1330-20-7 Xylene (total)

**Volatile Organic Compounds** 

## Validation Worksheets - Volatile Organics

Site: Carrier Corporation - Thompson Road Facility, Syrac				
SDG # <u>E94945</u> No. Samples <u>11</u> Matrix 8	50/C Lab: Accutest - New Jersey			
8 Attach Copy of Flagged Data Tables	water			
Method Reference: SW-846 8260B				
CRITERIA MET? YES NO NOTE: FORMS CITED MAY BE EQUIVALENTS	NONCOMPLIANCE NOTES			
Data Completeness / Sample Receipt	Call (fax) lab for resubmittals. Attach			
D Data Complete	all resubmittal correspondence to this review.			
Samples received in good condition	If any problems were noted with sample condition or receipt affecting data quality, attach discrepancy report or summarize problems and effects on data.			
Hold Times Met 14 days soil & preserved w unpreserved water	vater, 7 days Attach list of samples which exceed hold times. Indicate total hold time and qualifiers.			
System Monitoring Compounds Recovery	Attach copy of Form II for all			
Form II present for all samples	noncompliant surrogate recoveries. Circle all noncompliances and indicate			
All recoveries within lab criteria	qualifiers.			
Matrix Spike/Matrix Spike Duplicate D Not Applicabl	e Attach copy of Form III for all noncompliant % Recoveries. Circle all			
MS/MSD performed for each matrix	noncompliances and indicate qualifiers.			
MS %Rs within lab limits	A LA DIA DAG IN SAMPLE			
	tached CARGMW3504 was flagged "J."			
RPDs within lab limits				
Laboratory Control Samples (LCS) INot Applicable LCS %Rs within lab limits	le Attach summary for all noncompliant % Recoveries. Circle all outliers and indicate qualifiers.			
Blanks: Method - Trip - Field	Attach copy of Form IV for all samples.			
Method blank performed for each matrix?	List all contaminants, concentrations and action level.			
Method blank clean?	Attach copy of Form I for any associated field or trip blanks. Circle			
Field blank clean?     Not Applicab	Acetone detected in the			
Equip. blank clean? Not Applicab	le see attached. le vipment blank oid not affect sample results because no			
Trip blank clean? 🗍 Not Applicab	le samples contained acetore			

CRITERIA MET YES NO	?		Noncompliance Notes
	iment Performance C	heck (Form V)	Attach copy of Form V for
O' O	All samples within 1	• •	noncompliant tune. Indicate noncompliances and qualifiers.
0 0	All BFB m/z within c		
GC/MS Initial	Calibration		Attach copy of Form VI for noncompliant % RSD or RRF. Circle
U D	Form VI present for	all samples	each noncompliance and indicate
0 0	%RSD criteria met	%RSD <15% for ea. compound OR Ave. %RSD for all compounds of <15%	qualifiers. List all affected samples on Form VI.
90	RRF criteria met	SPCC RRFs >0.1 for: chloromethane, 1,1-DCA, bromoform. >0.3 for chlorobenzene, 1,1,2,2- tetrachloroethane	
GC/MS Cont	inuing Calibration		Attach copy of Form VII for noncompliant %D or RRF. Circle each
	Form VII (for all sar		noncompliance and indicate qualifiers. List all affected samples in Form VII.
9	%D criteria met	%Ds < 20% for CCCs: 1,1-DCE, chloroform, 1,2-DCP, toluene, ethylbenzene, vinyl chloride OR Ave. %D for all compounds of <20%.	
go	RRF criteria met	Same as Initial Calib.	
Internal Star	idard		Attach copy of Form VIII for all noncompliant areas and RTs. Circle
	Form VIII present f	or all samples	all noncompliances and indicate
	All IS area within la	b criteria	qualifiers.
g o	All retention times	within lab criteria	
Field Duplic	ates	O Not Applicable	Identify field duplicate pair and attach list of all compounds with noncomplian
Sample Ids:	CARS204004	CARC204004	RPDs. Indicate qualifiers.
g d	Within RPD Criteria	<i>, , ,</i>	
Sample Ids:	CARGMWD8DU	CARHMW0804	
	Within RPD Criteria	<i>,</i>	
Sample Res	ults		Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this
ØO	Reporting Limits ac sample volumes	djusted for %moisture / dilutions /	review.
Reviewer's S	sample volumes		

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DATALCP3 10/17/01		UNITED Field QC	1 0	TECHNOLOGIES CORPORATION SYRACUSE REI amples for Water SDG E94945	Page: 1 Time: 12:08
Ş	SAMPLE ID> COLIGINAL ID> LAB SAMPLE ID> LAB SAMPLE DI> SAMPLE DATE> DATE AMALYZED> MATRIX>	CAR+E-0701-WL CARE0701VL E95042-17 CARE0701WL 07713/01 07713/01 Mater UG/L	CAR-T-0712-01 CART071201 CART071201 E9495-12 CART071201 07/12/01 07/12/01 07/20/01 Water UG/L		
CAS #	CAS # Parameter	E95042 NV	E94945 NV		
67-64-1 71-43-2 75-27-4 75-27-4 78-93-3 78-93-3 75-15-0 76-23-5 75-15-0 75-05-3 108-90-7 156-65-5 107-66-5 156-65-5 156-65-5 156-65-5 156-65-5 156-65-5 156-65-5 156-65-5 106-101-5 75-09-2 106-101-5 75-09-2 100-41-4 75-09-2 100-41-6 75-09-2 100-41-6 75-09-2 100-41-6 75-09-2 100-41-6 75-09-2 75-09-2 100-41-6 75-09-2 75		$\frac{1}{20}$	พระรังพพพรงพพพพพพพพพพพพพพพพพ 		
2-30-52 	1,1,1-Tr 1,1,2-Tr Trichlor Vinyt ch Xytene (	<b>K K F - - - - - - - - - -</b>	。 、 、 、 、 、 、 、 、 、 、 、 、 、		
	with all water Samp	las-			

DATALCP3 10/17/01	UNITED	ED TECHNOLOGIES SYRACUSE R	ES CORPORATION		Page: 1 Time: 12:09
	Field Q(	c sam	Soil SDG E94945	145 	
VOA SAMPLE ID ORIGINAL ID CAROLLE ID LUB SAMPLE ID ID FROM REPORT SAMPLE DATE AMALYZED DATE AMALYZED	CAR-1-0712-01 CAR-1-071201 CAR1071201 E94945-12 CAR1071201 07/12/01 07/22/01 Water UG/L	CAR-E-0715-0P CARE0715P CARE0715P E95042-16 CARE0715P 07/13/01 07/13/01 Hater Water			
CAS # Parameter	E94945 NV	E95042 NV			
67-64-1 Acetone 71-43-2 Benzene 75-27-4 Bronodichloromethane	5. U 1. U 1.	AL=76 7.6			
Bromomethane 2-811ranone (ME)	s 5.	5. 5.			
Carbon disulfide					
contentanto Chlorobenzene Actourstanto	- <b>-</b> -	u ⊂ (			 
67-66-3 Chicopoetratie	<b>3</b> in K	<u>ب</u> د د			 
Dibromochlorometha	້ ທີ່ ເ		-		
1,1-UICHIOFORTANE 1,2-Dichloroethane	å <b>č</b>				 
75-55-4 11,1-Dichloroethene 156-59-2 eis-1,2-Dichloroethene	N N.	י בי ב	· · · · ·		 
	<b>.</b>				
		<b>5 5</b>			
10064144 Ethylbenzene 591-78-6 [2-Hexanone	5. U	5. U			 
108-10-1 4-Hethyl-2-Pentanone (MIBK) 75-00-2 Methylene chloride	2. III.	5. 2. U	- - -		 
79-34-5 1, 1, 2, 2-Tetrachloroethane 127-18-4 Tetrachloroethene	2. U				
		••••			 
71555:611,111 Thichloroethane 79-00-511.1.2-Trichloroethane		3°. C			
*****					 
75-01-4 Vinyl chloride 1330-20-7 Xylene (total)					
	R				 
dord damples'					

Job Number:	E94945
Account:	UTC United Technology Corporation
Project:	ENSTNN: Carrier, Syracuse, NY

Sample E94945-17MS E94945-17MSD E94945-17	File ID E47350.D E47351.D E47348.D	DF 20 20 20	Analyzed 07/20/01 07/20/01 07/20/01	By GTT GTT GTT	Prep Date n/a n/a n/a	Prep Batch n/a n/a n/a	Analytical Batch VE2519 VE2519 VE2519 VE2519
						<u></u>	

The QC reported here applies to the following samples:

Method: SW846 8260B

E94945-12, E94945-13, E94945-14, E94945-15, E94945-16, E94945-17, E94945-18, E94945-19

CAS No.	Compound	E94945- ug/I	-17 Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		1000	990	99	1000	100	1	21-160/30
71-43-2	Benzene	ND		1000	1200	120	1090	109	10	61-138/11
75-27-4	Bromodichloromethane	ND		1000	1090	109	1020	102	7	75-130/12
75-25-2	Bromoform	ND		1000	869	87	936	94	7	59-136/14
74-83-9	Bromomethane	ND		1000	1040	104	1140	114	9	65-143/18
78-93-3	2-Butanone (MEK)	ND		1000	915	92	929	93	2	41-141/29
75-15-0	Carbon disulfide	ND		1000	847	85	892	89	5	55-134/24
56-23-5	Carbon tetrachloride	ND		1000	966	97	974	97	1	69-143/17
108-90-7	Chlorobenzene	ND		1000	1020	102	1030	103	1	83-124/12
75-00-3	Chloroethane	ND		1000	1190	119	1270	127	6	66-147/19
67-66-3	Chloroform	ND		1000	1050	105	1040	104	1	76-128/12
74-87-3	Chloromethane	ND		1000	968	97	1120	112	14	59-136/23
124-48-1	Dibromochloromethane	ND		1000	937	94	985	98	5	69-130/13
75-34-3	1,1-Dichloroethane	164		1000	1240	108	1220	106	2	73-130/14
107-06-2	1,2-Dichloroethane	ND		1000	993	99	933	93	6	67-138/12
75-35-4	1,1-Dichloroethene	38.3	J	1000	1140	110	1100	106	4	72-134/17
156-59-2	cis-1,2-Dichloroethene	5780		1000	6500	72*1	5880	(10* a)		73-131/14
156-60-5	trans-1,2-Dichloroethene	13.9	J	1000	1080	107	1020	101	6	71-129/16
78-87-5	1,2-Dichloropropane	ND		1000	1200	120	1090	109	10	77-127/13
10061-01-5	cis-1,3-Dichloropropene	ND		1000	1050	105	1020	102	3	75-125/12
10061-02-6	trans-1,3-Dichloropropene	ND		1000	1090	109	1020	102	7	73-125/13
100-41-4	Ethylbenzene	ND		1000	1040	104	1050	105	1	68-139/12
591-78-6	2-Hexanone	ND		1000	1100	110	997	100	10	47-141/22
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1160	116	1080	108	7	68-131/18
75-09-2	Methylene chloride	ND		1000	1090	109	1050	105	4	69-132/13
100-42-5	Styrene	ND		1000	1050	105	1070	107	2	76-133/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		1000	971	97	1010	101	4	72-127/12
127-18-4	Tetrachloroethene	ND		1000	1100	110	1070	107	3	55-149/13
108-88-3	Toluene	ND		1000	1160	116	1080	108	7	55-147/12
71-55-6	1,1,1-Trichloroethane	ND		1000	1090	109	1050	105	4	72-135/14
79-00-5	1,1,2-Trichloroethane	ND		1000	1200	120	1100	110	9	78-131/11
79-01-6	Trichloroethene	ND		1000	1130	113	1040	104	• 8	77-132/13
75-01-4	Vinyl chloride	567		1000	1390	82	1520	95	9	63-138/18
1330-20-7	Xylene (total)	ND		3000	3190	106	3200	107	0	57-146/12
Action	CIS-12-DE WAS	LIARD	arl	"J ',	1 UNSF	IKed So	inpl		14	. I.

Action: Cis-1,2-DCE was flagged "J'in UNSPIKEd Sample CHRGMW 3504 (E94945-17) due to potential matrix effects atmough the concentration in the sample was high relative to the spike american. LCS results indicated (ab was in control.

Job Number: Account: Project:			ogy Corporation Syracuse, NY	1			
Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
E94945-1MS	K45279 D	1	07/23/01	DFT	n/a	n/a	VK1562
E94945-1MSD	K45280.D	1	07/23/01	DFT	n/a	n/a	VK1562
E94945-1	K45289.D	1	07/23/01	DFT	n/a	n/a	VK1562

The QC reported here applies to the following samples:

Method: SW846 8260B

E94945-1, E94945-2, E94945-4, E94945-6, E94945-7, E94945-8, E94945-9, E94945-10, E94945-11

CAS No.	Compound	E94945- ug/kg	-1 Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		60	122	203*.ª	)134	(223* a	),	5-187/35
71-43-2	Benzene	ND		60	43.9	73	47.2	79	7	64-132/15
75-27-4	Bromodichloromethane	ND		60	45.9	76	50.7	84	10	64-134/15
75-25-2	Bromoform	ND		60	39.2	65	46.2	77	16	53-147/19
74-83-9	Bromomethane	ND		60	46.9	78	51.2	85	9	45-132/19
78-93-3	2-Butanone (MEK)	ND		60	65.6	109	73.6	123	11	27-169/35
75-15-0	Carbon disulfide	ND		60	46.1	77	46.8	78	2	46-135/21
56-23-5	Carbon tetrachloride	ND		60	46.9	78	47.6	79	1	54-143/19
108-90-7	Chlorobenzene	ND		60	36.4	61	41.7	70	14	56-137/17
75-00-3	Chloroethane	ND		60	53.7	90	53.8	90	0	33-140/22
67-66-3	Chloroform	ND		60	50.7	84	53.9	90	6	66-130/14
74-87-3	Chloromethane	ND		60	51.7	86	55.5	92	7	46-137/22
124-48-1	Dibromochloromethane	ND		60	42.7	71	48.5	81	13	61-138/15
75-34-3	1,1-Dichloroethane	ND		60	52.9	88	54.6	91	3	67-131/15
107-06-2	1,2-Dichloroethane	ND		60	48.5	81	53.3	89	9	61-135/14
75-35-4	1,1-Dichloroethene	ND		60	49.8	83	50.2	84	1	60-130/19
156-59-2	cis-1,2-Dichloroethene	ND		60	48.2	80	51.5	86	7	63-132/16
156-60-5	trans-1,2-Dichloroethene	ND		60	46.9	78	50.5	84	7	63-131/18
78-87-5	1,2-Dichloropropane	ND		60	47.7	80	52.7	88	10	64-132/14
10061-01-	cis-1,3-Dichloropropene	ND		60	38.3	64	44.7	74 (	) 15	58-133/16
10061-02-0	5 trans-1,3-Dichloropropene	ND		60	35.0	58	42.9	72 ∽	(20* a)	53-138/18
100-41-4	Ethylbenzene	ND		60	38.3	64	42.9	72	11	49-143/20
591-78-6	2-Hexanone	ND		60	33.1	55	41.1	68	22	19-168/33
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		60	47.3	79	55.3	92	16	25-159/27
75-09-2	Methylene chloride	ND		60	51.9	86	56.1	94	8	57-130/15
100-42-5	Styrene	ND		60	32.3	54	38.0	63	16	44-152/18
79-34-5	1,1,2,2-Tetrachloroethane	ND		60	48.7	81	56.5	94	15	41-135/23
127-18-4	Tetrachloroethene	ND		60	51.4	86	57.4	96	11	27-207/27
108-88-3	Toluene	ND .		60	41.6	69	46.4	77	11	48-145/16
71-55-6	1,1,1-Trichloroethane	ND		60	50.6	84	51.2	85	1	60-136/19
79-00-5	1,1,2-Trichloroethane	ND		60	46.8	78	52.1	87	11	62-131/15
79-01-6	Trichloroethene	49.4		60	86.7	62	95.3	76	9	59-146/18
75-01-4	Vinyl chloride	ND		60	53.7	90	50.4	84	6	49-142/20
1330-20-7	Xylene (total)	ND		180	113	63	129	72	13	45-146/17
~		11-1		a 0		4.3		<i></i>	1.0	

(A) no action taken for acetone MS/MSD 90R outlier. Un spiked sample CARS 201004 (E94945.1) was undetect for acetone and the high 90R indicates a potential high result bias.

B no action taken for RPD outlier. trans-1,3-dichloropropene was slightly right above RPD limit of 18 and it was undetect in the unspiked sample.

Job Number:	E94945
Account:	UTC United Technology Corporation
Project:	ENSTNN: Carrier, Syracuse, NY

D 1	07/24/01	DFT	,		
		DET	n/a	n/a	VK1563
D 1	07/24/01	DFT	n/a	n/a	VK1563
D 1	07/24/01	DFT	n/a	n/a	VK1563
	D I D I				

The QC reported here applies to the following samples:

Method: SW846 8260B

E94945-3, E94945-5

		E95184	-1	Spike	MS	MS	MSD	MSD		Limits
CAS No.	Compound	ug/kg	Q	ug/kg	ug/kg	%	ug/kg	%	RPD	Rec/RPD
67-64-1	Acetone	ND		55	86.5	157	84.8	158	2	5-187/35
71-43-2	Benzene	ND		55	30.7	(56* *)	30.8 <	58* a	0	64-132/15
75-27-4	Bromodichloromethane	ND		55	50.5	92	49.0	92	3	64-134/15
75-25-2	Bromoform	ND		55	48.8	89	46.3	86	5	53-147/19
74-83-9	Bromomethane	ND		55	47.6	86	45.9	86	4	45-132/19
78-93-3	2-Butanone (MEK)	ND		55	43.4	79	44.1	82	2	27-169/35
75-15-0	Carbon disulfide	ND		55	43.8	80	42.0	78	4	46-135/21
56-23-5	Carbon tetrachloride	ND		55	47.0	85	44.4	83	6	54-143/19
108-90-7	Chlorobenzene	ND		55	42.9	78	40.4	76	6	56-137/17
75-00-3	Chloroethane	ND		55	50.6	92	49.7	93	2	33-140/22
67-66-3	Chloroform	ND		55	51.5	94	49.9	93	3	66-130/14
74-87-3	Chloromethane	ND		55	47.6	86	49.2	92	3	46-137/22
124-48-1	Dibromochloromethane	ND		55	50.2	91	47.4	88	6	61-138/15
75-34-3	1,1-Dichloroethane	ND		55	51.7	94	49.6	93	4	67-131/15
107-06-2	1,2-Dichloroethane	ND		55	54.0	98	50.7	95	6	61-135/14
75-35-4	1,1-Dichloroethene	ND		55	48.2	88	46.9	88	3	60-130/19
156-59-2	cis-1,2-Dichloroethene	ND		55	49.8	90	46.9	88	6	63-132/16
156-60-5	trans-1,2-Dichloroethene	ND		55	47.6	86	46.8	87	2	63-131/18
78-87-5	1,2-Dichloropropane	ND		55	51.5	94	49.1	92	5	64-132/14
10061-01-5	cis-1,3-Dichloropropene	ND		55	45.7	83	43.4	81	5	58-133/16
10061-02-6	trans-1,3-Dichloropropene	ND		55	45.0	82	43.6	81	3	53-138/18
100-41-4	Ethylbenzene	ND		55	44.0	80	41.0	77	7	49-143/20
591-78-6	2-Hexanone	ND		55	10.5	19	12.8	24	20	19-168/33
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		55	45.8	83	43.4	81	5	25-159/27
75-09-2	Methylene chloride	ND		55	51.0	93	48.1	90	6	57-130/15
100-42-5	Styrene	ND		55	35.2	64	32.8	61	7	44-152/18
79-34-5	1,1,2,2-Tetrachloroethane	ND		55	45.8	83	47.3	88	3	41-135/23
127-18-4	Tetrachloroethene	ND -		55	69.8	127	65.8	123	6	27-207/27
108-88-3	Toluene	ND		55	36.9	67	35.2	66	5	48-145/16
71-55-6	1,1,1-Trichloroethane	ND		55	48.7	88	46.4	87	5	60-136/19
79-00-5	1,1,2-Trichloroethane	ND		55	53.3	97	50.0	93	6	62-131/15
79-01-6	Trichloroethene	ND		55	52.2	95	49.0	92	6	59-146/18
75-01-4	Vinyl chloride	°ND		55	49.1	89	47.4	88	4	49-142/20
1330-20-7	Xylene (total)	ND		165	122	74	111	69	9	45-146/17

No action was taken for benzene MS/MSD 90R outliers. The Sample used for MS/MSD was not from the Thompson Road site. Therefore no action was taken because MS/MSD outliers may not be representative of site conditions. Also, LCS was within QC limits indicating the system was in control.

EPONS         WARE ID         Cons-Scholof         Consection         Consection <thconsection< th=""> <thconsect< th=""><th>DATALCP2 10/18/01</th><th></th><th>UNITED</th><th></th><th>TECHNOLOGIES CORPORATION SYRACUSE RFI</th><th>N</th><th></th><th>Page: 1 Time: 07:33</th></thconsect<></thconsection<>	DATALCP2 10/18/01		UNITED		TECHNOLOGIES CORPORATION SYRACUSE RFI	N		Page: 1 Time: 07:33
Parameter         Parameter           Parameter         5.9         5.8         0         5.8         0         5.8           Persone         5.9         0         5.8         0         5.8         0         5.8           Promotion         5.9         0         5.8         0         5.8         0         5.8           Promotion         5.9         0         5.8         0         5.8         0         5.8           Promotion         5.9         0         5.8         0			-2010-04 2104 5-1 701 701	CAR-S-2020-04 CARS20204 E94945-2 07/12/01 07/23/01 Soil VG/KG	CAR-S-2030-04 CARS20304 E94945-3 07/12/01 07/12/01 Soil UG/KG		CAR-C-2040-04 CARC20404 E94945-5 07/12/01 07/12/01 Soil NG/KG A	CAR-S-2050-02 CARS20502 E94945-6 07/12/01 07/23/01 Soil A UG/KG A
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Bromomethane         5.9         U         5.8         U         5.8 <thu< th="">         5.8         U</thu<>				8		8	8	
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Carbon disulfice       5.9       U       5.8       U       5.			ō,	8.		8.	ŝ	
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Chlorobertzene       5.9       U       5.8       U       5.8 </td <td></td> <td>0</td> <td></td> <td>ω,</td> <td></td> <td>8.</td> <td>æ,</td> <td></td>		0		ω,		8.	æ,	
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1,2-0ichloropropane $5.9$ U $5.8$ </td <td></td> <td>ne</td> <td>5.9</td> <td></td> <td></td> <td>∞.</td> <td>8.</td> <td></td>		ne	5.9			∞.	8.	
cis-1,3-Dichloropropene 5.9 U 5.8 U			5.9			8.		
trans-1,3-Dichloropropene5.9U5.8U5.8U5.8Ethylbenzene5.9U5.8U5.8U5.82-Hexanone2-Hexanone5.9U5.8U5.82-Hexanone5.9U5.8U5.8U5.88-thyllene chloride5.9U5.8U5.8U5.88-thyllene chloride5.9U5.8U5.8U5.81,1,2,2-Tetrachloroethane5.9U5.8U5.8U5.81,1,2,2-Tetrachloroethane5.9U5.8U5.8U5.81,1,2,2-Tetrachloroethane5.9U5.8U5.8U5.81,1,2,2-Tetrachloroethane5.9U5.8U5.8U5.81,1,2-Trichloroethane5.9U5.8U5.8U5.81,1,2-Trichloroethane5.9U5.8U5.8U5.81,1,2-Trichloroethane5.9U5.8U5.8U5.81,1,2-Trichloroethane5.9U5.8U5.8U5.81,1,2-Trichloroethane5.8U5.8U5.8U5.81,1,2-Trichloroethane5.9U5.8U5.8U5.81,1,2-Trichloroethane5.9U5.8U5.8U5.81,1,2-Trichloroethane5.9U5.8 <td></td> <td></td> <td>5.9</td> <td></td> <td></td> <td>εQ.</td> <td></td> <td></td>			5.9			εQ.		
Ethylbenzene5.8U5.8 <td></td> <td></td> <td>5.9</td> <td></td> <td></td> <td>ω.</td> <td>5.8</td> <td></td>			5.9			ω.	5.8	
2-Hexanone $2.Hexanone$ $5.8$ $0$	Ethylbenzene	· · ·	о 0			×,		
4. Hethylere chloride       5.9       0       5.8       0       <			о, с и і	ω, o		x, c		
Methylene chloride       5.9 U       5.8 U       5.8 U       5.8 U       5.8 U         1,1,2,2-Tetrachloroethane       5.9 U       5.8 U       5.8 U       5.8 U       5.8 U         Tetrachloroethane       5.9 U       5.8 U       5.8 U       5.8 U       5.8 U       5.8 U         1,1,2-Tetrachloroethane       5.9 U       5.8 U       5.8 U       5.8 U       5.8 U       5.8 U         1,1,1-Trichloroethane       5.9 U       5.8 U       5.8 U       5.8 U       5.8 U       5.8 U         1,1,2-Trichloroethane       5.9 U       5.8 U       5.8 U       5.8 U       5.8 U       5.8 U         1,1,2-Trichloroethane       5.9 U       5.8 U       5.8 U       5.8 U       5.8 U       5.8 U         1,1,2-Trichloroethane       5.9 U       5.8 U       5.8 U       5.8 U       5.8 U       5.8 U         1,1,2-Trichloroethane       5.8 U       5.8 U       5.8 U       5.8 U       5.8 U       5.8 U         1,1,2-Trichloroethane       5.8 U       5.8 U       5.8 U       5.8 U       5.8 U       5.8 U         Vinyl chloride       5.8 U       <			n N N	o o		o c		
Styrene5.8U5.8U5.8U5.81,1,2,2-Tetrachloroethane5.9U5.8U5.8U5.8Toluene5.9U5.8U5.8U5.8U5.81,1,1-Trichloroethane5.9U5.8U5.8U5.81,1,2-Trichloroethane5.9U5.8U5.8U5.81,1,2-Trichloroethane5.9U5.8U5.8U5.81,1,2-Trichloroethane5.9U5.8U5.8U5.81,1,2-Trichloroethane5.9U5.8U5.8U5.81,1,2-Trichloroethane5.9U5.8U5.8U5.81,1,2-Trichloroethane5.8U5.8U5.8U5.81,1,2-Trichloroethane5.9U5.8U5.8U5.8Vinyl chloride5.8U5.8U5.8U5.8Xytene (total)5.8U5.8U5.8U5.8 $L_10//6/0/$ 5.8U5.8U5.8U5.8			o v		х ° С	ည္စ		oα
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Toluene 5.9 U 5.8		ernane	х о и и			<u>م</u> د		
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1,1,2-Trichloroethane5.8U5.8U5.8Trichloroethane9.74.5J15.1Trichloroethane5.9U5.8U5.8Vinyl chloride5.9U5.8U5.8Xytene (total)5.9U5.8U5.8 $L_1(0)/(5(0))$ 5.9U5.8U5.8			, 0 , 4			, <i>∞</i> ,		i «
Trichloroethene $4.5 \ J$ $15.1 \ 5.8 \ U$ Vinyl chloride $5.9 \ U$ $5.8 \ U$ $5.8 \ U$ Xytene (total) $5.8 \ U$ $5.8 \ U$ $5.8 \ U$ $L /0//6/0/$ $5.9 \ U$ $5.8 \ U$ $5.8 \ U$			6	τœ		8		5.8 U
vinyl chloride 5.9 U 5.8 U			49.4	۰. ۲	4.5	<u>γ</u>	10.7	11.
xytene (total) <i>L</i> /0//6/0/	Vinyl chloride		5.9	80	8.	5.8	5.8 U	5.8 U
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DATALCP2 10/18/01		UNITED	ED TECHNOLOGIES SYRACUSE F	ES CORPORATION E RFI	N		Page: 2 Time: 07:33
E94945 SAMPLE ID VOA CRIGINAL ID LAB SAMPLE ID SAMPLE ID SAMPLE ID SAMPLE DATE DATE ANALYZED MATRIX	ID> IPLE ID> DATE> MATZED>	CAR-S-2060-04 CARS20604 E94945-7 07/12/01 07/12/01 Soil Soil	CAR-S-2070-02 CARS20702 E94945-8 07/12/01 07/12/01 07/24/01 Soil A UG/KG A	CAR-S-2080-04 CAR-S-2080-04 CARS20804 E94945-9 07/12/01 07/12/01 07/24/01 Soil Soil	CAR-S-2090-04 CAR-S-2090-04 CARS20904 E94945-10 07/12/01 07/12/01 07/12/01 Soil Soil	CAR-S-2100-02 CARS21002 E94945-111 07/12/01 07/12/01 07/24/01 Soil VG/KG A	CAR-G-MW01-04 CARGMW0104 E94945-13 07/12/01 07/20/01 Water UG/L A
CAS # Parameter							
67-64-1 &retone		2 S S		5.9	5.8 U	6. U	5. U
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74-83-9 Bromomethane			6. U				5 <b>.</b> C
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1,1,2,2-Tetrachloroetha	e U	2°8	• • •	0 ° ° °	0 = 0 0 4 0 4	⇒ = • ~	
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108-88-3 Toluene		ວ ແ ວ ແ ດ ນ	o ≍ • •				
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Vinyl chloride			6. U	5.9 U	5.8 U	6. U	<b>.</b>
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Parameter         Constrained         S         U         U         U         U         U         U         U         U         U <thu< th="">         U</thu<>	E94945 VOA		Ğ-M405-04 M40504 45-15 2/01 0/01		07	-MWD8-04 -MWD8-04 -03004 5-19 -01 -01	50 - 04 50 - 04	-G-MV3S-04 GMW3S04 345-17 345-17 12/01 20/01 er
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cis-1,2-bichlorecthene       5.       0       1.2       1.2       23.2       57.8       13.9         1,2-bichloroethene       5.       0       1.2       1       1.2       1.2       1.2       1.2       1.3       1.3         1,2-bichloroethene       5.       0       1.2       1       1.2       1.2       1.2       1.2       1.3       1.4       1.5       1.4       1.4       1.4       1.5       1.4       1.4       1.5       1.4       1.4       1.4       1.4       1.5       1.4       1.6       1.6       1.6       1.6 <td< td=""><td></td><td>bethene</td><td></td><td></td><td></td><td></td><td></td><td>M</td></td<>		bethene						M
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Ethylbenzene       5. U       7. U </td <td></td> <td>ichloropropene</td> <td>•••••</td> <td></td> <td></td> <td></td> <td></td> <td></td>		ichloropropene	•••••					
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4. Metryl -2- Fentanone (MIBK)       5. U       56.			~ i					
Methylene chloride       2. U       20. U <td></td> <td>entanone (MIBK)</td> <td>5</td> <td>•</td> <td></td> <td></td> <td></td> <td></td>		entanone (MIBK)	5	•				
Styrene       5: $U$		ıloride	~ 1					
1,1,2,2-Tetrachloroethane       2.       0       3.       0       3.			<u>,</u>					
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Toluene       1. U       3. U       1. U       3. U						,		
1,1,1 trichloroethane       5. U       5. U       5. U       100.         1,1,2 trichloroethane       3. U       3. U       3. U       5. U       100.         1,1,2 trichloroethane       3. U       3. U       3. U       3. U       5. U       100.         1,1,2 trichloroethane       1. U       1. U       1. U       1. U       1. U       20.         1,1,2 trichloroethane       1. U       1. U       1. U       1. U       20.       20.         vinyl chloride       1. U       1. U       1. U       1. U       1. U       20.         xylene (total)       5. U       5. U       5. U       100.       100.			<b>•</b>			,		
1,1,2-Trichloroethane       3. U       3. U       3. U       5. U       60.         Trichloroethane       1. U       1. U       1. U       1. U       20.         Trichloroethane       1. U       1. U       1. U       1. U       20.         vinyl chloride       1. U       1. U       1. U       1. U       20.         vinyl chloride       1. U       5. U       5. U       5. U       567.         Xylene (total)       5. U       5. U       5. U       100.	÷.,		5			è.	•	
Trichtoroethene       1. U       1.		oroethane	З.			3 <b>.</b> U		
vinvl chloride       1. U       1. U       1. U       1. U       1. U       100.         xylene (total)       5. U       5. U       5. U       5. U       100. $\mathcal{L}$ [0[18[0]       1. U       1. U       1. U       100.		lene				1. U		
xylene (total)       5. U       5. U       5. U       5. U       100. $\mathcal{L}$ [0][ $\mathcal{B}$ [0]       100[ $\mathcal{B}$ [0]	-	de				1. U		567.
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**PCBs** 

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Validation Worksheets - PCBs	Validation	Worksheets	-	<b>PCBs</b>
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Site: Carrier Corporation - Thompson Road Facility, Syracuse, NY	Y Project No. <u>3133-031-05-004-00</u>
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SDG # <u>E94945</u>	No. Samples		_Matrix	water	Lab:	Accutest - New Jersey
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Attach Copy of Flagged Data Tables

Method Reference: SW846 8082

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CRITERIA MET? YES NO	,		NONCOMPLIANCE NOTES
Data Complet	eness / Sample Receip Data Complete Samples received in g		Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this review. If any problems were noted with sample
			quality, attach discrepancy report or summarize problems and effects on data.
	Hold Times Met	water - 7 days to extraction/40 days to analysis; soil - 14 days to extraction/40 days to analysis	Attach list of samples which exceed hold times. Indicate total hold time and qualifiers.
Surrogate Re	covery All recoveries within cr	iteria	Attach summary for noncompliant surrogate recoveries. Indicate outliers and qualifiers.
Matrix Spike/I	Matrix Spike Duplicate MS/MSD performed fo Recoveries for MS with Recoveries for MSD w RPDs within lab limits	nin lab limits	Attach summary for all noncompliant % Recoveries. Circle all outliers and indicate qualifiers.
Laboratory C	ontrol Samples (LCS) LCS %Rs within lab lir	Not Applicable nits	Attach summary for all noncompliant % Recoveries. Circle all outliers and indicate qualifiers.
Blanks: Methe	od and Field Method blank perform Method blank clean? Field blank clean? Equip. blank clean?	ed for each matrix? <ul> <li>Not Applicable</li> <li>Not Applicable</li> </ul>	Attach copy of method blank summary. List all contaminants, concentrations and action levels. Attach copy of results for any associated field. Circle or highlight all contaminants and indicate action level. List all affected samples.

CRITER YES	NO NO			Noncompliance Notes
Calibra	ation - F	RT Windows and Calib	ration Factors	Attach copy of initial calibration form
9			s present for both columns ed for Aroclors 1016 and 1260. d on 1 point cal.)	for noncompliant % RSDs Indicate noncompliances, qualifiers, and affected samples.
Ø		Retention time criteria	met for both columns	
đ		%RSD criteria met	%RSD <20% for ea. compound OR Ave. %RSD for all compounds of <20%	
Calibr	ation Ve	rification		Attach copy of verification form
Ø		Calibration verification (Only required for Arocle	n forms present for both columns ors 1016 and 1260)	which does not meet %D criteria. Indicate outliers, qualifiers, and affected samples.
		Retention time criteria	met for both columns	
Ū	Ó	All Arochlor compound %D <15% for ea. compound Ave. %D for all compounds	d OR	
Comp	ound id	entification	Not Applicable - all samples were undetected	List all samples with compounds containing peaks outside RT or no 2nd column confirmation. Indicate
٥	σ	Arochlors were prope both columns	rly identified and quantitated on	qualifiers.
		Retention time criteria	met	
	Duplicat	es	D Not Applicable	Identify field duplicate pair and attach list of all compounds with noncompliant RPDs. Indicate
Sampl		Within RPD Criteria	35% water; 50% soil	qualifiers.
Sampl	οIDe			
		, Within RPD Criteria	35% water; 50% soil	
Samp	le Resul	ts	11/2	Call (fax) lab for resubmittals. Attach
Ø			sted for %moisture / dilutions /	all resubmittal correspondence to this review.

Reviewer's Signature:

Mantwell Date 10, 17,01

Job Number: Account: Project:			ogy Corporatior yracuse, NY	1	
Sample	File ID	DF	Analyzed	By	Prep 07/1

J							
Sample OP9795-MS OP9795-MSD E94771-1	File ID WW25333 WW25334 WW25326	4.D1	Analyzed 07/18/01 07/18/01 07/17/01	By YYX YYX YYX	Prep Date 07/17/01 07/17/01 07/17/01	<b>Prep Batch</b> OP9795 OP9795 OP9795	Analytical Batch GWW851 GWW851 GWW851 GWW851
1							

The QC reported here applies to the following samples:

Method: SW846 8082

E94945-13, E94945-14, E94945-15, E94945-16, E94945-17

~ . ~		E94771-1 ug/l Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1	Compound Aroclor 1016 Aroclor 1221 Aroclor 1232 Aroclor 1242 Aroclor 1248 Aroclor 1254 Aroclor 1254	ug/I Q ND ND ND ND ND ND ND ND	4 4	2.7 ND ND ND ND ND 3.0	68 75	3.7 ND ND ND ND 3.4	92 ( 85	31* <sup>a</sup> nc nc nc nc nc 12	49-138/21 15-178/0 10-215/0 39-150/0 38-158/0 29-131/1 25-133/35
CAS No. 877-09-8	Surrogate Recoveries Tetrachloro-m-xylene	MS 79% 84%	MSD 96% 102%		E94771-1 88% 91%	Limits 25-134 25-134			
877-09-8 2051-24-3 2051-24-3	Tetrachloro-m-xylene Decachlorobiphenyl Decachlorobiphenyl	84 % 57 % 63 %	58% 65%		63% 74%	14-150 14-150			

(a) Outside control limits due to matrix interference.

No action taken for the RPD outlier. The MS/MSD Was performed on a batch sample that was not from the Mompson Road site. Merefore, No action was taken because the MS/MSD RPD outlier may not be representative of site samples.

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Page: 1 Time: 12:10			
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TECHNOLOGIES CORPORATION SYRACUSE RFI Field QC sample			
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ECHNOLOGIES CC SYRACUSE RFI Field QC sampl			
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	F-071 57150 57150 42-15 07150 07150 77/01 77/01		
	CAR-F-0713-01 CARF071301 E95042-15 CARF071301 07/13/01 07/17/01 07/17/01 Vater UG/L	E95042	
	SAMPLE ID> ORIGINAL ID> LAB SAMPLE ID> ID FROM REPORI> SAMPLE DATE> DATE DATE> DATE ANALYZED> DATE ANALYZED> MATRIX>		
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			1016 232 242 254 254 254 256
		ameter	Aroclor - 1016 Aroclor - 1221 Aroclor - 1242 Aroclor - 1260 Aroclor - 1260
		CAS # Parameter	12674-11-2 Arocl or - 1016 11104-28-2 Arocl or - 1221 11141-16-5 Arocl or - 1222 534697-29-6 Arocl or - 1248 1097-69-1 Arocl or - 1260 11096-82-5 Arocl or - 1260
CP3		CAS	12674-11-2 11104-28-2 55469-27-9 12672-29-6 11096-82-5 11096-82-5 11096-82-5
DATALCP3 10/17/01	<b>2</b>		12674-11-2 Aroclor-1016 11104-28-2 Aroclor-1221 11141-16-5 Aroclor-1232 53469:21-9 Aroclor-1248 12672-29-6 Aroclor-1248 11097-69-1 Aroclor-1260 11096-82-5 Aroclor-1260
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DATALCP2 10/18/01		UNITED	ID TECHNOLOGIES SYRACUSE R	ES CORPORATION Z RFI	N		Page: 1 Time: 07:33
E94945 PCB	SAMPLE ID ORIGINAL ID LAB SAMPLE ID SAMPLE DATE DATE EXTRACTED DATE AMALYZED MATRIX	CAR-G-MW01-04 CARGMW0104 E94945-13 07/12/01 07/19/01 07/19/01 07/19/01 Water Water	CAR-G-MW05-04 CARGMW0504 E94945-15 07/12/01 07/19/01 07/19/01 Water Water	CAR-G-MW06-04 CAR-G-MW06-04 CARGMW0604 E94945-14 07/12/01 07/12/01 07/19/01 07/21/01 Water A	CAR-G-MW3D-04 CARGMW3D04 E94945-16 07/12/01 07/12/01 07/19/01 Water Water UG/L A	CAR-G-MW3S-04 CAR-G-MW3S-04 CARGMW3S04 E94945-17 07/12/01 07/12/01 07/19/01 07/21/01 Water Water	
CAS # Parameter							
12674-11-2 Aroclor-1016 11104-28-2 Aroclor-1221 11141-16-5 Aroclor-1232 53469-21-9 Aroclor-1242 12672-29-6 Aroclor-1248 11097-69-1 Aroclor-1260 11096-82-5 Aroclor-1260		0.52 U 0.52 U 0.52 U 0.52 U 0.52 U 0.52 U 0.52 U	0.52 U 0.52 U 0.52 U 0.52 U 0.52 U 0.52 U	0.52 U 0.52 U 0.52 U 0.52 U 0.52 U 0.52 U 0.52 U 0.52 U	0.52 U 0.52 U 0.52 U 0.52 U 0.52 U 0.52 U	0.5 0.5 0.5 0 0.5 0 0.5 0 0 5 0 0 5 0 0 5 0	
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Metals

#### Validation Worksheets - Metals

Site: Carrier Corporation - Thompson Road Facility, Syracuse, NY	Project No. <u>3133-031-05-004-00</u>
SDG # <u>E94945</u> No. Samples <u>5</u> Matrix <u>water - tot</u> 5 water - diss	-al Lab: Accutest - New Jersey
Attach Copy of Case Narrative, Lab Sample ID pages, and Flagged Dat	a Tables
Method Reference: SW-846 6010B (metals except Hg) SW-846 7470A (aqueous Hg) SW-84	46 7470A (solid Hg)
CRITERIA MET? YES NO NOTE: FORMS CITED MAY BE EQUIVALENTS	NONCOMPLIANCE NOTES
Data Completeness / Sample Receipt	Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this review.
Data Complete     Image: Samples received in good condition	If any problems were noted with sample condition or receipt affecting data quality, attach discrepancy report or summarize problems and effects on data.
Hold Times Met 6 Mos except Hg (28 days)	Attach list of samples which exceed hold times. Indicate total hold time and qualifiers.
Initial Calibration Verification (Form II-Part 1) Calibrated daily ICP - Calibration Acceptable (At least a 2 point calibration and %Rs 90-110%)	Attach copy of Form II for all noncompliant initial calibration criteria. Circle or highlight noncompliances and indicate qualifiers. List all affected samples on Form II.
Mercury - Calibration Acceptable (5 point calibration and %Rs 80-120%)	If calibration curve is not acceptable, discuss deficiencies and qualifiers.
Continuing Calibration Verification (Form Il Part 1) Percent recoveries within limits Hg: 80-120%; others: 90-110%	Attach copy of Form II for noncompliant cont. calb. stds. Circle or highlight outliers and indicate qualifiers. List all affected samples on Form II.
ICP Interference Check Sample (Form IV)	Attach copy of Form IV for all noncompliant %Rs_Circle or highlight
Image: Performed at the proper frequency?Image: Performed at the performed at the proper frequency?Image: Performed at the pe	outliers & indicate qualifiers.
Blanks - Laboratory and Field         Image: Second start         Image:	Attach copy of Form III. Circle or highlight all contaminants associated with samples and indicate action level. Attach copy of Form I for any associated field blank. Circle or highlight all contaminants and indicate action levels. List all affected samples.

CRITERIA MET? YES NO		Noncompliance Notes
Spike Sample Recoveries (Form V-	per frequency per matrix/level?	Attach copy of Form V for all noncompliant %Rs . Circle or highlight outliers and indicate qualifiers. Note: %Rs are acceptable if elements are detected greater than 4 times the spike level.
Laboratory Duplicates (Form VI) Performed at the pro RPD within criteria	Not Applicable per frequency per matrix/level? <20%	Attach copy of Form V for all noncompliant RPDs. Circle or highlight outliers and indicate qualifiers. Note: RPDs are acceptable if elements are detected at a concentration less than 10 times the IDL.
	•	Attach copy of Form VII for all noncompliant %Rs. Circle or highlight outliers and indicate qualifiers.
ICP Serial Dilutions (Form IX)	per frequency per matrix/level? %D <10%	Attach copy of Form IX for all noncompliant %Ds. Circle or highlight outliers and indicate qualifiers. Note: serial dilution is applicable to elements with concentrations greater than 10 times the IDL after dilution. If concentrations are less than 10 times the IDL after dilution, no action is necessary.
Field Duplicates Sample IDs:	Not Applicable	Identify field duplicate pair and attach list of all compounds with noncompliant RPDs. Indicate qualifiers.
Within RPD Criteria	35% water; 50% soil	
Sample IDs: Within RPD Criteria	35% water; 50% soil	
Sample Results P Reporting Limits adjustment sample volumes	Not Applicable Usted for %moisture / dilutions /	Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this review.

Reviewer's Signature:

Date 10,18,01

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DATALCP2 10/18/01		UNITED		TECHNOLOGIES CORPORATION SYRACUSE RFI	N		Page: 1 Time: 07:33
E94945 DISS METAL	SAMPLE ID> CRIGINAL ID> LAB SAMPLE ID> SAMPLE DATE> DATE EXTRACTED> DATE ANALYZED> MATRIX>	CAR-G-FW01-04 CAR-G-FW01-04 E94945-13A 07/12/01 07/19/01 07/19/01 Water Water A	CAR-G-FW05-04 CAR6FW0504 E94945-15A 07/12/01 07/18/01 07/19/01 Water Water	CAR-G-FW06-04 CARGFW0604 E94945-14A 07/12/01 07/18/01 07/19/01 Water UG/L A	CAR-G-FW3D-04 CAR6FW3D04 E94945-16A 07/12/01 07/18/01 07/18/01 07/19/01 Water UG/L A	CAR-G-FW3S-04 CARGFW3S04 E94945-17A 07/12/01 07/18/01 07/18/01 07/23/01 Water UG/L A	
CAS # Parameter 7440-38-2 Arsenic 7440-47-3 Chromium 7439-95-6 Iron 7439-95-1 Lead 7430-02-0 Nickel 7782-49-2 Selenium		5, 50, 5, 5, 50, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5, 5	5, u 10. u 3. u 5. u 5. u	5. c 100. c 39800. v 40. v 5. v	40. 40. 5. ссссс 40. сссс сссс сссс сссс сссс С	69800. 40. 5. 40. 40. 40. 40. 40. 40. 40. 40.	
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DATALCP2 10/18/01		UNITED	D TECHNOLOGIES SYRACUSE R	ES CORPORATION RFI	N		Page: 1 Time: 07:33
E94945 METAL	SAMPLE ID> ORIGINAL ID> LAB SAMPLE ID> BATE EXTRACTED> DATE EXTRACTED> DATE ANALYZED> MATRIX>	CAR-G-MW01-04 CAR-G-MW0104 E24945-13 07/12/01 07/18/01 07/19/01 Water UG/L A	CAR-G-MW05-04 CAR-G-MW0504 E24245-15 07/12/01 07/18/01 07/19/01 Water Water UG/L A	CAR-G-MU06-04 CARGMU0604 E94945-14 07/12/01 07/18/01 07/19/01 Water UG/L A	CAR-G-MW3D-04 CARGHW3D04 E94945-16 07/12/01 07/18/01 07/19/01 Water UG/L A	CAR-G-MW3S-04 CARGMW3S04 E94945-17 07/12/01 07/18/01 07/19/01 07/19/01 Water UG/L A	
CAS # Parameter							
7440-38-2 Arsenic 7440-47-3 Chromium 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7440-02-0 Nickel 7782-49-2 Selenium 7782-49-2 Selenium <i>7782-49-2 Selenium</i>	agh Ur-18/0/	22800 33 55 22800 33 5 52800 33 5 52800 33 5 52 52 52 52 52 52 52 52 52 52 52 52 52	14.8 45.3 21. 5. 0 103000. 5. U	13.10. 13.10. 5. 5. 5. 5.	2370. 2370. 49300. 5. e e e	7.9 10. 8 3. 8 40. 4 5. 40. 4	

**General Chemistry** 

Validation Worksheets - General Chemistry							
Site: Carrier Corporation - Thompson Road Facility, Syracuse, NY	Project No. <u>3133-031-05-004-00</u>						
SDG # <u>E94945</u> No. Samples <u>5</u> Matrix <u>Weder</u>	Lab: <u>Accutest - New Jersey</u>						
Attach Copy of Case Narrative, Lab Sample ID pages, and Flagged Dat	a Tables						
List Method(s)/Method number(s):Fluoride (EPA 300.0)Nitrite (SM18, 4500)Oil and Grease (HEM) (EPA 1664)Nitrate + nitrite (EPA 353.2)Nitrate (EPA 353.2)Phenols (EPA 420.2)	TOC (EPA 415.1) TOX (SW-846 9020)						
CRITERIA MET? YES NO	NONCOMPLIANCE NOTES						
Data Completeness / Sample Receipt         D       Data Complete         D       Samples received in good condition	Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this review. If any problems were noted with sample condition or receipt affecting data quality, attach discrepancy report or summarize problems and effects on data.						
Hold Times Met see attacked	Attach list of samples which exceed hold times. Indicate total hold time and qualifiers.						
Matrix Spike/Matrix Spike Duplicate       Image: Not Applicable         Image: MS/MSD performed for each matrix       Image: MS/MSD performed for each matrix         Image: MS/MSD performed for MS within lab limits       Image: Recoveries for MS within lab limits	List noncompliant %Rs and RPDs or attach form. Indicate all noncompliances and qualifiers.						
Lab Control Standard/Blank Spike     Instance       Image: Control Standard/Blank Spike     Image: Control Standard/Blank Spike	List noncompliant %Rs or attach form. Indicate all noncompliances and qualifiers.						
Laboratory Duplicate							
RPDs within lab limits							
Blanks: Method - Trip - Field	Attach copy of Form IV (or equiv.) for all						
Method blank performed for each matrix?	samples. List all contaminants, concentrations and action level.						
Image: Sector of the sector matrix:         Image: Sector matrix: <td< td=""><td>Attach copy of Form I (or equiv.) for any associated field or trip blanks. Circle all contaminants and indicate action level. List all affected samples.</td></td<>	Attach copy of Form I (or equiv.) for any associated field or trip blanks. Circle all contaminants and indicate action level. List all affected samples.						
Field Duplicates	Identify field duplicate pair and attach list of all compounds with noncompliant RPDs. Indicate qualifiers.						
Sample IDs:,,,,							
Sample Results     Invite Not Applicable       Image: Construction of the sample volumes     Not Applicable	Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this review.						
Reviewer's Signature: 							

Matrix:	E94945-13 AQ - Ground Water	Date Sampled: Date Received: Percent Solids:	07/13/01
Project:	ENSTNN: Carrier, Syracuse, NY		

**General Chemistry** 

Analyte	Result	RL	Units	DF	Analyzed By	Method
Fluoride	< 0.40	0.40	mg/l	1	07/26/01 vi.	EPA 300/SW846 9056
HEM Oil and Grease	< 5.0	5.0	mg/l	1	07/28/01 sjg	EPA 1664
Nitrogen, Nitrate <sup>a</sup>	< 0.11	0.11	mg/l	1	08/02/01 эк	EPA353.2/SM184500
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	08/02/01 JK	EPA 353.2
Nitrogen, Nitrite <sup>b</sup>	<0.010 J	0.010	mg/l	1*<	07/16/01 KY	SM18 4500NO2B
Phenols	< 0.050	0.050	mg/l	1	07/31/01 јк	EPA 420.2
Total Organic Carbon	10.6	1.0	mg/l	1	07/19/01 AMS	415.1/9060 M/5310B M
Total Organic Halides	< 0.050	0.050	mg/l	1	08/02/01 JJY	SW846 9020

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

(b) Analysis done out of holding time as per client request.

\* Mitrite was flagged "UJ" in sample CARGMWOIDY due to holding time exceedance.

· ·	13 ENS-SYR-TMP-MW06-CARGMW0604		07/10/01
Lab Sample ID:	E94945-14	Date Sampled:	07/12/01
Matrix:	AQ - Ground Water	Date Received:	07/13/01
		Percent Solids:	n/a
Project:	ENSTNN: Carrier, Syracuse, NY		

#### **General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed By	Method
Fluoride	< 0.40	0.40	mg/l	1	07/26/01 VL	EPA 300/SW846 9056
HEM Oil and Grease	< 5.0	5.0	mg/l	1	07/28/01 sjg	EPA 1664
Nitrogen, Nitrate <sup>a</sup>	< 0.11	0.11	mg/i	1	08/02/01 эк	EPA353.2/SM184500
Nitrogen, Nitrate + Nitrite	< 0,10	0.10	mg/l	1	08/02/01 јк	EPA 353.2
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	07/13/01 кү	SM18 4500NO2B
Phenols	< 0.050	0.050	mg/l	1	07/31/01 јк	EPA 420.2
Total Organic Carbon	<1.0	1.0	mg/l	1	07/19/01 AMS	415.1/9060 M/5310B M
Total Organic Halides	< 0.050	0.050	mg/l	1	08/02/01 лу	SW846 9020

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

# RL = Reporting Limit

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Client Sample ID: Lab Sample ID: Matrix:	14 ENS-SYR-TMP-MW05-CARGMW0504 E94945-15 AQ - Ground Water			Date S Date I Percei			
Project:	ENSTNN: Carrier, S	Syracuse, N	¥ <sup>°</sup>				
General Chemistry	,					<u></u>	*****
Analyte	Result	RL	Units	DF	Analyzed By	Method	

÷				Ū	2	
Fluoride	< 0.40 0.40	mg/l	1	07/26/01	VL	EPA 300/SW846 9056
HEM Oil and Grease	< 5.0 5.0	mg/I	1	07/28/01	SJG	EPA 1664
Nitrogen, Nitrate <sup>a</sup>	<0.11 0.11	mg/l	1	08/02/01	JK	EPA353.2/SM184500
Nitrogen, Nitrate + Nitrite	< 0.10 0.10	mg/l	1	08/02/01	JΚ	EPA 353.2
Nitrogen, Nitrite	< 0.010 0.010	mg/l	1	07/13/01	KΥ	SM18 4500NO2B
Phenols	<0.050 0.050	mg/l	1	07/31/01	JK	EPA 420.2
Total Organic Carbon	15.8 1.0	mg/l	1	07/19/01	AMS	415.1/9060 M/5310B M
Total Organic Halides <sup>b</sup>	0.47 0.20	mg/l	4	08/06/01	JJΥ	SW846 9020

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

(b) Second column analysis indicates possible matrix interference.

General Chemistry			
Project:	ENSTNN: Carrier, Syracuse, NY		
		Percent Solids:	n/a
Matrix:	AQ - Ground Water	Date Received:	07/13/01
Lab Sample ID:	E94945-16	Date Sampled:	07/12/01
Client Sample ID:	15 ENS-SYR-TMP-MW3D-CARGMW3D04		

Analyte	Result	RL	Units	DF	Analyzed By	Method
Fluoride	< 0.40	0.40	mg/l	1	07/26/01 VL	EPA 300/SW846 9056
HEM Oil and Grease	< 5.0	5.0	mg/l	1	07/28/01 sjg	EPA 1664
Nitrogen, Nitrate <sup>a</sup>	< 0.11	0.11	mg/l	1	08/02/01 јк	EPA353.2/SM184500
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	08/02/01 јк	EPA 353.2
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	07/13/01 кү	SM18 4500NO2B
Phenols	< 0.050	0.050	mg/l	1	07/31/01 јк	EPA 420.2
Total Organic Carbon	<1.0	1.0	mg/l	1	07/19/01 AMS	415.1/9060 M/5310B M
Total Organic Halides	< 0.050	0.050	mg/l	1	08/02/01 лу	SW846 9020

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Page 1 of 1

# **Report of Analysis**

Client Sample ID: Lab Sample ID: Matrix: Project:	E94945- AQ - Gro	SYR-TMP-MV 17 Jund Water V: Carrier, Syr		SMW3S04	Date F	Sampled: 07/12/ Received: 07/13/ ht Solids: n/a	
General Chemistry							
Analyte		Result	RL	Units	ÐF	Analyzed By	Method
Fluoride		< 0.40	0.40	mg/l	1	07/26/01 vl	EPA 300/SW846 9056
HEM Oil and Greas	se	< 5.0	5.0	mg/l	1	07/28/01 sjg	EPA 1664
Nitrogen, Nitrate <sup>a</sup>		< 0.11	0.11	mg/l	1	08/02/01 JK	EPA353.2/SM184500
Nitrogen, Nitrate +	Nitrite	< 0.10	0.10	mg/l	1	08/02/01 јк	EPA 353.2
Nitrogen, Nitrite		< 0.010	0.010	mg/l	1	07/13/01 KY	SM18 4500NO2B
Phenols		< 0.050	0.050	mg/l	1	07/31/01 јк	EPA 420.2
Total Organic Carb	on	2.8	1.0	mg/l	1	07/19/01 AMS	415.1/9060 M/5310B M
Total Organic Halic		8.6	2.0	mg/l	40	08/02/01 лү	SW846 9020

(a) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

(b) Second column analysis indicates possible matrix interference.

Page 1 of 1

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DATALCP2 10/18/01		UNITED	_	TECHNOLOGIES CORPORATION SYRACUSE RFI	z		Page: 1 Time: 07:33
E94945 GEN CHEM	SAMPLE ID> CRIGINAL ID> CRIGINAL ID> LAB SAMPLE DATE ID> SAMPLE DATE DATE> DATE ANALYZED> MATRIX>	CAR-G-MW01-04 CARGMW0104 E94945-13 07/12/01 07/16/01 Water MG/L A	CAR-G-MW05-04 CARCGNW0504 E94945-15 07/12/01 07/12/01 07/26/01 Water Water MG/L A	CAR-G-MU06-04 CARGMU0604 E94945-14 07/12/01 07/126/01 07/26/01 Water Water MG/L	CAR-G-MW3D-04 CARCMW3D04 E94945-16 07/12/01 07/18/01 07/19/01 Water MG/L A	CAR-G-MWJS-04 CARCAWJSS04 E94945-17 07/12/01 07/26/01 07/28/01 Water MG/L A	
CAS #	Parameter						
14797-65-0 14797-55-8 26984-48-8 16984-48-8 29999001-25-2 2999900-02-2 2999900-04-2	Witrite (as N) Nitrate (as N) Nitrate + Mitrite (as N) Fluoride (F) Oil and Grease (Hexane Extractable Phenolics, Total Recoverable Total Organic Halides (TOX) Total Organic Carbon (TOC)	0.000000 101-1-1-000 0.00000 0.000000	0.01 0.11 0.00 0.00 0.00 0.00 0.00 0.00	7000.11 7. 600.11 7. 000.11 7. 000.11 7. 000.11 7. 000.11	0000000 10000 10	ооооооооооооооооооооооооооооооооооооо	

Data Evaluation Worksheets Sample Delivery Group E95042

Volatile Organic Compounds

Validation Worksheets - Volatile Organi	Validation	Worksheets	- Volatile	Organics
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Site: Carrier Corporation - Thompson Road Facility, Syracuse, NY Project No. 3133-031-05-004-00

SDG # E95042 No. Samples 18 Matrix Water Lab: Accutest - New Jersey

Attach Copy of Flagged Data Tables

Method Reference: SW-846 8260B

Criteri YES	IA MET? NO	NOTE: FORMS CITED MAY BE EQUIVALENTS	NONCOMPLIANCE NOTES
Data Co I I I I	omplete	eness / Sample Receipt Data Complete Samples received in good condition	Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this review. If any problems were noted with sample condition or receipt affecting data quality, attach discrepancy report or summarize problems and effects on data.
Ū	0	Hold Times Met 14 days soil & preserved water, 7 days unpreserved water	Attach list of samples which exceed hold times. Indicate total hold time and qualifiers.
System	n Monite	oring Compounds Recovery Form II present for all samples All recoveries within lab criteria	Attach copy of Form II for all noncompliant surrogate recoveries. Circle all noncompliances and indicate qualifiers.
Matrix	Spike/M	Matrix Spike DuplicateImage: DescriptionMS/MSD performed for each matrixMS %Rs within lab limitsMSD %Rs within lab limitsRPDs within lab limits	Attach copy of Form III for all noncompliant % Recoveries. Circle all noncompliances and indicate qualifiers. C.1, 2-DCE Was flagged "J In Sample (ARG 990404)
Labora	atory Co	ontrol Samples (LCS)	Attach summary for all noncompliant % Recoveries. Circle all outliers and indicate qualifiers.
Blanks	s: Metho	od - Trip - Field Method blank performed for each matrix?	Attach copy of Form IV for all samples. List all contaminants, concentrations and action level.
9		Method blank clean?	Attach copy of Form I for any associated field or trip blanks. Circle
		Field blank clean? I Not Applicable	all contaminants and indicate action level. List all affected samples. Actione was Flagged """ in
	J	Equip. blank clean?  Not Applicable	to equipment block results
Q		Trip blank clean?  O Not Applicable	All other samples were enaffected by acetone in the blank because they were in detected

CRITERIA MET YES NO	?		Noncompliance Notes
GC/MS Instru	Iment Performance C All samples within 1: All BFB m/z within c	2 hr limit	Attach copy of Form V for noncompliant tune. Indicate noncompliances and qualifiers.
GC/MS Initial	Calibration Form VI present for %RSD criteria met RRF criteria met	%RSD <15% for ea. compound OR Ave. %RSD for all compounds of <15% SPCC RRFs >0.1 for: chloromethane, 1,1-DCA, bromoform. >0.3 for	Attach copy of Form VI for noncompliant % RSD or RRF. Circle each noncompliance and indicate qualifiers. List all affected samples on Form VI.
GC/MS Conti	nuing Calibration Form VII (for all san %D criteria met RRF criteria met	chlorobenzene, 1,1,2,2-letrachloroethane hples) %Ds < 20% for CCCs: 1,1-DCE, chloroform, 1,2-DCP, toluene, ethylbenzene, vinyl chloride OR Ave. %D for all compounds of <20%. Same as Initial Calib.	Attach copy of Form VII for noncompliant %D or RRF. Circle each noncompliance and indicate qualifiers. List all affected samples in Form VII.
Internal Stan	dard Form VIII present fo All IS area within lat All retention times w	o criteria	Attach copy of Form VIII for all noncompliant areas and RTs. Circle all noncompliances and indicate qualifiers.
Field Duplica Sample IDs:	ites <i>CARG990408</i> Within RPD Criteria Within RPD Criteria		Identify field duplicate pair and attach list of all compounds with noncompliant RPDs. Indicate qualifiers.
Sample Resu	ults	justed for %moisture / dilutions /	Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this review.

Reviewer's Signature: Manfuell

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DATALCP3		UNITED	D TECHNOLOGIES	S CORPORATION	Page: 1 Time: 12:09
10//1/01		Field QC	sam	Soil SDG E95042	
VOA	SAMPLE ID> CRIGINAL ID> LAB SAMPLE ID> LD FROM REPORT> SAMPLE DATE> DATE ANALYZED> MATRIX>	CAR-T-0713-01 CART071301 ESS042-19 CART071301 07/13/01 07/13/01 07/26/01 Water UG/L	CAR-E-0715-OP CARE0715P E95042-16 CARE0715P 07/13/01 07/13/01 07/26/01 Water UG/L		
CAS # Parameter	Ler.	E95042 NV	E95042 NV		
67-64-1 Acetone		n N	AL=76 7.6		
			ə =		
75+25+2 Bromoform	8 romodian Loromethade Bromoform				
	thane		•		
	2-Butanone (MEK)	ъ.			
56-23-5 Carbon	Carbon disulfide Carbon tetrachloride				
	Chlorobenzene				
	thane	ວ: ທີ່			
67-66-3 Chloroform	form				
	un un orometriane Diterrencel ceromothono				
75-34-3 1 1 1 5 - 3 1 1 - 0 1 5 - 0 15 - 0	Ulbromochloromethane 1 1-Dichloroethane				
	1,2-Dichloroethane	2. U	2. U		 
	1,1-Dichloroethene	·			
	cis-1,2-Dichloroethene	ي ت	ີ ສຸດ ເດັນ		 
_	trans-1,2-01chloroetnene				
10061-01-5  c1s-1,3	r, z-urchtoropropane cis-1,3-Dich(oropropene				
	Je Je				
	snzene	•			
	Jone				
75-00-2 Methyle	4-Methyl-Z-Pentanone (MiBK) Methylene chioride	5°	5.0		
	1,1,2,2-Tetrachloroethane	. :	2 <b>.</b> U		
	Tetrachloroethene	1999 1997 2017	<b>.</b>		
****		- - -	⊃ ≍ - ⊔		
	1,1,1-Trichloroethane				
70-01,11,0-00-07	l, l, c = l f l c l of oe unane T micht annathene		ם ביי היי ר		
بيستيعنين	Xylene (totál)		5. U		
				5	

			ł		
DATALCP3 10/17/01		UNITED	TECHNOLOGIE SYRACUSE	S CORPORATION RFI	Page: 1 Time: 12:10
		Field QC	samples for	Water SDG E95042	
YOA	SAMPLE ID> ORIGINAL ID> LAB SAMPLE ID> ID FROM FEPORT> SAMPLE DATE> DATE ANALYZED+> MATRIX>	CAR-E-0701-WL CARE07014L E95042-17 CARE07014L 07/15/01 07/15/01 Water UG/L	CAR-T-0713-01 CART071301 E95042-19 CART071301 07/13/01 07/13/01 07/26/01 Water UG/L		
CAS # Parameter		E95042 NV	E95042 NV		
67-64-1 Acetone	AL :	10/ 10.1	5. 1		
	Bromodíchloromethane				
75-25-2 Bromoform					
	e (MEK)				
75-15-0 Carbon disulfide	sulfide	⊃ : 			
	carbon tetrachtoride Chlorobenzene				
	апе		5 <b>.</b>		
÷	lane				
124-48-1 Dibromochioromethan 75-74-2 1 1-05-04 Coronethan	Dibromoch(oromethane 1 1.01.01.0004thane	o ≕ • 4			
	ur ve thane or ne thane				
	oroethene				
	cis-1,2-Dichloroethene				
	trans-1,2-Dichloroethene				
78-87-5 [1,2-Dichic 10061-01-5 [cis-1_3-Di	1,2-Dichloropropane cis-1,3-Dichloropropene				
	Je L				
_	ene	1			
	C)	ي ب ب			
	4-Methyl-Z-Pentanone (MIBK) Mothylono chiorida				
100-42-5 Styrene	2				
		~	2. U		
	roethene	· · · · · · · · · · · · · · · · · · ·			
	1,1,1-Trichloroethane	0 =	. K		
70-07-24 Treichloroethene	l, i, 2* iricnioroetnane Trichioroethena	) == 1 ==			
****	otal)	<b>5</b> .	с. С		
	a de la maine e e de la demando				

# Matrix Spike/Matrix Spike Duplicate Summary

Job Number:	E95042
Account:	UTC United Technology Corporation
Project:	ENSTNN: Carrier, Syracuse, NY

The QC reported here applies to the following samples:

Method: SW846 8260B

E95042-1, E95042-2, E95042-3, E95042-4, E95042-5, E95042-6, E95042-7, E95042-8, E95042-9, E95042-10, E95042-11, E95042-12, E95042-13, E95042-14, E95042-16, E95042-17, E95042-18, E95042-19

CAS No.	Compound	E95042- ug/l	.7 Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
01101101	compound		×		8		<b>0</b>			
67-64-1	Acetone	ND		1000	836	84	855	86	2	21-160/30
71-43-2	Benzene	ND		1000	935	94	978	98	4	61-138/11
75-27-4	Bromodichloromethane	ND		1000	970	97	1000	100	3	75-130/12
75-25-2	Bromoform	ND		1000	1070	107	1110	111	4	59-136/14
74-83-9	Bromomethane	ND		1000	891	89	893	89	0	65-143/18
78-93-3	2-Butanone (MEK)	ND		1000	1120	112	1180	118	5	41-141/29
75-15-0	Carbon disulfide	ND		1000	816	82	859	86	5	55-134/24
56-23-5	Carbon tetrachloride	ND		1000	977	98	1020	102	4	69-143/17
108-90-7	Chlorobenzene	ND		1000	1010	101	1050	105	4	83-124/12
75-00-3	Chloroethane	ND		1000	987	99	983	98	0	66-147/19
67-66-3	Chloroform	ND		1000	878	88	924	92	5	76-128/12
74-87-3	Chloromethane	ND		1000	887	89	897	90	1	59-136/23
124-48-1	Dibromochloromethane	ND		1000	1040	104	1080	108	4	69-130/13
75-34-3	1,1-Dichloroethane	69.9	J	1000	980	91	1020	95	4	73-130/14
107-06-2	1,2-Dichloroethane	ND		1000	949	95	982	98	3	67-138/12
75-35-4	1,1-Dichloroethene	ND		1000	996	100	1030	103	3	72-134/17
156-59-2	cis-1,2-Dichloroethene	2390		1000	3770	138* *	>3870	(148* a	3	73-131/14
156-60-5	trans-1,2-Dichloroethene	ND		1000	867	87	919	92	6	71-129/16
78-87-5	1,2-Dichloropropane	ND		1000	975	98	1020	102	4	77-127/13
10061-01-5	cis-1,3-Dichloropropene	ND		1000	1010	101	1050	105	4	75-125/12
10061-02-6	trans-1,3-Dichloropropene	ND		1000	1040	104	1080	108	4	73-125/13
100-41-4	Ethylbenzene	ND		1000	1060	106	1100	110	4	68-139/12
591-78-6	2-Hexanone	ŊD		1000	1010	101	1060	106	5	47-141/22
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		1000	1010	101	1040	104	3	68-131/18
75-09-2	Methylene chloride	15.0	J	1000	952	94	950	94	0	69-132/13
100-42-5	Styrene	ND		1000	1140	114	1160	116	2	76-133/13
79-34-5	1,1,2,2-Tetrachloroethane	ND		1000	1040	104	1090	109	5	72-127/12
127-18-4	Tetrachloroethene	ND		1000	980	98	1020	102	4	55-149/13
108-88-3	Toluene	ND		1000	999	100	1040	104	4	55-147/12
71-55-6	1,1,1-Trichloroethane	ND		1000	903	90	945	94	4	72-135/14
79-00-5	1,1,2-Trichloroethane	ND		1000	970	97	1000	100	3	78-131/11
79-01-6	Trichloroethene	ND		1000	966	97	1010	101	4	77-132/13
75-01-4	Vinyl chloride	338		1000	1390	105	1410	107	1 .	63-138/18
1330-20-7	Xylene (total)	ND		3000	3270	109	3390	113	4	57-146/12
				- 11						

Action: Cis-1,2-DCE was flagged "J" in Unspiked Sample CARG990404 due to potential matrix effects atmorgin the concentration in the sample was high relative to the Spike Concentration.

DATALCP2 10/18/01		UNITED	D TECHNOLOGIES SYRACUSE R	ES CORPORATION RFI	N		Page: 1 Time: 07:34
E95042 VDA	SAMPLE ID> ORIGINAL ID> LAB SAMPLE ID> SAMPLE DATE> DATE ANALYZED> MATRIX>	CAR-G-0107-04 CARG010704 E95042-14 07/13/01 07/26/01 Water UG/L A	CAR-G-0108-04 CARG010804 E95042-13 07/13/01 07/26/01 Water UG/L A	CAR-G-9904-01 CARG071301 E95042-18 07/13/01 07/13/01 07/26/01 Water UG/L A	CAR-G-9904-02 CARG990402 E95042-12 07/13/01 07/13/01 07/26/01 Water UG/L A	CAR-G-9904-03 CAR6990403 E95042-9 07/13/01 07/13/01 Water UG/L A	- <u></u>
CAS # Parameter		The Let of					C-1,2-5CC HSH3D
Į		0	ĺ	<			100
		Colouted 6. CL	250 <b>.</b> U	50. 10	- 00. 10 = 0		20.
75-27-4 Bromodich	⊎enzene Bromodich¦oromethane				10.	10. U	
			200 <b>.</b> U	40° U			80. U
	ane						100. 100.
	e (MEK)		250. U			20. 20.	100.
	sulfide				0. 10		
56-23-5 Carbon tetraci	Carbon tetrachloride	⊃ = -` ^	100, U				
	27 C L C A D O						
	hane	5. U					
	Dibromochloromethane	5.					
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74-83-9 Bromomethane					50. U	
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75-15-0 Carbon disulfide						- nn
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67-66-3 Chlorotorm 74-87-3 Chlorotmethane		ос 20- С				
	lethane					
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107-06-2 1,2-Dichloroethane	hane	50. 20.	50. U	100. U		
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1550-20-7 Xylene (total)						
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Data Evaluation Worksheets Sample Delivery Group E95042

PCBs

# Validation Worksheets - PCBs

Site: Carrier Corporation - Thompson Road Facility, Syracuse, NY Project No. 3133-031-05-004-00

SDG # \_ E 95042

2	No.	S

Samples \_\_\_\_\_ Autrix <u>Sectiment</u> Lab: <u>Accutest - New Jersey</u>

Attach Copy of Flagged Data Tables

Method Reference: SW846 8082

CRITERIA MET? YES NO			NONCOMPLIANCE NOTES
Data Complet	eness / Sample Receipt Data Complete Samples received in go		Call (fax) lab for resubmittals. Attach all resubmittal correspondence to this review.
	Samples received in go		If any problems were noted with sample condition or receipt affecting data quality, attach discrepancy report or summarize problems and effects on data.
	Hold Times Met	water - 7 days to extraction/40 days to analysis; soil - 14 days to extraction/40 days to analysis	Attach list of samples which exceed hold times. Indicate total hold time and qualifiers.
Surrogate Re	c <b>overy</b> All recoveries within cri	teria	Attach summary for noncompliant surrogate recoveries. Indicate outliers and qualifiers.
Matrix Spike/I	Matrix Spike Duplicate MS/MSD performed for Recoveries for MS with Recoveries for MSD w RPDs within lab limits	nin lab limits	Attach summary for all noncompliant % Recoveries. Circle all outliers and indicate qualifiers.
Laboratory C	ontrol Samples (LCS) LCS %Rs within lab lin	Not Applicable nits	Attach summary for all noncompliant % Recoveries. Circle all outliers and indicate qualifiers.
Blanks: Meth	od and Field Method blank performe Method blank clean? Field blank clean? Equip. blank clean?	ed for each matrix? <ul> <li>Not Applicable</li> <li>Not Applicable</li> </ul>	Attach copy of method blank summary. List all contaminants, concentrations and action levels. Attach copy of results for any associated field. Circle or highlight all contaminants and indicate action level. List all affected samples.

CRITER YES	IA MET? NO			Noncompliance Notes
Calibra	ation - R	T Windows and Calibr	ation Factors	Attach copy of initial calibration form
9			present for both columns d for Aroclors 1016 and 1260. I on 1 point cal.)	for noncompliant % RSDs Indicate noncompliances, qualifiers, and affected samples.
9		Retention time criteria	met for both columns	
	Ó	%RSD criteria met	%RSD <20% for ea. compound OR Ave. %RSD for all compounds of <20%	
Calibra	ation Ve	erification		Attach copy of verification form
Ø		Calibration verification (Only required for Aroclo	forms present for both columns rs 1016 and 1260)	which does not meet %D criteria. Indicate outliers, qualifiers, and affected samples.
IJ		Retention time criteria	met for both columns	
Ø	Ο	All Arochlor compound %D <15% for ea. compound Ave. %D for all compounds	d OR	
Compound Identification       Image: Not Applicable - all samples were undetected			List all samples with compounds containing peaks outside RT or no 2nd column confirmation. Indicate	
Arochlors were properly both columns			ly identified and quantitated on	qualifiers.
Ū		Retention time criteria	met	
Field I	Duplicat	tes	Not Applicable	Identify field duplicate pair and attach list of all compounds with
Sampl	e IDs _(	CARMHO3901,	CARRMO390/	noncompliant RPDs. Indicate
	D	Within RPD Criteria	35% water; 50% soil	qualifiers. Result Dup RPD Action
Sampl	a IDe			AR1260 1270 386 106.8 J/J
		Within RPD Criteria	35% water; 50% soil	
Samp	le Resu			Call (fax) lab for resubmittals. Attach all resubmittal correspondence to
Ч ——		Reporting Limits adjust sample volumes	sted for %moisture / dilutions /	this review.

Reviewer's Signature:

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Manhull Date 1:0 1 1710/

Job Number: Account: Project:	E95042 UTC United Technolo ENSTNN: Carrier, S	- ogy Corporation		·					
Sample OP9795-MS OP9795-MSD E94771-1	File ID         DF           WW25333.D 1         WW25334.D 1           WW253326.D 1         WW25326.D 1	Analyzed 07/18/01 07/18/01 07/17/01	<b>Ву</b> ҮҮХ ҮҮХ ҮҮХ	Prep D 07/17/0 07/17/0 07/17/0	01 01	<b>Prep Batcl</b> OP9795 OP9795 OP9795 OP9795	(	Analytical GWW851 GWW851 GWW851 GWW851	Batch
The QC repor E95042-15	rted here applies to the	following samp	oles:			Method: S	SW84	6 8082	]
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CAS No. C	ompound		Q ug/l	ug/l	%	ug/l	%	RPD	Rec/RPD
12674-11-2 A	roclor 1016	ND	4	2.7	68	3.7	92	(31* a	>49-138/21
11104-28-2 A	roclor 1221	ND		ND		ND		nc	15-178/0
11141-16-5 A	roclor 1232	ND		ND		ND		nc	10-215/0
53469-21-9 A	roclor 1242	ND		ND		ND		nc	39-150/0
12672-29-6 A	roclor 1248	ND		ND		ND		nc	38-158/0
11097-69-1 A	roclor 1254	ND		ND		ND		nc	29-131/1
11096-82-5 A	roclor 1260	ND	, 4	3.0	75	3.4	85	12	25-133/35
CAS No. S	urrogate Recoveries	MS	MSD	, 93	94771-1	Limits			

CAS NO.	Surrogate Recoveries	1410	MOD	1.24771-1	1,1111113	
877-09-8	Tetrachloro-m-xylene	79%	96%	88%	25-134%	
877-09-8	Tetrachloro-m-xylene	84%	102 %	91%	25-134%	
2051-24-3	Decachlorobiphenyl	57%	58%	63 %	14-150%	
2051-24-3	Decachlorobiphenyl	63%	65%	74%	14-150%	

(a) Outside control limits due to matrix interference.

No action taken for the RPD outlier. The MS/MSD was performed on a batch Dample that was not from the Thompson Road site. Therefore, No action was taken because the MS/MSD RPD Outlier may not be representative of site samples.



Page 1 of 1

# Matrix Spike/Matrix Spike Duplicate Summary

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\*\*\* Lab Results \*\*\*

# APPENDIX D

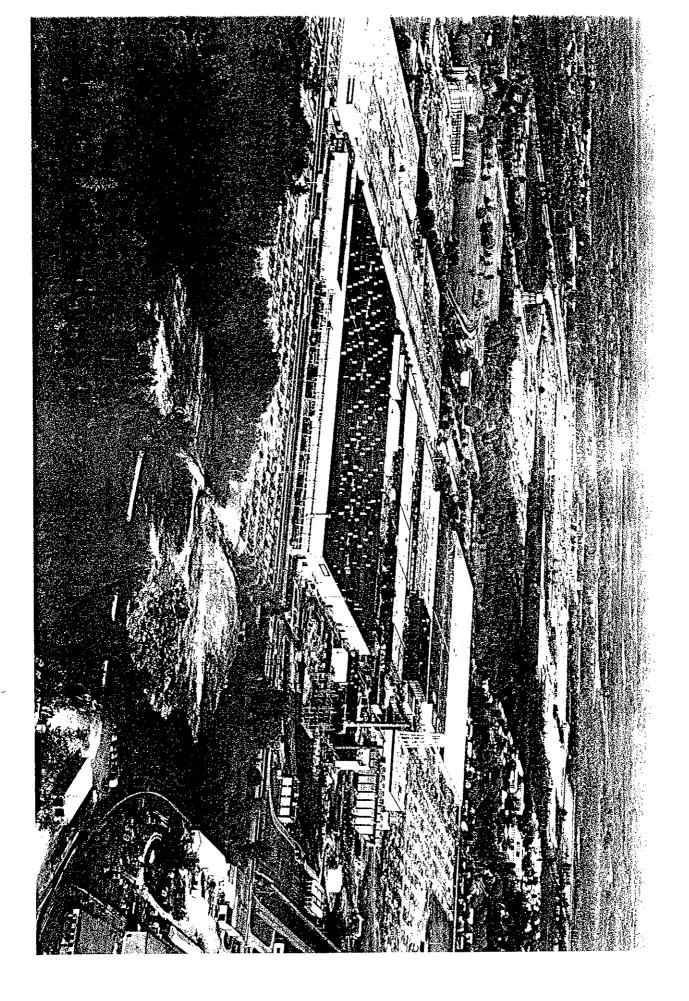
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Data Evaluation Report and Work Sheets (June 2002)

The data evaluation report and work sheets for the June 2002 investigation will be submitted under separate cover by October 18, 2002.

# APPENDIX E

**Carrier-DeWitt Landfill Information** 



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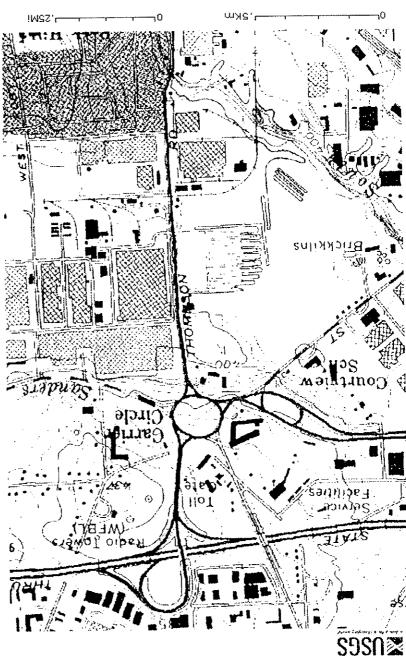


Image courtesy of the US Geological Survey.

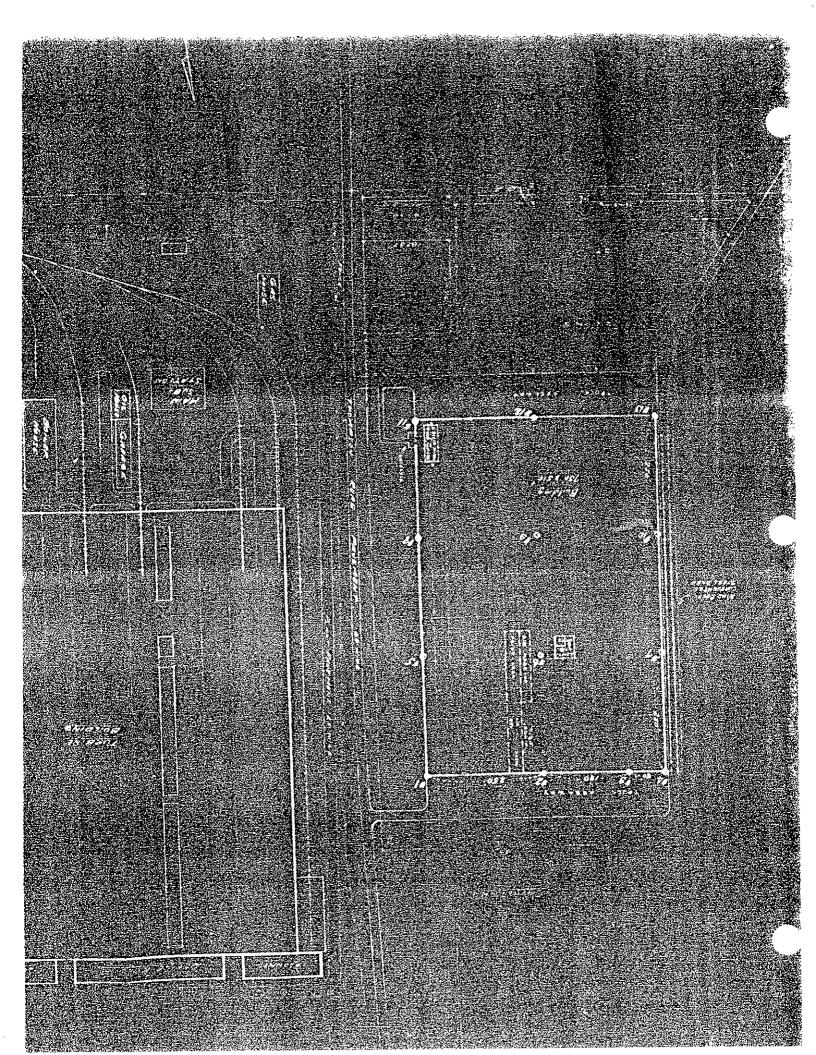
USGS Aerial Photograph

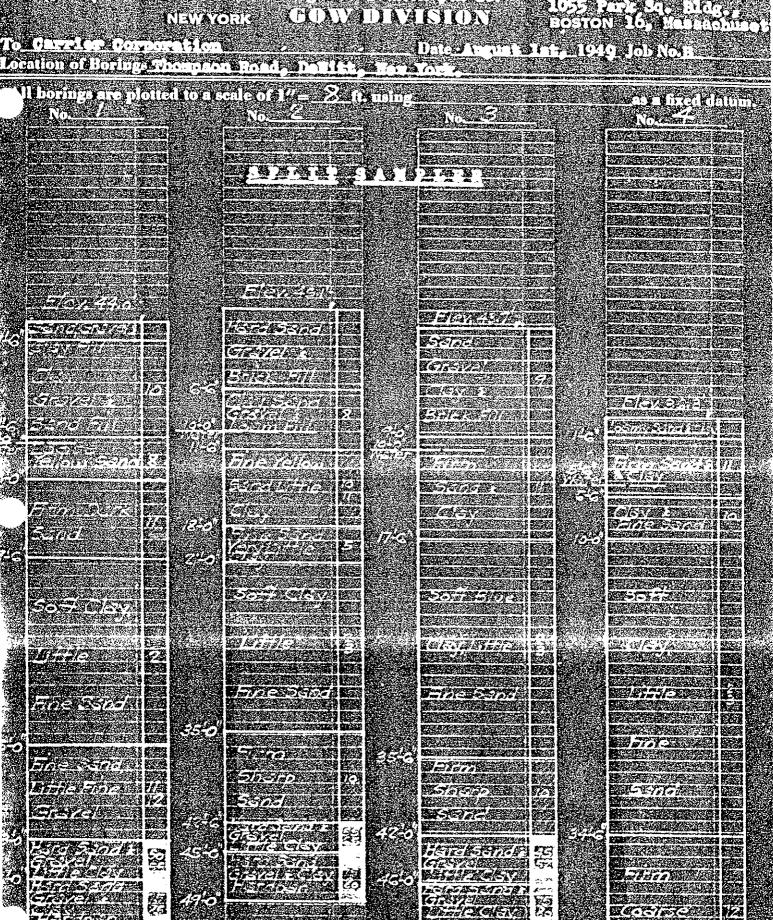
Microsoft TerraServer

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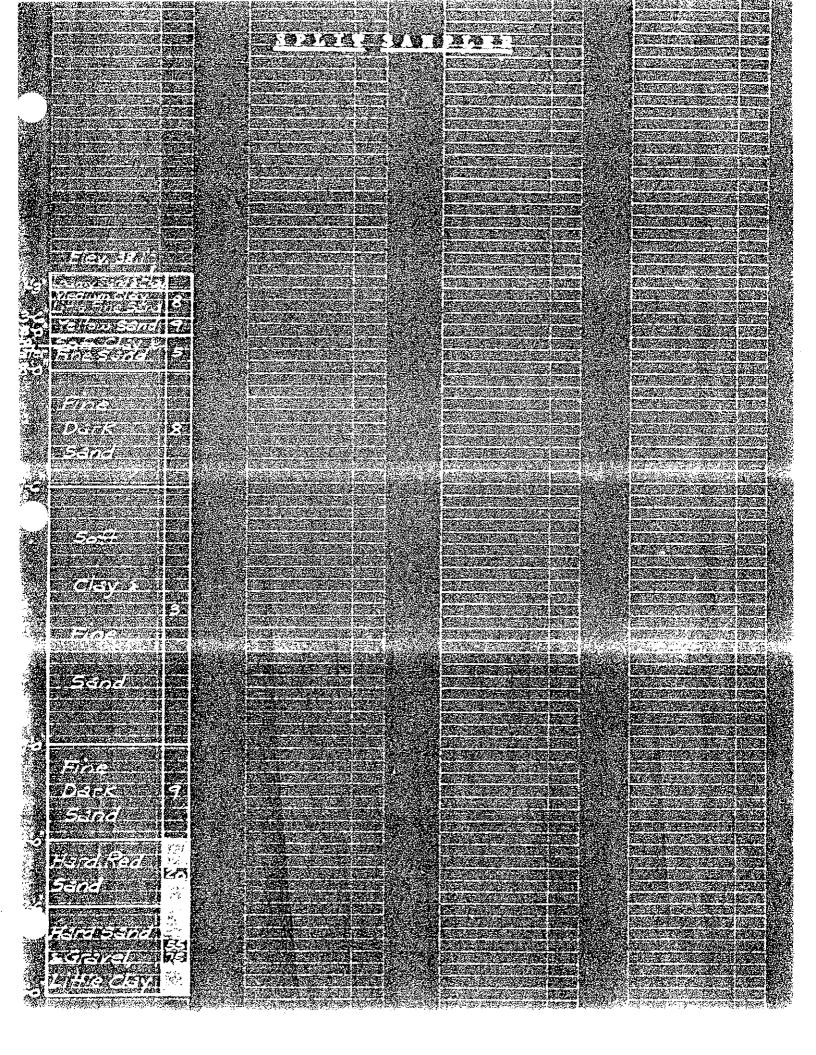
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# APPENDIX F

# Indoor Air Sampling Data Sheets

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INDOOR AIR SAMPLING ANALYTICAL DATA BUILDINGS TR-18 AND 18S June 2002



COVER PAGE

ANALYTICAL REPORT FOR Ensafe Phone(901) 372-7962 Fax(901) 372-2454

AMENDED

Form COVER-V1.3 08020209223469 Page 1



DCL Report Group. .: 021-1625-01

Date Printed....: 02-AUG-02 09:22

Project Protocol #: P021C002 Client Ref Number.: 3133-031-04-03-00 Release Number...: 3133-031-04-03-00

Analysis Method(s): TO17

Ensafe Attention: Bill Bradshaw 5724 Summer Trees Drive Memphis, TN 38134

Client Sample Name	Laboratory Sample Name	Date Sampled	Date Received
CS062501	02115784	25-JUN-02	28-JUN-02
CS062502	02115785	25-JUN-02	28-JUN-02
CS062503	02115786	25-JUN-02	28-JUN-02
CS062504	02115787	25-JUN-02	28-JUN-02
CS062505	02115788	25-JUN-02	28-JUN-02
Method Blank	BL-197279-1	NA	NA
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LCS Dup	QD-197279-1	NA	NA

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960 West LeVoy Drive / Salt Lake City, Utah 84123-2547 Phone (801) 266-7700 Web Page: www.datachem.com FAX (801) 268-9992 E-mail: lab@datachem.com

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SAMPLE GROUP COMMENTS

Form RLIMS63H-V1.3 08020209223469 Page 2



DCL Report Group...: 021-1625-01 Date Printed.....: 02-AUG-02 09:22

Rolease Number. ... 3133-031-04-03-00

Client Name ... : Ensafe

#### Sample Group Comments

Analyzed by thermal desorption GC/MS according to method T017 with modifications All results are semi-quantitative. FQL - Practical Quantitation Limit - Lowest standard that is detectable. MDL - Method Detection Limit - Statisticaly derived value using 40 CFR methods.

#### General Information

The DCL QC Database maintains all numerical figures which are input from the pertinent data The DCL QC Database maintains all numerical figures which are input from the pertinent data source. These data have not been rounded to significant figures nor have they been moisture corrected. Reports generated from the system, however, list data which have been rounded to the number of significant figures requested by the client or deemed appropriate for the method. This may create minor discrepancies between data which appear on the QC Summary Forms (Forms B-G) and those that would be calculated from rounded analytical results. Additionally, if a moisture correction is performed, differences will be observed between the QC data and the surrogate data reported on Form A (or other report forms) and corresponding data reported on QC Summary Forms. In these cases, the Form A will indicate the "Report Basis" as well as the moisture value used for making the correction. Report generation options: BX

#### Result Symbol Definitions

- ND Not Detected above the MDL (LLD or MDC for radiochemistry).
- \*\* No result could be reported, see sample comments for details.

#### Qualifier Symbol Definitions

- U Not Detected above the MDL (LLD or MDC for radiochemistry). B For organic analyses the qualifier indicates that this analyte was found in the method blank.
- For organic analyses the qualifier indicates that this analyce was found in the method blank For inorganic analyses the qualifier signifies the value is between the MDL and PQL.
   For organic analyses the qualifier indicates that the value is between the MDL and the PQL. It is also used for indicating an estimated value for tentatively identified compounds in mass spectrometry where a 1:1 response is assumed.
   rarameter outside of specified QC limits. Л

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### SAMPLE ANALYSIS DATA SHEET

Form RLIMS63A-V1.3 08020209223469 Page 3

Date Printed....: 02-AUG-02 09:22

Client Name:	Ensafe
	3133-031-04-03-00
Sampling Site	Carrier Syracuse
Release Number:	3133-031-04-03-00

Date Received.....: 28-JUN-02 00:00

DCL Preparation Group: Not Applicable Date Prepared......: Not Applicable Preparation Method...: Not Applicable Aliquot Weight/Volume: Not Applicable Net Weight/Volume....: Not Required Client Sample Name: CS062501 DCL Sample Name...: 02115784 DCL Report Group..: 021-1625-01

Matrix.....: CARBO Date Sampled.....: 25-JUN-02 00:00 Reporting Units...: ng/Sample Report Basis.....: 🖾 As Received []Dried

DCL Analysis Group: G0260004 Analysis Method...: T017 Instrument Type...: GC/MS VO Instrument ID....: 5972-X Column Type. DB-1 X Primary Confirmation

#### Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	PQL
Vinyl Chloride	30-JUN-02 05:13		ND			1	100.
cic-1,2-Dichlorcethone	30-JUN-02 05:13		91.			1	25.
trans-1,2-Dichloroethene	30-JUN-02 05:13		ND			1	25.
1,1-Dichloroethane	30-JUN-02 05:13		ND			1	25.
1,1-Dichloroethene	30-JUN-02 05:13		ND			1	25.
Trichloroethene	30-JUN-02 05:13		73.			1	25.

Surrogate Recoveries

1		Spiked	Percent
Analyte	Result	Amount	Recovery
4-Bromofluorobenzene	92.1	100.	92.1

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### SAMPLE ANALYSIS DATA SHEET

Form RLIMS63A-V1.3 08020209223469 Page 4



Date Printed....: 02-AUG-02 09:22

Client Name	Ensafe
Cliont Rof Number	3133-031-04-03-00
Sampling Site:	Carrier Syracuse
Release Number:	3133-031-04-03-00

Date Received....: 28-JUN-02 00:00

DCL Preparation Group: Not	Applicable
Date Prepared : Not	Applicable
Preparation Method: Not	Applicable
Aliquot Weight/Volume: Not	Applicable
Net Weight/Volume . Not	Required

Client Sample Name: CS062502 DCL Sample Name...: 02115785 DCL Report Group..: 021-1625-01

Matrix..... CARBO Date Sampled.....: 25-JUN-02 00:00 Reporting Units...: ng/Sample Report Basis.....: 🕅 As Received 🗍 Dried

DCL Analysis Group: G0260004 Analysis Method...: T017 Instrument Type...: GC/MS VO Instrument ID....: 5972-X Column Type.....: DB-1 X Primary Confirmation

#### Analytical Results

	Date			1	_		
Analyte	Analyzed	MDL	Result	Comment	Qual.	Dilution	PQL
Vinyl Chloride	30-JUN-02 06:06		ND			1	1.00,
cis-1,2-Dichleroethene	30 JUN-02 06.06		86.	}	1	1	25.
trans-1,2-Dichloroethene	30-JUN-02 06:06		ND			1	25.
1,1-Dichloroethane	30-JUN-02 06:06		ND			1	25.
1,1-Dichloroethene	30-JUN-02 06:06		ND			1	25.
Trichloroethene	30-JUN-02 06:06		49			1.	25

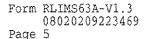
#### Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
4-Bromofluorobenzene	89.3	100.	89.3

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### SAMPLE ANALYSIS DATA SHEET



S025v

Date Printed..... 02-AUG-02 09:22

Client Name: Ensafe
client Ref Number: 3133-031-04-03-00
Sampling Site: Carrier Syracuse
Release Number: 3133-031-04-03-00

Date Received.....: 28-JUN-02 00:00

DCL Preparation Group: Not Applicable Date Prepared.....: Not Applicable Preparation Method...: Not Applicable Aliquot Weight/Volume: Not Applicable Net Weight/Volume..... Not Required Client Sample Name: CS062503 DCL Sample Name...: 02115786 DCL Report Group..: 021-1625-01

Matrix.....: CAREC Date Sampled.....: 25-JUN-02 00:00 Reporting Units...: ng/Sample Report Basis.....: XAS Received U Dried

DCL Analysis Group: G0260004 Analysis Method...: TO17 Instrument Type...: GC/MS VO Instrument ID....: 5972-X Column Type..... DB 1 [X] Primary [] Confirmation

#### Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	PQL
Vinyl Chloride	30-JUN-02 07:00		ND			1	100.
cis-1,Z-Dichloroethene	30-JUN-02 07:00		210			1	25.
trans-1,2-Dichloroethene	30-JUN-02 07:00		ND			1.	25.
1,1-Dichloroethane	30-JUN-02 07:00		ND	{		1	25.
1,1-Dichloroethene	30-JUN-02 07:00		NID			1	25.
Trichloroothene	30 JUN 02 07:00		42.			1.	25.

#### Surrogate Recoveries

		Spiked	Percent
Analyte	Result	Amount	Recovery
4-Bromofluorobenzene	103.	100.	103.

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SAMPLE ANALYSIS DATA SHEET

Form RLIMS63A-V1.3 08020209223469 Page 6

S025W040

Date Printed.....: 02-AUG-02 09:22

Client Name	Ensafe
Client Ref Number:	3133-031-04-03-00
Sampling Site	Carrier Syracuse
Release Number:	3133-031-04-03-00

Date Received.....: 28-JUN-02 00:00

DCT. Preparation Group: Not Applicable Date Prepared.....: Not Applicable Preparation Method...: Not Applicable Aliquot Weight/Volume: Not Applicable Net Weight/Volume..... Not Required Client Sample Name: CS062504 DCL Sample Name...: 02115787 DCL Report Group..: 021-1625-01

Matrix.....: CARBO Date Sampled.....: 25-JUN-02 00:00 Reporting Units...: ng/Sample Report Basis.....: [X]As Received []Dried

DCL Analysis Group: G0260004 Analysis Method...: TO17 Instrument Type...: GC/MS VO Instrument ID....: 5972-X Column Type..... DB 1 [X] Primary Confirmation

#### Analytical Results

Analyte	Date Analyzod	MDL	Result	Comment	Qual.	Dilution	PQL
Vinyl Chloride	30-JUN-02 07:54		ND			1	100.
cis-1,2-Dichloroethene	30-JUN-02 07:54		85,			1	25.
trans-1,2-Dichloroethene	30-JUN-02 07:54		ND			1	25.
1,1-Dichloroethane	30-JUN-02 07:54		ND			1	25.
1,1-Dichloroethene	30-JUN-02 07:54		ND			1	25.
Trichloroethene	30 JUN 02 07:54		ND		}	1	25.

#### Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
4-Bromofluorobenzene	108.	100.	108.

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#### SAMPLE ANALYSIS DATA SHEET

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Client Name:	Ensafe
Client Rof Number	3133-031-04-03-00
Sampling Site	Carrier Syracuse
Release Number:	3133-031-04-03-00

Date Received....: 28-JUN-02 00:00

DCL Preparation Group: Not Applicable Date Prepared.....: Not Applicable Preparation Method...: Not Applicable Aliquot Weight/Volume: Not Applicable Not Weight/Volume...: Not Required Client Sample Name: CS062505 DCL Sample Name...: 02115788 DCL Report Group..: 021-1625-01

Matrix.....: CARBO Date Sampled.....: 25-JUN-92 00:00 Reporting Units...: ng/Sample Report Basis.....: [X]As Received []Dried

DCL Analysis Group: G0260004 Analysis Method...: T017 Instrument Type...: GC/MS VO Instrument ID....: 5972-X Column Type..... DB-1 X Primary

#### Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	PQL
Vinyl Chloride	30-JUN-02 04:18		ND	ļ		1	100.
cis-1,2-Dichlorcethene	30-JUN-02 04:18		ND		1	1	25.
trans-1,2-Dichloroethene	30-JUN-02 04:18		ND			1	25.
1,1-Dichloroethane	30-JUN-02 04:18		ND			1	25.
1,1-Dichloroethene	30-JUN-02 04:18		ND		1	1	25.
Trichloroethene	30-JUN-02 04-18		ND		1	1	25.

#### Surrogate Recoveries

Analyte	Result	Spiked Amount	Percent Recovery
4-Bromofluorobenzene	91.1	100.	91.1

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### SAMPLE ANALYSIS DATA SHEET

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S026000S

Date Printed..... 02-AUG-02 09:22

Client Name F	Insafe
Client Ref Number 3	133-031-04-03-00
Sampling Site N	Not Applicable
Release Number: 3	133-031-04-03-00

Date Received..... Not Applicable

DCT. Preparation Group: Not Applicable Date Prepared...... Not Applicable Preparation Method...: Not Applicable Aliquot Weight/Volume: Not Applicable Net Weight/Volume....: Not Required Client Sample Name: BL-197279-1 DCL Sample Name...: BL-197279-1 DCL Report Group..: 021-1619-01

Matrix.....: TUBE Date Sampled.....: Not Applicable Reporting Units...: ng/Sample

DCL Analysis Group: G0260004 Analysis Method...: TO-15 Instrument Type...: GC/MS VO Instrument ID....: 5972-X Column Type..... DB 1 XPrimary Confirmation

#### Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	PQL
Dichlorodifluoromethane	29-JUN-02 16:45		ND		1	1	25.
Chioromethane	29-JUN-02 16:45		ND			1	25.
Freon 114	29-JUN-02 16:45		ND		1	1.	25.
Vinyl Chloride	29-JUN-02 16:45		ND		1	1	25.
Bromomethane	29-JUN-02 16:45		ND		1	1	25.
Chloroethane	29 JUN 02 16:45		ND		1	1	25,
Freon 11	29-JUN-02 16:45		ND			1	25.
cis-1,2-Dichloroethene	29-JUN-02 16:45		ND	1	1	1	25.
Carbon Disulfide	29-JUN-02 16:45		ND			1	25.
Freon 113	29-JUN-02 16:45		ND			1	25.
Acetone	29-JUN-02 16:45		ND	1	1	1	25.
Methylene Chloride	29-JUN-02 16:45		ND	1	1	1	25.
trans-1,2-Dichloroethene	29-JUN-02 16:45		ND	1		1	25,
1.1-Dichloroethane	29-JUN-02 16:45		ND			1	25.
Vinyl Acetate	29-JUN-02 16:45		ND	1		1	25.
1,1-Dichloroethene	29-JUN-02 16:45		ND			1	25.
2-Butanone	29-JUN-02 16:45		ND			1	25.
Chloroform	29-JUN-02 16:45		ND			1	25.
1,1,1-Trichloroethane	29-JUN-02 16:45	*****	UN	1	1	1	25.
Carbon Tetrachloride	29-JUN-02 16:45		ND		1	1	25.
Benzene	29-JUN-02 16:45		ND	1	1	1	25.
1,2-Dichloroethane	29-JUN-02 16:45		ND	1	1	1	25.
Trichloroethenc	29 JUN 02 16.45		ND			1	25.
1,2-Dichloropropane	29-JUN-02 16:45		ND	1	1	1	25.
Bromodichloromethane	29-JUN-02 16:45		ND	1		1	25.
cis-1,3-Dichloropropene	29-JUN-02 16:45		ND			1	25.
4-Methyl-2-Pentanone	29-JUN-02 16:45		ND		1	1	25
Toluene	29-JUN-02 16:45		ND			1	25.
trans-1,3-Dichloropropene	29-JUN-02 16:45		ND		1	1 1	25.
1,1,2-Trichloroethane	29-JUN-02 16:45		ND	1	1	1	25.
Tetrachloroethene	29-JUN-02 16:45		ND		1	1	25.
2-Hexanone	29-JUN-02 16:45		ND	1	· ·	1 I	25
Dibromochloromethane	29-JUN-02 16:45		ND	1		1	25.
1,2-Dibromoethane	29-JUN-02 16:45		ND	1		1	25.
Chlorobenzene	29-JUN-02 16:45		ND	1	1	1	25.
Ethylbenzene	29-JUN-02 16:45		ND	1		1 1	25.
m,p~Xylene	29-JUN-02 16:45		ND	1	1	1	25.
o-Xylene	29-JUN-02 16:45		ND		1	$\frac{1}{1}$	25.
Styrene	29-JUN-02 16:45		ND		1	1 1	25.
Dromoform	29-JUN-02 16.45	······	ND		+	1	25.
1,1,2,2-Tetrachloroethane	29-JUN-02 16:45		ND		1	1 1	25.

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### SAMPLE ANALYSIS DATA SHEET

S026000S

Date Printed.....: 02-AUG-02 09:22 Client Name.....: Ensafe DCL Sample Name...: BL-197279-1 DCL Report Group..: 021-1619-01

### Analytical Results

Analyte	Date Analyzed	MDL	Result	Comment	Qual.	Dilution	PQL
Benzyl Chloride	29-JUN-02 16:45		ND			1	25.
4-Ethyl toluene	29-JUN-02 15:45		ND			1	25.
1,3,5-Trimethylbenzene	29-JUN-02 16:45		ND			1	25.
1,2,4-Trimethylbenzene	29-JUN-02 16:45		ND			1	25.
1.3-Dichlorobenzene	29-JUN-02 16:45		ND			]	25.
1,4 Dichlerobenzone	29-JUN-02 16:45		ND			1	25.
1,2-Dichlcrobenzene	29-JUN-02 16:45		ND			1	25.
1,2,4-Trichlorobenzene	29-JUN-02 16:45		ND			1	25.
Hexachlorobutadiene	29-JUN-02 16:45		ND			1	25.
Methyl t-Butyl Ether	29-JUN-02 16:45		ND			1	25.

#### Surrogate Recoveries

.

Analyte	Result	Spiked Amount	Percent Recovery
4-Bromofluorobenzene	101.	100.	101.

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QUALITY CONTROL DATA SHEET LABORATORY CONTROL SAMPLE (LCS) LABORATORY CONTROL DUPL (LCD)



\$0260027

Client Name....: Ensafe Release Number....: 3133-031-04-03-00

Matrix..... AIR Reporting Units..... PPB V/V

DCL Preparation Group: Not Applicable Date Prepared.....: Not Applicable Preparation Method...: Not Applicable

#### Analytical Results

DCL Sample Name...: QC-197279-1 Date Printed.....: 02-AUG-02 09:22

DCL Analycic Croup: C0260004 Analysis Method...: TO17 Instrument Type...: GC/MS VO Instrument ID....: 5972-X Column Type.....: DB-1 X Primary

QC Limit Type ....: Method

Analyte	Date Analyzed	Target	Result	Percent Recovery	QC Limits	OC Flag
1,1,1-Trichloroethane	29-JUN-02 14:58	237,	277.	117.	25.0/175.	
1,1,2,2-Tetrachloroethane	29-JUN-02 14:58	354,	386.	109.	25.0/175.	
1,1-Dichloroethene	29-JUN-02 14:58	157.	178.	114.	25.0/175.	
Tetrachloroethene	29-JUN-02 14:58	326.	364.	112.	25.0/175.	[
Toluene	29-JUN-02 14:58	1.92.	207.	1.08.	25.0/175.	
p-Dichlorobenzene	29-JUN-02 14:58	313.	340.	109.	25.0/175.	

				(
	02			

DCL Sample Name...: QD-197279-1

#### Analytical Results

Analyte	Date Analyzed	Duplicate Result	Percent Recovery	Mean	Range	RPD	QC Limits	OC Flag
1,1,1-Trichloroethane	29-JUN-02 15:54	295.	124.	286.	17.9	6.3	0.00/50.0	1
1,1,2,2-Tetrachloroethane	29-JUN-02 15:54	365.	103.	376.	20.9	5.6	0.00/50.0	1
1,1-Dichloroethene	29-JUN-02 15:54	178.	114.	178.	0.493	0.28	0.00/50.0	
Tetrachloroethene	29-JUN-02 15:54	349.	107.	357.	14.7	4.1	0.00/50.0	1
Toluene	29-JUN-02 15:54	196.	102.	201.	10.4	5.2	0.00/50.0	1
p-Dichlorobenzene	29-JUN-02 15:54	334.	107.	337.	5.73	1.7	0.00/50.0	

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## QUALITY CONTROL DATA SHEET SURROGATE SUMMARY



Date Printed....: 02-AUG-02 09:22

DCL Analysis Group: G0260004 Analysis Method...: T017

DCL Prep Group....: Not Applicable Preparation Method: Not Applicable

QC Limit Type....: Method

Client Name....: Ensafe Release Number....: 3133-031-04-03-00

Matrix..... AIR Reporting Units..... ng/Sample

### Surrogate Recoveries

Surr. ID	4-Bromofluorobenzene						1			·		
OC Limits	<u> </u>			- I								
DCL Sample Number	Analyte Result	Spiked Amount	Rec.	Q	nalyte Result	Spiked Amount	Rec.	Q	Analyte Result	Spiked Amount	Rec.	T
02115784	92.1	100.	92.1									1
02115785	89.3	100.	89.3									+
02115786	103.	100.	103.							********		-
02115787	108.	100.	108.									+
02115788	91.1	100.	91.1					$\top$		*****		+
BL-197279-1	101.	100.	101.	-			1			······································		+
QC-197279-1	93.0	100.	93.0						······		***	-
QD-197279-1	92.4	100.	92.4	1	1							-+-

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