

**FOCUSED REMEDIAL INVESTIGATION REPORT**

*also*  
**TISHCON CORPORATION  
NEW CASSEL INDUSTRIAL AREA  
29 NEW YORK AVENUE  
NEW CASSEL, NEW YORK 11590**

**NYS DEC IHWDS I.D. No. 1-30-043V**

**Prepared For:**

**New York State Department of Environmental Conservation  
Bureau of Eastern Remedial Action  
Division of Environmental Remediation  
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**JANUARY 2000**

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## **1.0 INTRODUCTION**

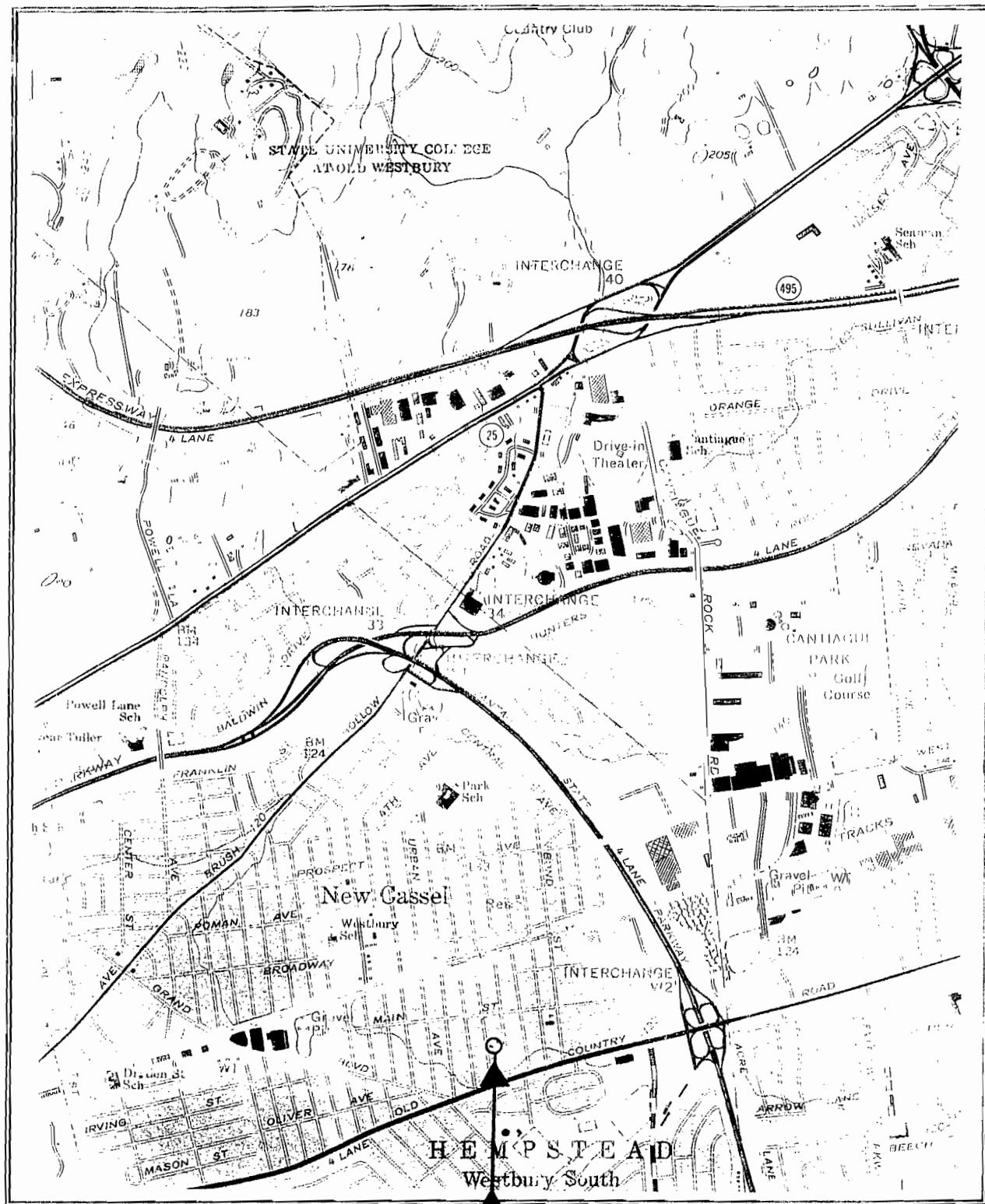
### **1.1 Overview**

A Focused Remedial Investigation was conducted at the property located at 29 New York Avenue, New Cassel, New York, identified on the tax map as Section 11, Block 77, Lots 25-28 and 50-55, hereafter referred to as the "Site". The investigative activities were conducted by General Consolidated Industries, Inc. (GCI). The Site investigation activities were initiated in order to satisfy the conditions of Order on Consent No. W1-0828-98-05, which was signed by Equity Share I Associates. The work performed at the site was done in accordance with the provisions of the Focused Remedial Investigation Work Plan, dated September 1998, which was prepared by GCI. The location of the subject Site is depicted on a U.S.G.S. 7.5 Minute Quadrangle and is included with this report as Figure 1 - Site Location Map.

The subject Site is located on the west side of New York Avenue approximately 300 feet north of the intersection of Old Country Road and New York Avenue. The subject property is located in a highly developed industrial neighborhood known as the New Cassel Industrial Area (NCIA). The site is bordered on all sides by industrial buildings.

The NCIA measures 170 acres and is improved with approximately 200 industrial / commercial businesses. Due to extensive chlorinated solvent contamination of the underlying groundwater, the New York State Department of Environmental Conservation (NYS DEC) classified the entire NCIA as an inactive hazardous waste disposal site (IHWDS) in 1988. Multiple phases of investigation have been conducted at the direction of NYS DEC to identify potentially responsible parties within the NCIA.

An initial investigation of the NCIA was conducted in 1985 by the Nassau County Department of Health (NCDOH) with the assistance of a private consulting firm. Extensive contamination of groundwater was identified which lead to classification of the entire NCIA as an IHWDS. Many of the properties within the NCIA would eventually be de-listed pending results of further study. Subsequent investigations conducted by Lawler, Matusky & Skelly Engineers (LMS) in 1993 and 1994 revealed seven (7) chlorinated solvent plumes: two (2) in the western section, three (3) in the central section and two (2) in the eastern section. Potentially responsible parties for two (2) plumes in the center and one (1) of the western section were identified. Those facilities were listed as Class "2" Sites on the IHWDS Registry. Facilities located within the remaining four (4) plume regions were designated as potential registry sites requiring further investigation.



**U.S.G.S. 7.5 MINUTE TOPOGRAPHIC MAP**

**29 New York Avenue  
New Cassel, New York**

**Scale: 1,24000**

**Map Name: Hicksville, NY**

LMS conducted a Multi-site Preliminary Site Assessment (PSA) of the remaining four (4) contaminant plumes in 1995. The objectives of the multi-site PSA were to further delineate the four (4) plumes, locate the sources of contamination, and assess the threat of each source to the environment. Based on the Multi-site PSA data, five (5) properties were recommended for inclusion on the IHWDS Registry, fifteen (15) properties were removed from the list of potential registry sites, and twelve (12) properties were identified as potential registry sites.

To resolve the status of the remaining properties that were included as potential registry sites and address data gaps for several properties in the industrial area, additional PSA activities were conducted by LMS in 1996. The investigation consisted of additional file reviews, facility inspections, soil and groundwater sampling, and on-site mobile laboratory analysis. A geophysical survey, dye testing of drains and Geoprobe soil borings were completed at the Site. The investigations confirmed that the Site was connected to the municipal sanitary sewer along New York Avenue. However, several anomalies characteristic of leaching pools were identified on-site using ground penetrating radar (GPR). Investigation of suspected source areas within the Site building failed to identify any contaminated soil. Groundwater samples collected beneath the Site as part of the Geoprobe investigation revealed elevated levels of Trichloroethene (TCE), 1,1-Dichloroethane (DCA) and 1,1,1-Trichloroethane (TCA). The highest concentrations of these compounds were detected at the upgradient (northeast) boundary of the Site near New York Avenue. A sediment sample was collected from the drywell located in the south parking lot at the Site and analyzed by the mobile laboratory. The sample contained high concentrations of DCA and TCA. Based on the findings of the investigation, it was recommended that the Site remain on the IHWDS Class 2 Registry.

The purpose of the Focused Remedial Investigation is to determine potential on-site sources of contamination as well as the extent of any soil and groundwater contamination present at the site. The investigative field activities were conducted at the site during the months of May and June 1999. The field work was conducted under the direction of Mr. Matthew Boeckel, Senior Hydrogeologist for GCI.

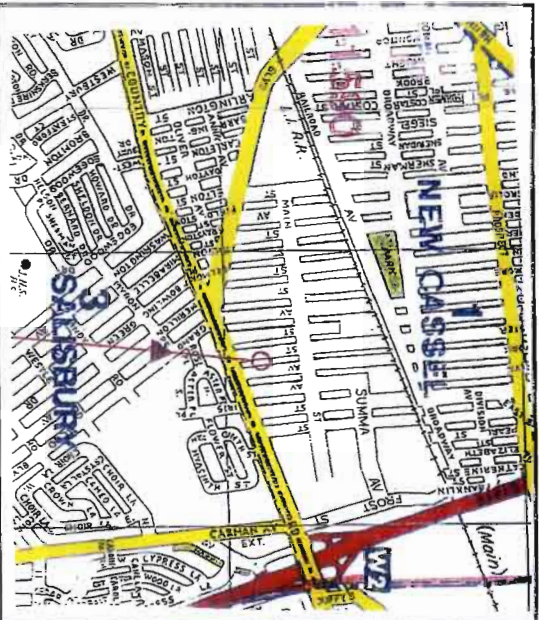
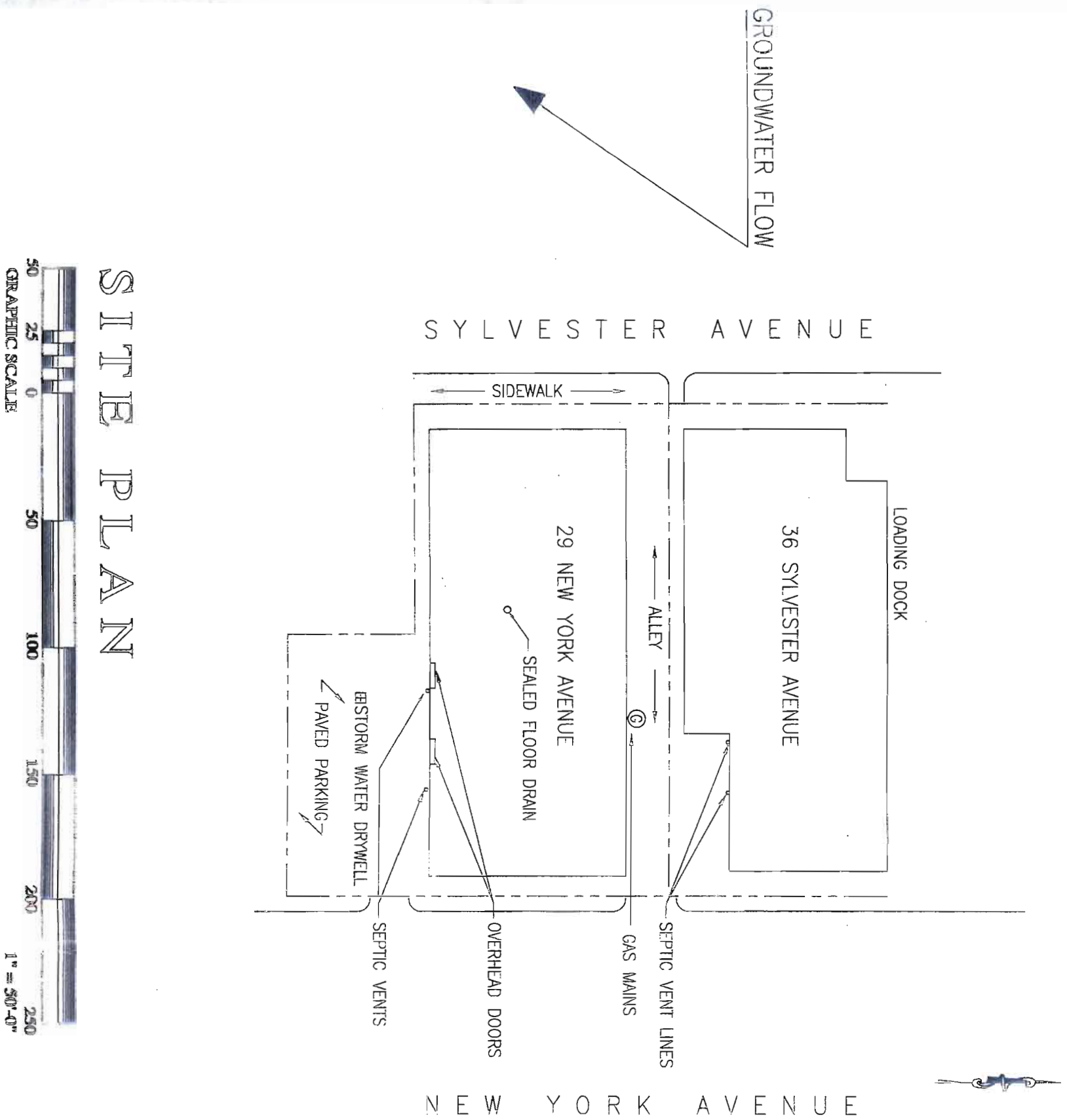
## 1.2 Work Plan Approach

The investigative activities which were conducted at the site were performed in accordance with the provisions of the Focused Remedial Investigation Work Plan, dated September 1998, which was prepared by GCI. The field activities were conducted in order to characterize the nature of the on-site subsurface soil and groundwater, as well as on-site subsurface structures which were previously identified as potential sources of contamination. The subsurface features which were of concern consist of storm water drainage pools and the sanitary system. The locations of relevant Site features are depicted on Figure 2.0 - Site Plan.

Please note that due to the site conditions encountered, slight modifications had to be made to the scope of work as proposed in the Focused Remedial Investigation (FRI) Work Plan. It was originally intended that sediment samples would be collected from the bottom invert level of suspect structures, as well as to obtain representative subsurface soil samples from directly below the structures. The method of sampling employed at the site consisted of a Geoprobe hydraulically powered drill rig. During the site investigation activities an attempt was made to drill directly through the manhole opening of the on-site drywell in order to obtain representative samples from directly below the structure. However, due to the fact that the structure is much larger than the sampling rods, there was no support available for the initial drilling rods. As such, the drilling rods were bending severely and causing an unsafe condition. There was a concern that the drilling rods would break. A call was placed to Mr. Richard Gaborow, Environmental Engineer I for the NYS DEC in order to discuss this matter. Mr. Gaborow indicated that the soil boring could be completed directly outside of the leaching rings of the subsurface structure.

In addition, the original laboratory which was to be utilized for the FRI was ANA lab, Inc. However, at the time the field work was being conducted the laboratory was in the process of moving its facility and all operations to a new location. Therefore, a different laboratory had to be utilized to perform the sample analysis. The laboratory chosen for the FRI was Chemtech Consulting Group. As required by the FRI Work Plan, Chemtech Consulting Group is a NYS DOH Environmental Laboratory Approval Program (ELAP) and US EPA Contract Laboratory Protocol (CLP) certified laboratory, which is located in Englewood, New Jersey. The ELAP CLP certification number for the laboratory is 10624.





LOCATION MAP

- LEGEND
- PROPERTY LINE \_\_\_\_\_
- BUILDING OUTLINE \_\_\_\_\_
- GAS MAINS (G)



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TITLE		FIGURE 2 - SITE PLAN	
LOCATION:		29 NEW YORK AVENUE NEW CASSEL, NEW YORK	
SECTION:		11 BLOCK: 77 LOTS: 25-28 AND 50-55	
DRAWN BY:	CC	DATE:	9 / 13 / 99
CHECKED BY:	AT	DATE:	9 / 13 / 99
LAST REVISED BY:	DATE:	SCALE:	1"=50'-0" FIG. No.: 3 OF 4

It should also be noted that the original FRI Work Plan called for select soil and groundwater samples to be analyzed for the presence of Vitamin E using EPA analytical method 8270. It was reported by the contract laboratory that their equipment was not capable of performing such analysis, and that this type of analysis would be more suited towards a medical laboratory. In addition, the cost for such analysis was projected at \$ 5,000.00 per sample. Based upon the field observations which were noted, as well as the financial burden which would be placed on our client, it was requested that the requirement to have selected samples analyzed for Vitamin E be rescinded from the scope of work. A call was placed to Mr. Richard Gaborow, Environmental Engineer I for the NYS DEC. Mr. Gaborow indicated that due to the unforeseeable events, select samples would not be required to be analyzed for the presence of Vitamin E.

## **2.0 SITE BACKGROUND AND SETTING**

### **2.1 Current Conditions**

The subject site is an irregular shaped parcel, with approximately 150 feet of frontage along the west side of New York Avenue. The Site measures approximately 25,000 square feet or 0.57 acres. The Site is improved with a two (2) story commercial building which occupies 14,640 square feet or 58 % of the entire Site. The remainder of the site is developed as paved parking areas and driveways for the facility. There is no natural vegetation growing at the site.

The subject building is constructed on a poured concrete slab foundation. The exterior facade is completed with decorative masonry and aluminum frame windows. The exterior walls are constructed of concrete block. The interior is divided into office and assembly areas. The interior is completed with tiled floors, sheetrock walls and dropped acoustical tile ceilings. The heat for the subject building is provided by a gas fired system. There are currently no (0) active floor drains within the subject building. The sanitary discharges are directed to the municipal Nassau County Sewer District (NCSD). The Site was reportedly connected to the municipal system on April 1, 1980. Based upon a review of former reports it was determined that the building formerly discharged to an on-site sanitary system which was located along the south side of the subject building. Although, please note that the subject building and the paved areas of the site were renovated within the last year, so the former on-site features could not be readily identified.

The storm water drainage along the south side of the Site is directed to one (1) open grate drywell. The remainder of the property is graded so that excess storm water will drain to New York Avenue. Photographs of the subject property have been included as Appendix A with this report.

### **2.2 Current Site Operations**

The site is currently occupied by Autotronics Plastics Inc., who utilizes the Site mainly for warehouse and office purposes, although there is some assembly and very light manufacturing taking place. The current operations conducted at the site do not represent a significant threat of impacting the environment. In addition, there is no record of reported spills and/or discharges at the Site which were the result of the operations conducted by the current tenant.

### **2.3 Site History**

Land ownership records indicate that the Site was originally owned by William Luxenburg. According to Town of North Hempstead Building Department records, a permit was issued to Mr. Luxenberg in 1952 for a steel frame and masonry building. A 7,200 square foot addition was constructed in 1956 and was to be used as a factory for the “manufacture of electronics”. Records indicate that cesspools and drywells were installed to dispose of surface water runoff and sewage from the facility. A Nassau County Department of Health (NCDH) sketch of the Site shows three (3) eight (8) foot diameter cesspools and one (1) septic tank to the south of the subject building.

Limited information was available regarding activities conducted at the Site by former occupants. Mr. Luxenberg appears to have retained ownership of the Site until the late 1970s. Land records indicate that Tishcon obtained a mortgage for the Site in February 1985. According to Equity I Associates, the sale was completed in 1986. The Site was occupied by Tishcon Corporation from 1979 to 1991. Tishcon reportedly changed their address from 29 to 30 New York Avenue after 1991 and sold the property to Equity 1 Associates. Tishcon has several properties within the NCIA and is listed as a RCRA Large Quantity Generator of Hazardous Waste.

Nationwide warehouse was listed as the occupant of the Site at the time of the LMS facility inspections conducted during June 28 to July 28, 1994. A “Lease Agreement” between Equity Share 1 Associates and Autotronic Plastics, Inc. was filed with the Nassau County Tax Assessor on March 19, 1997. Autotronic Plastics, Inc., maintains office/warehouse space in the adjoining building at 18 Sylvester Street and is presently leasing the Site under a lease agreement in force through 2001.

### **3.0 ENVIRONMENTAL SETTING**

#### **3.1 Hydrogeologic Setting**

Regional geology in the New Castle area consists of unconsolidated glacial deposits overlying Precambrian Age bedrock which occurs at a depth of approximately 900 feet below mean sea level (MSL). The glacial deposits consist of the Lloyd Sand which is a stratified deposit consisting of discontinuous layers of sand, gravel, sandy clay, silt and clay. The Upper surface of the Lloyd Sand occurs at approximately 650 below MSL.

Overlying the Lloyd Sand is the Raritan Clay which primary consists of gray, red, white and blue clay and silty clay and lenses of sand and gravel. The upper surface of the Raritan Clay occurs at approximately 550 feet below MSL. Overlying the Raritan Clay is the Magothy Formation which consists primarily of interbedded gray and white fine sand and clayey sand, and black, gray, white, and some red clay. Gravelly zones are common at the bottom of the formation but are rare in the upper part. The upper surface of the Magothy Formation is estimated to occur at 100 feet below the ground surface.

Overlying the Magothy Formation is the Upper Glacial Formation which, in the New Cassel area, is composed primarily of out-wash deposits consisting of well sorted stratified sand and gravel. The Upper Glacial deposits are the upper most unit and are estimated to be 100 feet thick in the site vicinity.

The depth to groundwater in the vicinity of the Site, was determined to be fifty-two (52) feet below grade. Based upon previous NCIA investigation reports and groundwater contour maps, the inferred direction of groundwater flow is to the southwest in the vicinity of the Site. The groundwater in the vicinity of the subject site are identified as GA. GA waters are classified as "fresh groundwater". The best usage of Class GA waters is as a source of potable water supply, as defined in Section 701.15 of the New York State Department of Environmental Conservation (NYSDEC) Water Quality Regulations - Surface Water and Groundwater Classifications and Standards.

### **3.2     Surface Water and Drainage**

The site is nearly level throughout. The storm water runoff at the site either directly infiltrates into the one (1) open grate drywell located in the south side parking area, or is directed towards New York Avenue. There is municipal sewer service available in the vicinity of the subject property.

There are no ponds, lakes, streams or other water bodies on the subject property or in the vicinity. The subject site is located in the middle of a large industrial area, and as such there are no major bodies of water in a close proximity. There are no NYSDEC wetlands or other protected lands located at the Site or in the immediate vicinity.

## **4.0 REMEDIAL INVESTIGATION**

The FRI field activities were conducted at the Site during the months of May and June 1999. The field work was conducted under the direction of Mr. Matthew Boeckel, Senior Hydrogeologist for GCI. The following sections provide a summary of the field data collection procedures, geophysical investigation results, soil screening results, visual observations, soil and groundwater sampling, and quality assurance and quality control (QA/QC) measures.

### **4.1 Geophysical Investigation**

As per the requirements of the FRI Work Plan, a Geophysical Investigation was to first be conducted at the Site in order to identify any subsurface structures which may be present, such as leaching pools, drywells, septic tanks, cesspools, etc. In addition please note that the Geophysical Investigation was conducted for the purpose of assessing several anomalous areas which were identified in the Pool & Floor Drain Investigation Report, which was prepared by LMS Engineering in 1996. In addition, the investigation was conducted in several other suspect areas of the adjacent properties.

On May 14 and 15, 1999, a Geophysical Investigation of the Site was conducted by GCI. The equipment selected for the investigation included a TM-808 metal-detector and a GSSI SIR-2 ground penetrating radar (GPR) with a 400 MHz transducer. The areas of concern (AOCs) at the subject property were first investigated with the TM-808 metal-detector. The TM-808 survey was conducted on the accessible areas along the north, south, east and west sides of the Site. In addition, a survey along the south and east sides of the building located on the northern adjacent property was conducted. The building located on the adjacent northern property was noted to be designated as 36 Sylvester Street.

The ground penetrating radar (GPR) survey was then conducted in the identical areas which were previously surveyed with the TM-808. The GPR system consisted of a control unit, control cable, a transducer. The GPR control unit transmits a trigger pulse at a normal reception rate of 50 KHz. The pulse is then sent to the transmitter electronics in the transducer via the control cable where the trigger pulses are transformed into bipolar pulses with higher amplitudes. The transformed pulse will vary in shape and frequency according to the transducer used. The GPR system is capable of transmitting electromagnetic energy into the subsurface of the earth in the frequency range of 16 to 2,000 MHz. In the subsurface, reflections of the pulse occur at the boundaries at which there is a

dielectric contrast (void, steel, soil type). The reflected portion of the signal travels back to the antenna and the control unit and is subsequently shown on the display of the computers color video monitor for interpolation. The GPR control unit was carried along traverses spaced approximately two (2) feet apart, both parallel and perpendicular throughout the Site.

The results of the TM-808 magnetometer survey indicated that there were no anomalous areas identified on the subject property. However, the TM-808 survey did reveal the presence of two (2) anomalous areas on the south side of the building located on the northern adjacent property, which was noted to be designated as 36 Sylvester Street. In addition, there was a sanitary vent line observed along the south side of the building at 36 Sylvester Street, which was noted to be located in the immediate vicinity of the anomalous areas. The GPR imaging results indicated that there were no apparent buried structures present on the Site. Although, the GPR imaging of the anomalous areas at 36 Sylvester Street revealed the presence of two (2) separate underground structures.

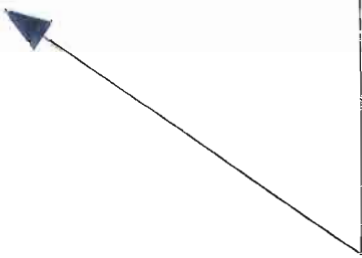
Based upon the results of the Geophysical Investigation, it was determined that the only subsurface feature currently identified on the Site is the one (1) storm water drywell. The drywell is located in the south side parking area. The anomalous areas along the north side of the Site which were previously identified by LMS were determined to be the septic system for the building located at 36 Sylvester Street. It is not known at this time whether or not the septic system at 36 Sylvester Street was ever properly abandoned. In addition, there are no analytical results or other information which indicate that the septic system at 36 Sylvester Street was ever sampled for the presence of contamination. Soil and groundwater boring locations were determined based upon the results of the Geophysical Investigation. The locations of the anomalous areas are included on Figure 3.0 - Geophysical Investigation Anomaly Map. In addition, the images obtained from the GPR are included as Appendix B.

#### **4.2 Photo-ionization Detector (PID) Screening Activities**

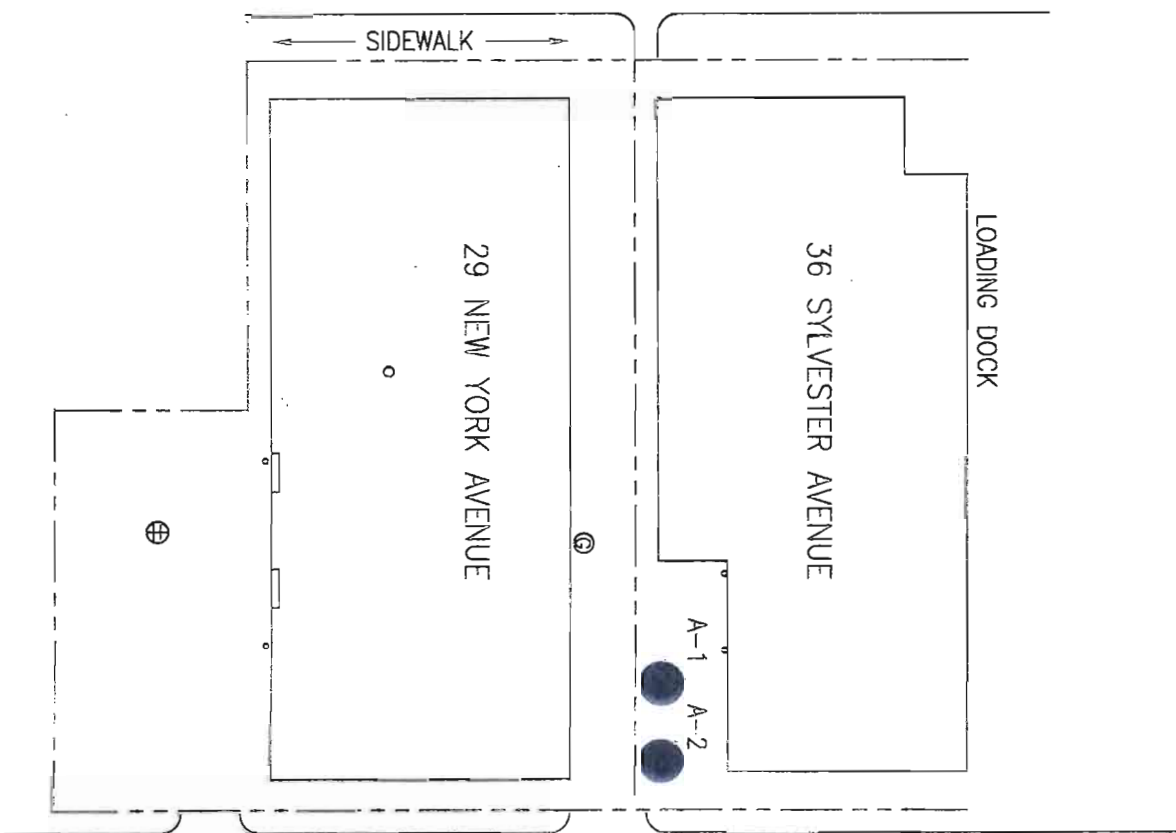
An integral part of the Focused Remedial Investigation was to sample, characterize and perform analysis on soil samples collected throughout the site. The primary contaminants of concern at the site are volatile organic compounds (VOCs), specifically trichloroethene (TCE), 1,1-dichloroethane (DCA), 1,1-dichloroethene (DCE) and 1,1,1-trichloroethane (TCA). Therefore, it was determined that the collected soil samples would be field screened with a photo-ionization detector (PID), in an attempt to identify possible areas of on-site soil contamination.



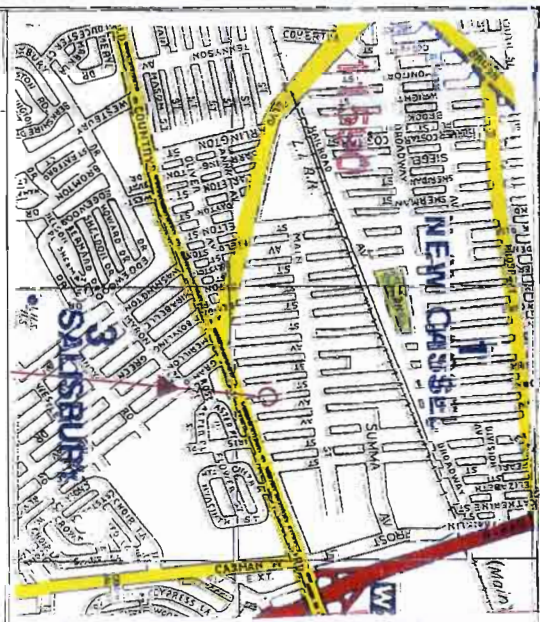
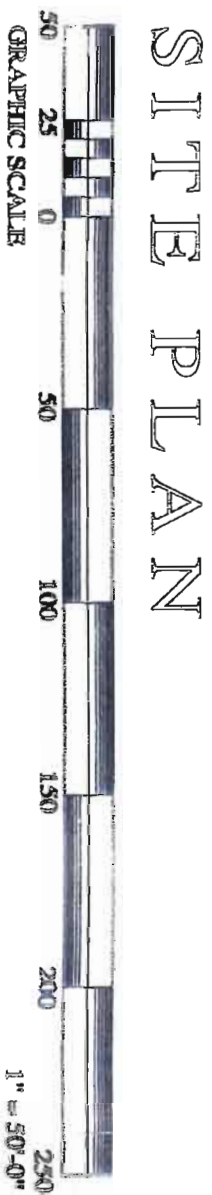
GROUNDWATER FLOW



SYLVESTER AVENUE



NEW YORK AVENUE



LOCATION MAP

**LEGEND**

PROPERTY LINE \_\_\_\_\_

BUILDING OUTLINE \_\_\_\_\_

AREA OF IDENTIFIED ANOMALY

GAS MAIN

SEPTIC VENT LINE

DRYWELL



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*Environmental & Engineering Consultants*

TITLE:	FIGURE 3 - GEOPHYSICAL INVESTIGATION ANOMALY MAP			
LOCATION:	29 NEW YORK AVENUE NEW CASSEL, NEW YORK			
SECTION:	11	BLOCK:	77	LOTS: 25-28 AND 50-55
DRAWN BY:	CC	DATE:	9 / 13 / 99	DRAWING NO. 990136A5
CHECKED BY:	AI	DATE:	9 / 13 / 99	
LAST REVISION BY:		DATE:		SCALE: 1" = 50'-0" SHEET NO. 3 OF 4

The field instrumentation chosen for the investigation was an HNU Model DL-101 PID. All of the collected soil samples were field screened in accordance with the standard operating procedure (SOP) as outlined in the FRI Work Plan. The following activities were conducted as part of the SOP. The PID was calibrated prior to each day of use with 100 parts per million (ppm) isobutylene gas. A representative portion was retained from each of the soil samples collected. The soil sample was then stored in an air-tight medium. The sample was agitated in order to allow for volatilization of any VOCs present. The PID probe node was then inserted into the head space of the air-tight medium. The PID probe node remained in the head space until a stable reading was achieved. The PID results were recorded and utilized for determining which samples would be submitted for laboratory analysis. The PID screening results did not reveal the presence of elevated levels of VOCs in any of the soil samples, with the exception of the invert level sample obtained from the drywell DW-1 which exhibited a PID reading of 50.0 ppm. A more detailed discussion of the PID field screening results is presented in Section 4.3 and Section 4.4 of this report. The lithology encountered and PID screening results for each sample are provided in Appendix C - Boring Logs.

#### **4.3 Storm Drain Sampling**

There is one (1) storm water drain (DW-1) located in the parking area along the south side of the Site. The drain is utilized for storm water collection only, it is not connected to any interior piping. Previous samples obtained from the loading dock storm drains have indicated the presence of elevated concentrations of VOCs and vitamin E. There has been no previous remedial work conducted on the storm drain.

An inspection of the storm drain revealed that it is constructed with a precast concrete dome top, concrete leaching rings which are ten (10) feet in diameter, and a natural earth bottom. The depth of storm drain DW-1 was determined to be approximately ten (10) feet below grade. A soil sample was collected from the bottom invert level of the storm drain. The sample was collected utilizing a stainless steel hand auger. There was visual evidence of suspected contamination observed. The sample was discolored and there was an oily sheen noted, additionally there was a weathered petroleum odor emanating from the sample. The PID field screening result for the invert level sample from DW-1 was 50.0 ppm.

Based upon the field data collected, it was decided that the invert level sample from DW-1 would be submitted for laboratory analysis. The soil sample obtained from DW-1 was immediately transferred into laboratory approved glassware. Each sample container was labeled with the Site location, sample location, date and time of sampling, and the analysis to be performed. The sample containers were then placed in a laboratory supplied cooler and stored on ice. The samples were then delivered to the contract laboratory, Chemtech Consulting Group, within forty-eight (48) hours of being collected. The soil sample was submitted for analysis of volatile organic compounds (VOCs) using EPA Method 8260, for semi-volatile organic compounds (SVOCs) base/neutral extractables by EPA Method 8270, for total petroleum hydrocarbons (TPH) by EPA Method 418.1, and for the priority pollutant metals using SW-846 Method 6010. The analytical results from the sample will be utilized to determine whether or not there was a discharge of hazardous waste into the one (1) on-site storm water drain DW-1. The analytical results are summarized in Section 5.3 of this report.

#### **4.4    Soil Sampling**

In order to assess the quality of the subsurface soils throughout the Site, a total of ten (10) soil / groundwater borings were installed throughout the site. The boring locations were strategically placed throughout the site with respect to possible on-site and off-site sources of contamination. The borings are designated as SGB-1 through SGB-10. All ten (10) of the of the borings were installed using a Geoprobe hydraulically powered drill rig. Please note that boring SGB-7 was installed immediately down-gradient of the one (1) on-site storm water drain (DW-1). The soil sampling locations are depicted on Figure 4.0 - Soil / Groundwater Sampling Location Map.

Soil samples were collected in two (2) foot intervals at depths of twenty (20) feet below land surface (bls), thirty(30) feet bls, forty (40) feet bls and fifty (50) feet bls. Groundwater was encountered at fifty-two (52) feet bls at the site, therefore it was determined that no soil samples would be collected from a depth greater than fifty-two (52) feet bls. The lithology encountered throughout the Site was noted to be relatively homogenous. The subsurface soil encountered consisted of a light brown, fine to coarse grain sand and trace pebbles to a depth of forty (40) feet. This material was underlain by a fine silty sand to a depth of fifty (50) feet at which point a tan clay was encountered. The PID field screening results revealed that there were no elevated levels of VOCs detected. There was no visual or olfactory evidence of contamination observed in any of the samples.

Based upon the field data collected, it was determined that no samples collected from the soil borings would be submitted for analysis. There was no evidence of contamination which was sufficient enough to warrant sending any of the soil boring samples for laboratory analysis.

#### **4.5 Groundwater Sampling**

In order to assess the groundwater quality in the vicinity of the Site, it was determined that representative groundwater samples would be collected from each of the ten (10) borings installed at the Site during the FRI investigation activities. Groundwater was encountered at a depth of fifty-two (52) feet bls at the Site. Representative groundwater samples were collected at fifty (52) feet bls and sixty-two (62) feet bls. The groundwater sampling locations are depicted on Figure 4.0 - Soil / Groundwater Sampling Location Map.

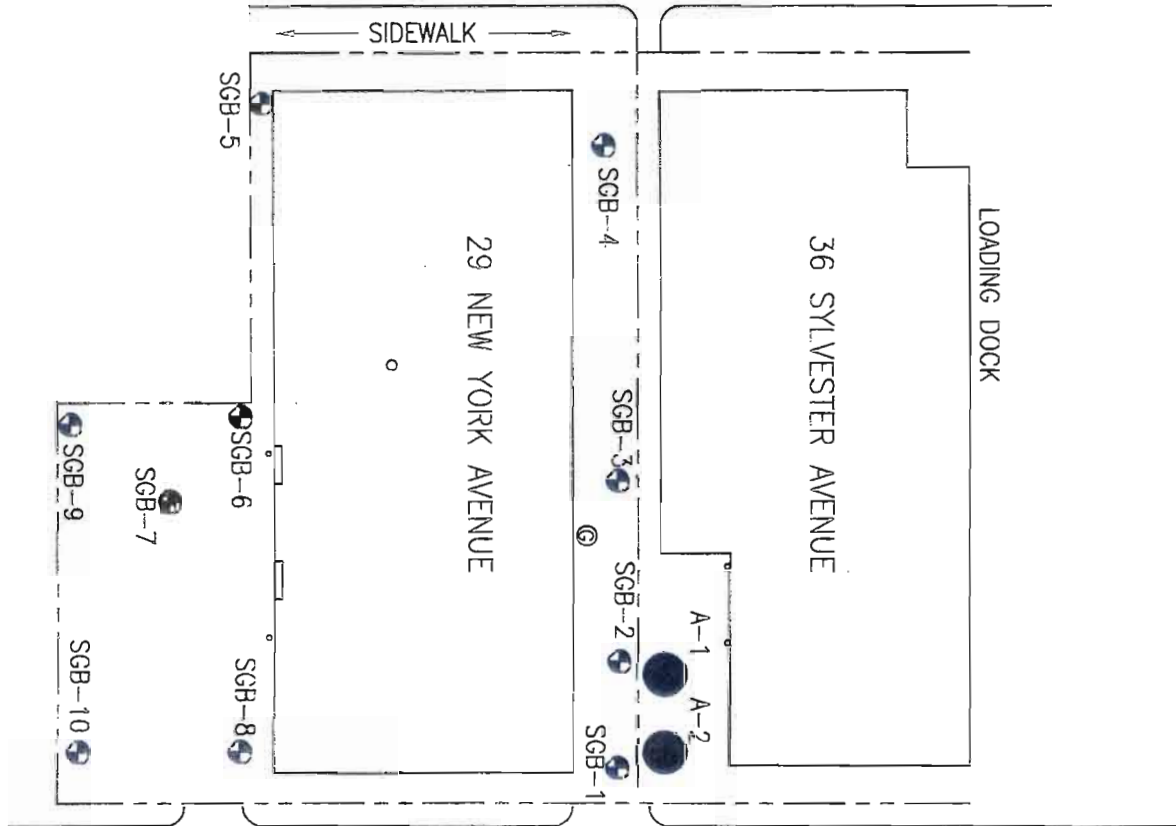
A Geoprobe hydraulically powered drill rig was utilized to obtain all groundwater samples. A total of twenty (20) groundwater samples were collected from the borings during the site investigation activities. The groundwater sampling system consisted of the Geoprobe Screen point 15, which is designed to accurately collect samples of groundwater. This system utilizes a screen with a standard slot size of 0.004 inches that is sealed inside a 1.5-inch inner diameter (ID) steel sheath. The screen is sealed inside the sheath with O-rings, so as to prevent infiltration of groundwater until the desired sampling depth has been achieved. Once the appropriate depth has been reached, a series of extension rods are utilized to hold the screened zone in place. At this time the sampling rods are retracted and approximately 41.5 inches of screened area will be in contact with the surrounding formation. The groundwater is then extracted through disposable Teflon tubing and a bottom check valve. The tubing is extended from the surface down to the screened zone, and then oscillated in an up and down motion until the check valve had caused an adequate volume of water to be removed. The groundwater samples were then transferred into the appropriate laboratory supplied glassware. The tubing was replaced prior to each sampling event. There was no visual evidence of suspected contamination noted in any of the groundwater samples which were collected.

It was determined that the groundwater samples collected from fifty-two (52) feet bls and sixty-two (62) feet bls in each of the borings would be submitted to the laboratory. A total of twenty (20) groundwater samples were collected and submitted for laboratory analysis. The sample containers were labeled with the Site location, sample location, date and time of sampling, and the analysis to be performed. The sample containers were then placed in a laboratory supplied cooler and stored on ice. The samples were then delivered to the contract laboratory, Chemtech Consulting Group,



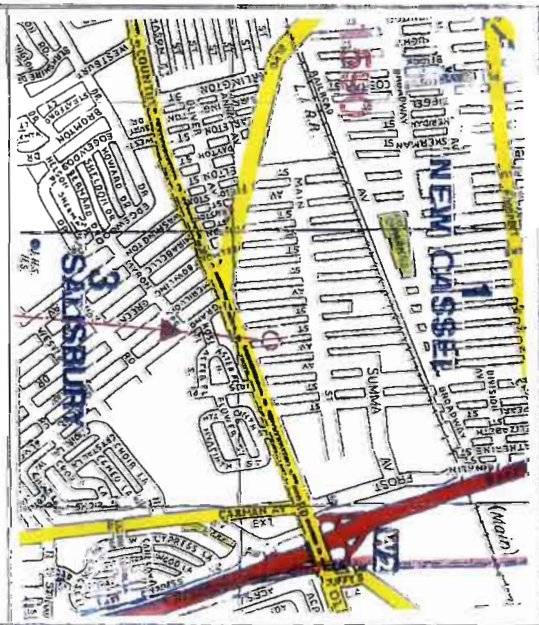
GROUNDWATER FLOW

SYLVESTER AVENUE



NEW YORK AVENUE

# SITE PLAN



## LOCATION MAP

## LEGEND

- PROPERTY LINE
- BUILDING OUTLINE
- AREA OF IDENTIFIED ANOMALY
- SOIL/GROUNDWATER BORING
- GAS MAIN
- SEPTIC VENT LINE
- DRYWELL



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*Environmental & Engineering Consultants*

TITLE: FIGURE 4 - SOIL / GROUNDWATER SAMPLING LOCATION MAP	
LOCATION:	29 NEW YORK AVENUE NEW CASSEL, NEW YORK
SECTION:	11 BLOCK: 77 LOTS: 25-28 AND 50-55
DRAWN BY:	CC DATE: 9 / 13 / 99 DRAWING NO. 990136A4
CHECKED BY:	AT DATE: 9 / 13 / 99
LAST REVISION BY:	DATE: SCALE: 1" = 50'-0" FIG. NO.: 3 OF 4

within forty-eight (48) hours of being collected. All twenty (20) groundwater samples were submitted for analysis of volatile organic compounds (VOCs) using EPA Method 8260. In addition, the groundwater sample collected at fifty-two (52) feet bls in the vicinity of DW-1 was also analyzed for semi-volatile organic compounds (SVOCs) base/neutral extractables by EPA Method 8270, for total petroleum hydrocarbons (TPH) by EPA Method 418.1 and for the priority pollutant metals using SW-846 Method 6010. The analytical results from the samples will be utilized to determine whether or not the former hazardous waste disposal operations conducted at the Site have lead to contamination of the groundwater. The analytical results are summarized in Section 5.4 of this report.

#### **4.6 Quality Assurance / Quality Control (QA/QC) Measures**

Quality Assurance / Quality Control (QA/QC) measures were utilized during the Focused Remedial Investigation field work to ensure that the resulting analytical data would accurately represent the subsurface conditions at the Site. A Quality Assurance Project Plan was developed prior to the implementation of the field work and is outlined in section 6.6.4 of the Focused Remedial Investigation Work plan.

All non-disposable downhole equipment (i.e., augers, hand augers, sampling sheaths, etc.) used during the drilling and sampling were decontaminated prior to use at each location to prevent cross contamination. The decontamination procedures were conducted as follows; equipment was scrubbed in a bath of potable water and low-phosphate detergent; then a potable water rinse; followed by a second bath and then finally the equipment was rinsed with potable water and allowed to air dry. Due to the fact that only one (1) sample was collected utilizing a hand auger, it was determined that equipment blanks would not be necessary for the sample obtained via the hand auger. The remaining soil samples collected at the site were obtained utilizing a Geoprobe drill rig. The Geoprobe collects representative samples in a disposable acetate liner, which is replaced prior to each sampling event. Based upon this fact, it was determined that equipment blanks would not be necessary for the samples obtained via the Geoprobe.

For each day of groundwater sampling, a field blank sample was collected and submitted for analysis. Please note, that only one (1) trip blank sample was submitted for analysis during this investigation. The second trip blank was not included due to a clerical error at the laboratory. In addition, a duplicate sample was obtained from boring SGB-10 at fifty-two (52) feet below grade in order to attest to the precision of the laboratory. For each day of sampling a chain of custody

sheet was completed and submitted to the laboratory. The chain of custody sheet included the project name, the sampler's signature, the sampling locations, intervals, and analysis parameters requested. The samples were stored on ice in a cooler. The cooler was secured using a custody seal to ensure that no tampering would occur. The laboratory received all of the samples within forty-eight (48) hours of being collected. The QA/QC samples were submitted for analysis of VOCs utilizing EPA Method 8260. The analytical results are summarized in Section 5.5 of this report.

## **5.0 ANALYTICAL RESULTS**

The following section provides a summary of the analytical data for the soil sample collected from the invert level of storm drain DW-1, and the twenty (20) groundwater samples, as well as the QA/QC samples. All of the samples were analyzed for VOCs utilizing EPA Method 8260. In addition, the soil sample from DW-1 and the groundwater sample from SGB-7 at fifty-two (52) feet below grade were sampled for semi-volatile organic compounds (SVOCs) base/neutral extractables by EPA Method 8270, for total petroleum hydrocarbons (TPH) by EPA Method 418.1, and for the priority pollutant metals using SW-846 Method 6010. The samples were submitted to Chemtech Consulting Group. Chemtech Consulting Group is a New York State Department of Health (NYS DOH) Environmental Laboratory Approval Program (ELAP) and US EPA Contract Laboratory Protocol (CLP) certified laboratory, which is located in Englewood, New Jersey. The ELAP CLP certification number for the laboratory is 10624. The analytical data for all of the samples were reported in a NYS DEC Analytical Services Protocol (ASP) Category B deliverables package.

### **5.1 Data Validation**

The analytical results were subject to review and data validation by Mr. Mike Veraldi, who is the Quality Assurance Officer (QAO) for the project. Mr. Veraldi reviewed all analytical data packages which were received as part of the Focused Remedial Investigation. A Data Usability Summary Report (DUSR) was prepared for the data packages in accordance with the requirements of the NYS DEC Guidance for the Development of Data Usability Summary Reports.

Based upon a review of the data packages, Mr. Veraldi indicated that the data was valid and the analytical results could be accurately relied upon. Mr. Veraldi indicated that there were some compounds identified in the trip and field blank samples, although these compounds are associated with laboratory sampling procedures and are not representative of contamination in the samples. The presence of the compounds in the field and trip blank samples does not impugn the validity of the data. The DUSR for each of the collected soil samples is included with this report as Appendix C.



## **5.2 Applicable Regulatory Guidelines**

The analytical results for the soil sample obtained from the invert level in DW-1 were compared to the recommended soil Cleanup Objectives as listed in the NYS DEC Division Technical and Administrative Guidance Memorandum HWR-94-4046: Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM).

Please note that there have been revisions made to TAGM, although the revised version has not yet been made available. It was reported by the NYS DEC Division of Environmental Remediation that the Cleanup Objective for cadmium has been changed from 1.0 ppm to 10.0 ppm. In addition, the Cleanup Objective for chromium was changed from 10.0 ppm to 50.0 ppm. There were no other revisions made to the TAGM Cleanup Objectives which would affect the data comparison and evaluation for the project.

The analytical results for the groundwater samples were compared to the Standards listed in the NYS DEC Water Quality Regulations Surface Water and Groundwater Classifications and Standards - Title 6, Chapter X Parts 700-706.

## **5.3 Storm Drain Analytical Results**

A total of one (1) soil sample was submitted for laboratory analysis from the invert level of storm drain DW-1. The soil sample was analyzed for volatile organic compounds (VOCs) using EPA Method 8260, semi-volatile organic compounds (SVOCs) base/neutral extractables by EPA Method 8270, total petroleum hydrocarbons (TPH) by EPA Method 418.1 and for the priority pollutant metals using SW-846 Method 6010.

The analytical results for the invert level sample from DW-1 were compared to the Recommended Soil Cleanup Objectives listed in the NYS DEC NYS DEC Division Technical and Administrative Guidance Memorandum HWR-94-4046: Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM). The analytical results revealed that there were elevated levels of VOCs and SVOCs present. The TPH analysis revealed a concentration of 70,027 ppm. Additionally, the metals analysis revealed that copper was present at 1,500 ppm, mercury at 0.59 ppm, nickel at 19.4 ppm and zinc at 1,710 ppm, all of which are above their respective TAGM Recommended Soil Cleanup Objectives of 25.0 ppm, 0.1 ppm, 13.0 ppm and 20.0 ppm. Although, please note that TCA which is a primary contaminant of concern, was not detected in the invert level sample. Based upon the analytical data it is apparent that the soil present within DW-1 has been impacted. The analytical results are summarized in Table 1, Table 2, Table 3 and Table 4.

<b><u>Table 1</u></b> <b>SOIL ANALYTICAL LABORATORY DATA</b> <b>Total Petroleum Hydrocarbons (TPH)</b>		
<b>Sample Location</b>	<b>Date</b>	<b>TPH</b>
DW-1	6/23/99	70,027

Notes: All results are in parts per million (mg/kg).

**Table 2**  
**SOIL ANALYTICAL LABORATORY DATA**  
**Volatile Organic Compounds**  
**South Side Storm Water Drain**

ANALYTICAL PARAMETERS	DW-1 Invert
Dichlorodifluoromethane	ND
Chloromethane	ND
Vinyl Chloride	ND
Bromomethane	ND
Chloroethane	3,600
Acrolein	ND
Trichlorofluoromethane	ND
1,1-Dichloroethene	ND
Acetone	ND
Carbon Disulfide	ND
Methylene Chloride	ND
trans-1,2-Dichloroethene	ND
Acrylonitrile	ND
1,1-Dichloroethane	ND
2,2-Dichloropropane	ND
cis-1,2-Dichloroethene	ND
Bromochloromethane	ND
Chloroform	ND
1,1,1-Trichloroethane	ND
Vinyl Acetate	ND
2-Butanone	ND
Carbon Tetrachloride	ND
1,1-Dichloropropene	ND
Benzene	ND
1,2-Dichloroethane	ND

Notes: All results are in ug/Kg (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).

<p align="center"><b>Table 2</b>  <b>SOIL ANALYTICAL LABORATORY DATA</b>  <b>Volatile Organic Compounds</b>  <b>South Side Storm Water Drain</b></p>	
<b>ANALYTICAL PARAMETERS</b>	<b>DW-1 Invert</b>
Trichloroethene	ND
1,2-Dichloropropane	ND
Dibromomethane	ND
Bromodichloromethane	ND
2-Chloroethyl Vinyl Ether	ND
cis-1,3-Dichloropropene	ND
Toluene	1,800
trans-1,3-Dichloropropene	ND
1,1,2-Trichloroethane	ND
4-Methyl-2-Pentanone	ND
Tetrachloroethene	ND
1,3-Dichloropropane	ND
Dibromochloromethane	ND
1,2-Dibromoethane	ND
2-Hexanone	ND
Chlorobenzene	ND
1,1,1,2-Tetrachloroethane	ND
Ethylbenzene	470
m & p - Xylenes	7,000
o - Xylene	1,500
Styrene	ND
Bromoform	ND
Isopropylbenzene	1,300
Bromobenzene	ND

Notes: All results are in ug/Kg (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).

**Table 2**  
**SOIL ANALYTICAL LABORATORY DATA**  
**Volatile Organic Compounds**  
**South Side Storm Water Drain**

<b>ANALYTICAL PARAMETERS</b>	<b>DW-1 Invert</b>
1,1,1,2-Tetrachloroethane	ND
1,2,3-Trichloropropane	ND
n-Propylbenzene	ND
2-Chlorotoluene	ND
4-Chlorotoluene	ND
1,3,5-Trimethylbenzene	ND
tert-Butylbenzene	ND
1,2,4-Trimethylbenzene	10,600
sec-Butylbenzene	ND
1,3-Dichlorobenzene	ND
4-Isopropyltoluene	1,200
1,4-Dichlorobenzene	ND
1,2-Dichlorobenzene	ND
n-Butylbenzene	ND
1,2-Dibromo-3-chloropropane	ND
1,2,4-Trichlorobenzene	ND
Hexachlorobutadiene	ND
Naphthalene	ND
1,2,3-Trichlorobenzene	ND

Notes: All results are in ug/Kg (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).

**Table 3**  
**SOIL LABORATORY ANALYTICAL DATA**  
**Semi-Volatile Organic Compounds**  
**South Side Storm Water Drain**

ANALYTICAL PARAMETERS	DW-1 Invert
bis(2-Chloroethyl)ether	ND
2,2'-Oxybis(1-Chloropropane)	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
n-Nitro-di-n-propylamine	ND
Hexachloroethane	ND
Nitrobenzene	ND
Isophorone	ND
bis(2-Chloroethoxy)methane	ND
1,2,4-Trichlorobenzene	ND
Naphthalene	320
4-Chloroaniline	ND
Hexachlorobutadiene	ND
2-Methylnaphthalene	480
Hexachlorocyclopentadiene	ND
2-Chloronaphthalene	ND
2-Nitroaniline	ND
Dimethylphthalate	ND
Acenaphthylene	48
2,6-Dinitrotoluene	ND
3-Nitroaniline	ND
Acenaphthene	ND
Dibenzofuran	82
2,4-Dinitrotoluene	ND

Notes: All results are in ug/Kg (parts per billion - ppb).

ND = Non-detectable above analytical method detection limit (MDL).

**Table 3**  
**SOIL LABORATORY ANALYTICAL DATA**  
**Semi-Volatile Organic Compounds**  
**South Side Storm Water Drain**

ANALYTICAL PARAMETERS	DW-1 Invert
Diethylphthalate	ND
4-Chlorophenyl-phenylether	ND
Fluorene	ND
4-Nitroaniline	ND
N-Nitrosodiphenylamine	1,900
1,2-Diphenylhydrazine	ND
4-Bromophenyl-phenylether	ND
Hexachlorobenzene	ND
Phenanthrene	ND
Anthracene	ND
Di-n-butylphthalate	ND
Fluoranthene	ND
Pyrene	ND
Butylbenzylphthalate	950
3,3'-Dichlorobenzidine	ND
Benzo(a)anthracene	ND
Chrysene	ND
bis(2-Ethylhexyl)phthalate	5,000
Di-n-octylphthalate	ND
Benzo(b)fluoranthene	ND
Benzo(k)fluoranthene	ND
Benzo(a)pyrene	ND
Ideno(1,2,3-cd)pyrene	ND
Dibenz(a,h)anthracene	ND
Benzo(g,h,i)perylene	ND

Notes: All results are in ug/Kg (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).

<b>Table 4</b> <b>SOIL ANALYTICAL LABORATORY DATA</b> <b>Metals Analysis</b> <b>South Side Storm Water Drain</b>		
<b>ANALYTICAL PARAMETER</b>	<b>TAGM VALUES</b>	<b>DW-1 Invert</b>
Silver	SB	ND
Arsenic	7.5 / SB	1.0
Beryllium	0.16 / SB	ND
Cadmium	10 / SB	3.5
Chromium	50 / SB	24.8
Copper	25 / SB	1,500
Thallium	SB	ND
Lead	SB (4-64)	51.9
Mercury	0.1	0.59
Nickel	13	19.4
Antimony	SB	1.1
Selenium	2 / SB	ND
Zinc	20 / SB	1,710

Notes: All results are in mg/Kg (parts per million - ppm).  
ND = Non-detectable above analytical method detection limit (MDL).



#### **5.4 Groundwater Analytical Results**

A total of twenty (20) groundwater samples were submitted for laboratory analysis in order to characterize the nature of the groundwater throughout the entire Site. All of the samples were submitted for analysis of VOCs utilizing EPA Method 8260. In addition, the groundwater sample collected from SGB-7 at fifty-two (52) feet below grade was sampled for semi-volatile organic compounds (SVOCs) base/neutral extractables by EPA Method 8270, for total petroleum hydrocarbons (TPH) by EPA Method 418.1, and for the priority pollutant metals using SW-846 Method 6010. This was done due to the fact that SGB-7 was installed immediately down-gradient of the on-site storm water drywell DW-1.

The analytical results for the groundwater samples obtained during the performance of the Focused Remedial Investigation were compared to the Standards listed in the NYS DEC Water Quality Regulations Surface Water and Groundwater Classifications and Standards - Title 6, Chapter X Parts 700-706. The analytical results will be utilized to determine if the former on-site hazardous waste disposal operations have contributed to the VOC contamination plume which is present in the New Cassel Industrial Area.

The analytical results for the ten (10) samples collected at fifty-two (52) feet below grade revealed that there were elevated concentrations of VOCs above respective NYS DEC groundwater Standards in all of the samples, with the exception of the sample obtained from SGB-5. The most common contaminants detected were 1,1-Dichloroethene (DCE); 1,1-Dichloroethane (DCA); and 1,1,1-Trichloroethane (TCA). The analytical data was plotted on a Site Plan for comparative purposes. Based upon a review of the analytical data, it was determined that the highest concentrations of VOCs are present in the upgradient groundwater samples collected from SGB-1 and SGB-2 near the northeast corner of the Site. Please note that these borings were completed immediately down-gradient of the two (2) anomalous areas identified at 36 Sylvester Street. Further review of the plotted analytical results revealed that there was a significant reduction in contaminant concentrations as traveling down-gradient across the site. The contaminant concentrations which were detected in each of the respective samples are plotted on Figure 5.0 - Groundwater Contaminant Concentrations at Fifty-Two Feet. In addition, please note that the SVOC and metals analysis for the sample obtained from SGB-7 at fifty-two (52) feet below grade did not exhibit any contamination at levels which exceeded their respective regulatory Standards. The TPH concentration detected was only 1.01 ppm. Based upon the field data collected and analytical results, it is apparent that an off-site VOC contamination plume is impacting the Site. The analytical results for the groundwater samples collected at fifty-two (52) feet below grade are summarized in Table 5. In addition, the results of the SVOC, TPH and metals analysis for the sample obtained from SGB-7 are summarized in Table 6, Table 7 and Table 8.

COMPOUND DETECTED	CONCENTRATION
1,1-DICHLOROETHANE	57
1,1,1-TRICHLOROETHANE	200
TETRACHLOROETHANE	1.0

COMPOUND DETECTED	CONCENTRATION
1,1,1-TRICHLOROETHANE	480
1,1-DICHLOROETHANE	40
1,1-DICHLOROETHANE	50

COMPOUND DETECTED	CONCENTRATION
1,1,1-TRICHLOROETHANE	1.0

GROUNDWATER FLOW

COMPOUND DETECTED	CONCENTRATION
1,1,1-TRICHLOROETHANE	230
1,1-DICHLOROETHANE	11
1,1-DICHLOROETHANE	92
ACETONE	3.0
TRICHLOROETHENE	3.6

COMPOUND DETECTED	CONCENTRATION
CHLORETHANE	2.3
1,1-DICHLOROETHENE	31
1,1-DICHLOROETHANE	100
ACETONE	4.4
1,1,1-TRICHLOROETHANE	370
BENZENE	2.0
TOLUENE	31
ETHYLBENZENE	6.0
M & P - XYLENE	10
O - XYLENE	7.7
1,2,4-TRIMETHYLBENZENE	5.2

COMPOUND DETECTED	CONCENTRATION
1,1,1-TRICHLOROETHANE	420
1,1-DICHLOROETHENE	31
1,1-DICHLOROETHANE	120
ACETONE	12
TRICHLOROETHENE	2.2
CHLORETHANE	2.7

COMPOUND DETECTED	CONCENTRATION
CHLORETHANE	17
1,1-DICHLOROETHENE	280
1,1-DICHLOROETHANE	340
ACETONE	3
1,1,1-TRICHLOROETHANE	2,100
OS-1,2-DICHLOROETHENE	3.5
TRICHLOROETHENE	17
TETRACHLOROETHANE	12

COMPOUND DETECTED	CONCENTRATION
CHLORETHANE	0.1
1,1-DICHLOROETHENE	130
1,1-DICHLOROETHANE	200
CHLOROPH	1.2
1,1,1-TRICHLOROETHANE	1,300
TRICHLOROETHENE	1.2

COMPOUND DETECTED	CONCENTRATION
CHLORETHANE	12
1,1-DICHLOROETHENE	460
1,1-DICHLOROETHANE	1,400
CHLOROPH	1.2
1,1,1-TRICHLOROETHANE	3,100
CARBON TETRACHLORIDE	420
TRICHLOROETHENE	190
TETRACHLOROETHANE	14

COMPOUND DETECTED	CONCENTRATION
CHLORETHANE	10
1,1-DICHLOROETHENE	280
1,1-DICHLOROETHANE	1,200
CHLOROPH	1.5
1,1,1-TRICHLOROETHANE	1.5
TRICHLOROETHENE	120
TETRACHLOROETHANE	2.2

# SITE PLAN



SYLVESTER AVENUE

SIDEWALK

29 NEW YORK AVENUE

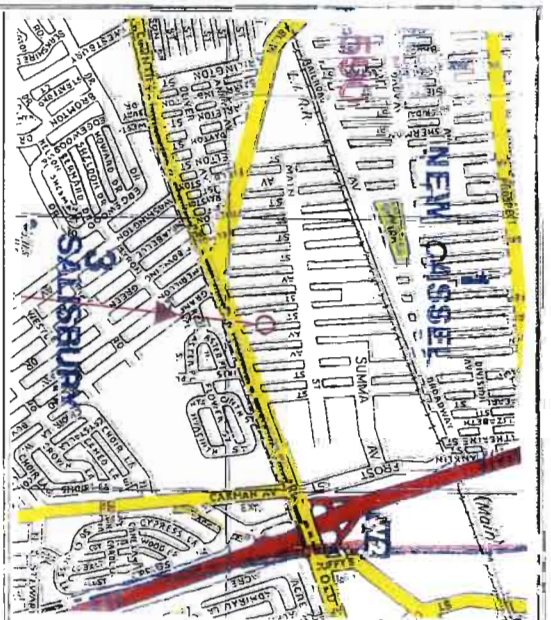
36 SYLVESTER AVENUE

LOADING DOCK

NEW YORK AVENUE



## LOCATION MAP



## LEGEND

- PROPERTY LINE
- BUILDING OUTLINE
- AREA OF IDENTIFIED ANOMALY
- SOIL/GROUNDWATER BORING
- GAS MAIN
- SEPTIC VENT LINE
- DRYWELL



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TITLE: FIGURE 5 - CONTAMINANT CONCENTRATIONS AT 52 FEET

LOCATION: 29 NEW YORK AVENUE  
NEW CASSEL, NEW YORK

SECTION: 11 BLOCK: 77 LOTS: 25-28 AND 50-55

DRAWN BY: CC DATE: 9 / 13 / 99 DRAWING NO. 990136A5

CHECKED BY: AT DATE: 9 / 13 / 99

LAST REVISED BY: DATE: 10 / 50 - 00 FIG. NO. 3 OF 4

The analytical results for the ten (10) samples collected at sixty-two (62) feet below grade revealed that there were elevated concentrations of VOCs above respective NYS DEC groundwater Standards in all of the samples, with the exception of the sample obtained from SGB-5. The most common contaminants detected were DCE, DCA and TCA. Based upon a review of the analytical data, it was determined that the highest concentrations of VOCs are present in the upgradient groundwater samples collected from SGB-1 and SGB-2 near the northeast corner of the Site. Further review of the analytical results revealed that there was a severe reduction in contaminant concentrations as traveling down-gradient across the site. The contaminant concentrations which were detected in each of the respective samples is plotted on Figure 6.0 - Groundwater Contaminant Concentrations at Sixty-Two Feet. Based upon the field data collected and analytical results, it is apparent that an off-site VOC contamination plume is impacting the Site. A summary of the analytical data for the groundwater samples collected at sixty-two (62) feet below grade is presented in Table 9.



COMPOUND DETECTED	CONCENTRATION
1,1,1-TRICHLOROETHANE	30
1,1,1-TRICHLOROETHANE	85
1,1-DICHLOROETHANE	12

COMPOUND DETECTED	CONCENTRATION
1,1,1-TRICHLOROETHANE	640
1,1-DICHLOROETHANE	87
1,1-DICHLOROETHANE	88

COMPOUND DETECTED	CONCENTRATION
NOTHING DETECTED	

COMPOUND DETECTED	CONCENTRATION
1,1,1-TRICHLOROETHANE	7,400
1,1-DICHLOROETHANE	760
1,1-DICHLOROETHANE	2,000

COMPOUND DETECTED	CONCENTRATION
CHLORETHANE	9.1
1,1-DICHLOROETHANE	300
1,1-DICHLOROETHANE	820
CHLOROFORM	1.1
1,1,1-TRICHLOROETHANE	1,000
1,1,2-TRICHLOROETHANE	1.7
TRICHLOROETHENE	350
TETRACHLOROETHENE	27

COMPOUND DETECTED	CONCENTRATION
CHLORETHANE	15
1,1-DICHLOROETHENE	180
1,1-DICHLOROETHANE	310
ACETONE	2.7
1,1,1-TRICHLOROETHANE	1,700

COMPOUND DETECTED	CONCENTRATION
CHLORETHANE	22
1,1-DICHLOROETHENE	330
1,1-DICHLOROETHANE	380
ACETONE	7.1
1,1,1-TRICHLOROETHANE	2,000
CHL-1,2-DICHLOROETHANE	6.5
TRICHLOROETHENE	20
M & P - XYLENE	3.7
TOLUENE	16
BENZENE	3.1

COMPOUND DETECTED	CONCENTRATION
1,1,1-TRICHLOROETHANE	220
1,1-DICHLOROETHANE	13
1,1-DICHLOROETHANE	82
ACETONE	3.5
TRICHLOROETHENE	5.8
TETRACHLOROETHENE	12

COMPOUND DETECTED	CONCENTRATION
CHLORETHANE	3.6
1,1-DICHLOROETHENE	50
1,1-DICHLOROETHANE	50
ACETONE	4.6
1,1,1-TRICHLOROETHANE	500
TOLUENE	5.8
TRICHLOROETHENE	2.1
M & P - XYLENE	2.7

COMPOUND DETECTED	CONCENTRATION
1,1,1-TRICHLOROETHANE	860
1,1-DICHLOROETHANE	110
1,1-DICHLOROETHANE	95
TETRACHLOROETHENE	12
TRICHLOROETHENE	7
CHLORETHANE	7.3

GROUNDWATER FLOW

SYLVESTER AVENUE

SIDEWALK

LOADING DOCK

36 SYLVESTER AVENUE

29 NEW YORK AVENUE

NEW YORK AVENUE

SITE PLAN



LOCATION MAP



LEGEND

- PROPERTY LINE
- BUILDING OUTLINE
- AREA OF IDENTIFIED ANOMALY
- SOIL/GROUNDWATER BORING
- GAS MAIN
- SEPTIC VENT LINE
- DRYWELL



GENERAL CONSOLIDATED INDUSTRIES INC.  
1092 MOTOR PARKWAY, HAUPPAUGE, NEW YORK 11788

Environmental & Engineering Consultants

FIGURE 6 - CONTAMINANT CONCENTRATIONS AT 62 FEET

LOCATION:	29 NEW YORK AVENUE
SECTION:	NEW CASSEL, NEW YORK
BLOCK:	77 LOTS: 25-28 AND 50-55
DRAWN BY:	CC
CHECKED BY:	AT
DATE:	9 / 13 / 99
DATE:	9 / 13 / 99
LAST REVISION BY:	DATE: SCALE: 1"=50'-0"
	PLOT NO.: 3 OF 4

**Table 5**  
**GROUNDWATER ANALYTICAL LABORATORY DATA**  
**Volatile Organic Compounds**  
**Groundwater Samples Collected At 52 Feet**

ANALYTICAL PARAMETERS	SGB - 1	SGB - 2	SGB - 3	SGB - 4	SGB - 5
Dichlorodifluoromethane	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND
Chloroethane	12	18	ND	ND	ND
Acrolein	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND
1,1-Dichloroethene	460	280	48	57	ND
Acetone	ND	ND	ND	ND	ND
Carbon Disulfide	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND
1,1-Dichloroethane	1,400	1,200	56	ND	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND
Chloroform	1.2	1.5	ND	ND	ND
1,1,1-Trichloroethane	3,100	1,900	490	260	1.6
Vinyl Acetate	420	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND

Notes: All results are in ug/L (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).

**Table 5**  
**GROUNDWATER ANALYTICAL LABORATORY DATA**  
**Volatile Organic Compounds**  
**Groundwater Samples Collected At 52 Feet**

ANALYTICAL PARAMETERS	SGB - 1	SGB - 2	SGB - 3	SGB - 4	SGB - 5
Trichloroethene	190	120	ND	1.6	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone	ND	ND	ND	ND	ND
Tetrachloroethene	14	2.2	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND
m & p - Xylenes	ND	ND	ND	ND	ND
o - Xylene	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND
Isopropylbenzene	ND	ND	ND	ND	ND
Bromobenzene	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND

Notes: All results are in ug/L (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).

**Table 5**  
**GROUNDWATER ANALYTICAL LABORATORY DATA**  
**Volatile Organic Compounds**  
**Groundwater Samples Collected At 52 Feet**

ANALYTICAL PARAMETERS	SGB - 1	SGB - 2	SGB - 3	SGB - 4	SGB - 5
1,2,3-Trichloropropane	ND	ND	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND
4-Isopropyltoluene	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND
n-Butylbenzene	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND

Notes: All results are in ug/L (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).

**Table 5**  
**GROUNDWATER ANALYTICAL LABORATORY DATA**  
**Volatile Organic Compounds**  
**Groundwater Samples Collected At 52 Feet**

ANALYTICAL PARAMETERS	SGB - 6	SGB - 7	SGB - 8	SGB - 9	SGB - 10
Dichlorodifluoromethane	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND
Chloroethane	ND	2.3	8.1	2.7	17
Acrolein	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND
1,1-Dichloroethene	11	31	130	31	290
Acetone	3.6	4.4	ND	12	3
Carbon Disulfide	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND
1,1-Dichloroethane	92	100	200	120	340
2,2-Dichloropropane	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	3.9
Bromochloromethane	ND	ND	ND	ND	ND
Chloroform	ND	ND	1.2	ND	ND
1,1,1-Trichloroethane	230	370	1,300	420	2,100
Vinyl Acetate	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND
Benzene	ND	2.6	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND

Notes: All results are in ug/L (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).



**Table 5**  
**GROUNDWATER ANALYTICAL LABORATORY DATA**  
**Volatile Organic Compounds**  
**Groundwater Samples Collected At 52 Feet**

ANALYTICAL PARAMETERS	SGB - 6	SGB - 7	SGB - 8	SGB - 9	SGB - 10
Trichloroethene	3.6	ND	1.2	2.2	17
1,2-Dichloropropane	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND
Toluene	ND	31	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	12
1,3-Dichloropropane	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND
Ethylbenzene	ND	6.9	ND	ND	ND
m & p - Xylenes	ND	7.7	ND	ND	ND
o - Xylene	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND
Isopropylbenzene	ND	ND	ND	ND	ND
Bromobenzene	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND

Notes: All results are in ug/L (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).

**Table 5**  
**GROUNDWATER ANALYTICAL LABORATORY DATA**  
**Volatile Organic Compounds**  
**Groundwater Samples Collected At 52 Feet**

ANALYTICAL PARAMETERS	SGB - 6	SGB - 7	SGB - 8	SGB - 9	SGB - 10
1,2,3-Trichloropropane	ND	ND	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	5.2	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND
4-Isopropyltoluene	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND
n-Butylbenzene	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND

Notes: All results are in ug/L (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).

<b>Table 6</b> <b>GROUNDWATER ANALYTICAL LABORATORY DATA</b> <b>Total Petroleum Hydrocarbons (TPH)</b> <b>Groundwater Samples Collected at 52 feet</b>		
<b>Sample Location</b>	<b>Date</b>	<b>TPH</b>
SGB-7	6/23/99	1.01

Notes: All results are in parts per million (mg/L).

**Table 7**  
**GROUNDWATER ANALYTICAL LABORATORY DATA**  
**Semi-Volatile Organic Compounds**  
**Groundwater Sample Collected at 52 feet**

ANALYTICAL PARAMETERS	SGB-7 52 feet bls.
bis(2-Chloroethyl)ether	ND
2,2'-Oxybis(1-Chloropropane)	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
n-Nitro-di-n-propylamine	ND
Hexachloroethane	ND
Nitrobenzene	ND
Isophorone	ND
bis(2-Chloroethoxy)methane	ND
1,2,4-Trichlorobenzene	ND
Naphthalene	ND
4-Chloroaniline	ND
Hexachlorobutadiene	ND
2-Methylnaphthalene	ND
Hexachlorocyclopentadiene	ND
2-Chloronaphthalene	ND
2-Nitroaniline	ND
Dimethylphthalate	ND
Acenaphthylene	ND
2,6-Dinitrotoluene	ND
3-Nitroaniline	ND
Acenaphthene	ND
Dibenzofuran	ND
2,4-Dinitrotoluene	ND
Diethylphthalate	ND

Notes: All results are in ug/L (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).

**Table 7**  
**GROUNDWATER ANALYTICAL LABORATORY DATA**  
**Semi-Volatile Organic Compounds**  
**Groundwater Sample Collected at 52 feet**

ANALYTICAL PARAMETERS	SGB-7 52 feet bls.
4-Chlorophenyl-phenylether	ND
Fluorene	ND
4-Nitroaniline	ND
N-Nitrosodiphenylamine	ND
1,2-Diphenylhydrazine	ND
4-Bromophenyl-phenylether	ND
Hexachlorobenzene	ND
Phenanthrene	ND
Anthracene	ND
Di-n-butylphthalate	2.1
Fluoranthene	ND
Pyrene	ND
Butylbenzylphthalate	ND
3,3'-Dichlorobenzidine	ND
Benzo(a)anthracene	ND
Chrysene	ND
bis(2-Ethylhexyl)phthalate	ND
Di-n-octylphthalate	ND
Benzo(b)fluoranthene	ND
Benzo(k)fluoranthene	ND
Benzo(a)pyrene	ND
Ideno(1,2,3-cd)pyrene	ND
Dibenz(a,h)anthracene	ND
Benzo(g,h,i)perylene	ND

Notes: All results are in ug/L (parts per billion - ppb).

ND = Non-detectable above analytical method detection limit (MDL).

**Table 8**  
**GROUNDWATER ANALYTICAL LABORATORY DATA**  
**Thirteen (13) Priority Pollutant Metals**  
**Groundwater Sample collected at 52 feet**

<b>ANALYTICAL PARAMETER</b>	<b>NYS DEC Class GA Standards</b>	<b>SGB-7 52 feet bls.</b>
Silver	50	< 1.0
Arsenic	25	< 6.0
Beryllium	NL	< 1.0
Cadmium	5	< 1.0
Chromium	50	1.1
Copper	200	9.2
Thallium	NL	< 7.0
Lead	25	< 2.0
Mercury	0.7	< 0.2
Nickel	100	5.8
Antimony	3	< 5.0
Selenium	10	< 4.0
Zinc	NL	22.4

- Notes:
1. All results are in parts per million (mg/L)
  2. ND - Compound was non-detectable above the analytical method detection limit (MDL).
  3. Class GA groundwater standards are listed in the NYS DEC Water Quality Regulations - Surface Water and Groundwater Classifications and Standards NYCRR Title 6, Chapter X, Parts 700-705.

**Table 9**  
**GROUNDWATER ANALYTICAL LABORATORY DATA**  
**Volatile Organic Compounds**  
**Groundwater Samples Collected At 62 Feet**

ANALYTICAL PARAMETERS	SGB - 1	SGB - 2	SGB - 3	SGB - 4	SGB - 5
Dichlorodifluoromethane	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND
Chloroethane	9.1	ND	ND	ND	ND
Acrolein	ND	ND	ND	ND	ND
Trichlorofouromethane	ND	ND	ND	ND	ND
1,1-Dichloroethene	300	760	87	12	ND
Acetone	ND	ND	ND	ND	ND
Carbon Disulfide	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND
1,1-Dichloroethane	620	2,000	86	30	ND
2,2-Dichloropropane	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	1,800	7,400	640	85	ND
Vinyl Acetate	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND

Notes: All results are in ug/L (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).

**Table 9**  
**GROUNDWATER ANALYTICAL LABORATORY DATA**  
**Volatile Organic Compounds**  
**Groundwater Samples Collected At 62 Feet**

ANALYTICAL PARAMETERS	SGB - 1	SGB - 2	SGB - 3	SGB - 4	SGB - 5
Trichloroethene	350	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.7	ND	ND	ND	ND
4-Methyl-2-Pentanone	ND	ND	ND	ND	ND
Tetrachloroethene	27	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND
m & p - Xylenes	ND	ND	ND	ND	ND
o - Xylene	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND
Isopropylbenzene	ND	ND	ND	ND	ND
Bromobenzene	ND	ND	ND	ND	ND

Notes: All results are in ug/L (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).



**Table 9**  
**GROUNDWATER ANALYTICAL LABORATORY DATA**  
**Volatile Organic Compounds**  
**Groundwater Samples Collected At 62 Feet**

<b>ANALYTICAL PARAMETERS</b>	<b>SGB - 1</b>	<b>SGB - 2</b>	<b>SGB - 3</b>	<b>SGB - 4</b>	<b>SGB - 5</b>
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	ND	ND	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND
4-Isopropyltoluene	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND
n-Butylbenzene	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND

Notes: All results are in ug/L (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).

**Table 9**  
**GROUNDWATER ANALYTICAL LABORATORY DATA**  
**Volatile Organic Compounds**  
**Groundwater Samples Collected At 62 Feet**

ANALYTICAL PARAMETERS	SGB - 6	SGB - 7	SGB - 8	SGB - 9	SGB - 10
Dichlorodifluoromethane	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND
Chloroethane	ND	3.4	15	7.3	22
Acrolein	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND
1,1-Dichloroethene	13	50	180	110	330
Acetone	3.5	4.6	2.7	ND	ND
Carbon Disulfide	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND
1,1-Dichloroethane	62	50	310	95	390
2,2-Dichloropropane	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	6.3
Bromochloromethane	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	220	500	1,700	890	2,000
Vinyl Acetate	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND
1,1-Dichloropropene	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	3.1
1,2-Dichloroethane	ND	ND	ND	ND	ND

Notes: All results are in ug/L (parts per billion - ppb).  
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**Table 9**  
**GROUNDWATER ANALYTICAL LABORATORY DATA**  
**Volatile Organic Compounds**  
**Groundwater Samples Collected At 62 Feet**

ANALYTICAL PARAMETERS	SGB - 6	SGB - 7	SGB - 8	SGB - 9	SGB - 10
Trichloroethene	5.6	2.1	ND	7	26
1,2-Dichloropropane	ND	ND	ND	ND	ND
Dibromomethane	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND
2-Chloroethyl Vinyl Ether	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND
Toluene	ND	5.8	ND	ND	16
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	12
1,3-Dichloropropane	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND
m & p - Xylenes	ND	2.7	ND	ND	3.7
o - Xylene	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND
Isopropylbenzene	ND	ND	ND	ND	ND
Bromobenzene	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND

Notes: All results are in ug/L (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).

**Table 9**  
**GROUNDWATER ANALYTICAL LABORATORY DATA**  
**Volatile Organic Compounds**  
**Groundwater Samples Collected At 62 Feet**

ANALYTICAL PARAMETERS	SGB - 6	SGB - 7	SGB - 8	SGB - 9	SGB - 10
1,2,3-Trichloropropane	ND	ND	ND	ND	ND
n-Propylbenzene	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND
tert-Butylbenzene	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND
4-Isopropyltoluene	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND
n-Butylbenzene	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND

Notes: All results are in ug/L (parts per billion - ppb).  
ND = Non-detectable above analytical method detection limit (MDL).

## **5.5     Quality Assurance / Quality Control Analytical Results**

A field blank sample was collected during each day of groundwater sampling, in order to attest to the precision of the laboratory. The analytical results for the field blank sample collected on June 15, 1999 revealed that there were no VOCs detected above their respective laboratory analytical method detection limit, with the exception of the Dibromochloromethane which was present at 1.3 ppb in the sample. There were no VOCs identified in the field blank sample collected on June 16, 1999.

A total of one (1) trip blank and two (2) field blank samples were collected and submitted for laboratory analysis during the sampling activities which were conducted on June 22 and 23, 1999. All three (3) samples revealed low concentrations of Acetone, which varied from 3.5 ppb to 7.1 ppb. There were no other VOCs detected above their respective laboratory analytical method detection limit.

As per the provisions of the FRI Work Plan, it was determined that one (1) duplicate groundwater sample would be attained. A duplicate groundwater sample was acquired from SGB-10 at fifty-two (52) feet below grade. The sample was submitted for laboratory analysis. A comparison of the analytical data revealed correspondingly similar results for all compounds identified in both samples.

The low levels of Acetone and Dibromochloromethane are most likely associated with laboratory sampling procedures and are not representative of contamination in the samples. The presence of these compounds in the samples does not impugn the validity of the data, it is believed that these deficiencies did not contravene the quality of the data. The data obtained during the course of this investigation is usable.

## **6.0 CONCLUSIONS**

The field observations and analytical data obtained during the performance of the FRI were utilized to determine whether or not the operations formerly conducted by Tishcon Corporation have impacted the subsurface soil and groundwater at the Site and the surrounding neighborhood. The following conclusions were drawn based upon the data obtained during the FRI.

On May 14 and 15, 1999, a Geophysical Investigation of the Site was conducted by GCI. The equipment selected for the investigation included a TM-808 metal-detector and a GSSI SIR-2 ground penetrating radar (GPR) with a 400 MHz transducer. The areas of concern (AOCs) at the subject property were first investigated with the TM-808 metal-detector. The ground penetrating radar (GPR) survey was then conducted in the identical areas which were previously surveyed with the metal-detector. The results of the TM-808 magnetometer survey indicated that there were no anomalous areas identified on the subject property. However, the TM-808 survey did reveal the presence of two (2) anomalous areas on the south side of the building located on the northern adjacent property, which was noted to be designated as 36 Sylvester Street. In addition, there was a sanitary vent line observed along the south side of the building at 36 Sylvester Street, which was noted to be located in the immediate vicinity of the anomalous areas. The GPR imaging results indicated that there were no apparent buried structures present on the Site. Although, the GPR imaging of the anomalous areas at 36 Sylvester Street revealed the presence of two (2) separate underground structures. Based upon the results of the Geophysical Investigation, it was determined that the only subsurface feature currently identified on the Site is the one (1) storm water drywell. The drywell is located in the south side parking area. Anomalous areas along the north side of the Site which were previously identified by LMS were determined to be the septic system for the building at 36 Sylvester Street. It is not known at this time whether or not the septic system at 36 Sylvester Street was ever properly abandoned. In addition, there are no analytical results or other information which indicate that the septic system at 36 Sylvester Street was ever sampled for the presence of contamination.

A sludge sample was obtained from the bottom invert level of the one (1) on-site storm water drywell (DW-1). The sample exhibited an elevated PID reading of 50.0 ppm. In addition, the sample was noted to be stained and exhibiting a weathered petroleum odor. The sludge sample was analyzed for volatile organic compounds (VOCs) using EPA Method 8260, semi-volatile organic compounds (SVOCs) base/neutral extractables by EPA Method 8270, total petroleum hydrocarbons (TPH) by EPA Method 418.1 and for the priority pollutant metals using SW-846 Method 6010. The analytical results for the invert level sample from DW-1 were compared to the Recommended Soil

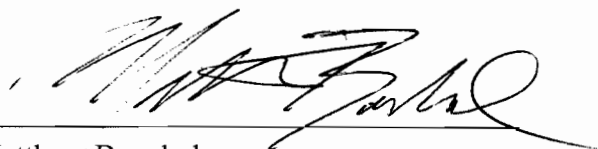
Cleanup Objectives listed in the NYS DEC NYS DEC Division Technical and Administrative Guidance Memorandum HWR-94-4046: Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM). The analytical results revealed that there were elevated levels of VOCs and SVOCs present. The TPH analysis revealed a concentration of 70,027 ppm. Additionally, the metals analysis revealed that copper was present at 1,500 ppm, mercury at 0.59 ppm, nickel at 19.4 ppm and zinc at 1,710 ppm, all of which are above their respective TAGM Recommended Soil Cleanup Objectives of 25.0 ppm, 0.1 ppm, 13.0 ppm and 20.0 ppm. Although, please note that TCA which is a primary contaminant of concern, was not detected in the invert level sample. Based upon the analytical data it is apparent that the sludge present within DW-1 has been impacted. In addition, SGB-7 was completed directly outside of the leaching rings for DW-1 in order to assess the soil and groundwater quality. There was no evidence of contamination observed in any of the soil samples collected from SGB-7. A groundwater sample collected from SGB-7 did not reveal the presence of elevated concentrations of SVOCs, TPH or metals. As such, it does not appear that the contamination present in DW-1 has impacted the groundwater at the Site.

Groundwater samples were collected from each of the borings at the groundwater interface level which was determined to be fifty-two (52) feet below grade, as well as from sixty-two (62) feet below grade. A total of twenty (20) groundwater samples were submitted for laboratory analysis. The analytical results for the groundwater samples obtained during the performance of the Focused Remedial Investigation were compared to the Standards listed in the NYS DEC Water Quality Regulations Surface Water and Groundwater Classifications and Standards - Title 6, Chapter X Parts 700-706. The analytical results for the samples collected at fifty-two (52) feet and sixty-two (62) feet below grade revealed that there were elevated concentrations of VOCs above respective NYS DEC groundwater Standards in all of the samples, with the exception of the samples obtained from SGB-5. The most common contaminants detected were DCE, DCA) and TCA. The analytical data was plotted on a Site Plan for comparative purposes. Based upon a review of the analytical data, it was determined that the highest concentrations of VOCs are present in the upgradient groundwater samples collected from SGB-1 and SGB-2 near the northeast corner of the Site. Please note that these borings were completed immediately down-gradient of the two (2) anomalous areas identified at 36 Sylvester Street. Further review of the plotted analytical results revealed that there was a significant reduction in contaminant concentrations as traveling down-gradient across the site. Based upon the field data collected and analytical results, it is apparent that an off-site VOC contamination plume is impacting the Site. Based upon the results of the FRI, it is believed that the operations formerly conducted at the site did not lead to the VOC contamination plume which has impacted the surrounding neighborhood of the Site. There are no further investigation activities recommended with regard to the Site. The Site should be de-listed from the NYS DEC IHWDS listing.

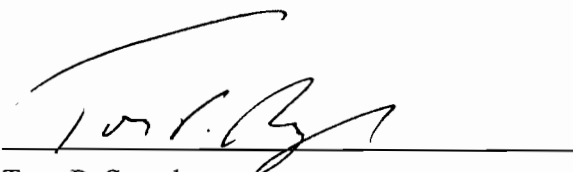
However, the analysis did reveal the presence of contamination in the invert level sample obtained from DW-1. Further sampling in the vicinity of DW-1 did not reveal the presence of contamination, as such it appears that the contamination present in DW-1 has not impacted the groundwater at the site. Based upon the results of the investigation there will be a need for an Interim Remedial Measure (IRM) in order to remove the contamination which was identified in DW-1.

#### **6.1 Interim Remedial Measure (IRM)**

The only significant source of on-site contamination found during the performance of the investigation activities was the one (1) on-site drywell DW-1. Therefore, it is recommended that the contaminated sludge present in DW-1 be remediated. The contaminated sludge present in DW-1 should be removed via a “vactor” and stored in an appropriate receptacle. The waste material should then be transported to a licensed facility for disposal. Upon completion of the remedial activities, a representative end-point sample will be collected from the one (1) drywell. The end-point sample will be submitted for analysis of volatile organic compounds (VOCs) using EPA Method 8260, semi-volatile organic compounds (SVOCs) base/neutral extractables by EPA Method 8270, total petroleum hydrocarbons (TPH) by EPA Method 418.1 and for the priority pollutant metals using SW-846 Method 6010. Upon review of the end-point analytical results, a final determination will be made as to whether or not the contamination at the site has been properly remediated.



Matthew Boeckel  
Senior Hydrogeologist  
General Consolidated Industries, Inc.



Tom P. Smyth  
President  
General Consolidated Industries, Inc.



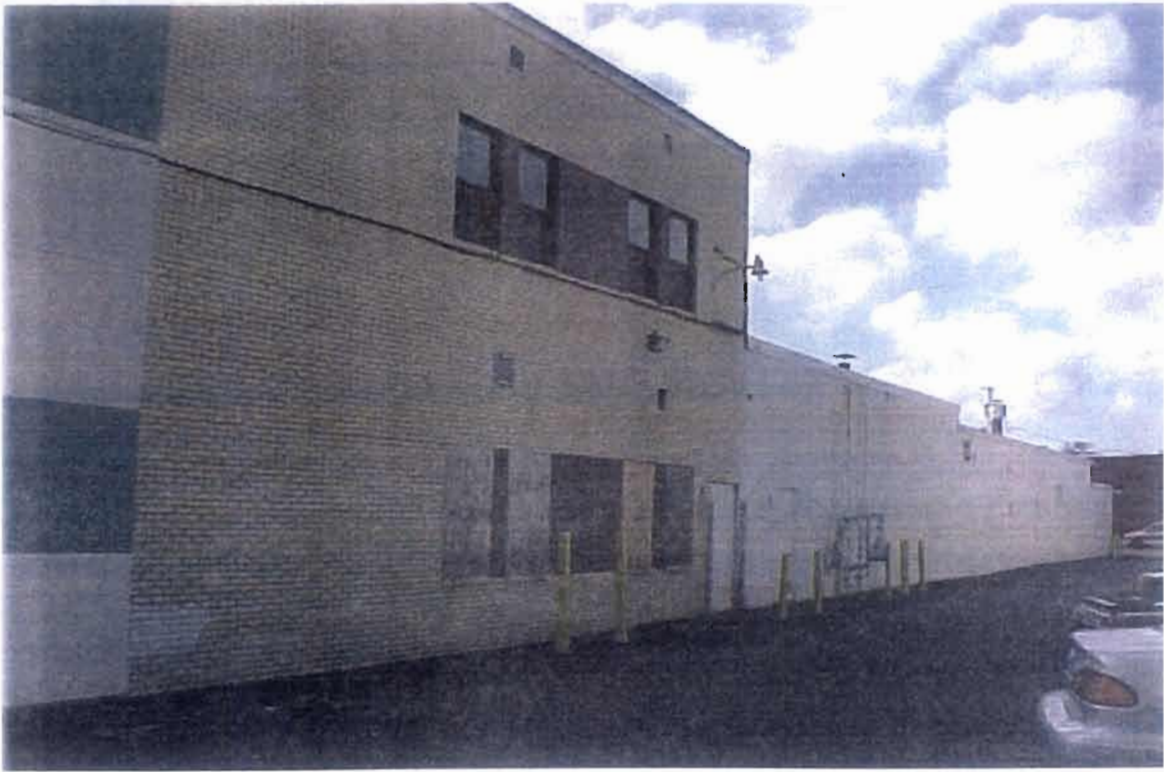
## **SITE PHOTOGRAPHS**



1. View of the east side of the Site, located along New York Avenue.



2. View of south side of Site.

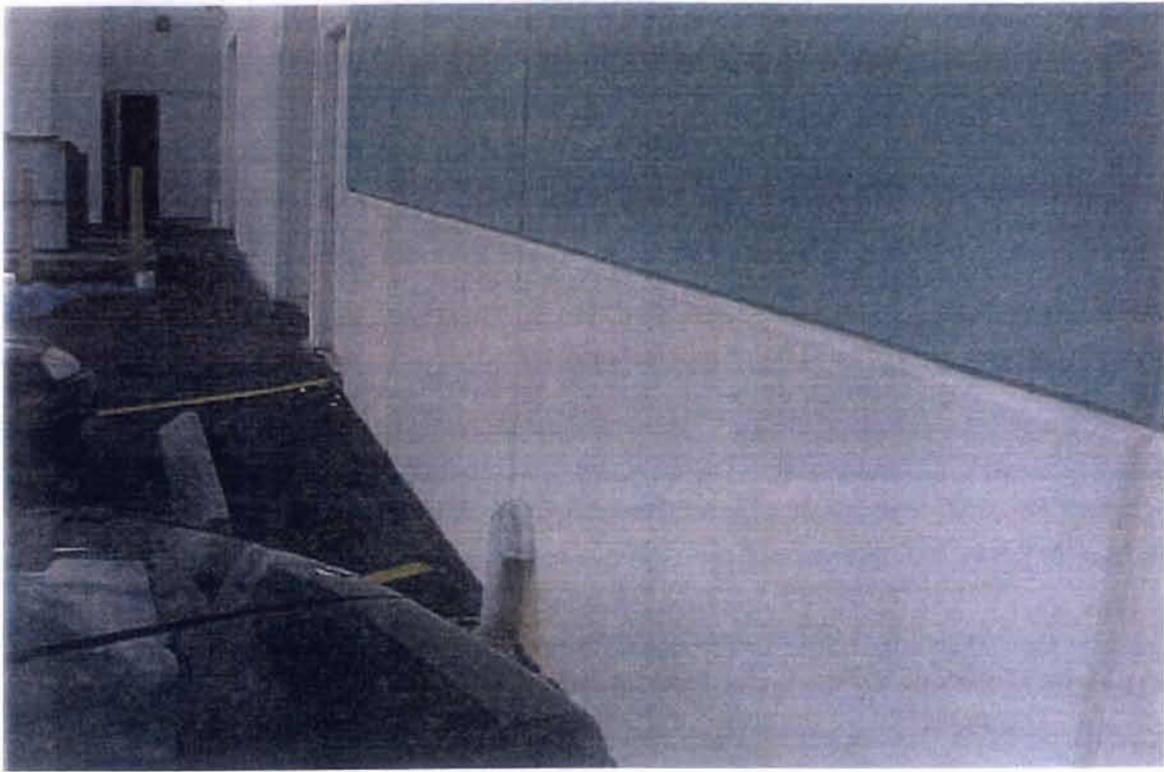


3. View of north side of the Site.



4. View of west side of the Site.

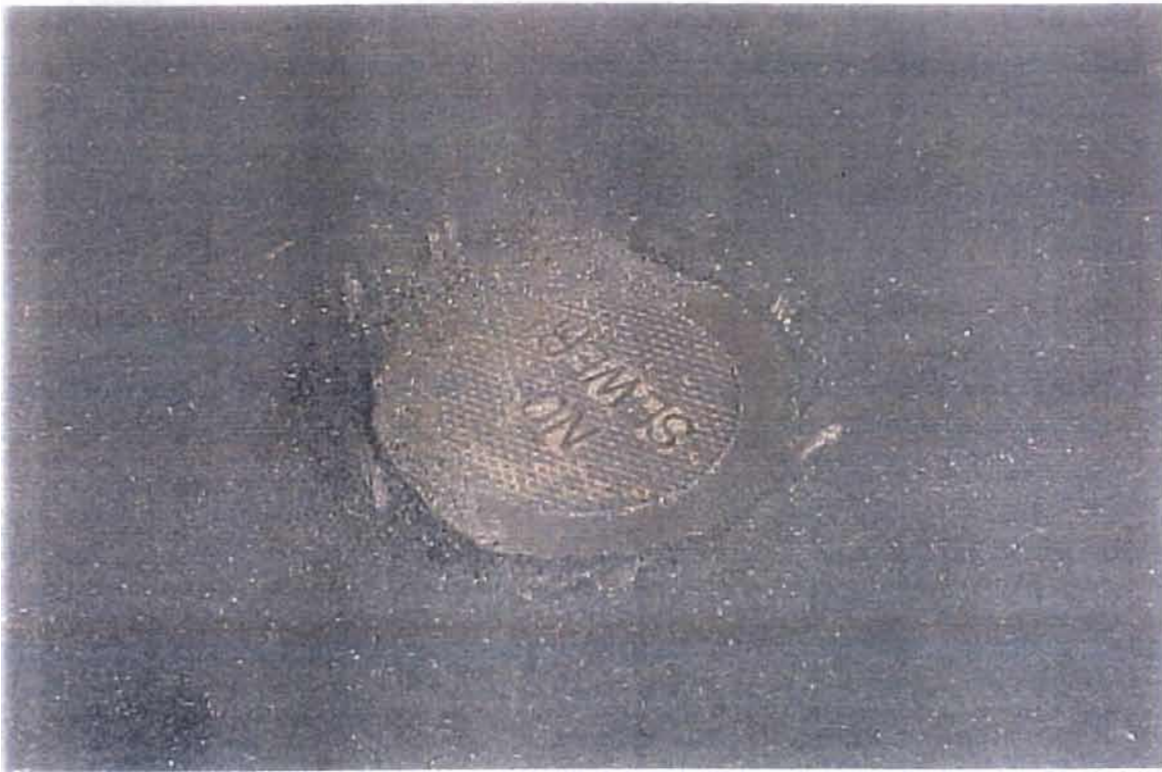




5. View showing the respective locations of the two (2) septic vent lines at the Site.



6. View of drywell (DW-1) located on south side parking area at the Site.



7. View of the municipal Nassau County Sewer District (NCSID) clean-out located at the Site.



8. View of a Soil / Groundwater boring being installed at the northeast corner of the Site.

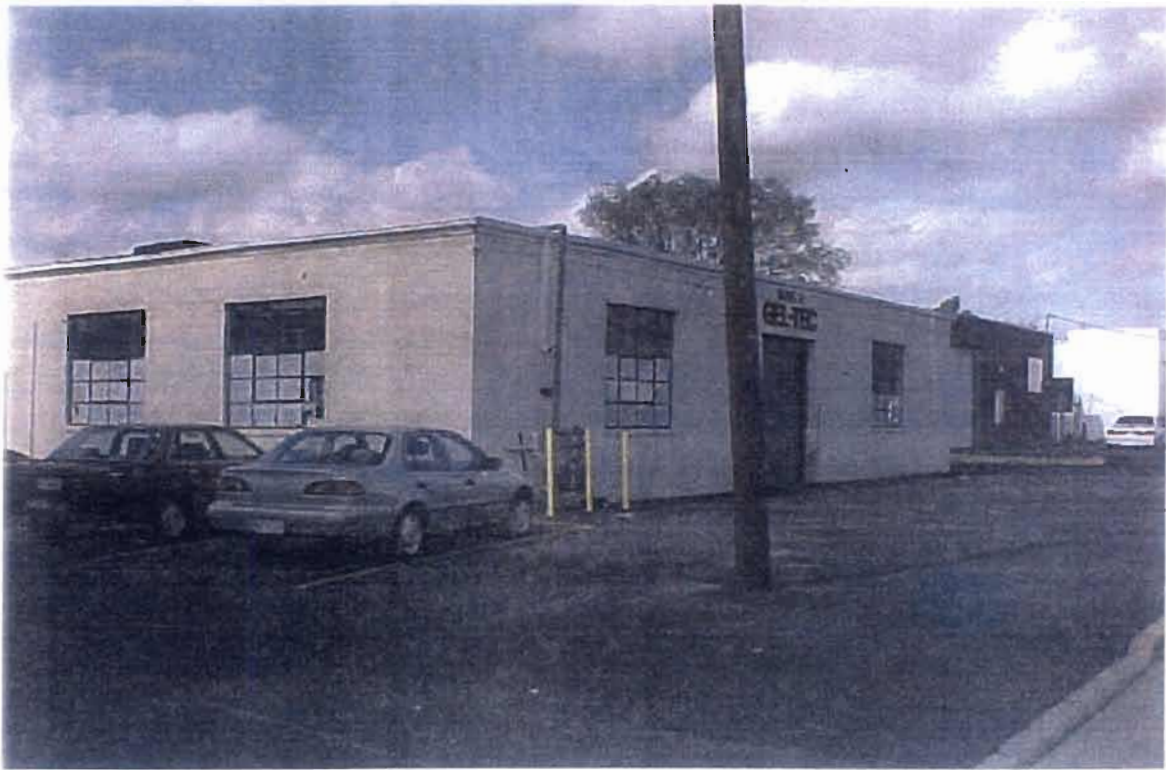




9. View of parking area located along the south side of the Site.



10. View of "Tishcon Corp." located at 30 New York Avenue.



11. View of adjacent property to the north of the Site, identified as 36 Sylvester Street.



12. View of adjacent property to the south of the Site.

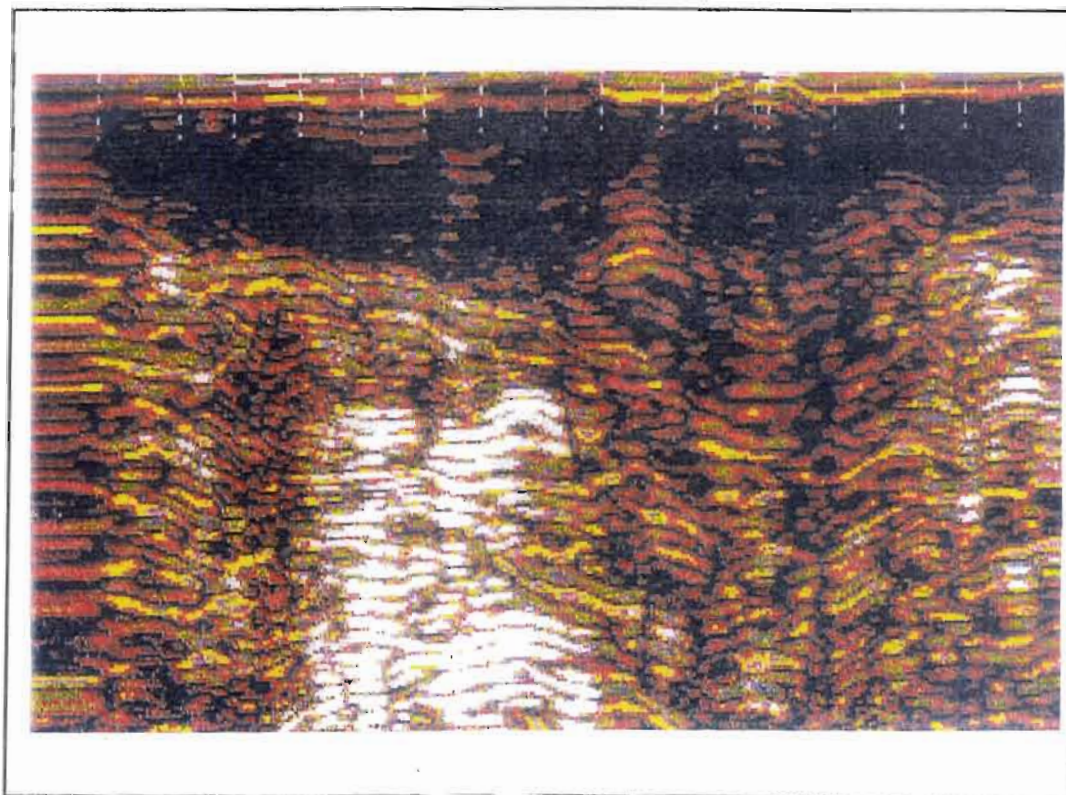




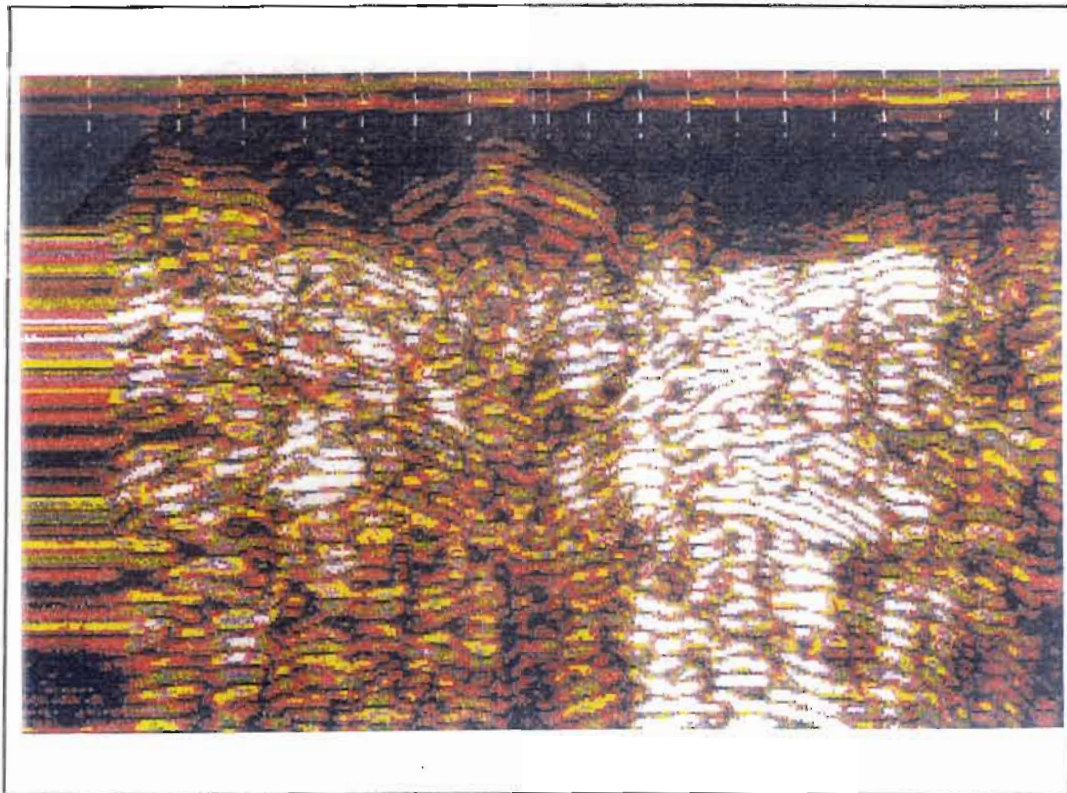
13. View of septic vent line associated with the two (2) anomalous features  
at 36 Sylvester Street.



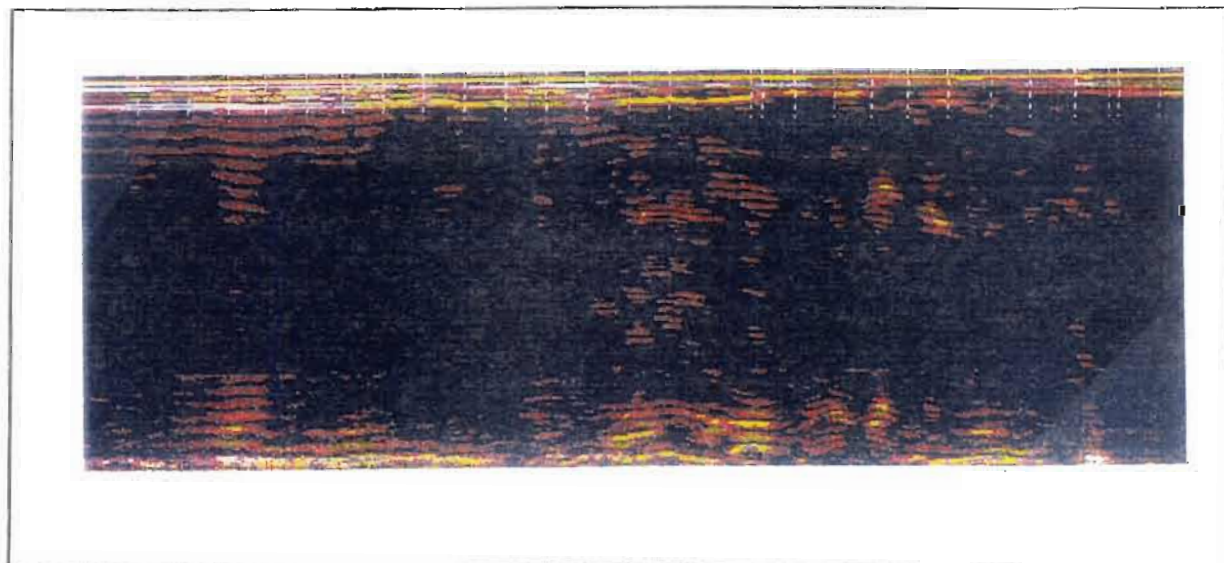
## **GEOPHYSICAL INVESTIGATION IMAGERY**



1. GPR Imagery of anomalous area A-1, located on north side of the Site.



2. GPR Imagery of anomalous area A-2, located on north side of the Site.



3. GPR Imagery of the southern parking area at the Site.

## **GEOLOGIC BORING LOGS**

# SOIL BORING LOG SGB-1

<b>GCI</b> <i>Environmental &amp; Engineering Consultants</i> 1092 Motor Parkway Hauppauge, New York 11788 Phone: (516) 851-1600 Fax: (516) 851-0535				<b>Location:</b> 29 New York Avenue, New Cassel, NY <b>Drill Date:</b> June 15, 1999 <b>Project No.:</b> 970096 <b>Client:</b> Mr. Carmine Inserra <b>Hydrogeologist:</b> Mr. Matthew Boeckel <b>Boring Location:</b> Northeast corner of the Site.	
Drilling Co.: GCI				Driller: Mr. James Mulvey	
Hauppauge, N.Y.				Drill Rig: GeoProbe 550 Van-Mounted	
Total Well Depth (ft.): Not Applicable				Screen (ft.): Not Applicable	
Riser (ft.): Not Applicable				Filter Pack: Not Applicable	
Annular Seal: Not Applicable				Well Head: Not Applicable	
Sample Depth (ft.)				LITHOLOGICAL DESCRIPTION	
Start	End	% Recovery	PID		
15' 0"	17' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
30' 0"	32' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
45' 0"	47' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
57' 0"	59' 0"	100%	0.0 ppm	Tan clay. No odor or staining noted.	
				* Groundwater encountered at 52 feet below grade.	
PID: HNU Model DL-101				Weather Conditions: Sunny, 90 degrees Fahrenheit	
Drilling Time: 2.25 hours.				Miscellaneous Site Conditions: No other pertinent site information.	
APPLICABLE UNIFIED SOIL CLASSIFICATION					
Soil Groups		Typical Soil Names			
GM		Silty Gravels, Gravel-Sand-Silt Mixture			
GC		Clayey Gravels, Gravel-Sand-Clay Mixture			
SC		Clayey Sands, Sand-Clay Mixtures			
SM		Silty Sands, Sand-Silt Mixtures			

# SOIL BORING LOG SGB-2

## GCI

**Environmental & Engineering Consultants**  
**1092 Motor Parkway**  
**Hauppauge, New York 11788**  
**Phone: (516) 851-1600**  
**Fax: (516) 851-0535**

**Location:** 29 New York Avenue, New Cassel, NY  
**Drill Date:** June 15, 1999  
**Project No.:** 970096  
**Client:** Mr. Carmine Inserra  
**Hydrogeologist:** Mr. Matthew Boeckel  
**Boring Location:** Northeast corner of the Site.

Drilling Co.: GCI

Driller: Mr. James Mulvey

Hauppauge, N.Y.

Drill Rig: GeoProbe 550 Van-Mounted

Total Well Depth (ft.): Not Applicable

Screen (ft.): Not Applicable

Riser (ft.): Not Applicable

Filter Pack: Not Applicable

Annular Seal: Not Applicable

Well Head: Not Applicable

Sample Depth (ft.)

LITHOLOGICAL DESCRIPTION

Start	End	% Recovery	PID	
20' 0"	22' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.
30' 0"	32' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.
40' 0"	42' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.
50' 0"	52' 0"	100%	0.0 ppm	Tan clay. No odor or staining noted.
				* Groundwater encountered at 52 feet below grade.

PID: HNU Model DL-101

Weather Conditions: Sunny, 90 degrees Fahrenheit

Drilling Time: 2.25 hours.

Miscellaneous Site Conditions: No other pertinent site information.

## APPLICABLE UNIFIED SOIL CLASSIFICATION

Soil Groups	Typical Soil Names
GM	Silty Gravels, Gravel-Sand-Silt Mixture
GC	Clayey Gravels, Gravel-Sand-Clay Mixture
SC	Clayey Sands, Sand-Clay Mixtures
SM	Silty Sands, Sand-Silt Mixtures



# SOIL BORING LOG SGB-3

<b>GCI</b> Environmental & Engineering Consultants 1092 Motor Parkway Hauppauge, New York 11788 Phone: (516) 851-1600 Fax: (516) 851-0535				<b>Location:</b> 29 New York Avenue, New Cassel, NY <b>Drill Date:</b> June 16, 1999 <b>Project No. :</b> 970096 <b>Client:</b> Mr. Carmine Inserra <b>Hydrogeologist:</b> Mr. Matthew Boeckel <b>Boring Location:</b> Center - North side of the Site.	
Drilling Co.: GCI				Driller: Mr. James Mulvey	
Hauppauge, N.Y.				Drill Rig: GeoProbe 550 Van-Mounted	
Total Well Depth (ft.): Not Applicable				Screen (ft.): Not Applicable	
Riser (ft.): Not Applicable				Filter Pack: Not Applicable	
Annular Seal: Not Applicable				Well Head: Not Applicable	
Sample Depth (ft.)				LITHOLOGICAL DESCRIPTION	
Start	End	% Recovery	PID		
20' 0"	22' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
30' 0"	32' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
40' 0"	42' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
50' 0"	52' 0"	100%	0.0 ppm	Tan clay. No odor or staining noted.	
				* Groundwater encountered at 52 feet below grade.	
PID: HNU Model DL-101				Weather Conditions: Sunny, 90 degrees Fahrenheit	
Drilling Time: 2.25 hours.				Miscellaneous Site Conditions: No other pertinent site information.	
APPLICABLE UNIFIED SOIL CLASSIFICATION					
Soil Groups		Typical Soil Names			
GM		Silty Gravels, Gravel-Sand-Silt Mixture			
GC		Clayey Gravels, Gravel-Sand-Clay Mixture			
SC		Clayey Sands, Sand-Clay Mixtures			
SM		Silty Sands, Sand-Silt Mixtures			



# SOIL BORING LOG SGB-4

<b>GCI</b> Environmental & Engineering Consultants 1092 Motor Parkway Hauppauge, New York 11788 Phone: (516) 851-1600 Fax: (516) 851-0535				<b>Location:</b> 29 New York Avenue, New Cassel, NY <b>Drill Date:</b> June 16, 1999 <b>Project No. :</b> 970096 <b>Client:</b> Mr. Carmine Inserra <b>Hydrogeologist:</b> Mr. Matthew Boeckel <b>Boring Location:</b> Northeast corner of the Site.	
Drilling Co.: GCI				Driller: Mr. James Mulvey	
Hauppauge, N.Y.				Drill Rig: GeoProbe 550 Van-Mounted	
Total Well Depth (ft.): Not Applicable				Screen (ft.): Not Applicable	
Riser (ft.): Not Applicable				Filter Pack: Not Applicable	
Annular Seal: Not Applicable				Well Head: Not Applicable	
Sample Depth (ft.)				LITHOLOGICAL DESCRIPTION	
Start	End	% Recovery	PID		
20' 0"	22' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
30' 0"	32' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
40' 0"	42' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
50' 0"	52' 0"	100%	0.0 ppm	Tan clay. No odor or staining noted.	
				* Groundwater encountered at 52 feet below grade.	
PID: HNU Model DL-101				Weather Conditions: Sunny, 90 degrees Fahrenheit	
Drilling Time: 2.0 hours.				Miscellaneous Site Conditions: No other pertinent site information.	
APPLICABLE UNIFIED SOIL CLASSIFICATION					
Soil Groups		Typical Soil Names			
GM		Silty Gravels, Gravel-Sand-Silt Mixture			
GC		Clayey Gravels, Gravel-Sand-Clay Mixture			
SC		Clayey Sands, Sand-Clay Mixtures			
SM		Silty Sands, Sand-Silt Mixtures			

# SOIL BORING LOG SGB-5

## GCI

**Environmental & Engineering Consultants**  
 1092 Motor Parkway  
 Hauppauge, New York 11788  
 Phone: (516) 851-1600  
 Fax: (516) 851-0535

**Location:** 29 New York Avenue, New Cassel, NY  
**Drill Date:** June 16, 1999  
**Project No. :** 970096  
**Client:** Mr. Carmine Inserra  
**Hydrogeologist:** Mr. Matthew Boeckel  
**Boring Location:** Northeast corner of the Site.

Drilling Co.: GCI

Driller: Mr. James Mulvey

Hauppauge, N.Y.

Drill Rig: GeoProbe 550 Van-Mounted

Total Well Depth (ft.): Not Applicable

Screen (ft.): Not Applicable

Riser (ft.): Not Applicable

Filter Pack: Not Applicable

Annular Seal: Not Applicable

Well Head: Not Applicable

Sample Depth (ft.)

LITHOLOGICAL DESCRIPTION

Start	End	% Recovery	PID	
20' 0"	22' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.
30' 0"	32' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.
40' 0"	42' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.
50' 0"	52' 0"	100%	0.0 ppm	Tan clay. No odor or staining noted.
				* Groundwater encountered at 52 feet below grade.

PID: HNU Model DL-101

Weather Conditions: Sunny, 90 degrees Fahrenheit

Drilling Time: 2.5 hours.

Miscellaneous Site Conditions: No other pertinent site information.

## APPLICABLE UNIFIED SOIL CLASSIFICATION

Soil Groups	Typical Soil Names
GM	Silty Gravels, Gravel-Sand-Silt Mixture
GC	Clayey Gravels, Gravel-Sand-Clay Mixture
SC	Clayey Sands, Sand-Clay Mixtures
SM	Silty Sands, Sand-Silt Mixtures

# SOIL BORING LOG SGB-6

<b>GCI</b> <i>Environmental &amp; Engineering Consultants</i> 1092 Motor Parkway Hauppauge, New York 11788 Phone: (516) 851-1600 Fax: (516) 851-0535				<u>Location:</u> 29 New York Avenue, New Cassel, NY <u>Drill Date:</u> June 16, 1999 <u>Project No. :</u> 970096 <u>Client:</u> Mr. Carmine Inserra <u>Hydrogeologist:</u> Mr. Matthew Boeckel <u>Boring Location:</u> Northwest corner of parking area.	
Drilling Co.: GCI				Driller: Mr. James Mulvey	
Hauppauge, N.Y.				Drill Rig: GeoProbe 550 Van-Mounted	
Total Well Depth (ft.): Not Applicable				Screen (ft.): Not Applicable	
Riser (ft.): Not Applicable				Filter Pack: Not Applicable	
Annular Seal: Not Applicable				Well Head: Not Applicable	
Sample Depth (ft.)				LITHOLOGICAL DESCRIPTION	
Start	End	% Recovery	PID		
20' 0"	22' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
30' 0"	32' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
40' 0"	42' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
50' 0"	52' 0"	100%	0.0 ppm	Tan clay. No odor or staining noted.	
				* Groundwater encountered at 52 feet below grade.	
PID: HNU Model DL-101				Weather Conditions: Sunny, 90 degrees Fahrenheit	
Drilling Time: 2.25 hours.				Miscellaneous Site Conditions: No other pertinent site information.	
APPLICABLE UNIFIED SOIL CLASSIFICATION					
Soil Groups		Typical Soil Names			
GM		Silty Gravels, Gravel-Sand-Silt Mixture			
GC		Clayey Gravels, Gravel-Sand-Clay Mixture			
SC		Clayey Sands, Sand-Clay Mixtures			
SM		Silty Sands, Sand-Silt Mixtures			

# SOIL BORING LOG SGB-7

## GCI

**Environmental & Engineering Consultants**  
**1092 Motor Parkway**  
**Hauppauge, New York 11788**  
**Phone: (516) 851-1600**  
**Fax: (516) 851-0535**

**Location:** 29 New York Avenue, New Cassel, NY  
**Drill Date:** June 16, 1999  
**Project No. :** 970096  
**Client:** Mr. Carmine Inserra  
**Hydrogeologist:** Mr. Matthew Boeckel  
**Boring Location:** Center-North side of parking area.

Drilling Co.: GCI

Driller: Mr. James Mulvey

Hauppauge, N.Y.

Drill Rig: GeoProbe 550 Van-Mounted

Total Well Depth (ft.): Not Applicable

Screen (ft.): Not Applicable

Riser (ft.): Not Applicable

Filter Pack: Not Applicable

Annular Seal: Not Applicable

Well Head: Not Applicable

Sample Depth (ft.)

LITHOLOGICAL DESCRIPTION

Start	End	% Recovery	PID	
20' 0"	22' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.
30' 0"	32' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.
40' 0"	42' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.
50' 0"	52' 0"	100%	0.0 ppm	Tan clay. No odor or staining noted.
				* Groundwater encountered at 52 feet below grade.

PID: HNU Model DL-101

Weather Conditions: Sunny, 90 degrees Fahrenheit

Drilling Time: 1.25 hours.

Miscellaneous Site Conditions: No other pertinent site information.

## APPLICABLE UNIFIED SOIL CLASSIFICATION

Soil Groups	Typical Soil Names
GM	Silty Gravels, Gravel-Sand-Silt Mixture
GC	Clayey Gravels, Gravel-Sand-Clay Mixture
SC	Clayey Sands, Sand-Clay Mixtures
SM	Silty Sands, Sand-Silt Mixtures

# SOIL BORING LOG SGB-8

<b>GCI</b> Environmental & Engineering Consultants 1092 Motor Parkway Hauppauge, New York 11788 Phone: (516) 851-1600 Fax: (516) 851-0535				<b>Location:</b> 29 New York Avenue, New Cassel, NY <b>Drill Date:</b> June 16, 1999 <b>Project No.:</b> 970096 <b>Client:</b> Mr. Carmine Inserra <b>Hydrogeologist:</b> Mr. Matthew Boeckel <b>Boring Location:</b> Northeast corner of parking area.	
Drilling Co.: GCI				Driller: Mr. James Mulvey	
Hauppauge, N.Y.				Drill Rig: GeoProbe 550 Van-Mounted	
Total Well Depth (ft.): Not Applicable				Screen (ft.): Not Applicable	
Riser (ft.): Not Applicable				Filter Pack: Not Applicable	
Annular Seal: Not Applicable				Well Head: Not Applicable	
Sample Depth (ft.)				LITHOLOGICAL DESCRIPTION	
Start	End	% Recovery	PID		
20' 0"	22' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
30' 0"	32' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
40' 0"	42' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
50' 0"	52' 0"	100%	0.0 ppm	Tan clay. No odor or staining noted.	
				* Groundwater encountered at 52 feet below grade.	
PID: HNU Model DL-101				Weather Conditions: Sunny, 90 degrees Fahrenheit	
Drilling Time: 2.5 hours.				Miscellaneous Site Conditions: No other pertinent site information.	
APPLICABLE UNIFIED SOIL CLASSIFICATION					
Soil Groups		Typical Soil Names			
GM		Silty Gravels, Gravel-Sand-Silt Mixture			
GC		Clayey Gravels, Gravel-Sand-Clay Mixture			
SC		Clayey Sands, Sand-Clay Mixtures			
SM		Silty Sands, Sand-Silt Mixtures			

# SOIL BORING LOG SGB-9

## GCI

**Environmental & Engineering Consultants**  
 1092 Motor Parkway  
 Hauppauge, New York 11788  
 Phone: (516) 851-1600  
 Fax: (516) 851-0535

**Location:** 29 New York Avenue, New Cassel, NY  
**Drill Date:** June 16, 1999  
**Project No.:** 970096  
**Client:** Mr. Carmine Inserra  
**Hydrogeologist:** Mr. Matthew Boeckel  
**Boring Location:** Southwest corner of parking area.

Drilling Co.: GCI

Driller: Mr. James Mulvey

Hauppauge, N.Y.

Drill Rig: GeoProbe 550 Van-Mounted

Total Well Depth (ft.): Not Applicable

Screen (ft.): Not Applicable

Riser (ft.): Not Applicable

Filter Pack: Not Applicable

Annular Seal: Not Applicable

Well Head: Not Applicable

Sample Depth (ft.)

## LITHOLOGICAL DESCRIPTION

Start	End	% Recovery	PID
-------	-----	------------	-----

20' 0"	22' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.
--------	--------	------	---------	---

30' 0"	32' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.
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40' 0"	42' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.
--------	--------	------	---------	---

50' 0"	52' 0"	100%	0.0 ppm	Tan clay. No odor or staining noted.
--------	--------	------	---------	--------------------------------------

\* Groundwater encountered at 52 feet below grade.

PID: HNU Model DL-101

Weather Conditions: Sunny, 90 degrees Fahrenheit

Drilling Time: 2.0 hours.

Miscellaneous Site Conditions: No other pertinent site information.

## APPLICABLE UNIFIED SOIL CLASSIFICATION

Soil Groups	Typical Soil Names
-------------	--------------------

GM	Silty Gravels, Gravel-Sand-Silt Mixture
----	---

GC	Clayey Gravels, Gravel-Sand-Clay Mixture
----	--

SC	Clayey Sands, Sand-Clay Mixtures
----	----------------------------------

SM	Silty Sands, Sand-Silt Mixtures
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# SOIL BORING LOG SGB-10

<b>GCI</b> Environmental & Engineering Consultants 1092 Motor Parkway Hauppauge, New York 11788 Phone: (516) 851-1600 Fax: (516) 851-0535				<b>Location:</b> 29 New York Avenue, New Cassel, NY <b>Drill Date:</b> June 16, 1999 <b>Project No. :</b> 970096 <b>Client:</b> Mr. Carmine Inserra <b>Hydrogeologist:</b> Mr. Matthew Boeckel <b>Boring Location:</b> Southeast corner of parking area.	
Drilling Co.: GCI				Driller: Mr. James Mulvey	
Hauppauge, N.Y.				Drill Rig: GeoProbe 550 Van-Mounted	
Total Well Depth (ft.): Not Applicable				Screen (ft.): Not Applicable	
Riser (ft.): Not Applicable				Filter Pack: Not Applicable	
Annular Seal: Not Applicable				Well Head: Not Applicable	
Sample Depth (ft.)				LITHOLOGICAL DESCRIPTION	
Start	End	% Recovery	PID		
20' 0"	22' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
30' 0"	32' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
40' 0"	42' 0"	100%	0.0 ppm	Tan, fine to coarse sand with pebbles. No odor or staining noted.	
50' 0"	52' 0"	100%	0.0 ppm	Tan clay. No odor or staining noted.	
				* Groundwater encountered at 52 feet below grade.	
PID: HNU Model DL-101				Weather Conditions: Sunny, 90 degrees Fahrenheit	
Drilling Time: 2.75 hours.				Miscellaneous Site Conditions: No other pertinent site information.	
APPLICABLE UNIFIED SOIL CLASSIFICATION					
Soil Groups		Typical Soil Names			
GM		Silty Gravels, Gravel-Sand-Silt Mixture			
GC		Clayey Gravels, Gravel-Sand-Clay Mixture			
SC		Clayey Sands, Sand-Clay Mixtures			
SM		Silty Sands, Sand-Silt Mixtures			

## **DATA USABILITY SUMMARY REPORTS**



Mr. Mat Brockel  
GCI Inc.  
125 Baylis Road Suite 330  
Melville, New York 11747

October 19, 1999

**RE: Data Validation samples 75701-75712**

Client Sample ID: <b>Field Bank 6/15/99</b>	Sample collected by: <b>Client</b>
Chemtech Project #: <b>12219ASP</b>	Date sample collected: <b>6/15/99</b>
Sample Matrix: <b>Liquid</b>	Date sample received: <b>6/18/99</b>
Analysis requested: <b>EPA 8260B</b>	Date extracted: <b>N/A</b>
Laboratory ID #: <b>75701</b>	Date analyzed: <b>6/24/99</b>
Cleanup procedure: <b>N/A</b>	Extraction method: <b>N/A</b>

**EPA 8260B**

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 10,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

**Explanation of non-conforming parameters:**

- Chain of custody does not indicate samples were preserved at 4° C.

Client Sample ID: **SG B-1 (52')**  
 Chemtech Project #: **12219ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **75702**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/15/99**  
 Date sample received: **6/18/99**  
 Date extracted: **N/A**  
 Date analyzed: **6/24/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 10,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.

Client Sample ID: **SG B-1 (62')**  
 Chemtech Project #: **12219ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **75703**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/15/99**  
 Date sample received: **6/18/99**  
 Date extracted: **N/A**  
 Date analyzed: **6/24/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 10,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

#### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.

Client Sample ID: **SG B-2 (52)**  
 Chemtech Project #: **12219ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **75704**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/15/99**  
 Date sample received: **6/18/99**  
 Date extracted: **N/A**  
 Date analyzed: **6/25/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 10,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

#### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.

Client Sample ID: **SG B-2 (62)**  
 Chemtech Project #: **12219ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **75705**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/15/99**  
 Date sample received: **6/18/99**  
 Date extracted: **N/A**  
 Date analyzed: **6/28/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 10,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

#### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.

Client Sample ID: **SG B-3 (52)**  
 Chemtech Project #: **12219ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **75706**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/15/99**  
 Date sample received: **6/18/99**  
 Date extracted: **N/A**  
 Date analyzed: **6/28/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 10,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

#### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.

Client Sample ID: **SG B-3 (62)**  
 Chemtech Project #: **12219ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **75707**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/15/99**  
 Date sample received: **6/18/99**  
 Date extracted: **N/A**  
 Date analyzed: **6/25/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 10,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

#### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.

Client Sample ID: **SG B-4 (52)**  
 Chemtech Project #: **12219ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **75708**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/15/99**  
 Date sample received: **6/18/99**  
 Date extracted: **N/A**  
 Date analyzed: **6/25/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 10,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.



Client Sample ID: **SG B-4 (62)**  
 Chemtech Project #: **12219ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **75709**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/15/99**  
 Date sample received: **6/18/99**  
 Date extracted: **N/A**  
 Date analyzed: **6/28/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery						
GC/MS calibration					X	
Method Blank					X	
Five point calibration 10,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

#### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.

Client Sample ID: <b>Field Blank 6/16/99</b>	Sample collected by: <b>Client</b>
Chemtech Project #: <b>12219ASP</b>	Date sample collected: <b>6/15/99</b>
Sample Matrix: <b>Liquid</b>	Date sample received: <b>6/18/99</b>
Analysis requested: <b>EPA 8260B</b>	Date extracted: <b>N/A</b>
Laboratory ID #: <b>75710</b>	Date analyzed: <b>6/28/99</b>
Cleanup procedure: <b>N/A</b>	Extraction method: <b>N/A</b>

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 10,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

#### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.

Client Sample ID: **SGB-5 (52)**  
 Chemtech Project #: **12219ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **75711**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/15/99**  
 Date sample received: **6/18/99**  
 Date extracted: **N/A**  
 Date analyzed: **6/28/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 10,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	
Field Blank negative for all parameters	X					

#### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.

Client Sample ID: **SGB-5 (62)**  
 Chemtech Project #: **12219ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **75712**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/15/99**  
 Date sample received: **6/18/99**  
 Date extracted: **N/A**  
 Date analyzed: **6/28/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 10,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	
Field Blank negative for all parameters	X					

#### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.

Mr. Mat Brockel  
GCI Inc.  
125 Baylis Road Suite 330  
Melville, New York 11747

August 25, 1999

**RE: Data Validation samples 76311-76325**

Client Sample ID: <b>SGB-6 (52')</b>	Sample collected by: <b>Client</b>
Chemtech Project #: <b>12326ASP</b>	Date sample collected: <b>6/22/99</b>
Sample Matrix: <b>Liquid</b>	Date sample received: <b>6/25/99</b>
Analysis requested: <b>EPA 8260B</b>	Date extracted: <b>N/A</b>
Laboratory ID #: <b>76311</b>	Date analyzed: <b>6/30/99</b>
Cleanup procedure: <b>N/A</b>	Extraction method: <b>N/A</b>

**EPA 8260B**

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptab
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 5,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

**Explanation of non-conforming parameters:**

- Chain of custody does not indicate samples were preserved at 4° C.

Client Sample ID: **SGB-7 (52')**  
 Chemtech Project #: **12326ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **76313**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/23/99**  
 Date sample received: **6/25/99**  
 Date extracted: **N/A**  
 Date analyzed: **6/30/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 5,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.

Client Sample ID: **SGB-7 (62)**  
 Chemtech Project #: **12326ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **76314**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/23/99**  
 Date sample received: **6/25/99**  
 Date extracted: **N/A**  
 Date analyzed: **6/30/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 5,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.

Client Sample ID: **SGB-8 (52)**  
 Chemtech Project #: **12326ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **76315**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/22/99**  
 Date sample received: **6/25/99**  
 Date extracted: **N/A**  
 Date analyzed: **6/30/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery						X
GC/MS calibration					X	
Method Blank					X	
Five point calibration 5,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

#### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.
- System Monitoring Compounds (BFB) criteria not met.
- System Monitoring Compounds (TOL) criteria not met.



Client Sample ID: **SGB-8 (62)**  
 Chemtech Project #: **12326ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **76316**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/22/99**  
 Date sample received: **6/25/99**  
 Date extracted: **N/A**  
 Date analyzed: **6/30/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery						X
GC/MS calibration					X	
Method Blank					X	
Five point calibration 5,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

#### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.
- System Monitoring Compounds (BFB) criteria not met.

Client Sample ID: **SGB-9 (52)**  
 Chemtech Project #: **12326ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **76317**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/23/99**  
 Date sample received: **6/25/99**  
 Date extracted: **N/A**  
 Date analyzed: **7/1/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery						X
GC/MS calibration					X	
Method Blank					X	
Five point calibration 5,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

#### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.
- System Monitoring Compounds (BFB) criteria not met.
- System Monitoring Compounds (TOL) criteria not met.

Client Sample ID: **SGB-9 (62)**  
 Chemtech Project #: **12326ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **76318**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/23/99**  
 Date sample received: **6/25/99**  
 Date extracted: **N/A**  
 Date analyzed: **7/1/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery						X
GC/MS calibration					X	
Method Blank					X	
Five point calibration 5,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.
- System Monitoring Compounds (BFB) criteria not met.
- System Monitoring Compounds (TOL) criteria not met.

Client Sample ID: **SGB-10 (52)**  
 Chemtech Project #: **12326ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **76319**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/23/99**  
 Date sample received: **6/25/99**  
 Date extracted: **N/A**  
 Date analyzed: **7/1/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery						X
GC/MS calibration					X	
Method Blank					X	
Five point calibration 5,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.
- System Monitoring Compounds (TOL) criteria not met.

Client Sample ID: **SGB-10 (62)**  
 Chemtech Project #: **12326ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **76320**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/23/99**  
 Date sample received: **6/25/99**  
 Date extracted: **N/A**  
 Date analyzed: **7/1/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery						X
GC/MS calibration					X	
Method Blank					X	
Five point calibration 5,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.
- System Monitoring Compounds (BFB) criteria not met.
- System Monitoring Compounds (TOL) criteria not met.

Client Sample ID: **DW-1 INVERT**  
 Chemtech Project #: **12326ASP**  
 Sample Matrix: **Soil**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **76321**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/23/99**  
 Date sample received: **6/25/99**  
 Date extracted: **N/A**  
 Date analyzed: **7/2/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL			X			
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 5,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

### Explanation of non-conforming parameters:

- No Non-conformities found.

Client Sample ID: <b>Field Blank (6/22)</b>	Sample collected by: <b>Client</b>
Chemtech Project #: <b>12326ASP</b>	Date sample collected: <b>6/22/99</b>
Sample Matrix: <b>Liquid</b>	Date sample received: <b>6/25/99</b>
Analysis requested: <b>EPA 8260B</b>	Date extracted: <b>N/A</b>
Laboratory ID #: <b>76322</b>	Date analyzed: <b>6/29/99</b>
Cleanup procedure: <b>N/A</b>	Extraction method: <b>N/A</b>

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 5,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	
Field Blank negative for all parameters		X				

#### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.
- Field blank was positive for Acetone.

Client Sample ID: <b>Field Blank (6/23)</b>	Sample collected by: <b>Client</b>
Chemtech Project #: <b>12326ASP</b>	Date sample collected: <b>6/23/99</b>
Sample Matrix: <b>Liquid</b>	Date sample received: <b>6/25/99</b>
Analysis requested: <b>EPA 8260B</b>	Date extracted: <b>N/A</b>
Laboratory ID #: <b>76323</b>	Date analyzed: <b>6/29/99</b>
Cleanup procedure: <b>N/A</b>	Extraction method: <b>N/A</b>

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 5,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	
Field Blank negative for all parameters		X				

#### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.
- Field blank was positive for Acetone.



Client Sample ID: **SGB-10 (Dup)**  
 Chemtech Project #: **12326ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **76324**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/23/99**  
 Date sample received: **6/25/99**  
 Date extracted: **N/A**  
 Date analyzed: **7/2/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C/HCL				X		
Proper analytical method cited 8260B					X	
Column used RTX624					X	
Quantitation Report					X	
BFB performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 5,20,50,100,200					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)					X	
Matrix spike duplicate (MSD)					X	

#### Explanation of non-conforming parameters:

- Chain of custody does not indicate samples were preserved at 4° C.

Client Sample ID: **Trip Blank**  
 Chemtech Project #: **12326ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8260B**  
 Laboratory ID #: **76325**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/22/99**  
 Date sample received: **6/25/99**  
 Date extracted: **N/A**  
 Date analyzed: **6/29/99**  
 Extraction method: **N/A**

### EPA 8260B

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody						<b>X</b>
Sample extraction holding time			<b>X</b>			
Sample analysis time			<b>X</b>			
Sample preservation 4°C/HCL				<b>X</b>		
Proper analytical method cited 8260B					<b>X</b>	
Column used RTX624					<b>X</b>	
Quantitation Report					<b>X</b>	
BFB performance check	<b>X</b>					
GC/MS tuning frequency (24 hr)	<b>X</b>					
SMC compound (ISTD) recovery					<b>X</b>	
SMC compound (surrogate) recovery					<b>X</b>	
GC/MS calibration					<b>X</b>	
Method Blank					<b>X</b>	
Five point calibration 5,20,50,100,200					<b>X</b>	
Calibration summary					<b>X</b>	
Surrogate summary					<b>X</b>	
ISTD summary					<b>X</b>	
Injection log sequence					<b>X</b>	
Matrix spike (MS)					<b>X</b>	
Matrix spike duplicate (MSD)					<b>X</b>	
Field Blank negative for all parameters		<b>X</b>				

#### Explanation of non-conforming parameters:

- Trip blank not indicated on chain of custody.
- Chain of custody does not indicate samples were preserved at 4° C.
- Field blank was positive but below MDL for Acetone.

Client Sample ID: **SGB-7 (52')**  
 Client Project #: **12326ASP**  
 Sample Matrix: **Liquid**  
 Analysis requested: **EPA 8270 (B/N)**  
 Laboratory ID #: **076313**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/23/99**  
 Date sample received: **6/25/99**  
 Date extracted: **6/26/99**  
 Date analyzed: **6/30/99**  
 Extraction method: **3510B**

### EPA 8270

Item	Pass	Fail	Met	Not met	Acceptable	Not accept
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C					X	
Proper analytical method cited 8270					X	
Column used RTX-5					X	
Quantitation Report					X	
DFTPP performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 20,50, 80, 120,160					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary					X	
Injection log sequence					X	
Matrix spike (MS)						X
Matrix spike duplicate (MSD)					X	

### Explanation of non-conforming parameters:

- Blank spike recovery (1,4-Dichlorobenzene) outside QC limits.

Client Sample ID: **DW- 1 (Invert)**  
 Client Project #: **12326ASP**  
 Sample Matrix: **Soil**  
 Analysis requested: **EPA 8270 (B/N)**  
 Laboratory ID #: **076321**  
 Cleanup procedure: **N/A**

Sample collected by: **Client**  
 Date sample collected: **6/23/99**  
 Date sample received: **6/25/99**  
 Date extracted: **6/25/99**  
 Date analyzed: **7/02/99**  
 Extraction method: **3510B**

### EPA 8270

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample extraction holding time			X			
Sample analysis time			X			
Sample preservation 4°C					X	
Proper analytical method cited 8270					X	
Column used RTX-5					X	
Quantitation Report					X	
DFTPP performance check	X					
GC/MS tuning frequency (24 hr)	X					
SMC compound (ISTD) recovery					X	
SMC compound (surrogate) recovery					X	
GC/MS calibration					X	
Method Blank					X	
Five point calibration 20,50, 80, 120,160					X	
Calibration summary					X	
Surrogate summary					X	
ISTD summary						X
Injection log sequence					X	
Matrix spike (MS)						X
Matrix spike duplicate (MSD)					X	

#### Explanation of non-conforming parameters:

- Internal Standard area outside QC limits.
- Blank spike recovery (1,4-Dichlorobenzene) outside QC limits.

Client Sample ID: **SBG-7 (52)**  
Chemtech Project #: **12326ASP**  
Sample Matrix: **Liquid**  
Analysis requested: **PP metals**  
Laboratory ID #: **76313**  
Cleanup procedure: **N/A**

Sample collected by: **Client**  
Date sample collected: **6/23/99**  
Date sample received: **6/25/99**  
Date digested: **6/29/99**  
Date analyzed: **6/29/99**  
Extraction method: **3005A**

**PP metals**

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample digestion holding time					X	
Sample analysis time			X			
Sample preservation					X	
Proper analytical method cited 6010A					X	
Method Blank					X	
Instrument calibration					X	
Interference check					X	
Matrix spike summary					X	
Duplicate recovery					X	
Matrix spike recovery					X	
Laboratory control sample					X	

**Explanation of non-conforming parameters:**

- No Non-conformities found.

Client Sample ID: **DW-1 (Invert)**  
Chemtech Project #: **12326ASP**  
Sample Matrix: **Soil**  
Analysis requested: **PP metals**  
Laboratory ID #: **76321**  
Cleanup procedure: **N/A**

Sample collected by: **Client**  
Date sample collected: **6/23/99**  
Date sample received: **6/25/99**  
Date digested: **6/29/99**  
Date analyzed: **6/29/99**  
Extraction method: **3050A**

**PP metals**

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample digestion holding time					X	
Sample analysis time			X			
Sample preservation					X	
Proper analytical method cited 6010A					X	
Method Blank					X	
Instrument calibration					X	
Interference check					X	
Matrix spike summary					X	
Duplicate recovery					X	
Matrix spike recovery					X	
Laboratory control sample					X	

**Explanation of non-conforming parameters:**

- No Non-conformities found.

Client Sample ID: **SGB-7 (52')**  
Client Project #: **12326ASP**  
Sample Matrix: **Water**  
Analysis requested: **Total mercury**  
Laboratory ID #: **76313**  
Cleanup procedure: **N/A**

Sample collected by: **Client**  
Date sample collected: **6/23/99**  
Date sample received: **6/25/99**  
Date digested: **6/28/99**  
Date analyzed: **6/28/99**  
Extraction method: **7470A**

**Total mercury 7470A**

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					X	
Sample digestion holding time					X	
Sample analysis time			X			
Sample preservation					X	
Proper analytical method cited 7471A					X	
Method Blank					X	
Instrument calibration					X	
Laboratory control sample					X	

**Explanation of non-conforming parameters:**

- No Non-conformities found.

Client Sample ID: <b>DW-1 (Invert)</b>	Sample collected by: <b>Client</b>
Client Project #: <b>12326ASP</b>	Date sample collected: <b>6/23/99</b>
Sample Matrix: <b>Soil</b>	Date sample received: <b>6/25/99</b>
Analysis requested: <b>Total mercury</b>	Date digested: <b>6/28/99</b>
Laboratory ID #: <b>76321</b>	Date analyzed: <b>6/28/99</b>
Cleanup procedure: <b>N/A</b>	Extraction method: <b>7471A</b>

**Total mercury 7471A**

Item	Pass	Fail	Met	Not met	Acceptable	Not acceptable
Sample chain of custody					<b>X</b>	
Sample digestion holding time					<b>X</b>	
Sample analysis time			<b>X</b>			
Sample preservation					<b>X</b>	
Proper analytical method cited 7471A					<b>X</b>	
Method Blank					<b>X</b>	
Instrument calibration					<b>X</b>	
Laboratory control sample					<b>X</b>	

**Explanation of non-conforming parameters:**

- No Non-conformities found.



## **LABORATORY ANALYSIS RESULTS**