FINAL SITE CHARACTERIZATION REPORT
REGION 8 DRY CLEANING SITES
LOOHNS CORNING SITE

CORNING, NEW YORK
SITE NO. 8-51-028

WORK ASSIGNMENT NO. D004434-21

Submitted to:

New York State Department of Environmental Conservation

Albany, New York

Submitted by:

MACTEC Engineering and Consulting, PC
Portland, Maine

MACTEC No. 3612072075

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ASP	Analytical Services Protocol
ASTM	American Society for Testing and Materials
bgs	below ground surface
Chemtech	Chemtech Consulting Group, Inc.
DUSR	Data Usability Summary Report
EDR	Environmental Data Resources, Inc.
ºF	degrees Fahrenheit
MACTEC	MACTEC Engineering and Consulting, P.C.
msl	mean sea level
NYCRR	Title 6 New York Codes, Rules, and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCE	tetrachloroethene
PID	photoionization detector
ppm	parts per million
Report	Site Characterization Report
SC	Site Characterization
Site	Loohns Corning Site
1,1,1-TCA	1,1,1-trichloroethane
TCE	trichloroethelene
TCL	Target Compound List
TAGM	Technical Administration Guidance Memorandum
TICS	tentatively identified compounds
µg/Kg	micrograms per Kilogram
µg/L	micrograms per Liter
$\mu g/M^3$	micrograms per cubic meter
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound
WA	Work Assignment

1.0 INTRODUCTION

MACTEC Engineering and Consulting, PC (MACTEC), is submitting this Site Characterization Report (Report) to the New York State Department of Environmental Conservation (NYSDEC). This Report addresses the Site Characterization (SC) at the Loohns Corning site (Site), a former dry cleaner in Corning, New York (Figure 1.1). This Report was prepared in response to Work Assignment (WA) No. D004434-21, and in accordance with the requirements of the July 1997 Superfund Standby Contract No. D004434 between the NYSDEC and MACTEC. The Loohns Corning site is located approximately 1000 feet north of the City of Corning water supply well number 3.

This Report is one of five site-specific SC reports for the Region 8 Dry Cleaning Sites multiple site Site Characterizations WA that were performed under previous WA # D003826-20. The other four SC reports address the sites listed below:

- Crystal Cleaners (Site No. 8-51-022)
- Former American Dry Cleaners (Site No. 8-08-036)
- Castle Cleaners (Site No. 8-08-034)
- Former Helwigs Dry Cleaners (Site No. 8-51-023)

The Loohns Corning site, Site No. 8-51-028, is a potential hazardous waste site, currently listed as a Potential or "P" site by the NYSDEC, because insufficient information existed to determine whether wastes were disposed of at the site and whether, if present, those wastes posed a potential significant threat to public health or the environment (New York State (NYS), 2006).

The purpose of the SC is to provide information to be used by the NYSDEC to reclassify the site to one of the following categories:

Class 1	Hazardous waste constitutes a significant threat to the environment, as described in Title 6 of the New York Codes, Rules, and Regulations (NYCRR) Part 375 (NYS, 2006); and the significant threat to the environment is causing, or presents an imminent danger of causing, either irreversible or irreparable damage to the environment.

Class 2 Hazardous waste constitutes a significant threat to the environment as described in NYCRR Part 375 (NYS, 2006).

Class 3 Hazardous waste does not presently constitute a significant threat to the environment, as described in NYCRR Part 375 (NYS, 2006).

Not Listed Sites where hazardous waste disposal is not documented.

To complete its reclassification, the NYSDEC requires information to establish the following:

- The existence of documented hazardous waste disposal, as defined in NYCRR Part 371 (NYS, 1999a).
- The site's significance with respect to the threat it poses to public health and the environment as defined in NYCRR Part 375 (NYSDEC, 2006).
- Identification of contaminant source.

To implement the SC, this WA was authorized and was divided into the following three tasks:

Task 1: Work Plan Development,

Task 2: Subsurface Investigations, and

Task 3: Reporting.

This Report presents reclassification documentation collected by MACTEC during Task 1 and Task 2 so the NYSDEC can recommend follow up action for the site (i.e., reclassify, delist, or perform additional investigations). Resources used to prepare this Report include: (1) information provided in the WA, (2) appropriate guidelines in the NYSDEC Draft DER-10 Guidance (NYSDEC, 2002), (3) results of previous investigations, if applicable, and (4) results of the SC investigation.

This Report is divided into five sections. Section 1 is the introduction. Section 2 presents information collected during Task 1, which included a search of state and county site records, and a site inspection. Because Task 1 activities did not develop adequate data on which to base a delist or reclassification recommendation Task 2, Subsurface Investigation, was conducted. Section 3 of this Report presents the work conducted during Task 2: Subsurface Investigations. Section 4 presents results of the field investigation. Section 5 presents an investigation summary.

2.0 SITE BACKGROUND AND PHYSICAL SETTING

On September 9 and 10, 2005, MACTEC personnel reviewed available records from the NYSDEC office in Albany, New York, and visited the City of Corning, New York town offices. As part of the review, MACTEC ordered a copy of an Environmental Data Resources, Inc. (EDR) report which provides a listing of federal and state governmental information pertaining to potential and documented environmental impacts, both at the Site and within the American Society for Testing and Materials (ASTM) recommended search radii. Complete lists of all recommended ASTM record searches for standard due diligence requirements are included in the EDR report provided under separate cover. The information was reviewed to support a Site classification, and to help prepare the scope of work for the SC field investigations. The information collected from these sources is summarized below.

2.1 SITE LOCATION

Loohns Corning is located at 37 East Pulteney Street in a mixed residential/commercial neighborhood, in the City of Corning, Steuben County, New York. (Figure 1.1). The Site property consists of 0.5 acres including a retail building and a large parking lot. According to the City of Corning Assessors office, the Site building was constructed in 1971. The current building includes a convenient store (Coat's Convenient Store) on the west side, one vacant space and a tattoo parlor in the center, and an H&R Block financial services office on the east side. The former dry cleaner occupied one of the middle commercial spaces. The building is one story, and it is not known if any basement exists.

Residential property is located north of the site, a Pizza Hut Restaurant is located east of the Site, and commercial property is located west of the site. Additional commercial property is located south of the Site across Pulteney Street. The City of Corning public water supply well number 3 is located approximately 1000 feet south of the Site, at the intersection of Riverside and Ferris Streets.

2.2 SITE HISTORY

The original use of the property is unknown. The 1968 Sanborn Fire Insurance Map indicates a building on the site property in the approximate location of the current Site parking lot. The 1961, 1965 and 1970 Mannings City Directory list the property as a residence (35 Pulteney Street). According to discussions with the City of Corning tax assessor, the current site building was constructed in 1971. It is a one story cement block building.

No dry cleaner was listed at the location in the Corning City Directory of 1970, which is consistent with the information that the building was reportedly constructed in 1971. Although it is not known if a dry cleaner was one of the original tenants in 1971, Gilliam's One Hour Cleaners was listed at the location in the 1975 city directory. The 1981 and 1989 directories reviewed listed Loohns Cleaners Launderers, Inc. at the location. The date the dry cleaner ceased operations is not known.

The water main and sewer along Pulteney Street were installed in the early 1900's (Panton, 2005), and it is therefore assumed that the Site building has always been serviced by public water and sewer.

2.3 PREVIOUS INVESTIGATIONS

City of Corning Supply Wells. Chlorinated solvents were first detected in the City of Corning supply wells number 1 and 2 in the early 1980's. These wells are located approximately 950 feet and 1300 feet southeast of the Site, respectively, along the banks of the Cohocton River (Figure 1.1). The two wells are both screened from approximately 50 to 70 feet below ground surface (bgs). Pumping tests indicate that these wells can produce up to one million gallons a day, although they are currently run on an alternating 10 day schedules, with one well producing approximately one million gallons over the ten day period (total running time of approximately 24 hours), and then rotating to the next well for the subsequent ten day period (Panton, 2005).

Tetrachloroethene (PCE) has been detected at low concentrations in both wells. Concentrations typically range from non-detect to 14 micrograms per liter (µg/L), with slightly higher concentrations detected in Well 2 then Well 1. PCE was detected in the samples collected in the

2004 round at concentrations of 1.1 µg/L in Well 1 and 11 µg/L in Well 2. The NYS Class GA standard for PCE is 5 µg/L.

Sears-Brown Phase II – March 1997. Although no formal investigation reports were available for review prior to MACTEC's conducting the first round of Geoprobe sampling, the City of Corning Assessor indicated that a Phase II Site Assessment was conducted for the Site by Sears-Brown Group for Fleet Financial Group. The city assessor stated that the report recommended further testing at the Site. Although the Phase II Report was not submitted for regulatory review, two letters outlining additional Phase II and Remedial work were submitted to the NYSDEC after MACTEC had completed its initial field sampling effort. The Phase II work completed by Sears-Brown indicated that the soil to the rear of the building in the vicinity of the rear door of the former cleaners contained chlorinated solvents (PCE) at concentrations in exceedance of Technical Administration Guidance Memorandum (TAGM) 4046 soil cleanup objectives). In addition, PCE was detected in groundwater at the Site collected from two monitoring wells (MW-1 and MW-2, viewed during the Site walkover) in exceedance of Class GA groundwater standards. The monitoring wells are located in the vicinity of the Site building, one located north of the building, approximately 8 feet from the back door of the former dry cleaning tenant space, and one located south of the Site building, approximately 5 feet from the front door of the former dry cleaning tenant space.

One of the work plans recommended additional soil, groundwater and soil vapor sampling to better define the extent of contamination. The second work plan outlined potential remedial costs, assuming the removal of approximately 70 tons of contaminated soil and the installation of an air sparging and soil vapor extraction system. The two work plans are included in Appendix A.

Stantec Consulting Services – November 2005. In November 2005, Stantec Consulting Services collected groundwater samples from MW-1 and MW-2 for the new property owner (Cadle's Pulteney Street Plaza, Inc.) PCE, detected at a concentration of 41.3 µg/L in MW-1, was the only compound detected during the sampling round. The Stanton Consulting Services report is included in Appendix A.

Teeter Environmental Services, Inc.- May 2006. Teeter Environmental Services performed additional work for the new property owner (Ms. Angela Hickey) in April 2006 and completed a

report in May 2006. Field work included a one day Geoprobe effort and the collection of soil and groundwater samples. Due to the size of the Geoprobe rig and the limited access space to the rear of the Site building, no soil samples were collected in the vicinity of the rear door of the former dry cleaners, the location of the reported historic soil exceedances. No photoionization detector (PID) readings were noted over the soil samples, and no volatile organic compound (VOCs) were detected in the one soil sample analyzed. PCE was detected in two of the eight groundwater samples collected. PCE was detected in MW-1 at a concentration of 29.8 µg/L and in BS-9, located approximately 40 feet southeast of MW-2, at a concentration of 8.8 µg/L. The Teeter Environmental Services report is included in Appendix A.

2.4 PHYSICAL SETTING

Topography

The Site is located in the Chemung River Valley, which runs east-west. The Site property is located at 935 feet above mean sea level (msl), sloping slightly to the south. The surrounding area slopes slightly down to the south, before reaching the dike at the edge of the Chemung River, located 1000 feet from the Site. The Chemung River is located at an elevation of approximately 920 feet above msl, just south of the dike. The topography to the north of the site is relatively flat for approximately 0.7 miles, and then rises to a ridge at 1700 feet above msl approximately 1.75 miles from the Site.

Climate

The climate of the area is characterized by moderately warm summers and cold winters. Mean monthly temperatures range from 23 degrees Fahrenheit (°F) in January to 68°F in July. Average annual precipitation is 32 inches. Average annual snowfall is 37 inches (National Climatic Data Center, 2004).

Surface Water Hydrology

Surface drainage from the site generally follows the topography, flowing toward the municipal storm drains located on Pulteney Street. These storm drains flow to a treatment plant located

approximately 2.2 miles south east of the site. The treatment plant discharges to the Chemung River downstream of the site (Panton, 2005). The site is not located within the 100 or 500 year flood zones (EDR, 2006).

Groundwater Hydrology

The Chemung River is a local groundwater discharge area. Groundwater at the Site was encountered at approximately 15 feet bgs, and is interpreted to flow south towards the River. Groundwater contours for the greater Corning area also indicate that groundwater at the site flows in a southerly direction, towards the river (USGS, 1982).

Geology

Overburden soils at the Site consist primarily of fluvial silts, sands and gravels. Surficial geology is mapped as oxidized, non calcareous, fine sand to gravel (Muller et al., 1986). Based on regional geologic mapping (Rickard and Fisher, 1970) bedrock is expected to consist of shale and siltstones associated with the Upper Devonian West Falls Group; specifically, the Gardeau Formation, consisting of shale and siltstone; and/or Roricks Glen shale (Rickard and Fisher, 1970).

Site Walkover

On September 10, 2005 Chuck Staples, the MACTEC Site Lead, and Matthew Dunham, the NYSDEC Project Manager conducted a walkover of the Site area.

The site walkover consisted of viewing the Loohns Corning property, and the surrounding neighborhood to assess possible contamination sources and the logistical concerns for the field program. MACTEC personnel documented the walkover with photographs (Appendix B).

Potential sources of contamination (e.g., floor drains) were noted during the site walkover, but no positive sources of contamination (e.g. leaking drums) were observed; however, detailed inspections of potential sources, including site soils were not conducted during the site walkover. Additional information for the purpose of identifying potential sources was gathered during Task 2, Field Investigations.

2.5 FILE REVIEW

MACTEC reviewed files from various state and local agency offices to develop information to support a reclassification or delisting, and to help prepare the scope of work for the SC field investigations. The Site EDR report was also reviewed in preparation of this Report.

2.6 SUMMARY OF DATA RECORDS SEARCH AND ASSESSMENT FINDINGS

Under federal and state regulations a solid waste may be regulated as a hazardous waste if it is a material included in one of the United States Environmental Protection Agency's (USEPA) or the NYSDEC's lists of hazardous wastes. If a material is regulated because of its inclusion on a federal or state list, it is commonly referred to as a "listed hazardous waste." A waste may also be regulated under the Resource Conservation and Recovery Act as a "characteristic hazardous waste" if it exhibits one of the characteristics of toxicity, corrosivity, reactivity, or flammability.

Results of sampling and analysis of the Corning City supply wells indicated the presence of chlorinated solvents (PCE) in groundwater. Spent chlorinated solvents not originating from a household sources, including PCE are included on both the USEPA's and the NYSDEC's lists of hazardous wastes. Under 6 NYCRR Part 371.4(a) (1), PCE constitutes hazardous waste from non-specified sources. Disposal of PCE was confirmed by available analytical results from the city supply wells, but the source was not identified.

As defined by 6 NYCRR Part 375, significant threat can be established by documenting a contravention of environmental standards. Surface water and groundwater are the only media for which NYS has promulgated standards. Under NYS Water Quality Regulations (6 NYCRR Parts 700-705) the state has set numeric standards that are the maximum concentration of compounds in groundwater and surface water that protect public health and/or the environment (NYS, 1999b).
Analytical data from the Site was not available for review during Task 1, and therefore it was not known if the Site was the source of the PCE contamination detected in the City supply well or if the Site posed a significant threat. As a result, the SC field investigations were conducted to:

- collect the data necessary to verify the likelihood of uncontrolled waste disposal,
- determine if potential contamination present on the Site and is migrating offsite, and
- provide sufficient information to allow the NYSDEC to re-classify the site.

3.0 SCOPE OF WORK

To reclassify the Site, the NYSDEC requires data documenting hazardous waste disposal as set forth in 6 NYCRR Part 371, and the potential significant threat to human health and the environment as defined by 6 NYCRR Part 375. Because data necessary to determine if the chlorinated solvents (specifically PCE) present in the city supply wells originated from the Site, or if potential contaminants present at the site are migrating off-site and pose a potential significant threat to human health and the environment were not available in federal and state files reviewed during Task 1, additional field investigations were performed as described below. Task 2 activities included the Field Investigation. The objective of Task 2 activities was to determine if volatile VOC contamination is present in Site media and, if present, is it originating from the site and migrating offsite. An additional objective is to determine, if possible, whether the VOCs detected in the City supply wells originated from the Site. Task 3 was the preparation and distribution of this Report.

TASK 2 - FIELD INVESTIGATIONS

The following subsections describe the activities conducted during the field investigation portion of the Site SC. The work generally followed the scope of work as outlined in the SC Work Plan (MACTEC, 2005), with the exception that no access was given for the site property. The field investigation was conducted in accordance with the specifications presented in the Quality Assurance Program Plan (ABB-Environmental Services, 1995) and the site specific Quality Assurance Project Plan (MACTEC, 2005). Off-site laboratory analyses was performed by Chemtech Consulting Group, Inc. (Chemtech), a New York State Department of Health (NYSDOH) approved laboratory. Off-site laboratory analysis complied with the NYSDEC Analytical Services Protocols (ASP) (NYSDEC, 2000).

3.1 GENERAL FIELD ACTIVITIES

General field activities, including mobilization, health and safety, and decontamination, are described in the following subsections.

3.1.1 Mobilization

After receiving the NYSDEC authorization to begin fieldwork, MACTEC and its subcontractors conducted utility clearance, mobilized to the Site and began the field exploration program.

A field team orientation meeting was held on-site with MACTEC personnel to familiarize field workers with site history, health and safety requirements, equipment calibration procedures, and other field procedures.

3.1.2 Health and Safety

Field investigation activities were conducted at Level D personal protection. Based on PID readings, no upgrades on personal protection were warranted.

3.1.3 Decontamination

Sampling methods and equipment for this field program were chosen to minimize investigation derived wastes and minimize possibility of cross contamination. Disposable sampling equipment was used as much as practical to minimize decontamination time and water disposal.

Non disposable sampling equipment was decontaminated by 1) scrubbing the sample collection equipment with potable water and Liquinox, rinsing with potable water, rinsing with deionized water, and then allowing the equipment to air dry, or 2) steam cleaning the equipment and then allowing the equipment to air dry. Decontamination fluids did not exhibit visual or olfactory evidence of contamination and were released to the ground surface in the area of the exploration, so as to allow the liquids to infiltrate into the soil.

3.1.4 Investigation Derived Wastes

The field investigation did not result in the generation of wastes that were considered hazardous (i.e., no visual or olfactory signs of contamination, and no PID readings above 5 parts per million (ppm) were detected). Therefore drill cuttings and purge water resulting from the investigation

were placed on the ground surface in the area of exploration and personal protective equipment and disposable sampling equipment were double bagged and disposed of as non-hazardous refuse.

3.1.5 Existing Well Sampling

One groundwater sample was obtained from each of the two existing groundwater wells on January 19, 2006, following low flow procedures. These samples were submitted to Chemtech and analyzed for target compound list (TCL) VOCs using USEPA OLM04.2 methods as described in the NYSDEC ASP of June 2000.

3.2 ROUND ONE GEOPROBE® BORINGS AND SAMPLING

Field investigation activities included the completion of Geoprobe® borings, the collection and analysis of groundwater, soil, and soil vapor samples, and the installation of microwells. Round One Geoprobe sampling was conducted on February 15 and 16, 2006. The purpose of the activities was to provide groundwater data for comparison to NYS Class GA Groundwater Quality Standards set forth under 6 NYCRR Parts 700-705 (NYS, 1999b), and to assist the NYSDEC in evaluating significant threat to public health and the environment as defined by 6 NYCRR Part 375 (NYS, 2006). Soil sample analyses were used to assess whether hazardous waste constituents were present in soils in the vicinity of the site, and, if possible, confirm a source of chlorinated solvents. Soil vapor sample results were used to evaluate whether VOCs present in soil and/or groundwater are migrating towards occupied buildings via vapor migration.

MACTEC used a Geoprobe® sampling device to collect groundwater, soil, and soil vapor samples to identify potential chlorinated solvents. The Geoprobe® pushes and/or hammers rods and probe tips into the subsurface for sample collection. A total of seven borings and three soil vapor points were completed, including the installation of four microwells. Borings included the collection of 12 groundwater samples, 2 soil samples, and 3 soil vapor samples.

MACTEC worked closely with the NYSDEC, the neighboring property owners, and utility companies to obtain access to the exploration locations. The Site property owner did not allow access to the Site property, or neighboring property to the east (Pizza Hut), so alternative locations

were chosen to determine groundwater conditions upgradient and downgradient of, as well as adjacent to, the site building. Sample locations are shown on Figure 3.1.

Soil Sampling. Soil samples were collected using a 4-foot long 2-inch diameter core sampler with an acrylic liner for the collection of discrete subsurface soil samples. Soil samples were collected continuously from the ground surface to the top of the groundwater table. PID headspace readings were used to screen soil samples for the presence of VOCs. Samples were described using the Unified Soil Classification System. The sample description and classification, VOC headspace reading, and boring observations were recorded on the Field Data Record, included in Appendix C. Based on the PID readings and physical evidence such as color or odor, two unsaturated soil samples (from locations GS-1 and GS-2, which coincide with locations GW-1 and GW-2, respectively, as shown on Figure 3.1) were submitted to the laboratory for analysis. Soil samples were shipped to Chemtech for analyses of TCL VOCs using USEPA OLM04.2 methods. Off-site laboratory analysis included Category B deliverables.

Groundwater Sampling. Groundwater samples were collected using a small diameter stainless steel wire wound screen that was exposed to the aquifer, after being pushed to the desired depth interval. A peristaltic pump was used for the collection of discrete groundwater samples. One tubing volume of water was purged and one set of parameters including temperature, conductivity, pH, and turbidity was collected before sampling. VOC samples were collected at a low purge rate (approximately 100 milliliters per minute) to minimize potential volatilization.

To assess vertical extent of contamination, MACTEC attempted to collect groundwater samples from two locations in each boring, the water table and 10 feet into the water table (10 feet below the first sample). The water table was encountered between 8 and 10 feet bgs.

Due to the soil formation, the actual number of samples per boring and sample collection depths varied. Only one groundwater sample was collected from five borings (GW-1, GW-2, GW-5 and GW-11). Two groundwater samples were collected at varying depths at all other boring locations (GW-6, GW-9, and GW-10). Groundwater samples were shipped to Chemtech for analyses of TCL VOCs using USEPA OLM04.2 Methods as described in the NYSDEC ASP of June 2000. Off-site laboratory analysis included Category B deliverables.

Microwell Installation. To determine groundwater flow direction at the Site, four Geoprobe® borings were completed as microwells (GW-1, GW-6, GW-10, and GW-11). Microwell locations are shown on Figure 3.1. Microwells were installed after soil and/or groundwater samples were collected from each boring. The microwells were installed as piezometers and used for water level measurements only. Microwells were constructed with schedule 40 polyvinyl chloride, with 10 foot lengths of 0.01-inch machine slotted well screens. The well screens were set across the water table to determine water table elevations and create a potentiometric map. The wells were constructed with a # 0 sand pack or native soil backfill and sealed at the ground surface with bentonite. The wells were completed with a locking cap and a six inch flush mount cover. The wells were developed for twenty minutes with a peristaltic pump to clean the screen and determine if the wells were conductive with groundwater. Well construction diagrams are included in Appendix C.

One round of groundwater levels was collected from the six microwells and two existing wells. Well caps were opened to allow the water in the wells to equilibrate to atmospheric pressure. Depth to water was measured with a conductivity probe from the top of the well riser. Groundwater table elevations were calculated from the well riser elevations and are shown on Table 3.1.

Soil Vapor Sampling. Three soil vapor samples (GV-1 to GV-3) were collected to evaluate the potential vapor migration of contaminants from the groundwater. Soil vapor samples were collected using a Geoprobe® sampling device. Locations are shown on Figure 3.1.

The Geoprobe® rods were pushed to between 6 and 8 feet bgs (expected to be below the rain infiltration line, but above the water table fringe zone). Soil vapor collected above the water table gives an indication of the possible vapor migration from potentially contaminated groundwater.

Soil vapor samples were collected from the Geoprobe® points. Upon reaching 6 feet bgs, the Geoprobe® rods were pulled back 0.5 feet, exposing the bottom of the open rods to the soil. The soil vapor sample was then collected using a sealed tubing system. In addition, the outside of the rods were sealed at the ground surface with pre-hydrated bentonite. Approximately 2 liters of soil vapor, plus the volume of the tubing, was purged at a rate of 200 milliliters per minute using 580B OVM PID pump before collecting samples. During the soil vapor purge, vapors were screened using a PID. In addition, helium leak tests were conducted on a subset of the Region 8 Dry

Cleaners Sites soil samples to ensure samples were representative of sub-surface conditions and not outdoor ambient air. Helium tests were set up by encapsulating the sample point with a bucket sealed to the ground surface with bentonite. The soil vapor samples were collected with one-liter SUMMA®-type canisters with flow valves (set to approximately 30 minutes per sample). Flow into the canisters was less than 0.1 liters per minute, as requested by the NYSDOH. Samples were sent to Chemtech for VOC analysis by USEPA Method TO-15.

3.3 ROUND TWO GEOPROBE® BORINGS AND SAMPLING

Based on results of the initial investigation, as well as the NYSDEC acquiring access the Site property, additional Geoprobe® borings were completed during Round Two, including the collection and analysis of groundwater and soil samples.

During Round Two, MACTEC used a Geoprobe® 66 DT rubber-mounted track rig sampling device to collect groundwater and soil samples to identify the presence of potential chlorinated solvents in Site media. A total of five soil and five groundwater borings and the collection of six groundwater samples and six soil samples were completed from October 30 to October 31, 2006.

Soil Sampling. Soil samples were collected using a 4-foot long 2-inch diameter core sampler with an acrylic liner for the collection of discrete subsurface soil samples. Soil samples were collected continuously from the ground surface to 12 feet bgs. PID headspace readings were used to screen soil samples for the presence of VOCs. Samples were described using the Unified Soil Classification System. The sample description and classification, VOC headspace reading, and boring observations were recorded on the Field Data Record, included in Appendix C.

Based on the PID readings and physical evidence such as color or odor, six unsaturated soil samples (from locations GS-1A through GS-5A, as shown on Figure 3.1) were submitted to Chemtech for analyses of TCL VOCs using USEPA OLM04.2 methods. Off-site laboratory analysis included Category B deliverables

Groundwater Sampling. Groundwater samples were collected using either a small diameter stainless steel wire wound screen or a 2” millslot screen sampler, depending on subsurface geologic conditions, which was exposed to the aquifer after being pushed to the desired depth interval. A

peristaltic pump was used for the collection of discrete groundwater samples. One tubing volume of water was purged and one set of parameters including temperature, conductivity, pH, and turbidity were collected before sampling. VOC samples were collected at a low purge rate (approximately 100 milliliters per minute) to minimize potential volatilization.

To assess vertical extent of contamination, MACTEC attempted to collect groundwater samples from two locations in each boring, the water table and 10 feet into the water table (10 feet below the first sample). The water table was encountered between 18 and 19 feet bgs.

Due to the soil formation, the actual number of samples per boring and sample collection depths varied. Only one groundwater sample was collected from borings GW-3A, GW-5A and GW-12A. Two groundwater samples were collected at varying depths from borings GW-7A and GW-8A. Groundwater sampling records are provided in Appendix C. Groundwater samples were shipped to Chemtech for analyses of TCL VOCs using USEPA OLM04.2 Methods as described in the NYSDEC ASP of June 2000. Off-site laboratory analysis included Category B deliverables.

MACTEC worked closely with the NYSDEC, the former Loohns Dry Cleaners property owner, the neighboring property owners, and utility companies to obtain access to the exploration locations. The additional locations for the borings are shown on Figures 3.1. Soil boring locations were chosen to determine if concentrations in soils exceed the Soil Cleanup Objectives. Groundwater boring locations were chosen to determine if concentrations in groundwater east of MW-1 were less than concentrations at MW-1 and to determine if chlorinated solvents were migrating off-site to the east at concentrations above the class GA criteria.

3.3.1 Indoor Air and Sub-Slab Vapor Sampling

Based on site observations during the field program, and discussions with the NYSDEC and the property owner, one sub-slab soil vapor sample (SV-1), one indoor air sample (IA-1), and one outside ambient air sample (AA-1) were collected on January 26, 2006. Location SV-1 is shown on Figure 3.1. Samples were collected from below the Site building concrete slab (below the former Loohns Dry Cleaners rental space), within the vacant retail space in the center of the building, and outside to the rear of the Site building to investigate the potential for vapor migration of contaminants

from the groundwater and soil beneath the Site into the occupied indoor spaces. An indoor air survey was also conducted at the time of sampling. Survey data sheets are included in Appendix C.

The sampling was completed by drilling a 1-inch diameter hole 2 inches into the concrete slab with a hammer drill. A 3/8-inch diameter hole was then advanced until the building slab was penetrated. The hole was then swept to remove drill cuttings/dust from the area. A ¼-inch piece of polyethylene tubing was inserted through a 1" diameter rubber stopper, and placed into the hole, so that the bottom of the tubing was below the slab floor and the stopper rested inside the one-inch hole, forming a seal. The stopper was then covered with bees wax to provide an impenetrable seal for the migration of indoor air into the sub-slab. One 60 cubic centimeter (cc) volume of air was purged from the tubing with a polyethylene syringe. A 6-liter SUMMA®-type canister with a 24-hour flow valve was connected to the tubing. The time of sample collection, canister vacuum (in inches Hg), weather conditions, and barometric pressure were recorded in the field log book.

The Indoor air sample and exterior ambient air sample were collected in 6-liter SUMMA®-type canisters from the vicinity of the sub-slab vapor sample collection point, and from outside the rear door of the facility (north side). The samples were collected from approximately four feet above ground level. The indoor air sample and exterior air sample were set up with 24-hour flow valves.

Once the sub-slab vapor sample canister, indoor air sample canisters, and exterior ambient air canister were set up, the valves from all containers were opened. The time of sample collection, canister vacuum (in inches Hg), and weather conditions were recorded in the field log book.

Approximately 24 hours after sample collection, the flow valves were shut off. The time, remaining vacuum in the canister, and weather conditions were noted in the field log book. The samples were delivered to Columbia for analyses of VOCs by USEPA Method TO-15.

Upon completion of the sampling, the tubing and stopper were removed from the building floor and the holes were sealed with a fast drying hydraulic concrete (i.e. Quickcrete).

3.4 SITE SURVEY

Upon completion of field investigation activities, MACTEC's survey subcontractor, Lu Engineers, completed a survey of the Site and surrounding area and create a base map. Horizontal locations were tied to the New York State Plane Coordinate System using North American Datum of 1983. The site plan provides horizontal locations of relevant Site features, including surrounding homes and businesses at a scale of 1 inch to 50 feet. Relevant features include, but are not limited to all structures, buildings, roads, fences, new monitoring wells, marked underground utilities, fire plugs, and power poles.

Vertical elevations of the four new microwells, and two existing wells were tied to msl, North Atlantic Vertical Datum of 1988, and measured to an accuracy of 0.01 feet. Horizontal well measurements were to an accuracy of 0.1 feet.

The base map was used to accurately locate all Geoprobe® sample points, microwells, and any other media sampling locations. Temporary sample points were located using a Trimble global positioning system. Sample points are included on Figure 3.1, and the Lu Engineers Site survey is included in Appendix D.

4.0 DATA ASSESSMENT

This section presents results of the laboratory analyses for soil, groundwater, and air samples collected during Task 2, as well as results of the water level survey.

4.1 ANALYTICAL RESULTS

Soil, groundwater, and soil vapor analytical results were compared to appropriate standards or guidelines. Reported concentrations of individual analytes indicating contravention of standards or guidelines are summarized in the following sections, and noted on Tables 4.1, 4.2, and 4.3.

A Data Usability Summary Report (DUSR) was completed in accordance with the NYSDEC's Guidance for the Development of Data Usability Summary Reports (NYSDEC, 1997). This report and complete analytical results, including tentatively identified compounds (TICS), are presented in Appendix E. TICS were not evaluated as part of the DUSR.

Based on laboratory or data usability review, some of the data was qualified with a J, B, and/or a D. Compounds were qualified J if the concentration listed was an estimated value, which was less than the specified minimum reporting limit but greater than the instrument detection limit. Compounds qualified J were analyzed for and determined to be present in the sample and the mass spectrum of the compound met the identification criteria of the method. The reporting limits for most target VOCs using the OLM04.2 Methods, including the target chlorinated solvents compounds were 10 µg/L. This is above most of the NYS Class GA groundwater standards; however, the actual instrument detection limit was below the NYS Class GA groundwater standards. A list of Chemtech's instrument reporting limits for the OLM04.2 Method is included in Appendix E.

Compounds qualified B indicates that the compound was found in the trip blank, or laboratory blank, and in the sample. It indicates possible sample contamination and warns the data user to use caution when applying the results of this analyte.

Compounds qualified D indicates that the compound was reported from an analytical run that required a dilution due to concentrations greater than the highest calibration standard.

Analytical results were compared to the standards, criteria or guidelines (SCGs) described below.

Soil Samples. Analytical results were compared to NYS Soil SCGs. Soil SCGs are based on the NYSDEC's Cleanup Objectives ("Technical and Administrative Guidance Memorandum [TAGM] 4046; Determination of Soil Cleanup Objectives and Cleanup Levels" and 6 NYCRR Subpart 375-6 - Remedial Program Soil Cleanup Objectives for unrestricted use).

Groundwater Samples. Analytical results were compared to: (1) the NYS Class GA Groundwater Quality Standards from 6 NYCRR Parts 700-706 (NYS, 1999b) or, where applicable, (2) the NYS Class GA Groundwater Quality Guidance Values from the Division of Water Technical and Operational Guidance Series 1.1.1 "Ambient Water Quality Standards and Guidance Values" (NYSDEC, 1998).

Geoprobe Soil Vapor Samples. There are currently no SCGs for concentrations of compounds in soil vapor. Soil vapor samples were collected to determine whether this environmental medium is contaminated, characterize the nature and extent of contamination, and identify possible sources of the contamination.

Sub-Slab Vapor and Indoor Air Samples. Sub-slab vapor and indoor air samples were compared to Matrix 1 and Matrix 2 from the New York State Department of Health, Guidance for Evaluating Soil Vapor Intrusion in the State of New York, Final, October 2006. In addition, indoor air sample results were compared to NYSDOH background values and the outdoor ambient air sample.

4.1.1 Soil Sample Results

A summary of target VOCs detected in soil samples for the January and October 2006 sample events are presented in Tables 4.1 and 4.2, respectively.

PCE was detected in one of the eight soil samples collected from the seven soil borings at a concentration above the NYS Soil Cleanup Objectives. PCE was detected at a concentration of 7300 D micrograms per Kilogram (µg/Kg) in a sample collected at a depth of 4-6 feet bgs from boring GS-1A, compared to a standard of 1300 µg/Kg. The only other detection of PCE was 4.4 J µg/Kg at a sample collected from 3-5 feet bgs at boring GS-4A.

4.1.2 Groundwater Sample Results

A summary of target VOCs detected in groundwater samples from the January and October 2006 sampling events are presented in Tables 4.3 and 4.4 and maximum concentrations of PCE in groundwater from both events are presented on Figure 4.1.

PCE, the only target compound detected in groundwater above the instrument detection limit, was detected in 10 of the 21 samples collected (detected at nine of the 13 sample boring locations). Concentrations ranged from 2.1 J µg/L (GW-2) to 37 J µg/L (MW-1). Concentrations in the samples from MW-1 (37 J µg/L) and GW-8A (5.1 J µg/L) exceeded the NYS Class GA groundwater standard for PCE of 5 µg/L (Figure 4.1). MW-1 is located on the north (or rear) side of the dry cleaning facility, and GW-8 is located on the southeast corner of the Site building. The additional seven borings with reported detections of PCE below NYS Class GA groundwater standards were located to the rear of the site facility in the vicinity of the potential source area (GW-2, GW-3A, GW-5A, and GW-7A), and to the south/south east of the Site facility in the interpreted down gradient groundwater flow direction (MW-2, GW-11, and GW-12A).

Several TICs were also detected in the groundwater samples collected. TICs are reported in Appendix E.

4.1.3 Geoprobe Soil Vapor Sample Results

A summary of target VOCs detected in Geoprobe exterior soil vapor samples is presented in Table 4.5.

Although there are no guidance values for soil vapor results collected outside the footprint of a building, VOCs were not detected in the soil vapor samples at concentrations above the NYSDOH guideline for sub-slab soil vapor. The only compounds for which sub-slab draft guidance numbers have been calculated are PCE, trichloroethelene (TCE), and 1,1,1-Trichloroethane (1,1,1-TCA). Although PCE, TCE and 1,1,1-TCA were detected in the Geoprobe soil vapor samples, the detections (highest concentrations of 76.7 J micrograms per cubic meter [µg/M^3], 1.29 J µg/M^3, and 10.3 BJ µg/M^3, respectively) were below any guidance value requiring mitigation or even

monitoring (mitigation guidance of 1000 µg/m^3, 250 µg/m^3, and 1000 µg/m^3, respectively – see NYSDOH Vapor Intrusion Matrix).

4.1.4 Sub-Slab Soil Vapor and Indoor Air Sample Results

A summary of target VOCs detected in the sub-slab soil vapor, indoor air, and outside ambient air samples is presented in Table 4.6.

PCE, the primary contaminant of concern, and most prevalent dry cleaning solvent, was detected at a concentration of 32,842 µg/M^3 in the sample collected from below the former dry cleaning facilities concrete slab. Although the indoor air analytical result for PCE of 35.8 µg/M^3 was below the NYSDOH regulatory guidance value for PCE of 100 µg/M^3, the NYSDOH recommends mitigation based on the soil vapor intrusion matrix for PCE (Matrix 2), considering both soil vapor and indoor air concentrations (NYSDOH, 2006).

4.2 POTENTIOMETRIC SURFACE MAP

The microwell survey and depth to water measurements were used to create a potentiometric surface water map (Figure 4-2). Microwell survey and water elevation data are presented in Table 3.1. Depth to water across the survey area varied from approximately 15 feet bgs to 16 feet bgs. Groundwater elevations varied from 914.20 feet above msl, to 913.88 feet above msl. The groundwater table gradient appears to be relatively flat, varying by only 0.38 feet in elevation over 240 feet of distance. Based on measured water table elevations, groundwater is interpreted to flow south, towards the Chemung River.

5.0 INVESTIGATION FINDINGS

A review of physical and chemical data collected during the SC resulted in the following findings:

1) The site is located in a residential neighborhood that is serviced by public water. Low concentrations of PCE have been detected in the City of Corning's public supply well #2, located approximately 950 feet southwest of the Site. Groundwater measurements collected at the Site indicate that groundwater flow is generally to the south towards the river and not towards this supply well, although it is towards public supply well #3.

2) PCE, a NYS listed hazardous waste, was detected at two on-site locations (MW-1 at a concentration of 37 J µg/L and GW-8A at a concentration of 5.1 µg/L), at concentrations above the NYS standard for PCE of 5 µg/L. PCE was detected in groundwater samples collected downgradient of the Site building (MW-2, GW-8, and GW-12) and downgradient of the Site property line (GW-11) at concentrations below the NYS standard. Although concentrations and locations of PCE detected in groundwater indicate that hazardous wastes (specifically PCE) were released at the Site (e.g., no or trace PCE detections in upgradient samples from GW-1, GW-2, and GW-10), analytical results do not indicate that PCE contamination is migrating off-site in groundwater at concentrations above the NYS standards.

3) Although only trace concentrations of PCE, TCE, and 1,1,1-TCA were detected in soil vapor samples collected from Geoprobe borings around the Site property (each less than 80 µg/M^3), sub-slab soil vapor results for PCE of 32,842 ED µg/M^3 indicate a need for mitigation based on Matrix 2 from the New York State Department of Health, Guidance for Evaluating Soil Vapor Intrusion in the State of New York, Final, October 2006.

4) PCE was detected in soil in the vicinity of the rear door of the former dry cleaners at a concentration of 7,300 µg/Kg, compared to a Soil Cleanup Objective of 1,300 µg/Kg. It is likely that contaminants were disposed of in this area.

Data Gaps. Based on the SC, the following data gaps still exist:

1) Although it is possible that the PCE concentration detected in sub-slab soil vapor (32,842 ED µg/M^3) is a result of the soil contamination located behind the Site building (7,300 µg/Kg) (see calculations included in Appendix F), no sampling was conducted below the Site building and it is not known if potential PCE contamination exists in soil below the former dry cleaners concrete slab.

2) The aerial and vertical extent of soil contamination has not been fully defined.

6.0 REFERENCES

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TABLES

Table 3.1: Monitoring Well and Microwell Details

Location	Northing	Easting	Casing Elevation	Riser Elevation	DTW 2/16/2006	Water Elevation 2/16/06
GW-1	784321.73	691285.11	930.81	930.55	16.35	914.20
GW-6	784117.17	691201.44	929.79	929.50	15.37	914.13
GW-10	784242.40	691196.54	929.99	929.73	15.55	914.18
GW-11	784082.33	691386.76	929.16	928.99	15.11	913.88
MW-1	784261.36	691273.53	929.83	929.70	15.50	914.20
MW-2	784181.22	691279.00	929.96	929.64	15.46	914.18

Notes:
DTW = Depth to water as measured from top of PVC riser by MACTEC Engineering.
Wells surveyd by Lu Engineers -March 2006.

Created By: CRS 4/20/06
Checked By: KLT 7/20/06

Table 4.1: January Soil Sample VOC Results

	Location Name	GS-1 (GW-1)		GS-2 (GW-1)	
	Field Sample Id	LCGS00101201XX		LCGS00201501XX	
	Surface Depth (ft bgs)	12-14		15-17	
	Field Sample Date	2/15/2006		2/15/2006	
	QC Code	FS		FS	
Paramater	**Criteria**	**Result**	**Qualifier**	**Result**	**Qualifier**
Xylene, m/p	260	0.71	J	11	UJ

Notes:

Results reported in micrograms per kilogram (µg/kg)

Only detected compounds are shown. Samples were analyzed for VOCs by EPA Method OLM04.2

ft bgs = feet below ground surface

QC Code:

FS = Field Sample

Qualifiers:

U = Not detected at a concentration greater than the reporting limit

J = Estimated value

Criteria = Values from Subpart 375-6.8(a) Unrestricted Use Soil Cleanup, "Remedial Program Soil Clean-up Objectives" (NYSDEC, 2006)

Table Created by: ASZ 6/1/06
Table Checked by: CRS 7/17/06

Table 4.2: October Soil VOC Results

Location		GS-1A		GS-2A		GS-3A		GS-4A		GS-4A		GS-4A		GS-5A	
Sample Date		10/31/2006		10/31/2006		10/31/2006		10/31/2006		10/31/2006		10/31/2006		10/31/2006	
Sample ID		LCGS00100401XX		LCGS00200401XX		LCGS00300301XX		LCGS00400701XD		LCGS00400701XX		LCGS00400901XX		LCGS00500201XX	
Sample Depth (ft bgs)		4-6		4-6		3-5		7-9		7-9		9-11		2-4	
QC Code		FS		FS		FS		FD		FS		FS		FS	
Parameter	**Criteria**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
2-Butanone	120	59	U	55	U	58	U	53	U	54	U	**8.1**	**J**	54	U
Acetone	50	59	U	55	U	58	U	53	U	54	U	**100**	**B**	54	U
Benzene	60	**3**	**J**	11	U	**1.4**	**J**	11	U	11	U	11	U	11	U
Chloroform	370	12	U	11	U	12	U	11	U	11	U	**7.5**	**J**	11	U
Ethyl benzene	1000	**3.1**	**J**	11	U	**1.2**	**J**	**0.65**	**J**	**0.84**	**J**	11	U	**1.9**	**J**
o-Xylene	260	**3.9**	**J**	11	U	**1.3**	**J**	**0.66**	**J**	**0.81**	**J**	11	U	**0.55**	**J**
Tetrachloroethene	1300	**7300**	**D**	11	U	**4.4**	**J**	11	U	11	U	11	U	11	U
Toluene	700	**11**	**J**	**0.85**	**J**	**2**	**J**	**1.9**	**J**	**2.3**	**J**	**1.6**	**J**	**1.1**	**J**
Xylene, m/p	260	**5.4**	**J**	11	U	**1**	**J**	**2.2**	**J**	**2.4**	**J**	11	U	**1.8**	**J**

Notes:

Only Detected Compounds shown. Samples analyzed for VOCs by USEPA Method OLM04.2.
Results in microgram per kilogram (µg/kg)
ft bgs = feet below ground surface
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the reporting limit
J = Estimated value
B = Compound detected in blank
Criteria = Values from Subpart 375-6.8(a) Unrestricted Use Soil Cleanup, "Remedial Program Soil Clean-up Objectives" (NYSDEC, 2006)

Created by: ASZ 2/1/07
Checked by: CRS 2/13/07

Table 4.3: January Groundwater VOC Results

	Location Name	GW-1		GW-2		GW-5		GW-5		GW-5		GW-6	
	Field Sample Id	LCGW00102601XX		LCGW00202201XX		LCGW00501501XA		LCGW00502201XD		LCGW00502201XX		LCGW00601801XA	
	Sample Depth (ft bgs)	26		22		15		22		22		18	
	Field Sample Date	2/15/2006		2/15/2006		2/16/2006		2/16/2006		2/16/2006		2/16/2006	
	QC Code	FS		FS		FS		FD		FS		FS	
Paramater	Criteria	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Tetrachloroethene	5*	10	UJ	2.1	J	10	U	10	U	10	U	10	U

Notes:

Results reported in micrograms per liter (µg/L)

Only detected compounds are shown. Samples were analyzed for VOCs by EPA Method OLM04.2

ft bgs = feet below ground surface

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the reporting limit

J = Estimated value

Criteria = Values from Technical and Operational Guidance Series (TOGS) 1.1.1, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (NYSDEC, 1998).

* = New York State Standard

Results in **BOLD** exceed associated criteria

Table Created by: ASZ 6/1/06

Table Checked by: CRS 7/17/06

Table 4.3: January Groundwater VOC Results

	Loc Name	GW-6		GW-9		GW-9		GW-9		GW-10		GW-11	
	Field Sample Id	LCGW00602501XX		LCGW00902001XA		LCGW00902501XB		LCGW00903001XX		LCGW01002401XX		LCGW01101801XA	
	Sample Depth (ft bgs)	25		20		25		30		24		18	
	Field Sample Date	2/16/2006		2/15/2006		2/15/2006		2/15/2006		2/15/2006		2/16/2006	
	QC Code	FS		FS		FS		FS		FS		FS	
Paramater	Criteria	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Tetrachloroethene	5*	10	U	10	UJ	10	UJ	10	UJ	10	UJ	3.9	J

Notes:

Results reported in micrograms per liter (µg/L)

Only detected compounds are shown. Samples were analyzed for VOCs by EPA Method OLM04.2

ft bgs = feet below ground surface

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the reporting limit

J = Estimated value

Criteria = Values from Technical and Operational Guidance Series (TOGS) 1.1.1, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (NYSDEC, 1998).

* = New York State Standard

Results in **BOLD** exceed associated criteria

Table Created by: ASZ 6/1/06

Table Checked by: CRS 7/17/06

Table 4.3: January Groundwater VOC Results

	Loc Name	GW-11		MW-1		MW-2	
	Field Sample Id	LCGW01102601XX		LCMW00101701XX		LCMW00201701XX	
	Sample Depth (ft bgs)	26		17		17	
	Field Sample Date	2/16/2006		1/19/2006		1/19/2006	
	QC Code	FS		FS		FS	
Paramater	**Criteria**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
Tetrachloroethene	5*	10	U	**37**	**J**	2.5	J

Notes:

Results reported in micrograms per liter (µg/L)

Only detected compounds are shown. Samples were analyzed for VOCs by EPA Method OLM04.2

ft bgs = feet below ground surface

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the reporting limit

J = Estimated value

Criteria = Values from Technical and Operational Guidance Series (TOGS) 1.1.1, "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (NYSDEC, 1998).

* = New York State Standard

Results in **BOLD** exceed associated criteria

Table Created by: ASZ 6/1/06

Table Checked by: CRS 7/17/06

Table 4.4: October Groundwater VOC Results

	Location	GW-3A		GW-3A		GW-5A		GW-7A		GW-7A		GW-8A	
	Sample Date	10/31/2006		10/31/2006		10/31/2006		10/31/2006		10/31/2006		10/30/2006	
	Sample ID	LCGW00302001XD		LCGW00302001XX		LCGW00502101XX		LCGW00702501XX		LCGW00702101XX		LCGW00802501XX	
	Sample Depth (ft bgs)	20		20		21		25		21		25	
	QC Code	FD		FS		FS		FS		FS		FS	
Parameter	**Criteria**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
Tetrachloroethene	5	3.4	J	2.9	J	3.3	J	1.4	J	3.7	J	10	U

Notes:
Only Detected Compounds shown. Samples analyzed for VOCs by USEPA Method OLM04.2.
Results in microgram per liter (µg/L)
ft bgs = feet below ground surface
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the reporting limit
J = Estimated value
Criteria = Values from Technical and Operational Guidance Series (TOGS) 1.1.1,
Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (NYSDEC, 1998).
All Criteria listed are New York State Groundwater Standards.
Results in **BOLD** exceed associated criteria

Created by: ASZ 2/1/07
Checked by: CRS 2/13/07

Table 4.4: October Groundwater VOC Results

	Location	GW-8A		GW-12A	
	Sample Date	10/30/2006		10/30/2006	
	Sample ID	LCGW00801901XX		LCGW01202001XX	
	Sample Depth (ft bgs)	19		20	
	QC Code	FS		FS	
Parameter	Criteria	Result	Qualifier	Result	Qualifier
Tetrachloroethene	5	**5.1**	**J**	2.5	J

Notes:
Only Detected Compounds shown. Samples analyzed for VOCs by USEPA Method OLM04.2.
Results in microgram per liter (µg/L)
ft bgs = feet below ground surface
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the reporting limit
J = Estimated value
Criteria = Values from Technical and Operational Guidance Series (TOGS) 1.1.1,
Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (NYSDEC, 1998).
All Criteria listed are New York State Groundwater Standards.
Results in **BOLD** exceed associated criteria

Created by: ASZ 2/1/07
Checked by: CRS 2/13/07

Table 4.5: Soil Vapor Sample Results

Location Name	GV-1		GV-2		GV-3	
Field Sample Id	LCGV00100601XX		LCGV00200601XX		LCGV00300601XX	
Sample Depth (ft bgs)	6-7		6-7		6-7	
Field Sample Date	2/16/2006		2/16/2006		2/16/2006	
QC Code	FS		FS		FS	
Paramater	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	6.75	BJ	10.3	BJ	9.25	BJ
1,2,4-Trimethylbenzene	12.8	J	27.5	J	27	J
1,3,5-Trimethylbenzene	8.25	J	4.91	UJ	4.91	UJ
2-Butanone	20.7		61.3		10.3	
2-Propanol	78.5		52.8		27.5	
4-Ethyltoluene	1.96		4.91	U	4.91	U
Acetone	177		316		231	
Benzene	43		59.7		8.61	
Carbon disulfide	25.2		120		3.11	U
Chloromethane	0.82		2.04	U	2.04	
Cyclohexane	114		182		3.35	U
Dichlorodifluoromethane	3.76	J	4.95	U	4.95	U
Ethyl acetate	15.5		3.6	U	22.3	
Ethyl benzene	4.68		5.64		4.34	U
Heptane	159		311		20	
Hexane	225		475		127	
Methylene chloride	29.8		31.3		80.3	
o-Xylene	5.72		6.5		4.34	U
Propylene	258	D	602	D	105	
Styrene	6.13		4.25	U	4.25	U
Tetrachloroethene	39.1	J	76.7	J	5.43	J
Toluene	93.8		95.2		23	
Trichloroethene	1.29	J	2.68	UJ	2.68	UJ
Trichlorofluoromethane	2.24		5.6	U	5.6	U
Xylene, m/p	19.2		18.6		8.67	U

Notes:

Results reported in micrograms per cubic meter ($\mu g/m^3$)

Only detected compounds are shown. Samples were analyzed for VOCs by Method TO-15

ft bgs = feet below ground surface

QC Code:

FS = Field Sample

Qualifiers:

U = Not detected at a concentration greater than the reporting limit

J = Estimated value

D = Result was reported from a diluted analytical run

B = Analyte was detected in both the blank and field sample

Table Created by: ASZ 6/1/06

Table Checked by: CRS 7/17/06

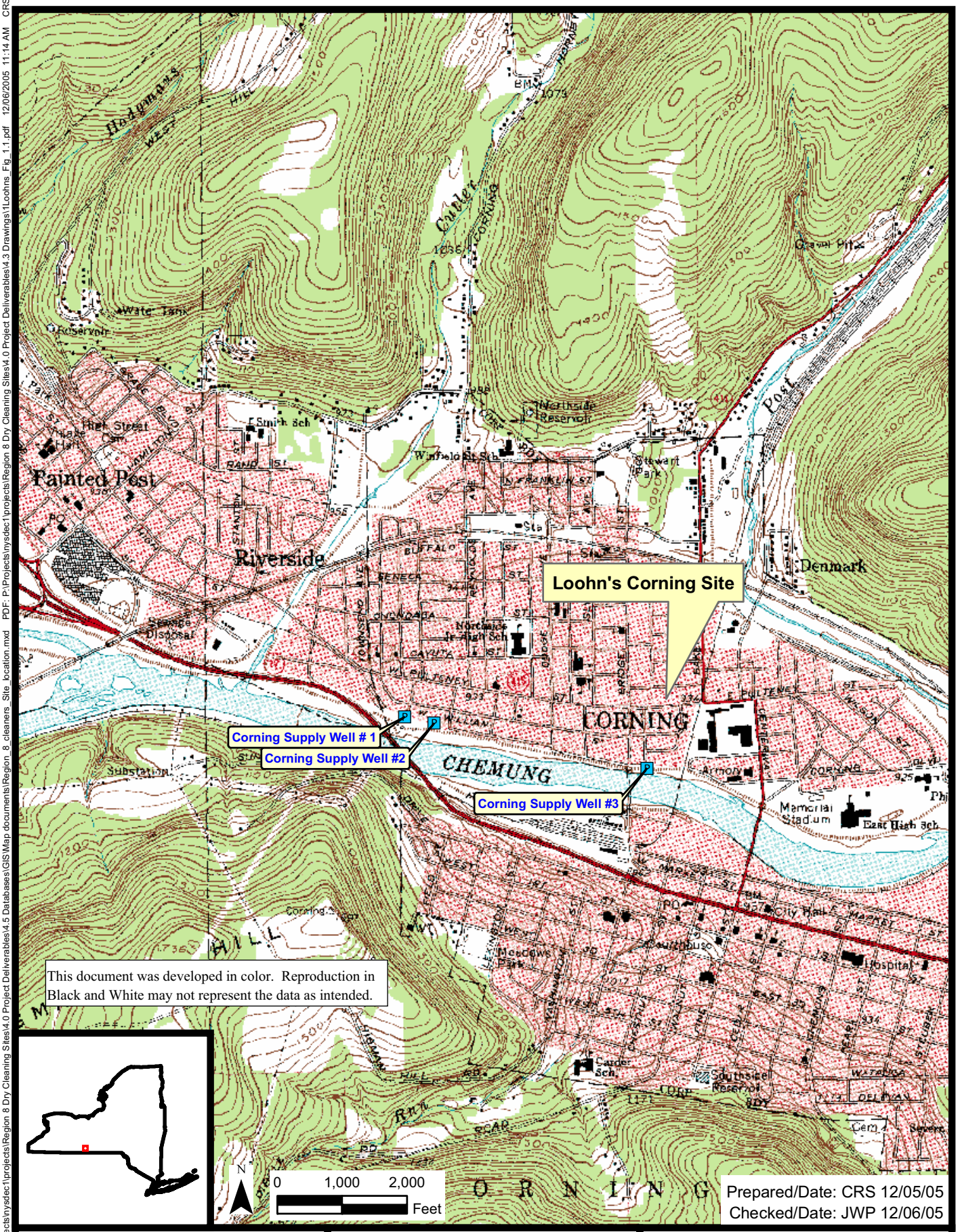
Table 4.6: Sub-Slab Soil Vapor, Indoor Air and Ambient Air Results

Location	AA-1		SV-1		IA-1	
Sample Date	11/1/2006		11/1/2006		11/1/2006	
Sample ID	LCAA00100101XX		LCSV00100101XX		LCIA00100101XX	
Sample Depth (ft bgs)	1-3		1-3		1-3	
Qc Code	FS		FS		FS	
Parameter	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	1.09	U	3.48		1.09	U
1,2,4-Trimethylbenzene	0.98	U	7.26		2.75	
1,2-Dichloropropane	0.92	U	4.62		0.92	U
1,3,5-Trimethylbenzene	0.98	U	2.26		1.18	
2-Butanone	1.18	UJ	31	J	16.5	J
2-Propanol	3.29		0.98	U	21.5	
4-Ethyltoluene	0.98	U	2.36		1.87	
4-Methyl-2-pentanone	1.64	UJ	4.17	J	1.64	UJ
Acetone	0.95	U	265	D	0.95	U
Benzene	3.57		45.9		20	
Carbon disulfide	0.62	U	9.14		0.62	U
Chloroform	0.97	U	1.36		0.97	U
Chloromethane	1.06		0.45		1.1	
Cis-1,2-Dichloroethene	0.79	U	4.44		0.79	U
Cyclohexane	0.67	U	25.5		2.41	
Dichlorodifluoromethane	2.97		3.17		4.16	
Ethyl acetate	392	DJ	313	D	176	D
Ethyl benzene	0.87	U	14.7		8.93	
Heptane	0.98		57.6		15.8	
Hexane	1.41	U	34.8		1.41	U
Isooctane	0.93	U	0.93	U	2.42	
Methylene chloride	1.46		1.53		1.39	U
o-Xylene	0.87	U	6.24		3.64	
Styrene	0.85	U	5.27		0.94	
Tetrachloroethene	1.63		**32,842**	**ED**	35.8	
Toluene	7.07		1583	D	1114	D
Trichloroethene	1.07	U	103		1.07	U
Trichlorofluoromethane	1.79		2.35		2.35	
Vinyl acetate	8.86	J	0.7	U	4.64	
Vinyl chloride	0.51	U	0.51	U	0.66	
Xylene, m/p	1.73	U	17.4		11.7	

Notes:
Only Detected Compounds shown. Samples analyzed for VOCs by USEPA Method TO-15.
Results in microgram per cubic meter (µg/m3)
ft bgs = feet below ground surface
QC Code:
FS = Field Sample
Qualifiers:
U = Not detected at a concentration greater than the reporting limit
J = Estimated value
D = Result is reported from a diluted analytical run
E = Result exceeded the calibration curve of the instrument
Trichloroethene results in **BOLD** exceed the sub-slab guidance criteria recommending remediation of 1000 µg/m3 established in Guidance for EvaluatingSoil Vapor Intrusion in the State of New York (New York State Department of Health, 2006).

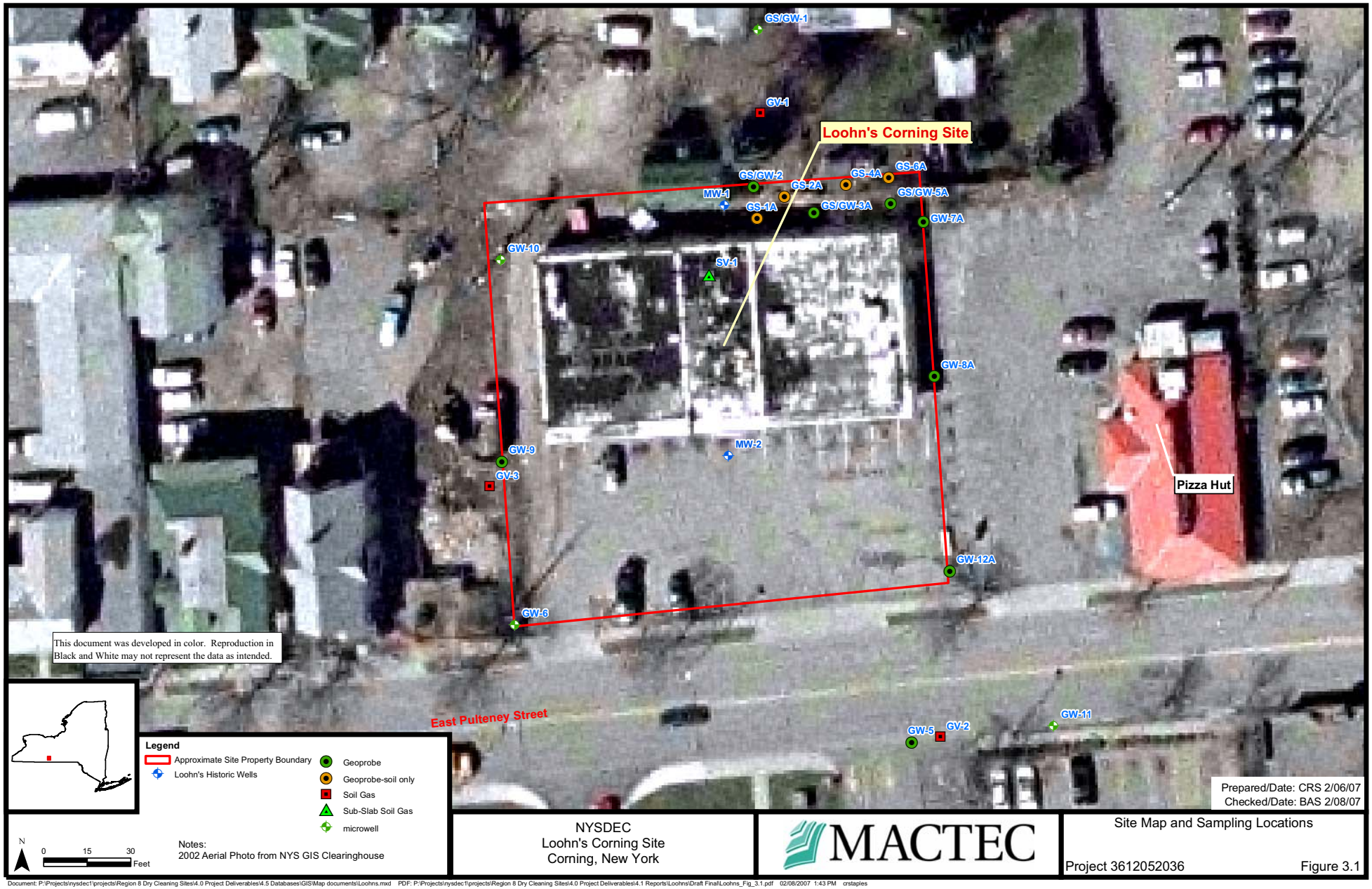
Created by: ASZ 2/1/07
Checked by: CRS 2/13/07

FIGURES



Prepared/Date: CRS 12/05/05
Checked/Date: JWP 12/06/05

NYSDEC Loohn's Corning Site Corning, New York	MACTEC	Site Location Project 3612052036 Figure 1.1



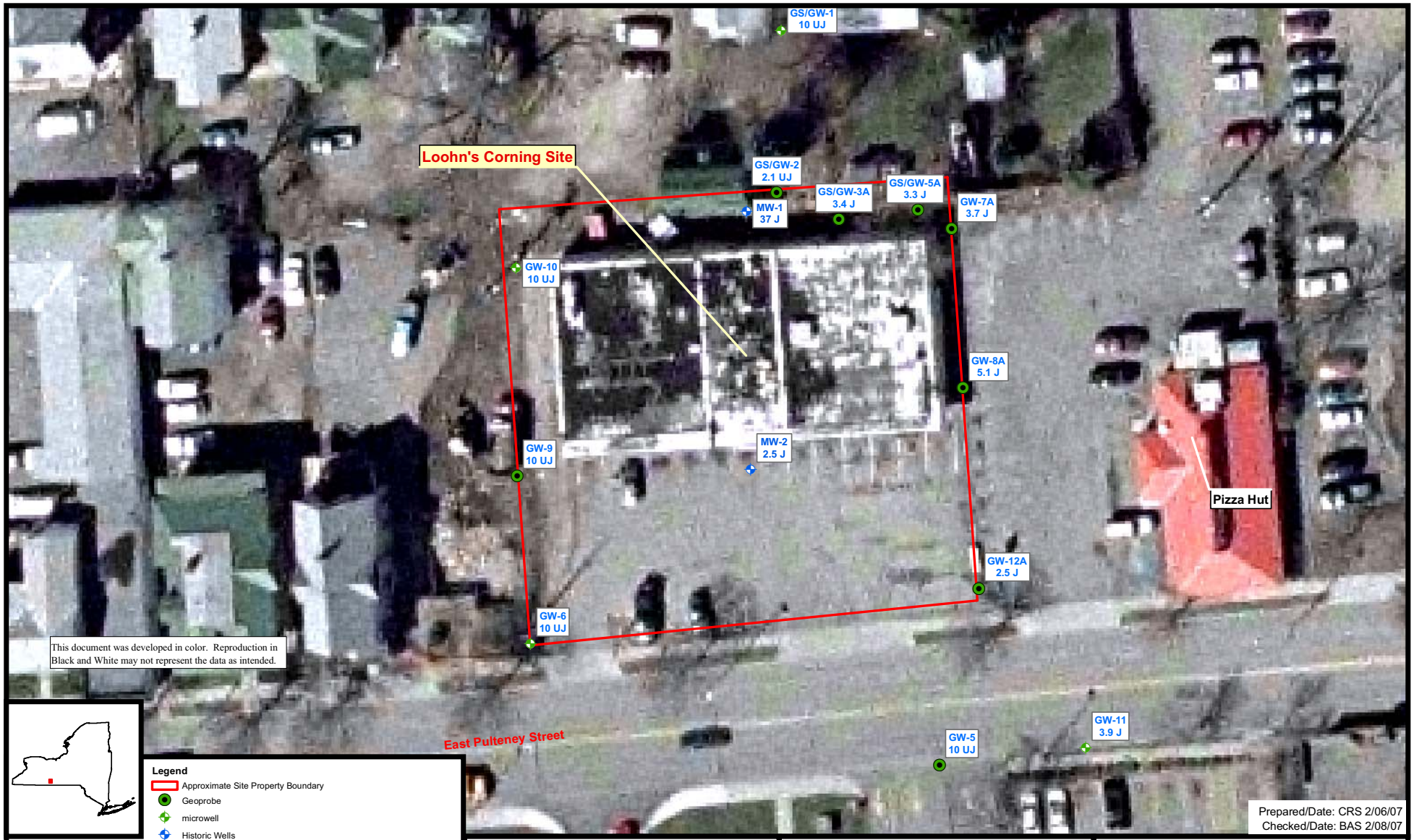
NYSDEC
Loohn's Corning Site
Corning, New York

MACTEC

Site Map and Sampling Locations

Project 3612052036 Figure 3.1

Document: P:\Projects\nysdec1\projects\Region 8 Dry Cleaning Sites\4.0 Project Deliverables\4.5 Databases\GIS\Map documents\Loohns.mxd PDF: P:\Projects\nysdec1\projects\Region 8 Dry Cleaning Sites\4.0 Project Deliverables\4.1 Reports\Loohns\Draft Final\Loohns_Fig_3.1.pdf 02/08/2007 1:43 PM crstaples



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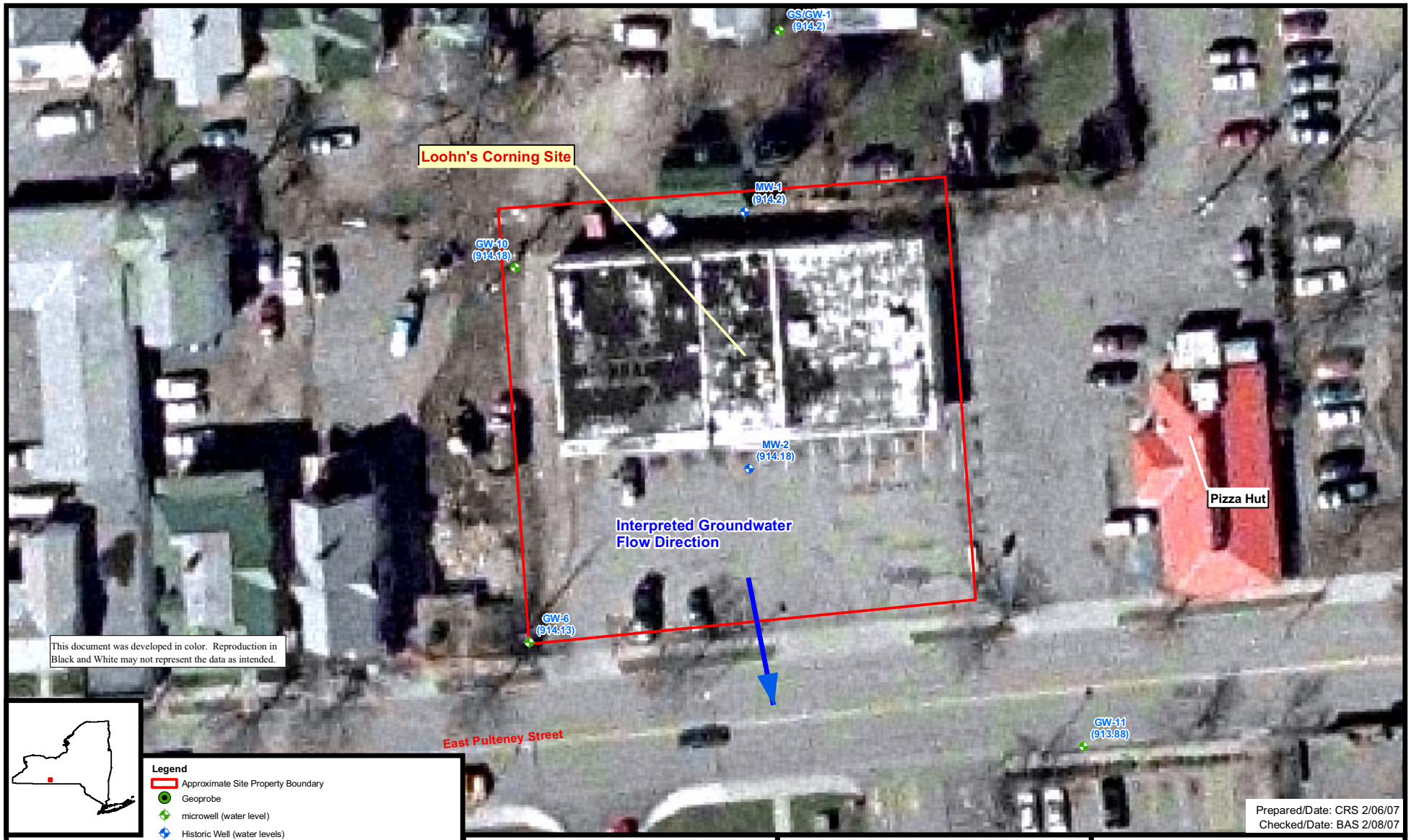

NYSDEC
Loohn's Corning Site
Corning, New York

MACTEC

Groundwater Elevations and Flow Direction

Project 3612052036 Figure 4.2

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APPENDIX A

PREVIOUS INVESTIGATIONS

THE **SEAR-BROWN** GROUP
FULL-SERVICE DESIGN PROFESSIONALS

85 METRO PARK
ROCHESTER, NEW YORK 14623-2674

716-475-1440 FAX: 716-272-1814

Privileged and Confidential
for Fleet Financial Group Use Only

March 19, 1997

Mr. Ronald Punska
Fleet National Bank
777 Main Street, CT MO H20B
Hartford, Connecticut 06102-5078

RE: Recommendations
Additional Level II Environmental Site Assessment **14301.02**
Loohn's Convenient Plaza
33-35 East Pultney Street
Corning, New York 14830

Dear Mr. Punska:

The Sear-Brown Group (Sear-Brown) has performed a Level II Environmental Site Assessment (ESA) at Loohn's Convenient Plaza, located at 33-35 East Pultney in Corning, New York. Based on the results of the Level II ESA, the following site environmental concerns were identified:

- the soil and groundwater investigation identified the presence of tetrachloroethene (PCE), a chlorinated solvent, on the subject property in upgradient and downgradient locations in both soil and groundwater;

- the concentrations of PCE exceed New York State Department of Environmental Conservation (NYSDEC) soil guidance values in the soil samples collected from an area adjacent to the rear door of the dry cleaning shop; and

- the concentrations of PCE exceed NYSDEC groundwater standards in samples collected from monitoring wells installed in the rear of the building and on the downgradient side of the building.

As stated above, detected concentrations of PCE are above NYSDEC soil guidance values and groundwater standards. Since the site is located over a primary groundwater aquifer which provides drinking water, it is likely that the NYSDEC would require that remedial actions be undertaken to protect the aquifer from further degradation.

Although the extent and type of the remediation are unknown at this time, remedial activities would likely include source removal, i.e., removal or treatment of contaminated soils above

guidance values, and installation of a remedial system to reduce contaminant concentrations in soil and groundwater to acceptable levels. The preliminary estimate of the volume of significantly impacted soil subject to removal is about 70 tons. The concentrations of PCE in the soils may require treatment by incineration prior to land disposal. Assuming a disposal cost of $1,200 per ton, the disposal cost for the estimated volume would be about $84,000.

Typical technologies used to remediate impacted groundwater include air-sparging (AS) system installed in conjunction with a soil vapor extraction (SVE) system. The costs of these system are dependent upon the size of the treatment area and length of operation. Based on the available information, our opinion of the probable costs for installation and operation of an AS/SVE system ranges between $100,000 and $150,000. Therefore, implementation of the remedial efforts described above could range between $184,000 and $234,000.

In order to refine these potential remedial costs, it is recommended that additional an subsurface investigation be performed, including soil coring, passive soil gas and monitoring well installations. The purpose and objectives of the additional investigation would be to provide additional data to support develop of remedial objectives and evaluation of remedial alternatives. In addition, the results of the investigation could be used to evaluate remediation of the site under a Voluntary Cleanup Agreement with NYSDEC, should Fleet consider pursuing this option.

An additional Phase II subsurface investigation program could be performed for an estimated fee of $16,500.

Should you have any questions or require further information, I would invite your calls.

Sincerely,

Lawrence R. Keefe
Senior Environmental Engineer

LRK:PHS:glv:14301.02\L0001.doc

c: Helen M. Sahi

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85 METRO PARK
ROCHESTER, NEW YORK 14623-2674

716-475-1440 FAX: 716-272-1814

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March 19, 1997

Mr. Ronald Punska
Fleet National Bank
777 Main Street, CT MO H20B
Hartford, Connecticut 06102-5078

RE: Proposal
Additional Level II Environmental Site Assessment **14301.02**
Loohn's Convenient Plaza
33-35 East Pultney Street
Corning, New York 14830

Dear Mr. Punska:

Sear-Brown is pleased to submit this proposal to conduct an additional Level II Environmental Site Assessment (ESA) at Loohn's Convenient Plaza, located at 33-35 East Pultney in Corning, New York (Figure 1). Given the elevated concentrations of PCE in soil and groundwater detected during our Level II ESA, further characterization of this area is recommended.

Project Understanding

Based on Sear-Brown's March 1997 Level II Environmental Site Assessment (ESA) Report of the above referenced property, the following concerns were identified:

- the soil and groundwater investigation identified the presence of tetrachloroethene (PCE), a chlorinated solvent, on the subject property in upgradient and downgradient locations in both soil and groundwater; and

- the concentration of PCE exceeds New York State Department of Environmental Conservation (NYSDEC) soil guidance values and groundwater standards in the area adjacent to the rear door of the dry cleaning shop.

Scope of Work

Task 1 - Soil Coring Program

Sear-Brown proposes to conduct a limited soil coring program involving the extraction of 1- inch diameter soil cores in the area along the north and west side of the alley behind the dry cleaners. This soil coring program will be performed to evaluate the lateral extent of the elevated PCE concentrations which were found in soil core locations C-7 and C-8, and boring B-1. Approximately ten cores will be collected along the northern and eastern portion of the alley (Figure 2). The coring program will involve a systematic procedure that allows for the collection and screening of volatile organic vapors from the soil matrix. Cores will be collected with a three ft. stainless steel subsurface soil probe, lined with a three ft. long polyethylene tube, which will be driven into the ground using a rotary hammer. Two soil cores will be collected from each location, allowing the soil to be screened from depths of 0-3 feet and from 3-6 feet. Representative portions of the soil cores will be containerized and allowed to equilibrate to ambient temperatures. Headspace analysis for volatile organic vapors will be performed using a calibrated HNu photoionization detector (PID) equipped with a 10.2 eV lamp.

In addition to headspace screening, the soil core samples will be visually inspected for physical indications of contamination such as staining, oils, odors, fill material, etc. Based on field observations (staining, odor, elevated headspace readings), up to four of the samples will be submitted for laboratory analysis of volatile organic compounds (VOCs) by EPA Method 8260.

Task 2- Passive Soil Gas Investigation

Sear-Brown proposes to conduct a passive soil gas investigation, using EMFLUX Soil-Gas Probes, to define the lateral extent of the PCE plume detected in wells MW-1 and MW-2. Approximately 20 soil gas probes will be installed in shallow (3-inch) small-diameter (3/4-inch) borings at the approximate upgradient and downgradient locations (see Figure 2). Approximately 9 of these gas probes will be installed through the floor of the building. After one week, the soil gas probes will be extracted and analyzed for the presence of PCE and its decay products. The analytical data provided by the passive soil gas investigation will be used to select well locations for confirmatory groundwater testing as described below.

Task 3 - Soil Boring/Groundwater Investigation

To further evaluate the extent of subsurface soil and groundwater contamination on the subject property, Sear-Brown proposes to drill and sample two additional soil borings to

approximately 15-20 ft. in depth. Each boring will be completed as a monitoring well in downgradient locations near the vicinity of MW-2. The purpose of installing additional wells is to delineate the direction of the dissolved PCE plume in groundwater. Each existing and proposed well will be surveyed to allow for construction of groundwater flow maps. Prior to performing the soil borings, underground utilities will be located by the Underground Facilities Protection Organization (UFPO).

Field headspace screening of split-spoon samples will be conducted using a calibrated HNu PID to evaluate the potential presence of volatile organic vapors. Based on visual field observations, or odors, one soil sample from each boring will be collected for VOCs using EPA Method 8260. If contamination is encountered, the drill cuttings will be placed into 55-gallon drums and segregated from the clean soil. Contingent on the investigation findings, these drums could possibly require special handling and disposal procedures. The costs to drum, sample, analyze, transport and dispose of affected soils and decontamination water are not included as part of our presently proposed services.

The proposed groundwater monitoring well installations would consist of two additional overburden groundwater monitoring wells to be installed at the downgradient side of the site (Figure 2).

The wells would be drilled using 4-1/4 inch hollow stem augers under the supervision of a qualified geologist or engineer. The groundwater monitoring wells would be constructed of schedule-40 PVC with 10-foot long screens. The wells would be installed such that the screen straddles the water table. Following installation, the wells would be developed to reduce turbidities to the extent practicable.

Groundwater samples would be collected from each of the new and existing wells and would be analyzed for VOCs by EPA Method 8260.

Following installation, the well elevations will be surveyed to allow development of a site wide groundwater contour map. Aquifer testing (slug tests) would be conducted at each newly installed well to estimate the hydraulic conductivity of the screened aquifer. This information, along with groundwater elevation and gradient data, would be used to estimate groundwater flow/contaminant transport rates and to assess potential remedial options.

Task 4 - Reporting

Verbal reports will be provided as the field programs are being conducted as well as when the soil gas, soil and groundwater analytical results are received. A report will then be prepared which incorporates the approach, methods, field findings, lab results, interpretations, conclusions and recommendations for your review and comment. Copies of all pertinent records, including drilling logs and lab reports, will be included in this report.

Schedule

The Additional Level II Environmental Site Assessment field program can be scheduled within approximately two weeks of a notice to proceed. Laboratory turnaround times for soil or groundwater samples are two to three weeks. The draft report can be completed within two weeks of receipt of all necessary information and results. Therefore, the additional Level II activities will take approximately six to seven weeks to complete.

Terms and Conditions

The additional Level II ESA, as described above, will be performed under the terms and conditions of Fleet's MESA for a not-to-exceed cost of $16,500, including laboratory costs. Please note that costs associated with disposal of drummed wastes, meetings with the DEC, development of remedial plans and actual remedial activities are not included at this time.

We look forward to working with you on this project. Should you have any questions or require further information, I would invite your calls.

Sincerely,

Lawrence R. Keefe
Senior Environmental Engineer

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Attachments
A. Budget Summary Sheet
B. Site Plan

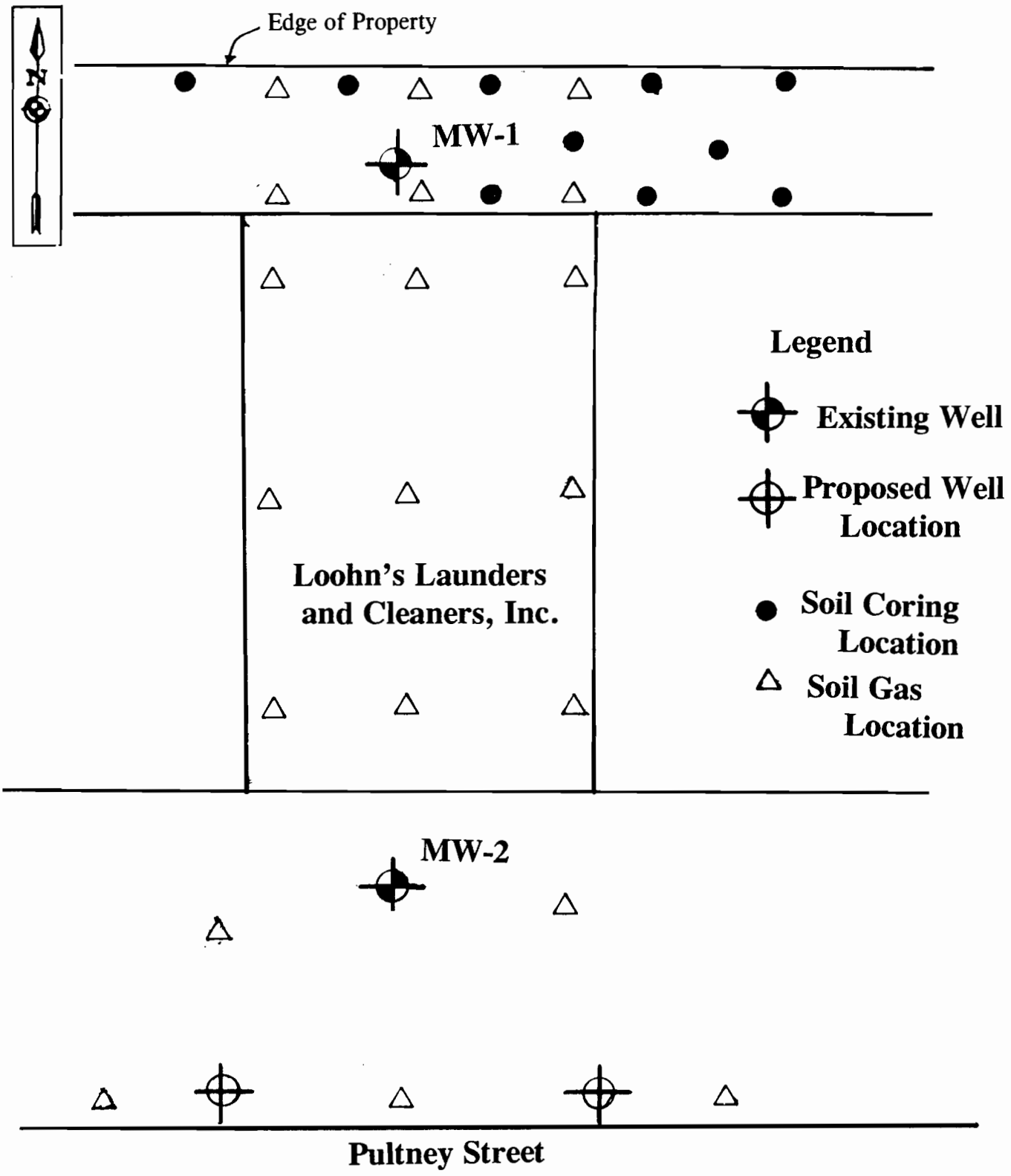
c. Helen Sahi

Fleet Budget Summary Sheet

Record No: 14301.02 **Site Address:** Loohn's Convenient Plaza, 33-35 East Pultney Street, Corning, New York **Date:** 3/19/97

		SCOPE ITEM / TASK											
		1. Soil Coring		2. Soil Gas		3. Well Install.		4. Reporting					
LABOR													
CLASS	RATE	HRS.	COST	HRS.	COST	HRS.	COST	HRS.	COST	HRS.	COST	HRS.	COST
Project Manager	100	2	$200	2	$200	2	$200	4	$400				
Project Engineer	95							8					
Geologist	60	13	$780	13	$780	24	$1,440	40	$2,400				
Technician	35	13	$455	24	$840								
Drafter	40							8	$320				
Word Processor	35							4	$140				
Sub-Total - Labor		28	$1,435		$1,820		$1,640		$3,260				
DIRECT EXPENSES													
Travel		$70		$490		$175		$30					
Reproduction								$25					
Postage & Delivery								$50					
Miscellaneous													
Subtotal - Direct Expenses		$70		$490		$175		$105					
SUBCONTRACTORS													
Drilling						$2,450							
Geophysics (GPR-1 day)													
Laboratory*		$480		$3,400		$720							
Asbestos Laboratory													
Subtotal - Subcontractors		$480		$3,400		$3,170							
OTHER EXPENSES													
Equipment Rental		$155		$150		$150							
Etc.													
Subtotal - Other Expenses		$155		$150		$150							
TOTALS		**$2,140**		**$5,860**		**$5,135**		**$3,365**					
											TOTAL :		**$16,500**

* Assumes 6 soil and 4 groundwater samples, EPA Method 8260.



THE **SEAR-BROWN** GROUP
FULL-SERVICE DESIGN PROFESSIONALS
85 METRO PARK
ROCHESTER NEW YORK 14623
716-475-1440 FAX: 716-272-1814

Figure 2
Loohn's Convenient Plaza
33-35 Pultney Street
Corning, New York
Sampling Locations
Not to Scale

Stantec Consulting Services Inc.
2250 Brighton-Henrietta Town Line Road
Rochester NY 14623-2706
Tel: (585) 475-1440 Fax: (585) 424-5951
stantec.com

Stantec

November 23, 2005

Mr. Doug Harrah
Cadle's Pulteney Street Plaza, Inc.
100 North Center Street
Newton Falls, Ohio 44444

RE: Groundwater Sampling
33-35 East Pulteney Street
Corning, New York

Dear Doug:

Pursuant to our contractual agreement, Stantec has conducted Groundwater Sampling at the above referenced property.

Background

Based on Stantec's (formerly Sear-Brown) March 1997 Level II Environmental Site Assessment (ESA) Report of the above referenced property, the following concerns were identified:

- tetrachloroethene (PCE), a chlorinated solvent typically used by dry cleaners, was reported in soil and groundwater sampling locations both to the rear (north) and the front (south) of the Loohn's Cleaners and Launders; and

- the concentration of PCE exceeded both New York State Department of Environmental Conservation (NYSDEC) soil guidance values in the area adjacent to the rear door of the dry cleaning shop, and groundwater standards both adjacent to the rear, and in front of, the building.

Groundwater sampling was requested to evaluate how the groundwater concentrations in the two previously installed monitoring wells may have changed since the 1997 sampling event.

Groundwater Sampling

On November 1, 2005, Stantec collected two (2) groundwater samples from existing wells MW-1 and MW-2 (Figure 1).

General water quality field parameters (i.e. turbidity, pH, specific conductance and temperature) were monitored during well purging. Field parameters are presented in Table 1.

Following well purging, one groundwater sample was collected from each of the two existing monitoring wells. The groundwater samples were forwarded to Paradigm Environmental Services, Inc. to be analyzed for:

- Target Compound List (TCL) Volatile Organic Compounds (VOCs) by EPA Method 8260.

Results

As shown in Table 2, one volatile organic compound, tetrachloroethene (PCE) was reported in MW-1 at a concentration of 41.3 parts per billion (ppb). PCE concentrations in MW-1 represents an approximate 51% reduction from the March 1997 sampling results. No other VOCs were reported above detection limits in MW-1 including acetone, which was previously reported in this well in 1997.

The VOC results from MW-2 were reported to be below detection limits. The October 1997 sampling of MW-2 had reported PCE at 18.7 ppb and a low concentration of toluene.

A copy of the laboratory analytical results are presented in Appendix A.

Should you have any questions or require further information, I would welcome your calls at 585-413-5620.

Very truly yours,

Michael P. Storonsky
Senior Associate

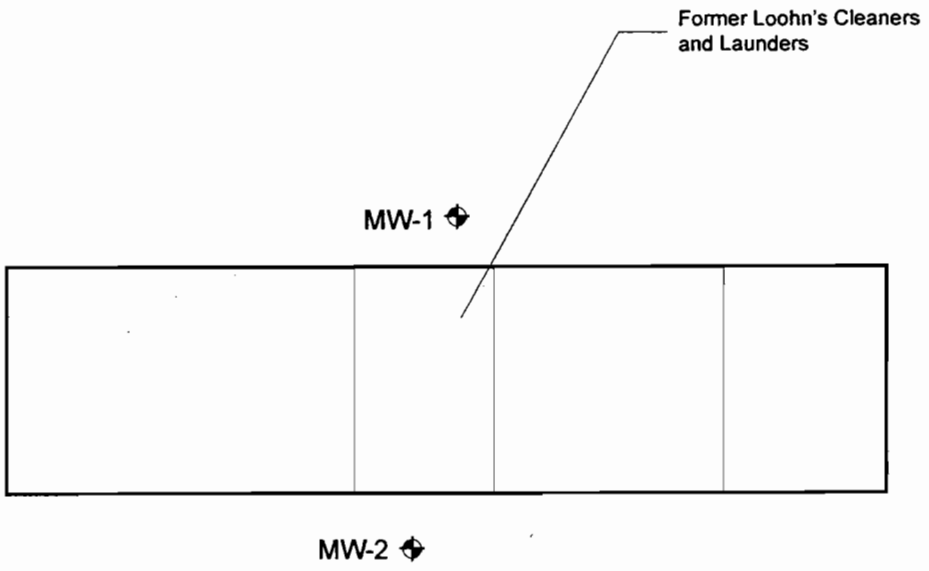
Attachments:

Figure 1 Well Location Map

Table 1 Field Parameter
Table 2 Summary of Detected Volatile Organic Compounds in Groundwater

Appendix A Laboratory Report

FIGURES



East Pultney Street

Stantec

Figure 1

Well Location Map

Loohn's Commercial Plaza
33-35 East Pultney Street
City of Corning, New York

Source: Stantec Field Notes

TABLES

TABLE 1
FEILD PARAMETER SUMMARY

33-35 E. Pultney Street
Corning, NY

Well	Date	Time	Well Volume	pH (Su)	Conductivity (umhos/cm)	Temperature (^{o}C)
MW-1	11/1/05	13:01	1	8.44	445	16.1
		13:06	2	7.85	638	16.1
		13:11	3	7.48	677	15.8
MW-2	11/1/05	12:13	1	6.35	1,671	17.2
		12:18	2	6.73	1,577	17.2
		12:23	3	6.91	1,574	17.5

Notes:

1. Su = standard units.
2. umhos/cm = micromhos per centimeter.
3. (^{o}C) = degrees Celsius.
4. NTU = Nephelometric Turbidity Units.

TABLE 2
SUMMARY OF DETECTED
VOLATILE ORGANIC COMPOUNDS in GROUNDWATER (ug/l)

33-35 E. Pultney Street

Corning, NY

DETECTED COMPOUNDS	Mar-97		Oct-05		NYSDEC Class GA Groundwater and Guidance Values Standards[1]
	MW-1	MW-2	MW-1	MW-2	
TCL 8260					
Tetrachloroethene	***84.5***	***18.7***	**41.3**		5
Toluene		2.9			5
Acetone	***25.0***				5

Notes:

1. NYSDEC. October 22, 1993. Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Reissued June 1998. April 2000 Addendum.
2. ug/l = all values expressed in micrograms per liter (equivalent to parts per billion).
3. blank space = below detection limits.
4. Sample results which exceed groundwater standard are presented in ***Bold.***

APPENDIX A

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Non-potable Water

Client: Stantec

Client Job Site: Loohn's
Client Job Number: N/A
Field Location: MW-1
Field ID Number: N/A
Sample Type: Water

Lab Project Number: 05-3716
Lab Sample Number: 12917

Date Sampled: 11/01/2005
Date Received: 11/01/2005
Date Analyzed: 11/03/2005

Compound	Results in ug / L
Acetone	ND< 10.0
Benzene	ND< 0.700
Bromochloromethane	ND< 2.00
Bromodichloromethane	ND< 2.00
Bromoform	ND< 2.00
Bromomethane	ND< 2.00
2-Butanone	ND< 5.00
Carbon disulfide	ND< 5.00
Carbon Tetrachloride	ND< 2.00
Chlorobenzene	ND< 2.00
Chloroethane	ND< 2.00
Chloroform	ND< 2.00
Chloromethane	ND< 2.00
Cyclohexane	ND< 10.0
Dibromochloromethane	ND< 2.00
1,2-Dibromo-3-Chloropropane	ND< 2.00
1,2-Dibromoethane	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00
Dichlorodifluoromethane	ND< 2.00
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	ND< 2.00
trans-1,2-Dichloroethene	ND< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Ethylbenzene	ND< 2.00
2-Hexanone	ND< 5.00
Isopropylbenzene	ND< 2.00
Methyl acetate	ND< 2.00
Methyl tert-butyl Ether	ND< 2.00
Methylcyclohexane	ND< 2.00
Methylene chloride	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00
Styrene	ND< 2.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	41.3
Toluene	ND< 2.00
Freon 113	ND< 2.00
1,2,3-Trichlorobenzene	ND< 2.00
1,2,4-Trichlorobenzene	ND< 2.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl chloride	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00

ELAP Number 10958 Method: EPA 8260B Data File: V32905.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

PARADIGM
ENVIRONMENTAL SERVICES, INC. 179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Non-potable Water

Client: Stantec

Client Job Site: Loohn's
Client Job Number: N/A
Field Location: MW-2
Field ID Number: N/A
Sample Type: Water

Lab Project Number: 05-3716
Lab Sample Number: 12918

Date Sampled: 11/01/2005
Date Received: 11/01/2005
Date Analyzed: 11/03/2005

Compound	Results in ug / L
Acetone	ND< 10.0
Benzene	ND< 0.700
Bromochloromethane	ND< 2.00
Bromodichloromethane	ND< 2.00
Bromoform	ND< 2.00
Bromomethane	ND< 2.00
2-Butanone	ND< 5.00
Carbon disulfide	ND< 5.00
Carbon Tetrachloride	ND< 2.00
Chlorobenzene	ND< 2.00
Chloroethane	ND< 2.00
Chloroform	ND< 2.00
Chloromethane	ND< 2.00
Cyclohexane	ND< 10.0
Dibromochloromethane	ND< 2.00
1,2-Dibromo-3-Chloropropane	ND< 2.00
1,2-Dibromoethane	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00
Dichlorodifluoromethane	ND< 2.00
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	ND< 2.00
trans-1,2-Dichloroethene	ND< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Ethylbenzene	ND< 2.00
2-Hexanone	ND< 5.00
Isopropylbenzene	ND< 2.00
Methyl acetate	ND< 2.00
Methyl tert-butyl Ether	ND< 2.00
Methylcyclohexane	ND< 2.00
Methylene chloride	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00
Styrene	ND< 2.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	ND< 2.00
Toluene	ND< 2.00
Freon 113	ND< 2.00
1,2,3-Trichlorobenzene	ND< 2.00
1,2,4-Trichlorobenzene	ND< 2.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl chloride	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	ND< 2.00

ELAP Number 10958 Method: EPA 8260B Data File: V32906.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature: _____
Bruce Hoogesteger: Technical Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 • (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO:			INVOICE TO:				
COMPANY: Stantec			COMPANY: Stantec			LAB PROJECT #: 05-3716	CLIENT PROJECT #:
ADDRESS: 2250 Brighton Henrietta TL Rd			ADDRESS:			TURNAROUND TIME: (WORKING DAYS)	
CITY: Rochester	STATE: NY	ZIP: 14623	CITY:	STATE:	ZIP:		
PHONE: 475-5635	FAX: 424-5951		PHONE:	FAX:		STD	OTHER
ATTN: [illegible]			ATTN:			1 ☐ 2 ☐ 3 ☐ 5 ☑	☐
COMMENTS: Stantec Template						QUOTE #:	

PROJECT NAME/SITE NAME: Loblin's

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	[illegible]										REMARKS	PARADIGM LAB SAMPLE NUMBER
1	11/1/05	12:20		✓	MW-1	W	2	✓											12917
2	"	3:30		✓	MW-2	W	2	✓											12918
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type: Comments: VOA	Y ☑	N ☐
Preservation: Comments:	Y ☑	N ☐
Holding Time: Comments:	Y ☑	N ☐
Temperature: Comments: 4°	Y ☑	N ☐

	Date/Time
Sampled By: [signature]	11/1/05 [illegible]
Relinquished By: [signature]	11/1/05 1600
Received By: [illegible]	[illegible]
Received @ Lab By: [illegible]	11/1/05 1620

Total Cost: ☐

P.I.F. ☐

Phase II Environmental Site Assessment Report

PHASE II ENVIRONMENTAL SITE ASSESSMENT

Former Loohn's Cleaners
formerly 33-35 East Pulteney Street
Corning, New York 14830

SUBMITTED TO:

Ms. Angela Hickey
104 Front Street
Addison, New York 14801

PREPARED BY:

Teeter Environmental Services, Inc.

David J. Teeter
President

May 10, 2006

TABLE OF CONTENTS

TABLES

APPENDICES

I. AUTHORIZATION

Teeter Environmental Services, Inc. was authorized by Ms. Angela Hickey to perform a Phase II Environmental Site Assessment (ESA) of the property designated as the former Loohn's Cleaners currently located at 37 East Pulteney Street (Route 415), Corning, New York, 14830. The address was formerly designated as 33-35 East Pulteney Street. The ESA was completed on April 19, 2006.

II. OBJECTIVE

The objective of the ESA was to determine if soil and groundwater had been impacted with solvent-type hydrocarbons related to prior site usage as a dry cleaning operation. Prior subsurface investigation was completed c. 1997 which purportedly determined that soil and groundwater had been impacted with tetrachloroethene (PCE), a common dry cleaning solvent. Specific data including affected areas, contaminant concentrations, exact sample locations, and complete site history was not available. The premise of this assessment was to reevaluate subsurface conditions to provide documented results for the interested parties.

III. SCOPE OF WORK

The scope of work to complete the ESA is summarized. The amount of soil borings completed and soil and groundwater samples submitted for laboratory analysis were based on field conditions.

- Completed eight (8) soil borings. Seven (7) borings were advanced to a depth of 24 feet below ground surface (bgs), one (1) boring was advanced to four (4) feet bgs, and and one (1) boring was advanced to 14 feet bgs using a Geoprobe® direct-push soil sampling rig. The borings were near and hydraulically downgradient of the suspected source area.

- Obtained soil samples at continuous four (4) foot intervals, observed each for evidence of solvent impact, characterized lithologically, screened for volatile organic compounds (VOC's) using an organic vapor meter (OVM), and containerized for potential laboratory analysis.

- Submitted two (2) soil samples for laboratory analysis for volatile aromatic and aliphatic hydrocarbons by EPA Method 5035/8260B.

- Submitted eight (8) groundwater samples for laboratory analysis for volatile aromatic and aliphatic hydrocarbons EPA Method 8260B.

- Prepared the following report of the findings.

IV. SITE DESCRIPTION and HISTORY

The site is considered the boundary of the parcel and all physical features within. The site is and was occupied by more than one business operation located in a multi-unit building including the subject facility, the former Loohn's Cleaners. The site is nearly square in shape measuring approximately 150 feet north to south on the center line and 147 feet east to west. East Pulteney Street (Route 415) is located to the south. The nearest cross road is Warren Street located across East Pulteney Street to the southeast of the site.

One (1) rectangular structure 126 feet in long by 60 feet wide is located on-site and is divided into four (4) units. The building is one story with exterior construction of cinder block and brick. At the time of the assessment, the addresses and occupants of the units from west to east were: #35 – Coat's Convenience Store; #37 – Loohn's Cleaners (subject facility [vacant]), #39 – Tattoorolo (tattoo parlor); #41 - H&R Block tax service. The limited documentation available regarding prior investigation listed the address of the subject facility as 33-35 East Pulteney Street. It is assumed that addresses of the units were subsequently redesignated or the original address was incorrect. The remainder of the site consists of asphalt parking with the exception of a narrow strip of grass and gravel approximately 12 wide behind (north) of the building. The north edge of the strip represents the property line. Three (3) monitoring wells associated with previous subsurface investigation were observed near north, west, and south walls of the building.

Adjacent properties include residences to the north, Pizza Hut to the east, multiple facilities associated with Corning Glass to the south across East Pulteney Street, and Robert's Salon to the west. It appears from the size of Robert's Salon that residential units are included in the building.

Refer to Figure 1 in Appendix A for a site map showing the property and building dimensions and the locations of the monitoring wells as measured in the field. Refer to Figure 2 for a map of the general site setting and Figure 3 for an aerial photograph with surrounding properties and streets. Photodocumentation is included in Appendix B.

Site history was not available and the subject facility is currently vacant. All that could be determined from the limited documentation provided prior to the ESA and observations during the ESA was that a dry cleaning facility was located on-site and that the subsurface was impacted with TCE presumably related to the dry cleaning operation. A site map (not to scale) was provided which identified two (2) of the monitoring wells and soil boring locations. The alleged source area of contamination was to the north of building just outside the dry cleaning facility where it was presumed contaminated fluids were discarded to the ground surface.

V. METHODS OF INVESTIGATION

A. Soil Sampling and Analysis

Chambers Environmental Group, Inc., Bellefonte, Pennsylvania was contracted to perform the borings under supervision of David Teeter of Teeter Environmental. The soil borings were completed using a Geoprobe® Model 540UD direct-push soil probing rig. The borings were completed as close to the alleged source area as possible given site conditions and hydraulically downgradient. Soil samples were obtained by advancing a two-inch diameter, 48-inch long hollow steel sampling tube with an acetate liner attached to steel drive rods. The sampler was advanced its entire length (0 to 4 feet), retrieved from the borehole, and the acetate liner containing the soil core was removed. Another sampling tube was then inserted into the open boring, advanced to the bottom of the borehole, and driven from 4 to 8 feet. With the exception of two (2) borings advanced to 4 and 16 feet (sampler refusal), the remaining samples were obtained in this fashion to a depth of 24 feet. All soil samples were observed for petroleum or solvent impact (sheen, discoloration, odor, etc.) and characterized lithologically.

Composite samples from one (1) foot interval in each boring were screened for volatile organic compounds (VOC's), expressed in parts per million (ppm), using a ThermoEnvironmental Model 580B organic vapor meter (OVM). One (1) sample from the saturated zone nearest the alleged source area was submitted to Eastern Laboratory Services Ltd., Sayre, PA (NYS Laboratory ID #11216) for analysis for volatile aromatic and aliphatic hydrocarbons by EPA Method 8260B.

Refer to Figure 1 in Appendix A for soil boring locations.

B. Groundwater Sampling and Analysis

Groundwater was obtained from temporary small diameter PVC wells installed in borings B1, B2, B3, B4, and B8 and from existing monitoring wells designated in the field as MW1, MW2, and MW3. Samples were collected by inserting 3/8-inch tubing connected to a Geopump® low flow pump. Groundwater was pumped out of the wells for a short period of time to reduce turbidity. Samples were then containerized in 40-milliliter zero-headspace vials preserved with hydrochloric acid and packed in an ice-filled cooler. The samples were delivered to Eastern Laboratory Services Ltd. (NYS Laboratory ID #11216), Sayre, PA for analysis for volatile aromatic and aliphatic hydrocarbons by EPA Method 8260B.

VI. RESULTS

A. General Hydrogeology

The site lies at an approximate elevation of 934 feet above mean sea level (benchmark on corner of East Pulteney and Baker Streets.

The topography in the immediate area is virtually flat as the site lies within the floodplain of the Chemung River located approximately 1,400 feet to the south.

Native surficial geology to a depth of 24 feet based on the soil borings generally consists of brown and gray subrounded to subangular sandy and silty gravel and gravelly silt. There were occasional lenses of nearly pure silt or fine sand. The predominantly gravel soils were typically moderately cemented and the soils with higher sand and silt fractions were mostly medium dense where the soils would crumble with light to moderate finger pressure. Native soils were encountered throughout the site with the exception of the area near adjacent borings B5 and B6 where imported soil fill material was evident. Some concrete and brick fragments were observed. The native soils represent either glacial outwash, alluvium (river deposits), or both. The roundness of most of the courser fractions and the relative lack of finer particles indicates a dynamic hydraulic depositional environment with running water shaping and transporting the particles. The angularity of some course particles may indicate reworking of the grains.

Depth to groundwater was approximately 19 feet below ground surface based on the moisture content of the soil. Depth to groundwater in the three existing monitoring wells was approximately 17 feet below ground surface, ranging from 17.02 to 17.10 feet. The water level in the wells represents the actual water table. Well surveying was not included in the scope of work as it was unknown that three wells were located on-site, therefore, direction of groundwater flow and groundwater gradient were not determined. Most groundwater regimes near a significant surface body of flowing water will flow toward the surface body. The Chemung River is located to the south of the site and groundwater almost certainly flows directly toward it (south) or with a possible eastern component (southeast) as the river flows to the east. Although the well casings were not surveyed, the site is flat and the casings were trimmed about the same depth below grade. The similar water levels in the wells suggest a nearly "flat" water table with a slight gradient.

Bedrock was not encountered during the ESA to the maximum boring depth of 24 feet. According to the Geologic Map of New York: Finger Lakes Sheet (Rickard and Fisher, 1970), bedrock in the immediate area of the site likely consists of the Gardeau formation shales and siltstones of the West Falls Group deposited in the Upper Devonian Period approximately 360 million years ago. Bedrock outcrops in the hills surrounding the site.

Refer to Appendix C for subsurface logs containing lithologic characterization for each soil sample interval and Figure 4 in Appendix A for a topographic map of the vicinity.

B. Soil Quality

Borings were advanced with the objective of encountering groundwater to characterize soil in both the unsaturated and saturated zones and to obtain groundwater samples.

Borings B1-B3 were located as close to the suspected source area behind the former dry cleaning facility as conditions would permit. As photograph #1 in Appendix B indicates, the strip behind the building was narrow and there were many obstructions

such as a shed, trees, and a permanent air conditioning unit which prevented complete access with the truck-mounted sampling unit. Samples obtained to a depth of 24 feet in each boring did not exhibit any evidence of solvent impact such as free product, odor, sheen, or discoloration. All OVM readings were zero (0) parts per million indicating that VOC's were most likely not present.

Borings B4-B8 were completed in the front (south) of the building to characterize the condition of the soil and secure groundwater samples hydraulically downgradient of the suspected source area. Boring B5 could only be advanced to 4 feet where the subsurface could no longer be penetrated. B6 was attempted one foot removed from B5 and was advanced to 14 feet with sampler refusal at that depth. It was determined based on the presence of small concrete and brick fragments in the gravel, sand, and silt matrix that non-native fill material was located in that area. It is probable that larger impenetrable fragments of concrete or other material were included in the fill. There was no evidence of solvent impact in the samples retrieved from these borings. Borings B4, B7, and B8 were successfully completed to a depth of 24 feet. No evidence of solvent impact was exhibited in any soil samples from these boring.

Soil sampling intervals, OVM readings, and general observations are summarized in Table 1.

Table 1

Field Data

April 19, 2006

Boring ID	Sampling Interval (feet)	OVM Reading (ppm)	Observations
B1	0-4	0	No observed impact
	4-8	0	No observed impact
	8-12	0	No observed impact
	12-16	0	No observed impact
	16-20	0	No observed impact
	20-24	0	No observed impact
B2	0-4	0	No observed impact
	4-8	0	No observed impact
	8-12	0	No observed impact
	12-16	0	No observed impact
	16-20	0	No observed impact
	20-24	0	No observed impact
B3	0-4	0	No observed impact
	4-8	0	No observed impact
	8-12	0	No observed impact
	12-16	0	No observed impact
	16-20	0	No observed impact
	20-24	0	No observed impact

Table 1 (cont'd)

Field Data

April 19, 2006

Boring ID	Sampling Interval (feet)	OVM Reading (ppm)	Observations
B4	0-4	0	No observed impact
	4-8	0	No observed impact
	8-12	0	No observed impact
	12-16	0	No observed impact
	16-20	0	No observed impact
	20-24	0	No observed impact
B5	0-4 (refusal)	0	No observed impact
B6	0-4	0	No observed impact
	4-8	0	No observed impact
	8-12	0	No observed impact
	12-14 (refusal)	0	No observed impact
B7	0-4	0	No observed impact
	4-8	0	No observed impact
	8-12	0	No observed impact
	12-16	0	No observed impact
	16-20	0	No observed impact
	20-24	0	No observed impact
B8	0-4	0	No observed impact
	4-8	0	No observed impact
	8-12	0	No observed impact
	12-16	0	No observed impact
	16-20	0	No observed impact
	20-24	0	No observed impact

A composite sample containing unsaturated and saturated soil from the 16 to 20 foot interval in boring B3 located nearest the suspected source area was submitted for laboratory analysis. The sample interval was selected to determine if contaminants had migrated vertically through the soil column and laterally through the groundwater. No compounds included in the analytical method were detected above the reporting limit of 12.0 micrograms per kilogram (µg/kg). Because there was no physical evidence of impact in the remaining samples from B3 or any of the other borings and the OVM readings were 0 ppm, additional laboratory analysis of soil was considered unnecessary. Chlorinated hydrocarbons such as PCE and its most common degradation products, trichloroethene (TCE), 1,2-dichloroethene (DCE), and vinyl chloride, do not easily sorb (adhere) to soil particles and tend to migrate vertically until groundwater is encountered.

For reference, the analytical results and cleanup guidelines are summarized in Table 2. The cleanup guidance values are based on the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum #4046 (TAGM 4046) dated January 24, 1994.

The analytical method includes over 60 volatile aromatic and aliphatic hydrocarbons. Only PCE, the primary contaminant of concern, and its common degradation products are included in the table. PCE will naturally degrade through chemical and biological process into compounds which contain fewer chlorine atoms and are often found as byproducts of PCE releases, particularly over time.

Table 2

Laboratory Analytical Summary
Volatile Hydrocarbons in Soil
by EPA Method 8260B (selected compounds only)

April 19, 2006

Compound	B3 16'-20'	NYSDEC Guideline*
Tetrachloroethene (PCE)	ND<12.0	1,400
Trichloroethene (TCE)	ND<12.0	700
1,2-Dichloroethene (DCE)	ND<12.0	300
Vinyl Chloride	ND<12.0	120

Common dry cleaning solvent (PCE) and degradation products included in table
Reported as micrograms per kilogram (µg/kg)
ND – Not detected above the indicated reporting limit
*Cleanup guidelines per NYSDEC TAGM 4046

A copy of the complete laboratory report with all target compounds is included in Appendix D.

C. Groundwater Quality

Chlorinated hydrocarbons are highly mobile in groundwater and considerable attention was given to characterization of groundwater quality. Eight (8) groundwater samples were analyzed to determine the areal extent of the plume the best degree possible given site conditions.

The suspected source area according to the limited documentation available was to the north of the building just outside the dry cleaning facility where it was believed waste product may have been discharged to the ground surface. Borings could not be advanced directly behind the facility or to the east of the suspected source due to obstructions. B1-B3 were advanced to the west of the suspected source and groundwater samples from each were analyzed. The rationale was to ascertain whether contaminants had migrated laterally. Lateral migration (dispersion) in water tables with a slight gradient can be pronounced. The actual location and extent of the source area is also unknown and product may have been discharged at any point behing the facility.

Borings B4-B8 were located hydraulically downgradient of the suspected source area. Groundwater was not encountered in B5 and B6 because the subsurface could not be penetrated beyond a depth of 14 feet. Depth to groundwater was approximately 17 feet. Groundwater was encountered in B7, but a sample could not be obtained because the borehole collapsed before a temporary well could be installed. Samples were obtained from B4 and B8, the boring farthest downgradient. Samples from the three existing monitoring wells designated MW1-MW3 were also submitted for laboratory analysis.

Of the eight (8) samples analyzed, PCE was detected in only two (2) samples at concentrations slightly exceeding regulatory standards. 29.8 micrograms per liter (µg/l) PCE was detected in the sample from MW1 and 8.80 µg/l was detected in the sample from B8. The standard for PCE is 5 µg/l. Although B8 is the point farthest downgradient, PCE was not detected in samples from MW1 and B4 located upgradient of B8. None of the common degradation products

The analytical results and regulatory standards are summarized in Table 3. The analytical method includes over 60 volatile aromatic and aliphatic hydrocarbons. PCE and its common degradation products are included in the table. Refer to Appendix D for a copy of the laboratory report which lists all compounds included in the analytical method.

Table 3

Laboratory Analytical Summary
Volatile Hydrocarbons in Groundwater
by EPA Method 8260B (NYSDEC STARS compounds only)

April 19, 2006

Compound	B1	B2	B3	B4	B8	MW1	MW2	MW3	NYSDEC Standard
Tetrachloroethene (PCE)	ND	ND	ND	ND	**8.80**	**29.8**	ND	ND	5
Trichloroethene (TCE)	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2-Dichloroethene (DCE)	ND	ND	ND	ND	ND	ND	ND	ND	5
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	2

Common dry cleaning solvent PCE and degradation products included in table
Reported as micrograms per liter (µg/l)
ND – Not detected above the indicated reporting limit of 5.00 µg/l

The reporting limit of 5.00 µg/l is higher than the standard of 2 µg/l for vinyl chloride. It is highly unlikely that vinyl chloride is present since PCE will degrade progressively from TCE to vinyl chloride. No TCE was detected.

VII. SUMMARY and CONCLUSIONS

Teeter Environmental Services Inc. performed a Phase II Environmental Site Assessment of the former Loohn's Cleaners located at 37 East Pulteney Street (formerly 33-35 East Pulteney Street), Corning, New York 14830 . The following summarizes the results of the assessment:

- Limited documentation available indicated that a dry cleaning facility was formerly located on the site and that soil and groundwater had been impacted with tetrachloroethene (PCE). It was believed waste solvent related to the dry cleaning operation was released to the ground surface behind (north) of the building outside the dry cleaning facility. Comprehensive site history and the magnitude and extent of impact were not provided.

- The site is nearly square measuring approximately 150 feet from north to south on the center line and 147 feet west to east. East Pulteney Street (Route 415) bounds the site to the south. One building is located on-site and contains four (4) units including the former Loohn's Cleaners (currenly vacant). Current occupants of the building include Coat's Convenience Store and H&R Block tax service. The remainder of the site is paved with asphalt with the exception of a narrow strip of grass and gravel to the north of the building.

- Adjacent properties include residences to the north, Pizza Hut to the east, Corning Glass facilities to the south across East Pulteney Street, and Robert's Salon/residences to the west.

- Three (3) small diameter groundwater monitoring wells (designated in the field as MW1-MW3) from previous subsurface investigation are located on-site.

- Eight (8) soil borings (B1-B8) were completed: six (6) to a depth of 24 feet, one (1) to a depth of 4 feet, and one (1) to a depth of 12 feet. Sampler refusal occurred in the latter two borings. The borings were located as close to the suspected source area as possible given site conditions (obstructions) and hydraulically downgradient of the source area. Soil samples were obtained at continuous four (4) foot interval.

- Surficial geology generally consists of silty sandy gravel and gravelly silt. Depth to groundwater is approximately 17 feet below ground surface and likely flows toward Chemung River located approximately 1,400 feet to the south. Bedrock was not encountered.

- No evidence of solvent impact such as free product, odor, discoloration, or sheen was observed in any soil sample. Organic vapor meter (OVM) readings did not exceed the background level of zero (0) parts per million. One (1) sample from the boring nearest the suspected source area was submitted for laboratory analysis. No volatile hydrocarbons were detected.

- Eight (8) groundwater samples were submitted for laboratory analysis. 29.8 µg/l PCE was detected in a sample from MW1 likely located within the suspected source area and 8.80 µg/l in a sample from B8 located furthest downgradient of the suspected source area. The regulatory standard is 5 µg/l. No other hydrocarbons were detected.

It is concluded that no significant contamination is present at the subject site as any contaminants identified were detected at very low levels and no significant receptors were identified. Further it is apparent from field observations, field screening, and laboratory analysis that soil has not impacted with contaminants of concern (COC's) near and downgradient of the suspected source area. Groundwater has been minimally impacted with PCE at concentrations slightly exceeding the groundwater standard at only two sample points including near or within the suspected source area (MW1) and farthest downgradient (B8). The lower concentration was in the downgradient point and COC's were not detected in samples obtained between MW1 and B8. It appears that releases to the subsurface may have minimal in magnitude and/or the contaminant plume has undergone significant natural attenuation. Although the regulatory standard for PCE has been slightly contravened, it is the opinion of Teeter Environmental that subsurface remediation is unwarranted. It is unlikely the condition will worsen since no perpetual source of contamination was identified, nor is any such source apparent. Soil sampling may not have been completed within the suspected source area, however the low concentrations of PCE in groundwater and the low sorbency of PCE to soil particles suggest that soil is not impacted. The risk to human health and wildlife is minimal and the contamination in groundwater should eventually attenuate to undetectable levels or below standards.Moreover it appears that the area is served by public water so that any minimal impacts to groundwater should not present a concern.

The conclusions are based only on the investigation performed by Teeter Environmental. It is understood that NYSDEC is in possession of additional data which may affect complete site characterization. Any information will be accessible under the Freedom of Information Law. It is recommended that given the trace levels disclosed and the apparent lack of any receptors of concern that no additional investigation or remediation is appropriate and the site should not be listed by NYSDEC. Should NYSDEC have any data significantly affecting the findings of this ESA, the concerns will be documented in NYSDEC's response.

VIII. LIMITATIONS

This report is based on a limited number of soil and groundwater samples and chemical analyses. The conclusions presented in this report are based only on the observations made during this investigation. The report presents a description of the subsurface conditions observed at each boring location during this investigation. Conclusions and recommendations set forth are applicable only to the facts and conditions at the time of this investigation. In performing professional services, Teeter Environmental uses the degree of care and skill exercised under similar circumstances by members of the environmental profession practicing in the same or similar locality under similar conditions. The standard of care shall be judged exclusively as of the time these services

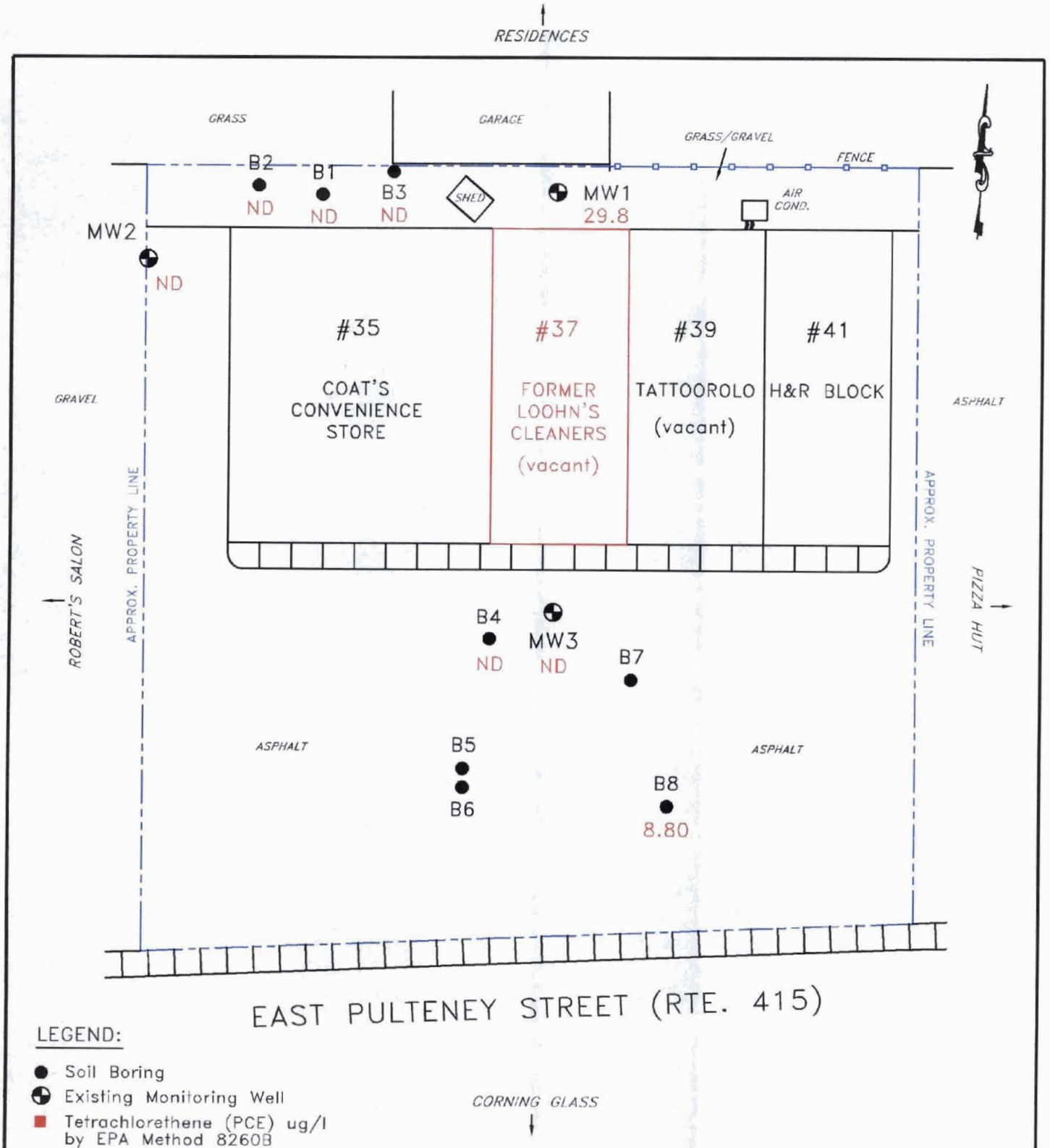
are rendered and not according to later standards. Teeter Environmental makes no express or implied warranty beyond its conformance to this standard.

Teeter Environmental shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed for this report. Teeter Environmental believes that all information contained in this report is factual, however no guarantee is made or implied.

APPENDIX A

FIGURES

Figure 1: Site Map with Soil Boring Locations
Figure 2: Area Map
Figure 3: Aerial View
Figure 4: Topographic Setting



LEGEND:

- ● Soil Boring
- ⊕ Existing Monitoring Well
- ■ Tetrachlorethene (PCE) ug/l by EPA Method 8260B

ND Not Detected

SCALE 1" = 25'	0 — 25	
DRAWN BY	C. Treese	5/8/06
CHECKED BY	D. Teeter	5/8/06
REVISED BY	C. Treese	5/8/06
APPROVED BY	D. Teeter	5/8/06

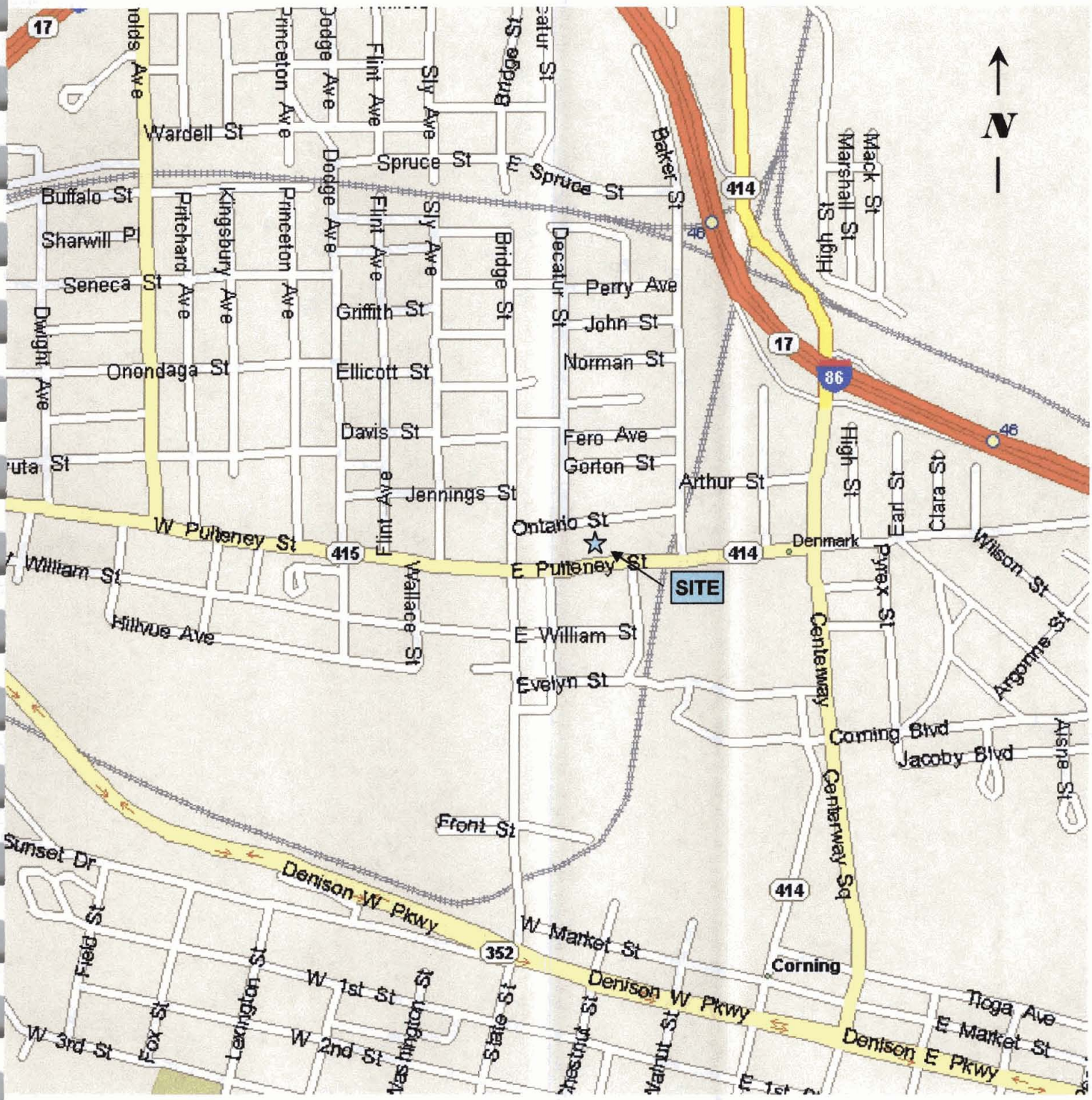
Teeter Environmental Services

FORMER LOOHN'S CLEANERS
formerly 33-35 E. PULTENEY STREET
CORNING, NY 14830
prepared for:
MS. ANGELA HICKEY
104 FRONT STREET
ADDISON, NY 14801

Figure 1

SITE MAP

May 10, 2006



Phase II Environmental Site Assessment

Former Loohn's Cleaners
formerly 33-35 E. Pulteney Street
Corning, New York 14830
May 10, 2006

Figure 2

AREA MAP

1 in = 1,040 ft (0.2 mi)

Teeter Environmental Services

Phase II Environmental Site Assessment

Former Loohn's Cleaners
formerly 33-35 E. Pulteney Street
Corning, New York 14830
May 10, 2006

Figure 3

AERIAL VIEW

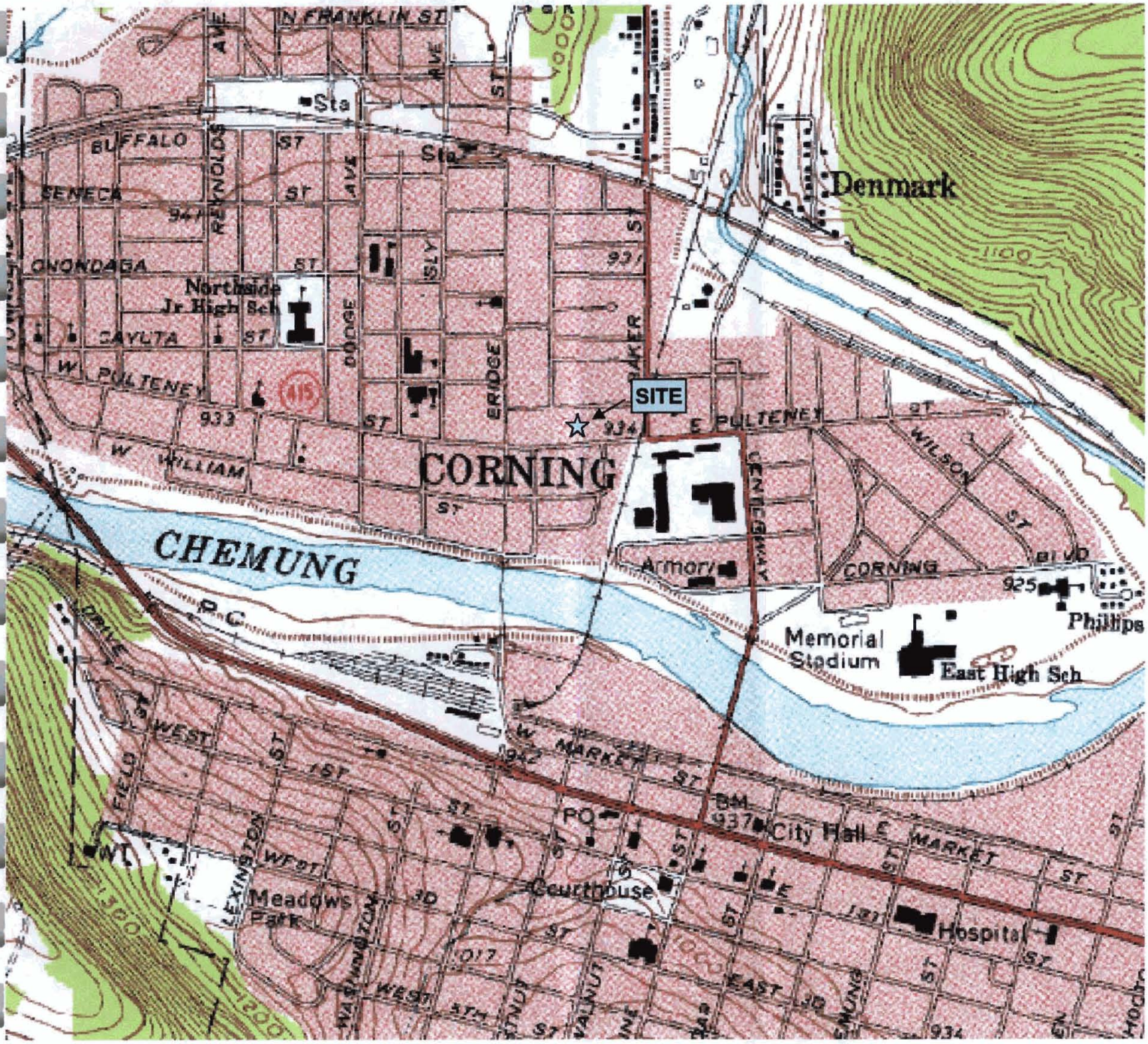
April 15, 1995

1 in = 250 ft

Teeter Environmental Services

Adapted from USGS Series Topographic
Corning Quadrangle
1976

N



Phase II Environmental Site Assessment

Former Loohn's Cleaners
formerly 33-35 E. Pulteney Street
Corning, New York 14830
May 10, 2006

Figure 4

TOPOGRAPHIC SETTING

1 in = 1,390 ft

Teeter Environmental Services

APPENDIX B

PHOTODOCUMENTATION

Phase II Environmental Site Assessment

Former Loohn's Cleaners
formerly 33-35 E. Pulteney Street
Corning, New York 14830

May 10, 2006

#1: North (rear) of building

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Phase II Environmental Site Assessment

Former Loohn's Cleaners
formerly 33-35 E. Pulteney Street
Corning, New York 14830

May 10, 2006

#2: South (front) of building

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#3: View to the west

Phase II Environmental Site Assessment

Former Loohn's Cleaners
formerly 33-35 E. Pulteney Street
Corning, New York 14830
May 10, 2006

Phase II Environmental Site Assessment

Former Loohn's Cleaners
formerly 33-35 E. Pulteney Street
Corning, New York 14830

May 10, 2006

#4: View to the south

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Phase II Environmental Site Assessment

Former Loohn's Cleaners
formerly 33-35 E. Pulteney Street
Corning, New York 14830
May 10, 2006

#5: View to the east

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Phase II Environmental Site Assessment

Former Loohn's Cleaners
formerly 33-35 E. Pulteney Street
Corning, New York 14830

May 10, 2006

#6: View to the north

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APPENDIX C

SUBSURFACE LOGS

Teeter Environmental Services, Inc.

SUBSURFACE LOG

PROJECT & LOCATION: Former Loohn's Cleaners, formerly 33-35 East Pulteney Street, Corning, New York, 14801

CLIENT: Ms. Angela Hickey, 104 Front Street, Addison, New York 14830 WELL/BORING ID: **B1**

START DATE: April 19, 2006 COMPLETION DATE: April 19, 2006 RECORDED BY: David Teeter

GROUNDWATER DEPTH WHILE DRILLING: ~19 ft GROUNDWATER DEPTH AFTER COMPLETION: NA

WEATHER CONDITIONS: sunny, 45° DRILLING CONTRACTOR: Chambers Environmental Group

DRILL RIG: Geoprobe® 540UD DRILL SIZE & TYPE: 2" OD drive point DRILLER NAME(S): Keith Skow

Sample No.	OVM Reading (ppm)	Sample Interval (feet)	Sampler Type*	Recovery (inches)	Material Classification trace – 1-10% little – 11-20% some – 21-35% and – 36-50% f-fine m-medium c-coarse
1	0	0-4	MC	13	2" topsoil → 4" lt brown loose subangular fmc GRAVEL and rounded c SAND some SILT → 7" dk brown medium loose SILT some rounded f GRAVEL and c SAND. Moist. No unusual odor.
2	0	4-8	MC	0	(no recovery)
3	0	8-12	MC	43	3" brown medium dense SILT little rounded f GRAVEL → 18" gray angular fmc GRAVEL some SILT → 22" gray subangular GRAVEL little subrounded m GRAVEL (fill?). Moist. No unusual odor.
4	0	12-16	MC	16	brown dense SILT some rounded f GRAVEL and c SAND. Moist. No unusual odor.
5	0	16-20	MC	27	brown subrounded to angular fmc GRAVEL some c SAND and SILT. Moist to wet at ~19 feet. No unusual odor.
6	0	20-24	MC	34	similar soils. Wet. No unusual odor.
					Boring terminated at 24 feet below ground surface.

NOTES: Groundwater sample submitted for laboratory analysis.

*MC – GEOPROBE MACROCORE SS – SPLIT SPOON DPSS – DIRECT PUSH SPLIT SPOON SH – SHELBY TUBE C – BEDROCK CORE

Teeter Environmental Services, Inc. SUBSURFACE LOG

PROJECT & LOCATION: Former Loohn's Cleaners, formerly 33-35 East Pulteney Street, Corning, New York, 14801

CLIENT: Ms. Angela Hickey, 104 Front Street, Addison, New York 14830 WELL/BORING ID: **B2**

START DATE: April 19, 2006 COMPLETION DATE: April 19, 2006 RECORDED BY: David Teeter

GROUNDWATER DEPTH WHILE DRILLING: ~19 ft GROUNDWATER DEPTH AFTER COMPLETION: NA

WEATHER CONDITIONS: sunny, 56° DRILLING CONTRACTOR: Chambers Environmental Group

DRILL RIG: Geoprobe® 540UD DRILL SIZE & TYPE: 2" OD drive point DRILLER NAME(S): Keith Skow

Sample No.	OVM Reading (ppm)	Sample Interval (feet)	Sampler Type*	Recovery (inches)	Material Classification trace – 1-10% little – 11-20% some – 21-35% and – 36-50% f-fine m-medium c-coarse
1	0	0-4	MC	14	14" dk brown SILT and subrounded to angular moderately cemented fm GRAVEL and c SAND. Moist. No unusual odor.
2	0	4-8	MC	24	similar soils. Brown. Moist. No unusual odor.
3	0	8-12	MC	42	33" brown subrounded to subangular moderately cemented fmc GRAVEL some SILT little fmc SAND → 9" gray loosely cemented subrounded to subangular fmc GRAVEL. Moist. No unusual odor.
4	0	12-16	MC	48	20" brown medium dense SILT and subrounded fm GRAVEL little c SAND → 24" lt gray rounded to subrounded moderately cemented fmc GRAVEL little c SAND and SILT. Moist. No unusual odor.
5	0	16-20	MC	28	brown moderately cemented subrounded fmc GRAVEL and SILT little rounded fmc SAND. Moist to wet at ~19 feet. No unusual odor.
6	0	20-24	MC	12	similar soils. Wet. No unusual odor.
					Boring terminated at 24 feet below ground surface.

NOTES: Groundwater sample submitted for laboratory analysis.

*MC – GEOPROBE MACROCORE SS – SPLIT SPOON DPSS – DIRECT PUSH SPLIT SPOON SH – SHELBY TUBE C – BEDROCK CORE

Teeter Environmental Services, Inc. SUBSURFACE LOG

PROJECT & LOCATION: Former Loohn's Cleaners, formerly 33-35 East Pulteney Street, Corning, New York, 14801

CLIENT: Ms. Angela Hickey, 104 Front Street, Addison, New York 14830 WELL/BORING ID: **B3**

START DATE: April 19, 2006 COMPLETION DATE: April 19, 2006 RECORDED BY: David Teeter

GROUNDWATER DEPTH WHILE DRILLING: ~19 ft GROUNDWATER DEPTH AFTER COMPLETION: NA

WEATHER CONDITIONS: sunny, 65° DRILLING CONTRACTOR: Chambers Environmental Group

DRILL RIG: Geoprobe® 540UD DRILL SIZE & TYPE: 2" OD drive point DRILLER NAME(S): Keith Skow

Sample No.	OVM Reading (ppm)	Sample Interval (feet)	Sampler Type*	Recovery (inches)	Material Classification trace – 1-10% little – 11-20% some – 21-35% and – 36-50% f-fine m-medium c-coarse
1	0	0-4	MC	16	2" dk brown topsoil → 14" tan medium dense CLAYEY SILT some rounded c SAND and fm GRAVEL. Moist. No unusual odor.
2	0	4-8	MC	30	9" similar soils → 21" gray loosely cemented subrounded to angular fmc GRAVEL little SILT. Moist. No unusual odor.
3	0	8-12	MC	48	gray rounded to subrounded moderately cemented fmc GRAVEL some brown SILT little fmc SAND. Moist. No unusual odor.
4	0	12-16	MC	40	11" similar soils → 3" gray moderately cemented subangular c SAND and f GRAVEL → 26" brown moderately cemented subrounded some subangular fmc GRAVEL and SILT little fmc SAND. Moist. No unusual odor.
5	0	16-20	MC	39	17" brown medium loose subrounded c SAND and fm GRAVEL some SILT. Moist to wet at ~19 feet. No unusual odor.
6	0	20-24	MC	36	gray moderately cemented subrounded GRAVEL some brown SILT little subrounded fmc SAND. Wet. No unusual odor.
					Boring terminated at 24 feet below ground surface.

NOTES: Groundwater sample submitted for laboratory analysis. Soil sample #5 submitted for laboratory analyisis.

*MC – GEOPROBE MACROCORE SS – SPLIT SPOON DPSS – DIRECT PUSH SPLIT SPOON SH – SHELBY TUBE C – BEDROCK CORE

Teeter Environmental Services, Inc.

SUBSURFACE LOG

PROJECT & LOCATION: Former Loohn's Cleaners, formerly 33-35 East Pulteney Street, Corning, New York, 14801

CLIENT: Ms. Angela Hickey, 104 Front Street, Addison, New York 14830 WELL/BORING ID: **B4**

START DATE: April 19, 2006 COMPLETION DATE: April 19, 2006 RECORDED BY: David Teeter

GROUNDWATER DEPTH WHILE DRILLING: ~19 ft GROUNDWATER DEPTH AFTER COMPLETION: NA

WEATHER CONDITIONS: sunny, 70° DRILLING CONTRACTOR: Chambers Environmental Group

DRILL RIG: Geoprobe® 540UD DRILL SIZE & TYPE: 2" OD drive point DRILLER NAME(S): Keith Skow

Sample No.	OVM Reading (ppm)	Sample Interval (feet)	Sampler Type*	Recovery (inches)	Material Classification trace – 1-10% little – 11-20% some – 21-35% and – 36-50% f-fine m-medium c-coarse
1	0	0-4	MC	28	16" brown medium dense SILT and f SAND some subrounded mc SAND little subrounded fm GRAVEL. Moist. No unusual odor.
2	0	4-8	MC	4	9"similar soils. Moist. No unusual odor.
3	0	8-12	MC	34	12" brown medium loose f SAND some subrounded fm GRAVEL trace c GRAVEL → 22" gray moderately cemented subrounded to subangular fmc GRAVEL and c SAND. Moist. No unusual odor.
4	0	12-16	MC	38	brown loosely cemented subrounded some subangular fm GRAVEL and c SAND little fm SAND and SILT. Moist. No unusual odor.
5	0	16-20	MC	48	29" brown medium dense and subangular little subrounded fm GRAVEL little SILT → 19" similar soils, gray. Moist to wet at ~19 feet. No unusual odor.
6	0	20-24	MC	48	lt brown moderately cemented rounded to subrounded fmc GRAVEL and fmc SAND little SILT. Wet. No unusual odor.
					Boring terminated at 24 feet below ground surface.

NOTES: Groundwater sample submitted for laboratory analysis.

*MC – GEOPROBE MACROCORE SS – SPLIT SPOON DPSS – DIRECT PUSH SPLIT SPOON SH – SHELBY TUBE C – BEDROCK CORE

Teeter Environmental Services, Inc.

SUBSURFACE LOG

PROJECT & LOCATION: Former Loohn's Cleaners, formerly 33-35 East Pulteney Street, Corning, New York, 14801

CLIENT: Ms. Angela Hickey, 104 Front Street, Addison, New York 14830 WELL/BORING ID: **B5**

START DATE: April 19, 2006 COMPLETION DATE: April 19, 2006 RECORDED BY: David Teeter

GROUNDWATER DEPTH WHILE DRILLING: not encountered GROUNDWATER DEPTH AFTER COMPLETION: NA

WEATHER CONDITIONS: sunny, 70° DRILLING CONTRACTOR: Chambers Environmental Group

DRILL RIG: Geoprobe® 540UD DRILL SIZE & TYPE: 2" OD drive point DRILLER NAME(S): Keith Skow

Sample No.	OVM Reading (ppm)	Sample Interval (feet)	Sampler Type*	Recovery (inches)	Material Classification trace – 1-10% little – 11-20% some – 21-35% and – 36-50% f-fine m-medium c-coarse
1	0	0-4	MC	48	brown medium dense SILT and subrounded fmc GRAVEL. Dry. No unusual odor.
					Sampler refusal at 4 feet below ground surface. Moved ~1 foot to attempt B6.

NOTES

*MC – GEOPROBE MACROCORE SS – SPLIT SPOON DPSS – DIRECT PUSH SPLIT SPOON SH – SHELBY TUBE C – BEDROCK CORE

Teeter Environmental Services, Inc.

SUBSURFACE LOG

PROJECT & LOCATION: Former Loohn's Cleaners, formerly 33-35 East Pulteney Street, Corning, New York, 14801

CLIENT: Ms. Angela Hickey, 104 Front Street, Addison, New York 14830 WELL/BORING ID: **B6**

START DATE: April 19, 2006 COMPLETION DATE: April 19, 2006 RECORDED BY: David Teeter

GROUNDWATER DEPTH WHILE DRILLING: not encountered GROUNDWATER DEPTH AFTER COMPLETION: NA

WEATHER CONDITIONS: sunny, 70° DRILLING CONTRACTOR: Chambers Environmental Group

DRILL RIG: Geoprobe® 540UD DRILL SIZE & TYPE: 2" OD drive point DRILLER NAME(S): Keith Skow

Sample No.	OVM Reading (ppm)	Sample Interval (feet)	Sampler Type*	Recovery (inches)	Material Classification trace – 1-10% little – 11-20% some – 21-35% and – 36-50% f-fine m-medium c-coarse
1	0	0-4	MC	34	17" brown medium dense SILT and subrounded fmc GRAVEL little fmc SAND → 17" gravel and shale fragments (FILL?). Dry. No unusual odor.
2	0	4-8	MC	28	lt gray rounded to subrounded little angular c gravel, concrete fragment FILL. Moist. No unusual odor.
3	0	12-14	MC	15	similar material with brick fragments. Moist. No unusual odor.
					Sampler refusal at 14 feet below ground surface.

NOTES

*MC – GEOPROBE MACROCORE SS – SPLIT SPOON DPSS – DIRECT PUSH SPLIT SPOON SH – SHELBY TUBE C – BEDROCK CORE

Teeter Environmental Services, Inc.

SUBSURFACE LOG

PROJECT & LOCATION: Former Loohn's Cleaners, formerly 33-35 East Pulteney Street, Corning, New York, 14801

CLIENT: Ms. Angela Hickey, 104 Front Street, Addison, New York 14830 WELL/BORING ID: **B7**

START DATE: April 19, 2006 COMPLETION DATE: April 19, 2006 RECORDED BY: David Teeter

GROUNDWATER DEPTH WHILE DRILLING: ~19 ft GROUNDWATER DEPTH AFTER COMPLETION: NA

WEATHER CONDITIONS: sunny, 72° DRILLING CONTRACTOR: Chambers Environmental Group

DRILL RIG: Geoprobe® 540UD DRILL SIZE & TYPE: 2" OD drive point DRILLER NAME(S): Keith Skow

Sample No.	OVM Reading (ppm)	Sample Interval (feet)	Sampler Type*	Recovery (inches)	Material Classification trace – 1-10% little – 11-20% some – 21-35% and – 36-50% f-fine m-medium c-coarse
1	0	0-4	MC	30	4" gravel ballast → 14" brown medium dense f SAND little subrounded to angular mc SAND and fm GRAVEL → 12" brown dense SILT and subrounded to subangular trace rounded c SAND and f GRAVEL. Moist. No unusual odor.
2	0	4-8	MC	24	brown dense SILT and subrounded to subangular fm GRAVEL. Moist. No unusual odor.
3	0	8-12	MC	44	24" brown medium dense f SAND and subrounded little subangular fm GRAVEL and mc SAND → 20" gray moderately cemented subrounded to subangular fmc GRAVEL and c SAND. Moist. No unusual odor.
4	0	12-16	MC	48	brown moderately cemented subrounded little subangular fmc GRAVEL and fmc SAND little SILT. Moist. No unusual odor.
5	0	16-20	MC	48	similar soils. Moist to wet at ~19 feet. No unusual odor.
6	0	20-24	MC	24	similar soils, lt brown and gray. Wet. No unusual odor.
					Boring terminated at 24 feet below ground surface.

NOTES Groundwater sample submitted for laboratory analysis.

*MC – GEOPROBE MACROCORE SS – SPLIT SPOON DPSS – DIRECT PUSH SPLIT SPOON SH – SHELBY TUBE C – BEDROCK CORE

Teeter Environmental Services, Inc.

SUBSURFACE LOG

PROJECT & LOCATION: Former Loohn's Cleaners, formerly 33-35 East Pulteney Street, Corning, New York, 14801

CLIENT: Ms. Angela Hickey, 104 Front Street, Addison, New York 14830 WELL/BORING ID: **B8**

START DATE: April 19, 2006 COMPLETION DATE: April 19, 2006 RECORDED BY: David Teeter

GROUNDWATER DEPTH WHILE DRILLING: ~19 ft GROUNDWATER DEPTH AFTER COMPLETION: NA

WEATHER CONDITIONS: sunny, 72° DRILLING CONTRACTOR: Chambers Environmental Group

DRILL RIG: Geoprobe® 540UD DRILL SIZE & TYPE: 2" OD drive point DRILLER NAME(S): Keith Skow

Sample No.	OVM Reading (ppm)	Sample Interval (feet)	Sampler Type*	Recovery (inches)	Material Classification trace – 1-10% little – 11-20% some – 21-35% and – 36-50% f-fine m-medium c-coarse
1	0	0-4	MC	32	3" asphalt → 4" gravel ballast → 8" brown medium dense f SAND and SILT little subangular f GRAVEL → 8" brown moderately cemented subangular mc GRAVEL little SILT → 3" lt brown dense SILT trace rounded f GRAVEL → 6" brown moderately cemented subangular mc GRAVEL little SILT. Moist. No unusual odor.
2	0	4-8	MC	19	brown moderately cemented subrounded to subangular fmc SAND and fmc GRAVEL little SILT. Moist. No unusual odor.
3	0	8-12	MC	36	similar soils. Moist. No unusual odor.
4	0	12-16	MC	46	21" similar soils → 25" gray loosely cemented subangular to angular some subrounded fm GRAVEL little fmc SAND trace c GRAVEL. Moist. No usual odor.
5	0	16-20	MC	35	20" gray moderately cemented subangular fm GRAVEL and fmc SAND little SILT and c GRAVEL → 15" gray moderately cemented mc GRAVEL little subrounded f GRAVEL and c SAND trace SILT. Moist to wet at ~19 feet. No unusual odor.
6	0	20-24	MC	30	lt gray moderately cemented subrounded to subangular fmc GRAVEL and fmc SAND little SILT. Wet. No unusual odor.
					Boring terminated at 24 feet below ground surface.

NOTES Groundwater sample submitted for laboratory analysis.

*MC – GEOPROBE MACROCORE SS – SPLIT SPOON DPSS – DIRECT PUSH SPLIT SPOON SH – SHELBY TUBE C – BEDROCK CORE

APPENDIX D

LABORATORY REPORT

Eastern Laboratory Services Ltd
quality ■ accuracy ■ reliability

ENVIRONMENTAL
2566 Pennsylvania Ave.
Sayre, PA 18840
Phone (570) 888-0169
FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pulmey Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	**Reported:**
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-1
6D20030-01 (Ground Water)

Date Sampled: 04/19/06 10:25
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								
Trichlorotrifluoroethane	<5.00	5.00	ug/l	04/27/06 00:00	04/27/06 00:00	SW-846/8260B	CY	
Carbon disulfide	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Benzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromodichloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromoform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
sec-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
tert-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Carbon tetrachloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	LCCV
2-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
4-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromoethane (EDB)	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,4-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dichlorodifluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

Eastern Laboratory Services, Ltd.
Irene Chu
Reviewed by Irene Chu, Laboratory Director

The results in this report apply to the samples, as received by the laboratory, analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. The test results meet all requirements of NELAC.

PA 08380 NY 11216

Eastern Laboratory Services Ltd
quality ■ accuracy ■ reliability

ENVIRONMENTAL
2566 Pennsylvania Ave.
Sayre, PA 18840
Phone (570) 888-0169
FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pulmey Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	Reported:
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-1
6D20030-01 (Ground Water)

Date Sampled: 04/19/06 10:25
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								
cis-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
trans-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
2,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
cis-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
trans-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Ethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Hexachlorobutadiene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Isopropylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
p-Isopropyltoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methylene chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Propylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Styrene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Tetrachloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Toluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichlorofluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3,5-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Vinyl chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

Eastern Laboratory Services, Ltd.
Irene Chu

Reviewed by Irene Chu, Laboratory Director

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ENVIRONMENTAL
2566 Pennsylvania Ave.
Sayre, PA 18840
Phone (570) 888-0169
FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	**Reported:**
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-1
6D20030-01 (Ground Water)

Date Sampled: 04/19/06 10:25
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								
o-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
m,p-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Naphthalene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methyl tert-butyl ether	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Acetone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl ethyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl isobutyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*80-120*		"	"	CY	
Surrogate: Toluene-d8		*99.8 %*	*88-110*		"	"	CY	
Surrogate: Bromofluorobenzene		*99.8 %*	*86-115*		"	"	CY	

Qualifiers:

LCCV = Continuing Calibration Verification was below acceptance limits. Results may be biased low.

Eastern Laboratory Services, Ltd.

Irene Chu

Reviewed by Irene Chu, Laboratory Director

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Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	Reported:
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

MW-2
6D20030-02 (Ground Water)

Date Sampled: 04/19/06 10:45
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								
Trichlorotrifluoroethane	<5.00	5.00	ug/l	04/27/06 00:00	04/27/06 00:00	SW-846/8260B	CY	
Carbon disulfide	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Benzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromodichloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromoform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
sec-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
tert-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Carbon tetrachloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	LCCV
2-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
4-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromoethane (EDB)	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,4-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dichlorodifluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

Eastern Laboratory Services, Ltd.
Irene Chu
Reviewed by Irene Chu, Laboratory Director

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FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	**Reported:**
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

MW-2
6D20030-02 (Ground Water)

Date Sampled: 04/19/06 10:45
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								
cis-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
trans-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
2,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
cis-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
trans-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Ethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Hexachlorobutadiene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Isopropylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
p-Isopropyltoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methylene chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Propylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Styrene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Tetrachloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Toluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichlorofluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3,5-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Vinyl chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

Eastern Laboratory Services, Ltd.

Irene Chu

Reviewed by Irene Chu, Laboratory Director

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Sayre, PA 18840
Phone (570) 888-0169
FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	**Reported:**
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

MW-2
6D20030-02 (Ground Water)

Date Sampled: 04/19/06 10:45
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								
o-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
m,p-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Naphthalene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methyl tert-butyl ether	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Acetone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl ethyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl isobutyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*80-120*		"	"	CY	
Surrogate: Toluene-d8		*99.4 %*	*88-110*		"	"	CY	
Surrogate: Bromofluorobenzene		*97.8 %*	*86-115*		"	"	CY	

Qualifiers:

LCCV = Continuing Calibration Verification was below acceptance limits. Results may be biased low.

Eastern Laboratory Services, Ltd.

Irene Chu

Reviewed by Irene Chu, Laboratory Director

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FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	Reported:
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-2
6D20030-03 (Ground Water)

Date Sampled: 04/19/06 11:30
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								PH
Trichlorotrifluoroethane	<5.00	5.00	ug/l	04/27/06 00:00	04/27/06 00:00	SW-846/8260B	CY	
Carbon disulfide	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Benzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromodichloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromoform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
sec-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
tert-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Carbon tetrachloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	LCCV
2-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
4-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromoethane (EDB)	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,4-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dichlorodifluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

Eastern Laboratory Services, Ltd.

Irene Chu

Reviewed by Irene Chu, Laboratory Director

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FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	**Reported:**
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-2
6D20030-03 (Ground Water)

Date Sampled: 04/19/06 11:30
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								PH
cis-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
trans-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
2,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
cis-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
trans-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Ethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Hexachlorobutadiene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Isopropylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
p-Isopropyltoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methylene chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Propylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Styrene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Tetrachloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Toluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichlorofluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3,5-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Vinyl chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

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Irene Chu

Reviewed by Irene Chu, Laboratory Director

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Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	**Reported:**
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-2
6D20030-03 (Ground Water)

Date Sampled: 04/19/06 11:30
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								PH
o-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
m,p-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Naphthalene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methyl tert-butyl ether	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Acetone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl ethyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl isobutyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Surrogate: 1,2-Dichloroethane-d4		*96.4 %*	*80-120*		"	"	CY	
Surrogate: Toluene-d8		*99.8 %*	*88-110*		"	"	CY	
Surrogate: Bromofluorobenzene		*98.6 %*	*86-115*		"	"	CY	

Qualifiers:

LCCV = Continuing Calibration Verification was below acceptance limits. Results may be biased low.

PH = Insufficient preservative to reduce the sample pH to less than 2.

Eastern Laboratory Services, Ltd.

Irene Chu

Reviewed by Irene Chu, Laboratory Director

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PA 08380 NY 11216

Eastern Laboratory Services Ltd
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ENVIRONMENTAL
2566 Pennsylvania Ave.
Sayre, PA 18840
Phone (570) 888-0169
FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	Reported:
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

MW-1
6D20030-04 (Ground Water)

Date Sampled: 04/19/06 11:45
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								
Trichlorotrifluoroethane	<5.00	5.00	ug/l	04/27/06 00:00	04/27/06 00:00	SW-846/8260B	CY	
Carbon disulfide	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Benzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromodichloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromoform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
sec-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
tert-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Carbon tetrachloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	LCCV
2-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
4-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromoethane (EDB)	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,4-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dichlorodifluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

Eastern Laboratory Services, Ltd.
Irene Chu

Reviewed by Irene Chu, Laboratory Director

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ENVIRONMENTAL
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FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	Reported:
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

MW-1
6D20030-04 (Ground Water)

Date Sampled: 04/19/06 11:45
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								
cis-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
trans-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
2,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
cis-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
trans-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Ethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Hexachlorobutadiene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Isopropylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
p-Isopropyltoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methylene chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Propylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Styrene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Tetrachloroethene	29.8	5.00	ug/l	04/27/06 00:00	"	"	CY	
Toluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichlorofluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3,5-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Vinyl chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

Eastern Laboratory Services, Ltd.

Irene Chu

Reviewed by Irene Chu, Laboratory Director

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Sayre, PA 18840
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FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	**Reported:**
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

MW-1
6D20030-04 (Ground Water)

Date Sampled: 04/19/06 11:45
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								
o-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
m,p-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Naphthalene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methyl tert-butyl ether	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Acetone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl ethyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl isobutyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Surrogate: 1,2-Dichloroethane-d4		*99.8 %*	*80-120*		"	"	CY	
Surrogate: Toluene-d8		*99.0 %*	*88-110*		"	"	CY	
Surrogate: Bromofluorobenzene		*99.2 %*	*86-115*		"	"	CY	

Qualifiers:

LCCV = Continuing Calibration Verification was below acceptance limits. Results may be biased low.

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Irene Chu

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Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	Reported:
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

MW-3
6D20030-05 (Ground Water)

Date Sampled: 04/19/06 12:30
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								
Carbon disulfide	<5.00	5.00	ug/l	04/27/06 00:00	04/27/06 00:00	SW-846/8260B	CY	
Trichlorotrifluoroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Benzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromodichloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromoform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
sec-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
tert-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Carbon tetrachloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	LCCV
2-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
4-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromoethane (EDB)	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,4-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dichlorodifluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

Eastern Laboratory Services, Ltd.
Irene Chu

Reviewed by Irene Chu, Laboratory Director

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FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1; Box 124B, Macafee Road	Project No: [none]	Reported:
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

MW-3
6D20030-05 (Ground Water)

Date Sampled: 04/19/06 12:30
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								
cis-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
trans-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
2,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
cis-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
trans-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Ethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Hexachlorobutadiene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Isopropylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
p-Isopropyltoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methylene chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Propylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Styrene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Tetrachloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Toluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichlorofluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3,5-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Vinyl chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

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Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	**Reported:**
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

MW-3
6D20030-05 (Ground Water)

Date Sampled: 04/19/06 12:30
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								
o-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
m,p-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Naphthalene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methyl tert-butyl ether	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Acetone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl ethyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl isobutyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*80-120*		"	"	CY	
Surrogate: Toluene-d8		*101 %*	*88-110*		"	"	CY	
Surrogate: Bromofluorobenzene		*96.4 %*	*86-115*		"	"	CY	

Qualifiers:

LCCV = Continuing Calibration Verification was below acceptance limits. Results may be biased low.

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Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	Reported:
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-3
6D20030-06 (Ground Water)

Date Sampled: 04/19/06 13:00
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								PH
Carbon disulfide	<5.00	5.00	ug/l	04/27/06 00:00	04/27/06 00:00	SW-846/8260B	CY	
Trichlorotrifluoroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Benzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromodichloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromoform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
sec-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
tert-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Carbon tetrachloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	LCCV
2-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
4-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromoethane (EDB)	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,4-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dichlorodifluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

Eastern Laboratory Services, Ltd.
Irene Chu
Reviewed by Irene Chu, Laboratory Director

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ENVIRONMENTAL
2566 Pennsylvania Ave.
Sayre, PA 18840
Phone (570) 888-0169
FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	Reported:
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-3
6D20030-06 (Ground Water)

Date Sampled: 04/19/06 13:00
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								PH
cis-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
trans-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
2,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
cis-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
trans-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Ethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Hexachlorobutadiene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Isopropylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
p-Isopropyltoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methylene chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Propylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Styrene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Tetrachloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Toluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichlorofluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3,5-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Vinyl chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

Eastern Laboratory Services, Ltd.
Irene Chu

Reviewed by Irene Chu, Laboratory Director

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ENVIRONMENTAL
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Sayre, PA 18840
Phone (570) 888-0169
FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	**Reported:**
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-3
6D20030-06 (Ground Water)

Date Sampled: 04/19/06 13:00
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								PH
o-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
m,p-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Naphthalene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methyl tert-butyl ether	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Acetone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl ethyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl isobutyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Surrogate: 1,2-Dichloroethane-d4		*105 %*	*80-120*		"	"	CY	
Surrogate: Toluene-d8		*98.8 %*	*88-110*		"	"	CY	
Surrogate: Bromofluorobenzene		*96.4 %*	*86-115*		"	"	CY	

Qualifiers:

LCCV = Continuing Calibration Verification was below acceptance limits. Results may be biased low.

PH = Insufficient preservative to reduce the sample pH to less than 2.

Eastern Laboratory Services, Ltd.

Irene Chu

Reviewed by Irene Chu, Laboratory Director

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Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	Reported:
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-4
6D20030-07 (Ground Water)

Date Sampled: 04/19/06 14:00
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								PH
Trichlorotrifluoroethane	<5.00	5.00	ug/l	04/27/06 00:00	04/27/06 00:00	SW-846/8260B	CY	
Carbon disulfide	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Benzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromodichloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromoform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
sec-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
tert-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Carbon tetrachloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	LCCV
2-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
4-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromoethane (EDB)	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,4-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dichlorodifluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

Eastern Laboratory Services, Ltd.
Irene Chu

Reviewed by Irene Chu, Laboratory Director

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FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	Reported:
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-4
6D20030-07 (Ground Water)

Date Sampled: 04/19/06 14:00
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								PH
cis-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
trans-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
2,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
cis-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
trans-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Ethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Hexachlorobutadiene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Isopropylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
p-Isopropyltoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methylene chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Propylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Styrene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Tetrachloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Toluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichlorofluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3,5-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Vinyl chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

Eastern Laboratory Services, Ltd.

Irene Chu

Reviewed by Irene Chu, Laboratory Director

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ENVIRONMENTAL
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FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	Reported:
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-4
6D20030-07 (Ground Water)

Date Sampled: 04/19/06 14:00
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								PH
o-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
m,p-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Naphthalene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methyl tert-butyl ether	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Acetone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl ethyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl isobutyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Surrogate: 1,2-Dichloroethane-d4		*105 %*	*80-120*		"	"	CY	
Surrogate: Toluene-d8		*98.6 %*	*88-110*		"	"	CY	
Surrogate: Bromofluorobenzene		*97.8 %*	*86-115*		"	"	CY	

Qualifiers:

LCCV = Continuing Calibration Verification was below acceptance limits. Results may be biased low.

PH = Insufficient preservative to reduce the sample pH to less than 2.

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Irene Chu

Reviewed by Irene Chu, Laboratory Director

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Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	Reported:
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-8
6D20030-08 (Ground Water)

Date Sampled: 04/19/06 17:00
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								PH
Trichlorotrifluoroethane	<5.00	5.00	ug/l	04/27/06 00:00	04/27/06 00:00	SW-846/8260B	CY	
Carbon disulfide	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Benzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromodichloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromoform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Bromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
sec-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
tert-Butylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Carbon tetrachloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloroform	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Chloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	LCCV
2-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
4-Chlorotoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromochloromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dibromomethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromoethane (EDB)	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dibromo-3-chloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,4-Dichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Dichlorodifluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

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Irene Chu

Reviewed by Irene Chu, Laboratory Director

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Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	Reported:
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-8
6D20030-08 (Ground Water)

Date Sampled: 04/19/06 17:00
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								PH
cis-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
trans-1,2-Dichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
2,2-Dichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
cis-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
trans-1,3-Dichloropropene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Ethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Hexachlorobutadiene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Isopropylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
p-Isopropyltoluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methylene chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
n-Propylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Styrene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2,2-Tetrachloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Tetrachloroethene	8.80	5.00	ug/l	04/27/06 00:00	"	"	CY	
Toluene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trichlorobenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,1-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,1,2-Trichloroethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichloroethene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Trichlorofluoromethane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,3-Trichloropropane	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,2,4-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
1,3,5-Trimethylbenzene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Vinyl chloride	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	

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Irene Chu

Reviewed by Irene Chu, Laboratory Director

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ENVIRONMENTAL
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Sayre, PA 18840
Phone (570) 888-0169
FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	**Reported:**
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-8
6D20030-08 (Ground Water)

Date Sampled: 04/19/06 17:00
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								PH
o-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	SW-846/8260B	CY	
m,p-Xylene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Naphthalene	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Methyl tert-butyl ether	<5.00	5.00	ug/l	04/27/06 00:00	"	"	CY	
Acetone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl ethyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Methyl isobutyl ketone	<10.0	10.0	ug/l	04/27/06 00:00	"	"	CY	
Surrogate: 1,2-Dichloroethane-d4		*106 %*	*80-120*		"	"	CY	
Surrogate: Toluene-d8		*99.4 %*	*88-110*		"	"	CY	
Surrogate: Bromofluorobenzene		*96.4 %*	*86-115*		"	"	CY	

Qualifiers:

LCCV = Continuing Calibration Verification was below acceptance limits. Results may be biased low.

PH = Insufficient preservative to reduce the sample pH to less than 2.

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Irene Chu

Reviewed by Irene Chu, Laboratory Director

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Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pultney Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	**Reported:**
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-3 16'-20'
6D20030-09 (Grab)

Date Sampled: 04/19/06 12:45
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
Conventional Chemistry Parameters by APHA/EPA Methods								
% Solids	97.1	0.100	%	04/26/06 00:00	04/26/06 00:00	EPA 160.3	KAL	LLFB
SW846/8260B Volatile Organic Compounds								
Trichlorotrifluoroethane	<12.0	12.0	ug/kg	04/27/06 00:00	04/27/06 00:00	SW-846/8260B	CY	
Carbon disulfide	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Benzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Bromobenzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Bromochloromethane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Bromodichloromethane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Bromoform	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Bromomethane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
n-Butylbenzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
sec-Butylbenzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
tert-Butylbenzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Carbon tetrachloride	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Chlorobenzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Chloroethane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Chloroform	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Chloromethane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	LCCV
2-Chlorotoluene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
4-Chlorotoluene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Dibromochloromethane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Dibromomethane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,2-Dibromoethane (EDB)	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,2-Dibromo-3-chloropropane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,2-Dichlorobenzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,3-Dichlorobenzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,4-Dichlorobenzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Dichlorodifluoromethane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,1-Dichloroethane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	

Eastern Laboratory Services, Ltd.

Irene Chu

Reviewed by Irene Chu, Laboratory Director

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FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental	Project: 35-41 E. Pulteny Street	
RD#1, Box 124B, Macafee Road	Project No: [none]	Reported:
Sayre PA, 18840	Project Manager: Dave Teeter	05/01/06 15:21

B-3 16'-20'
6D20030-09 (Grab)

Date Sampled: 04/19/06 12:45
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								
1,2-Dichloroethane	<12.0	12.0	ug/kg	04/27/06 00:00	"	SW-846/8260B	CY	
1,1-Dichloroethene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
cis-1,2-Dichloroethene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
trans-1,2-Dichloroethene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,2-Dichloropropane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,3-Dichloropropane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
2,2-Dichloropropane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,1-Dichloropropene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
cis-1,3-Dichloropropene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
trans-1,3-Dichloropropene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Ethylbenzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Hexachlorobutadiene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Isopropylbenzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
p-Isopropyltoluene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Methylene chloride	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
n-Propylbenzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Styrene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,1,1,2-Tetrachloroethane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Tetrachloroethene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Toluene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,2,3-Trichlorobenzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,2,4-Trichlorobenzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,1,1-Trichloroethane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,1,2-Trichloroethane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Trichloroethene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Trichlorofluoromethane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,2,3-Trichloropropane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,2,4-Trimethylbenzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
1,3,5-Trimethylbenzene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	

Eastern Laboratory Services, Ltd.

Irene Chu

Reviewed by Irene Chu, Laboratory Director

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FAX (570) 888-0717

Certificate of Analysis

Teeter Environmental RD#1, Box 124B, Macafee Road Sayre PA, 18840	Project: 35-41 E. Pultney Street Project No: [none] Project Manager: Dave Teeter	**Reported:** 05/01/06 15:21

B-3 16'-20'
6D20030-09 (Grab)

Date Sampled: 04/19/06 12:45
Date Received: 04/20/06 08:50

Analyte	Result	Detection Limit	Units	Prepared	Analyzed	Method	Analyst	Notes
SW846/8260B Volatile Organic Compounds								
Vinyl chloride	<12.0	12.0	ug/kg	04/27/06 00:00	"	SW-846/8260B	CY	
o-Xylene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
m,p-Xylene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Naphthalene	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Methyl tert-butyl ether	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Acetone	<24.0	24.0	ug/kg	04/27/06 00:00	"	"	CY	
Methyl isobutyl ketone	<24.0	24.0	ug/kg	04/27/06 00:00	"	"	CY	
Methyl ethyl ketone	<24.0	24.0	ug/kg	04/27/06 00:00	"	"	CY	
1,1,2,2-Tetrachloroethane	<12.0	12.0	ug/kg	04/27/06 00:00	"	"	CY	
Surrogate: 1,2-Dichloroethane-d4		*99.6 %*	*85-112*		"	"	CY	
Surrogate: Toluene-d8		*98.4 %*	*89-108*		"	"	CY	
Surrogate: Bromofluorobenzene		*94.2 %*	*75-116*		"	"	CY	

Qualifiers:

LCCV = Continuing Calibration Verification was below acceptance limits. Results may be biased low.

LLFB = LFB % Recovery below acceptance limits. The result may be biased low.

Eastern Laboratory Services, Ltd.

Irene Chu

Reviewed by Irene Chu, Laboratory Director

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CHAIN OF CUSTODY

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2566 Pennsylvania Avenue • Sayre, PA 18840
Phone: (570) 888-0169

PAGE 1 OF 1

REPORT TO: TES Inc
R.R. 4 | Box 1246
Sayre Pa. 18840

CONTACT

PH#

FAX#

BILL TO: TES Inc

PO#

PROJECT DESCRIPTION: 35-41-E Pulteney Street

SAMPLER SIGNATURE / AFFILIATION: TES Inc

REFRIGERATE SAMPLES AFTER COLLECTION

TRANSPORT TO LABORATORY IN COOLER WITH ICE

DW	DRINKING WATER	SL	SLUDGE
GW	GROUND WATER	SO	SOIL
SW	SURFACE WATER	HZ	HAZARDOUS
WW	WASTE WATER	OTHER	
DE	DEIONIZED WATER	DI	DISTILLED WATER

RESULTS ARE BEING USED FOR: NYDOH (NYDEC) PADEP LANDFILL_____ PERSONAL OTHER_____

ARE SPECIAL DETECTION LIMITS NEEDED: (YES) NO
IF YES, PLEASE ATTACH

IS A QC PACKAGE NEEDED? YES (NO)
IF YES, PLEASE ATTACH REQUIREMENTS

H	HYDROCHLORIC ACID	OH	SODIUM HYDROXIDE
S	SULFURIC ACID	AS	ASCORBIC ACID
N	NITRIC ACID	AC	ACETIC ACID
SO_3	SODIUM SULFITE	NH_4	AMMONIUM CHLORIDE
Thio	SODIUM THIOSULFATE	ZN	ZINC ACETATE
–	NONE	Hg	MERCURIC CHLORIDE

An incomplete chain of custody may delay the processing of your sample(s).

Please fill out all applicable areas completely

	CONTAINER	SAMPLING POINT	DATE SAMPLED	TIME OF SAMPLING	SAMPLE MATRIX	SAMPLE TYPE - GRAB / COMPOSITE	SAMPLER INITIALS	PRESERVATIVE	ANALYSIS TO BE PERFORMED (PER CONTAINER)	COMPOSITED ON RECEIPT	PRESERVATIVE ADDED ON RECEIPT	ELS USE ONLY
1	B-1		4/12/06	1035	GW	G	DT	HCl	8260			6D20030-01AB
2	MW-2		4/12/06	1045	GW	G	DT	HCl	8260			-02AB
3	B-2		4/12/06	1130	GW	G	DT	HCl	8260			-03AB
4	MW-1		4/12/06	1145	GW	G	DT	HCl	8260			-04AB
5	MW-3		4/12/06	1230	GW	G	DT	HCl	8260			-05AB
6	B-3		4/12/06	100	GW	G	DT	HCl	8260			-06AB
7	B-4		4/12/06	200	GW	G	DT	HCl	8260			-07AB
8	B-8		4/12/06	300	GW	G	DT	HCl	8260			-08AB
9	B-3-16-20'		4/12/06	1245	SO	G	DT	none	8260			-09A
10	↓								%TS			↓B
11												Due 5/4/06

ELS USE ONLY

DELIVERED BY DT TEMPERATURE UPON RECEIPT 3 °C ARRIVAL ON ICE (Y) N

RELINQUISHED BY:	DATE: / /	TIME:	RECEIVED BY:	DATE: / /	TIME:
RELINQUISHED BY:	DATE: / /	TIME:	RECEIVED BY:	DATE: / /	TIME:
RELINQUISHED BY:	DATE: 4/12/06	TIME: 850	RECEIVED BY: Debbie McCarty	DATE: 4/20/06	TIME: 850

1055

APPENDIX B

SITE PHOTOGRAPHS

LOOHN'S CORNING DRY CLEANERS SITE PHOTOGRAPHS

Loohn's Corning Site building. View looking north. Former dry cleaner occupied center retail space.

Looking east along rear of Site building. First door is the rear door of the former dry cleaners.

Looking east along rear of Site Building.
Door to former dry cleaner is behind brown dumpster.

Looking south at southwest side of Site building.
(white door to convenient store).

LOOHN'S CORNING DRY CLEANERS SITE PHOTOGRAPHS

Looking east along East Pulteney Street, across from Loohn's Corning Site. Geoprobe is set up to collect soil gas sample GV-2.

APPENDIX C

FIELD DATA RECORDS

TEST BORING LOG

Project: NYSDEC - Region 8 Dry Cleaners	Boring/Well No.: GW-1	Project No.: 361205.2036	
Client: NYSDEC	Site: Loohns Cleaners	Sheet No.: 1 of 1	
Logged By: Brandon Shaw	Ground Elevation	Start Date: 02/15/06	Finish Date: 02/15/06
Drilling Contractor: ADT	Driller's Name: Roger Buley	Rig Type: Geoprobe ~~54DT~~ 6610	
Drilling Method: Direct Push	Protection Level: D	P.I.D. (eV)	Casing Size: 1 1/2" Auger Size: 1 1/2"
Soil Drilled: 20'	Rock Drilled	Total Depth: 28'	Depth to Groundwater/Date: Piez ☐ Well ☑ Boring ☐

Depth (Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Sample Description	USCS Group Symbol	Notes on Drilling	Monitoring (ppm) PI Meter Field Scan	Monitoring (ppm) PI Meter Head Space	Lab Tests
1	S1					0-1.5 olive brown silty fine sand w roots, PG, moist, SP, M Dense	O zone		41.0		
2	1.4/4.0					1.5-2.5 same as 0-1.5 but w some fine gravel.					
3						2.5-4 orange sand-clay-gravel wet, NP, loose/M Dense, WG	GW				
4						4-4.8 same as 2.5-4					
5	S2					4.8-7.2 Lt Brown sandy gravel WG, moist, trace fines, NP, M Dense	GC		41.0		
6	2.3/4.0					7.2-8 Brown sand-gravel w rock flour, broken cobbles damp, NP, WG,	GC				
7						8-9 Brown silt-sand gravel WG, moist, SP, trace clay, Dense	GW				
8						9-12 Sandy gravel, damp/dry trace cobble/rock flour @ 11.7	GW/ML				
9	S3					12-14.4 Sandy gravel/ gravel/cobbles w/ sand, WG many cobble which have been broken, rock flour	GW/ML		41.0		
10	4.0/4.0					14.4-16 olive gravely silt, PG, V. Dense, moist, SP, trace Sand	GW				
11						19.5 water, saturated zone silty sand gravel.	GW/ML				
12						▽ Bgs @ 28'; pushed w water Sampler from 20' to 28'	GW/ML		700ppb		
13	S4						GW		6000ppb.		
14	4.0/4.0						GP				
15									200 ppb		
16						▽ TDS: 28' bgs; Direct Push	GW				

9910003(e).L 33

Hardihg Lawson Associates

S3 3-4/4.0

550 ppb - 18.5'-19'

TEST BORING LOG

Project: NYSDEC - Region 8 Dry Cleaners	Boring/Well No.: GW-2	Project No.: 361205.2036	
Client: NYSDEC	Site: Looks Cleaners	Sheet No.: 1 of 1	
Logged By: Brandon Shaw	Ground Elevation	Start Date: 02/15/06	Finish Date: 02/15/06
Drilling Contractor: ADT	Driller's Name: Roger Burley	Rig Type: GeoProbe 6610	
Drilling Method: Direct Push	Protection Level: D	P.I.D. (eV)	Casing Size: 1 1/2" / Auger Size: 1 1/2"
Soil Drilled: 16'-20'	Rock Drilled	Total Depth: 28'	Depth to Groundwater/Date: Piez ☐ Well ☐ Boring ☑

Depth (Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Sample Description	USCS Group Symbol	Notes on Drilling	Monitoring (ppm) PI Meter Field Scan	Monitoring (ppm) PI Meter Head Space	Lab Tests
1	S1					0-2 Brownish olive silty fine sand, PC, damp/frozen @ surface, SP-friable, M Dense.	SM		21.0		
2	1.7/4.0					2-3.5 orange/Brown clay-gravel w little Sand, WG, Stiff, MP			20 ppb		
3						3.5-4 Orange/Brown silt-gravel-Sand moist, WG, M Dense, SP,	GC		21.0		
4						4-6 orangish Brown Silty Sand and gravel, WG, some roots, M Dense, wet, SP/NP.	GM				
5	S2					6-7.1 Lt Brown silty Sandy gravel, wet, WG, Dense, NP			21.0		
6	2.0/4.0					7.1-8 Lt Brown Sandy-gravel w trace fines, NP, WG, damp					
7						8-9.1 Same as 2-3.5					
8						9.1-9.5 Brown clean fine Sand damp, PC, V. Dense,	GM				
9	S3					9.5-10.8 Lt Brown Sandy gravel WG, rock flour, v. Angular pieces of cobbles, dry, NP, M Dense,	SW		21.0		
10	2.8/4.0					10.8-10.9 Lt Brown dry clay lense, friable, PG, NP,	SW				
11						10.9-12 Same as 9.5-10.8.	SP				
12						12-16 Brown Silt-Sand-gravel moist-wet, NP, WG, M Dense	GW				
13	S4					*Collected soil Sample 14'-16' LEGS00201501XX@0930	GW		50 ppb		
14	3.7/4.0								21.0		
15						*Sampling got tight @ ~25'					
16						▽ BOB @ 28'; pushed w water Sample from 16' to 28'	GM		100 ppb		

TEST BORING LOG

Project: NYSDEC - Region 8 Dry Cleaners	Boring/Well No.: GW-6	Project No.: 361205.2036	
Client: NYSDEC	Site: Leathers Cleaners	Sheet No.: 1 of 1	
Logged By: Brandon Shaw	Ground Elevation	Start Date: 02/16/06	Finish Date: 02/16/06
Drilling Contractor: ADT	Driller's Name: Roger Bwey.	Rig Type: Geoprobe 5400 6610	
Drilling Method: Direct Push	Protection Level: D	P.I.D. (eV)	Casing Size: 1 1/2" Auger Size: 1 1/2"
Soil Drilled: 16'	Rock Drilled	Total Depth: 27'. 28'	Depth to Groundwater/Date: ~15' Piez ☐ Well ☑ Boring ☐

Depth (Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Sample Description	USCS Group Symbol	Notes on Drilling	Monitoring (ppm) PI Meter Field Scan	Monitoring (ppm) PI Meter Head Space	Lab Tests
1						0-2 DK olive/DK Brown silty fine Sand w/ some fine gravel, roots, WG, moist, SP	SM/GM		4.0		
2	1.6/4.0					2-3.5 olive/orange clay - gravel, wet, HP/MP, WC, stiff, organic, roots					
3						3.5-4 Sandy clay - gravel, orange LT Brown, wet, SP, loose, WC	GC				
4						4-5.5 LT Brown silt - Sand - gravel wet, WC, SP, roots	SC/GC				
5						5.5-5.9 LT Brown Sandy clay w/ gravel, MP, wet, WC, Soft	GM		4.0		
6	1.7/4.0					5.9-6.2 White cobble-Sandstone w/ rock flour	GC				
7						6.2-8 LT Brown silty Sand and gravel, dry, NP, trace clay lenses (<0.1) throughout Sleeve, friable - LT brown	GP/ML		200 ppb		
8						8-10.4 LT Brown silty sand - gravel dry, WC, NP, loose	GM		300 ppb 150 ppb		
9						10.4-11.6 Sandy gravel w/ some fines, PG, dry, NP			350 ppb.		
10	3.9/4.0					11.6-12 Sandy clay w/ some fine gravel, dry, friable, well drained, Stratified,			<0.1 200 ppb		
11						12-12.8 Silty Sand w/ fine gravel, dry loose, NP, PG	GP		<1.0		
12						12.8-13.6 Same as 11.6-12.	SC				
13						13.6-14.8 gravel w/ some Sand and rock flour, PG, NP, dry	SM		180 ppb		
14	2.8/4.0					14.8-15.5 Olive Brown Silty Sand w/ trace clay lenses - dry, NP, friable Dense.	GP/ML		50		
15						15.5-16 white Sandstone/rock flour, PG, dry NP	SM/SC		400 ppb - 600 ppb		
16						refusal @ 27' w/ water Sample from 16'-27'	ML				

S1 S2 S3 S4

Harding Lawson Associates

TEST BORING LOG

Project: NYSDEC - Region 8 Dry Cleaners	Boring/Well No.: GW-9	Project No.: 361205.2036	
Client: NYSDEC	Site: Loohn Cleaners	Sheet No.: 1 of 1	
Logged By: Brandon Shaw	Ground Elevation	Start Date: 02/15/06	Finish Date: 02/15/06
Drilling Contractor: ADT	Driller's Name: Roger Butler	Rig Type: GeoProbe ~~5400~~ 6610	
Drilling Method: Direct Push	Protection Level: D	P.I.D. (eV)	Casing Size: 1 1/2" Auger Size: 1 1/2"
Soil Drilled: 16'	Rock Drilled	Total Depth: 32'	Depth to Groundwater/Date: Piez ☐ Well ☐ Boring ☑

Depth (Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Sample Description	USCS Group Symbol	Notes on Drilling	Monitoring (ppm) PI Meter Field Scan	Monitoring (ppm) PI Meter Head Space	Lab Tests
1	S1 0.8/4.0					0-0.5 DK olive silty Sand-gravel Saturated WG, NP, M Dense			4.0		
2						0.5-4. DK olive silty fine Sand w some fine gravel, moist, Dense.					
3						4-6 olive Brown silty clay w trace fine gravel, PG, wet HP, soft	Fill				
4						6-8 orange/Brown silty Sand-gravel PG, dry, NP,					
5	S2 0.5/4.0					8-8.6 orange/Brown clay-Sand-gravel WG, MP, wet, M Dense.	GM/GC		11.0		
6						8.6-8.7 Mortar piece - red brick					
7						8.7-10 Lt Brown Sand-gravel w some silt					
8						10-10.2 yellow cobble/rock flour	GM				
9	S3 2.0/4.0					10.2-12 Brown silt-Sand clay WG, wet, M Dense, NP, clay lens @ 11.9-12	GC		11.0		
10						12-13 Brown silt-Sand-gravel w trace clay, wet, WG, MP, M Dense	GM				
11						13-14 white Sandstone rock flour w/ pink Sandstone.	SM/SC				
12						14-15.1 Lt Brown silt Sand w Some gravel					
13	S4 1.8/4.0					15.1-15.5 cobble. white rock flour	GM				
14						15.5-16 Lt Brown Sandy gravel, wet/sat., Slight odor NP, loose, WG	ML		500 ppb		
15						▽ BOB @ 32'; pushed w/ water sampler from 16'-32'	SM				
							ML				
							GW				

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Harding Lawson Associates

TEST BORING LOG

Project: NYSDEC - Region 8 Dry Cleaners	Boring/Well No.: GW-10	Project No.: 361205.2036	
Client: NYSDEC	Site: Looms Cleaners	Sheet No.: 1 of 1	
Logged By: Brandon Shaw	Ground Elevation	Start Date: 02/15/05	Finish Date: 02/15/05
Drilling Contractor: ADT	Driller's Name: Roger Burg	Rig Type: GeoProbe ~~5400~~ 6610	
Drilling Method: Direct Push	Protection Level: D	P.I.D. (eV)	Casing Size: 1 1/2" Auger Size: 1 1/2"
Soil Drilled: 16'	Rock Drilled	Total Depth: 25'	Depth to Groundwater/Date: Piez ☐ Well ☑ Boring ☐

Depth (Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Sample Description	USCS Group Symbol	Notes on Drilling	Monitoring (ppm) PI Meter Field Scan	Monitoring (ppm) PI Meter Head Space	Lab Tests
1						0-2 Olive Sand-clay-gravel wet, WG, V. angular to rounded, NP, stiff.	Fill		41.0		
2	S1 1.6/4.0					2.0-2.1 white ash layer					
3						2.1-2.2 Black soft layer, rusty nail 0.05' long, shiny, glass stray	SM				
4						2.2-3 olive brown silty fine sand PG, moist, NP, m Dense.	CL GW	Fill			
5	S2					3-3.4 Lt Brown/olive Silty clay PG, moist, NP, trace fine gravel					
6	2.1/4.0					3.4-4 Lt orange/olive Sandy gravel w little silt WG, NP/SP, loose	Fill		41.0		
7						4-4.8 Same as 3.4-4					
8						4.8-5.2 Brick pieces, rock dry	GP				
9	S3 3.8/4.0					5.2-8 Lt Brown Sandy gravel w/ little fine silt, damp/dry, WG, loose/m Dense, NP					
10						8-12 Silty-Sand-gravel dry, m Dense, NP, WG.	GM		41.0		
11						12-13.1 Same as 8-12			100ppb		
12	S4					13.1-14.1 Lt Brown clay sand w/ gravel, moist/wet, WG, SP, Dense			800ppb		
13						14.1-15 Lt Brown/Lt Olive clay sand-gravel, WG, dry, m Dense NP			1000ppb		
14	2.1/4.0					15-16 Brown Sandy gravel w little fines, wet, NP loose			50ppb		
15									41.0		
16							SC/GC				
							GC				
							GW		100ppb		

▽ Bob @ 25'; pushed 2 1/2" casing to 25'; refusal @ 25'

Test Boring Log

Project: REGION 8 D.C. - GROUP II	Boring/Well No.: SB/GW-001	Project No.: 3612062036/0602	
Client: NYSDEC	Site: Loohn-Additional	Sheet No.: 1 of 1	
Logged By: B. Smart	Ground Elevation	Start Date: 10/31/2006	Finish Date: 10/31/2006
Drilling Contractor: Geologic, NY	Driller's Name: Joe Mansel	Rig Type: 66 DT.	
Drilling Method: Direct Push	Protection Level: D	P.I.D. (eV)	Casing Size: 1 1/2 / Auger Size: 2"
Soil Drilled: 12'	Rock Drilled	Total Depth: 12'	Depth to Groundwater/Date: Piez ☐ Well ☐ Boring ☒

Depth (Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Sample Description	USCS Group Symbol	Notes on Drilling	Monitoring (ppm): PI Meter Field Scan	Monitoring (ppm): PI Meter Head Space	Lab Tests
1	S1 2.2/4.0					0-0.5 Topsoil & roots. 0.5-1.5 Brown fine sandy silt w/ trace fine gravel, slag, moist	Fill		60.9		Composite 0.5 to 3.5 LCG5001400401XX @1400 MS/MSD also have
2						1.5-3.2 orange brn/olive brown silty clay w/ sand, wet mp/HP;	CL GW				
3						3.2-4' orange brown sandy clay saturated, HP, trace coarse sand	CL				
4											
5	S2 3.1/4.0					Olive Brown silty sand & gravel, moist to dry. Dense. NP	GC GW		20.9		
6											
7											
8											
9	S3 1.6/4.0					orange brown gravelly sandy clay, saturated (dry @ ~11.7), mStiff, NP	GC CL		40.1		
10											
11											
12											
13											

FIGURE 4-6
TYPICAL TEST BORING LOG
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

Test Boring Log

Project	Boring/Well No.	Project No.
REGION 8 D.C. - GROUP II	SB/GW-002	52036 36120621594/0.2

Client	Site	Sheet No.
NYSDEC	WOHNS	1 of 1

Logged By	Ground Elevation	Start Date	Finish Date
B. Snow		10/31/2006	10/31/2006

Drilling Contractor	Driller's Name	Rig Type
Geologic, NY	Joe mensel	66 DT.

Drilling Method	Protection Level	P.I.D. (eV)	Casing Size	Auger Size
Direct Push	D	—	1 1/2	2"

Soil Drilled	Rock Drilled	Total Depth	Depth to Groundwater/Date	Piez / Well / Boring
12'	—	12'	—	☐ Piez ☐ Well ☑ Boring

Depth (Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Sample Description	USCS Group Symbol	Notes on Drilling	Monitoring (ppm) PI Meter Field Scan	PI Meter Head Space		Lab Tests
0–4 (S1)	2.1/4.0					0-1.4 DK olive Brn silty sand & gravel, roots, moist, NP.	Fill		<0.1			Composite Soil 1.4-4 LCGSO200401XX - 1 VOA @1410
						1.4-4 orange Brn silty sand moist, M Dense	GM					
4–8 (S2)	1.9/4.0					4-4.5 reddish orange sandy clay w/ gravel, wet NP.	GC		<0.1			
						4.5-7 olive Brn silty sand & gravel, dry NP, M Dense	GC GM					
						7-7.2 yellowish tan dry clay lense	CL					
						7.2-8 same as 4.5-7	GC GM					
8–12 (S3)	3.9/4.0					olive to Brn to Lt Brn silty sand & gravel, dry clay lamination @ ~10.2, moist from 8 to 8.8, clean sand & gravel @ 10.5 → damp	GM GC		<0.1			
13												

FIGURE 4-6
TYPICAL TEST BORING LOG
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

ABB Environmental Services, Inc.

9404014D(z) L33

Test Boring Log

Project: REGION 8 D.C. - GROUP II	Boring/Well No.: SB/GW-003	Project No.: 3612062159/08.2 (52036)
Client: NYSDEC	Site: Loomis Additional	Sheet No. 1 of 2
Logged By: B. Snow	Ground Elevation:	Start Date: 10/31/2006
		Finish Date: 10/31/2006
Drilling Contractor: Geologic, NY	Driller's Name: Joe Mansel	Rig Type: 66 DT.
Drilling Method: Direct Push	Protection Level: D	P.I.D. (eV):
Casing Size: 1 1/2	Auger Size: 2"	
Soil Drilled: 16 ft	Rock Drilled:	Total Depth: 16 ft
Depth to Groundwater/Date:	Piez ☐ Well ☐ Boring ☑	

Depth (Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Sample Description	USCS Group Symbol	Notes on Drilling	PI Meter Field Scan (ppm)	PI Meter Head Space (ppm)		Lab Tests
0–4	S1 2.1/4.0					0-0.7 Brown silty loams fine gravel, wet, MD, roots 0.7-3 orange/Brown silty sandy clay, MP, moist/wet, m stiff 3-4 Lt Brown sandy gravel w/ some silt, trace clay, moist, med/SP,	Fill SM/SC GM/GC		<0.1			Composite 0.7 to 3 LL6SB003003-01XX @1230
4–8	S2 3.0/4.0					silty sand & gravel, moist to dry, NP; v. angular to subrounded, sandstone cobbles @ ~7 & 5.5'			<0.1			
8–12	S3 3.2/4.0					olive & Lt Brown to white silty sand & gravel, dry, NP, Dense	GM/GC		<0.1			
12–16	S4 3.1/4.0					12 to 14 Lt Brown/Lt olive silty fine sand & fine gravel, dry, m Dense 14/16 DK olive Brown silty coarse sand & gravel, wet, V Dense, SP	SM SC(S) GM		<0.1			

FIGURE 4-6
TYPICAL TEST BORING LOG
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

ABB Environmental Services, Inc.

9404014D(z) L33

Test Boring Log

Project: Region 8 D.C. - Group II	Boring/Well No.: SB/GW-003	Project No.: 52036/3612062059/0...
Client: NYSDEC	Site: Loohns	Sheet No. 2 of 2
Logged By: B. Shaw	Ground Elevation:	Start Date: 10/31/2006 — Finish Date: 10/31/2006
Drilling Contractor: Geologic	Driller's Name: Joe Mursel	Rig Type: 66 DT
Drilling Method: Direct Push	Protection Level: D — P.I.D. (eV): —	Casing Size: 1 1/2" — Auger Size: 2"
Soil Drilled: 20' — Rock Drilled: —	Total Depth: 22'	Depth to Groundwater/Date — Piez ☐ Well ☐ Boring ☑

Depth (Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Sample Description	USCS Group Symbol	Notes on Drilling	Monitoring (ppm) PI Meter Field Scan	PI Meter Head Space		Lab Tests
14						on previous page	/					
15												
S4 16						~~Sand~~ a 16 to ~18.5			20.1			
17						silty sand & gravel, dry	GM					
S5 18	3.6/4.0					18.5 - 20 Sand & fine gravel w/ some silty saturated	GC					
19												
20												
21												
22												
23												
24												
25												
26												
27												

FIGURE 4-6
TYPICAL TEST BORING LOG
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

ABB Environmental Services, Inc.

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: REGIONS DRY CLEANERS - GROUP II
Project Number: ~~3612062059/0.2~~ 3612052038/0.6.2
Sample Location ID: LGGW0030200 | XX
Site: Additional Leonrs - Corning
Date: 10/31/2006
Time: Start: 1200 End: 1235
Signature of Sampler:

Water Level/Well Data

Well Depth ______ Ft. ___ Measured ___ Historical ___ Top of Well ___ Top of Protective Casing ___ ______

Well Riser Stick-up ______ Ft. (from ground)

Protective ______ Ft. Casing/Well Difference

Protective ______ Ft. Casing

Depth to Water ______ Ft.

Well Material: ___ PVC ___ SS ___

Well Locked?: ___ Yes ___ No

Well Dia. ___ 2 inch ___ 4 inch ___ 6 inch ___ ______

Water Level Equip. Used: ___ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer ___ ______

Height of Water Column ______ Ft. X ___ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ ___ Gal/Ft. (__in.) = [______ Gal/Vol. ______ Total Gal Purged]

Well Integrity:	Yes	No
Prot. Casing Secure	___	___
Concrete Collar Intact	___	___
Other ______	___	___

Geoprobe

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For)

Purging	Sampling		Equipment ID
✓	✓	Peristaltic Pump	
		Submersible Pump	
		Bailer	
✓	✓	PVC/Silicon Tubing	
		Teflon/Silicon Tubing	
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	
✓	✓	SP-15 mill slot	

Decontamination Fluids Used:

(✓ All That Apply at Location)

- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None

Field Analysis Data

PID: Ambient Air ___ ppm Well Mouth ___ ppm

Purge Data Collected: ___ In-line ✓ In Container

Sample Observations: ___ Turbid ✓ Clear ✓ Cloudy ___ Colored ___ Odor

Purge Data	@ ~2 Gal.	@ ___ Gal.	@ ___ Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	18				
pH, units	8.1				
Specific Conductivity (µmhos/cm)	0.422				
Turbidity (NTUS)	Cloudy				
Oxidation - Reduction, +/- mv					
Dissolved Oxygen, ppm	12.6				

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle ILot Nos.
✓ VOCs	✓	4°C	3 x40 ml	
SVOCs		4°C	2x1 liter AG	
Metals		HNO_3,4°C	1x1 liter P	
Cyanide		NaOH,4°C	1x500mLP	@ 1230
Nitrate/Sulfate		H_2SO_4,4°C	1x1 liter P	
Nitrate/Phosphate		H_2SO_4,4°C	1x1 liter P	
Pest/PCB		4°C	3x1 liter AG	
TPH		H_2SO_4,4°C	2x1 liter AG	
TOC		H_2SO_4,4°C	1x1 liter P	

Notes: Screen: 19 to 21

Purge water: cloudy → clear

FIGURE 4-1
GROUNDWATER SAMPLE DATA RECORD
NYSDEC QUALITY ASSURANCE PROGRAM PLAN
ABB Environmental Services

Test Boring Log

Project REGION 8 D.C. - GROUP II	Boring/Well No. SB/GW-004	Project No. 52036 361206 2159/06.2
Client NYSDEC	Site LOOHNS	Sheet No. 1 of 1
Logged By B. Snow	Ground Elevation	Start Date 10/31/2006 — Finish Date 10/31/2006
Drilling Contractor Geologic, NY	Driller's Name Joe Mensel	Rig Type 66 DT.
Drilling Method Direct Push	Protection Level D — P.I.D. (eV)	Casing Size 1 1/2 — Auger Size 2"
Soil Drilled 12' — Rock Drilled	Total Depth 12'	Depth to Groundwater/Date — Piez ☐ Well ☐ Boring ☑

Depth (Feet)	Sample No. & Penetration/Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Sample Description	USCS Group Symbol	Notes on Drilling	Monitoring (ppm) PI Meter Field Scan	PI Meter Head Space		Lab Tests
0–4 (S1)	0.8/4.0					0-1 DK Brwn silty loam; roots 1-? olive Sandy clay v. soft, moist/wet, HP metal slag @ ~ the bottom of sleeve	Fill		<0.1			
4–8 (S2)	3.1/4.0					4-4.2 Black sand, dry 4.2-5 white concrete 5-6.5 olive brwn silty sand dry, NP, m Dense 6.5 to 8 Lt grey brwn silty fine sand & gravel, dry	Fill SM SM GM		<0.1			Composite 5 to 6.5 LCG5004007DIXX &XD @ 1430
8–12 (S3)	3.9/4.0					8-8.5 Lt Brwn clean silty fine sand, dry 8.5-9 DK Brwn silty sand; v strong odor 9-12 Lt Brwn silty sand & gravel dry, m Dense/Dense	SM SM SM GM		<0.1			Composite Soil LCG5004009DIXX @ 1435

FIGURE 4-6
TYPICAL TEST BORING LOG
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

ABB Environmental Services, Inc.

9404014D(z) L33

Test Boring Log

Project: REGION 8 D.C. - GROUP II		Boring/Well No.: SB/GW-005	Project No.: ~~3612062159/06.~~ 52036
Client: NYSDEC	Site: Looknus Additional		Sheet No. 1 of ~~3~~ 2
Logged By: B. Snow	Ground Elevation:	Start Date: 10/31/2006	Finish Date: 10/31/2006
Drilling Contractor: Geologic, NY	Driller's Name: ~~Tim Cortner~~ Liam Cummings		Rig Type: 66 DT.
Drilling Method: Direct Push	Protection Level: D	P.I.D. (eV): —	Casing Size: 1 1/2 / Auger Size: 2"
Soil Drilled: 20 ~~34~~	Rock Drilled: —	Total Depth: 20 ~~34~~	Depth to Groundwater/Date: — Piez ☐ Well ☐ Boring ☑

Depth (Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Sample Description	USCS Group Symbol	Notes on Drilling	PI Meter Field Scan (ppm)	PI Meter Head Space (ppm)		Lab Tests
0–4 (S1)	3.1/4.0					0-1 DK Brn silty loam, roots organic, SP, moist 1-1.5 Brown olive silty fine sand & angular gravel, dry, SP, 1.5-4 Lt Brownish orange silty fine sand w/ little fine gravel dry, m Dense,	Fill SM GM SM GM		<0.1			
4–8 (S2)	2.7/4.0					Lt Brn fine sandy silt w/ gravel, dry, NP, m Dense,	SM GM		<0.1			
8–12 (S3)	3.2/4.0					8-10.5 Same as 4 to 8' 10.5 to 10.7 Brown silty sand w/ little clay, moist/damp, NP, 10.7-12 Lt gray/Brown m coarse sandy gravel, w/ some silt dry loose/m Dense, NP	SM SC GM		<0.1			
12–14 (S4)	NA/4.0					Sleeve got stuck inside the core, no recovery			N/A			

FIGURE 4-6
TYPICAL TEST BORING LOG
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

ABB Environmental Services, Inc.

9404014D(z) L33

Test Boring Log

Project: Region 8 D.C. - Group II		Boring/Well No.: SB/GW-005	Project No. 520361/05.2 3612062059/[illegible]
Client: NYSDEC	Site: Loohns Additional		Sheet No. 2 of 2
Logged By: B. Shaw	Ground Elevation:	Start Date: 10/31/2006	Finish Date: 10/31/2006
Drilling Contractor: Geologic	Driller's Name: ~~Liam Cummings~~ Tim Cartner		Rig Type: 66 DT
Drilling Method: Direct Push	Protection Level: D	P.I.D. (eV): —	Casing Size: 1 1/2" / Auger Size: 2"
Soil Drilled: 20'	Rock Drilled: —	Total Depth: 26'	Depth to Groundwater/Date: Piez ☐ Well ☐ Boring ☑

Depth (Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Sample Description	USCS Group Symbol	Notes on Drilling	Monitoring (ppm) PI Meter Field Scan	PI Meter Head Space		Lab Tests
14–16 (cont from 1 of 2, S4)	N/A / 4.0					cont from 1 of 2			N/A			
16–20 (S5)	N/A / 4.0					Sleeve is plugged ~4.0 recovery, had to push the			N/A			
20–27												

FIGURE 4-6
TYPICAL TEST BORING LOG
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

ABB Environmental Services, Inc.

9404014D(z) L33

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: REGION 8 Dry Cleaners - Group II
Site: Additional Leads - Corning
Project Number: ~~3612062059/6.2~~ 3612052036/9.6.2
Date: 10/31/2006
Time: Start: 1033 End: 1200
Sample Location ID: LCGW0509110118X
Signature of Sampler: [signature]

Water Level/Well Data

Well Depth ____ Ft. ___ Measured ___ Historical ___ Top of Well ___ Top of Protective Casing
Well Riser Stick-up (from ground) ____ Ft.
Protective Casing/Well Difference ____ Ft.
Protective Casing ____ Ft.

Depth to Water ____ Ft.
Well Material: ___ PVC ___ SS
Well Locked?: ___ Yes ___ No
Well Dia. ___ 2 inch ___ 4 inch ___ 6 inch
Water Level Equip. Used: ___ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

Height of Water Column ____ Ft. X ___ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__ in.) = ____ Gal/Vol. ____ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure		
Concrete Collar Intact		
Other		

GEOPROBE

Equipment Documentation

Purging/Sampling Equipment Used:

Purging (✓ If Used For)	Sampling	Equipment	Equipment ID
✓	✓	Peristaltic Pump	
		Submersible Pump	
		Bailer	
✓	✓	PVC/Silicon Tubing	
		Teflon/Silicon Tubing	
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	
✓	✓	SP 15	Mill Slot

Decontamination Fluids Used:

(✓ All That Apply at Location)
- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None

Field Analysis Data

PID: Ambient Air — ppm Well Mouth — ppm
Purge Data Collected: ___ In-line ✓ In Container
Sample Observations: ✓ Turbid ___ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ ~2 Gal.	@ ___ Gal.	@ ___ Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	16				
pH, units	Cons/ 8.1				
Specific Conductivity (µmhos/cm)	0.701				
Turbidity (NTUS)	>1000				
Oxidation - Reduction, +/- mv	—				
Dissolved Oxygen, ppm	13.9				

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle Lot Nos.
✓ VOCs	✓	4°C	3 2x40 ml	@ 1145
SVOCs		4°C	2x1 liter AG	
Metals		HNO_3,4°C	1x1 liter P	
Cyanide		NaOH,4°C	1x500mLP	
Nitrate/Sulfate		H_2SO_4,4°C	1x1 liter P	
Nitrate/Phosphate		H_2SO_4,4°C	1x1 liter P	
Pest/PCB		4°C	3x1 liter AG	
TPH		H_2SO_4,4°C	2x1 liter AG	
TOC		H_2SO_4,4°C	1x1 liter P	

Notes: Screen: 15' 20 to 22'
Purge water: Lt Tan

FIGURE 4-1
GROUNDWATER SAMPLE DATA RECORD
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

Test Boring Log

Project: REGION 8 D.C. - GROUP II	Boring/Well No.: SB/GW-006	Project No.: 52036 361206205106.2	
Client: NYSDEC	Site: LOCKNS	Sheet No.: 1 of 1	
Logged By: B. Shaw	Ground Elevation:	Start Date: 10/31/2006	Finish Date: 10/31/2006
Drilling Contractor: Geologic, NY	Driller's Name: Joe Mineo	Rig Type: 66 DT.	
Drilling Method: Direct Push	Protection Level: D	P.I.D. (eV):	Casing Size: 1 1/2	Auger Size: 2"
Soil Drilled: 12'	Rock Drilled:	Total Depth: 12'	Depth to Groundwater/Date:	Piez ☐ Well ☐ Boring ☑

Depth (Feet)	Sample No. & Penetration/ Recovery (Feet)	Sample Type	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Graphic Log	Sample Description	USCS Group Symbol	Notes on Drilling	Monitoring (ppm): PI Meter Field Scan	PI Meter Head Space	Lab Tests
1	S1					DK Brown Silty loam w glass & slag, V. Soft	Fill		6.1		
2	0.6/4.0										
3											
4						Brick (red) to ~4.8			6.1		
5	S2					5.5 to 8 Lt Brown, Silty fine Sand & fine gravel, Dry, V. Dense					
6	3.0/4.0						Fill				
7											
8											
9						Black slag & roots @ 9'			6.1		
10	S3					9 to 12 Same as 5.5 to 8					
11	3.9/4.0						Sm Gm				
12											
13											

* no soil sample taken here

FIGURE 4-6
TYPICAL TEST BORING LOG
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: REGIONS DRY CLEANERS - GROUP II
Project Number: ~~3612062059 / 0.28~~ 3612052036 / 0002
Sample Location ID: L C G W 0 0 7 0 2 1 0 1 X X
Site: Loehn's
Date: 10/31/06
Time: Start: 8:40 End: 8:48
Signature of Sampler: LMS

Water Level/Well Data

Well Depth ____ Ft. ___ Measured ___ Historical ___ Top of Well ___ Top of Protective Casing
Well Riser Stick-up (from ground) ____ Ft.
Protective Casing/Well Difference ____ Ft.
Protective Casing ____ Ft.

Depth to Water ____ Ft.
Well Material: ___ PVC ___ SS
Well Locked?: ___ Yes ___ No
Well Dia. ___ 2 inch ___ 4 inch ___ 6 inch
Water Level Equip. Used: ___ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

GEOPROBE

Height of Water Column ____ Ft. X ___ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__ in.) = [____ Gal/Vol. ____ Total Gal Purged]

Well Integrity:	Yes	No
Prot. Casing Secure		
Concrete Collar Intact		
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For)

Purging	Sampling		Equipment ID
✓	✓	Peristaltic Pump	
		Submersible Pump	
		Bailer	
✓	✓	PVC/Silicon Tubing	
		Teflon/Silicon Tubing	
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	
✓	✓	SP-15	

Decontamination Fluids Used:

(✓ All That Apply at Location)
___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
✓ Deionized Water
✓ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
___ Potable Water
___ None

Field Analysis Data

PID: Ambient Air — ppm Well Mouth — ppm
Purge Data Collected ___ In-line ✓ In Container
Sample Observations: ___ Turbid ___ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ — Gal.	@ ___ Gal.	@ ___ Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	13.3°C				
pH, units	7.8				
Specific Conductivity (µmhos/cm)	0.651				
Turbidity (NTUS)	>999				
Oxidation - Reduction, +/- mv					
Dissolved Oxygen, ppm	14.8 mg/L				

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle Lot Nos.
✓ VOCs	✓	4°C	3 x40 ml	
SVOCs		4°C	2x1 liter AG	
Metals		HNO_3, 4°C	1x1 liter P	
Cyanide		NaOH, 4°C	1x500mLP	N/A
Nitrate/Sulfate		H_2SO_4, 4°C	1x1 liter P	
Nitrate/Phosphate		H_2SO_4, 4°C	1x1 liter P	
Pest/PCB		4°C	3x1 liter AG	
TPH		H_2SO_4, 4°C	2x1 liter AG	
TOC		H_2SO_4, 4°C	1x1 liter P	

Notes: SCREEN: 19-23
Purge water: N/A

FIGURE 4-1
GROUNDWATER SAMPLE DATA RECORD
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: REGION 8 Dry Cleaners - Group II
Project Number: ~~36120620597/0.2~~ 3612052036/062
Sample Location ID: L C G W 0 0 7 0 2 5 0 1 X X

Site: Loehn's
Date: 10/31/06
Time: Start: 8:28 End: 8:35
Signature of Sampler: [signature]

Water Level/Well Data

Well Depth ____ Ft. ___ Measured ___ Historical ___ Top of Well ___ Top of Protective Casing

Well Riser Stick-up ____ Ft. (from ground)

Protective ____ Ft. Casing/Well Difference

Protective ____ Ft. Casing

Depth to Water ____ Ft.

Well Material: ___ PVC ___ SS

Well Locked?: ___ Yes ___ No

Well Dia. ___ 2 inch ___ 4 inch ___ 6 inch

Water Level Equip. Used: ___ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

Geoprobe

Height of Water Column ____ Ft. X ___ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__ in.) = ____ Gal/Vol. ____ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure		
Concrete Collar Intact		
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For)

Purging	Sampling		Equipment ID
✓	✓	Peristaltic Pump	
		Submersible Pump	
		Bailer	
✓	✓	PVC/Silicon Tubing	
		Teflon/Silicon Tubing	
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	
✓	✓	Mill Slot	

Decontamination Fluids Used:

(✓ All That Apply at Location)

- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None

Field Analysis Data

PID: Ambient Air 0 ppm Well Mouth 0 ppm

Purge Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ___ Colored ___ Clear ___ Odor ___ Cloudy

Purge Data	@ ___ Gal.	@ ___ Gal.	@ ___ Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	13.7°C				
pH, units	7.7				
Specific Conductivity (µmhos/cm)	0.630				
Turbidity (NTUS)	>999				
Oxidation - Reduction, +/- mv					
Dissolved Oxygen, ppm	10.6 mg/l				

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle Lot Nos.
✓ VOCs	✓	4°C	3 x40 ml	@ N/A
SVOCs		4°C	2x1 liter AG	
Metals		HNO_3,4°C	1x1 liter P	
Cyanide		NaOH,4°C	1x500mLP	
Nitrate/Sulfate		H_2SO_4,4°C	1x1 liter P	
Nitrate/Phosphate		H_2SO_4,4°C	1x1 liter P	
Pest/PCB		4°C	3x1 liter AG	
TPH		H_2SO_4,4°C	2x1 liter AG	
TOC		H_2SO_4,4°C	1x1 liter P	

Notes: Screen: 24-26

Purge water: N/A

FIGURE 4-1
GROUNDWATER SAMPLE DATA RECORD
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: REGIONS DRY CLEANERS - GROUP II
Project Number: ~~361206 2059/0.2~~ 36120520366/06.2
Sample Location ID: LCGW00801901XX

Site: Loehn's
Date: 10/30/06
Time: Start: 1650 End: 1700
Signature of Sampler: [signature]

Water Level/Well Data

Well Depth ______ Ft. ___ Measured ___ Historical ___ Top of Well ___ Top of Protective Casing ___ ______

Well Riser Stick-up ______ Ft. (from ground)

Protective ______ Ft. Casing/Well Difference

Protective ______ Ft. Casing

Depth to Water ______ Ft.

Well Material: ___ PVC ___ SS ______

Well Locked?: ___ Yes ___ No

Well Dia. ___ 2 inch ___ 4 inch ___ 6 inch ___ ______

Water Level Equip. Used: ___ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer ___ ______

Height of Water Column ______ Ft. X ___.16 Gal/Ft. (2 in.) ___.65 Gal/Ft. (4 in.) ___1.5 Gal/Ft. (6 in.) ___ ___ Gal/Ft. (__in.) = [______ Gal/Vol. ______ Total Gal Purged]

GEOPROBE

Well Integrity:	Yes	No
Prot. Casing Secure	___	___
Concrete Collar Intact	___	___
Other ______	___	___

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For)

Purging	Sampling		Equipment ID
✓	✓	Peristaltic Pump	
		Submersible Pump	
		Bailer	
✓	✓	PVC/Silicon Tubing	
		Teflon/Silicon Tubing	
		Airlift	
		Hand Pump	
		In-line Filter	
		Press/Vac Filter	
✓	✓	Millslot	

Decontamination Fluids Used:

(✓ All That Apply at Location)
- ___ Methanol (100%)
- ___ 25% Methanol/75% ASTM Type II water
- ✓ Deionized Water
- ✓ Liquinox Solution
- ___ Hexane
- ___ HNO_3/D.I. Water Solution
- ___ Potable Water
- ___ None

Field Analysis Data

PID: Ambient Air / ppm Well Mouth / ppm

Purge Data Collected ___ In-line ✓ In Container

Sample Observations: ___ Turbid ___ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ N/A Gal.	@ ___ Gal.	@ ___ Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	15.6°C				
pH, units	7.7				
Specific Conductivity (μmhos/cm)	0.722				
Turbidity (NTUS)	540				
Oxidation - Reduction, +/- mv					
Dissolved Oxygen, ppm	7.34mg/l				

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle Lot Nos.
✓ VOCs	✓	4°C	3 ~~2~~x40 ml	
___ SVOCs		4°C	2x1 liter AG	
___ Metals		HNO_3,4°C	1x1 liter P	
___ Cyanide		NaOH,4°C	1x500mLP	N/A
___ Nitrate/Sulfate		H_2SO_4,4°C	1x1 liter P	
___ Nitrate/Phosphate		H_2SO_4,4°C	1x1 liter P	
___ Pest/PCB		4°C	3x1 liter AG	
___ TPH		H_2SO_4,4°C	2x1 liter AG	
___ TOC		H_2SO_4,4°C	1x1 liter P	

Notes: Screen: 18-20'
Purge water: N/A

FIGURE 4-1
GROUNDWATER SAMPLE DATA RECORD
NYSDEC QUALITY ASSURANCE PROGRAM PLAN
ABB Environmental Services

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: REGIONS Dry CLEANERS - GROUP II
Project Number: 361206205911 0.25
361205203656.2
Sample Location ID: LCGW008025011XX

Site: Loehn's Cleaners
Date: 10/30/06
Time: Start: 16:24 End: 16:44
Signature of Sampler: [signature]

Water Level/Well Data

Well Depth _____ Ft. ___ Measured ___ Historical
___ Top of Well ___ Top of Protective Casing
Well Riser Stick-up _____ Ft. (from ground)
Protective _____ Ft. Casing/Well Difference
Protective _____ Ft. Casing

Depth to Water _____ Ft.
Well Material: ___ PVC ___ SS _____
Well Locked?: ___ Yes ___ No
Well Dia. ___ 2 inch ___ 4 inch ___ 6 inch _____
Water Level Equip. Used: ___ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer _____

Height of Water Column _____ Ft. X ___ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__ in.) = _____ Gal/Vol. _____ Total Gal Purged

Well Integrity:

	Yes	No
Prot. Casing Secure	___	___
Concrete Collar Intact	___	___
Other _____	___	___

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For) Purging	Sampling		Equipment ID
✓	✓	Peristaltic Pump	
—	—	Submersible Pump	
—	—	Bailer	
✓	✓	PVC/Silicon Tubing	
—	—	Teflon/Silicon Tubing	
—	—	Airlift	
—	—	Hand Pump	
—	—	In-line Filter	
—	—	Press/Vac Filter	
✓	✓	Mill Slot	

Decontamination Fluids Used:

(✓ All That Apply at Location)
___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
✓ Deionized Water
✓ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
___ Potable Water
___ None

Field Analysis Data

PID: Ambient Air 0 ppm Well Mouth 0 ppm
Purge Data Collected ✓ In-line ✓ In Container
Sample Observations: ___ Turbid ___ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data @ N/A Gal.	@ _____ Gal.	@ _____ Gal.	@ _____ Gal.	@ _____ Gal.	@ _____ Gal.
Temperature, Deg. C: 17.3°C					
pH, units: 7.9					
Specific Conductivity (µmhos/cm): 0.711					
Turbidity (NTUS): >999					
Oxidation - Reduction, +/- mv:					
Dissolved Oxygen, ppm: 4.95 mg/L					

Sample Collection Requirements

(✓ If Required at this Location)

Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle ILot Nos.
✓ VOCs	✓	4°C	3 x 40 ml	
___ SVOCs	___	4°C	2x1 liter AG	
___ Metals	___	HNO_3, 4°C	1x1 liter P	
___ Cyanide	___	NaOH, 4°C	1x500mLP	
___ Nitrate/Sulfate	___	H_2SO_4, 4°C	1x1 liter P	
___ Nitrate/Phosphate	___	H_2SO_4, 4°C	1x1 liter P	
___ Pest/PCB	___	4°C	3x1 liter AG	
___ TPH	___	H_2SO_4, 4°C	2x1 liter AG	
___ TOC	___	H_2SO_4, 4°C	1x1 liter P	

Notes: SCREEN: 24-26'
Purge water: N/A

FIGURE 4-1
GROUNDWATER SAMPLE DATA RECORD
NYSDEC QUALITY ASSURANCE PROGRAM PLAN
ABB Environmental Services

GROUNDWATER SAMPLE FIELD DATA RECORD

Project: REGION 8 Dry CLEANERS - GROUP II
Project Number: 36120620590.2 / 3612052036 / 062
Sample Location ID: L C G W 0 1 2 0 2 0 0 1 X X

Site: Loohn's
Date: 10/30/06
Time: Start: 1500 End: 1520
Signature of Sampler: LMS

Water Level/Well Data

Well Depth ______ Ft. ___ Measured ___ Historical
___ Top of Well ___ Top of Protective Casing
Well Riser Stick-up ______ Ft. (from ground)
Protective ______ Ft. Casing/Well Difference
Protective ______ Ft. Casing

Depth to Water ______ Ft.
Well Material: ___ PVC ___ SS
Well Locked?: ___ Yes ___ No
Well Dia. ___ 2 inch ___ 4 inch ___ 6 inch
Water Level Equip. Used: ___ Elect. Cond. Probe ___ Float Activated ___ Press. Transducer

GEOPROBE

Height of Water Column ______ Ft. X ___ .16 Gal/Ft. (2 in.) ___ .65 Gal/Ft. (4 in.) ___ 1.5 Gal/Ft. (6 in.) ___ Gal/Ft. (__ in.) = ______ Gal/Vol. ______ Total Gal Purged

Well Integrity:	Yes	No
Prot. Casing Secure		
Concrete Collar Intact		
Other		

Equipment Documentation

Purging/Sampling Equipment Used:

(✓ If Used For)

Purging	Sampling		Equipment ID
✓	✓	Peristaltic Pump	
		Submersible Pump	
		Bailer	
✓	✓	PVC/Silicon Tubing	
		Teflon/Silicon Tubing	
		Airlift	
		Hand Pump	
		In-line Filter	
	✓	Press/Vac Filter	
✓	✓	millslot	

Decontamination Fluids Used:

(✓ All That Apply at Location)
___ Methanol (100%)
___ 25% Methanol/75% ASTM Type II water
✓ Deionized Water
✓ Liquinox Solution
___ Hexane
___ HNO_3/D.I. Water Solution
___ Potable Water
___ None

Field Analysis Data

PID: Ambient Air — ppm Well Mouth — ppm
Purge Data Collected ___ In-line ✓ In Container
Sample Observations: ✓ Turbid ___ Clear ___ Cloudy ___ Colored ___ Odor

Purge Data	@ N/A Gal.	@ ___ Gal.	@ ___ Gal.	@ ___ Gal.	@ ___ Gal.
Temperature, Deg. C	17.1°C				
pH, units	7.5				
Specific Conductivity (µmhos/cm)	0.749				
Turbidity (NTUS)	>999				
Oxidation - Reduction, +/- mv					
Dissolved Oxygen, ppm	2.41 mg/l				

Sample Collection Requirements (✓ If Required at this Location)

Analytical Parameter	✓ If Sample Collected	Preservation Method	Volume Required	Sample Bottle ILot Nos.
✓ VOCs	✓	4°C	3 x40 ml	LCGW012020 01XX
SVOCs		4°C	2x1 liter AG	MS
Metals		HNO_3,4°C	1x1 liter P	MD
Cyanide		NaOH,4°C	1x500mLP	
Nitrate/Sulfate		H_2SO_4,4°C	1x1 liter P	
Nitrate/Phosphate		H_2SO_4,4°C	1x1 liter P	
Pest/PCB		4°C	3x1 liter AG	
TPH		H_2SO_4,4°C	2x1 liter AG	
TOC		H_2SO_4,4°C	1x1 liter P	

Notes: SCREEN: 19-21'
Purge water: N/A

FIGURE 4-1
GROUNDWATER SAMPLE DATA RECORD
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY ***RE1***

Performed by B Shaw Date Performed 10/31/06

Company Name MACTEC E & C Phone No. (207) 775-5401

1. Occupant

Name: Vacant
Street Address:
Town:
County:
Home Phone No. Office Phone No.

2. Owner or Landlord →
(if different from above)

A. Building Construction Characteristics:

Type (circle appropriate responses): Single Family Multiple Dwelling (Commercial)

Ranch	2-Family
Raised Ranch	Duplex
Split Level	Apartment House_____Units
Colonial	Number of Floors_____
Mobile Home	Other specify plaza

Building Age_____ General Description of Building Construction Material
Bricks, block, plaza, commercial, 1 floor

Is the building insulated? Yes / No How air tight is the building door leaks in front window/vent in back room

B. Basement Construction Characteristics (circle all that apply): *RE1*

1. Full basement, crawlspace, slab on grade, other_____
2. Basement floor: concrete, dirt, other _____
3. Concrete floor: unsealed, painted, covered; with Linoleum
4. Foundation walls: poured concrete, block, laid up stone, other_____
5. The basement is: wet, damp, dry Sump present? y / n water in sump y / n
   If the basement has a moisture problem, how many times a year?_____

   Comment:_____
6. The basement is: finished, unfinished_____
   If finished, how many rooms?_____
   How many used for more than 2 hours/day?_____
7. Identify potential soil vapor entry points (e.g., cracks, utility ports, floor drains, etc.)_____
8. Describe how air tight the basement is:_____

_____

C. HVAC (circle all that apply):

1. The type of heating system(s) used in this residence is/are:

Hot Air Circulation	Heat Pump
Hot Water Radiation	Unvented Kerosene Heater
Steam Radiation	Wood Stove
Electric Baseboard	Other (specify)?

2. The type(s) of fuel(s) used is/are: Natural Gas, Fuel Oil, Electric, Wood, Coal, Solar, Other (specify)_____
3. Is the heating system's power plant located in the basement or other area: No
4. Is there air conditioning? Yes / No Central Air, or Window Units?
   Specify the location_____
5. Are there air distribution ducts present? Yes / No
6. Describe the supply and cold air return duct work in the basement including whether there is a cold air return. How tight are the duct joints?

_____

_____

D. Potential Indoor Sources of Pollution *RE1*

1. Has the house ever had a fire? Yes / (No)
2. Is there an attached garage? Yes / (No)
3. Is a vehicle normally parked in the garage? Yes / No N/A
4. Us there a kerosene heater present? Yes / No N/A
5. Is there a workshop, hobby, or craft area in the residence? Yes / (No)
   If Yes, where and what ___
6. Is there a kitchen exhaust fan? Yes / (No) Where is it vented? ___
7. Is there a clothes dryer? (Yes) / No Where is it located? ___
   Where is it Vented? ___
8. Has a new carpet been installed in the home within the last year? Yes / (No)
   If yes, where? ___
9. Has any painting been completed in the last 6-months. Yes / (No)
   If yes, where? ___
10. Has the house ever been fumigated? If yes describe date, type, and location of treatment. next door
11. Does anyone in the home regularly use or work in a dry cleaning service? Yes/No N/A is → market
    If Yes, explain (i.e. how often) ___
12. Does anyone in the home use solvents at work? Yes / No N/A
    If yes, what solvents, and are clothes washed at home? ___
13. Use attached page to complete inventory of products used and stored in the building. Any product that contains volatile organic compounds, or chemicals similar to the target compounds should be listed, along with PID readings.

E. Water and Sewage (Circle appropriate responses):

Source of Water:

(Public Water) Drilled Well Driven Well Dug Well Other(specify) ___

Do you have a private well for purposes other than drinking? (Yes) / No
If yes, what is it used for Dry Cleaning Services

Water Specifications:

Well Diameter ___ Grouted or Ungrouted ___
Well Depth ___ Type of Storage Tank ___
Depth to Bedrock ___ Size of Storage Tank ___
Feet of Casing ___ Describe type(s) of treatment ___

Water Quality:

Taste and/or odor problems y / (n) If so describe ___
How long has the taste and/or odor been a present ___

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Other (specify) ___
Distance from well to septic system ___ Type of septic tank additive ___

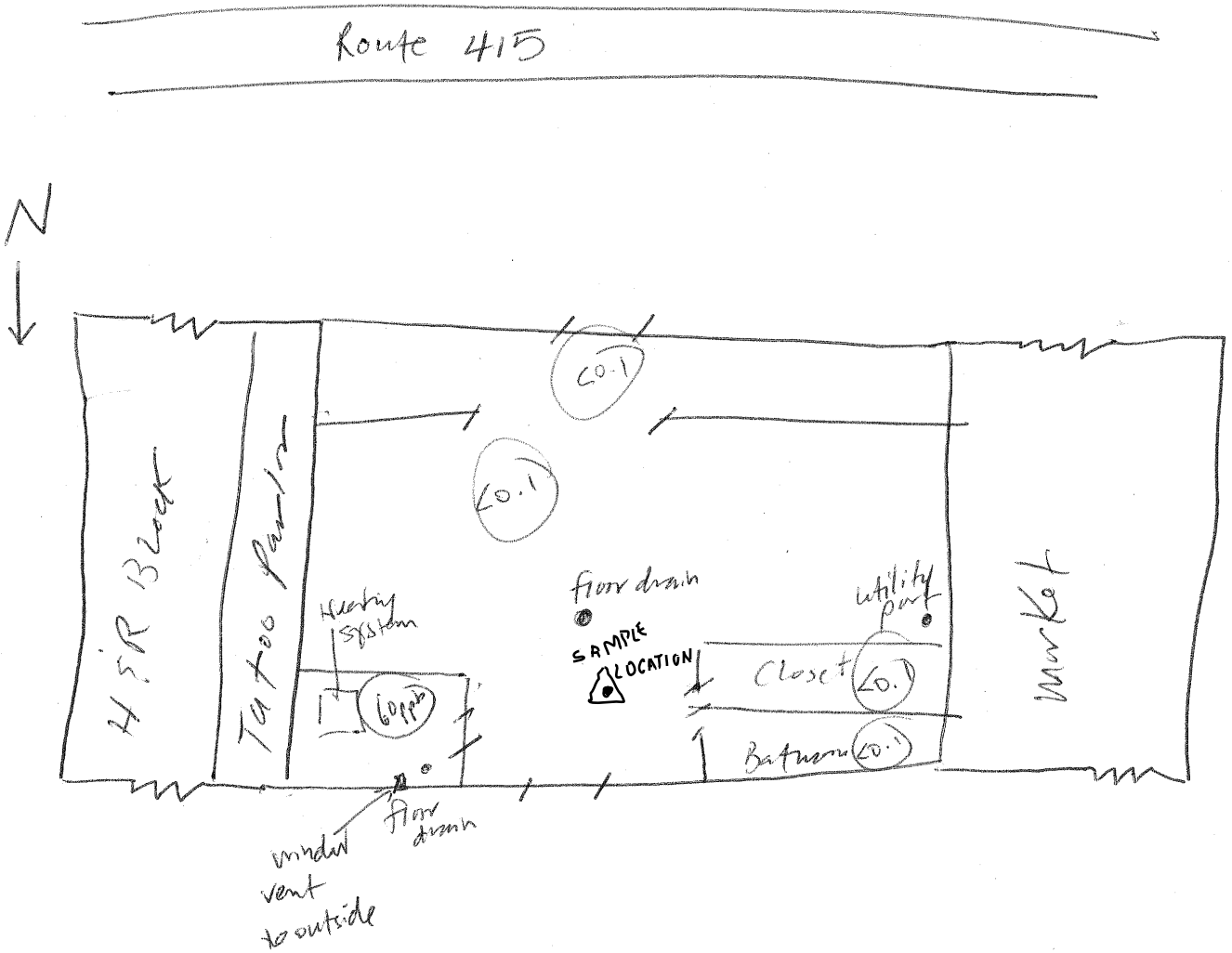
F. Plan View:

Draw a plan view sketch for each floor of the residence and if applicable, indicate air sample locations, possible indoor air pollution sources and PID meter readings.

G. Potential Outdoor Sources of Pollution:

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on the spill location (if known), potential air contamination sources (industry, gas stations, repair shops, etc.), outdoor sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the location of the well and septic system if applicable, and a qualifying statement to help locate the site on a topographic map.



RE1

PRODUCT INVENTORY FORM

Make and Model of Field Instrument Used: ppb Mini Rae

Location	Product Description and Chemical Ingredients	Size ~~(oz.)~~	Condition*	PID Reading	Photo (y/n)
1st floor	Gasoline	1 gal	U	> 10 ppm	N
	Spray Enamel	12 oz	U.	2000 ppb	
	Black Top patch	240 lbs	UO	—	
	Clorox Bleach	48 oz	U	—	
	Rust-Oleum	12 oz	U	220 ppb	
	BEL-RAY waterproof grease	16 oz	U	25 ppb	
	Silicon spray	12 oz	U	100 ppb	
	Wire Dryer	6 oz	U	210 ppb	
	Castrol Wheel grease for bearings	16 oz	U	300 ppb	
	Concrete mix.	160 lbs	UO	—	

* = Describe the general condition of the container as unopened (UO), used (U), or deteriorated (D).

If a Photograph replaces the hand written description of ingredients, both front and back of container must be labeled and it must be in a readable photograph.

APPENDIX D

SITE SURVEY

P:\Projects\nysdec1\projects\Region 8 Dry Cleaning Sites\4.0 Project Deliverables\4.5 Databases\CADD\36409 Loohns-REV.dwg Mon, 12 Mar 2007 - 12:32pm delawrence

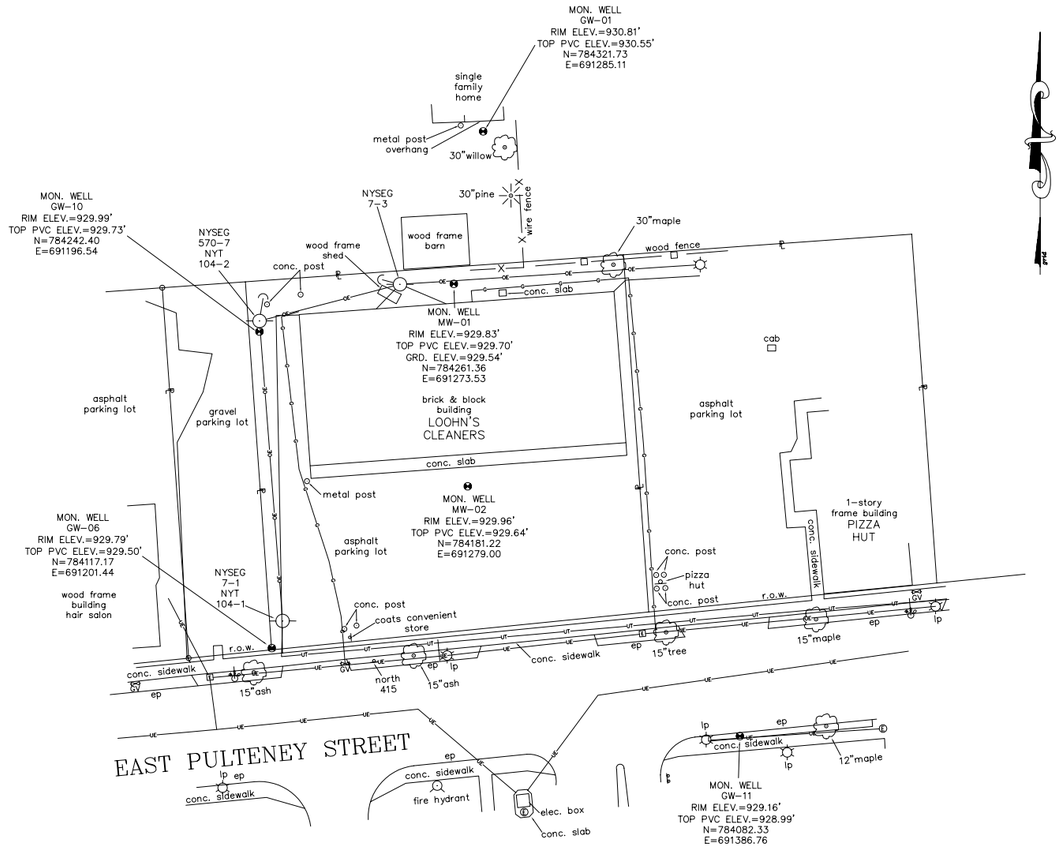
SURVEY NOTES:

1.) HORIZONTAL AND VERTICAL COORDINATES ARE RELATED TO NEW YORK STATE PLANE COORDINATES NAD 83 AND NAVD 88

2.) PROPERTY LINES (℄) AND STREET RIGHT-OF-WAYS (R.O.W.) ARE FROM TAX MAPS AND NOT FIELD VERIFIED.

LEGEND

UTP NYSEG 6302	UTILITY POLE
WV	WATER VALVE
WSO	WATER SEVICE VALVE
GV	GAS VALVE
	SURVEY CONTROL POINT
	MON. WELL GW-10 RIM ELEV.= 854.58' TOP PVC ELEV.= 854.17'N=764634.7515 E=760549.2186
cab	DRAINAGE CATCH BASIN
	GAS SERVICE LINE
	OVERHEAD ELECTRIC LINE
	OVERHEAD TELEPHONE LINE
	UNDERGROUND TELEPHONE LINE
	WATER LINE



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

DATE	REVISIONS	BY

DRAWING ALTERATION

WARNING: It is a violation of the New York State Education Law, Article 145, Section 7209, Special Provision 2, for any person unless he is acting under the direction of a Licensed Professional Engineer or Land Surveyor to alter an item in any way. If an item bearing the seal of an engineer or land surveyor is altered, the altering engineer or land surveyor shall affix to the item his seal and notation "altered by" followed by his signature and date of such alteration, and a specific description of the alteration.

BY: _____

DATE: _____

LU ENGINEERS
Civil and Environmental

JOSEPH C. LU ENGINEERING AN
LAND SURVEYING, P.C.
2230 Penfield Road
Penfield, New York 14526
(585) 377-1450
FAX: (585) 377-1266

PROJECT:

LOOHN'S CLEANERS
EAST PULTENEY STREET
CORNING, NY

CLIENT:

MACTEC ENGINERING, INC
511 CONGRESS STREET
PORTLAND, ME 04101

DRAWING TITLE:

ENVIRONMENTAL MAP

DESIGNED BY:	SCALE: 1"=50'
DRAWN BY: JRH	DATE: 3-10-06
CHECKED BY: CJR	PROJECT No. 36409

SHEET	DRAWING No.
1 OF 1	1

APPENDIX E

DATA USABILITY SUMMARY REPORT

DATA USABILITY SUMMARY REPORT
2006 SAMPLING EVENT
REGION 8 DRY CLEANERS-LOOHN'S CLEANERS
CORNING, NEW YORK

Introduction:

Soil, water, and air samples were collected at the Loohn's Cleaners site in February of 2006 and submitted for off-site laboratory analyses. Samples were analyzed by Chemtech located in Mountainside, NJ. A listing of samples included in this investigation is presented in Table 1. A summary of the analytical results is presented in Appendix E, Tables 1.1-1.4. Samples were analyzed for the following parameters:

.

- Soil: Contract Laboratory Program (CLP) procedures for volatile organic compounds (VOCs)
- Water: CLP procedures for volatile organic compounds (VOCs)
- Air: EPA Method TO-15 for VOCs

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2000).

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2000). Laboratory QC limits were used during the data evaluation unless noted otherwise. The project chemist review included evaluations of sample collection, data package completeness, holding times, QC data (blanks, instrument calibrations, duplicates, surrogate recovery, and spike recovery), data transcription, electronic data reporting, calculations, and data qualification. With the exception of the items discussed below, results are interpreted to be usable as reported by the laboratory. The following qualifiers are used in the final data presentation.

U = target analyte is not detected at the reported detection limit
J = concentration is estimated
UJ = target analyte is not detected at the reported detection limit and is estimated
R = target analyte was rejected

Results are interpreted to be usable as reported by the laboratory unless discussed in the following sections.

Air - Volatile Organic Compounds

Initial Calibration

The initial calibration associated with samples LCGV00100601XX , LCGV00200601XX, and LCGV00300601XX had a percent relative standard deviation greater than the control limit of 30 for 1,1,1-trichloroethane (35.27). The correlation coefficient for 4-methyl-2-pentanone (0.993) was also less than the control limit of 0.995. Results for 1,1,1-trichloroethene were positive and were qualified as estimated (J). Results for 4-methyl-2-pentanone were all non-detect and were qualified as estimated (UJ). In addition, the RRF associated with 1,3-butadiene (0.021) was less than the control limit of 0.05. Results for 1,3-butadiene in all three samples were non-detect and were qualified as rejected (R).

Continuing Calibration

The continuing calibration associated with samples LCGV00100601XX, LCGV00200601XX, and LCGV00300601XX had percent differences greater than the control limit of 25 for vinyl chloride (-27.7), 1,3-butadiene (-33.3), cis-1,2-dichloroethene (-28.2), trichloroethene (-31.9), 1,4-dioxane (30.6), cis-1,3-dichloropropene (-25.7), 4-methyl-2-pentanone (58.0), 2-hexanone (52.7), tetrachloroethene (-27.3), 1,1,2,2-tetrachloroethane (-28.3), 1,3,5-trimethylbenzene (-32.9), 1,2,4-trimethylbenzene (-30.8), 1,4-dichlorobenzene (-30.9), and 1,2-dichlorobenzene (-26.1). Results for vinyl chloride, cis-1,2-dichloroethene, 1,4-dioxane, cis-1,3-dichloropropene, 4-methyl-2-pentanone, 2-hexanone, 1,1,2,2-tetrachloroethane, 1,4-dichlorobenzene, and 1,2-dichlorobenzene were all non-detect and were qualified as estimated (UJ). The results for tetrachloroethene and 1,2,4-trimethylbenzene were all positive and were qualified as estimated (J). The results for trichloroethene and 1,3,5-trimethylbenzene in sample LCGV00100601XX were positive and were qualified as estimated (J). Results for trichloroethene and 1,3,5-trimethylbenzene in samples LCGV00200601XX and LCGV00300601XX were non-detect and were qualified as estimated (UJ). The results for 1,3-butadiene were previously qualified as rejected (R) due to a low RRF value.

Laboratory Control Sample

The LCS associated with samples LCGV00100601XX, LCGV00200601XX, and LCGV00300601XX had percent recoveries for dichlorodifluoromethane (140), 1,4-dioxane (35), 4-methyl-2-pentanone (60), and 2-hexanone (55) that were outside of laboratory control limits. Results for 1,4-dioxane, 4-methyl-2-pentanone, and 2-hexanone were all non-detect and were qualified as estimated (UJ). The result for dichlorofluoromethane was positive in sample LCGV00100601XX and was qualified as estimated (J).

Soil and Water Samples - Volatile Organic Compounds

Holding Times and Sample Collection

Samples LCMW00101701XX, and LCMW00201701XX were sampled on 1/19/06 and analyzed on 2/21/06. Since these samples were analyzed after 28 days, non-detect results were qualified as rejected (R) and positive results were qualified as estimated (J).

Internal Standards

All three internal standards had area counts below control limits in sample LCGS00201501XXRE. Compounds associated with these internal standards in sample LCGS002001501XXRE were qualified as estimated (J/UJ).

Blank Contamination

Detections of acetone (27ug/L, 10ug/L, 19ug/kg) and methylene chloride (1.9ug/kg) were reported in the trip and method blanks. An action level was calculated at ten times the detections in the blanks. Detections for acetone in samples LCGW00903001XX, LCGW00902001XA, LCGW00902501XB, LCGW01002401XX, LCGW00102601XX, LCGW00202201XX, LCGS00101201XX, and LCGS00201501XXRE were less than the action level and were

qualified as non-detect (U). Detections for methylene chloride in samples LCGS00101201XX and LCGS00201501XXRE were less than the action level and were qualified as non-detect (U).

The trip, method, and equipment blanks had detections of acetone (11ug/L, 9.0ug/L, 11ug/L) and methylene chloride (1.8ug/L, 2.0ug/L). Action levels were calculated at ten times the detection reported in the blank for both compounds. The detections for acetone and methylene chloride in samples LCGW00502201XX, LCGW00501501XA, LCGW00502201XD, LCGW00602501XX, LCGW01102601XX, and LCGW01101801XA were less than the action level and were qualified as non-detect (U). In addition, the detection for acetone in sample LCGW00601801XA was less than the action level and was also qualified as non-detect (U).

Detections of acetone (11µg/L, 3.4µg/L, 11µg/L) were reported in the trip and method blanks. An action level was calculated at ten times the detections reported in the blanks for acetone. Samples LCMW00101701XX and LCMW00201701XX had detections for acetone that were less than the action level and were qualified as non-detect (U).

Initial Calibration

The initial calibration had a percent relative standard deviation for acetone (32.0) that was greater than the control limit of 30. Results for acetone in samples LCGS00101201XX and LCGS00201501XXRE were non-detect and were qualified as estimated (UJ).

Continuing Calibration

A continuing calibration had percent differences greater than the control limit of 25 for 2-hexanone (162.0) and tetrachloroethene (48.2). Results for 2-hexanone in samples LCGW00903001XX, LCGW00902001XA, LCGW00902501XB, LCGW01002401XX, LCGW00102601XX, and LCGW00202201XX were non-detect and were qualified as estimated (J). The results for tetrachloroethene were also all non-detect and qualified as estimated (UJ), except for sample LCGW00202201XX which had a positive detection which was qualified as estimated (J).

The continuing calibration associated with samples LCGS00101201XX and LCGS00201501XXRE had percent differences greater than the control limit of 25 for trichlorofluoromethane (34.9). Results for trichlorofluoromethane in samples LCGS00101201XX and LCGS00201501XXRE were non-detect and were qualified as estimated (UJ).

The continuing calibration had a percent difference greater than the control limit of 25 for 2-hexanone (185.2). Results for 2-hexanone in samples LCGW00502201XX, LCGW00501501XA, LCGW00502201XD, LCGW00602501XX, LCGW01102601XX, LCGW01101801XA, and LCGW00601801XA were non-detect and were qualified as estimated (UJ).

A continuing calibration had a percent difference that was greater than the control limit of 25 for 2-hexanone (185.2). The results for 2-hexanone in samples LCMW00101701XX and LCMW00201701XX were non-detect and were previously qualified as rejected (R) for holding time exceedences.

Tentatively Identified Compounds

Tentatively identified compounds (TICs) were reported by the laboratory in accordance with CLP method procedures. TICs reported in samples are presented in Table 1.4. Only samples that had TICs reported are included on Table 1.4. If a sample is not listed, no TICs were reported.

TABLE 1

SDG	Sample Name	Date Collected	Method	Parameter	Type
X1613	LCGS00101201XX	2/15/06	OLM 04.2	VOC	FS
X1613	LCGS00101201XX	2/15/06	D2216	Percent Moisture	FS
X1613	LCGS00101201MS	2/15/06	OLM 04.2	VOC	MS
X1613	LCGS00101201MS	2/15/06	D2216	Percent Moisture	MS
X1613	LCGS00101201MD	2/15/06	OLM 04.2	VOC	MD
X1613	LCGS00101201MD	2/15/06	D2216	Percent Moisture	MD
X1613	LCGS00201501XX	2/15/06	OLM 04.2	VOC	FS
X1613	LCGS00201501XX	2/15/06	D2216	Percent Moisture	FS
X1613	LCGW00102601MS	2/15/06	OLM 04.2	VOC	MS
X1613	LCGW00102601MD	2/15/06	OLM 04.2	VOC	MD
X1613	LCGW00903001XX	2/15/06	OLM 04.2	VOC	FS
X1613	LCGW00902001XA	2/15/06	OLM 04.2	VOC	FS
X1613	LCGW00902501XB	2/15/06	OLM 04.2	VOC	FS
X1613	LCGW01002401XX	2/15/06	OLM 04.2	VOC	FS
X1613	LCQT001XXX01XX	2/15/06	TO-15	VOC	TB
X1613	LCGW00102601XX	2/15/06	OLM 04.2	VOC	FS
X1613	LCGW00202201XX	2/15/06	OLM 04.2	VOC	FS
X1590	LCGW00502201XX	2/16/06	OLM 04.2	VOC	FS
X1590	LCGW00501501XA	2/16/06	OLM 04.2	VOC	FS
X1590	LCGW00502201XD	2/16/06	OLM 04.2	VOC	FD
X1590	LCGW00602501XX	2/16/06	OLM 04.2	VOC	FS
X1590	LCGW00601801XA	2/16/06	OLM 04.2	VOC	FS
X1590	LCGW01102601XX	2/16/06	OLM 04.2	VOC	FS
X1590	LCGW01101801XA	2/16/06	OLM 04.2	VOC	FS
X1590	LCGV00100601XX	2/16/06	TO-15	VOC	FS
X1590	LCGV00200601XX	2/16/06	TO-15	VOC	FS
X1590	LCGV00300601XX	2/16/06	TO-15	VOC	FS
X1590	LCQT002XXX01XX	2/16/06	OLM 04.2	VOC	TB
X1590	EBGW004XXX01XX	2/16/06	OLM 04.2	VOC	EB

Reference:

New York State Department of Environmental Conservation (NYSDEC), 2000. "Analytical Services Protocols"; June 2000.

New York State Department of Environmental Conservation (NYSDEC), 2002. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; Draft DER-10; Division of Environmental Remediation; December 2002.

DATA USABILITY SUMMARY REPORT
2006 SAMPLING EVENT
REGION 8 DRY CLEANERS-LOOHN'S CLEANERS
CORNING, NEW YORK

Introduction:

Soil, water, and air samples were collected at the Loohn's Cleaners site in October and November of 2006 and submitted for off-site laboratory analyses. Samples were analyzed by Chemtech located in Mountainside, NJ. A listing of samples included in this investigation is presented in Table 1. A summary of the analytical results is presented in Appendix E, Tables 1.5-1.8. Samples were analyzed for the following parameters:

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- Soil: Volatile organic compounds (VOCs) by Contract Laboratory Program (CLP) Method OLM04.2
- Water: VOCs by CLP Method OLM04.2
- Air: VOCs by EPA Method TO-15

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2000).

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002). Laboratory QC limits were used during the data evaluation unless noted otherwise. The project chemist review included evaluations of sample collection, data package completeness, holding times, QC data (blanks, instrument calibrations, duplicates, surrogate recovery, and spike recovery), data transcription, electronic data reporting, calculations, and data qualification. With the exception of the items discussed below, results are interpreted to be usable as reported by the laboratory. The following laboratory or data validation qualifiers are used in the final data presentation.

U = target analyte is not detected at the reported detection limit
J = concentration is estimated
UJ = target analyte is not detected at the reported detection limit and is estimated
R = target analyte was rejected
D = result is reported from an additional dilution run
E = Detection exceeded the upper calibration range of the instrument
B = Analyte was detected in the method blank

Results are interpreted to be usable as reported by the laboratory unless discussed in the following sections.

Air - Volatile Organic Compounds

Initial Calibration

The initial calibration associated with samples LCSV00100101XX, LCIA00100101XX, and LCAA00100101XX had a percent difference that was greater than the control limit of 30 for trans-1,3-dichloropropene (37) and 2-hexanone (36). The results for these compounds in the samples listed above were all non-detect and were qualified as estimated (UJ).

Continuing Calibration

The continuing calibration associated with samples LCSV00100101XX, LCIA00100101XX, and LCAA00100101XX had a percent difference that was greater than the control limit of 20 for trans-1,3-dichloropropene (-22), 2-hexanone (-42), 2-butanone (-26), and 4-methyl-2-pentanone (-27). The results for these compounds in the samples listed above were qualified as estimated (J/UJ).

Matrix Spike/Matrix Spike Duplicate

The MS/MSD associated with sample LCAA00100101XX had percent recoveries for vinyl acetate (155, 145) and ethyl acetate (220, 200) that were greater than the laboratory control limit of 65-135. The results for these two compounds were positive and were qualified as estimated (J).

Water Samples - Volatile Organic Compounds

Surrogate Recoveries

Sample LCGW00801901XX had a percent recovery of the surrogate toluene-d8 (83) that was less than laboratory control limits. All results in sample LCGW00801901XX were qualified as estimated (J/UJ).

Blank Contamination

Acetone was detected in the method blank associated with samples LCGW00302001XX, LCGW00702101XX, LCGW00702501XX, and LCGW01202001XX. An action level was calculated at ten times the detection reported in the blank. Results for acetone in the samples listed above were all less than the action level and were qualified as non-detect (U).

Initial Calibration

The initial calibration associated with samples LCGW00302001XX, LCGW00302001XD, LCGW00502101XX, LCGW00702101XX, LCGW00702501XX, LCGW00801901XX, LCGW00802501XX, and LCGW01202001XX had a percent difference that was greater than the control limit of 30 for chloroethane (40). The results for chloroethane were all non-detect in the samples listed above and were qualified as estimated (UJ).

Continuing Calibration

The continuing calibration associated with samples LCGW00302001XD, LCGW00502101XX, , LCGW00801901XX, and LCGW00802501XX had percent differences that were greater than the control limit of 20 for dichlorodifluoromethane (32), chloromethane (32), vinyl chloride (32), trichlorofluoromethane (42), 1,1-dichloroethene (26), carbon disulfide (24), methyl acetate (56), and cyclohexane (23). These results were all non-detect in the samples listed above and were qualified as estimated (UJ).

The continuing calibration associated with samples LCGW00302001XX, LCGW00702101XX, LCGW00702501XX, and LCGW01202001XX had percent differences that were greater than the control limit of 20 for dichlorodifluoromethane (27), chloromethane (24), trichlorofluoromethane (30), 1,1,2-trichlorotrifluoroethane (24), 1,1-dichloroethene (23), and carbon disulfide (23).

These results were all non-detect in the samples listed above and were qualified as estimated (UJ).

Matrix Spike/Matrix Spike Duplicate

The MS/MSD associated with sample LCGW01202001XX had percent recoveries for chlorobenzene (13, 11) and 1,1-dichlorethene (64, 64) that were less than the laboratory control limit. In addition, the relative percent difference (17) between the MS and MSD in sample LCGW01202001XX was greater than the laboratory control limit. Results for these two compounds were non-detect and were qualified as estimated (UJ) in sample LCGW01202001XX

Soil Samples - Volatile Organic Compounds

Blank Contamination

Detections of acetone and methylene chloride were detected in the method blanks associated with samples LCGS00100401XX, LCGS00200401XX, LCGS00300301XX, LCGS00400701XX, LCGS00400701XD, LCGS00500201XX, and LCGS00400901XX. An action level was calculated at ten times the detection reported in the blank. Detections less than the action level were qualified as non-detect (U). Non-detect results or results greater than the action level were reported without additional qualification.

Continuing Calibration

The continuing calibration associated with samples LCGS00100401XX and LCGS00300301XX had a percent difference that was greater than the control limit of 20 for carbon disulfide (-21). The results for carbon disulfide were non-detect in both samples and were qualified as estimated (UJ).

Matrix Spike/Matrix Spike Duplicate

The MS/MSD associated with sample LCGS00100401XX had percent recoveries for chlorobenzene (5, 9) that were less than the laboratory control limit. The relative percent difference between the MS and MSD in sample LCGS00100401XX was also greater than the laboratory control limit. Since the percent recoveries for this compound were less than ten percent the result for chlorobenzene was qualified as rejected (R) in sample LCGS00100401XX.

Tentatively Identified Compounds

No Tentatively identified compounds (TICs) were detected in the samples listed below in Table 1.

TABLE 1

SDG	Sample Name	Date Collected	Method	Parameter	Type
X5085	LCSV00100101XX	11/1/06	TO-15	VOC	FS
X5085	LCIA00100101XX	11/1/06	TO-15	VOC	FS
X5085	LCAA00100101XX	11/1/06	TO-15	VOC	FS
X5201	LCGS00100401XX	10/31/06	D2216	VOC	FS
X5201	LCGS00100401XX	10/31/06	D2216	Percent Moisture	FS
X5201	LCGS00100401MS	10/31/06	OLM 04.2	VOC	MS
X5201	LCGS00100401MD	10/31/06	D2216	VOC	MSD
X5201	LCGS00200401XX	10/31/06	OLM 04.2	VOC	FS
X5201	LCGS00200401XX	10/31/06	OLM 04.2	Percent Moisture	FS
X5201	LCGS00300301XX	10/31/06	D2216	VOC	FS
X5201	LCGS00300301XX	10/31/06	D2216	Percent Moisture	FS
X5201	LCGS00400701XX	10/31/06	OLM 04.2	VOC	FS
X5201	LCGS00400701XX	10/31/06	OLM 04.2	Percent Moisture	FS
X5201	LCGS00400701XD	10/31/06	OLM 04.2	VOC	FD
X5201	LCGS00400701XD	10/31/06	OLM 04.2	Percent Moisture	FD
X5201	LCTB001XXX02XX	10/31/06	OLM 04.2	VOC	TB
X5201	LCGS00500201XX	10/31/06	OLM 04.2	VOC	FS
X5201	LCGS00500201XX	10/31/06	OLM 04.2	Percent Moisture	FS
X5201	LCGS00400901XX	10/31/06	OLM 04.2	VOC	FS
X5201	LCGS00400901XX	10/31/06	OLM 04.2	Percent Moisture	FS
X5201	LCGW00302001XX	10/31/06	OLM 04.2	VOC	FS
X5201	LCGW00302001XD	10/31/06	TO-15	VOC	FD
X5201	LCGW00502101XX	10/31/06	OLM 04.2	VOC	FS
X5201	LCGW00702101XX	10/31/06	OLM 04.2	VOC	FS
X5201	LCGW00702501XX	10/31/06	OLM 04.2	VOC	FS
X5201	LCGW00801901XX	10/30/06	OLM 04.2	VOC	FS
X5201	LCGW00802501XX	10/30/06	OLM 04.2	VOC	FS
X5201	LCGW01202001XX	10/30/06	OLM 04.2	VOC	FS
X5201	LCGW01202001MS	10/30/06	OLM 04.2	VOC	MS
X5201	LCGW01202001MD	10/30/06	OLM 04.2	VOC	MSD

Reference:

New York State Department of Environmental Conservation (NYSDEC), 2000. "Analytical Services Protocols"; June 2000.

New York State Department of Environmental Conservation (NYSDEC), 2002. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; Draft DER-10; Division of Environmental Remediation; December 2002.

Data Validator: Amanda Zeidler

Signature_____ Date: December 8, 2006

QA Officer: Chris Ricardi NRCC-EAC

Date: 2/2/07

Appendix E
Table 1.1: Soil VOC Results

Lab Sample Id	X1613-01		X1613-04RE	
Lab Sample Delivery Group	X1613		X1613	
Loc Name	GS-1		GS-2	
Field Sample Id	LCGS00101201XX		LCGS00201501XX	
Field Sample Date	2/15/2006		2/15/2006	
Qc Code	FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	10	U	11	UJ
1,1,2,2-Tetrachloroethane	10	U	11	UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane	10	U	11	UJ
1,1,2-Trichloroethane	10	U	11	UJ
1,1-Dichloroethane	10	U	11	UJ
1,1-Dichloroethene	10	U	11	UJ
1,2,4-Trichlorobenzene	10	U	11	UJ
1,2-Dibromo-3-chloropropane	10	U	11	UJ
1,2-Dibromoethane	10	U	11	UJ
1,2-Dichlorobenzene	10	U	11	UJ
1,2-Dichloroethane	10	U	11	UJ
1,2-Dichloropropane	10	U	11	UJ
1,3-Dichlorobenzene	10	U	11	UJ
1,4-Dichlorobenzene	10	U	11	UJ
2-Butanone	52	U	54	UJ
2-Hexanone	52	U	54	UJ
4-Methyl-2-pentanone	52	U	54	UJ
Acetic acid, methyl ester	10	U	11	UJ
Acetone	52	UJ	54	UJ
Benzene	10	U	11	UJ
Bromodichloromethane	10	U	11	UJ
Bromoform	10	U	11	UJ
Bromomethane	10	U	11	UJ
Carbon disulfide	10	U	11	UJ
Carbon tetrachloride	10	U	11	UJ
Chlorobenzene	10	U	11	UJ
Chlorodibromomethane	10	U	11	UJ
Chloroethane	10	U	11	UJ
Chloroform	10	U	11	UJ
Chloromethane	10	U	11	UJ
Cis-1,2-Dichloroethene	10	U	11	UJ
cis-1,3-Dichloropropene	10	U	11	UJ
Cyclohexane	10	U	11	UJ
Dichlorodifluoromethane	10	U	11	UJ
Ethyl benzene	10	U	11	UJ
Isopropylbenzene	10	U	11	UJ
Methyl cyclohexane	10	U	11	UJ
Methyl Tertbutyl Ether	10	U	11	UJ
Methylene chloride	10	U	11	UJ
o-Xylene	10	U	11	UJ
Styrene	10	U	11	UJ
Tetrachloroethene	10	U	11	UJ

Table Created by: ASZ 6/1/06
Table Checked by: CRS 7/17/06

Appendix E
Table 1.1: Soil VOC Results

Lab Sample Id	X1613-01		X1613-04RE	
Lab Sample Delivery Group	X1613		X1613	
Loc Name	GS-1		GS-2	
Field Sample Id	LCGS00101201XX		LCGS00201501XX	
Field Sample Date	2/15/2006		2/15/2006	
Qc Code	FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**
Toluene	10	U	11	UJ
trans-1,2-Dichloroethene	10	U	11	UJ
trans-1,3-Dichloropropene	10	U	11	UJ
Trichloroethene	10	U	11	UJ
Trichlorofluoromethane	10	UJ	11	UJ
Vinyl chloride	10	U	11	UJ
Xylene, m/p	0.71	J	11	UJ

Notes:
Results reported in micrograms per kilogram (µg/kg)
Samples analyzed for VOCs by EPA Method OLM04.2
QC Codes:
FS = Field Sample
Qualifiers:
U = Result not detected at a concentration greater than the reporting limit
J = Estimated value

Table Created by: ASZ 6/1/06
Table Checked by: CRS 7/17/06

Lab Sample Id	X1284-11		X1284-12		X1590-01		X1590-02		X1590-03		X1590-04		X1590-05		X1590-06		X1590-07	
Lab Sample Delivery Group	X1284		X1284		X1590		X1590		X1590		X1590		X1590		X1590		X1590	
Loc Name	GW-1		GW-2		GW-5		GW-5		GW-5		GW-6		GW-6		GW-11		GW-11	
Field Sample Id	LCMW00101701XX		LCMW00201701XX		LCGW00502201XX		LCGW00501501XA		LCGW00502201XD		LCGW00602501XX		LCGW00601801XA		LCGW01102601XX		LCGW01101801XA	
Field Sample Date	1/19/2006		1/19/2006		2/16/2006		2/16/2006		2/16/2006		2/16/2006		2/16/2006		2/16/2006		2/16/2006	
Qc Code	FS		FS		FS		FS		FD		FS		FS		FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2,2-Tetrachloroethane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-Trichloro-1,2,2-Trifluoroethane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-Trichloroethane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2,4-Trichlorobenzene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dibromo-3-chloropropane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dibromoethane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dichlorobenzene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dichloroethane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dichloropropane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,3-Dichlorobenzene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,4-Dichlorobenzene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Butanone		R		R	50	U	50	U	50	U	50	U	50	U	50	U	50	U
2-Hexanone		R		R	50	UJ	50	UJ	50	UJ	50	UJ	50	UJ	50	UJ	50	UJ
4-Methyl-2-pentanone		R		R	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Acetic acid, methyl ester		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Acetone		R		R	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Benzene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Bromodichloromethane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Bromoform		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Bromomethane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon disulfide		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon tetrachloride		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chlorobenzene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chlorodibromomethane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chloroethane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chloroform		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chloromethane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Cis-1,2-Dichloroethene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
cis-1,3-Dichloropropene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Cyclohexane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Dichlorodifluoromethane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Ethyl benzene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Isopropylbenzene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Methyl cyclohexane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Methyl Tertbutyl Ether		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Methylene chloride		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
o-Xylene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Styrene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Tetrachloroethene	37	J	2.5	J	10	U	10	U	10	U	10	U	10	U	10	U	3.9	J
Toluene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
trans-1,2-Dichloroethene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
trans-1,3-Dichloropropene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Trichloroethene		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Trichlorofluoromethane		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Vinyl chloride		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Xylene, m/p		R		R	10	U	10	U	10	U	10	U	10	U	10	U	10	U

Notes:
Results reported in micrograms per liter (µg/L)
Samples analyzed for VOCs by EPA Method OLM04.2
QC Codes:
FS = Field Sample
FD = Field Duplicate
TB = Trip Blank
EB = Equipment Blank
Qualifiers:
U = Result not detected at a concentration greater than the reporting limit
J = Estimated value
R = Rejected result
B = Analyte detected in both the blank and sample

Table Created by: ASZ 6/1/06
Table Checked by: CRS 7/17/06

Appendix E
Table 1.2: Groundwater VOC Results

Lab Sample Id	X1590-11		X1590-12		X1613-07		X1613-08		X1613-09		X1613-10		X1613-11		X1613-12		X1613-13	
Lab Sample Delivery Group	X1590		X1590		X1613		X1613		X1613		X1613		X1613		X1613		X1613	
Loc Name	QC		QC		GW-9		GW-9		GW-9		GW-10		QC		GW-1		GW-2	
Field Sample Id	LCQT002XXX01XX		EBGW004XXX01XX		LCGW00903001XX		LCGW00902001XA		LCGW00902501XB		LCGW01002401XX		LCQT001XXX01XX		LCGW00102601XX		LCGW00202201XX	
Field Sample Date	2/16/2006		2/16/2006		2/15/2006		2/15/2006		2/15/2006		2/15/2006		2/15/2006		2/15/2006		2/15/2006	
Qc Code	TB		EB		FS		FS		FS		FS		TB		FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	0.96	J	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2,2-Tetrachloroethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1,2-Trichloroethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2,4-Trichlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dibromo-3-chloropropane	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dibromoethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dichloroethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,2-Dichloropropane	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,3-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
1,4-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
2-Butanone	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
2-Hexanone	1.2	J	50	U	50	UJ	50	UJ	50	UJ	50	UJ	50	U	50	UJ	50	UJ
4-Methyl-2-pentanone	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U	50	U
Acetic acid, methyl ester	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Acetone	9	JB	11	JB	50	U	50	U	50	U	50	U	27	JB	50	U	50	U
Benzene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Bromodichloromethane	5.2	J	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Bromoform	1.5	J	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Bromomethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon disulfide	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Carbon tetrachloride	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chlorobenzene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chlorodibromomethane	4.3	J	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chloroethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chloroform	7.5	J	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Chloromethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Cis-1,2-Dichloroethene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
cis-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Cyclohexane	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Dichlorodifluoromethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Ethyl benzene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Isopropylbenzene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Methyl cyclohexane	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Methyl Tertbutyl Ether	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Methylene chloride	1.8	J	2	J	10	U	10	U	10	U	10	U	10	U	10	U	10	U
o-Xylene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Styrene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Tetrachloroethene	10	U	10	U	10	UJ	10	UJ	10	UJ	10	UJ	10	U	10	UJ	2.1	J
Toluene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
trans-1,2-Dichloroethene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
trans-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Trichloroethene	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Trichlorofluoromethane	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Vinyl chloride	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U
Xylene, m/p	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U	10	U

Notes:
Results reported in micrograms per liter (µg/L)
Samples analyzed for VOCs by EPA Method OLM04.2
QC Codes:
FS = Field Sample
FD = Field Duplicate
TB = Trip Blank
EB = Equipment Blank
Qualifiers:
U = Result not detected at a concentration greater than the reporting limit
J = Estimated value
R = Rejected result
B = Analyte detected in both the blank and sample

Table Created by: ASZ 6/1/06
Table Checked by: CRS 7/17/06

Lab Sample Id	X1590-08		X1590-09		X1590-10	
Lab Sample Delivery Group	X1590		X1590		X1590	
Loc Name	GV-01		GV-02		GV-03	
Field Sample Id	LCGV00100601XX		LCGV00200601XX		LCGV00300601XX	
Field Sample Date	2/16/2006		2/16/2006		2/16/2006	
Qc Code	FS		FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	6.75	BJ	10.3	BJ	9.25	BJ
1,1,2,2-Tetrachloroethane	2.75	UJ	6.87	UJ	6.87	UJ
1,1,2-Trichloro-1,2,2-Trifluoroethane	3.06	U	7.65	U	7.65	U
1,1,2-Trichloroethane	2.18	U	5.44	U	5.44	U
1,1-Dichloroethane	1.62	U	4.05	U	4.05	U
1,1-Dichloroethene	1.59	U	3.97	U	3.97	U
1,2,4-Trichlorobenzene	2.96	U	7.4	U	7.4	U
1,2,4-Trimethylbenzene	12.8	J	27.5	J	27	J
1,2-Dibromoethane	3.08	U	7.69	U	7.69	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.8	U	6.99	U	6.99	U
1,2-Dichlorobenzene	2.4	UJ	6.01	UJ	6.01	UJ
1,2-Dichloroethane	1.62	U	4.05	U	4.05	U
1,2-Dichloropropane	1.85	U	4.62	U	4.62	U
1,3,5-Trimethylbenzene	8.25	J	4.91	UJ	4.91	UJ
1,3-Dichlorobenzene	2.4	U	6.01	U	6.01	U
1,4-Dichlorobenzene	2.4	UJ	6.01	UJ	6.01	UJ
1,4-Dioxane	2.88	UJ	7.2	UJ	7.2	UJ
2-Butanone	20.7		61.3		10.3	
2-Hexanone	3.27	UJ	8.18	UJ	8.18	UJ
2-Propanol	78.5		52.8		27.5	
4-Ethyltoluene	1.96		4.91	U	4.91	U
4-Methyl-2-pentanone	3.27	UJ	8.18	UJ	8.18	UJ
Acetone	177		316		231	
Allyl chloride	1.26	U	3.15	U	3.15	U
Benzene	43		59.7		8.61	
Benzyl chloride	2.31	U	5.77	U	5.77	U
Bromodichloromethane	2.68	U	6.71	U	6.71	U
Bromoform	4.14	U	10.35	U	10.35	U
Bromomethane	1.55	U	3.89	U	3.89	U
Butadiene, 1,3-		R		R		R
Carbon disulfide	25.2		120		3.11	U
Carbon tetrachloride	2.52	U	6.3	U	6.3	U
Chlorobenzene	1.85	U	4.62	U	4.62	U
Chlorodibromomethane	3.4	U	8.51	U	8.51	U
Chloroethane	1.06	U	2.66	U	2.66	U
Chloroform	1.95	U	4.87	U	4.87	U
Chloromethane	0.82		2.04	U	2.04	
Cis-1,2-Dichloroethene	1.59	UJ	3.97	UJ	3.97	UJ
cis-1,3-Dichloropropene	1.82	UJ	4.54	UJ	4.54	UJ
Cyclohexane	114		182		3.35	U
Dichlorodifluoromethane	3.76	J	4.95	U	4.95	U
Ethyl acetate	15.5		3.6	U	22.3	
Ethyl benzene	4.68		5.64		4.34	U
Heptane	159		311		20	
Hexachlorobutadiene	4.27	U	10.67	U	10.67	U
Hexane	225		475		127	
Isooctane	1.87	U	4.66	U	4.66	U
Methyl Tertbutyl Ether	1.44	U	3.6	U	3.6	U
Methylene chloride	29.8		31.3		80.3	
o-Xylene	5.72		6.5		4.34	U
Propylene					105	
Styrene	6.13		4.25	U	4.25	U
Tetrachloroethene	39.1	J	76.7	J	5.43	J
Tetrahydrofuran	2.36	U	5.89	U	5.89	U
Toluene	93.8		95.2		23	
trans-1,2-Dichloroethene	1.59	U	3.97	U	3.97	U
trans-1,3-Dichloropropene	1.82	U	4.54	U	4.54	U
Trichloroethene	1.29	J	2.68	UJ	2.68	UJ
Trichlorofluoromethane	2.24		5.6	U	5.6	U
Vinyl acetate	1.41	U	3.52	U	3.52	U
Vinyl bromide	1.75	U	4.38	U	4.38	U
Vinyl chloride	1.02	UJ	2.56	UJ	2.56	UJ
Xylene, m/p	19.2		18.6		8.67	U

Notes:
Results reported in micrograms per cubic meter (µg/m3)
Samples analyzed for VOCs by Method TO-15
QC Codes:
FS = Field Sample
Qualifiers:
U = Result not detected at a concentration greater than the reporting limit
J = Estimated value
R = Rejected result
B = Analyte detected in both the blank and sample

Table Created by: ASZ 6/1/06
Table Checked by: BTS 2/7/07

Appendix E
Table 1.4: Groundwater VOC TICs

Matrix	WATER		WATER		WATER		WATER		WATER	
Lab Id	X1590-01		X1590-03		X1590-04		X1590-05		X1590-06	
Sample No	LCGW00502201XX		LCGW00502201XD		LCGW00602501XX		LCGW00601801XA		LCGW01102601XX	
Samp Date	2/16/2006		2/16/2006		2/16/2006		2/16/2006		2/16/2006	
Parameter	**Lab Result**	**Lab Qual**	**Lab Result**	**Lab Qual**	**Lab Result**	**Lab Qual**	**Lab Result**	**Lab Qual**	**Lab Result**	**Lab Qual**
3,6,9-Trioxa-2,10-disilaundecane,										
4,6-Dioxa-3,8-disiladecane, 5-(2,6										
Butanoic acid, 3-methyl-2-[(trimet							9.5	J		
Decane, 4-methyl-										
Ethyl Acetate										
Inosose, 2-desoxy-, O-methyloxime,	8.1	J								
Tetrasiloxane, 1,1,3,3,5,5,7,7-oct										
unknown22.90	5.9	J								
unknown22.91					7	J				
unknown27.24			7.6	J					6.4	J
unknown27.25										
unknown27.26					12	J				

Notes:
Results reported in micrograms per liter (µg/L)
Samples were analyzed for VOCs by EPA Method OLM04.2
Qualifiers:
J = Estimated value

Table Created by: ASZ 6/1/06
Table Checked by: CRS 7/17/06

Appendix E
Table 1.4: Groundwater VOC TICs

Matrix	WATER		WATER		WATER		WATER		WATER	
Lab Id	X1590-07		X1590-12		X1613-08		X1613-09		X1613-10	
Sample No	LCGW01101801XA		EBGW004XXX01XX		LCGW00902001XA		LCGW00902501XB		LCGW01002401XX	
Samp Date	2/16/2006		2/16/2006		2/15/2006		2/15/2006		2/15/2006	
Parameter	**Lab Result**	**Lab Qual**	**Lab Result**	**Lab Qual**	**Lab Result**	**Lab Qual**	**Lab Result**	**Lab Qual**	**Lab Result**	**Lab Qual**
3,6,9-Trioxa-2,10-disilaundecane,			8.2	J	8.3	J	6	J		
4,6-Dioxa-3,8-disiladecane, 5-(2,6	5.9	J								
Butanoic acid, 3-methyl-2-[(trimet										
Decane, 4-methyl-							7.3	J		
Ethyl Acetate							5.1	J		
Inosose, 2-desoxy-, O-methyloxime,										
Tetrasiloxane, 1,1,3,3,5,5,7,7-oct										
unknown22.90										
unknown22.91										
unknown27.24										
unknown27.25	7.2	J							6.5	J
unknown27.26										

Notes:
Results reported in micrograms per liter (µg/L)
Samples were analyzed for VOCs by EPA Method OLM04.2
Qualifiers:
J = Estimated value

Table Created by: ASZ 6/1/06
Table Checked by: CRS 7/17/06

Appendix E
Table 1.4: Groundwater VOC TICs

Matrix	WATER		WATER	
Lab Id	X1613-12		X1613-13	
Sample No	LCGW00102601XX		LCGW00202201XX	
Samp Date	2/15/2006		2/15/2006	
Parameter	**Lab Result**	**Lab Qual**	**Lab Result**	**Lab Qual**
3,6,9-Trioxa-2,10-disilaundecane,	5.7	J		
4,6-Dioxa-3,8-disiladecane, 5-(2,6				
Butanoic acid, 3-methyl-2-[(trimet				
Decane, 4-methyl-				
Ethyl Acetate				
Inosose, 2-desoxy-, O-methyloxime,				
Tetrasiloxane, 1,1,3,3,5,5,7,7-oct				
unknown22.90				
unknown22.91				
unknown27.24			5.7	J
unknown27.25				
unknown27.26				

Notes:
Results reported in micrograms per liter (µg/L)
Samples were analyzed for VOCs by EPA Method OLM04.2
Qualifiers:
J = Estimated value

Table Created by: ASZ 6/1/06
Table Checked by: CRS 7/17/06

Table 1.5: TO-15 VOC Results

Lab Sample Id	X5085-01		X5085-02		X5085-03	
Lab Sample Delivery Group	X5085		X5085		X5085	
Loc Name	SV-01		IA-01		AA-01	
Field Sample Id	LCSV00100101XX		LCIA00100101XX		LCAA00100101XX	
Field Sample Date	11/1/2006		11/1/2006		11/1/2006	
Qc Code	FS		FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	3.48		1.09	U	1.09	U
1,1,2,2-Tetrachloroethane	1.37	U	1.37	U	1.37	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.53	U	1.53	U	1.53	U
1,1,2-Trichloroethane	1.09	U	1.09	U	1.09	U
1,1-Dichloroethane	0.81	U	0.81	U	0.81	U
1,1-Dichloroethene	0.79	U	0.79	U	0.79	U
1,2,4-Trichlorobenzene	1.48	U	1.48	U	1.48	U
1,2,4-Trimethylbenzene	7.26		2.75		0.98	U
1,2-Dibromoethane	1.54	U	1.54	U	1.54	U
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.4	U	1.4	U	1.4	U
1,2-Dichlorobenzene	1.2	U	1.2	U	1.2	U
1,2-Dichloroethane	0.81	U	0.81	U	0.81	U
1,2-Dichloropropane	4.62		0.92	U	0.92	U
1,3,5-Trimethylbenzene	2.26		1.18		0.98	U
1,3-Dichlorobenzene	1.2	U	1.2	U	1.2	U
1,4-Dichlorobenzene	1.2	U	1.2	U	1.2	U
1,4-Dioxane	1.44	U	1.44	U	1.44	U
2-Butanone	31	J	16.5	J	1.18	UJ
2-Hexanone	1.64	UJ	1.64	UJ	1.64	UJ
2-Propanol	0.98	U	21.5		3.29	
4-Ethyltoluene	2.36		1.87		0.98	U
4-Methyl-2-pentanone	4.17	J	1.64	UJ	1.64	UJ
Acetone	265	D	0.95	U	0.95	U
Allyl chloride	0.63	U	0.63	U	0.63	U
Benzene	45.9		20		3.57	
Benzyl chloride	1.15	U	1.15	U	1.15	U
Bromodichloromethane	1.34	U	1.34	U	1.34	U
Bromoform	2.07	U	2.07	U	2.07	U
Bromomethane	0.78	U	0.78	U	0.78	U
Butadiene, 1,3-	0.44	U	0.44	U	0.44	U
Carbon disulfide	9.14		0.62	U	0.62	U
Carbon tetrachloride	1.26	U	1.26	U	1.26	U
Chlorobenzene	0.92	U	0.92	U	0.92	U
Chlorodibromomethane	1.7	U	1.7	U	1.7	U
Chloroethane	0.53	U	0.53	U	0.53	U
Chloroform	1.36		0.97	U	0.97	U
Chloromethane	0.45		1.1		1.06	
Cis-1,2-Dichloroethene	4.44		0.79	U	0.79	U
cis-1,3-Dichloropropene	0.91	U	0.91	U	0.91	U
Cyclohexane	25.5		2.41		0.67	U
Dichlorodifluoromethane	3.17		4.16		2.97	
Ethyl acetate	313	D	176	D	392	DJ
Ethyl benzene	14.7		8.93		0.87	U
Heptane	57.6		15.8		0.98	
Hexachlorobutadiene	2.13	U	2.13	U	2.13	U
Hexane	34.8		1.41	U	1.41	U
Isooctane	0.93	U	2.42		0.93	U
Methyl Tertbutyl Ether	0.72	U	0.72	U	0.72	U
Methylene chloride	1.53		1.39	U	1.46	
o-Xylene	6.24		3.64		0.87	U
Propylene	1.72	U	1.72	U	1.72	U

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Table 1.5: TO-15 VOC Results

Lab Sample Id	X5085-01		X5085-02		X5085-03	
Lab Sample Delivery Group	X5085		X5085		X5085	
Loc Name	SV-01		IA-01		AA-01	
Field Sample Id	LCSV00100101XX		LCIA00100101XX		LCAA00100101XX	
Field Sample Date	11/1/2006		11/1/2006		11/1/2006	
Qc Code	FS		FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
Styrene	5.27		0.94		0.85	U
Tetrachloroethene	32842	ED	35.8		1.63	
Tetrahydrofuran	1.18	U	1.18	U	1.18	U
Toluene	1583	D	1114	D	7.07	
trans-1,2-Dichloroethene	0.79	U	0.79	U	0.79	U
trans-1,3-Dichloropropene	0.91	UJ	0.91	UJ	0.91	UJ
Trichloroethene	103		1.07	U	1.07	U
Trichlorofluoromethane	2.35		2.35		1.79	
Vinyl acetate	0.7	U	4.64		8.86	J
Vinyl bromide	0.88	U	0.88	U	0.88	U
Vinyl chloride	0.51	U	0.66		0.51	U
Xylene, m/p	17.4		11.7		1.73	U

Notes:

Results in microgram per cubic meter (µg/m3)

Samples analyzed for VOCs by EPA Method TO-15

QC Code:

FS = Field Sample

Qualifiers:

U = Not detected at a concentration greater than the reporting limit

J = Estimated value

D = Result was reported from a diluted analytical run

E = Result exceeds the upper calibration range of the analytical instrument

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Appendix E
Table 1.6: VOC Groundwater Results

Lab Sample Id	X5201-08		X5201-11		X5201-12		X5201-13		X5201-14	
Lab Sample Delivery Group	X5201		X5201		X5201		X5201		X5201	
Loc Name	QC		GW-03		GW-03		GW-05		GW-07	
Field Sample Id	LCTB001XXX02XX		LCGW00302001XX		LCGW00302001XD		LCGW00502101XX		LCGW00702101XX	
Field Sample Date	10/31/2006		10/31/2006		10/31/2006		10/31/2006		10/31/2006	
Qc Code	TB		FS		FD		FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	10	U	10	U	10	U	10	U	10	U
1,1,2,2-Tetrachloroethane	10	U	10	U	10	U	10	U	10	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	10	U	10	UJ	10	U	10	U	10	UJ
1,1,2-Trichloroethane	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethane	10	U	10	U	10	U	10	U	10	U
1,1-Dichloroethene	10	U	10	UJ	10	UJ	10	UJ	10	UJ
1,2,4-Trichlorobenzene	10	U	10	U	10	U	10	U	10	U
1,2-Dibromo-3-chloropropane	10	U	10	U	10	U	10	U	10	U
1,2-Dibromoethane	10	U	10	U	10	U	10	U	10	U
1,2-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U
1,2-Dichloroethane	10	U	10	U	10	U	10	U	10	U
1,2-Dichloropropane	10	U	10	U	10	U	10	U	10	U
1,3-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U
1,4-Dichlorobenzene	10	U	10	U	10	U	10	U	10	U
2-Butanone	50	U	50	U	50	U	50	U	50	U
2-Hexanone	50	U	50	U	50	U	50	U	50	U
4-Methyl-2-pentanone	50	U	50	U	50	U	50	U	50	U
Acetic acid, methyl ester	10	U	10	U	10	UJ	10	UJ	10	U
Acetone	50	U	10	U	50	U	50	U	10	U
Benzene	10	U	10	U	10	U	10	U	10	U
Bromodichloromethane	10	U	10	U	10	U	10	U	10	U
Bromoform	10	U	10	U	10	U	10	U	10	U
Bromomethane	10	U	10	U	10	U	10	U	10	U
Carbon disulfide	10	U	10	UJ	10	UJ	10	UJ	10	UJ
Carbon tetrachloride	10	U	10	U	10	U	10	U	10	U
Chlorobenzene	10	U	10	U	10	U	10	U	10	U
Chlorodibromomethane	10	U	10	U	10	U	10	U	10	U
Chloroethane	10	U	10	UJ	10	UJ	10	UJ	10	UJ
Chloroform	10	U	10	U	10	U	10	U	10	U
Chloromethane	10	U	10	UJ	10	UJ	10	UJ	10	UJ
Cis-1,2-Dichloroethene	10	U	10	U	10	U	10	U	10	U
cis-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U
Cyclohexane	10	U	10	U	10	UJ	10	UJ	10	U
Dichlorodifluoromethane	10	U	10	UJ	10	UJ	10	UJ	10	UJ

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Table 1.6: VOC Groundwater Results

Lab Sample Id	X5201-08		X5201-11		X5201-12		X5201-13		X5201-14	
Lab Sample Delivery Group	X5201		X5201		X5201		X5201		X5201	
Loc Name	QC		GW-03		GW-03		GW-05		GW-07	
Field Sample Id	LCTB001XXX02XX		LCGW00302001XX		LCGW00302001XD		LCGW00502101XX		LCGW00702101XX	
Field Sample Date	10/31/2006		10/31/2006		10/31/2006		10/31/2006		10/31/2006	
Qc Code	TB		FS		FD		FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
Ethyl benzene	10	U	10	U	10	U	10	U	10	U
Isopropylbenzene	10	U	10	U	10	U	10	U	10	U
Methyl cyclohexane	10	U	10	U	10	U	10	U	10	U
Methyl Tertbutyl Ether	10	U	10	U	10	U	10	U	10	U
Methylene chloride	10	U	10	U	10	U	10	U	10	U
o-Xylene	10	U	10	U	10	U	10	U	10	U
Styrene	10	U	10	U	10	U	10	U	10	U
Tetrachloroethene	10	U	2.9	J	3.4	J	3.3	J	3.7	J
Toluene	10	U	10	U	10	U	10	U	10	U
trans-1,2-Dichloroethene	10	U	10	U	10	U	10	U	10	U
trans-1,3-Dichloropropene	10	U	10	U	10	U	10	U	10	U
Trichloroethene	10	U	10	U	10	U	10	U	10	U
Trichlorofluoromethane	10	U	10	UJ	10	UJ	10	UJ	10	UJ
Vinyl chloride	10	U	10	U	10	UJ	10	UJ	10	U
Xylene, m/p	10	U	10	U	10	U	10	U	10	U

Notes:
Results in microgram per liter (µg/L)
Samples analyzed for VOCs by EPA Method OLM04.2
QC Code:
FS = Field Sample
FD = Field Duplicate
TB = Trip Blank
Qualifiers:
U = Not detected at a concentration greater than the RL
J = Estimated value

Created By: WBC 1/29/06
Checked By: ASZ 2/5/07

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Table 1.6: VOC Groundwater Results

Lab Sample Id	X5201-15		X5201-16		X5201-17		X5201-18	
Lab Sample Delivery Group	X5201		X5201		X5201		X5201	
Loc Name	GW-07		GW-08		GW-08		GW-12	
Field Sample Id	LCGW00702501XX		LCGW00801901XX		LCGW00802501XX		LCGW01202001XX	
Field Sample Date	10/31/2006		10/30/2006		10/30/2006		10/30/2006	
Qc Code	FS		FS		FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	10	U	10	UJ	10	U	10	U
1,1,2,2-Tetrachloroethane	10	U	10	UJ	10	U	10	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	10	UJ	10	UJ	10	U	10	UJ
1,1,2-Trichloroethane	10	U	10	UJ	10	U	10	U
1,1-Dichloroethane	10	U	10	UJ	10	U	10	U
1,1-Dichloroethene	10	UJ	10	UJ	10	UJ	10	UJ
1,2,4-Trichlorobenzene	10	U	10	UJ	10	U	10	U
1,2-Dibromo-3-chloropropane	10	U	10	UJ	10	U	10	U
1,2-Dibromoethane	10	U	10	UJ	10	U	10	U
1,2-Dichlorobenzene	10	U	10	UJ	10	U	10	U
1,2-Dichloroethane	10	U	10	UJ	10	U	10	U
1,2-Dichloropropane	10	U	10	UJ	10	U	10	U
1,3-Dichlorobenzene	10	U	10	UJ	10	U	10	U
1,4-Dichlorobenzene	10	U	10	UJ	10	U	10	U
2-Butanone	50	U	50	UJ	50	U	50	U
2-Hexanone	50	U	50	UJ	50	U	50	U
4-Methyl-2-pentanone	50	U	50	UJ	50	U	50	U
Acetic acid, methyl ester	10	U	10	UJ	10	UJ	10	U
Acetone	10	U	50	UJ	50	U	10	U
Benzene	10	U	10	UJ	10	U	10	U
Bromodichloromethane	10	U	10	UJ	10	U	10	U
Bromoform	10	U	10	UJ	10	U	10	U
Bromomethane	10	U	10	UJ	10	U	10	U
Carbon disulfide	10	UJ	10	UJ	10	UJ	10	UJ
Carbon tetrachloride	10	U	10	UJ	10	U	10	U
Chlorobenzene	10	U	10	UJ	10	U	10	UJ
Chlorodibromomethane	10	U	10	UJ	10	U	10	U
Chloroethane	10	UJ	10	UJ	10	UJ	10	UJ
Chloroform	10	U	10	UJ	10	U	10	U
Chloromethane	10	UJ	10	UJ	10	UJ	10	UJ
Cis-1,2-Dichloroethene	10	U	10	UJ	10	U	10	U
cis-1,3-Dichloropropene	10	U	10	UJ	10	U	10	U
Cyclohexane	10	U	10	UJ	10	UJ	10	U
Dichlorodifluoromethane	10	UJ	10	UJ	10	UJ	10	UJ

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Checked By: ASZ 2/5/07

Appendix E
Table 1.6: VOC Groundwater Results

Lab Sample Id	X5201-15		X5201-16		X5201-17		X5201-18	
Lab Sample Delivery Group	X5201		X5201		X5201		X5201	
Loc Name	GW-07		GW-08		GW-08		GW-12	
Field Sample Id	LCGW00702501XX		LCGW00801901XX		LCGW00802501XX		LCGW01202001XX	
Field Sample Date	10/31/2006		10/30/2006		10/30/2006		10/30/2006	
Qc Code	FS		FS		FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
Ethyl benzene	10	U	10	UJ	10	U	10	U
Isopropylbenzene	10	U	10	UJ	10	U	10	U
Methyl cyclohexane	10	U	10	UJ	10	U	10	U
Methyl Tertbutyl Ether	10	U	10	UJ	10	U	10	U
Methylene chloride	10	U	10	UJ	10	U	10	U
o-Xylene	10	U	10	UJ	10	U	10	U
Styrene	10	U	10	UJ	10	U	10	U
Tetrachloroethene	1.4	J	5.1	J	10	U	2.5	J
Toluene	10	U	10	UJ	10	U	10	U
trans-1,2-Dichloroethene	10	U	10	UJ	10	U	10	U
trans-1,3-Dichloropropene	10	U	10	UJ	10	U	10	U
Trichloroethene	10	U	10	UJ	10	U	10	U
Trichlorofluoromethane	10	UJ	10	UJ	10	UJ	10	UJ
Vinyl chloride	10	U	10	UJ	10	UJ	10	U
Xylene, m/p	10	U	10	UJ	10	U	10	U

Notes:
Results in microgram per liter (µg/L)
Samples analyzed for VOCs by EPA Method OLM04.2
QC Code:
FS = Field Sample
FD = Field Duplicate
TB = Trip Blank
Qualifiers:
U = Not detected at a concentration greater than the RL
J = Estimated value

Created By: WBC 1/29/06
Checked By: ASZ 2/5/07

Appendix E
Table 1.7: VOC Soil Results

Lab Sample Id	X5201-01		X5201-04		X5201-05		X5201-06		X5201-07	
Lab Sample Delivery Group	X5201		X5201		X5201		X5201		X5201	
Loc Name	GS-01a		GS-02a		GS-03a		GS-04a		GS-04a	
Field Sample Id	LCGS00100401XX		LCGS00200401XX		LCGS00300301XX		LCGS00400701XX		LCGS00400701XD	
Field Sample Date	10/31/2006		10/31/2006		10/31/2006		10/31/2006		10/31/2006	
Qc Code	FS		FS		FS		FS		FD	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane	12	U	11	U	12	U	11	U	11	U
1,1,2,2-Tetrachloroethane	12	U	11	U	12	U	11	U	11	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	12	U	11	U	12	U	11	U	11	U
1,1,2-Trichloroethane	12	U	11	U	12	U	11	U	11	U
1,1-Dichloroethane	12	U	11	U	12	U	11	U	11	U
1,1-Dichloroethene	12	U	11	U	12	U	11	U	11	U
1,2,4-Trichlorobenzene	12	U	11	U	12	U	11	U	11	U
1,2-Dibromo-3-chloropropane	12	U	11	U	12	U	11	U	11	U
1,2-Dibromoethane	12	U	11	U	12	U	11	U	11	U
1,2-Dichlorobenzene	12	U	11	U	12	U	11	U	11	U
1,2-Dichloroethane	12	U	11	U	12	U	11	U	11	U
1,2-Dichloropropane	12	U	11	U	12	U	11	U	11	U
1,3-Dichlorobenzene	12	U	11	U	12	U	11	U	11	U
1,4-Dichlorobenzene	12	U	11	U	12	U	11	U	11	U
2-Butanone	59	U	55	U	58	U	54	U	53	U
2-Hexanone	59	U	55	U	58	U	54	U	53	U
4-Methyl-2-pentanone	59	U	55	U	58	U	54	U	53	U
Acetic acid, methyl ester	12	U	11	U	12	U	11	U	11	U
Acetone	59	U	55	U	58	U	54	U	53	U
Benzene	3	J	11	U	1.4	J	11	U	11	U
Bromodichloromethane	12	U	11	U	12	U	11	U	11	U
Bromoform	12	U	11	U	12	U	11	U	11	U
Bromomethane	12	U	11	U	12	U	11	U	11	U
Carbon disulfide	12	UJ	11	U	12	UJ	11	U	11	U
Carbon tetrachloride	12	U	11	U	12	U	11	U	11	U
Chlorobenzene		R	11	U	12	U	11	U	11	U
Chlorodibromomethane	12	U	11	U	12	U	11	U	11	U
Chloroethane	12	U	11	U	12	U	11	U	11	U
Chloroform	12	U	11	U	12	U	11	U	11	U
Chloromethane	12	U	11	U	12	U	11	U	11	U
Cis-1,2-Dichloroethene	12	U	11	U	12	U	11	U	11	U
cis-1,3-Dichloropropene	12	U	11	U	12	U	11	U	11	U
Cyclohexane	12	U	11	U	12	U	11	U	11	U
Dichlorodifluoromethane	12	U	11	U	12	U	11	U	11	U

Created By: WBC 1/29/06
Checked By: ASZ 2/5/07

Appendix E
Table 1.7: VOC Soil Results

Lab Sample Id	X5201-01		X5201-04		X5201-05		X5201-06		X5201-07	
Lab Sample Delivery Group	X5201		X5201		X5201		X5201		X5201	
Loc Name	GS-01a		GS-02a		GS-03a		GS-04a		GS-04a	
Field Sample Id	LCGS00100401XX		LCGS00200401XX		LCGS00300301XX		LCGS00400701XX		LCGS00400701XD	
Field Sample Date	10/31/2006		10/31/2006		10/31/2006		10/31/2006		10/31/2006	
Qc Code	FS		FS		FS		FS		FD	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**	**Result**	**Qualifier**
Ethyl benzene	3.1	J	11	U	1.2	J	0.84	J	0.65	J
Isopropylbenzene	12	U	11	U	12	U	11	U	11	U
Methyl cyclohexane	12	U	11	U	12	U	11	U	11	U
Methyl Tertbutyl Ether	12	U	11	U	12	U	11	U	11	U
Methylene chloride	12	U	11	U	12	U	11	U	11	U
o-Xylene	3.9	J	11	U	1.3	J	0.81	J	0.66	J
Styrene	12	U	11	U	12	U	11	U	11	U
Tetrachloroethene	7300	D	11	U	4.4	J	11	U	11	U
Toluene	11	J	0.85	J	2	J	2.3	J	1.9	J
trans-1,2-Dichloroethene	12	U	11	U	12	U	11	U	11	U
trans-1,3-Dichloropropene	12	U	11	U	12	U	11	U	11	U
Trichloroethene	12	U	11	U	12	U	11	U	11	U
Trichlorofluoromethane	12	U	11	U	12	U	11	U	11	U
Vinyl chloride	12	U	11	U	12	U	11	U	11	U
Xylene, m/p	5.4	J	11	U	1	J	2.4	J	2.2	J

Notes:
Results in microgram per kilogram (µg/kg)
Samples analyzed for VOCs by EPA Method OLM04.2
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the RL
J = Estimated value
D = Result was reported from a diluted analytical run
R = Result was rejected during data validation
B = Analyte was detected in the method blank

Created By: WBC 1/29/06
Checked By: ASZ 2/5/07

Appendix E
Table 1.7: VOC Soil Results

	Lab Sample Id	X5201-09		X5201-10	
	Lab Sample Delivery Group	X5201		X5201	
	Loc Name	GS-05a		GS-04a	
	Field Sample Id	LCGS00500201XX		LCGS00400901XX	
	Field Sample Date	10/31/2006		10/31/2006	
	Qc Code	FS		FS	
Param Name		**Result**	**Qualifier**	**Result**	**Qualifier**
1,1,1-Trichloroethane		11	U	11	U
1,1,2,2-Tetrachloroethane		11	U	11	U
1,1,2-Trichloro-1,2,2-Trifluoroethane		11	U	11	U
1,1,2-Trichloroethane		11	U	11	U
1,1-Dichloroethane		11	U	11	U
1,1-Dichloroethene		11	U	11	U
1,2,4-Trichlorobenzene		11	U	11	U
1,2-Dibromo-3-chloropropane		11	U	11	U
1,2-Dibromoethane		11	U	11	U
1,2-Dichlorobenzene		11	U	11	U
1,2-Dichloroethane		11	U	11	U
1,2-Dichloropropane		11	U	11	U
1,3-Dichlorobenzene		11	U	11	U
1,4-Dichlorobenzene		11	U	11	U
2-Butanone		54	U	8.1	J
2-Hexanone		54	U	55	U
4-Methyl-2-pentanone		54	U	55	U
Acetic acid, methyl ester		11	U	11	U
Acetone		54	U	100	B
Benzene		11	U	11	U
Bromodichloromethane		11	U	11	U
Bromoform		11	U	11	U
Bromomethane		11	U	11	U
Carbon disulfide		11	U	11	U
Carbon tetrachloride		11	U	11	U
Chlorobenzene		11	U	11	U
Chlorodibromomethane		11	U	11	U
Chloroethane		11	U	11	U
Chloroform		11	U	7.5	J
Chloromethane		11	U	11	U
Cis-1,2-Dichloroethene		11	U	11	U
cis-1,3-Dichloropropene		11	U	11	U
Cyclohexane		11	U	11	U
Dichlorodifluoromethane		11	U	11	U

Created By: WBC 1/29/06
Checked By: ASZ 2/5/07

Appendix E
Table 1.7: VOC Soil Results

Lab Sample Id	X5201-09		X5201-10	
Lab Sample Delivery Group	X5201		X5201	
Loc Name	GS-05a		GS-04a	
Field Sample Id	LCGS00500201XX		LCGS00400901XX	
Field Sample Date	10/31/2006		10/31/2006	
Qc Code	FS		FS	
Param Name	**Result**	**Qualifier**	**Result**	**Qualifier**
Ethyl benzene	1.9	J	11	U
Isopropylbenzene	11	U	11	U
Methyl cyclohexane	11	U	11	U
Methyl Tertbutyl Ether	11	U	11	U
Methylene chloride	11	U	11	U
o-Xylene	0.55	J	11	U
Styrene	11	U	11	U
Tetrachloroethene	11	U	11	U
Toluene	1.1	J	1.6	J
trans-1,2-Dichloroethene	11	U	11	U
trans-1,3-Dichloropropene	11	U	11	U
Trichloroethene	11	U	11	U
Trichlorofluoromethane	11	U	11	U
Vinyl chloride	11	U	11	U
Xylene, m/p	1.8	J	11	U

Notes:
Results in microgram per kilogram (µg/kg)
Samples analyzed for VOCs by EPA Method OLM04.2
QC Code:
FS = Field Sample
FD = Field Duplicate
Qualifiers:
U = Not detected at a concentration greater than the RL
J = Estimated value
D = Result was reported from a diluted analytical run
R = Result was rejected during data validation
B = Analyte was detected in the method blank

Created By: WBC 1/29/06
Checked By: ASZ 2/5/07

Example Form I - showing CHEMTECH's OLM 04.2 VOC Method Detection Limits

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	**MACTEC Inc.**	**Date Collected:**	**02/16/06**
Project ID:	**D003826 Region 8 Dry Cleaners-Loohns MEC02060003**	**Date Received:**	**02/17/06**
Customer Sample No.:	**LCGW01101801XA**	**Lab Sample ID:**	**X1590-07**
Test:	**VOC-TCLVOA 4.3-10NP**	**SDG ID:**	**X1590**
Analytical Method:	**EPA OLM04.2 - VOA**	**% Moisture:**	**100.00**
Result Type:		**Datafile:**	**VF001117**

CAS Number	Parameter	Results	Qualifier	Units	DL	Retention Time	DF	DIL/RE
75-71-8	Dichlorodifluoromethane	ND	U	ug/L	0.50		10	1
74-87-3	Chloromethane	ND	U	ug/L	0.50		10	1
75-01-4	Vinyl Chloride	ND	U	ug/L	0.50		10	1
74-83-9	Bromomethane	ND	U	ug/L	0.50		10	1
75-00-3	Chloroethane	ND	U	ug/L	0.50		10	1
75-69-4	Trichlorofluoromethane	ND	U	ug/L	0.50		10	1
76-13-1	1,1,2-Trichlorotrifluoroethane	ND	U	ug/L	0.50		10	1
75-35-4	1,1-Dichloroethene	ND	U	ug/L	0.50		10	1
67-64-1	Acetone	6.7	JB	ug/L	0.50		50	1
75-15-0	Carbon Disulfide	ND	U	ug/L	0.50		10	1
1634-04-4	Methyl tert-butyl Ether	ND	U	ug/L	0.50		10	1
79-20-9	Methyl Acetate	ND	U	ug/L	0.50		10	1
75-09-2	Methylene Chloride	2.0	J	ug/L	0.50		10	1
156-60-5	trans-1,2-Dichloroethene	ND	U	ug/L	0.50		10	1
75-34-3	1,1-Dichloroethane	ND	U	ug/L	0.50		10	1
110-82-7	Cyclohexane	ND	U	ug/L	0.50		10	1
78-93-3	2-Butanone	ND	U	ug/L	0.50		50	1
56-23-5	Carbon Tetrachloride	ND	U	ug/L	0.50		10	1
156-59-2	cis-1,2-Dichloroethene	ND	U	ug/L	0.50		10	1
67-66-3	Chloroform	ND	U	ug/L	0.50		10	1
71-55-6	1,1,1-Trichloroethane	ND	U	ug/L	0.50		10	1
108-87-2	Methylcyclohexane	ND	U	ug/L	0.50		10	1
71-43-2	Benzene	ND	U	ug/L	0.50		10	1
107-06-2	1,2-Dichloroethane	ND	U	ug/L	0.50		10	1
79-01-6	Trichloroethene	ND	U	ug/L	0.50		10	1
78-87-5	1,2-Dichloropropane	ND	U	ug/L	0.50		10	1
75-27-4	Bromodichloromethane	ND	U	ug/L	0.50		10	1
108-10-1	4-Methyl-2-Pentanone	ND	U	ug/L	0.50		50	1

CHEMTECH 284 Sheffield Street, Mountainside, NJ 07092 Phone: 908-789-8900 Fax: 908-789-8922

Report of Analysis

Client:	**MACTEC Inc.**	**Date Collected:**	**02/16/06**
Project ID:	**D003826 Region 8 Dry Cleaners-Loohns MEC02060003**	**Date Received:**	**02/17/06**
Customer Sample No.:	**LCGW01101801XA**	**Lab Sample ID:**	**X1590-07**
Test:	**VOC-TCLVOA 4.3-10NP**	**SDG ID:**	**X1590**
Analytical Method:	**EPA OLM04.2 - VOA**	**% Moisture:**	**100.00**
Result Type:		**DataFile:**	**VF001117**

CAS Number	Parameter	Results	Qualifier	Units	DL	Retention Time	DF	DIL/RE
108-88-3	Toluene	ND	U	ug/L	0.50	10	1	
10061-02-6	t-1,3-Dichloropropene	ND	U	ug/L	0.50	10	1	
10061-01-5	cis-1,3-Dichloropropene	ND	U	ug/L	0.50	10	1	
79-00-5	1,1,2-Trichloroethane	ND	U	ug/L	0.50	10	1	
591-78-6	2-Hexanone	ND	U	ug/L	0.50	50	1	
124-48-1	Dibromochloromethane	ND	U	ug/L	0.50	10	1	
106-93-4	1,2-Dibromoethane	ND	U	ug/L	0.50	10	1	
127-18-4	Tetrachloroethene	3.9	J	ug/L	0.50	10	1	
108-90-7	Chlorobenzene	ND	U	ug/L	0.50	10	1	
100-41-4	Ethyl Benzene	ND	U	ug/L	0.50	10	1	
126777-61-2	m/p-Xylenes	ND	U	ug/L	0.50	10	1	
95-47-6	o-Xylene	ND	U	ug/L	0.50	10	1	
100-42-5	Styrene	ND	U	ug/L	0.50	10	1	
75-25-2	Bromoform	ND	U	ug/L	0.50	10	1	
98-82-8	Isopropylbenzene	ND	U	ug/L	0.50	10	1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	U	ug/L	0.50	10	1	
541-73-1	1,3-Dichlorobenzene	ND	U	ug/L	0.50	10	1	
106-46-7	1,4-Dichlorobenzene	ND	U	ug/L	0.50	10	1	
95-50-1	1,2-Dichlorobenzene	ND	U	ug/L	0.50	10	1	
96-12-8	1,2-Dibromo-3-Chloropropane	ND	U	ug/L	0.50	10	1	
120-82-1	1,2,4-Trichlorobenzene	ND	U	ug/L	0.50	10	1	
109629-49-4	4,6-Dioxa-3,8-disiladecane, 5-(2,6	5.9	J	ug/L	0	0	1	TIC
	unknown27.25	7.2	J	ug/L	0	0	1	TIC

APPENDIX F

ESTIMATED SOIL VAPOR CONCENTRATIONS

Loohns Corning Site

Estimation of the soil gas concentration at the potential source area.[1]

$$C_{sg} = \frac{H * C_{soil} * \rho_b}{\theta_w + (K_d * \rho_b) + H\theta_a} * (1000)$$

Inputs:

Contaminant = PCE

H = = 0.754 (dimensionless) (default[1])

K_{oc} = 364[2]

C_{soil} = PCE = 7.3 mg/Kg

$$C_{sg} = \frac{0.754 * 7.3 * 1.5}{0.15 + (2.184 * 1.5) + 0.754*0.28} * (1000)$$

C_{sg} = 2,270 µg/L

Converted to µg/M^3 = 2,270 µg/L* (1000L/1 M^3)

C_{sg} = 2,270,000 µg/M^3

Parameter = Definition (units)

C_{sg} = soil gas concentration (µg/L)
ρ_b = dry soil bulk density (kg/L) = 1.5 (default[1])
K_d = soil-water partition coefficient (L/kg) = K_{oc} x f_{oc}
K_{oc} = organic carbon partition coefficient (L/kg)
F_{oc} = fraction organic carbon in soil (g/g) = 0.006 (0.6%)(default[1])
θ_w = water-filled soil porosity (L_{water} /L_{soil}) = 0.15 (default[1])
H = dimensionless Henry's law constant
θ_a = air-filled soil porosity (L_{air} /L_{soil}) = n - θ_w
n = total soil porosity (L_{pore} /L_{soil}) = 1 - (ρ_b/ρ_s) =0.43 (default[1])
ρ_s = soil particle density (kg/L) = 2.65 (default[1])

[1] From USEPA, 1996; Soil Screening Guidance: Users Guide; EPA/540/R-96/018; April, 1996
[2]From USEPA, 1990; Basic of Pump and Treat Ground-Water Remediation Technology; EPA/600/8-90/003; March, 1990