

# Remedial Investigation Work Plan

Brownfield Cleanup Program Site  
110 Luther Avenue Site  
110 Luther Avenue, Liverpool  
Onondaga County, New York

BCP Site # C734118

October 2009



**Remedial Investigation Work Plan  
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Brownfield Cleanup Program Site  
110 Luther Avenue, Liverpool  
Onondaga County, New York**

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**Project No. N8011**

**TABLE OF CONTENTS**

**SECTION 1 - INTRODUCTION.....1**

    1.1    PROJECT BACKGROUND.....1

    1.2    OBJECTIVES.....1

**SECTION 2 - SITE HISTORY AND DESCRIPTION.....3**

    2.1    SITE LOCATION AND LAYOUT.....3

    2.2    TOPOGRAPHY.....3

    2.3    METEOROLOGY.....3

    2.4    SURFACE WATER AND DRAINAGE.....4

    2.5    GROUNDWATER.....4

    2.6    SITE HISTORY.....4

    2.7    PREVIOUS INVESTIGATIONS.....5

    2.8    DATA GAPS.....8

**SECTION 3 INVESTIGATION SCOPE.....9**

    3.1    TASK 1.....9

    3.2    TASK 2.....12

    3.3    SITE SURVEY.....14

    3.4    SAMPLING SUMMARY AND LABORATORY ANALYSIS.....14

    3.5    SITE HEALTH AND SAFETY PLAN.....15

**SECTION 4 DATA EVALUATION AND REPORTING.....16**

    4.1    DATA USABILITY SUMMARY REPORT (DUSR).....16

    4.2    HUMAN HEALTH EXPOSURE ASSESSMENT.....17

    4.3    COMPLIANCE WITH STANDARDS, CRITERIA, AND GUIDANCE.....18

    4.4    FISH AND WILDLIFE RESOURCES IMPACT ANALYSIS.....18

    4.5    HYDROGEOLOGIC / HYDROLOGIC ASSESSMENT.....18

    4.6    CONCLUSIONS AND RECOMMENDATIONS.....19

**SECTION 5 SITE INVESTIGATION SCHEDULE.....20**

**FIGURES**

Figure 1           Topographic Map Showing Site Location

Figure 2           Site Location

Figure 3           Sample Locations

Figure 4           Conceptual Groundwater Well Diagram

Figure 5           Conceptual Soil Vapor Well Diagram

**APPENDICES**

Appendix A   Previous Investigation Data

Appendix B   Quality Assurance Project Plan

- Appendix C Site Health and Safety Plan
- Appendix D Community Air Monitoring Plan
- Appendix E Fish and Wildlife Impact Decision Key

## **ATTACHMENTS**

- Attachment 1 Site Survey
- Attachment 2 Site Investigation Report and Construction Remediation Plan
- Attachment 3 Site Remediation Summary Report
- Attachment 4 Limited Subsurface Investigation

## **SECTION 1 - INTRODUCTION**

### **1.1 Project Background**

The 110 Luther Ave site (the 'site') occupies approximately 1.4 acres along the west side of Luther Avenue in the Town of Salina, Onondaga County, New York (Figure 1). The site is owned by Syracuse Label Co., Inc. ("Syracuse Label") whose office, light manufacturing, and warehousing operations are housed within the one story building which occupies the majority of the parcel. The remainder of the site consists primarily of paved parking areas. The site is located in a commercial/industrial area just east of Interstate 81 and is bordered by Albion Ave to the west, Knapp Ave to the north, Luther Ave to the east, and an open lot and maintenance garage to the west (Figure 2).

Syracuse Label is interested in investigating and remediating the 110 Luther Ave site in the New York State Brownfield Cleanup Program (BCP) under agreement with the NYSDEC. Under the BCP, a Remedial Investigation must be completed in accordance with the NYSDEC's Department of Environmental Remediation (DER) Draft DER-10 Technical Guidance for site Investigation and Remediation (NYSDEC, December 2002) to provide a systematic assessment of environmental conditions at the site. Data has been generated during previous investigations at the site (see Section 2.7), therefore, additional investigation is necessary only to fill data gaps for the assessment of potential remedial approaches.

This Remedial Investigation (RI) Work Plan has been developed in accordance with the 6NYCRR Part 375 and DER-10 to collect the data necessary to fill information gaps that exist at the site. The RI Work Plan sets forth the scope and methods that will be followed during the course of the investigation. The approach described herein is based on existing site conditions and the results of previous investigations as described in Section 2.7.

### **1.2 Objectives**

The objectives of the RI will be

- to define the nature and extent of contamination,
- to identify a contaminant source, if any,
- to produce data sufficient to conduct a qualitative exposure assessment, and

- to provide a basis to develop an appropriate remedy consistent with the intended industrial end use.

The following supporting documents are included in this RI Work Plan:

- Appendix A Previous Investigation Data
- Appendix B Quality Assurance Project Plan
- Appendix C Site Health and Safety Plan
- Appendix D Community Air Monitoring Plan
- Appendix E Fish and Wildlife Impact Decision Key
- Attachment 1 Site Survey
- Attachment 2 Site Investigation Report and Construction Remediation Plan
- Attachment 3 Site Remediation Summary Report
- Attachment 4 Limited Subsurface Investigation

## **SECTION 2 - SITE HISTORY AND DESCRIPTION**

### **2.1 Site Location and Layout**

The site is located along Luther Avenue in the Town of Salina and is made up of Tax Parcels 085.-12-04.1, 085.-12-05.0, 085.-12-06.1, 085.-12-08.0, and 085.-12-09.0 as depicted in Figure 2. A site survey recently completed by Ianuzi & Romans Land Surveying (Attachment 1) indicates that the site is approximately 1.40 acres.

The site is rectangular shaped land that is flat to nearly flat (0 to 2% slope) throughout the site. The eastern site boundary is interrupted by a parcel that is owned by the Brannock Device Company, Inc., a manufacturer of foot measurement devices. There are several commercial/manufacturing businesses along Luther Ave to the east, north, and south of the site including Syracuse Crank and Machine, Diverse Food Products, Walk on Wood Flooring, and Bush Electronics. There are several vacant lots, a semi-residential building, and an auto repair shop located to the west of the site along Albion Ave.

The site encompasses the Syracuse Label facility, which includes a strip along the north, east, and west perimeter that is used for parking, and the south side of the site which is used for delivery vehicles. The entire site, and the majority of the surrounding area, is covered with building or is paved with asphalt except for minor landscape planting areas (Figure 2).

### **2.2 Topography**

The area surrounding the site dips gently from west to east towards Ley Creek, which is approximately 1,300 east of the site. The site itself is flat and lies at an elevation of approximately 360 feet above mean sea level (Figure 1).

### **2.3 Meteorology**

The site is located in Central New York and is a part of the Greater Syracuse metropolitan area. This region has a humid continental climate with cold winters and warm to cool summers. The average temperature ranges from 22.7° F in January to 70.9°

F in July<sup>1</sup>. The average total snowfall for this region is approximately 115.6 inches<sup>2</sup> and the average annual rain fall of 40".

## **2.4 Surface water and Drainage**

Surface water in proximity to the site includes Beartrap Creek located approximately 800 feet north of the site, across 7<sup>th</sup> North Street, and Ley Creek which is located approximately 1,300 feet east of the site.

Beartrap Creek is a southward flowing tributary to Ley Creek. The two water bodies join just upstream from the point where 7<sup>th</sup> North Street crosses Ley Creek. Much of the area is serviced by a storm water drainage and conveyance system.

## **2.5 Groundwater**

Based on the information obtained from monitoring wells during previous investigations (see Section 2.7 – Previous Investigations), the water table is typically within three to five feet of the ground surface. Based on information provided in previous investigations (see Section 2.7), groundwater flow is from northwest to southeast across the site. The site is serviced by a public water supply.

## **2.6 Site History**

The site has a history of industrial/commercial use dating back to at least the 1920's. Since that time a number of industrial/commercial facilities have operated at the site including

- All-State Stamping Corp.,
- Tuff-Kote,
- Syracuse Bumper Plating,
- Erhand & Gilcher, Inc.,
- Raynor Overhead Door,
- Prince Tool & Die, and

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<sup>1</sup> Information obtained from the National Weather Service at <http://www.erh.noaa.gov/bgm/climate/syr> based on data recorded between 1950 and the present.

<sup>2</sup> Information obtained from the National Climatic Data Center website at <http://lwf.ncdc.noaa.gov/oa/climate/online/ccd/snowfall>. Information updated in August 2008.



- Syracuse Truck Sales.

## 2.7 Previous Investigations

The following information provides a summary of environmental work completed at the site. The previous investigation activities were related to property transactions and construction activities associated with the expansion of Syracuse Label's facilities. The information presented in this section is based on a review of the following three reports:

- C&H Engineers, P.C. *Site Investigation Report and Construction Remediation Plan*. November 18, 1994.
- C&H Engineers, P.C. *Site Remediation Summary Report*. August 22, 1995.
- Beardsley Design Associates. *Limited Subsurface Investigation*. April 28, 2008.

**2.7.1 Site Investigation Report and Construction Remediation Plan** (Attachment 2). In October of 1994, C&H Engineers, P.C. (C&H) completed a Phase II Environmental Assessment at the site. At the time the parcel being investigated was owned by Syracuse Truck Sales. The assessment included completing test pits along the Syracuse Truck Sales/110 Luther Ave site property boundary and screening excavated soils with a photoionization detector (PID). Initial test pits completed along the property boundary identified soils with PID readings that ranged between 120 and 340 parts per million (ppm). Based on the PID readings the NYSDEC spills hotline was contacted and spill file 94-09529 was assigned. A sample of soils with elevated PIDs was taken for laboratory analysis and the sample results identified several volatile organic compounds (VOCs) commonly associated with petroleum, tetrachloroethylene (PCE) and trichloroethylene (TCE).

Based on the results of the initial data, four additional test pits were completed and soils excavated from test pits were reported as exhibiting a fuel oil/kerosene type odor and PID readings between 40 and 60 ppm. A sample composited from two of the test pits, which was analyzed for VOCs, semi-volatile organic compounds (SVOCs), and petroleum characterization, indicated that the soils were likely impacted by weathered kerosene. As a follow-up to the test pits, eight borings (See borings 1 through 8 on Figure 3) were completed through the slab of the 110 Luther Ave site building. PID

readings from soils under the slab ranged between 18 and 660 ppm with the highest readings toward the south near boring 4 (Figure 3).

**2.7.2 Site Remediation Summary Report** (Attachment 3). In December 1994 soil excavation was completed to remove impacted soils identified along the former Syracuse Truck Sales/110 Luther Ave site property boundary (currently occupied by the Syracuse Label warehouse) prior to construction of a warehouse building. During excavation soils were screened with a PID to determine the extent of excavation, and to determine how soils should be handled. Soils with detectable volatile organic vapors were reportedly excavated and transported offsite for disposal. The field screening approach resulted in an excavation that was initially 10 by 56 by 6 feet deep that C&H field staff identified as kerosene impacted soil. The excavation was expanded to the north to remove additional VOC impacted soil which resulted in an additional 34 by 18 by 9 feet deep strip. The overall excavation area is depicted in Figure 3.

PID screening of sidewall samples indicated that the majority of contaminated shallow soils were successfully removed and end-point samples taken from test pits adjacent to the excavation area confirmed this observation. The samples taken from these “clearance” test pits indicated low levels (i.e. less than 0.0049 ppm) or non-detectable levels of VOCs. Laboratory results of a sample taken from 18-feet below ground surface within the VOC impacted portion of the excavation detected PCE at a concentration of 78 ppm.

A sample of water that seeped into the excavation from beneath the structure to the east was sampled for VOC analysis. The sample results indicated that PCE, TCE, and dichloroethylene (DCE) were detected. Based on these results a composite soil sample was taken from bore holes 1 through 6 installed through the floor of the site building slab. The laboratory results identified petroleum VOCs, but at relatively low levels (i.e. less than 1.0 ppm). Subsequently, two additional sub-slab samples were taken from the boreholes: one composite sample was taken from bore holes 1, 2, 3, 5, and 6 (S-2), and a second sub-slab sample was taken from bore hole 4 (S-1). The sample results indicated that petroleum VOCs were detected, but at relatively low levels.

To address the impacted soils beneath the building slab, C&H designed and constructed a soil venting system in a discrete area beneath the site building slab. The system uses a low pressure blower to depress the pressure below the slab. Air from within the building is drawn into the subslab, through PVC conduit penetrating the slab, connecting the interior and subslab environments. The interior air is drawn over subslab soils, collected at a single suction point on the east side of the building and exhausted. A system layout is provided in Appendix A.

In May of 1995, Niagara Mohawk Power Corporation, discovered petroleum contaminated soil surrounding a utility conduit on the east side of the building, along Luther Ave., while installing a new service to the Syracuse Label facility. Niagara Mohawk excavated approximately 20 tons of impacted soil, which was later characterized and disposed of at the BFI Landfill in Niagara Falls, New York by Clean Harbors. It is believed that the impacted soil surrounding the pipe was caused by a leaky underground storage tank (UST) that was removed in 1992 under spill file number 92-04555. Tables summarizing laboratory results from the C&H Engineers report are included in Appendix A.

**2.7.3 Limited Subsurface Investigation** (Attachment 4). In December 2007, Beardsley Design Associates (BDA) sampled groundwater from four site monitoring wells (MW-1 through MW-4). The laboratory analysis detected PCE at 170 micrograms per liter (ug/L) in well MW-1. A subsequent groundwater sample from well MW-1 confirmed the presence of PCE at a concentration of 110 ug/L. As a result, twelve (12) additional monitoring wells (MW-5 through MW-16) were installed and sampled to determine the nature and extent of groundwater impact. The sample results identified PCE and its degradation by-products TCE, DCE, and vinyl chloride in samples from multiple wells including MW-1, MW-7, MW-8, MW-10, MW-11, MW-12, and MW-13 at a concentration that exceeded groundwater standards for at least one compound. PCE was generally the compound detected at the highest concentrations, and was detected at 14,000 ug/L<sup>3</sup> in samples from wells MW-7 and MW-11, and 6,200 ug/L in the sample from MW-8.

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<sup>3</sup> Note: The table provided in the report incorrectly identifies the groundwater concentrations as ug/kg, however, the correct concentration units are ug/L.

The results identified a narrow groundwater plume beneath the central-east side of the site building. Based on groundwater elevation data the direction of groundwater flow is generally from west to east towards Luther Ave. Portions of the Beardsley design associated *Limited Subsurface Investigation* are included in Appendix A.

## 2.8 Data Gaps

Although previous investigations have generally identified the nature and extent of site contamination, some minor data gaps exist with respect to evaluation of potential contaminants in groundwater, soil, and soil vapor. Based on a review of the information reported in Section 2.7, these data gaps fall into the following two categories:

- 1.) Information needed to evaluate the impacts, and migration of impacts in on-site media. Specifically historical soil data exists for the central portion of the site, but little or no soil data exists at the site boundaries. Onsite groundwater is well characterized with data indicating that groundwater contamination is limited to a relatively narrow plume located on the central-east portion of the site. However, limited data regarding the potential extent of offsite migration of groundwater and soil vapor.
  
- 2.) Information needed to evaluate the existing soil venting system. This includes evaluation of the ability of a pressure field to communicate below the site building, including the field induced by the existing soil venting system.

## SECTION 3 - INVESTIGATION SCOPE

The investigation of the site will consist of two concurrent tasks. Task 1 will fill in the data gaps necessary to investigate the potential impacts to soil, groundwater, and soil vapor. Task 2 will field verify the location and number of suction points that comprise the soil venting system, and evaluate the communication of the pressure field beneath the slab of the building.

A Quality Assurance Project Plan (QAPP) has been developed to address quality assurance/quality control procedures that will be followed during the RI work. The QAPP is included as Appendix B of this Work Plan, and outlines the scope and goals of the project, project organization, sampling procedures and equipment decontamination procedures, and sampling methodology. In addition, the QAPP contains a summary table that details the sampling protocol with respect to the matrix, number of samples, analytical methods, and duplicate samples.

The following sections describe the specific tasks to complete the RI scope. General provisions that will apply to these tasks, as indicated in the QAPP, include the use of sampling instruments constructed of stainless steel, Teflon®, or other inert or approved material to collect samples, and the use of a NYSDOH ELAP-certified analytical laboratory to provide the prescribed analyses.

### 3.1 Task 1

**3.1.1 Soil.** Previous investigations provide a site wide characterization of groundwater quality, and a characterization of soils from the central portion of the site, therefore, soil boring activities completed during the RI will be focused on obtaining soil quality data where it is needed at the site perimeter. Three (3) soil borings will be installed to obtain this perimeter soil quality data. One soil boring each will be installed in the northwest, southwest, and southeast corners of the site. Since the intent of the soil borings is to obtain soil samples to fill data gaps, the soil borings will be advanced to the top of the water table which is expected to be between four and six -feet below ground surface (bgs) based on previous investigation findings.

Continuous soil samples will be collected from each soil boring. Soil samples from each sampling interval will be screened by field personnel for visual characteristics and for

volatile organic vapors with a photoionization detector (PID). Observations and instrument readings will be recorded in a Site field notebook.

The sample from each boring with the highest PID readings, or other observations which indicate potential impacts exist, will be selected from each boring for laboratory analysis for target compound list (TCL) volatile organic compounds (VOCs) using EPA Method 8260, TCL semi-volatile organic compounds (SVOCs) using EPA Method 8270, target analyte list (TAL) metals using EPA Methods 6010, 7470, and 7471, and PCBs (six analytes) using EPA Method 8082. If no evidence of potential impacts are observed the sample will be taken from the interval just above the soil-groundwater interface.

**3.1.2 Groundwater.** Two (2) soil borings will be installed offsite in the right-of-way (ROW) downgradient of MW-8 and MW-7 (Figure 3) for the purpose of installing groundwater monitoring wells MW-18 and MW-19. The locations will be field determined based on ROW, property boundary, and utility locations. A third boring/groundwater well (MW-17) will be installed upgradient of well MW-11.

The soil borings will be installed using 4¼ inch hollow stem augers to an approximate depth of 15 feet bgs. Continuous soil samples will be collected using a 2 inch diameter stainless steel split-spoon sampler. Soil samples from each sampling interval will be screened by field personnel for visual characteristics and for volatile organic vapors with a photoionization detector (PID). Observations and instrument readings will be recorded in a site field notebook.

Once the boring is complete, monitoring wells will be constructed in each boring using a 10-foot, 2 inch diameter, 0.01 inch slotted well screen, and PVC riser with the well screens installed to straddle the water table. The boring annular space will be filled with a #00 sized sand pack extending two feet above the top of well screen and capped with a bentonite seal. The monitoring wells will be finished with a flushmount protective cover. A conceptual design of the groundwater monitoring wells is shown on Figure 4. Immediately following installation each well will be developed by removing 10 well volumes of water.

A minimum of one week following well development, groundwater samples will be collected from wells MW-1, -2, -5, -6, -7, -8, -9, -10, -11, -12, -13, 15, -16, and newly installed wells MW-17, -18 (offsite), and -19 (offsite).. The wells will be purged of three

well volumes of water immediately prior to sampling, and field parameters (e.g. eH, pH, conductivity, turbidity) will be measured. The samples will be collected using a disposable PVC bailer, and will be placed in sample containers provided by the laboratory. The groundwater samples from each of the wells will be analyzed as indicated in Table 1 below.

Table 1. Laboratory Analytes For RI Groundwater Samples.

Well ID	Laboratory Analytes			
	TCL VOCs	TCL SVOCs (Base/Neutrals only)	TAL Metals	Total Glycols
MW-1	X		X	
MW-2	X			
MW-5	X		X	
MW-6		X		
MW-7	X		X	
MW-8	X	X		
MW-9	X	X		
MW-10			X	
MW-11	X	X	X	
MW-12	X		X	
MW-13	X		X	
MW-15		X		X
MW-16	X			X
MW-17	X			
MW-18	X	X		
MW-19	X	X		

**3.1.3 Soil Vapor.** The potential for soil vapor impacts to migrate off of the Brownfield site will be investigated. Four (4) soil vapor wells will be installed: two at locations along the 110 Luther Ave site property boundary between near the western end of the site's building, and two (2) near the groundwater monitoring wells located in the Right-Of-Way (Figure 3). The soil vapor monitoring wells will be installed to approximately 2 to 3 feet bgs using direct push techniques, allowing at least 3 feet between the bottom of the screen and groundwater. If the desired separation between the screen and groundwater

can not be achieved, the location of the well screen will be adjusted in the field. If no separation is possible then the soil vapor wells will not be installed.

The soil vapor wells will consist of ¼-inch outside diameter nylon or Teflon® tubing connected to a 0.5-foot stainless steel screen. A sand pack will be placed in the annular space around the screen and sealed with bentonite. The soil vapor wells will be completed with a flush mount protective cover. A conceptual design of the soil vapor monitoring wells is shown on Figure 5.

Soil vapor samples will be collected from each of the soil vapor monitoring wells using summa canisters. During sampling, each designated soil vapor well will be purged of a minimum of three volumes using a low volume pump, with the flow rate not exceeding 0.2 liters per minute. The wells will then be capped with bee's wax, or similar material, and a ¼-inch inside diameter sampling tube (nylon or Teflon®) will be inserted through the wax cover and connected to the vapor well tubing installed during drilling. The other end of the soil gas tube will be attached to a regulator and secured with a clamp. The regulator will be attached to a 1-liter summa canister. To verify that the soil vapor samples are not diluted by ambient air, the soil vapor sampling effort will include the use of an inert tracer gas (such as helium, propane, or butane). The sampling procedure is begun by placing an inverted plastic pail (or other cover) over the sample point. The atmosphere around the well head is enriched with the tracer gas by filling the inverted pail or other cover with the tracer gas via a small tube which penetrates the side of the cover. Once the soil vapor samples are collected, they will be analyzed by USEPA Method TO-15 for VOCs plus the tracer gas, at a detection limit of 1µg/m<sup>3</sup> (by volume). Tracer gas concentration will also be measured before and after sample collection using a field meter. Detection of greater than 10 percent of the tracer gas will indicate that the soil samples have been exposed to ambient air during the collection procedures.

## **3.2 Task 2**

**3.2.1 Subslab Communication Evaluation.** The presence of groundwater contamination below the site building indicates that there is potential that contaminated soil vapor exists. It is anticipated that a subslab depressurization system (SSDS) will be installed as a part of the site's remedy to mitigate potential risks associated with contaminated soil vapor intrusion into site buildings. A subslab soil venting system exists in a portion of the site building. This soil venting system could be modified and



augmented to function as an SSDS system, however, the layout and performance of the existing venting system must be evaluated, and subslab communication tested before this determination can be made.

As a first step the soil venting system record documents, if available, will be reviewed to gain an understanding of the system layout. This will be followed by a visual inspection of the venting system equipment and the building to identify system components, and building characteristics and conditions that could affect a subslab depressurization system's operation. The inspection will look for:

- venting system pipe runs and mechanical equipment,
- Cracks in floor slab,
- Exposed earth,
- Floor penetrations (sumps, drains, French drains, etc), and
- Foundation wall construction (hollow block wall vs. poured solid wall).

Following the visual inspection, a sub-slab communication test will be completed to determine the radius of influence of a vacuum applied to the sub-slab aggregate. Initially this will begin in the area of the building with an existing soil venting system to measure the extent of the pressure field induced by the system, however, communication testing will proceed throughout the building.

Communication will be completed by drilling small diameter pilot holes (e.g. 3/8 inch diameter) through the floor slab into the sub-slab aggregate material. Vacuum extraction test holes measuring 1¼ inches in diameter will be drilled at locations surrounding the pilot hole. Once the pilot and test holes are in place a vacuum will be applied to pilot hole to determine the affected radius below the floor slab. The actual configuration of the pilot and vacuum test holes will be determined by the communication testing contractor based on an inspection of the premises and accessibility to work areas.

Each pilot hole will be temporarily sealed with modeling clay after it is drilled. One of the vacuum extraction holes will remain open, and a vacuum will be applied to it using an industrial vacuum. The clay seals will be removed from one test hole at a time and a smoke tracer will be used to determine if air is drawn in through the monitoring hole as the vacuum is applied. After the monitoring hole is tested in this manner, it will be

resealed, and then another hole will be unsealed for a similar test. Each of the monitoring holes will be tested individually, in sequence. The airflow patterns observed by the smoke tubes at each monitoring hole will be used to determine the radius of influence of the vacuum applied at each extraction hole. This data will be used to determine the number of extraction points that will be needed to maintain negative pressure in the sub-slab aggregate.

As the communication test is conducted a photoionization detector (PID) will be used to screen the vacuum exhaust for VOCs. If the exhaust contains more than 5 ppm VOCs then it will be exhausted outdoors by a hose.

Upon completion of the communication test, a communication map will be produced that shows the areas of influence achieved at each of the vacuum holes. This will substantiate that the sub-slab communication has been properly characterized and will provide a basis for augmentation or enhancement design.

### **3.3 Site Survey**

A site survey will be completed that will:

- locate the elevation and location of all monitoring wells,
- identify the site property boundary, and
- identify major site features.

The survey will be completed by a licensed surveyor.

### **3.4 Sampling Summary and Laboratory Analysis**

A summary of the proposed sampling plan and the analysis of each sample is listed in Table 1 (Section 3.1.2). In accordance with DER-10, the laboratory analysis on this project will follow NYSDEC Analytical Services Protocol (ASP), where applicable. The laboratory will provide ASP Category B data deliverables packages so that a data usability study (DUSR) report may be completed by an independent third party.

### **3.5 Site Health and Safety Plan**

A site health and safety plan (SHSP) has been prepared for this site and is included as Appendix C. The SHSP has been developed using the applicable general industry and construction standards of the Federal Occupational Safety and Health Administration (OSHA) to protect SWRNA workers implementing this Work Plan. Other contractors will be required to provide SHSP specific to their site work.

## **SECTION 4 - DATA EVALUATION AND REPORTING**

After the investigation is complete, a Remedial Investigation Report will be prepared to present the findings of the investigation, as defined in the previous section. The RI Report will contain a description of the methods used and the data acquired, and will include the following:

- site maps showing sample locations which will be identified by alpha-numeric indicators;
- figures that report pertinent analyte concentrations and provide isoconcentration contouring as appropriate,
- analytical summary tables for each sampled media, including parameters that were detected and those that exceeded applicable standards, criteria, and guidances (SCGs);
- a water table contour map showing the direction of groundwater flow;
- soil boring logs and well construction details;
- laboratory analysis reports and data usability summary reports;
- photographs of site investigation activities;
- identification of specific areas of contamination, and
- identification of potential contaminant migration/transport mechanisms.

The conclusions of the Report will rely on several factors which will be discussed below. It is intended that a Remedial Work Plan will be submitted concurrent with the RI Report to expedite the project schedule.

### **4.1 Data Usability Summary Report (DUSR)**

Following the completion of the laboratory analysis program, a Data Usability Summary Report (DUSR) will be completed by an independent third party, and included in the Remedial Investigation Report. As specified in DER-10, the DUSR will be carried out to evaluate the quality control measures that were implemented during the field and laboratory portions of the investigation. The objective of the DUSR is to determine if the analytical data are representative and usable in decision making. The DUSR will evaluate whether the data are technically defensible (i.e. were all analytical requirements met and documented). Data usability analysis reviews the site data to determine if they are adequate to draw conclusions regarding the nature and extent of contamination.

DUSR evaluation includes the following:

- completeness (number of samples collected and analyzed compared to plans),
- chain of custody completeness and accuracy,
- holding times,
- instrument calibration,
- relative percent difference between field duplicates,
- reasonableness of data (e.g. relationship between total and soluble analytes), and
- blank contamination.

It is noted here that the previously collected soil and groundwater samples were analyzed by a NYS Department of Health (DOH) Environmental Laboratory Accreditation Program (ELAP) laboratory, but quality assurance/quality control data are not available. These data will be presented in the RI Report, but will not be considered to be a part of the DUSR.

#### **4.2 Human Health Exposure Assessment**

Site data will be evaluated to determine whether human receptors may be potentially exposed. The purpose of the exposure assessment will be to qualitatively determine the route, intensity, frequency, and duration of actual or potential exposures of humans to site-related contaminants. The assessment will also describe the nature and size of the population potentially exposed to the contaminants.

Soil, groundwater, and soil vapor laboratory analytical data for will be compared to the following applicable health-based criteria:

- **Soil:** Soil analytical data will be compared to Remedial Program Soil Cleanup Objectives presented in Table 375-6.8(b) for industrial site use.
- **Groundwater:** Groundwater analytical data will be compared to NYS Class GA (drinking water) groundwater quality standards.
- **Soil Vapor.** The New York State Department of Health Evaluation Matrix.

The comparison of the analytical results to the applicable screening criteria will be used to identify contaminants of potential concern (COPCs).

### **4.3 Compliance with Standards, Criteria, and Guidance**

Applicable standards, criteria, and guidance (SCGs) for the sampled media will be identified and analytical results from the field sampling program will be compared to those regulatory SCGs.

### **4.4 Fish and Wildlife Resources Impact Analysis**

In accordance with DER-10, a fish and wildlife resources impact analysis (FWRIA) must be completed at the site. The first part of the FWRIA process is a characterization of fish and wildlife resources. The FWRIA assessment includes the following:

- Fish and wildlife resources will be identified and if no resources are identified, no further FWRIA is warranted.
- Contaminant migration pathways and fish and wildlife exposure pathways will be identified. If no exposure pathways are identified, no further FWRIA is needed. Resources onsite and within one-half mile will be identified and assessed for exposure to any contaminant onsite.
- Identification of contaminants of ecological concern.

Part 1 of the FWRIA will be achieved by completing Steps I through IIA outlined in NYSDEC Division of Fish and Wildlife's *Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites (October 1994)* through Step IIA (FWIA). The findings of the FWIA will be used to complete a Fish and Wildlife Resources Impact Decision Key (Appendix E) to determine if additional assessment is required.

### **4.5 Hydrogeologic / Hydrologic Assessment**

Available data and records related to site climate, hydrology, and hydrogeology will be reviewed and discussed the RI Report as necessary, including:

- precipitation records,
- area aquifers,
- floodplains,

- area wetlands,
- groundwater use in the general area; and,
- surface water classification and designations for the area.

Site specific data for groundwater will be evaluated and discussed in terms of contaminant migration and transport potential.

#### **4.6 Conclusions and Recommendations**

The Remedial Investigation Report will provide conclusions and recommendations that identify and summarize specific onsite sources of contamination, if any, define the extent of areas of concern, identify human health exposure and potential ecological receptors, and recommend future work, if any. The conclusions of the RI will support the basis for the recommended remedial approach for the site.

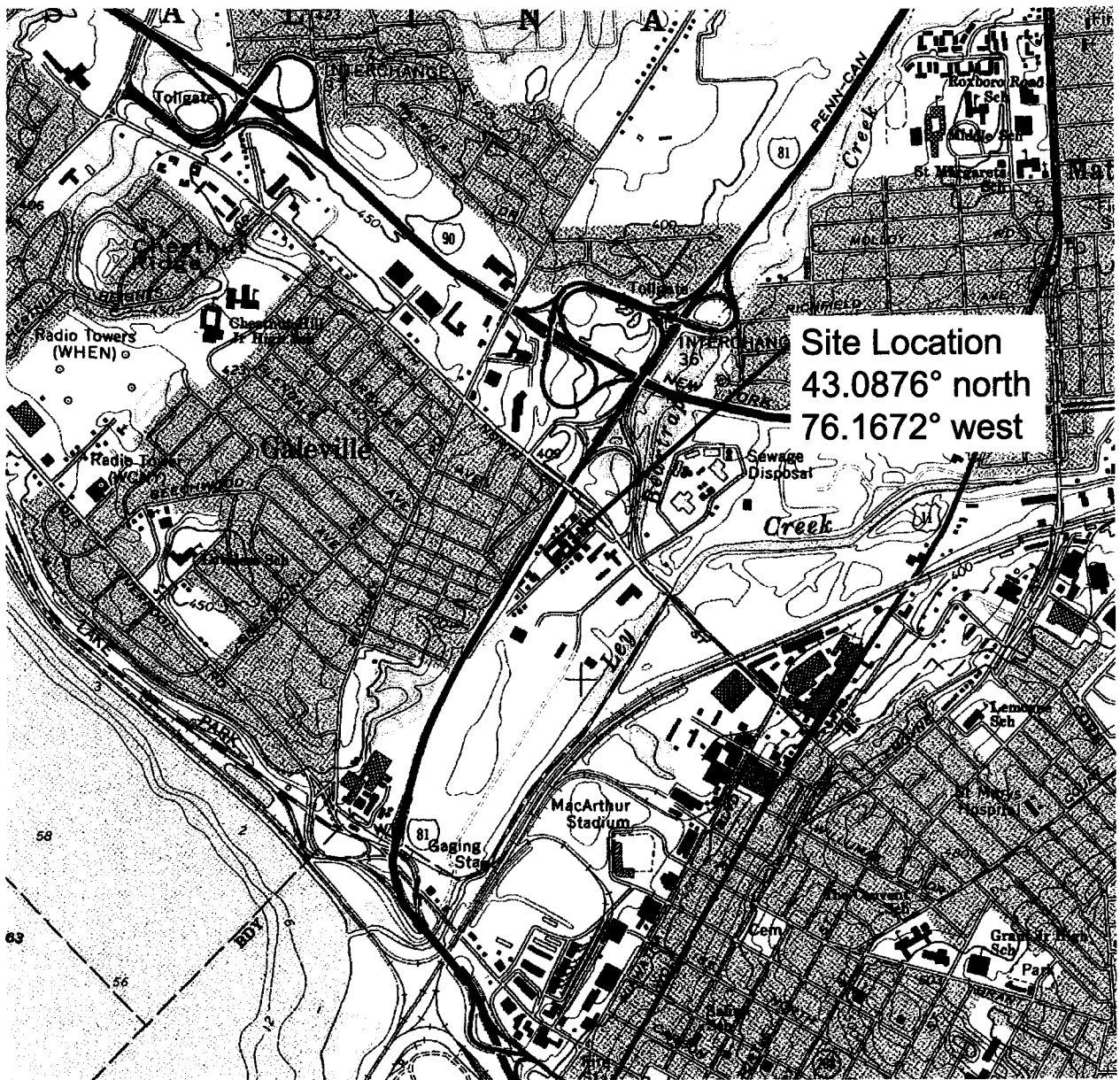
## SECTION 5 - SITE INVESTIGATION SCHEDULE

The Remedial Investigation (RI) and analysis plan proposed herein will be implemented following NYSDEC approval. This RI Work Plan is being submitted with the BCP application. As such, the determination of eligibility, acceptance into the BCP, and required public comment periods will precede NYSDEC approval of the Work Plan. RI Phase 1 field sampling work can be scheduled to begin within thirty days following NYSDEC approval, provided the drilling equipment necessary is available. Phase 1I sample collection will take three to five days and it is estimated that laboratory analysis and evaluation will take approximately six weeks after submission to the laboratory. Depending on the availability of the communication testing contractor, Phase 2 of the investigation should begin within one week of the commencement of the RI Phase 1 field work. Phase 2 field work is estimated to take three weeks to complete. Following receipt of the final laboratory results and DUSR, a RI Report will be provided to NYSDEC within six weeks. It is estimated that the RI Report will be completed within 120 days of this Work Plan approval. A project schedule is presented below.

Project Accepted Into BCP/BCA Executed	September 2009
NYSDEC Approve RI Work Plan/Execute BCA	November 2009
Implement Work Plan	November 2009
Submit RI Report and Remedial Work Plan (RWP)/Remedial Design (RD) To NYSDEC	January 2010

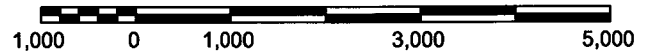


## **Figures**



Site Location  
 43.0876° north  
 76.1672° west

SCALE in FEET



Contour Interval: 10 Feet

Map Taken From: USGS 7.5 Minute Series  
 Topographic Quadrangle;  
 Syracuse West (1975, photorevised 1978)  
 (www.nysgis.state.ny.us/quads/usgsdrg.htm)



QUADRANGLE LOCATION



**S&W Redevelopment**

of North America, LLC.

Syracuse, New York

DATE:4-2009 JOB No.:N8011

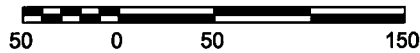
110 Luther Ave. Site  
 110 Luther Ave., Liverpool  
 Onondaga County, New York

Figure 1  
 Site Location Map

X-REF: NAMES?  
 2009/Agency/yr/jk  
 J:\PROJECTS\N-xxxx\N8000\N8011 - Syracuse Label\Figure 1 & 2\SyrLabelFig 1.dwg



SCALE in FEET



Aerial Photo Taken From:  
<http://www1.nysgis.state.ny.us/MainMap.cfm>

 Approximate site boundary.



**S&W Redevelopment**

of North America, LLC.

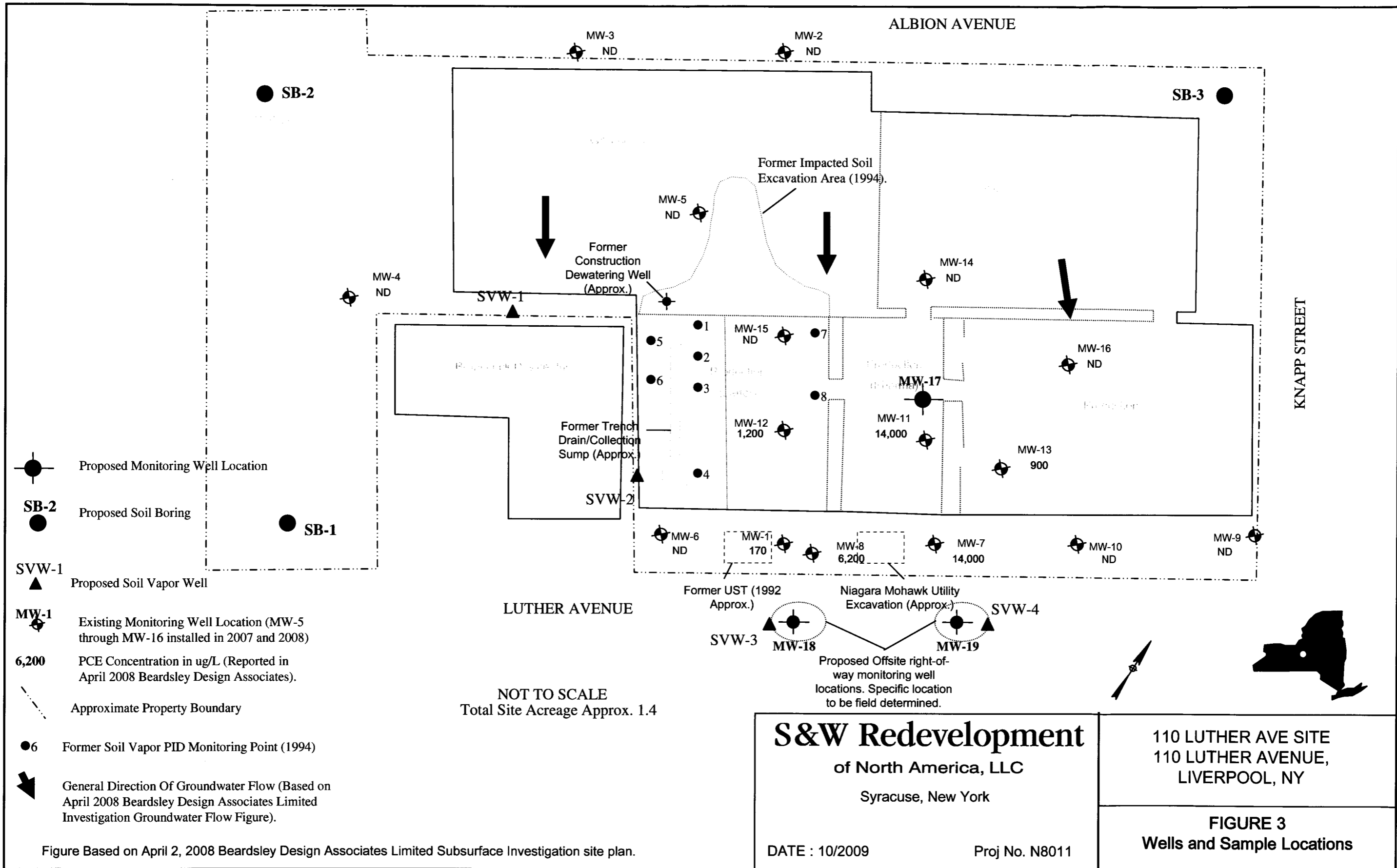
Syracuse, New York

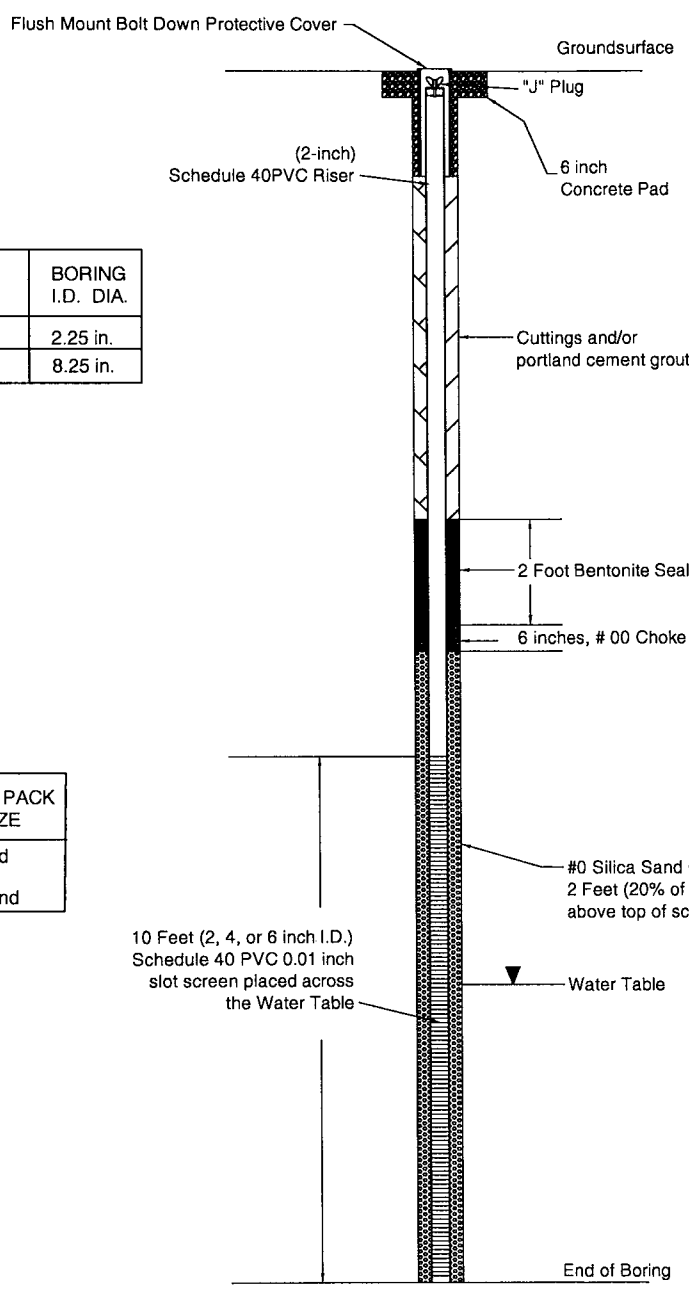
DATE:4-2009 JOB No.:N8011

110 Luther Ave. Site  
 110 Luther Ave., Liverpool  
 Onondaga County, New York

Figure 2  
 Site Plan

X-REF: NAMES?  
 2009/Mar/Byr/jrk  
 J:\PROJECTS\N-xxxx\N8000\N8011 - Syracuse Label\Figure 1 & 2\SyrLabelFig\_2.dwg





CASING I.D. DIA.	AUGER I.D. DIA.	BORING I.D. DIA.
1 in.		2.25 in.
2 in.	4.25 in.	8.25 in.

SCREEN SLOT SIZE	GRAVEL PACK SAND SIZE
0.01 in.	# 0 sand
Choke Sand	# 00 sand

**Note:**  
 Idealized detail. Actual well construction subject to change due to regulatory and/or design requirements as well as field conditions/limitations.

X-REF: NAMES7 2005/September/Syr/ilk J:\PROJECTS\N-xxxx\NB000\NB011 - Syracuse Label\Figure 1 & 2\SyrLabelFig4.dwg

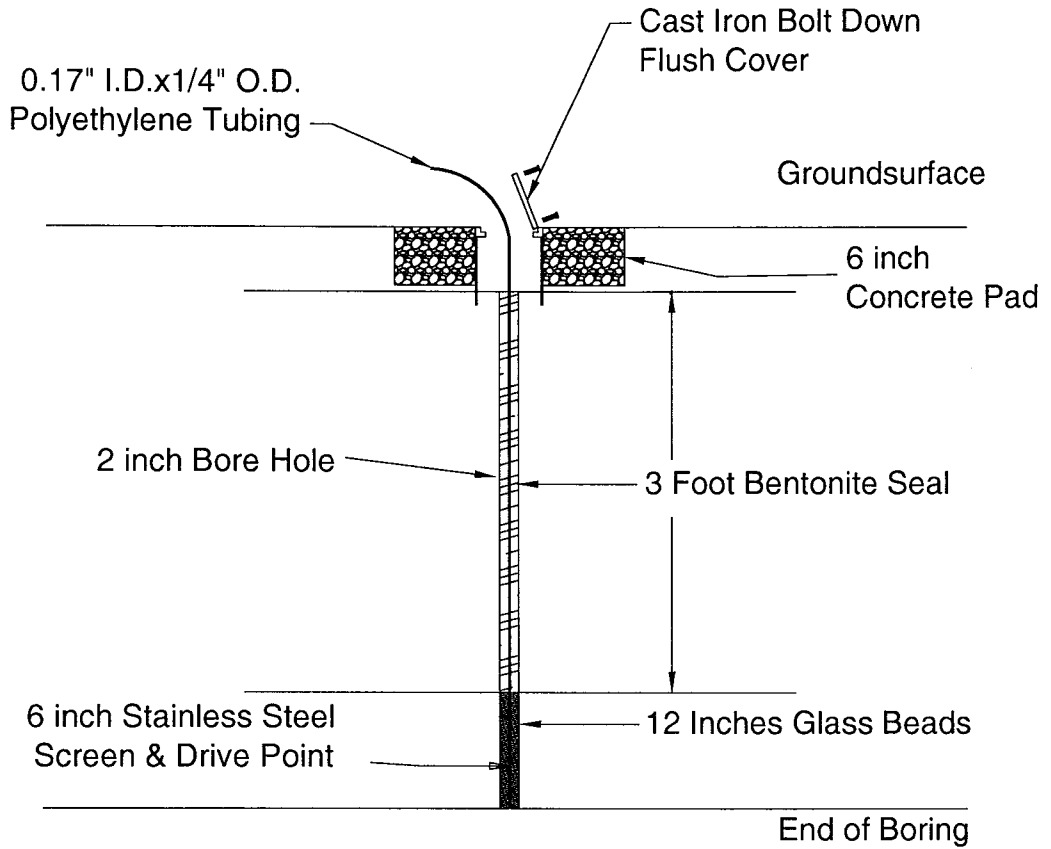
**Not to Scale**

**S&W Redevelopment**  
 of North America, LLC.  
 Syracuse, New York

DATE:4-2009 JOB No.:N8011

110 Luther Ave. Site  
 110 Luther Ave., Liverpool  
 Onondaga County, New York

**Figure 4**  
 Conceptual Monitoring Well Detail



**Note:**

Idealized detail. Actual well construction subject to change due to regulatory and/or design requirements as well as field conditions/limitations.

X-REF: NAMES?  
 2009/September/Syr/ilk  
 J:\PROJECTS\N-xxxx\N8000\N8011 - Syracuse Label\Figure 1 & 2\SyrLabelFig5.dwg

**Not  
to  
Scale**

**S&W Redevelopment**  
 of North America, LLC.  
 Syracuse, New York

DATE:4-2009 JOB No.:N8011

110 Luther Ave. Site  
 110 Luther Ave., Liverpool  
 Onondaga County, New York

Figure 5 Conceptual  
 Soil Vapor Monitoring Well Detail

# **APPENDICES**

**Appendix A**  
**Previous Investigation Data**



TCL Volatiles EPA 8260B ug/L	Class GA Standard <sup>1</sup>	MW-1* 12/10/07	MW-2* 12/10/07	MW-3* 12/10/07	MW-4* 12/10/07	MW-5 1/28/08
1,1-Dichloroethane	5	NR	NR	NR	NR	ND
1,2-Dichloroethene, Total	5	NR	NR	NR	NR	ND
Tetrachloroethene	5	170	ND	ND	ND	ND
Trichloroethene	5	NR	NR	NR	NR	ND
Vinyl chloride	2	NR	NR	NR	NR	ND

TCL Volatiles EPA 8260B mg/kg (ppm)	Class GA Standard <sup>1</sup>	MW-6 1/28/08	MW-7 1/28/08	MW-8 1/28/08	MW-9 3/19/08	MW-10 3/19/08
1,1-Dichloroethane	5	1.9	ND	ND	ND	ND
1,2-Dichloroethene, Total	5	ND	2600	1600	ND	ND
Tetrachloroethene	5	ND	14000	6200	ND	ND
Trichloroethene	5	ND	1700	920	ND	ND
Vinyl chloride	2	ND	560	290	ND	29

TCL Volatiles EPA 8260B mg/kg (ppm)	Class GA Standard <sup>1</sup>	MW-11 3/21/08	MW-12 3/21/08	MW-13 3/21/08	MW-14 4/2/08	MW-15 4/2/08	MW-16 4/2/08
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene, Total	5	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5	14000	1200	900	ND	ND	ND
Trichloroethene	5	2400	280	470	ND	ND	ND
Vinyl chloride	2	ND	ND	ND	ND	ND	2.5

\* Sample analyzed for Volatile Halocarbons by EPA Method 624. Tetrachloroethene was the only compound reported by Laboratory.

NR - Indicates analyte concentration was not reported.

ND - Indicates that compound was not detected.

<sup>1</sup> Class GA Standard from NYSDEC Technical and Operational Guidance Series (TOGS).

<sup>2</sup> Summarizes only those compounds that were detected in samples.

**Site Investigation Report and  
Construction Remediation Plan  
(C&H, 11/18/1994)**

TABLE I

Summary of Detected Compounds  
From Soil Test Pits

## Case Truck Sales Southeast Test Pit (Area C)

Compound	Detected Concentration (ppb)	DEC <sup>1</sup> Standards (ppb)
sec-Butylbenzene	13.9	100.0
p-Isopropyltoluene	8.1	100.0
Tetrachloroethene	15,300.0	1,400.0 <sup>2</sup>
Trichloroethene	281.0	700.0 <sup>2</sup>
1,2,4-Trimethylbenzene	24.0	100.0
1,3,5-Trimethylbenzene	9.0	100.0

Volatiles by  
EPA Method 8021

## Syracuse Label Test Pits (Area D)

Compound	Detected Concentration (ppb)	DEC <sup>1</sup> Standards (ppb)
Total Petroleum Hydrocarbons by NYSDOH 310-13	694 ppm	
Volatiles by EPA Method 8021		
n-Butylbenzene	6,080	100.0
Ethylbenzene	478	100.0
Isopropylbenzene	2,540	100.0
p-Isopropyltoluene	2,070	100.0
Naphthalene	5,730	200.0
1,2,4-Trimethylbenzene	1,130	100.0
1,3,5-Trimethylbenzene	738	100.0
o-Xylene	351	100.0
m, p-Xylene	144	200.0
Anthracene	570	1,000.00
Benzo(b)fluoranthene	170	0.04
Chrysene	180	0.04
Fluoranthene	390	1,000.0
Fluorene	680	1,000.0
Naphthalene	1,600	200.0
Phenanthrene	680	1,000.0
Pyrene	270	1,000.0

Total Petroleum  
Hydrocarbons by  
NYSDOH 310-13Semi-Volatiles by  
EPA Method 8270

## Notes:

ppb parts per billion  
ppm parts per million

- DEC<sup>1</sup> Soil Guidance Values, Spill Technology and Remediation Series Memo #1, Petroleum-Contaminated Soil Guidance Policy, August 1992.
- Soil Cleanup Objective, DEC Division of Hazardous Waste Remediation Technical and Administrative Guidance Memorandum, January 1994.



TABLE 2  
Sub-Slab Soil Vapor Survey Results\*

Soil Boring	Open Bore Hole Organic Vapor Concentration (ppm)	Headspace Soil Organic Vapor Concentration (ppm) 2 - 3' of Depth	Headspace Soil Organic Vapor Concentration (ppm) 3 - 4' of Depth
1	85	90	40
2	100	40	60
3	80	36	5
4	660	50	48
5	500	20	10
6	250	40	35
7	100	5	3
8	18	2	4

Notes:

ppm = parts per million

\* = Organic vapor concentration in ppm as detected by Hnu 101 photoionization detector.

**Site Remediation Summary  
Report (C&H, 8/22/1995)**

Table 1

Results of Excavation Pit Clearance Sampling  
Syracuse Label/ Syracuse Truck Sales

Excavation Field Screening	
Sample Location <sup>1</sup>	PID <sup>2</sup> Organic Vapor Concentration (ppm) <sup>3</sup>
A	1.0
B	2.0
C	8.0
D	2.0
E	2.0
F	2.0
G	2.0
H	7.0
I	12.0
J	2.0

## Detected Compounds in Test Pit Clearance Soil Samples

Test Pit	Compound	Concentration (ppm)	DEC Clean-up Standards (ppm) <sup>7</sup>
NW Solvent	Tetrachloroethene	0.0049	1.4
NE <sup>4</sup> Solvent	nd <sup>5</sup>		
NW Kerosene	Tetrachloroethene	0.001	1.4
NE Kerosene	nd		
18' Deep Pit	Tetrachloroethene	78	1.4
	Toluene	1.01	1.5
	Trichloroethene	0.433	0.7

## Notes:

- See Figure 2 for sample location
- PID: Photoionization Detector
- ppm: parts per million
- NW: northwest
- NE: northeast
- nd: not detected
- Recommended soil cleanup objectives - Volatile Organic Contaminants  
DEC Division of Hazardous Waste Remediation - Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels, January 24, 1994

**LABORATORY REPORT**  
Lab Log No: 9412086

**BUCK ENVIRONMENTAL**  
ANALYTICAL CHEMISTRY  
3848 ROUTE 41 SOUTH,  
CORTLAND, N.Y. 13045  
P.O. BOX 5180  
607-753-3403

Client: **C & H Engineers**  
**431 East Fayette Street**  
**Syracuse, NY 13203**  
Site: Syracuse Label

Report Date: 12/14/94  
Sampling Date: 12/06/94  
Sampled By: SDN  
Date Received: 12/06/94  
Analyzed by: EAC, 12/10/94

**Sample ID: 40"TP (perc)** VOLATILES BY METHOD EPA 8021

ANALYTE	CAS #	UNITS	DL	RESULT
Acetone	75-06-6	ug/kg	1.0	nd
Benzene	71-43-2	ug/kg	1.0	nd
Bromochloromethane	74-97-5	ug/kg	1.0	nd
Bromoethane	75-27-4	ug/kg	1.0	nd
Bromochloroethane	75-25-2	ug/kg	1.0	nd
Bromodichloromethane	74-43-9	ug/kg	1.0	nd
Bromofluoromethane	75-45-6	ug/kg	1.0	nd
Bromotrifluoromethane	135-98-8	ug/kg	1.0	nd
tert-Butylbenzene	98-06-6	ug/kg	1.0	nd
Carbon Tetrachloride	56-23-5	ug/kg	1.0	nd
Chlorobenzene	108-90-7	ug/kg	1.0	nd
Chloroethane	78-66-3	ug/kg	1.0	nd
Chloroform	74-87-3	ug/kg	1.0	nd
Chloromethane	74-87-3	ug/kg	1.0	nd
Chloroethene	75-49-8	ug/kg	1.0	nd
Chloroethane	106-43-4	ug/kg	1.0	nd
Chloroethane	106-43-4	ug/kg	1.0	nd
1,1-Dichloroethane	75-34-3	ug/kg	1.0	nd
1,2-Dichloroethane	78-87-5	ug/kg	1.0	nd
1,1,1-Trichloroethane	70-14-2	ug/kg	1.0	nd
1,1,2-Dichloroethane	75-34-3	ug/kg	1.0	nd
1,2-Dichloroethane	107-06-2	ug/kg	1.0	nd
1,1,1-Trichloroethane	70-14-2	ug/kg	1.0	nd
1,1,2-Dichloroethane	156-60-5	ug/kg	1.0	nd
1,2-Dichloroethane	78-87-5	ug/kg	1.0	nd
1,1,1-Trichloroethane	142-28-9	ug/kg	1.0	nd
1,1,2-Dichloroethane	563-58-2	ug/kg	1.0	nd
1,1,1-Trichloroethane	10061-01-5	ug/kg	1.0	nd
1,1,2-Dichloroethane	10061-02-3	ug/kg	1.0	nd
1,1,1-Trichloroethane	10041-4	ug/kg	1.0	nd
1,1,2-Dichloroethane	98-32-8	ug/kg	1.0	nd
1,1,1-Trichloroethane	99-37-6	ug/kg	1.0	nd
1,1,2-Dichloroethane	75-49-2	ug/kg	1.0	nd
1,1,1-Trichloroethane	91-20-3	ug/kg	1.0	nd
1,1,2-Dichloroethane	100-42-1	ug/kg	1.0	nd
1,1,1-Trichloroethane	630-20-6	ug/kg	1.0	nd
1,1,2-Dichloroethane	79-34-5	ug/kg	1.0	nd
1,1,1-Trichloroethane	106-43-4	ug/kg	1.0	nd
1,1,2-Dichloroethane	87-61-6	ug/kg	1.0	nd
1,1,1-Trichloroethane	120-82-1	ug/kg	1.0	nd
1,1,2-Dichloroethane	71-35-6	ug/kg	1.0	nd
1,1,1-Trichloroethane	79-01-6	ug/kg	1.0	nd
1,1,2-Dichloroethane	75-59-4	ug/kg	1.0	nd
1,1,1-Trichloroethane	96-18-4	ug/kg	1.0	nd
1,1,2-Dichloroethane	95-63-6	ug/kg	1.0	nd
1,1,1-Trichloroethane	75-01-4	ug/kg	1.0	nd
1,1,2-Dichloroethane	93-47-6	ug/kg	1.0	nd
1,1,1-Trichloroethane	108-38-3/1	ug/kg	1.0	nd

Note: detected greater than detection limit (DL) noted.  
Results are certified as conforming with generally accepted laboratory standards and requirements of the New York  
Department of Health ELAP Program.

*John Deen*  
Laboratory Director  
ELAP ID - 10795

**LABORATORY REPORT**  
Lab Log No: 9412086

Report Date: 12/14/94  
Sampling Date: 12/06/94  
Sampled By: SDN  
Date Received: 12/06/94  
Analyzed by: EAC, 12/10/94

**BUCK ENVIRONMENTAL ANALYSIS**  
3845 ROUTE 11 SOUTH P.O. BOX 5150  
CORTLAND, N.Y. 13045 607-755-3405

Client: C & H Engineers  
431 East Fayette Street  
Syracuse, NY 13202  
Site: Syracuse Label

**VOLATILES BY METHOD EPA 8021**

Sample ID: N pit (perc)

ANALYTE	CAS #	UNITS	DL	RESULT
Acetone	71-43-2	ug/kg	1.0	nd
Acrylonitrile	71-86-1	ug/kg	1.0	nd
Benzene	71-43-2	ug/kg	1.0	nd
Bromochloromethane	75-27-4	ug/kg	1.0	nd
Chloroform	75-25-2	ug/kg	1.0	nd
Chloromethane	74-87-3	ug/kg	1.0	nd
Dibromomethane	114-98-8	ug/kg	1.0	nd
Dibromopropane	98-06-6	ug/kg	1.0	nd
Dibromopropane	56-23-5	ug/kg	1.0	nd
Dibromopropane	108-90-7	ug/kg	1.0	nd
Dibromopropane	67-66-3	ug/kg	1.0	nd
Dibromopropane	74-87-3	ug/kg	1.0	nd
Dibromopropane	95-49-8	ug/kg	1.0	nd
Dibromopropane	108-43-4	ug/kg	1.0	nd
Dibromopropane	96-12-8	ug/kg	1.0	nd
Dibromopropane	96-12-8	ug/kg	1.0	nd
Dibromopropane	106-93-4	ug/kg	1.0	nd
Dibromopropane	74-95-3	ug/kg	1.0	nd
Dibromopropane	95-50-1	ug/kg	1.0	nd
Dibromopropane	104-46-7	ug/kg	1.0	nd
Dibromopropane	75-71-8	ug/kg	1.0	nd
Dibromopropane	75-34-3	ug/kg	1.0	nd
Dibromopropane	107-06-2	ug/kg	1.0	nd
Dibromopropane	156-59-4	ug/kg	1.0	nd
Dibromopropane	156-60-5	ug/kg	1.0	nd
Dibromopropane	78-87-5	ug/kg	1.0	nd
Dibromopropane	142-28-9	ug/kg	1.0	nd
Dibromopropane	365-58-6	ug/kg	1.0	nd
Dibromopropane	10061-01-5	ug/kg	1.0	nd
Dibromopropane	10061-02-6	ug/kg	1.0	nd
Dibromopropane	10061-03-7	ug/kg	1.0	nd
Dibromopropane	98-82-8	ug/kg	1.0	nd
Dibromopropane	99-87-6	ug/kg	1.0	nd
Dibromopropane	75-69-2	ug/kg	1.0	nd
Dibromopropane	97-29-1	ug/kg	1.0	nd
Dibromopropane	100-42-5	ug/kg	1.0	nd
Dibromopropane	630-20-6	ug/kg	1.0	nd
Dibromopropane	79-34-5	ug/kg	1.0	nd
Dibromopropane	127-18-4	ug/kg	1.0	nd
Dibromopropane	87-61-6	ug/kg	1.0	nd
Dibromopropane	120-82-1	ug/kg	1.0	nd
Dibromopropane	71-55-6	ug/kg	1.0	nd
Dibromopropane	79-00-3	ug/kg	1.0	nd
Dibromopropane	75-59-4	ug/kg	1.0	nd
Dibromopropane	96-18-4	ug/kg	1.0	nd
Dibromopropane	95-63-6	ug/kg	1.0	nd
Dibromopropane	75-67-8	ug/kg	1.0	nd
Dibromopropane	95-47-6	ug/kg	1.0	nd
Dibromopropane	108-38-3/1	ug/kg	1.0	nd

Results detected greater than detection limit (DL) noted.  
Results are certified as conforming with generally accepted laboratory standards and requirements of the New York  
Department of Health ELAP Program.

*[Signature]*  
Laboratory Director  
ELAP ID - 10795



**LABORATORY REPORT**  
Lab Log No: 9412086

**BUCK ENVIRONMENTAL**  
ANALYTICAL LABORATORY

8845 ROUTE 11 SOUTH, P.O. BOX 5150  
CORTLAND, NY 13045 807-753-8403

Report Date: 12/14/94  
Sampling Date: 12/06/94  
Sampled By: SDN  
Date Received: 12/06/94  
Analyzed by: EAC, 12/10/94

Client: C & H Engineers  
431 East Fayette Street  
Syracuse, NY 13202  
Site: Syracuse Label

**VOLATILES BY METHOD EPA 8021**

Sample ID: NW wall (kero pit)

ANALYTE	CAS #	UNITS	DL	RESULT
Acetone	71-43-7	ug/kg	1.0	nd
Benzene	108-86-1	ug/kg	1.0	nd
Bromochloromethane	74-97-5	ug/kg	1.0	nd
Bromodichloromethane	75-27-4	ug/kg	1.0	nd
Bromofluoromethane	75-25-2	ug/kg	1.0	nd
Bromomethane	74-83-9	ug/kg	1.0	nd
1,1-Dichloroethane	104-51-8	ug/kg	1.0	nd
1,1,1-Trichloroethane	71-91-3	ug/kg	1.0	nd
1,1,2-Trichloroethane	98-06-6	ug/kg	1.0	nd
1,2-Dichloroethane	56-23-5	ug/kg	1.0	nd
Carbon Tetrachloride	56-11-8	ug/kg	1.0	nd
Chlorobenzene	70-00-7	ug/kg	1.0	nd
Chloroform	67-66-3	ug/kg	1.0	nd
Chloromethane	74-87-3	ug/kg	1.0	nd
Chloroethane	92-49-3	ug/kg	1.0	nd
Chloroethene	75-35-4	ug/kg	1.0	nd
1,1-Dichloroethene	156-14-1	ug/kg	1.0	nd
1,2-Dichloroethene	96-13-8	ug/kg	1.0	nd
1,1,1-Trichloroethane	106-91-4	ug/kg	1.0	nd
1,1,2-Trichloroethane	74-95-3	ug/kg	1.0	nd
1,1,1,2-Tetrachloroethane	54-71-1	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	54-71-1	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	108-46-7	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	75-71-8	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	75-34-3	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	92-12-9	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	156-59-4	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	156-50-5	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	590-20-7	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	563-58-6	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	10061-01-5	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	10061-02-6	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	87-58-3	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	98-82-8	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	99-87-6	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	75-09-2	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	100-42-5	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	100-42-5	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	690-20-6	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	79-34-5	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	106-88-3	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	87-61-6	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	120-92-1	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	70-35-6	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	79-01-6	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	79-01-6	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	96-18-4	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	96-33-5	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	75-01-4	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	95-47-6	ug/kg	1.0	nd
1,1,1,2,2-Pentachloroethane	108-38-3/1	ug/kg	1.0	nd

None detected greater than detection limit (DL) noted.  
Results are certified as conforming with generally accepted laboratory standards and requirements of the New York Department of Health ELAP Program.

*[Signature]*  
Laboratory Director  
ELAP ID - 10795



3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045 P.O. BOX 5180  
807-753-3403

Client: **C & H Engineers**  
431 East Fayette Street  
Syracuse, NY 13203  
Site: Synchuse Label

**LABORATORY REPORT**  
Lab Log No: 9412086

Report Date: 12/14/94  
Sampling Date: 12/06/94  
Sampled By: SDN  
Date Received: 12/06/94  
Analyzed by: EAC, 12/10/94

Sample ID: SW wall (kero pit)

**VOLATILES BY METHOD EPA 8021**

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/kg	1.0	nd
Benzonitrile	106-46-1	ug/kg	1.0	nd
Benzochlorobenzene	74-97-7	ug/kg	1.0	nd
Bromochloromethane	75-27-4	ug/kg	1.0	nd
Bromobenzene	75-25-2	ug/kg	1.0	nd
Bromomethane	74-83-9	ug/kg	1.0	nd
1,1-Dibromochloroethane	118-96-4	ug/kg	1.0	nd
1,1-Dibromodichloroethane	118-96-4	ug/kg	1.0	nd
1,1-Dibromoethane	98-08-6	ug/kg	1.0	nd
1,1-Dibromoethylene	56-23-5	ug/kg	1.0	nd
1,1-Dibromoethane	108-90-7	ug/kg	1.0	nd
1,1-Dibromoethane	65-09-3	ug/kg	1.0	nd
1,1-Dibromoethane	74-87-3	ug/kg	1.0	nd
1,1-Dibromoethane	95-49-8	ug/kg	1.0	nd
1,1-Dibromoethane	106-43-4	ug/kg	1.0	nd
1,1-Dibromoethane	24-48-1	ug/kg	1.0	nd
1,1-Dibromoethane	95-56-1	ug/kg	1.0	nd
1,1-Dibromoethane	74-93-3	ug/kg	1.0	nd
1,1-Dibromoethane	95-56-1	ug/kg	1.0	nd
1,1-Dibromoethane	106-43-4	ug/kg	1.0	nd
1,1-Dibromoethane	75-34-3	ug/kg	1.0	nd
1,1-Dibromoethane	107-26-2	ug/kg	1.0	nd
1,1-Dibromoethane	152-30-4	ug/kg	1.0	nd
1,1-Dibromoethane	156-80-5	ug/kg	1.0	nd
1,1-Dibromoethane	78-87-5	ug/kg	1.0	nd
1,1-Dibromoethane	142-28-9	ug/kg	1.0	nd
1,1-Dibromoethane	565-28-7	ug/kg	1.0	nd
1,1-Dibromoethane	10061-01-5	ug/kg	1.0	nd
1,1-Dibromoethane	10061-02-6	ug/kg	1.0	nd
1,1-Dibromoethane	100-41-4	ug/kg	1.0	nd
1,1-Dibromoethane	58-83-3	ug/kg	1.0	nd
1,1-Dibromoethane	59-87-6	ug/kg	1.0	nd
1,1-Dibromoethane	75-09-2	ug/kg	1.0	nd
1,1-Dibromoethane	91-20-3	ug/kg	1.0	nd
1,1-Dibromoethane	100-47-5	ug/kg	1.0	nd
1,1-Dibromoethane	630-20-6	ug/kg	1.0	nd
1,1-Dibromoethane	79-34-5	ug/kg	1.0	nd
1,1-Dibromoethane	127-18-4	ug/kg	1.0	nd
1,1-Dibromoethane	87-58-6	ug/kg	1.0	nd
1,1-Dibromoethane	120-82-1	ug/kg	1.0	nd
1,1-Dibromoethane	71-53-6	ug/kg	1.0	nd
1,1-Dibromoethane	79-00-5	ug/kg	1.0	nd
1,1-Dibromoethane	75-69-5	ug/kg	1.0	nd
1,1-Dibromoethane	96-18-4	ug/kg	1.0	nd
1,1-Dibromoethane	54-63-6	ug/kg	1.0	nd
1,1-Dibromoethane	108-67-8	ug/kg	1.0	nd
1,1-Dibromoethane	95-41-4	ug/kg	1.0	nd
1,1-Dibromoethane	108-38-2/1	ug/kg	1.0	nd

None detected greater than detection limit (DL) noted.  
Results are certified as conforming with generally accepted laboratory standards and requirements of the New York Department of Health ELAP Program.

*[Signature]*  
Laboratory Director  
ELAP ID - 10795

**BUCK ENGINEERING**  
 ANALYTICAL CHEMISTRY  
 3645 ROUTE 11 SOUTH  
 CORTLAND, N.Y. 13045  
 P.O. BOX 5150  
 607-753-3403

**LABORATORY REPORT**  
 Lab Log No: 9412086

Client: C & H Engineers  
 431 East Fayette Street  
 Syracuse, NY 13202  
 Site: Syracuse Label  
 Report Date: 12/09/94  
 Sampling Date: 12/06/94  
 Sampled By: SDN  
 Date Received: 12/06/94  
 Analyzed by: MM, 12/08/94

Sample ID: 40\*TP (perc)  
 PAH BY METHOD BY EPA 8270

ANALYTE	CAS #	UNITS	DL	RESULT
Benzo(a)anthracene	83-32-9	ug/kg	170	ND
Benzo(a)pyrene	208-96-8	ug/kg	170	ND
Benzo(b)fluoranthene	120-12-7	ug/kg	170	ND
Benzo(k)fluoranthene	56-55-3	ug/kg	330	ND
Benzo(e)pyrene	50-32-8	ug/kg	170	ND
Benzo(g,h)perylene	193-27-2	ug/kg	170	ND
Benzo(i)perylene	193-27-2	ug/kg	170	ND
Benzo(j)fluoranthene	207-08-9	ug/kg	170	ND
Benzo(k)perylene	218-01-9	ug/kg	170	ND
Benzo(l)perylene	206-44-0	ug/kg	170	ND
Benzo(m)perylene	187-72-2	ug/kg	170	ND
Benzo(n)perylene	193-39-5	ug/kg	170	ND
Benzo(o)perylene	91-20-3	ug/kg	170	ND
Benzo(p)perylene	85-01-8	ug/kg	330	ND
Benzo(q)perylene	129-00-0	ug/kg	170	ND

None detected greater than detection limit (DL) noted.  
 Results are certified as conforming with generally accepted laboratory standards and requirements of the New York Department of Health ELAP Program.

*[Signature]*  
 Laboratory Director  
 ELAP ID - 10795

**BUCKENHAM ENVIRONMENTAL**  
 ANALYTICAL LABORATORIES  
 3845 ROUTE 11 SOUTH  
 CORTLAND, N.Y. 13045  
 P.O. BOX 5150  
 607-753-3403

**LABORATORY REPORT**  
 Lab Log No: 9412086

Client: C & H Engineers  
 431 East Fayette Street  
 Syracuse, NY 13202

Report Date: 12/09/94  
 Sampling Date: 12/06/94  
 Sampled By: SDN  
 Date Received: 12/06/94  
 Analyzed by: MM, 12/08/94

Site: Syracuse Label

Sample ID: N pit (pct) PAH BY METHOD BY EPA 8270

ANALYTE	CAS #	UNITS	DL	RESULT
acanthrene	83-32-9	ug/kg	170	ND
anthracene	208-96-6	ug/kg	170	ND
benz[a]anthracene	193-29-5	ug/kg	330	ND
benz[a]pyrene	50-32-8	ug/kg	170	ND
benz[b]fluoranthene	205-99-2	ug/kg	170	ND
benz[k]fluoranthene	191-24-2	ug/kg	170	ND
benz[e]pyrene	207-08-9	ug/kg	170	ND
fluorene	19-10-3	ug/kg	170	ND
fluoranthene	51-70-3	ug/kg	170	ND
phenanthrene	206-44-0	ug/kg	170	ND
pyrene	86-73-7	ug/kg	170	ND
benz[1,2,3-c,d]pyrene	193-39-5	ug/kg	170	ND
perylene	91-20-3	ug/kg	170	ND
quinoline	85-01-8	ug/kg	330	ND
indene	129-00-0	ug/kg	170	ND

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

*[Signature]*  
 Laboratory Director  
 ELAP ID - 10795

**BUCH ENVIRONMENTAL**  
 AGGREGATED ENVIRONMENTAL ANALYTICS  
 3845 ROUTE 11 SOUTH, P.O. BOX 5150  
 CORTLAND, N.Y. 13045 607-753-3403

**LABORATORY REPORT**  
 Lab Log No: 9412086

Client: C & H Engineers  
 431 East Fayette Street  
 Syracuse, NY 13202

Report Date: 12/09/94  
 Sampling Date: 12/06/94  
 Sampled By: SDN  
 Date Received: 12/06/94  
 Analyzed by: MM, 12/08/94

Site: Syracuse Label

Sample ID: NW wall (kero pit) PAH BY METHOD BY EPA 8270

ANALYTE	CAS #	UNITS	DL	RESULT
Acetophenone	83-32-9	ug/kg	170	ND
Acenaphthene	208-96-8	ug/kg	170	ND
Acenaphthylene	120-12-7	ug/kg	170	ND
Anthracene	56-55-3	ug/kg	330	ND
Benzo[a]pyrene	50-32-8	ug/kg	170	ND
Benzo[b]fluoranthene	208-99-2	ug/kg	170	ND
Benzo[k]fluoranthene	191-24-2	ug/kg	170	ND
Benzo[e]pyrene	218-01-9	ug/kg	170	ND
Benzo[a]anthracene	53-70-3	ug/kg	170	ND
Benzo[a]phenanthrene	206-44-0	ug/kg	170	ND
Benzo[b]phenanthrene	86-73-7	ug/kg	170	ND
Benzo[k]phenanthrene	195-29-5	ug/kg	170	ND
Benzo[ghi]perylene	129-00-0	ug/kg	330	ND
Benzo[perylene]	85-01-8	ug/kg	170	ND
Indeno[1,2,3-c,d]pyrene	129-00-0	ug/kg	170	ND
Fluorene	195-29-5	ug/kg	170	ND
Phenanthrene	85-01-8	ug/kg	170	ND
Pyrene	129-00-0	ug/kg	170	ND

None detected greater than detection limit (DL) noted.  
 Results are certified as conforming with generally accepted laboratory standards and requirements of the New York Department of Health ELAP Program.

*John Deane*  
 Laboratory Director  
 ELAP ID - 10795

**BUCK ENVIRONMENTAL**  
 ANALYTICAL LABORATORY  
 3845 ROUTE 11 SOUTH,  
 CORTLAND, N.Y. 13045  
 P.O. BOX 5150  
 607-753-3403

**LABORATORY REPORT**  
 Lab Log No: 9412086

Client: C & H Engineers  
 431 East Fayette Street  
 Syracuse, NY 13202

Report Date: 12/09/94  
 Sampling Date: 12/06/94  
 Sampled By: SDN  
 Date Received: 12/06/94  
 Analyzed by: MM, 12/08/94

Site: Syracuse Label

Sample ID: SW wall (kero pit)

PAH BY METHOD BY EPA 8270

ANALYTE	CAS #	UNITS	DL	RESULT
Acetylene	83-32-9	ug/kg	170	ND
Acetylene	208-56-8	ug/kg	170	ND
Acetylene	120-12-7	ug/kg	170	ND
Acetylene	26-35-3	ug/kg	330	ND
Acetylene	205-99-2	ug/kg	170	ND
Acetylene	191-24-2	ug/kg	170	ND
Acetylene	207-08-9	ug/kg	170	ND
Acetylene	218-01-9	ug/kg	170	ND
Acetylene	32-70-3	ug/kg	170	ND
Acetylene	86-23-0	ug/kg	170	ND
Acetylene	192-50-5	ug/kg	170	ND
Acetylene	91-20-3	ug/kg	170	ND
Acetylene	85-01-8	ug/kg	330	ND
Acetylene	129-00-0	ug/kg	170	ND

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

*[Signature]*  
 Laboratory Director  
 ELAP ID - 10795

**LABORATORY REPORT**  
Lab Log No: 9412066

**BUCK ENVIRONMENTAL ANALYSIS**  
ACCREDITED ENVIRONMENTAL ANALYSIS  
3845 ROUTE 11 SOUTH, P.O. BOX 5180  
CORTLAND, NY 13045 607-759-5403

**C & H Engineers**  
431 East Fayette Street  
Syracuse, NY 13202  
Site: Syracuse Label

Report Date: 12/29/94  
Sampling Date: 12/03/94  
Sampled By: SDN  
Date Received: 12/05/94  
Analyzed by: EAC, 12/17/94

**VOLATILES BY METHOD EPA 8021**

Sample ID: Deep Pit

CAS #	UNITS	DL	RESULT
78-36-2	ug/kg	250	nd
108-90-2	ug/kg	250	nd
74-97-5	ug/kg	250	nd
75-27-4	ug/kg	250	nd
75-25-2	ug/kg	250	nd
74-83-9	ug/kg	250	nd
135-98-8	ug/kg	250	nd
98-06-6	ug/kg	250	nd
56-23-5	ug/kg	250	nd
108-90-7	ug/kg	250	nd
67-46-3	ug/kg	250	nd
74-87-3	ug/kg	250	nd
92-48-8	ug/kg	250	nd
106-43-4	ug/kg	250	nd
96-12-8	ug/kg	250	nd
106-93-4	ug/kg	250	nd
74-95-3	ug/kg	250	nd
92-50-1	ug/kg	250	nd
108-16-7	ug/kg	250	nd
75-71-8	ug/kg	250	nd
75-34-3	ug/kg	250	nd
92-52-3	ug/kg	250	nd
156-59-4	ug/kg	250	nd
78-87-5	ug/kg	250	nd
92-28-9	ug/kg	250	nd
563-58-6	ug/kg	250	nd
10061-01-5	ug/kg	250	nd
10061-02-6	ug/kg	250	nd
87-63-4	ug/kg	250	nd
98-82-8	ug/kg	250	nd
99-87-6	ug/kg	250	nd
75-09-2	ug/kg	250	nd
103-45-1	ug/kg	250	nd
100-42-5	ug/kg	250	nd
630-20-6	ug/kg	250	nd
79-34-5	ug/kg	250	nd
108-88-3	ug/kg	250	nd
87-61-6	ug/kg	250	nd
120-82-1	ug/kg	250	nd
71-53-6	ug/kg	250	nd
70-01-5	ug/kg	250	nd
75-09-4	ug/kg	250	nd
96-18-4	ug/kg	250	nd
95-63-5	ug/kg	250	nd
100-60-7	ug/kg	250	nd
93-37-5	ug/kg	250	nd
108-38-3/1	ug/kg	250	nd

None detected greater than detection limit (DL) noted.  
Results are certified as conforming with generally accepted laboratory standards and requirements of the New York Department of Health ELAP Program.

*[Signature]*  
Laboratory Director  
ELAP ID - 10795

**BUCHHEIM ENVIRONMENTAL ANALYSIS**  
 3845 ROUTE 11 SOUTH,  
 CORTLAND, N.Y. 13045  
 P.O. BOX 5150  
 607-758-3403

**LABORATORY REPORT**  
 Lab Log No: 9412066

Client: C & H Engineers  
 431 East Fayette Street  
 Syracuse, NY 13202

Site: Syracuse Label

Report Date: 12/09/94  
 Sampling Date: 12/03/94  
 Sampled By: SDN  
 Date Received: 12/05/94  
 Analyzed by: MM, 12/08/94

Sample ID: Deep Pit  
 PAH BY METHOD BY EPA 8270

ANALYTE	CAS #	UNITS	DL	RESULT
acanthrene	83-32-9	ug/kg	170	ND
anthracene	208-96-8	ug/kg	170	ND
benz(a)anthracene	120-12-7	ug/kg	170	ND
benz(b)fluoranthene	56-55-3	ug/kg	330	ND
benz(k)fluoranthene	205-99-5	ug/kg	170	ND
benz(a)pyrene	191-26-2	ug/kg	170	ND
benz(e)pyrene	207-08-9	ug/kg	170	ND
fluoranthene	218-01-9	ug/kg	170	ND
indeno(1,2,3-cd)perylene	55-70-3	ug/kg	170	ND
perylene	84-73-7	ug/kg	170	ND
pyrene	193-39-5	ug/kg	170	ND
fluoranthene	91-20-3	ug/kg	170	ND
anthracene	85-01-8	ug/kg	170	ND
anthracene	129-00-0	ug/kg	170	ND

ND - None detected greater than detection limit (DL) noted.  
 These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

*[Signature]*  
 Laboratory Director  
 ELAP ID - 10795



10-21-94 WED 9:47

BUCK ENVIRONMENTAL LABS

FAX NO. 6077533415

P. 03

**BUCK ENVIRONMENTAL LABS**  
 3843 ROUTE 11 SOUTH  
 CORTLAND, NY 13045  
 P.O. BOX 5150  
 607-753-2409

**LABORATORY REPORT**  
 Lab Log No: 9412261

Client: C & H Engineers  
 431 East Fayette Street  
 Syracuse, NY 13202

Site: Syracuse Label

Sample ID: Footer Excavation

TEST

Report Date: December 21, 1994  
 Sampling Date: 12/19/94  
 Sampled By: SDN  
 Date Received: 12/19/94

TEST	METHOD	ANALYZED BY	UNITS	DL	RESULT
Total Glycols	ASP 89-9	12/20/94	JFC	mg/L	.10
					.27

ND - None detected greater than detection limits (DL) noted.  
 These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

*Christine E. Beck*  
 Laboratory Director  
 ELAP ID - 10795



CLIENT: C-H Engineers  
ADDRESS: 431 E. Fayette St.  
PHONE NO. 315 472 6980  
REPORT TO ATTN: Scott Noskrom

NORMAL QA/QC  
PREMIUM QA/QC 2  
NORMAL TURNAROUND  
EXPEDITE AT PREMIUM  
CLIENT AUTHORIZ. SIGN. [Signature]

PROJECT NAME: Syracuse Local - Footer  
PO NO. 31404 -  
SAMPLED BY: SDB

ANALYSIS REQUESTED

DATE	TIME	LOCATION	ANALYSIS REQUESTED																			
			8021	8022	8023	8024	8025	8026	8027	8028	8029	8030	MATRIX (AIR, SOLID, WATER)	GRAVE OR COMPOSITE	NUMBER OF CONTAINERS	VOLUME OF CONTAINERS USED	PRESERVATIVE					
11-19	10:15 A	Footer Excavation	1															W	G	3		
DATE	TIME	RELINQUISHED BY	ACCEPTED BY		ADDITIONAL COMMENTS																	
12/11	10:30	1 [Signature]	1 [Signature]																			
		2	2																			
		3	3																			
		4	4																			

3845 Route 11 S. • PO Box 5150 • Cortland, NY 13045 • (607) 753-3403  
FAX: 753-3415

BRANCH OFFICES - 14 Smith Ave. • Binghamton, NY 13904 • (607) 771-0866  
- 526 Old Liverpool Rd. • Liverpool, NY 13088 • (315) 451-2644

**LABORATORY REPORT**  
Lab Log No: 941111

**BUCK ENVIRONMENTAL**  
ACCREDITED ENVIRONMENTAL ANALYSIS  
3845 ROUTE 11 SOUTH  
CORTLAND, N.Y. 13045  
P.O. BOX 5150  
607-753-3403

Client: **C & H Engineers**  
**431 East Fayette Street**  
**Syracuse, NY 13202**

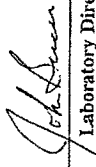
Site: Syracuse Label  
31404

Report Date: 11/23/94  
Sampling Date: 11/09/94  
Sampled By: S. N.  
Date Received: 11/09/94  
Analyzed by: EAC, 11/16/94

Sample ID: Sub-slab STARS VOLATILES BY METHOD BY EPA 8020

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/kg	130	*138*
n-Butylbenzene	104-51-8	ug/kg	130	*520*
sec-Butylbenzene	135-98-8	ug/kg	130	*539*
tert-Butylbenzene	98-06-6	ug/kg	130	ND
Ethylbenzene	100-41-4	ug/kg	130	ND
Isopropylbenzene	99-87-6	ug/kg	130	ND
Isopropyltoluene	91-20-3	ug/kg	130	*151*
Naphthalene	103-55-1	ug/kg	130	*710*
Propylbenzene	108-88-3	ug/kg	130	*924*
Toluene	95-43-6	ug/kg	130	*713*
1,2,4-Trimethylbenzene	108-67-8	ug/kg	130	*148*
1,3,5-Trimethylbenzene	95-47-6	ug/kg	130	ND
o-Xylene	108-38-3	ug/kg	130	ND
m-Xylene	106-42-3	ug/kg	130	ND
p-Xylene	106-42-3	ug/kg	130	ND
MTBE	1634-04-4	ug/kg	130	ND

ND - None detected greater than detection limit (DL) noted.  
These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

  
Laboratory Director  
ELAP ID - 10795

**BUCH ENVIROTECHNICAL**  
 ACCREDITED ENVIRONMENTAL ANALYSIS  
 3845 ROUTE 11 SOUTH, P.O. BOX 5150  
 CORTLAND, N.Y. 13045 607-753-3403

**LABORATORY REPORT**  
 Lab Log No: 9411111

Client: C & H Engineers  
 431 East Fayette Street  
 Syracuse, NY 13202

Report Date: 11/23/94  
 Sampling Date: 11/09/94  
 Sampled By: S. N.  
 Date Received: 11/09/94  
 Analyzed by: MM, 11/21/94

Site: Syracuse Label

PAH BY METHOD BY EPA 8270

Sample ID: Sub-slab

ANALYTE	CAS #	UNITS	DL	RESULT
acenaphthene	83-32-9	ug/kg	170	ND
acenaphthylene	208-96-9	ug/kg	170	ND
anthracene	151-13-3	ug/kg	330	ND
benz[a]anthracene	44-51-3	ug/kg	170	ND
benz[a]pyrene	50-32-8	ug/kg	170	ND
benz[b]fluoranthene	205-99-2	ug/kg	170	ND
benz[b]fluoranthene	191-24-2	ug/kg	170	ND
benz[k]fluoranthene	207-08-9	ug/kg	170	ND
chrysene	218-01-9	ug/kg	170	ND
fluorene	206-46-0	ug/kg	170	ND
fluoranthene	86-73-7	ug/kg	170	ND
indeno[1,2,3-c,d]pyrene	195-39-5	ug/kg	170	ND
phenanthrene	91-20-3	ug/kg	330	*5.68*
pyrene	85-01-8	ug/kg	170	ND
pyrene	129-00-0	ug/kg	170	ND

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

*John Deane*  
 Laboratory Director  
 ELAP ID - 10795

**LABORATORY REPORT**  
Lab Log No: 9412017

**BUCK ENVIRONMENTAL**  
ANALYTICAL SERVICES

8845 ROUTE 11 SOUTH, P.O. BOX 5150  
CORTLAND, NY 13045 607-753-9403

Client: **C & H Engineers**  
**431 East Fayette Street**  
**Syracuse, NY 13202**  
Site: Syracuse Label

Report Date: 12/02/94  
Sampling Date: 12/01/94  
Sampled By: SDN  
Data Received: 12/01/94  
Analyzed by: EAC, 12/01/94

**VOLATILES BY METHOD EPA 8021**

Sample ID: Wall Seep

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/l	1.0	nd
Bromobenzene	74-83-2	ug/l	1.0	nd
Bromochloromethane	74-97-5	ug/l	1.0	nd
Bromodichloromethane	75-27-4	ug/l	1.0	nd
Bromoforn	75-25-2	ug/l	1.0	nd
Bromobenzene	74-83-2	ug/l	1.0	nd
sec-Butylbenzene	115-98-8	ug/l	1.0	nd
iso-Butylbenzene	98-06-6	ug/l	1.0	nd
Cis-1,2-Dichloroethane	56-23-5	ug/l	1.0	nd
Chlorobenzene	108-90-7	ug/l	1.0	nd
Chloroethane	77-46-3	ug/l	1.0	nd
Chloroform	67-66-3	ug/l	1.0	nd
1-Chlorotoluene	74-87-3	ug/l	1.0	nd
2-Chlorotoluene	95-49-8	ug/l	1.0	nd
1,3-Dichlorobenzene	106-43-4	ug/l	1.0	nd
1,4-Dichlorobenzene	95-49-8	ug/l	1.0	nd
1,2-Dichloro-3-chloropropane	96-12-1	ug/l	1.0	nd
1,2-Dichloroethane	106-93-4	ug/l	1.0	nd
Dibromomethane	74-95-3	ug/l	1.0	nd
Dibromobenzene	95-50-1	ug/l	1.0	nd
1,5-Dichlorobenzene	106-43-4	ug/l	1.0	nd
1,4-Dichlorobenzene	106-43-4	ug/l	1.0	nd
Dibromodifluoromethane	75-71-8	ug/l	1.0	nd
1,1-Dichloroethane	75-34-3	ug/l	1.0	nd
1,1-Dichloroethane	107-06-2	ug/l	1.0	nd
1,1-Dichloroethane	156-60-3	ug/l	1.0	nd
trans-1,2-Dichloroethene	156-59-4	ug/l	1.0	nd
1,2-Dichloropropane	78-87-5	ug/l	1.0	nd
1,2-Dichloropropane	142-38-9	ug/l	1.0	nd
1,2-Dichloropropane	563-58-6	ug/l	1.0	nd
1,1-Dichloropropane	10061-01-5	ug/l	1.0	nd
1,3-Dichloropropane	10061-02-6	ug/l	1.0	nd
Ethylbenzene	106-62-8	ug/l	1.0	nd
Fluorobenzene	87-63-4	ug/l	1.0	nd
Fluorochlorobenzene	98-42-8	ug/l	1.0	nd
Isopropylbenzene	99-87-6	ug/l	1.0	nd
1,1,1-Trichloroethane	75-09-2	ug/l	1.0	nd
Nitrobenzene	71-43-2	ug/l	1.0	nd
Propylbenzene	100-42-5	ug/l	1.0	nd
Styrene	630-20-6	ug/l	1.0	nd
1,1,1-Trichloroethane	75-09-2	ug/l	1.0	nd
1,1,2-Trichloroethane	79-34-5	ug/l	1.0	nd
Toluene	106-110-4	ug/l	1.0	nd
1,2,3-Trichlorobenzene	87-61-5	ug/l	1.0	nd
1,2,4-Trichlorobenzene	120-82-1	ug/l	1.0	nd
1,2,4-Trichlorobenzene	71-35-6	ug/l	1.0	nd
1,1,2-Trichloroethane	79-00-5	ug/l	1.0	nd
Trichloroethene	75-69-3	ug/l	1.0	nd
Trichlorofluoromethane	75-69-3	ug/l	1.0	nd
1,1,2-Trichloropropane	96-18-4	ug/l	1.0	nd
1,1,2-Trichloropropane	95-65-6	ug/l	1.0	nd
1,1,1-Trichloroethane	106-90-7	ug/l	1.0	nd
1,1,1-Trichloroethane	95-47-6	ug/l	1.0	nd
o-Xylene	95-47-6	ug/l	1.0	nd
m,p-Xylene	108-38-3/1	ug/l	1.0	nd

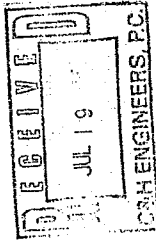
ND - None detected greater than detection limit (DL) noted.  
These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

*[Signature]*  
Laboratory Director  
ELAP ID - 10795



**Environmental  
PRODUCTS & SERVICES, INC.**  
P.O. Box 369  
Liverpool, NY 13088-0206  
(315) 451-6666 FAX (315) 457-6652 (800) THE-TANK

July 14, 1995



Mr. Tom Ascienzo  
C & H Engineers, PC  
431 East Fayette Street  
Syracuse, New York 13202

RE: ANALYTICAL RESULTS  
SOIL SAMPLES  
SYRACUSE LABEL

Dear Tom:

Enclosed please find the laboratory analytical results of two soil samples collected by Environmental Products & Services, Inc. on June 28, 1995 at the above referenced site.

Please note that sample #100623 (S-1) was collected from point #4, and sample #100624 (S-2) was collected from points 1, 2, 3, 5 and 6.

As we discussed, free-phase petroleum (kerosene) was encountered when collecting sample #100623 (S-1).

If you have any questions, please contact me at (315) 451-6666.

Very truly yours,

ENVIRONMENTAL PRODUCTS & SERVICES, INC.

*Thomas J. DiCaprio*  
Thomas J. DiCaprio, Senior Geologist  
Syracuse Branch

TJD/amf  
031.044.030

cc: Dave Dake, Environmental Products & Services, Inc.

Corporate Office (315) 471-0503	Albany, NY (518) 465-4000	Boston, MA (617) 933-6666	Bridgeport, CT (203) 380-3538	Buffalo, NY (716) 685-6600
Harrisburg, PA (717) 564-4200	Linden, NJ (908) 486-6600	Newburgh, NY (814) 361-0707	Rochester, NY (716) 436-5660	Springfield, MA (413) 733-1000



# Environmental Laboratory Services, Inc.

7260 Caswell Street, Hancock Air Park  
 North Syracuse, NY 13212  
 (815) 458-8033 FAX (315) 458-0249

95 - SYRACUSE  
 33 EDGEcomb DR.

OVERPOOL NY 13088  
 ATN: ENVIRONMENTAL COORDINATOR

O. # 26457  
 CLIENT JOB NUMBER: S1422

PROJECT #: 951270  
 RECEIVED: 06/28/95



ST PERFORMED RESULTS UNITS DATE PERFORMED METHOD PERFORMED BY

# 100623 CLIENT SAMPLE ID: S4618 S-1 DATE SAMPLED: 06/28/95

72 PERCENT 06/29/95 EPA 160.3 MM

MG/KG DRY WT. 07/17/95 EPA 8021 DJ

ORGANICS - EPA 8021

BENZENE <0.014

BROMOCHLOROMETHANE <0.069

BROMODICHLOROMETHANE <0.069

BROMOFORM <0.069

BROMOMETHANE <0.069

ISOBUTYLBENZENE 2.0

SEC-BUTYLBENZENE 0.119

TERT-BUTYLBENZENE <0.069

CARBON TETRACHLORIDE <0.069

CHLOROBENZENE <0.069

CHLOROETHANE <0.069

CHLOROFORM <0.069

CHLOROMETHANE <0.069

1-CHLOROTOLUENE <0.069

1,2-DICHLOROBENZENE <0.069

1,3-DICHLOROBENZENE <0.069

1,4-DICHLOROBENZENE <0.069

DICHLORODIFLUOROMETHANE <0.069

1,1,2-DIBROMOETHANE <0.069

1,1,2-DICHLOROETHANE <0.069

1,1-DICHLOROETHANE <0.069

1,2-DICHLOROETHANE <0.069

1,2-DIBROMOMETHANE <0.069

1,2-DICHLOROBENZENE <0.069

1,3-DICHLOROBENZENE <0.069

1,4-DICHLOROBENZENE <0.069

DICHLORODIFLUOROMETHANE <0.069

1,1,2-DIBROMOETHANE <0.069

1,1,2-DICHLOROETHANE <0.069

1,1-DICHLOROETHANE <0.069

1,2-DICHLOROETHANE <0.069

1,3-DICHLOROETHANE <0.069

1,4-DICHLOROETHANE <0.069





# Environmental LABORATORY SERVICES

7280 Caswell Street, Hancock Air Park  
North Syracuse, NY 13212  
(315) 458-8033 FAX (315) 458-0249 (800) 842-4667

P. S. - SYRACUSE  
1635 EDGEComb DR.

PROJECT #: 951270  
RECEIVED: 06/28/95

UTTERPOOL NY 13089  
ATTN: ENVIRONMENTAL COORDINATOR

P.O. # 26457  
CLIENT JOB NUMBER: S1422

TEST PERFORMED RESULTS UNITS DATE PERFORMED METHOD NUMBER PERFORMED BY

# 100623 CLIENT SAMPLE ID: S4618 S-1 MG/KG DRY WT. 07/12/95 EPA 8021 DJ

TEST PERFORMED	RESULTS	UNITS	DATE PERFORMED	METHOD NUMBER	PERFORMED BY
ORGANICS - EPA 8021					
1,1-DICHLOROETHANE	<0.069				
TRANS-1,2-DICHLOROETHENE	<0.069				
1,2-DICHLOROPROPANE	<0.069				
2,2-DICHLOROPROPANE *	<0.069				
1,1-DICHLOROPROPENE	<0.069				
TRANS-1,3-DICHLOROPROPENE	<0.069				
ETHYLBENZENE	<0.069				
HEXACHLOROBUTADIENE	<0.069				
METHYLENE CHLORIDE	<0.069				
1,1-DICHLOROETHANE	0.550				
1,2-DICHLOROETHANE	<0.069				
1,1,1,2-TETRACHLOROETHANE	<0.069				
1,1,2,2-TETRACHLOROETHANE	<0.069				
1,2,3-TRICHLOROBENZENE	<0.069				
1,2,4-TRICHLOROBENZENE	<0.069				
1,2,3-TRICHLOROPROPANE	<0.069				
1,2,4-TRIMETHYLBENZENE	<0.069				
1,1,1-TRICHLOROETHANE	<0.069				
ETHYL CHLORIDE	<0.069				
LENES (TOTAL)	<0.069				



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7280 Caswell Street, Hancock Air Park  
North Syracuse, NY 13212  
(315) 458-8033 (800) 842-4667  
FAX (315) 458-0249

SYRACUSE  
EDGECOMB DR.

POOL NY 13088  
ENVIRONMENTAL COORDINATOR

# 26457  
JOB NUMBER: S1422

PROJECT #: 951270  
RECEIVED: 06/28/95

PERFORMED RESULTS UNITS DATE PERFORMED METHOD PERFORMED BY

100623 CLIENT SAMPLE ID: S4518 S-1 MG/KG DRY WT. 07/12/95 EPA 8021 DJ

ANICS - EPA 8021  
\* COMPOUND COELUTES. RESULT IS CALCULATED AS A COMBINED STANDARD.

100624 CLIENT SAMPLE ID: S4518 S-2 DATE SAMPLED: 06/28/95

TOTAL 78 PERCENT 06/29/95 EPA 160.3 MM DJ  
MG/KG DRY WT. 07/12/95 EPA 8021 DJ

MONOBENZENE	<0.064
DIMETHYLBENZENE	<0.064
TRIMETHYLBENZENE	<0.064
1,2-DICHLOROBENZENE	<0.064
1,4-DICHLOROBENZENE	<0.064
1,3-DICHLOROBENZENE	<0.064
BROMOBENZENE	<0.064
CHLOROBENZENE	<0.064
ETHYLBENZENE	1.8
ISOBUTYLBENZENE	0.142
1,2-DICHLOROBENZENE	<0.064
1,4-DICHLOROBENZENE	<0.064
1,3-DICHLOROBENZENE	<0.064
BROMOBENZENE	<0.064
CHLOROBENZENE	<0.064
ETHYLBENZENE	0.402
ISOBUTYLBENZENE	<0.064
1,2-DICHLOROBENZENE	<0.064
1,4-DICHLOROBENZENE	<0.064
1,3-DICHLOROBENZENE	<0.064
BROMOBENZENE	<0.064
CHLOROBENZENE	<0.064



# Environmental LABORATORY SERVICES

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North Syracuse, NY 13212  
(315) 458-8033 FAX (315) 458-0249 (800) 842-4667

P. S. - SYRACUSE  
635 EDGEOMB DR.

SIVERPOOL NY 13088  
ATTN: ENVIRONMENTAL COORDINATOR

P.O. # 26457  
CLIENT JOB NUMBER: 51422

PROJECT #: 951270  
RECEIVED: 06/28/95

TEST PERFORMED RESULTS UNITS DATE PERFORMED METHOD NUMBER PERFORMED BY

# # 100624 CLIENT SAMPLE ID: S4618 S-2 MS/KG DRY WT. 07/12/95 EPA 8021 DJ

TEST PERFORMED	RESULTS	UNITS	DATE PERFORMED	METHOD NUMBER	PERFORMED BY
ORGANICS - EPA 8021					
1,2-DICHLOROBENZENE	<0.064				
1,3-DICHLOROBENZENE	<0.064				
1,4-DICHLOROBENZENE	<0.064				
DICHLOROFLUOROMETHANE	<0.064				
1,2-DIBROMOETHANE	<0.064				
CIS-1,2-DICHLOROETHENE	<0.064				
TRANS-1,2-DICHLOROETHENE	<0.064				
1,1-DICHLOROETHANE	<0.064				
1,1-DICHLOROETHENE	<0.064				
TRANS-1,2-DICHLOROETHENE	<0.064				
1,2-DICHLOROPROPANE	<0.064				
1,3-DICHLOROPROPANE	<0.064				
2,2-DICHLOROPROPANE	<0.064				
1,1-DICHLOROPROPENE	<0.064				
TRANS-1,3-DICHLOROPROPENE	<0.064				
ETHYLBENZENE	<0.064				
HEXACHLOROBUTADIENE	<0.064				
METHYLENE CHLORIDE	<0.064				
NAPHTHALENE	0.654				
N-PROPYLBENZENE	<0.064				
STYRENE	<0.064				
TOLUENE	<0.064				
TRICHLOROETHENE	<0.064				
TRICHLOROFUOROMETHANE	<0.128				
1,1,1,2-TETRACHLOROETHANE	<0.064				
1,1,1,2,2-TETRACHLOROETHANE	<0.064				
TETRACHLOROETHENE	<0.064				
1,2,3-TRICHLOROETHENE	<0.064				
1,2,4-TRICHLOROETHENE	<0.064				
1,1,2-TRICHLOROETHANE	<0.064				
1,2,3-TRICHLOROPROPANE	<0.064				

Page 4

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# Environmental LABORATORY SERVICES

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(800) 842-4667

P.S. - SYRACUSE  
#35 EDGEcombe DR.

PROJECT #: 951270  
RECEIVED: 06/28/95

VERPOOL NY 13088

ETH: ENVIRONMENTAL COORDINATOR

O. # 26457

CLIENT JOB NUMBER: S1422

TEST PERFORMED RESULTS UNITS DATE PERFORMED METHOD NUMBER DATE SAMPLED PERFORMED BY

TEST PERFORMED	RESULTS	UNITS	DATE PERFORMED	METHOD NUMBER	DATE SAMPLED	PERFORMED BY
# 100624	CLIENT SAMPLE ID: S4618 S-2		07/12/95	EPA 8021	06/28/95	DJ
ORGANICS - EPA 8021		MG/KG DRY WT.				
2,4-TRIMETHYLBENZENE	0.115					
3,5-TRIMETHYLBENZENE	<0.064					
1,1,1-TRICHLOROETHANE	<0.064					
PERYLENE CHLORIDE	<0.064					
PERYLENE (TOTAL)	<0.064					

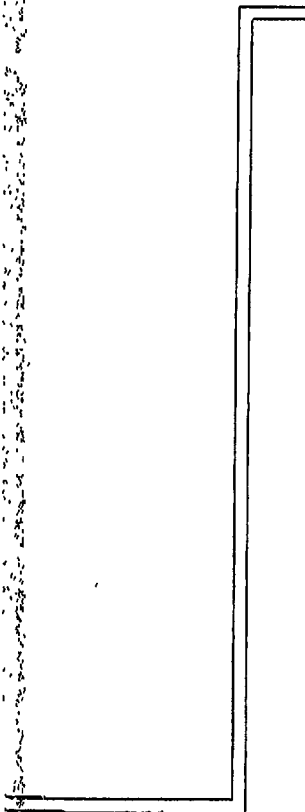
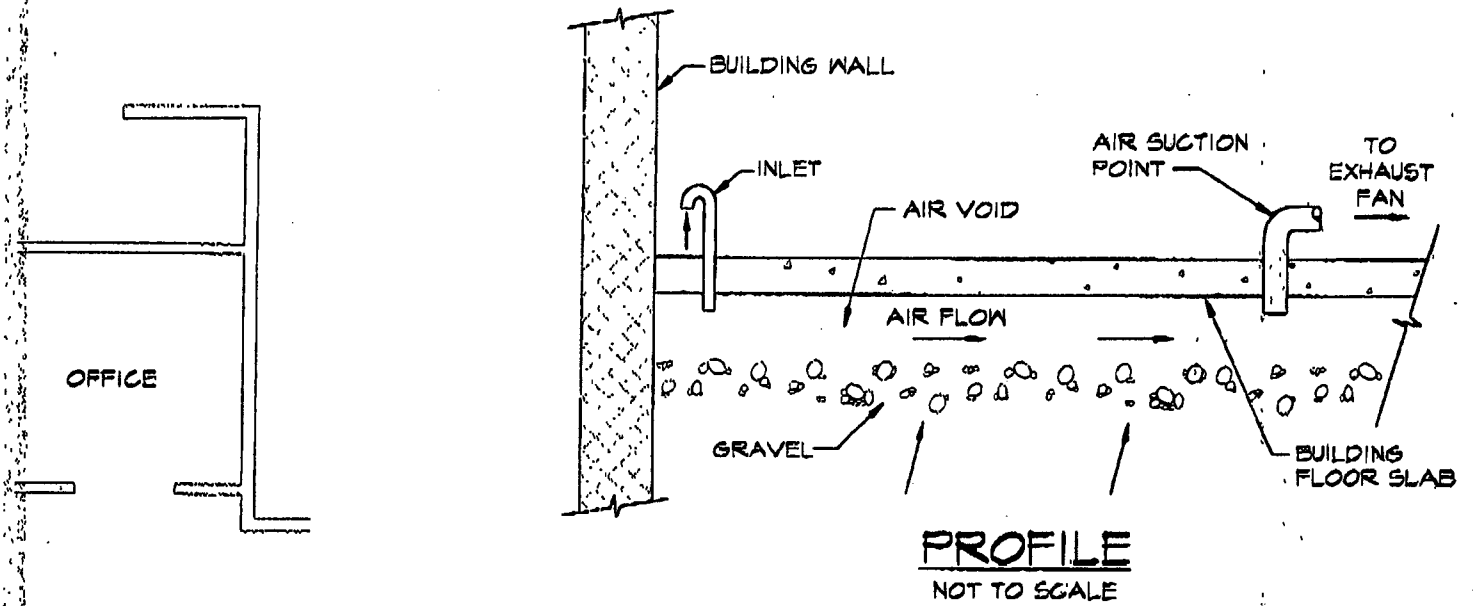
\* COMPOUND COELUTES. RESULT IS CALCULATED AS A COMBINED STANDARD.

*Douglas W. Mendrala*  
Douglas W. Mendrala  
Laboratory Director

07/12/95  
Date

All tests performed under NYS ELAP Laboratory Certification # 11375 unless otherwise stated.

**Limited Subsurface  
Investigation Report (BDA,  
(4/28/2008)**



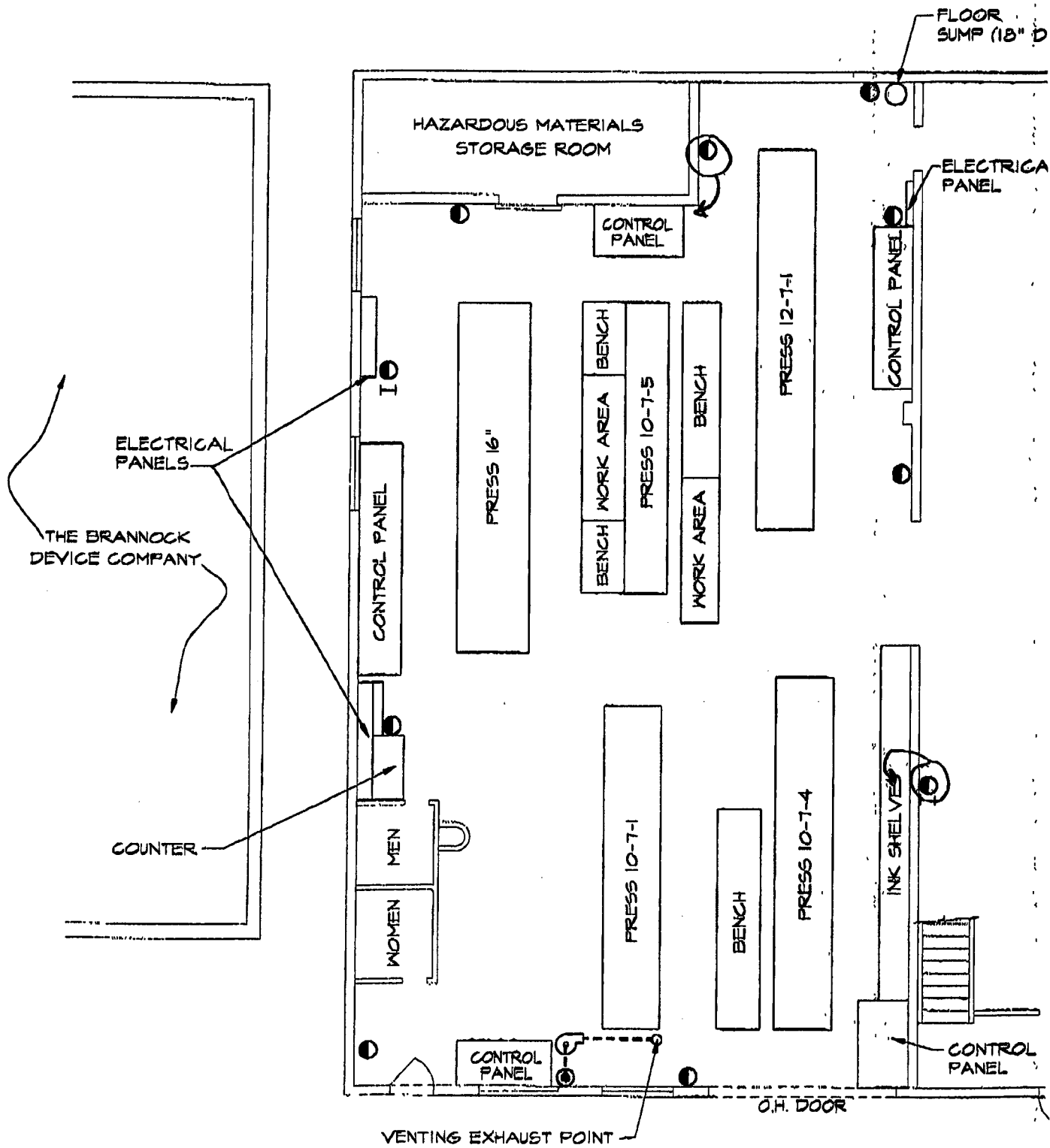
**LEGEND:**

- ⊙ PROPOSED SUB-SLAB AIR SUCTION POINT
- ⊕ PROPOSED SUB-SLAB AIR INLET
- ⊞ BLOWER/FAN

**PROPOSED SUBFLOOR VENTING PLAN**

Syracuse Label Company, Inc.  
110 Luther Avenue  
Liverpool, New York 13088

Scale: 1" = 10'



5.0 LABORATORY ANALYTICAL RESULTS

Soil

Soil analytical results were compared to the Technical and Administrative Guidance Memorandum #4046 (TAGM 4046) recommended soil cleanup objectives, amended per the December 20, 2000 soil cleanup objectives for gasoline and fuel oil spills. The following is a summary of detected compounds in excess of TAGM 4046 Soil Cleanup Objectives.

Summary of Detected Compounds in Excess of TAGM 4046 Soil Cleanup Objectives		
Analyte	TAGM 4046 Soil Cleanup Objective	Soil Sample
	(ug/kg)	B-08-3 (4'-6') (ug/kg)
EPA 8260E TCL	14,000	26,000
Tetrachloroethene	10,000	23,000
Total VOCs		26,000

Groundwater

Groundwater analytical results were compared with the NYSDEC groundwater standards published in the Division of Water Technical and Operations Guidance Series (TOGS) Memorandum 1.1.1. The following is a summary of compounds identified in samples in excess of TOGS groundwater quality standards.

Summary of Detected Compounds in Excess of TOGS 1.1.1 Groundwater Quality Standards/Guidance Values (TOGS 1.1.1)									
Analyte	Groundwater Standard (ug/kg)	Groundwater Sample							
		MW-1	MW-7	MW-8	MW-10	MW-11	MW-12	MW-13	MW-16
EPA 601B TCL	5	170	14,000	6,200	<1	14,000	1,200	900	<1
Tetrachloroethene	5	--	1,700	920	<1	2,400	280	470	<1
Trichloroethene	2	--	560	290	29	<1,000	<20	<100	2.5
Vinyl Chloride	5	--	2,600	1,600	<1	<1,000	<20	<100	<1

An isocentration map (Figure 4) was constructed for the tetrachloroethene (perc) data presented in the table above. The map depicts an area of concentration centered near the east side of the main production area. The limits of the contaminant plume defined by the isocenters is defined to the north, west, and south, and not well defined to the east towards Luther Avenue.

The complete Laboratory Analysis Reports are included in Attachment A.



**Appendix B**  
**Quality Assurance Project Plan**

## **SECTION 1**

### **PROJECT DESCRIPTION**

The 110 Luther Ave site (the 'Site') occupies approximately 1.4 acres along the west side of Luther Avenue in the Town of Salina, Onondaga County, New York . The Site is owned by Syracuse Label whose office, light manufacturing, and warehousing operations are housed within the one story building which occupies the majority of the parcel. The remainder of the site consists primarily of paved parking areas. The site is located in a commercial/industrial area just east of Interstate 81 and is bordered by Albion Ave to the west, Knapp Ave to the north, Luther Ave to the east, and an open lot and maintenance garage to the west.

Syracuse label is interested in investigating and remediating the 110 Luther Ave Site in the New York State Brownfield Cleanup Program (BCP) under agreement with the NYSDEC. Under the BCP, a Remedial Investigation must be completed in accordance with the NYSDEC's Department of Environmental Remediation (DER) Draft DER-10 Technical Guidance for Site Investigation and Remediation (NYSDEC, December 2002) to provide a systematic assessment of environmental conditions at the Site.

The Remedial Investigation (RI) Work Plan has been developed in accordance with the 6NYCRR Part 375 and DER-10 to collect the data necessary to fill information gaps that exist at the site. The RI Work Plan sets forth the scope and methods that will be followed during the course of the investigation. This Quality Assurance Project Plan (QAPP) describes quality assurance objectives and the methods that will be followed.

## SECTION 2

### PROJECT ORGANIZATION

The organization of the project management team and areas of responsibility are presented below.

Project Principal	Damian J. Vanetti.	Provide technical and administrative oversight and guidance throughout the project, assist in securing company resources, participate in technical review of deliverables, and attend key meetings as needed.
Principal Engineer	Brownfield Engineering Services, PLLC	Provide technical guidance and review of reports and analytical data. Will have key involvement in screening and development of remedial alternatives.
Project Manager	Donald S Sorbello	Responsible for maintaining the day-to-day schedule for completing the fieldwork and deliverables according to schedule and for using proper field procedures.
Field Team Leader	Ian McNamara	Responsible for coordinating and directing field efforts of SWRNA staff and subcontractors.

## **SECTION 3**

### **QA/QC OBJECTIVES FOR MEASUREMENT OF DATA**

Where NYSDOH Environmental Laboratory Approval Program (ELAP) Certification exists for a specific group or category of parameters, the laboratories performing analyses in connection with this project will have appropriate NYSDOH ELAP Certification. For analyses of samples where NYSDEC Analytical Services Protocol (NYSDEC-ASP, June 2000) Category B deliverables are required, NYSDOH ELAP certification is required.

Detection limits set by NYSDEC-ASP will be used for all sample analyses unless otherwise noted. If ASP-dictated detection limits prove insufficient to assess project goals (i.e. comparison to drinking water standards or attainment of ARARs), then ASP Special Analytical Services (SAS) or other appropriate methods will be utilized.

The quality assurance/quality control objectives for all measurement data include completeness, representativeness, comparability, precision, and accuracy.

#### **COMPLETENESS**

The analyses performed must be appropriate and inclusive. The parameters selected for analysis are chosen to meet the objectives of this study.

Completeness of the analyses will be assessed by comparing the number of parameters intended to be analyzed with the number of parameters successfully determined and validated. Data must meet QC acceptance criteria for 100 percent or more of requested determinations.

## **REPRESENTATIVENESS**

Samples must be taken of the population and, where appropriate, the population will be characterized statistically to express the degree to which the data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, a process, or environmental condition.

Non-dedicated sampling devices will be cleaned between sampling points by washing and rinsing with pesticide-grade methanol, followed by a thorough rinse with distilled water. Specific cleaning techniques are described in the Field Sampling Procedure. Two types of blank samples will accompany each sample set where Target Compound List (TCL) volatiles are to be analyzed (water matrix only). A trip blank, consisting of a 40 ml VOA vial of organic-free water prepared by the laboratory, will accompany each set of sample bottles from the laboratory to the field and back. This bottle will remain sealed throughout the shipment and sampling process. This blank will be analyzed for TCL volatile organic compounds along with the groundwater samples to ensure that contamination with TCL volatile compounds has not occurred during the bottle preparation, shipment, or sampling phase of the project. In order to check for contaminant carryover when non-dedicated sampling equipment is used, a rinsate blank will be submitted to the laboratory. This blank will also be analyzed for TCL volatile organic compounds. The TCL compounds are identified in the United States Environmental Protection Agency (USEPA) Contract Laboratory Program dated 7/85 or as periodically updated. Field activities are audited by the S&W Redevelopment of North America, LLC Quality Assurance Officer.

The analytical results obtained from the determination of identical parameters in field duplicate samples can be used to further assess the representativeness of the sample data.

## **COMPARABILITY**

Consistency in the acquisition, preparation, handling and analysis of samples is necessary in order for the results to be compared where appropriate. Additionally, the results obtained from analyses of the samples will be compared with the results obtained in previous studies, if available.

To ensure the comparability of analytical results with those obtained in previous or future testing, all samples will be analyzed by NYSDEC-approved methods. The NYSDEC-ASP mandated holding times for various analyses will be strictly adhered to.

## PRECISION AND ACCURACY

The validity of the data produced will be assessed for precision and accuracy. Analytical methods which will be used include gas chromatography/mass spectrometry (GC/MS), gas chromatography (GC), colorimetry, atomic spectroscopy, gravimetric and titrametric techniques. The following outlines the procedures for evaluating precision and accuracy, routine monitoring procedures, and corrective actions to maintain analytical quality control. All data evaluations will be consistent with NYSDEC-ASP procedures. Data will be 100 percent compliant with NYSDEC-ASP requirements.

The requirements of QA/QC are both method specific and matrix dependent. The procedures to be used are described on this basis in Sections 6 and 9. The number of duplicate, spiked, and blank samples analyzed will be dependent upon the total number of samples of each matrix to be analyzed, but there will be at least one split per matrix. The inclusion and frequency of analysis of field blanks and trip blanks will be on the order of one per each site. Samples to be analyzed for volatile organic compounds will be accompanied by trip and field blanks (water matrix).

Quality assurance audit samples will be prepared and submitted by the laboratory QA manager for each analytical procedure used. The degree of accuracy and the recovery of analyte to be expected for the analysis of QA samples and spiked samples is dependent upon the matrix, method of analysis, and compound or element being determined. The concentration of the analyte relative to the detection limit is also a major factor in determining the accuracy of the measurement. The lower end of the analytical range for most analyses is generally accepted to be five times the detection limit. At or above this level, the determination and spike recoveries for metals in water samples will be expected to range from 75 to 125 percent. The recovery of organic surrogate compounds and matrix spiking compounds determined by GC/MS will be compared to the guidelines for recovery of individual compounds as established by the United States Environmental Protection Agency Contract Laboratory Program dated 7/85 or as periodically updated.

The quality of results obtained for inorganic ion and demand parameters will be assessed by comparison of QC data with laboratory control charts for each test.

## SECTION 4

### SAMPLING PROCEDURES

#### SAMPLING PROGRAM

The soil sampling program will include the collection of soil samples from split spoon sampling devices retrieve from soil borings. Groundwater samples will be collected from groundwater monitoring wells, and soil vapor samples will be collected from soil vapor wells. Sample locations are depicted on QAPP Figure 4-1. QAPP Table 4-1 presents a summary of sample matrices, analytical methods, containers, preservation requirements, duplicates, MS/MSDs, and holding times for the sampling program.

**A. Drilling/Sampling Procedures.** Test borings shall be completed using the hollow stem auger drilling method for overburden drilling, and spun casing and NX-coring methods for bedrock drilling, to a depth specified by SWRNA field personnel.

Hollow stem auger drilling utilized for monitoring well completion will require a minimum 4-1/4 inch inside auger diameter. Samples of the encountered subsurface materials shall be collected continuously. The sampling method employed shall be ASTM D-1586/Split Barrel Sampling using a standard 2-foot long, 2-inch outside diameter split- spoon sampler with a 140-pound hammer. Upon retrieval of the sampling barrel, the collected sample shall be placed in glass jars and labeled, stored on site (on ice in a cooler if necessary), and transmitted to the appropriate testing laboratory or storage facility. Chain-of-custody procedures will be practiced following Section 15, EPA-600/4-82-029, Handbook for Sampling and Sample Preservation of Water and Waste Waters.

Bedrock borings will be completed by a combination of spun casing through the overburden, followed by core drilling through bedrock. Six-inch diameter black iron casing will be advanced two feet into the upper weathered bedrock zone (Figure 4-1), and grouted in place. After the grout has cured overnight, drilling will resume using a core barrel, attached at the bottom of a string of rods, which will be rotated and advanced through the grouted casing and a minimum of ten feet into the underlying bedrock. Core samples of rock material will be retrieved from the rock borings. Potable water will be used as needed to cool the cutting bit and carry cuttings to ground surface.

A geologist will be on site during the drilling operations to fully describe each soil and rock sample retrieved from the borings. Overburden soil samples will be described following the New York State Soil Description Procedure. Bedrock cores will be examined for evidence of fracturing, and will be assigned rock quality designations (RQDs), which shall be defined as the sum total length of rock fragments greater than 4 inches, divided by the total core run length.

The drilling contractor will be responsible for obtaining accurate and representative samples, informing the geologist of changes in drilling pressure, keeping a separate general log of soils encountered including blow counts [i.e., the number of blows from a soil sampling drive weight (140 pounds)] required to drive the split-spoon sampler in 6-inch increments and installing monitoring wells to levels directed by the supervising geologist following specifications further outlined in this protocol.

**B. Monitoring Well Completion.** Monitoring wells will be constructed of 10 feet of 2-inch diameter 0.010-inch slot size PVC well screen and riser casing that will extend from the screened interval to the existing grade. Other materials utilized for completion will be washed silica sand (Q-Rock No. 4 or approved equivalent) bentonite grout, Portland cement, and a protective steel locking well casing and cap with locks. Well construction diagrams for both overburden and bedrock wells are shown on QAPP Figure 4-2.

The monitoring well installation method for wells installed within unconsolidated sediments shall be to place the screen and riser assembly into the casing once the screen interval has been selected. At that time, a washed silica sand pack will be placed around the well screen if required to prevent screen plugging. If a sand pack is not warranted, the auger string will be pulled back to allow the native aquifer material to collapse 2 to 3 feet above the top of the screen. Bentonite pellets will then be added to the annulus between the casing and the inside auger to insure proper sealing. Cement/bentonite grout will continue to be added during the extraction of the augers until the entire aquifer thickness has been sufficiently sealed off from horizontal and/or vertical flow above the screened interval. During placement of sand and bentonite pellets, frequent measurements will be made to check the height of the sand pack and thickness of bentonite layers by a weighted drop tape measure.

A vented protective steel casing shall be located over the standpipe extending 2 feet below grade and 2 to 3 feet above grade, secured by a Portland cement seal. The cement seal shall extend laterally at least 1 foot in all directions from the protective casing and shall slope gently away to drain water



away from the well. A vented steel cap will be fitted on the protective casing. The cap shall be constructed so it may be secured with a steel lock.

Bedrock wells will be of a double-cased design (QAPP Figure 4-2), constructed of the same materials as the shallow overburden wells, including PVC screens and risers, with sand packs and bentonite/grout seals. The bedrock wells will be installed within the grouted iron casing that has been keyed into bedrock, with slotted PVC well screen and sand filter pack placed in the open bedrock borehole.

**C. Well Development.** All existing and newly installed monitoring wells will be developed or cleared of all fine-grained materials and sediments that have settled in or around the well during installation so that the screen is transmitting representative portions of the groundwater. The development will be by either pumping or bailing, in combination with surging, the goal being to produce relatively sediment-free groundwater samples.

A submersible bladder pump, or dedicated bailer lowered by rope, will be used to develop the wells. Pumping or bailing will continue for 10 well volumes, when the turbidity falls below 50 NTUs, or until specific conductivity, pH, and temperature are stable (i.e., consecutive readings are within 10 percent with no overall upward or downward trends in measurements). Periodically, bailing/pumping will be interrupted by periods of surging, during which a bailer will be raised and lowered in a plunger-like fashion, to repeatedly draw in and expel water through the well screen. Well development water will be disposed of on the ground surface at each well location.

**D. Decontamination.** All drilling equipment and associated tools including augers, drill rods, sampling equipment, wrenches and any other equipment or tools that have come in contact with contaminated materials will be decontaminated before any drilling on site begins, between each well, and prior to removing any equipment from the site. The preferred decontamination procedure will be to use a high pressure steam cleaner to remove soils and volatile organics from the equipment. The water used for this procedure will be contained and shall come from a controlled source, preferably a municipal drinking supply. Representative samples of the contained decontamination water and well development water will be screened in the field to determine the proper method of disposal. Every effort will be made to minimize the generation of contaminated water.

**E. Groundwater Sampling Program.**

1. **Well Evacuation.** Prior to sampling a monitoring well, the static water level will be recorded and the wells evacuated to assure that the water in the well is truly representative of the groundwater. All well data will be recorded on a field sampling record. For shallow wells or deep wells with a relatively low static water level, evacuation will be accomplished by using a stainless steel or teflon bailer with a ball check valve at its lower end. A bladder may be used to evacuate the deeper wells at a rate of approximately 1 gpm. Water samples to be analyzed for volatile organics must be sampled by bailer.

2. **Sampling Procedure.** Groundwater samples for volatile organic compound (VOC) analysis will be collected using either stainless steel, teflon, or disposable polyethylene bailers with a ball check valve at the lower end. Incorporation of a check valve onto the bailers assures that a sample is representative of the depth to which the bailer is lowered. All samples will be removed from a depth just above the well screen to further assure a representative groundwater sample. Before and after sampling, the sampling device will be cleaned inside and out with soapy water, methanol, and then rinsed with distilled deionized water. Sampling procedures by bailer are summarized on Table 4-2.

Groundwater samples for parameters other than VOCs will be collected using a low stress (low flow) purge and sampling method, utilizing either a submersible bladder pump, or a peristaltic pump with dedicated tubing. The purpose of low stress purging and sampling is to collect groundwater samples from monitoring wells that are representative of groundwater conditions within a discrete vertical interval of the geologic formation. This is accomplished by setting the intake velocity of the sampling pump to a flow rate that limits drawdown within the well casing, thereby drawing in water from immediately adjacent to the pump intake, and minimizing disturbance of sediments to produce a low turbidity sample. Sampling procedures by low-flow methods are summarized on Table 4-3.

In addition to water samples collected from the monitoring wells, two types of "blanks" will be collected and submitted to the chemical laboratory for analyses. The blanks will consist of 40 ml VOA vials, as follows:

a. **Trip Blank.** A trip blank will be prepared before the sample bottles are sent by the laboratory. It consists of a sample of distilled, deionized water which accompanies the other sample bottles into the field and back to the laboratory. A trip blank will be included with each shipment of samples where sampling and analysis for TCL volatiles is planned (water matrix

only). The trip blank will be analyzed for TCL volatile organic compounds as a measure of the internal laboratory procedures and their effect on the results.

b. **Field (Wash) Blanks.** Field wash blanks are analyzed to check the effectiveness of decontamination. Each sample consists of distilled deionized water (prepared by the laboratory) poured through a decontaminated bailer or other sampling apparatus. It is usually collected as a last step in the decontamination procedure prior to sampling of a monitoring well. The wash blank can be analyzed for all or some of the compounds which the subsequent monitoring well sample is scheduled for.

#### **F. Soil Vapor Sampling.**

Soil vapor sampling will be conducted in accordance with NYSDOH Guidance for Evaluating Indoor Air Intrusion in New York State (February 2005). Soil vapor samples will be collected in the vadose zone from shallow (5 feet) well points. Each well point will be installed in a shallow boring drilled either by hand-operated equipment (e.g. hand auger or percussion hammer drill), or by a small truck-mounted drill rig. Drilling equipment used shall be based on soil conditions, and the method that provides the most practical approach.

Each well point will consist of an inert sampling tube (polyethylene, stainless steel, or Teflon<sup>®</sup>) with a 6-inch screened section at the bottom through which soil vapors can be sampled. A sampling zone will be created around the screened section by backfilling with 1 to 2 feet of porous coarse sand or glass beads, and at least three feet of bentonite will be placed above the porous sampling zone to form a seal from the surface. Native clean soil will be packed around the remaining annulus to the ground surface. QAPP Figure 4-3 shows a schematic of the soil vapor well design.

Each designated soil vapor sampling location will be purged of a minimum of three volumes using a low volume pump, and then attached to a regulator, and secured with a clamp. The regulator will then be attached to a 1-liter summa canister.

The regulator will be set to collect a soil vapor sample at a flow rate of less than 0.2 liters per minute. After the summa canister is filled, the valve will be closed.

Each canister will be listed according to a specific sample I.D. on a chain of custody form. Sample canisters will be delivered to the laboratory within 24 hours, and analyzed for VOCs by method TO-15. The detection limit for VOCs will be 1  $\mu\text{g}/\text{m}^3$  or less.

The soil vapor sampling effort will include the use inert helium tracer gas to verify that the soil vapor samples are not diluted by ambient air. The atmosphere around the sampling tube will be enriched with the tracer gas, and the soil vapor sample will be collected in the presence of the enriched tracer atmosphere. This will be accomplished by placing an inverted plastic pail over the sampling point, and filling the pail with the tracer gas via a small tube penetrating the site of the pail. Figure 4-2 includes the tracer gas setup. After the soil vapor sample is collected via summa canister, a second soil vapor sample will be collected using a syringe, and analyzed in the field for helium gas, to see if some of the tracer may have been inadvertently drawn into the gas probe during the sampling process.

Weather conditions in the 48 hours prior to the test, and during the test, will be noted, including average wind speed, precipitation, temperature, and barometric pressure. Soil vapor sampling procedures are summarized in QAAP Table 4-4.

## **G. Indoor and Outdoor Air Sampling**

Indoor and outdoor air sampling will be conducted in accordance with NYSDOH Guidance for Evaluating Indoor Air Intrusion in New York State (February 2005). The air samples will be collected on a cold heating season day. The heating system of the building will be in “normal” operation (i.e. maintaining a temperature between 60F and 70F) for at least 24 hours prior to and during the sample collection time.

The samples will be collected using evacuated 3 liter summa canisters. Flow regulators will maintain the low-flow intake of ambient air into the canister, over an 8-hour period, to approximate ambient air concentrations for a typical work shift. The flow intake will not exceed 0.2 liters per minute.

The summa canisters for indoor sampling will be placed in a central portion of the selected room(s), away from exterior walls, windows, vents, drains, and ducts. Areas with known or suspected sources of VOCs (e.g. chemical storage areas, petroleum-using equipment and machines, etc) will be avoided. The canisters will be placed at least three feet off of the floor and at least one foot away from the ceiling, so that breathing-level air is sampled.

Sampling will be conducted in the lowest occupied building space. A pre-sampling inspection will be conducted prior to the sampling event to identify and minimize conditions that may interfere with the testing. The inspection will evaluate the type of structure, floor layout, air flows, and physical conditions of the building being studied. This information, along with information on potential sources of indoor air contamination will be identified on a building inventory form, completed as part of the comprehensive indoor air quality questionnaire included in the NYSDOH Guidance.

An outdoor air sample will be collected upwind of the building, in an area free of wind obstructions (trees, bushes), and away from potential contaminant sources (automobiles, gas stations, storage tanks, etc), at a height above the ground to represent breathing zones (3 to 5 feet high).

The summa canisters will be shipped to a New York State certified laboratory for volatile organic compounds (VOCs) analysis by EPA method TO-15. The detection limit for analysis will be 0.25 micrograms per cubic meter for TCE, and 1.0 microgram per cubic meter for other VOCs.

## **SAMPLE PRESERVATION AND SHIPMENT**

Since all bottles will contain the necessary preservatives as shown in Table 4.1, they need only be filled. The 40 ml VOA vials must be filled brim full with no air bubbles. The other bottles should be filled to within about 1 inch from the top.

The bottles will be sent from the laboratory in coolers which will be organized on a per site basis. Following sample collection, the bottles should be placed on ice in the shipping cooler. The samples will be cooled to 4°C, but not frozen.

Final packing and shipment of coolers will be performed in accordance with guidelines outlined in the "User's Guide to the CLP".

## **SECTION 5**

### **SAMPLE CUSTODY**

The program for sample custody and sample transfer is in compliance with the NYSDEC-ASP, as periodically updated. If samples may be needed for legal purposes, chain-of-custody procedures, as defined by *NEIC Policies and Procedures* (USEPA-330/9-78-001-R) will be used. Sample chain-of-custody is initiated by the laboratory with selection and preparation of the sample containers. To reduce the chance for error, the number of personnel handling the samples should be minimized.

#### **FIELD SAMPLE CUSTODY**

A chain-of-custody record accompanies the sample from initial sample container selection and preparation at the laboratory, shipment to the field for sample containment and preservation, and return to the laboratory. Two copies of this record follow the samples to the laboratory. The laboratory maintains one file copy and the completed original is returned to the site inspection team. Individual sample containers provided by the laboratory are used for shipping samples. The shipping containers are insulated and chemical or ice water is used to maintain samples at approximately 4°C (39.4° F) until samples are returned and in the custody of the laboratory. All sample bottles within each shipping container are individually labeled and controlled. Samples are to be shipped to the laboratory within 24-48 hours of the day of collection.

Each sample shipping container is closed and sealed. This seal must be broken to open the container. Tampering is possible if the seal is broken before receipt at the laboratory. The laboratory will contact the site investigation team leader and the sample will not be analyzed if tampering is apparent.

#### **LABORATORY SAMPLE CUSTODY**

The site investigation team leader or Project Quality Assurance Officer notifies the laboratory of upcoming field sampling activities and the subsequent transfer of samples to the laboratory. This

notification will include information concerning the number and type of samples to be shipped as well as the anticipated date of arrival.

The laboratory sample program meets the following criteria:

1. The laboratory has designated a sample custodian who is responsible for maintaining custody of the samples and for maintaining all associated records documenting that custody.
2. Upon receipt of the samples, the custodian will check the original chain-of-custody documents and compare them with the labeled contents of each sample container for correctness and traceability. The sample custodian signs the chain-of-custody record and records the date and time received.
3. Care is exercised to annotate any labeling or descriptive errors. In the event of a discrepancy in the documentation, the laboratory will immediately contact the site investigation team leader as part of the corrective action process. A qualitative assessment of each sample container is performed to note any anomalies, such as broken or leaking bottles. This assessment is recorded as part of the incoming chain-of-custody procedure.
4. The samples are stored in a secured area at a temperature of approximately 4°C (39.4° F) until analyses are to commence.
5. A laboratory chain-of-custody record accompanies the sample or sample fraction through final analysis for control.
6. A copy of the chain-of-custody form will accompany the laboratory report and will become a permanent part of the project records.

## **FINAL EVIDENCE FILES**

Final evidence files include all originals of laboratory reports and are maintained under documented control in a secure area.

A sample or an evidence file is under custody if:

- It is in your possession; it is in your view, after being in your possession.
- It was in your possession and you placed it in a secure area.
- It is in a designated secure area.



## **SECTION 6**

### **CALIBRATION PROCEDURES**

Instruments and equipment used to gather, generate or measure environmental data will be calibrated with sufficient frequency and in such a manner that accuracy and reproducibility of results are consistent with the appropriate manufacturer's specifications or project specific requirements. The procedures for instrument calibration, calibration verification, and the frequency of calibrations are described in the NYSDEC-CLP. The calibration of instruments used for the determination of metals will be as described in the appropriate CLP standard operating procedures.

Calibration of other instruments required for measurements associated with these analyses will be in accordance with the manufacturer's recommendations and the standard operating procedures of the laboratory.

## **SECTION 7**

### **ANALYTICAL PROCEDURES**

Analytical procedures shall conform to the most recent revision of the NYSDEC-ASP and are summarized on Table 7.1. In the absence of USEPA or NYSDEC guidelines, appropriate procedures shall be submitted for approval by NYSDEC prior to use.

The procedures for the sample preparation and analysis for organic compounds are as specified in the NYSDEC-ASP. Analytical cleanups are mandatory where matrix interferences are noted. No sample shall be diluted any more than 1 to 5. The sample shall be either extracted again, sonicated again, stream distilled again, etc. or be subjected to any one analytical cleanup noted in SW846 or a combination thereof. The analytical laboratory shall expend such effort and discretion to demonstrate good laboratory practice and demonstrate an attempt to best achieve the method detection limit.

#### **VOLATILE ORGANICS (VOA)**

For the analysis of water samples for Target Compound List (TCL), volatile organic compounds (VOCs), no sample preparation is required. The analytical procedure for volatiles is detailed in NYSDEC-ASP (Volume I, Section D-I). A measured portion of the sample is placed in the purge and trap apparatus and the sample analysis is performed by gas chromatography/mass spectrometry for the first round. USEPA Methods 8010 or 8020 (gas chromatography with different detectors) will be used if subsequent rounds with lower limits of detection are warranted. Air analyses will be complete by EPA Method TO-15 (gas chromatography/mass spectrometry).

#### **SEMI-VOLATILE ORGANIC COMPOUNDS**

The extraction and analytical procedures used for preparation of water, soil and sediment samples for the analysis of the TCL semi-volatile organic compounds are described in NYSDEC-ASP Volume I, Section D-III.

Instrument calibration, compound identification, and quantitation are performed as described in Section 6 of this document and in the NYSDEC-ASP.

## **PESTICIDE AND PCB COMPOUNDS**

The sample preservation procedures for gas chromatography for pesticides and PCBs will be as described in the NYSDEC-ASP methods (Section D-IV). The analysis of standard mixes, blanks and spiked samples will be performed at the prescribed frequency with adherence to the 72-hour requirement described in the method.

## **METALS**

Water, soil and sediment samples will be analyzed for the metals listed in Table 7.2. The detection limits for these metals are as specified in the NYSDEC-ASP, Section D-V. The instrument detection limits will be determined using calibration standards and procedures specified in the NYSDEC-ASP. The detection limits for individual samples may be higher due to the sample matrix. The procedures for these analyses will be as described in the NYSDEC-ASP.

The digestion procedures for water samples are not recommended for samples requiring analysis for mercury, arsenic or selenium. The aliquot of sample analyzed for As and Se will be prepared using methods described in USEPA Methods 200.7. Analysis for mercury requires a separate digestion procedure (245.1 or 245.2).

The analyses for metals will be performed by atomic absorption spectroscopy (AAS), inductively coupled plasma emission spectroscopy (ICP-ES), or inductively coupled plasma mass spectrometry (ICP-MS), as specified in the ASP with regard to AAS flame, ICP-ES, or ICP-MS analysis.

## **SITE SPECIFICITY OF ANALYSES**

Work plans prepared for remedial investigation waste sites contain recommendations for the chemical parameters to be determined for each site. Thus, some or all of the referenced methods will apply to the analysis of samples collected at the individual waste sites. Analyses of Target Compound List (TCL) analytes will be performed on all samples.

## **SECTION 8**

### **INTERNAL QUALITY CONTROL**

#### **QUALITY ASSURANCE BATCHING**

Each set of samples will be analyzed concurrently with blanks, matrix spikes, surrogate spikes and replicate at the frequency described in the NYSDEC-ASP.

#### **ORGANIC STANDARDS AND SURROGATES**

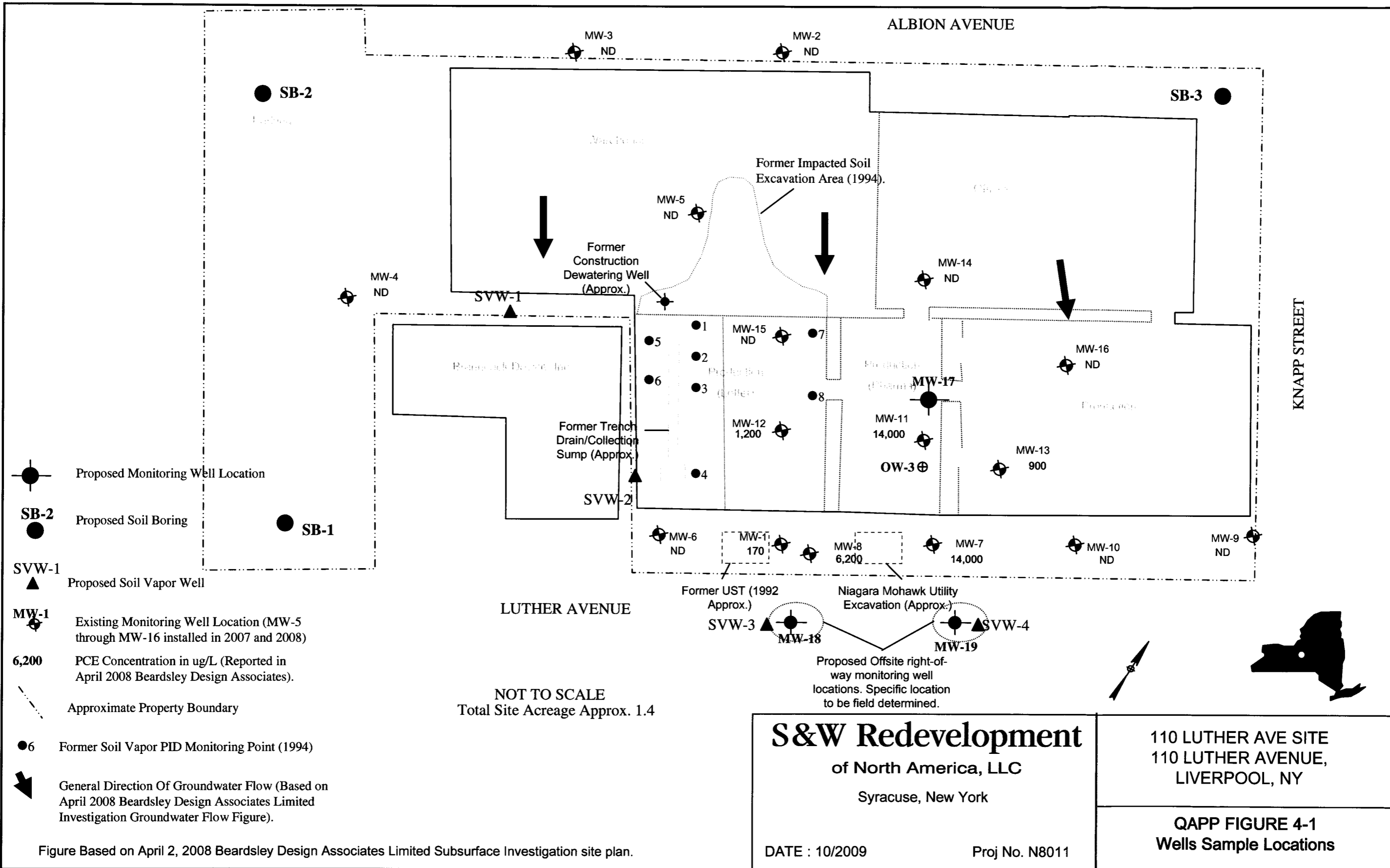
All standard and surrogate compounds are checked by the method of mass spectrometry for correct identification and gas chromatography for degree of purity and concentration. When the compounds pass the identity and purity tests, they are certified for use in standard and surrogate solutions. Concentrations of the solutions are checked for accuracy before release for laboratory use. Standard solutions are replaced monthly or earlier based upon indications of deterioration.

#### **ORGANIC BLANKS, SPIKED BLANK AND MATRIX SPIKE**

Analysis of blank samples verifies that the analytical method does not introduce contaminants. The blank water can be generated by reverse osmosis and Super-Q filtration systems, or distillation of water containing  $\text{KMnO}_4$ . The spiked blank is generated by addition of standard solutions to the blank water. The matrix spike is generated by addition of standard solutions to the blank water. The matrix spike is generated by addition of surrogate standard to each sample.

#### **TRIP AND FIELD BLANKS**

Trip blanks and field blanks will be utilized in accordance with the specifications in Section 4 of this QA/QC Project Plan. These blanks will be analyzed to provide a check on sample bottle preparation and to evaluate the possibility of atmospheric or cross contamination of the samples.



Proposed Monitoring Well Location

Proposed Soil Boring

Proposed Soil Vapor Well

Existing Monitoring Well Location (MW-5 through MW-16 installed in 2007 and 2008)

PCE Concentration in ug/L (Reported in April 2008 Beardsley Design Associates).

Approximate Property Boundary

Former Soil Vapor PID Monitoring Point (1994)

General Direction Of Groundwater Flow (Based on April 2008 Beardsley Design Associates Limited Investigation Groundwater Flow Figure).

**S&W Redevelopment**  
of North America, LLC  
Syracuse, New York

DATE : 10/2009

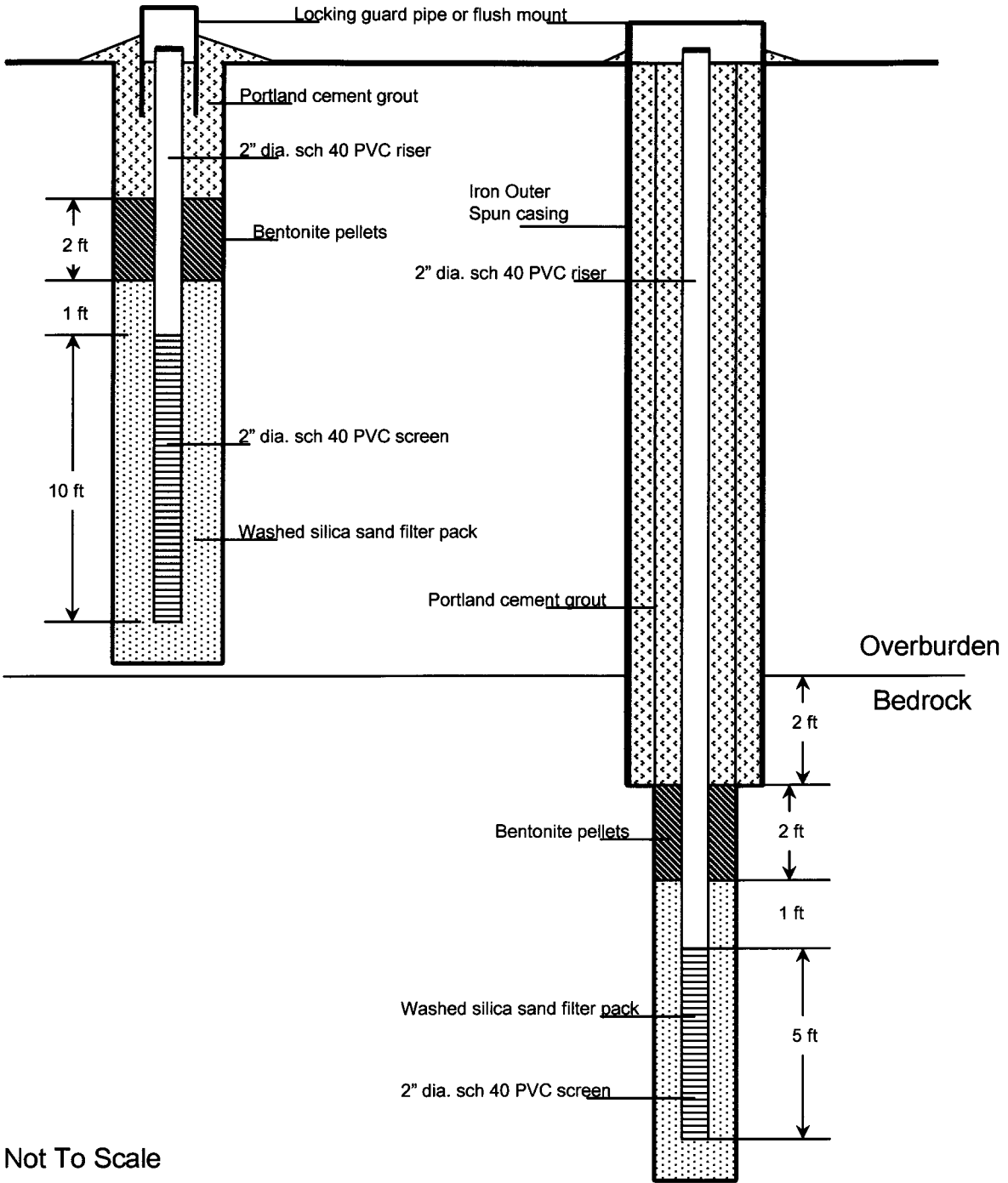
Proj No. N8011

**110 LUTHER AVE SITE**  
110 LUTHER AVENUE,  
LIVERPOOL, NY

**QAPP FIGURE 4-1**  
Wells Sample Locations

Overburden well design

Bedrock well design



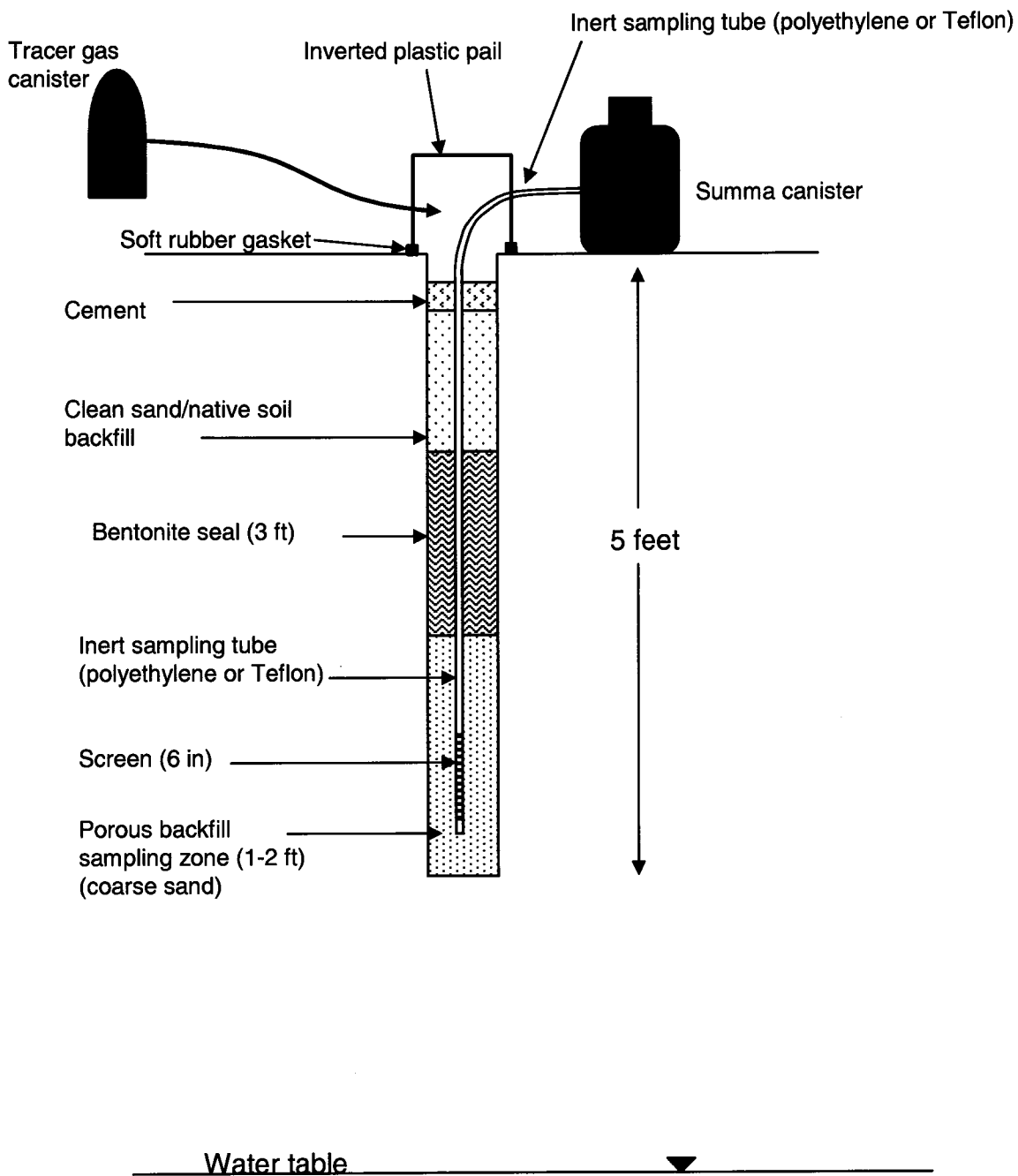
Not To Scale

**S&W Redevelopment**

of North America, LLC  
Syracuse, New York

S&W Redevelopment of North America, LLC  
Quality Assurance Project Plan (QAPP)

**FIGURE 4-2**  
**CONCEPTUAL WELL DETAILS**



NOT TO SCALE

**S&W Redevelopment**  
of North America, LLC  
Syracuse, New York

S&W Redevelopment of North America, LLC  
Quality Assurance Project Plan (QAPP)

**FIGURE 4-3**  
**SOIL VAPOR SAMPLING WELL**



TABLE 4.1  
SAMPLE CONTAINERIZATION

Analysis	EPA Method	Bottle Type and Size	No. of containers	Preservative	Holding Time
<b>Soil and Sediment</b>					
TCL VOCs	8260	2 oz. glass soil jar	1	None	7 days until extraction 40 days after extraction
TCL SVOCs	8270	8 oz. glass soil jar	1	None	7 days until extraction 40 days after extraction
PCBs	8082	8 oz. glass soil jar	1	None	7 days until extraction 40 days after extraction
TAL Metals	6010 7471	8 oz. glass soil jar	1	None	6 months
Pesticides	8081A	8 oz. glass soil jar	1	None	7 days until extraction 40 days after extraction
Total Organic Carbon (Seds only)	8081A	8 oz. glass soil jar	1	None	7 days until extraction 40 days after extraction

All of the above except VOCs may be collected together in a single 8 oz. jar.

All containers must be labeled with the sample number, location, date, and time collected.

All samples must be chilled to 4°C (39.4°F).

Analysis	EPA Method	Bottle Type and Size	No. of containers	Preservative	Holding Time
<b>Water</b>					
TCL VOCs	8260	40 ml VOC vial	1	HCl	7 days until extraction 40 days after extraction
TCL SVOCs	8270	1-liter amber bottle	2	None	7 days until extraction 40 days after extraction
PCBs	8082	1-liter amber bottle	2	None	7 days until extraction 40 days after extraction
TAL Metals	6010 7470	500 ml plastic jar	1	HNO <sub>3</sub>	6 months
Pesticides	8081A	1-liter amber bottle	2	None	7 days until extraction 40 days after extraction
Duplicate	One duplicate and one MS/MSD shall be collected for each parameter. MS/MSD shall be labeled with the well number, location, date, and time of collection. Duplicate shall be identified only as Duplicate.				
MS/MSD					

SVOCs, PCBs, and Pesticides may be collected together in 3 1-liter amber bottles.

Duplicate will require three (3) additional 1-liter amber bottles.

All samples must be chilled to 4°C (39.4°F).

All containers except the duplicate must be labeled with the sample number, location, date, and time of collection.

Analysis	EPA Method	Bottle Type and Size	No. of containers	Preservative	Holding Time
<b>Air</b>					
VOCs	TO-15	Summa Cannister	1	NA	30 Days

TABLE 4.2

SAMPLING PROCEDURE FOR MONITORING WELLS

1. Initial static water level recorded with an electric contact probe accurate to the nearest 0.1 foot.
2. Sampling device and electric contact probe decontaminated.
  - Sampling device and probe are rinsed with pesticide-grade methanol and distilled water.
  - Methanol is collected into a large funnel which empties into a five- gallon container.
3. Sampling device lowered into well.
  - Bailer lowered by dedicated PVC or polypropylene line.
4. Sample taken.
  - Sample is poured slowly from the open end of the bailer and the sample bottle tilted so that aeration and turbulence are minimized.
  - Duplicate sample is collected when appropriate.
5. Samples are capped, labeled and placed in laboratory coolers with ice packs or bagged ice.
6. All equipment is cleaned with successive rinses of pesticide-grade methanol and distilled water.
  - Dedicated line is disposed of or left at well site.
7. Equipment/wash blanks are collected when non-dedicated sampling equipment is used.
8. Chain-of-custody forms are completed in triplicate.
  - The original and one carbon copy are put into a zip-lock bag and placed into the cooler. The original will be returned following sample analysis.
  - A second carbon copy is kept on file.
9. Cooler is sealed with strapping tape and chain-of-custody seals to assure integrity and to prevent tampering of sample.

TABLE 4.3

**SAMPLING PROCEDURE FOR MONITORING WELLS USING  
LOW-STRESS (LOW-FLOW) METHODS**

1. Initial static water level recorded with an electric contact probe accurate to the nearest 0.1 foot.
2. Sampling device is lowered into well. Slowly lower the pump, safety cable, tubing and electrical lines into the well to the depth specified for that well. Pump intake must be no less than 2 feet from the bottom of the well to prevent disturbance and resuspension of sediments which may be at the bottom of the well.
3. Measure water level again: Before starting the pump, measure the water level again with the pump in the well. Leave the water level measuring device in the well.
4. Purge Well: Start pumping the well at 200 to 500 milliliters per minute (ml/min). The water level should be monitored approximately every five minutes. Ideally, a steady flow rate should be maintained that results in a stabilized water level (drawdown of 0.3 ft or less). Pumping rates should, if needed, be reduced to the minimum capabilities of the pump to ensure stabilization of the water level. As noted above, care should be taken to maintain pump suction and to avoid entrainment of air in the tubing. Record each adjustment made to the pumping rate and the water level measured immediately after each adjustment.
5. Monitor Indicator Parameters: During purging of the well, monitor and record the field indicator parameters (turbidity, temperature, specific conductance, pH, Eh, and DO) approximately every five minutes. The well is considered stabilized and ready for sample collection when the indicator parameters have stabilized for three consecutive readings as follows (Puls and Barcelona, 1996):
  - +0.1 for pH
  - +3% for specific conductance (conductivity)
  - +10 mv for redox potential
  - +10% for DO and turbidity
6. Dissolved oxygen and turbidity usually require the longest time to achieve stabilization. The pump must not be removed from the well between purging and sampling.
7. Collect Samples: Collect samples at a flow rate between 100 and 250 ml/min and such that drawdown of the water level within the well does not exceed the maximum allowable drawdown of 0.3 ft. VOC samples must be collected first and directly into sample containers. All sample containers should be filled with minimal turbulence by allowing the ground water to flow from the tubing gently down the inside of the container.
8. Ground water samples to be analyzed for volatile organic compounds (VOCs) require pH adjustment. The appropriate EPA Program Guidance should be consulted to determine whether pH adjustment is necessary. If pH adjustment is necessary for VOC sample preservation, the amount of acid to be added to each sample vial prior to sampling should

be determined, drop by drop, on a separate and equal volume of water (e.g., 40 ml). Groundwater purged from the well prior to sampling can be used for this purpose.

9. Remove Pump and Tubing: After collection of the samples, the tubing, unless permanently installed, must be properly discarded or dedicated to the well for resampling by hanging the tubing inside the well.

10. Measure and record well depth.

11. Close and lock the well.

12. Samples are capped, labeled and placed in laboratory coolers with ice packs or bagged ice.

13. All equipment is cleaned with successive rinses of pesticide-grade methanol and distilled water.

- Dedicated line is disposed of or left at well site.

14. Equipment/wash blanks are collected when non-dedicated sampling equipment is used.

15. Chain-of-custody forms are completed in triplicate.

- The original and one carbon copy are put into a zip-lock bag and placed into the cooler. The original will be returned following sample analysis.
- A second carbon copy is kept on file.

16. Cooler is sealed with strapping tape and chain-of-custody seals to assure integrity and to prevent tampering of sample.

TABLE 4.4

SAMPLING PROCEDURE FOR SOIL VAPOR WELLS

1. Create a bentonite berm around the well sufficient in diameter and thickness to properly seal the tracer gas pressurization dome.
2. Cover the bentonite berm and well area with poly sheeting.
3. Cut a 4 inch x 4 inch hole through the poly sheeting within the area of the bentonite berm.
4. Feed the well tubing through the hole in the poly sheeting and connect it to the purging port in the pressurization dome and tape connections to ensure air tight seals.
5. Seat the pressurization dome into the bentonite berm.
6. Pressurize the dome with the tracer gas.
7. Evacuate static vapor (approximately 3 sample zone volumes) from the well tube and the sampling zone at a rate not to exceed 0.2 liters per minute.
8. Connect well tubing to tracer gas tester to analyze for break through of the tracer gas.
9. Remove and disconnect the tracer gas pressurization dome.
10. Connect the sample collection device (i.e. summa canister regulator) and sample canister to the well tubing.
11. Collect sample.
12. Connect well tubing to tracer gas tester to analyze for break through of the tracer gas.
13. Complete sample log including:
  - a. Sample identification
  - b. Date and time of sample collection
  - c. Purge volume
  - d. Vacuum start & stop times
  - e. Chain of custody.

TABLE 7-1

PROPOSED METHOD DETECTION LIMITS AND  
ANALYTICAL METHODS  
ASP INORGANICS, ASP VOLATILES, ASP SEMI-VOLATILES.  
ASP PESTICIDES, AND PCBS

Superfund Target Compound List (TCL) and Contract-Required Quantization Limit

SECTION 1 - ASP INORGANICS  
Method NYSDEC-ASP, June 2000

PARAMETER		CONTRACT-REQUIRED DETECTION LEVEL* (µg/l)
1.	Aluminum	200
2.	Antimony	60
3.	Arsenic	10
4.	Barium	200
5.	Beryllium	5
6.	Cadmium	5
7.	Calcium	5000
8.	Chromium	10
9.	Cobalt	50
10.	Copper	25
11.	Iron	100
12.	Lead	3
13.	Magnesium	5000
14.	Manganese	15
15.	Mercury	0.2
16.	Nickel	40
17.	Potassium	5000
18.	Selenium	5
19.	Silver	10
20.	Sodium	5000
21.	Thallium	10
22.	Vanadium	50
23.	Zinc	20
24.	Cyanide	10

\*Matrix groundwater. For soil matrix, multiply CRDL by 100.

TABLE 7-1 (continued)

SECTION I - ASP ORGANICS  
Method NYSDEC-ASP, June 2000

VOLATILE		PROPOSED METHOD DETECTION LIMITS ( $\mu\text{g/l}$ )*
1.	Chloromethane	1
2.	Bromomethane	1
3.	Vinyl chloride	1
4.	Chloroethane	1
5.	Methylene chloride	1
6.	Acetone	1
7.	Carbon disulfide	1
8.	1,1-Dichloroethylene	1
9.	1,1-Dichloroethane	1
10.	1,2-Dichloroethylene (total)	1
11.	Chloroform	1
12.	1,2-Dichloroethane	1
13.	2-Butanone	1
14.	1,1,1-Trichloroethane	1
15.	Carbon tetrachloride	1
16.	Bromodichloromethane	1
17.	1,1,2,2-Tetrachloroethane	1
18.	1,2-Dichloropropane	1
19.	cis-1,3-Dichloropropene	1
20.	Trichloroethene	1
21.	Dibromochloromethane	1
22.	1,1,2-Trichloroethane	1
23.	Benzene	1
24.	Trans-1,3-Dichloropropene	1
25.	Bromoform	1
26.	2-Hexanone	1
27.	4-Methyl-2-pentanone	1
28.	Tetrachloroethylene	1
29.	Toluene	1
30.	Chlorobenzene	1
31.	Ethylbenzene	1
32.	Styrene	1
33.	Total xylenes	1

\*Quantitation limit for medium-level soil is  $1200 \mu\text{g/kg}$  (wet weight basis).  
For soil vapor VOCs (TO-15) limits are  $1 \text{ ug/m}^3$  except TCE which is  $0.25 \text{ ug/m}^3$ .

TABLE 7-1 (continued)

SECTION I - ASP ORGANICS  
Method NYSDEC-ASP, June 2000

SEMI-VOLATILES		CONTRACT-REQUIRED QUANTITATION LIMIT (µg/l)
34.	Phenol	10
35.	Bis(2-chloroethyl) ether	10
36.	2-Chlorophenol	10
37.	1,3-Dichlorobenzene	10
38.	1,4-Dichlorobenzene	10
39.	1,2-Dichlorobenzene	10
40.	2-Methylphenol	10
41.	2,2' oxybis(1-Chloropropane)	10
42.	4-Methylphenol	10
43.	N-Nitroso-dipropylamine	10
44.	Hexachloroethane	10
45.	Nitrobenzene	10
46.	Isophorone	10
47.	2-Nitrophenol	10
48.	2,4-Dimethylphenol	10
49.	bis(2-Chloroethoxy) methane	10
50.	2,4-Dichlorophenol	10
51.	1,2,4-Trichlorobenzene	10
52.	Naphthalene	10
53.	4-Chloroaniline	10
54.	Hexachlorobutadiene	10
55.	4-Chloro-3-methylphenol	10
56.	2-Methylnaphthalene	10
57.	Hexachlorocyclopentadiene	10
58.	2,4,6-Trichlorophenol	10
59.	2,4,5-Trichlorophenol	25
60.	2-Chloronaphthalene	10
61.	2-Nitroaniline	25
62.	Dimethyl phthalate	10
63.	Acenaphthylene	10
64.	2,6-Dinitrotoluene	10
65.	3-Nitroaniline	25
66.	Acenaphthene	10
67.	2,4-Dinitrophenol	25



TABLE 7-1 (continued)

**SECTION I - ASP ORGANICS**  
Method NYSDEC-ASP, June 2000

SEMI-VOLATILES		CONTRACT-REQUIRED QUANTITATION LIMIT (µg/l)
68.	4-Nitrophenol	25
69.	Dibenzofuran	10
70.	Dinitrotoluene	10
71.	Diethylphthalate	10
72.	4-Chlorophenyl phenyl ether	10
73.	Fluorene	10
74.	4-Nitroanile	25
75.	4,6-Dinitro-2-methylphenol	25
76.	N-nitrosodiphenylamine	10
77.	4-Bromophenyl phenyl ether	10
78.	Hexachlorobenzene	10
79.	Pentachlorophenol	25
80.	Phenanthrene	10
81.	Anthracene	10
82.	Carbazole	10
83.	Di-n-butyl phthalate	10
84.	Fluoranthene	10
85.	Pyrene	10
86.	Butyl benzyl phthalate	10
87.	3,3'-Dichlorobenzidine	10
88.	Benz(a) anthracene	10
89.	Chrysene	10
90.	bis(2-ethylhexyl)phthalate	10
91.	Di-n-octyl phthalate	10
92.	Benzo(b)fluoranthene	10
93.	Benzo(k)fluoranthene	10
94.	Benzo(a)pyrene	10
95.	Indeno(1,2,3-cd)pyrene	10
96.	Dibenz(a,h)anthracene	10
97.	Benzo(g,h,i)perylene	10

TABLE 7-1 (continued)

SECTION I - ASP ORGANICS  
Method NYSDEC-ASP, June 2000

PESTICIDES/PCBS		CONTRACT-REQUIRED QUANTITATION LIMIT (µg/l)
98.	alpha-BHC	0.05
99.	beta-BHC	0.05
100.	delta-BHC	0.05
101.	gamma-BHC (lindane)	0.05
102.	Heptachlor	0.05
103.	Aldrin	0.05
104.	Heptachlor epoxide	0.05
105.	Endosulfan I	0.05
106.	Dieldrin	0.10
107.	4,4'-DDE	0.10
108.	Endrin	0.10
109.	Endosulfan II	0.10
110.	4,4'-DDD	0.10
111.	Endosulfan sulfate	0.10
112.	4,4'-DDT	0.10
113.	Methoxychlor	0.5
114.	Endrin ketone	0.10
115.	Endrin aldehyde	0.10
116.	alpha-Chlordane	0.05
117.	gamma-Chlordane	0.05
118.	Toxaphene	5.0
119.	AROCLOR-1016	1.0
120.	AROCLOR-1221	1.0
121.	AROCLOR-1232	1.0
122.	AROCLOR-1242	1.0
123.	AROCLOR-1248	1.0
124.	AROCLOR-1254	1.0
125.	AROCLOR-1260	1.0

**Appendix C**  
**Site Specific Health and Safety Plan**

# 110 LUTHER AVE BCP SITE HEALTH AND SAFETY PLAN

## A.1. SITE DESCRIPTION

Date ..... Date: October 13, 2009 Revised:  
Location ..... 110 Luther Ave  
Liverpool, New York  
Hazards ..... Volatile organic compounds  
in soil and groundwater.  
Area Affected ..... Subsurface soils, and ground water  
Surrounding Population ..... Mixed commercial and industrial  
Topography ..... flat at site, with flat to moderate slopes surrounding  
Weather Conditions ..... Usually partly sunny to overcast, south winds

**A.2 ENTRY OBJECTIVES:** The objective of site entry is to conduct a site investigation including well installation, in-situ chemical oxidation testing, and to collect samples. Future activities may include remedial activities such as soil excavation or groundwater treatment.

**A.3 ON-SITE ORGANIZATION AND COORDINATION.** The following S&W Redevelopment personnel are designated to carry out the stated job functions on site. (Note: One person may carry out more than one job function.)

Project Manager:.....	Donald Sorbello or designee	(315) 422-4949
Field Team Leader:.....	Ian McNamara or designee	(315) 439-4090
Field Sampling Team Member .....	Jeff Kiggins or designee	(315) 422-4949
Project Safety Officer .....	Daniel P. Ours or designee	(315) 422-4949

**A.4 ON-SITE CONTROL.** Syracuse Label or its designated agent will coordinate access control and security for the work area for each day of on site work. No unauthorized personnel should be within the established work area. All contractors will be responsible to assure appropriate health and safety plans are available and have been reviewed with their workers and subcontractors.

## A.5 HAZARD EVALUATION.

**A. Chemical Hazards.** It is anticipated that a number of different chemical contaminants may be encountered during site activities. Previous investigations conducted at the Site have determined the Contaminants of Concern (COCs) to be tetrachloroethene (PCE), trichloroethene (TCE), cis and trans-1,2-dichloroethene (DCE), and vinyl chloride. The locations with the highest concentration of these contaminants are MW-11 and MW-7.

Exposure to potassium permanganate that might occur while handling during completion of the pilot test is another potential hazard at the site. The exposure risks and mitigative measures are included in the attached material safety data sheet (MSDS).

The primary hazards of each known or suspected chemical contaminant are identified below. The main potential exposure route is associated primarily with direct skin contact and inhalation.

<b><i>Volatile Organics</i></b>	
Trichloroethene	Eye & skin irritation, nausea, vomiting, headache
1,2 Dichloroethene	Eye irrit, respiratory irrit, central nervous system
Vinyl chloride	Eye irrit, soar throat, dizziness, headache, nausea
Tetrachloroethene	Irrit eyes, nose, throat, nausea, dizziness, vomiting

**B. Physical Hazards.** Physical hazards for this project relate to mechanical exposure associated with working around heavy equipment and vehicles, noise exposure, and heat or cold stress. Basic safety guidelines for the above noted main physical hazards are included below.

1. **Drilling.** Site activities will involve drilling of monitoring wells into the subsurface beneath and outside of the building slab. The estimated location of all underground utilities must be determined before drilling begins. Necessary clearances must be observed. Appropriate engineering controls will be implemented during drilling to protect site workers and the public.
  
2. **Utility Clearances.** Prior to any intrusive activities (e.g. drilling, excavating, probing) New York State Dig Safe shall be contacted to mark underground lines before any work is started. Personnel directly involved in intrusive work shall determine the minimum distance from marked utilities which work can be conducted with the assistance of the locator line service. For those utilities that may be located beneath the building slab, those performing intrusive work will obtain clearance for work areas with Syracuse Label.
  
3. **Heavy Lifting Method.** Personnel conducting work that may require lifting of heavy objects should use the following proper lifting techniques:
  - Feet must be parted, with one foot alongside the object being lifted and one foot behind. When the feet are comfortably spread a more stable lift can occur and the rear foot is in a better position for the upward thrust of the lift.
  - Use the squat position and keep the back straight. A straight back means the spine, back muscles, and organs of the body in correct alignment.
  - To grip the item being lifted, the fingers and the hand are extended around the object being lifted, using the full palm.

Fingers have very little power – use the strength of the entire hand.

- The load must be drawn close, and the arms and elbows must be tucked into the side of the body. Holding the arms away from the body increases the strain on the arms and elbows. Keeping the arms tucked in helps keep the body weight centered.

The body must be positioned so that the weight of the body is centered over the feet. This provides a more powerful line of thrust and also ensures better balance. Start the lift with a thrust of the rear foot. Do not twist.

4. **Slip/Trip/Hit/Fall.** These injuries are the most frequent of all injuries to workers. They occur for a wide variety of reasons, but can be minimized by the following practices:

- Spot-check the work area to identify hazards;
- Establish and utilize pathways that are most free of slip and trip hazards. Avoid pathways that are more hazardous;
- Beware of trip hazards such as wet floors, slippery floors, and uneven terrain;
- Carry only loads you can see over;
- Keep work areas clean and free of clutter, especially in storage areas and walkways;
- Communicate observed hazards to site personnel.

5. **Heat Stress.** All field personnel engaged in site work shall have completed training to recognize and avoid heat related illness. Proper training and preventive measures will aid in averting loss of worker productivity and serious illness. Heat stress prevention is particularly important because once a person suffers from heat stroke or heat exhaustion, that person may be predisposed to additional heat-related illness. To avoid heat stress, the following steps may be taken:

- Adjust work schedules.

Modify work/rest schedules according to monitoring requirements.

Mandate work slowdowns as needed.

Perform work during cooler hours of the day if possible or at night if adequate lighting can be provided.

- Provide shelter (air conditioned, if possible) or shaded areas to protect personnel during rest periods.

- Maintain worker's body fluids at normal levels. This is necessary to ensure that the cardiovascular system functions adequately. Daily fluid intake must approximately equal the amount of water lost in sweat, i.e., eight fluid ounces (0.23 liters) of water must be ingested for approximately every eight ounces (0.23 kg) of weight lost. The normal thirst mechanism is not sensitive enough to ensure that enough water will be drunk to replace lost sweat. When heavy sweating occurs, encourage the worker to drink more. The following strategies may be useful:
- Members of each Work Crew shall be properly trained by each Crew's respective employer to recognize the symptoms of heat-related illnesses.

**6. Adverse Weather Conditions.** The Field Leader for each Work Crew will be responsible for deciding on the continuation or discontinuation of work for his/her Crew based on current and pending weather conditions. Electrical storms, tornado warnings, and strong winds are examples of conditions that would call for the discontinuation of work and evacuation of the site. Site operations should not be permitted during an electrical storm.

**7. Vehicle Traffic.** As the scope of work includes the transport and disposal of material, there is a potential to encounter a temporarily high volume of vehicular traffic. Project Work Crews that have the potential to be exposed to vehicle traffic should wear a high visibility safety vest. The excavation and or drilling contractor Work Crew will provide proper signage, flagging, and barricades to maintain a safe flow of traffic.

Slip/Trip/Falls	Use three points of contact to mount and dismount equipment. Continuously inspect work areas for slip, trip, & fall hazards. Be aware of surroundings. Practice good housekeeping.
Noise	Wear appropriate hearing protection.
Pinch Points	Keep hands, feet, & clothing away from moving parts/devices.
Utilities	Maintain proper utility clearances. All utilities should be properly located and marked out prior to start of work.
Heavy Lifting	Follow safe lifting practices. Lift items within your capabilities and assigned project role. Ask for assistance if necessary.

Proximity to Heavy Equipment and Vehicles	Maintain adequate distance from trucks/equipment. Obey barriers and/or signage
Heat/Cold Stress	Dress appropriately and follow HASP guidelines
Dangerous Weather Conditions	Consult local weather reports daily, watch for signs of severe weather, etc. Suspend or reduce work during severe weather.
Chemical hazards	Use PID as indicated in HASP. Wear specified PPE. No smoking.
Biological Hazards – Insects, Snakes, Poison Plants, etc.	Wear appropriate PPE and keep necessary first aid supplies readily available. Use insect repellent and snake chaps as needed. Learn to identify poisonous plants.

**C. Biological Hazards.** Biological hazards may include contact with biting insects, reptiles, and poisonous plants.

**1. Tick-Borne Diseases.** Lyme disease is caused by a bacterial parasite called spirochete, and is spread by infected ticks that live in and near wooded areas, tall grass, and brush. Once the tick deposits the spirochete, it must feed on the host blood for 12 to 24 hours before it can transmit the disease. The ticks that cause the disease in the Northeast and Midwest are often no bigger than a poppy seed or a comma in a newsprint. The peak months for human infection are June through October. There are many other tick borne diseases such as Rocky Mountain Spotted Fever, which can be carried by a variety of ticks. The prevention and treatment of these diseases are similar to those of Lyme disease.

Ticks hang on blades of grass or shrub waiting for a host to come by. When a host brushes against the vegetation, the tick grabs on. They usually first climb onto a persons legs and then crawl up looking for a place to attach. Preventative measures include wearing light-colored clothing, keeping clothing buttoned, tucking pant legs in socks, and keeping shirt tails tucked in. Periodic checks for ticks should be made during the day, and especially at night. Hair should also be checked by parting it and combing through it to make sure that no ticks have attached to the scalp. Also, check clothing when it is first removed, before ticks have a chance to crawl off.

The most common repellent recommended for ticks is n,n-dimethyl-m-toluamide, or DEET. It is important to follow the manufacturer's instructions found on the container. for use with all insecticides especially those containing DEET.

In general, DEET insect repellent should only be applied to clothing, not directly on the skin. Do not apply to sunburns, cuts or abrasions. Use soap and water to remove DEET once indoors.



The best way to remove a tick is removal by tweezers. If tweezers are not available, cover your fingers (tissue paper) while grasping the tick. It is important to grasp the tick as close as possible to the Site of attachment and use a firm steady pull to remove it. When removing the tick, be certain to remove all the mouth parts from your skin so as not to cause irritation or infection. Wash hands immediately after with soap and water, and apply antiseptic to the area where tick was removed.

A variety of tests exist for determining Lyme Disease infection. However, most of these tests are not exact. The first symptoms of Lyme Disease usually appear from 2 days to a few weeks after a person is bitten by an infected tick. Symptoms usually consist of a ring-like red rash on the skin where the tick attached. The rash is often bull's eye-like with red on the outside and clear in the center. The rash may be warm, itchy, tender, and/or "doughy." Unfortunately, this rash appears in only 60 to 80 percent of infected persons. An infected person also has flu-like symptoms of fever, fatigue, chills, headaches, a stiff neck, and muscle aches and pains (especially knees). Rashes may be found some distance away from original rash. These symptoms often disappear after a few weeks.

**2. Mosquitos.** Mosquitoes are known to carry diseases including encephalitis and West Nile virus, which can be passed on to humans through the bite of the mosquito. Mosquito bites can also cause itching and swelling. Prevention of mosquito bites is recommended to avoid these diseases. When possible, avoid activity near stagnant water bodies or in deep woods. Mosquitoes are most active later in the day. The most common repellent recommended for mosquitoes is n,n-dimethyl-m-toluamide, or DEET. It is important to follow the manufacturer's instructions found on the container for use with all insecticides especially those containing DEET.

In general, DEET insect repellent should only be applied to clothing, not directly on the skin. Do not apply to sunburns, cuts or abrasions. Use soap and water to remove DEET once indoors.

**3. Bees and Wasps.** The insects most likely to cause strong allergic reactions are wasps, honeybees, hornets, and yellow jackets. Although they differ in appearance and reside in different habitats, all stinging insects have one thing in common -- when upset, they will attack.

Yellow Jackets and honeybees make their nests in the ground, in old tree stumps, or in walls. Wasps nest in trees, in bushes, under the house, or on buildings. Hornets construct a gray or brown paper football shaped nest in trees and shrubs, 5 to 10 feet above the ground. All of the above may also be found in above ground protective well casings.

Insect sting reactions can be classified into three types -- a normal reaction, a toxic reaction, and an allergic reaction. A normal reaction usually lasts only a few

hours.

If you have had an allergic reaction to an insect sting before, an allergist should be consulted. There is a treatment, venom immunotherapy, which is 97 percent effective in preventing future allergic reactions to insect stings.

If stung by a honeybee, the only bee to leave its stinger, instant removal of the stinger and sac usually reduces harmful effects. To remove the stinger, never try to use the thumb and forefinger or tweezers to pinch it out, instead with a fingernail or flat object, scrape it away with one quick scrape in a sideways movement. This method prevents more venom from being injected into the wound.

Other helpful tips would be to take a rapid acting antihistamine to reduce itching; apply ice or cold compresses to the area to reduce swelling; and rest, because physical activity hastens the absorption of the venom.

People with severe allergic reactions should be given a dose of epinephrine immediately following the insect sting. They should also be taken to the hospital for further evaluation. Severe or even life threatening reactions to insect stings, if treated properly usually clear up in one or two hours after treatment.

**4. Poisonous Plants.** Common Poison Ivy (Rhus radicans) grows as a small plant, a vine, and a shrub. Poison Ivy occurs in every state. The leaves always consist of three glossy leaflets. Poison Sumac (Rhus vernix) grows as a woody shrub or small tree 5 to 25 feet tall. It usually contains nine leaves, with eight paired leaves and one on top, and is common in swampy areas. The plants are potent sensitizers and can cause a mild to severe allergic reaction. This reaction is called contact dermatitis.

Dermatitis, in Rhus-sensitive persons, can result from contact with the milky sap found in the roots, stems, leaves, and fruit. The sap may retain its potency for months or years in a dry atmosphere, and can occur during any time of the year. The sap may also be carried by animals, equipment, or apparel.

**A.6 PERSONAL PROTECTIVE EQUIPMENT.** Based on evaluation of potential hazards, the following levels of personal protection have been designated for the applicable work areas or tasks:

[REDACTED]					
Work zone	Site investigation	A	B	C	Ⓓ Other

Specific protective equipment for each level of protection is as follows:

Level A	Fully-encapsulating suit SCBA (disposable coveralls)
Level B	Splash gear (saranax-coated Tyvek suit) SCBA or airline respirators
Level C	Splash gear (Tyvek suit) Half-face canister respirator Safety glasses Boots Gloves Hard hat
<b><u>Level D</u></b>	<b>Work boots</b> <b>Gloves (latex)</b> <b>Hard hat</b>

**Action Levels.** Action levels shall be determined by monitoring of work zone breathing space with a portable photoionization detector (PID) or comparable instrument. Measurement of a sustained concentration above ambient (background) conditions shall initiate action. The following criteria shall be used to determine appropriate action:

0-5 ppm	Level D
5-200 ppm	Level C
200-1000 ppm	Level B - air line
1000+ ppm	Level B - SCBA

Above 10	Discontinue work and take remedial action
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**NO CHANGE TO THE SPECIFIED LEVELS OF PROTECTION SHALL BE MADE WITHOUT THE APPROVAL OF THE SITE SAFETY OFFICER AND THE PROJECT TEAM LEADER.**

**If the above criteria indicate the need to increase from Level D to a higher level of personal protection, work will be immediately suspended in that particular site area until the required personal protective equipment is made available, or until Level D conditions return.**

**A.7 ON-SITE WORK PLANS.** The following personnel or designated alternate(s) will perform the field investigation.

Field Team Leader: .....Ian McNamara or designee  
 Work Party .....Ian McNamara, and designee  
 as needed to support field effort

The work party was briefed on the contents of this plan prior to commencement of work.

**A.8 COMMUNICATION PROCEDURES.** The Project Manager should remain in communication with the Field Team Leader. A cellular phone will be used in the field.

Continuous horn blast is the emergency signal to indicate that all personnel should leave the Work Zone.

In the event that radio communications are used, the following standard hand signals will be used in case of failure of radio communications:

- Hand gripping throat ..... Out of air; can't breathe
- Grip partner's wrist or both hands around waist ..... Leave area immediately
- Hands on top of head..... Need assistance
- Thumbs up..... OK; I am all right; I understand
- Thumbs down..... No; negative

**A.9 SITE HEALTH AND SAFETY PLAN.**

**A.** The designated Site Safety Officer will have responsibility for safety recommendations on site. The Field Team Leader will be responsible for carrying out the Site Health and Safety Plan, and for enforcing it on all SWRNA employees engaged in site work.

**B. Emergency Medical Care.** The Saint Josephs Hospital is located at 31 Prospect Avenue, in Syracuse, NY, approximately 6 miles from the site. A map of the route to this facility is available at the field vehicle (attached).

1. Head Northeast on Luther Ave Towards 7<sup>th</sup> North Street for 0.1 miles
2. Turn Left onto 7<sup>th</sup> North Street
3. Continue on 7th North Steet for approximately 400 feet and turn right onto I-81 South.
4. Stay on I-81 South for approximately 3 miles
5. From I-81 South Take Exit 19 For Salina Street
6. Take right onto North Salina
7. Take Left Onto Willow Street
8. Turn Left onto North Townsend Street
9. Turn Left onto Union Avenue. Hospital is on The Right Side.

First aid equipment is available on site at the following locations:

- First aid kit
- Field vehicle

List of emergency phone numbers:

Syracuse Label Facility	(315) 422-1037
Police	911
Fire	911
Ambulance	911

Saint Joseph's Hospital	315-448-5101
-------------------------	--------------

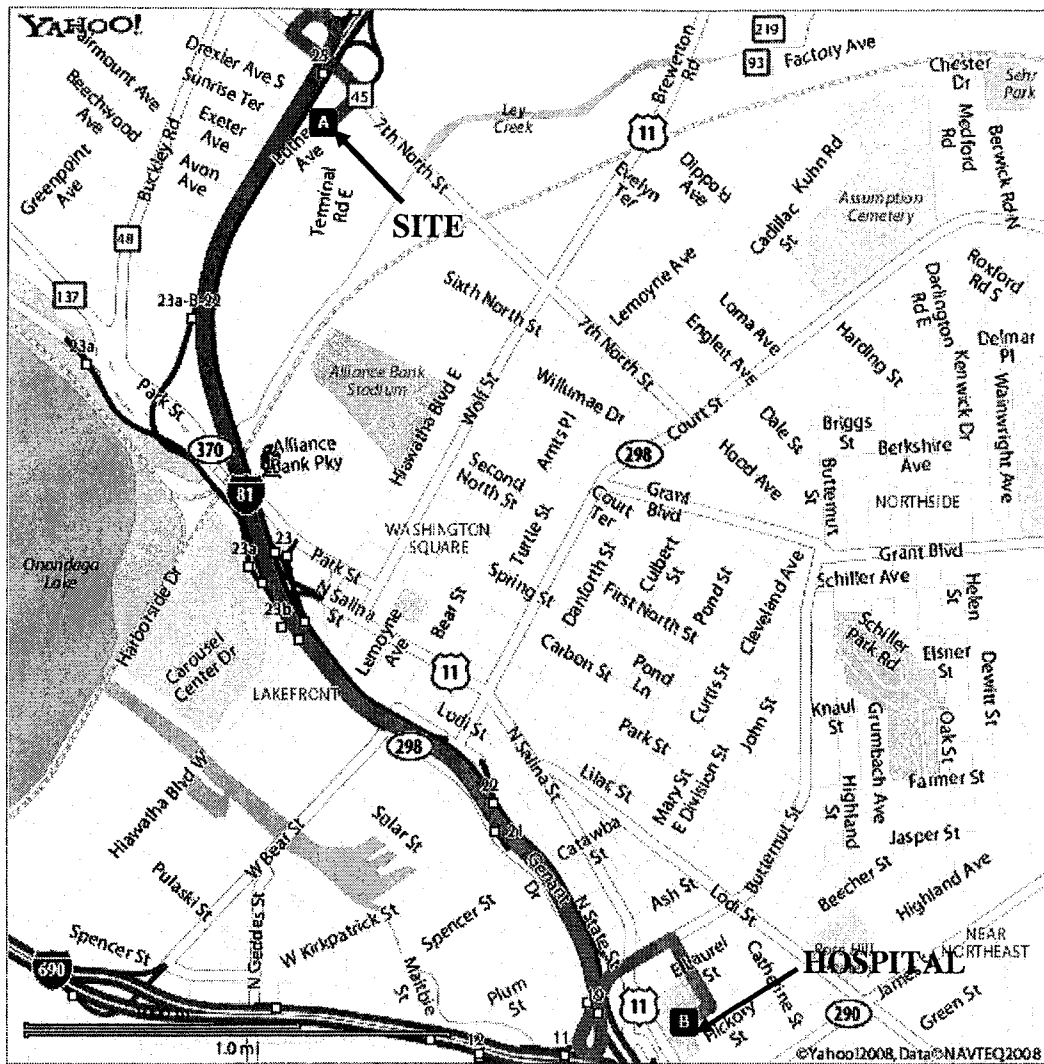
- C. **Environmental Monitoring.** The following environmental monitoring instruments shall be used on site at the specified intervals:
- MiniRAE photoionization detector (PID). Continuous during installation of soil borings and soil gas monitoring probes.
  - Dust (particulate) monitor. Continuous during installation of soil borings per Community Air Monitoring Plan (CAMP)
- D. **Emergency Procedures.** The following standard procedures will be used by on-site personnel. The Site Safety Officer shall be notified of any on-site emergencies and be responsible for ensuring that the appropriate procedures are followed:
1. **Personnel Injury in the Work Zone.** Upon notification of an injury in the Work Zone, the designated emergency signal, a continuous horn blast, shall be sounded. A rescue team will enter the Work Zone (if required) to remove the injured person to safety. Appropriate first aid shall be initiated and contact should be made for an ambulance and with the designated medical facility (if required). No persons shall re-enter the Work Zone until the cause of the injury or symptoms is determined.
  2. **Fire/Explosion.** Upon notification of a fire or explosion on site, the designated emergency signal, a continuous horn blast, shall be sounded and all site personnel assembled at the decontamination line. The fire department shall be alerted and all personnel moved to a safe distance from the involved area.
  3. **Personal Protective Equipment Failure.** If any site worker experiences a failure or alteration of protective equipment that affects the protection factor, that person and his/her buddy shall immediately leave the Work Zone. Re-entry shall not be permitted until the equipment has been repaired or replaced.
  4. **Other Equipment Failure.** If any other equipment on site fails to operate properly, the Project Team Leader and Site Safety Officer shall be notified and then determine the effect of this failure on continuing operations on site. If the failure affects the safety of personnel or prevents completion of the Work Plan tasks, all personnel shall leave the Work Zone until the situation is evaluated and appropriate actions taken.

In all situations, when an on-site emergency results in evacuation of the Work Zone, personnel shall not re-enter until:

- a. The conditions resulting in the emergency have been corrected.
  - b. The hazards have been reassessed.
  - c. The Site Health and Safety Plan has been reviewed.
  - d. Site personnel have been briefed on any changes in the Site Health and Safety Plan.
- E. **Personal Monitoring.** The following personal monitoring will be in effect on site:

Personal exposure sampling: MiniRAE PID screening, sampling pumps/tubes , or organic vapor monitors.

Medical monitoring: The expected air temperature will be less than 70EF. If it is determined that heat stress monitoring is required (mandatory if over 70EF), the following procedures shall be followed: Monitoring body temperature, body weight, pulse weight.



**Directions to St. Joseph's Hospital located at 301 Prospect Ave, Syracuse, New York:**

- |                                                              |     |
|--------------------------------------------------------------|-----|
| 1. Start at 110 Luther Ave, Liverpool going toward KNAPP ST. | 0.1 |
| 2. Turn Left on 7TH NORTH ST                                 | 0.2 |
| 3. Turn Right on ramp to I-81 S toward SYRACUSE              | 3.0 |
| 4. Take exit #19/CLINTON ST/SALINA ST toward BUTTERNUT ST    | 0.2 |
| 5. Bear Right on BUTTERNUT ST                                | 0.4 |
| 6. Turn Right on N TOWNSEND ST                               | 0.2 |
| 7. Turn Right on UNION AVE                                   |     |
| 8. Turn Right on PROSPECT AVE                                |     |
| 9. Arrive at 301 PROSPECT AVE on the Left                    |     |



Trip Distance: 4.11 miles  
 Hospital Telephone:  
 (315) 448-5111

**S&W Redevelopment**

of North America, LLC

4/2009

JOB No: N8011

110 LUTHER AVE SITE  
 110 LUTHER AVENUE, LIVERPOOL, NY

**FIGURE 1  
 Health and Safety Plan  
 Hospital Directions**

**Appendix D**  
**Community Air Monitoring Plan**



## **APPENDIX D**

### **COMMUNITY AIR MONITORING PLAN**

#### **D.1 INTRODUCTION**

The 110 Luther Ave site (the 'Site') occupies approximately 1.4 acres along the west side of Luther Avenue in the Town of Salina, Onondaga County, New York. The Site is owned by Syracuse Label whose office, light manufacturing, and warehousing operations are housed within the one story building which occupies the majority of the parcel. The remainder of the site consists primarily of paved parking areas. The site is located in a commercial/industrial area just east of Interstate 81 and is bordered by Albion Ave to the west, Knapp Ave to the north, Luther Ave to the east, and an open lot and maintenance garage to the west.

Syracuse label is interested in investigating and remediating the 110 Luther Ave Site in the New York State Brownfield Cleanup Program (BCP) under agreement with the NYSDEC. Under the BCP, a Remedial Investigation must be completed in accordance with the NYSDEC's Department of Environmental Remediation (DER) Draft DER-10 Technical Guidance for Site Investigation and Remediation (NYSDEC, December 2002) to provide a systematic assessment of environmental conditions at the Site. Data has been generated during previous Phase II investigations at the Site, therefore, additional investigation is necessary only to fill data gaps for the assessment of potential remedial approaches.

The Remedial Investigation (RI) will define the extent of contamination, if any, in order to implement a remedial strategy, if determined to be necessary. This Community Air Monitoring Plan (CAMP) describes the measures that will be undertaken during field work to monitor ambient air at the downwind site perimeter.

#### **D.2 OBJECTIVES**

The objective of this CAMP is to provide a measure of protection for the downwind community from potential airborne contaminant releases that might arise as a result of the planned field work that penetrates the ground surface, which will include test pits and soil borings.

### **D.3 METHODS**

The CAMP will include monitoring for volatile organic compounds (VOCs) and particulate matter (e.g. airborne “dust”). Readings will be recorded, periodically each day, for VOCs and dust. The readings will be available for State (DEC and DOH) personnel to review, as requested, and will be included in the Remedial Investigation Report.

#### **A. VOC MONITORING**

A MiniRAE photoionization detector (PID) will be used to measure VOCs in air. VOCs will be monitored at the downwind perimeter of the site, or directly downwind of the work area, based on the prevailing wind direction as determined at the beginning of each workday. The site perimeter is defined as the existing property boundary.

Upwind concentrations of VOCs will be measured at the beginning of every workday to establish background conditions. VOC concentrations will be measured at the downwind property boundary or directly downwind of the work area. Downwind data will be checked as needed to provide a measure of assurance that contaminants are not being spread off site through the air.

- If the ambient air concentration for total organic vapors at the downwind monitoring point exceeds 5 parts per million (ppm) above background for a 15-minute average, work activity will be halted and monitoring will continue until levels decline to below 5 ppm over background. At this point, work will resume and monitoring will continue.
- If total organic vapor levels at the downwind monitoring point persist at levels above 5 ppm over background but less than 25 ppm, work activities will be halted, the source of the vapors will be identified, and corrective actions will be taken to abate emissions. Work will resume after organic vapor levels fall to below 5 ppm over background at the downwind monitoring point.
- If organic vapor levels exceed 25 ppm at the downwind monitoring point activities will be shut down. An appropriate course of action to abate emissions in order to resume work will be discussed with NYSDEC personnel.

## B. PARTICULATE MONITORING

Particulate (e.g. “dust”) emissions will be measured continuously at the upwind and downwind property boundaries, or directly downwind of the work area, when work activities are being completed outside of site buildings. Particulate monitoring may be suspended if weather and surface conditions (i.e. precipitation or wet work surfaces) warrant. Real time monitoring equipment (e.g. MiniRAM or equivalent), with audible alarms and capable of measuring particulate matter less than 10 micrometers in size, will be used.

- If the downwind particulate level is 100 micrograms per cubic meter ( $\text{ug}/\text{m}^3$ ) greater than background (upwind) for a 15-minute period, then dust suppression techniques will be employed. Work will continue with dust suppression provided that downwind particulate levels do not exceed  $150 \text{ ug}/\text{m}^3$  above upwind levels and provided that no visible dust is migrating from the work area.
- If, after dust suppression techniques, downwind particulate levels are greater than  $150 \text{ ug}/\text{m}^3$  above upwind levels, work will be stopped and a re-evaluation of activities will be initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing downwind particulate concentrations to within  $150 \text{ ug}/\text{m}^3$  of the upwind level and in preventing visible dust migration.

During work activities that are conducted within site buildings, perimeter community air monitoring for dust will be suspended unless visible dust is observed migrating from the building work area.

**Appendix E**  
**Fish and Wildlife Impact Decision Key**

APPENDIX 3C

Fish and Wildlife Resources Impact Analysis Decision Key

	If YES Go to:	If NO Go to:
1. Is the site or area of concern a discharge or spill event?	13.	2.
2. Is the site or area of concern a point source of contamination to the groundwater which will be prevented from discharging to surface water? Soil contamination is not widespread, or if widespread, is confined under buildings and paved areas.	13.	3
3. Is the site and all adjacent property a developed area with buildings, paved surfaces and little or no vegetation?	4.	9.
4. Does the site contain habitat of an endangered, threatened or special concern species?	Section 3.10.1	5.
5. Has the contamination gone off site?	6.	14.
6. Is there any discharge or erosion of contamination to surface water or the potential for discharge or erosion of contamination?	7.	14.
7. Are the site contaminants PCBs, pesticides or other persistent, bioaccumulable substances?	Section 3.10.1	8.
8. Does contamination exist at concentrations that could exceed SCGs or be toxic to aquatic life if discharged to surface water?	Section 3.10.1	14.
9. Does the site or any adjacent or downgradient property contain any of the following resources? a. Any endangered, threatened or special concern species or rare plants or their habitat b. Any NYSDEC designated significant habitats or rare NYS Ecological Communities c. Tidal or freshwater wetlands d. Stream, creek or river e. Pond, lake, lagoon f. Drainage ditch or channel g. Other surface water feature h. Other marine or freshwater habitat i. Forest j. Grassland or grassy field k. Parkland or woodland l. Shrubby area m. Urban wildlife habitat n. Other terrestrial habitat		
10. Is the lack of resources due to the contamination?	Section 3.10.1	14.
11. Is the contamination a localized source which has not migrated and will not migrate from the source to impact any on-site or off-site resources?	14.	12.
12. Does the site have widespread soil contamination that is not confined under and around buildings or paved areas?	Section 3.10.1	13.
13. Does the contamination at the site or area of concern have the potential to migrate to, erode into or otherwise impact any on-site or off-site habitat of endangered, threatened or special concern species or other fish and wildlife resource? (See #9 for list of potential resources. Contact NYSDEC for information regarding endangered species.)	Section 3.10.1	14.
14. No Fish and Wildlife Resources Impact Analysis needed.		

**Attachment I**  
**Site Property Survey**  
**(lanuzi & Romans, January 15, 2008)**

**Attachment II**  
**Site Investigation and Construction**  
**Remediation Plan (C&H Engineers,**  
**November 18, 1994)**

**SITE INVESTIGATION REPORT AND CONSTRUCTION REMEDIATION PLAN**

**Syracuse Truck Sales/Syracuse Label Company  
DEC Spill No. 94- 09529**

**(C & H Engineers Project No. 31404)**

**November 18, 1994**

**Prepared for:  
Mr. Peter Rhodes  
Syracuse Label Company  
110 Luther Avenue  
Liverpool, NY 13088**

**Prepared by:  
C & H Engineers, P.C.  
431 East Fayette Street  
Syracuse, NY 13202**



## TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
1	INTRODUCTION.....	1
2	SITE INVESTIGATION.....	1
2.1	Test Pit Excavations - Syracuse Truck Sales .....	1
2.2	Test Pit Excavations - Syracuse Label Company Property .....	3
2.3	Sub-Slab Soil Vapor Survey .....	5
2.4	Other Potential Sources.....	7
2.5	Investigation Summary.....	8
3	CONSTRUCTION REMEDIATION PLAN.....	9
3.1	General.....	9
3.2	Site Dewatering.....	10
3.3	Excavation Water Discharge Monitoring .....	10
3.4	Remedial Excavation .....	11
3.5	General Building Foundation Excavation .....	11
3.6	Interceptor Trench System.....	12
3.6.1	Groundwater and Soil Vapor Monitoring .....	13
3.7	Syracuse Label Site Investigation.....	14
4	SUMMARY.....	14

### FIGURES

- 1 Location Plan
- 2 Property Boundary Sketch
- 3 Construction Remediation Work Plan
- 4 Groundwater Collection and Soil Vapor Extraction Interceptor Trench Drawing
- 5 Proposed Construction Remediation and Investigation Plan Schedule

### TABLES

- 1 Summary of Detected Compounds From Soil Test Pits
- 2 Sub-Slab Soil Vapor Survey Results

### APPENDIX

Laboratory Analysis Result Sheets

## **1.0 INTRODUCTION**

This document presents the results of a preliminary investigation conducted on the former Syracuse Truck Sales and Syracuse Label Company properties following the discovery of a release of volatile organic compounds along the common property border of both sites. This spill site is logged as New York State Department of Environmental Conservation (DEC) spill file no. 94-09529.

A limited area of soil affected by a release of tetrachloroethene on the Syracuse Truck Sales property, and an area of soil subjected to a release of kerosene on both the Syracuse Truck Sales and Syracuse Label properties, has been defined from test pit excavations. These areas are located within the bounds of a new building that is to be constructed by Syracuse Label following the purchase of a portion of the Syracuse Truck Sales property. Due to the anticipated delivery of new machinery to be installed in the structure by mid-winter, Syracuse Label wishes to expedite site investigation and remediation.

This document presents a combined investigation and remediation plan for the site, which supports a stipulation agreement between the DEC and the property owners. Preliminary investigative activities conducted at the site have defined the areal extent of the release, and a potential source of the kerosene has been identified.

## **2.0 SITE INVESTIGATION**

In October of 1994, C & H Engineers began a Phase II Environmental Assessment of a portion of the former Syracuse Truck Sales property located between Albion and Luther Avenues in Liverpool, New York. This lot is the subject of a pending real estate transaction which would result in the sale of the lot to Syracuse Label Company. Syracuse Label occupies the lot adjacent to the east side of the former Syracuse Truck Sales property. The position of the lots in relation to each other and the streets is presented in Figures 1 and 2.

### **2.1 Test Pit Excavations - Syracuse Truck Sales**

While conducting soil test pits on the former Syracuse Truck Sales property on October 17, 1994, C & H Engineers identified subsurface soils on the southeast side of the property which emitted petroleum/ solvent odors. Test pit areas are indicated on Figure 2. A portable photoionization detector (Hnu DL-101) was utilized to field screen the soils for volatile organic compounds. Organic compounds were detected with the photoionization detector from soil in test pits located near the north central border of the Syracuse Truck

Sales property (Test Pit Area A). The soil in the test pits was observed to consist of a 2 to 3 foot thick layer of gravel and unconsolidated fill. A one foot thick layer of sand was noted below the surficial fill, and brown and gray clay were encountered below the sand layer. Portions of the clay appeared to be stained. Headspace analysis of samples of the fill and sandy soils with the Hnu meter revealed organic vapor concentrations ranging from 0.4 to 4.0 parts per million (ppm). Headspace analysis of the gray clay soils detected organic vapor concentrations ranging from 16 to 25 parts per million. Below 8 feet of depth, the organic vapors in the clay decreased to less than 5.0 ppm. Soils with similar characteristics and organic vapor concentrations were observed towards the southeast corner of the Syracuse Truck Sales lot. No organic vapors were detected in test pits installed 30 feet to the west of the east property line (Test Pit Area B). A test pit installed in the north east corner of the lot contained soils between a depth of 4 and 10 feet which emitted organic vapors detectable with the Hnu meter (Test Pit Area C). Headspace analysis of soil samples obtained from the walls of this test pit ranged from 120 to 348 ppm. Soils in this test pit also emitted a notable solvent odor.

C & H Engineers notified Mr. and Mrs. Everett Sharp, the property owners, of the discovery of the stained soils and organic vapor detection, and contacted the New York State DEC Oil/Hazardous Substance Spill Report Hotline. The DEC assigned Spill No. 9409529 to this site.

Prior to temporarily backfilling the test pits, C & H Engineers collected a sample of soil from the southeast test pit, at the location where the highest organic vapor concentrations were detected with the Hnu meter. The soil sample was submitted for laboratory analysis of volatile organic compounds by EPA method 8260. The laboratory results are summarized in Table 1, and the full laboratory result sheets are presented in the Appendix.

Six volatile organic compounds were detected in the soil. Sec-Butylbenzene, Isopropyltoluene, 1,2,4-Trimethylbenzene, and 1,3,5-Trimethylbenzene were detected at concentrations of 13.9, 8.1, 24.0, and 9.0 parts per billion (ppb), respectively. The concentrations of these compounds are below the DEC soil guidance values for gasoline contaminated soils, presented in the DEC Spill Technology and Remediation Series (STARS) Memo #1 - Petroleum Contaminated Soil Guidance Policy. Tetrachloroethene and trichloroethene were detected in the soil at concentrations of 15,300 and 281 ppb, respectively. The detected trichloroethene concentration was below the DEC Division of Hazardous Waste Remediation's recommended soil cleanup objective of 700 ppb, as

published in the Division's Technical and Administrative Guidance Memorandum of January 1994. Tetrachloroethene, however, was detected at a concentration which exceeds the soil cleanup objective (1400 ppb).

## **2.2 Test Pit Excavations - Syracuse Label Company Property**

Based on the discovery of tetrachloroethene in soils on the southeast corner of the former Syracuse Truck Sales property, the Syracuse Label Company was contacted and informed of the presence of the solvent compound adjacent to their lot. Syracuse Label then authorized C & H Engineers to install test pits, across from the former Syracuse Truck Sales property, to determine if solvent was present in soils on the Syracuse Label property.

Test pits were installed on the Syracuse Label property on October 27, 1994. The initial test pit was installed perpendicular to, and against the foundation of, the Syracuse Label building, ten feet east of the property border with Syracuse Truck Sales (see Figure 2 - Test Pit Area D). The soils from grade to two feet of depth consisted of a gravel parking lot fill, over an unconsolidated sandy fill. No organic vapors were detected with the Hnu meter in the surficial soils. Below two feet of depth, the soils were observed to consist of a heavy brown clay. The clay soils near the building appeared stained. The clay continued below the depth of the building foundation footer (approximately 5 feet below grade). Organic vapors were detected with the Hnu meter at the clay walls of the test pit next to the building, at concentrations ranging from 7 ppm (2 to 4 feet of depth) to 60 ppm (4 to 6 feet of depth). After exposing the building footer, moisture was visible against the foundation. The moisture appeared to be groundwater, which contained a slight brown petroleum sheen. A fuel oil/kerosene type odor was noted. The Hnu meter detected organic vapors above the pooled liquid at a concentration of 40 to 60 ppm. The test pit was extended below the bottom of the building foundation footer. The clay below the foundation was not significantly stained, and organic vapors were not detected above 7 ppm. This suggests that petroleum stained soils do not continue for significant depths below the building foundation. The test pit was extended 10 feet to the west of the Syracuse Label building. No organic vapors were detected in the test pit soils beyond 3 to 4 feet from the building wall.

A second test pit was installed against the foundation wall at the intersection of the Syracuse Label and Syracuse Truck Sales property borders (to the west of initial test pit). This test pit was extended to the north for 18 feet (see Figure 2). Portions of this test pit were located within 5 feet of the Syracuse Truck Sales test pit, where the tetrachloroethene was detected. The soils in this test pit were similar to those observed in the adjacent pit, and consisted of

gravel and unconsolidated fill to a depth of two feet, and a dense clay below two feet. Organic vapors were detected in the clay with the Hnu meter at concentrations ranging from 40 to 60 ppm. No organic vapors were detected in soil beyond 4 feet from the building wall. A pooled liquid was also visible on top of the footer in this test pit. This liquid also appeared to be groundwater. The clay soils below the foundation footer exhibited a significantly decreased concentration of organic vapors.

A third test pit was installed against the Syracuse Label building, 25 feet to the east of the property border. The soils observed in this test pit were similar to the soils from the other portions of the property. No organic vapors were detectable in the clay with the Hnu meter, although organic vapors were detected along the foundation footer (5 to 8 ppm), near a localized stain.

A fourth test pit was installed adjacent to the property border, twenty feet to the north of the building. No petroleum vapors were detected with the Hnu meter from grade to a depth of seven feet.

Based on the test pit excavations conducted on the Syracuse Label property, a limited area of stained soil was observed adjacent to the building foundation. A composite sample of soil was collected from the two test pits which exhibited indications of petroleum contamination. The soil sample was submitted for laboratory analysis of volatile and semi-volatile organic compounds by EPA Methods 8021 and 8270, and for petroleum characterization by New York State Department of Health Method 310-13. The results of the laboratory analysis are summarized in Table 1, and the original laboratory reports presented in the Appendix.

The laboratory results indicate that the stained soil observed on the Syracuse Label property is due to the presence of weathered kerosene. Volatile and semi-volatile organic compounds were detected in the soil at concentrations which exceed the guidance values established in the DEC Spill Technology and Remediation Series (STARS) Memo #1 Petroleum Contaminated Soil Guidance Policy. The detected compounds are also indicative of a kerosene product.

No tetrachloroethene was observed in the soil sample collected from the Syracuse Label property test pits. The composite sample included soil collected within 5 feet of the test pit located on the former Syracuse Truck Sales property where tetrachloroethene was identified (see Figure 2 - Test Pit Areas C and D). The laboratory data and field screening conducted on both properties, suggests that the area affected by tetrachloroethene is limited, and that an area of kerosene stained soil is located against the Syracuse Label building.

### **2.3 Sub-Slab Soil Vapor Survey**

The test pit excavations have defined limited areas of soil on the Syracuse Truck Sales and Syracuse Label properties that have been subjected to releases of kerosene and tetrachloroethene. No point source was identified to explain the releases, and it is not known if the kerosene and tetrachloroethene are from the same source.

The kerosene appears to be concentrated adjacent to the Syracuse Label foundation. It should be noted that this portion of the Syracuse Label Company building was formerly occupied by a Ziebart automobile undercoating facility. According to reports on the Ziebart facility operation, obtained by C & H Engineers while conducting a Phase I Environmental Assessment of the Syracuse Label Company building in 1992, the Ziebart facility floors were periodically cleaned with kerosene, to remove the undercoating residuals from the building floor surfaces. The Phase I Environmental Assessment identified no significant leaks or loss of kerosene product. In addition, the Phase I Environmental Assessment identified the location of a 550-gallon underground gasoline storage tank on the south side (Luther Avenue) of the Syracuse Label building. Although some remediation of leaked gasoline was required during removal of this tank, C & H Engineers identified no indications of kerosene in the subsurface soils immediately adjacent to the east side of the building.

Due to the history of use of kerosene in the Syracuse Label building, Syracuse Label directed C & H Engineers to perform a soil vapor survey of the sub-slab soils beneath the building, to determine if kerosene is present below the structure. On November 8, 1994, C & H Engineers conducted a vapor survey of the soils located beneath the southeast wing of the Syracuse Label building. The soil vapor survey involved the installation of one-inch diameter bore holes through the building concrete slab floor, collection of soil samples for headspace analysis from varying elevations below the slab, and measurement of the air space immediately beneath the building floor for volatile organic vapors. Figure 2 presents a sketch of the building floor showing the location of the boring and sample points.

Eight borings were installed into the sub-slab soils at the Syracuse Label building (see Figure 2). In general, the borings were installed through an eight inch thick floor slab and gravel bed to a depth of 2 feet below grade. The Hnu meter was utilized to screen the bore holes for volatile organic vapors. A stainless steel hollow stem soil sample tube was then extended into the sub-slab soils to collect a one foot long soil core. The soil was removed from the soil sampler and placed in plastic bags for headspace analysis. The soil sampling tube was decontaminated with an alconox and deionized water wash, and the soil coring repeated until groundwater was encountered. The soils below the building were observed to primarily consist of clay. Groundwater was encountered during the second core penetration at each bore hole. Soil cores were therefore obtained from each bore hole at a depth of 2 to 3 feet, and 3 to 4 feet below grade.

Soil boring 1 was located within 20 inches of the north building wall, opposite the location where the test pits were positioned on the exterior property. Borings 2, 3, and 4 were located along an axis which was perpendicular to Luther Avenue (see Figure 2). Borings 5 and 6 were located within 10 feet of the west building wall, and borings 7 and 8 were located to the east, along an axis positioned near the eastern most test pit.

The Hnu meter organic vapor concentrations detected in the air within the bore holes, and the headspace analysis of soil collected from each bore hole are summarized in Table 2. Organic vapors detected within the bore holes ranged from 18 to 660 ppm. The lowest concentration of organic vapors was observed in bore holes 7 and 8, on the east side of the building. The highest concentration of organic vapors was detected in bore hole 4, on the southern side of the facility. The organic vapors were characteristic of a fuel oil/kerosene type odor.

Due to the presence of the gravel bed below the concrete floor slab, the organic vapors detected upon installation of the bore hole may have accumulated from an area of soil beyond the localized bore hole, and may not be representative of the soil conditions directly surrounding the bore hole. Direct headspace analysis of the soil samples collected from the bore holes resulted in organic vapor detections ranging from 5 to 90 ppm. Organic vapors were detected above 5 ppm in all bore holes except borings 7 and 8. The boring air space readings and the soil sample headspace readings appear to indicate that the sub-slab soils on the eastern side of the building are free of petroleum contamination.

The borings in the central and western portion of the facility are located in an area which contains active floor trench drains, and previously contained vehicle lifts. The organic vapor readings from these portions of the facility suggest that the sub-slab soils have been impacted by a petroleum product release, although there are no indications of free product. The floor drains in the facility are sloped to a collection sump on the south side of the building. This sump is located near Boring 4, which had the highest detected boring air space reading. The previous reported use of kerosene in the facility may have resulted in a release of kerosene beneath the floor on the south side of the facility.

In order to determine if the soil vapor readings correspond with soil concentrations that exceed regulatory standards, C & H Engineers collected a composite sample of soil from Bore holes 1 - 6. The composite soil sample was submitted for laboratory analysis of volatile and semi-volatile organic compounds by EPA methods 8021 and 8270. The laboratory analysis is not yet complete.

#### **2.4 Other Potential Sources**

The results of the soil vapor survey appear to indicate that the sub-slab soils of the Syracuse Label building may be the source of the kerosene product observed along the exterior of the building foundation. The source of the tetrachloroethene is undetermined, however, it is possible that this chemical was utilized by the automobile undercoater which previously occupied the structure.

Syracuse Label stores a 55-gallon drum of tetrachloroethene within a hazardous materials storage room, located in the southwest corner of the existing building. This room is located to the south of the test pit where tetrachloroethene was identified on the Syracuse Truck Sales property. Syracuse Label has no record of spills of the solvent occurring within the storage room, and tetrachloroethene was not detected at the Syracuse Label building wall. Syracuse Label personnel indicate that storm water seeps through the building wall following precipitation events (the elevation of the floor is below the exterior grade elevation). Although this precipitation seepage will be reviewed as a potential pathway for residual solvent on the floor to leave the room as the water drains from the structure, it is unlikely that residual concentrations of the solvent would have resulted in the detection of tetrachloroethene along the building wall, outside the structure. Since tetrachloroethene was not detected at the building wall, the storage area does not appear to be the source of the solvent.



A pipe was observed to exit the north wall of an adjacent building, occupied by Scientific Tool and Engineering, to the southwest of the area on the Syracuse Truck Sales lot where the solvent was detected. The pipe enters the ground within 2 feet of the structure and its function and pathway are unknown. A test pit was installed across from this pipe during the Phase II activities conducted on the Syracuse Truck Sales property. No organic vapors were detected in the soils from this test pit. Due to the unknown configuration and discharge location of this pipe, and the history of metal machining conducted in the neighboring structure, this pipe remains a potential source of the solvent and/or petroleum identified in the soils.

The eastern portion of the Syracuse Truck Sales lot is reported by the property owner to have always been vacant, and was not utilized for equipment storage. The eastern thirty feet was utilized as a parking lot by Syracuse Label, prior to installation of a fence along the property line. The use of this property as a vacant lot and for parking suggests that the solvent may have been released from illegal dumping or leakage from a solvent transport vehicle parked on the lot. These potential sources of the petroleum and solvent release will be further investigated as part of the investigation and remediation plan described below.

Based on the test pit excavations, Hnu readings, and soil samples, it appears likely that the tetrachloroethene was spilled or deposited on the property surface, and has not resulted from migration from the Syracuse Label building.

## **2.5 Investigation Summary**

The test pit excavations conducted on the Syracuse Truck Sales and Syracuse Label properties have defined an area of soil which has been impacted by petroleum (kerosene) and solvent (tetrachloroethene). The soil affected by these substances appears to be confined to an area within 3 to 4 feet of the Syracuse Label building foundation. Soil affected by the solvent may be located up to 20 feet from the north side of the building (see Figure 2). The impacted soils appear to be located between a depth of 2 to 10 feet. The petroleum and solvent contaminated soils are primarily clay, which appears to have limited the migration of these substances. Volatile organic vapor concentrations detected from soil in the test pits, indicated a decrease in the organic vapor concentration below the elevation of the building foundation. The petroleum and solvent affected zone on the exterior property appears to be confined by the heavy clay site soils, and is therefore, amenable to removal by excavation. The clay soils, however, have poor permeability, and precipitation events were observed to raise groundwater elevations to within 2 to 3 feet of the soil surface. It is likely, therefore,

that soil excavation would require on-site dewatering to access and remove the contaminated zone. The groundwater removed from the excavation may require treatment prior to discharge.

A soil vapor survey conducted below the Syracuse Label building floor slab has identified an area of soil which appears to contain petroleum products. The laboratory results of a soil sample collected from the sub-slab soils will identify the concentration and type of petroleum products emitting volatile organic vapors, and will provide guidance to potential affects on groundwater quality. The sub-slab soils may be the source of the petroleum contamination observed outside of the building.

As indicated above, it is Syracuse Label's intention to purchase the Syracuse Truck Sales property and construct a new building on the property affected by the petroleum and solvent release. This will require the installation of concrete footings and foundation walls in the area where the petroleum constituents were detected. It will also require dewatering of the excavation for the piping or concrete. Due to a business schedule requiring construction of the building in November/December, the property owners wish to expedite remediation of the exterior property to allow the construction schedule to progress. The remainder of this document presents a Construction Remediation Plan for the exterior soil, and an additional investigation plan to further characterize the source of the petroleum and solvent release.

### **3.0 CONSTRUCTION REMEDIATION PLAN**

#### **3.1 General**

The proposed remediation plan presented below is intended to "fast track" the clean-up of soils which have been impacted by a release of petroleum (kerosene) and solvent (tetrachloroethene). These soils are located to the north and northwest of the Syracuse Label building, on property that is currently owned by both Syracuse Label and Syracuse Truck Sales. The removal of the affected soils will allow the continued construction of a building on the property. To prevent the reintroduction of petroleum products to the remediated area below the new building, an interceptor trench will be installed adjacent to the existing building foundation to capture and monitor ground water at the junction between the existing building and the new foundation. This interceptor trench will also include a soil vapor extraction system to remove evaporated petroleum contaminants if they are detected in the vadose zone soils adjacent to the foundation.

### **3.2 Site Dewatering**

Based on site conditions observed during the test pit excavations, groundwater may be encountered within 2 to 3 feet of the soil surface. To allow for the excavation of the stained soils from the property, the excavation zone will require dewatering. Prior to initiating the soil excavation, a well point will be installed with a backhoe, to the southwest of the defined contaminated zone (see Figure 3). The well point will be set at an elevation below the bottom of the excavation, and will be utilized to pump water that accumulates in the excavation pit. Water pumped from the well point will be routed through a carbon filtration system prior to discharge. The filtration system will consist of two carbon canisters in series, and will discharge to a stormwater catch basin located on Albion Avenue. The discharge of the excavation water will be conducted in accordance with the surface water discharge requirements identified in the DEC's Guidance for Petroleum Spill Stipulation Agreements. The excavation water will be discharged while the remedial excavation is being conducted. Once the petroleum and solvent stained soils are removed from the work area, the filtration system will be discontinued.

### **3.3 Excavation Water Discharge Monitoring**

In order to verify that the carbon filtration system is removing volatile and semi-volatile organic constituents in the excavation water to the required discharge standards provided in the DEC Stipulation Agreement Guidance Document, four grab samples of water will be collected during each day of operation from the carbon filtration system discharge. These grab samples will be forwarded to a laboratory for analysis of volatile and semi-volatile compounds by EPA method 8021 and 8270. A one day turnaround will be requested. The four grab samples will be composited at the laboratory for analysis of one daily composite water sample from the treatment system. The carbon filtration system effluent will be monitored for the parameters presented in Table 2 of the DEC's Stipulation Agreement Guidance Document. In addition, tetrachloroethene will be monitored in the wastewater. Although no tetrachloroethene groundwater discharge limit is indicated in the DEC document, a standard of 5 micrograms per liter (ug/l) is proposed for this constituent. This is the applicable organic contaminant groundwater effluent quality standard.

Should laboratory analysis indicate that the carbon filtration system has failed to remove the organic compounds from the excavation wastewater to the required standard, then upon receipt of the laboratory analysis, the system will be shut down and inspected for conditions which may have resulted in by-pass or failure of the treatment system. If this condition

occurs, the system will not be actively returned to service until a sample of effluent which passes through the carbon filtration system is analyzed and determined to be below the treatment limits.

### **3.4 Remedial Excavation**

Once the excavation water discharge system is in place and operational, excavation, and on site staging of the petroleum and solvent contaminated soils will occur. The excavations will initially be conducted adjacent to the northwest corner of the Syracuse Label building foundation. Soil will be removed down to the bottom of the building footer, and out to the north from the building wall, until field screening of the excavation pit side walls and bottom verifies that the limit of the petroleum and/or solvent contamination has been reached (see Figure 3). The excavation will then proceed to the north and east to remove the affected soil.

Soils removed from the excavation will be transferred to a staging site located on the western side of the Syracuse Truck Sales property. Soils removed from the excavation will be staged on polyethylene sheeting and will be stored on site pending laboratory analysis for hazardous waste characteristics, and approval for disposal at a regulated landfill. Soils will be transported from the property by waste transporters maintaining an active Part 364 permit. Once the limits of the excavation have been defined by field screening, a composite soil sample of the excavation pit walls and bottom will be collected and submitted for analysis of volatile and semi-volatile organic compounds by EPA methods 8021 and 8270, to verify that the contaminated soils have been removed from the property.

### **3.5 General Building Foundation Excavation**

Following completion of the on site soil excavation activities, it is expected that general building foundation excavations will occur on the Syracuse Label and Syracuse Truck Sales properties. Based on the foundation plan for the structure, it appears that a foundation footer will be located adjacent to the northern side of the existing Syracuse Label building and will continue to the west adjacent to the neighboring Scientific Tool and Engineering structure (see Figure 3). As indicated above, a pipe was observed to exit the Scientific Tool and Engineering structure, adjacent to the southern property border of the Syracuse Truck Sales lot. While test pit excavations conducted on the Syracuse Truck Sales lot during the Phase II Environmental Assessment did not reveal that soils adjacent to this pipe have been impacted by materials of environmental concern, the discharge point of the pipe is unknown. During excavation for the foundation footer, Syracuse Label's site contractor will immediately

cease work and notify C & H Engineers if an area of suspect contaminated soil is encountered beyond the defined spill work area. C & H Engineers will be on call to visit the site and review the soil conditions for the presence of materials of environmental concern. The DEC will be notified of all such discoveries and the material will be excavated and handled as required.

C & H Engineers will also visit the site at least once each day during the foundation excavations, and to screen the excavated soils and the foundation trench with an organic vapor analyzer, in order to identify whether any other petroleum contaminated soils exist on the property. C & H Engineers would also photograph and record the conditions encountered in the excavations. Suspect soils will be staged on polyethylene plastic sheeting for sampling and laboratory analysis, and eventual disposal in accordance with New York State and federal regulations.

Based on C & H Engineers observations at the site, and our understanding of the proposed location for the building foundation, we believe that the intended building footer excavation will provide an extensive look at the subsurface soil conditions at the Syracuse Truck Sales and Syracuse Label properties. Environmental concerns identified during excavations on other portions of the property will be brought to the attention of the New York State DEC.

### **3.6 Interceptor Trench System**

As indicated above, the source of the petroleum identified on the exterior of the Syracuse Label building foundation, may be an area of soil underneath the existing Syracuse Label structure, which has been impacted by a release of kerosene during use of the building by others. In order to prevent transfer of kerosene product contained in the soils beneath the building, to the newly remediated and backfilled portion of the site beneath the new structure, an interceptor trench system will be installed along the face of the existing Syracuse Label foundation (see Figure 3) to allow for the collection of groundwater that may be impacted by petroleum products.

Prior to construction of the new building footers, a groundwater collection pipe will be installed below the existing building footer elevation. This collection pipe will consist of a corrugated plastic drainage tile encased in a filter fabric mesh. The pipe will be installed within a trench and backfilled with fine granular sand, to provide a filter media around the pipe (see Figure 4). The remainder of the trench will be backfilled with gravel to the grade of the building foundation footer. The horizontal groundwater collection pipe will be connected

to a vertical collection well. This well will allow for removal of water from the horizontal pipe, in order to monitor groundwater conditions along the building foundation, and if necessary, to remove groundwater for treatment.

During the backfilling of the footer excavation trench, vertical sections of 2-inch diameter slotted PVC well screen will be placed at 5 foot intervals along the length of the Syracuse Label building foundation. These vertical well screen pipes will be connected to a solid horizontal PVC header system which will be located below the new concrete floor slab (see Figure 4). The header pipe will penetrate through the finished floor slab of the new Syracuse Label building, near the groundwater collection well. The purpose of the installation of the groundwater collection trench and the air header system is to provide a barrier to the movement of petroleum contaminated groundwater and vapors from the existing Syracuse Label structure. The groundwater collection trench will allow for the installation and operation of a groundwater recovery system, should petroleum contaminated groundwater be observed to be re-entering the remediated area. In addition, the air header system will allow for operation of a soil vapor extraction system to remove petroleum contaminants from the backfill placed against the existing Syracuse Label structure, if analytical results indicate this to be necessary. The groundwater collection and soil vapor extraction systems will not become functional, unless post construction monitoring and additional investigation determines that their operation is necessary to contain the release. The operational procedures to be employed with these systems would be proposed when their use is required.

### 3.6.1 Groundwater and Soil Vapor Monitoring

Following completion of the construction of the Syracuse Label building, groundwater will be sampled from the collection pipe system and well, and will be analyzed for volatile and semi-volatile organic compounds to determine if groundwater on the site is being impacted by petroleum products from under the existing Syracuse Label building. The results of the laboratory analysis will be included in the investigation report for the activities identified below.

A vapor survey will also be performed on air removed from the header system located below the new concrete floor slab. The purpose of the vapor test is to determine if petroleum product vapors are collecting in the backfilled soils with in the remediated zone. The results of the vapor tests will also be summarized in the investigation report identified below.

### 3.7 Syracuse Label Site Investigation

Based on the results of the soil vapor survey conducted within the interior of the existing Syracuse Label building, it appears that soils beneath the existing floor slab have been impacted by a release of a petroleum product. The soil vapor survey indicated that soils have been affected by petroleum products to a depth of 4 feet below the floor slab, and that groundwater was observed at this elevation. The laboratory results of a composite soil sample collected from the soil vapor borings will be utilized to determine if the concentration of petroleum products in the soils beneath the floor slab require additional remediation or investigation. This soil sample should be available within one to two weeks.

Assuming that the laboratory results identify the presence of petroleum products in the sub-slab soils at concentrations which exceed the DEC's STARS memo guidance values, then it is proposed that a groundwater monitoring system be installed at the site to determine if the petroleum products observed in the soils are leaching to groundwater and potentially moving from the site. It is assumed that a minimum of three groundwater wells will be installed surrounding the existing structure. A groundwater investigation plan will be prepared for DEC review, should the soil boring composite sample identify concerns related to groundwater contamination. The results of the groundwater investigation (if required), the monitoring of the groundwater collection well, and the soil vapor test conducted on the air header system installed in the new building, will be summarized in an investigation report to be prepared following receipt of the laboratory results. This report will identify potential remedial activities to address environmental concerns which may be identified by the monitoring data.

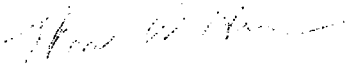
### 4.0 SUMMARY

The Site Investigation Report and Construction Remediation Plan presented above are intended to address a limited area of petroleum and solvent contaminated soils observed on the exterior of the Syracuse Label and Syracuse Truck Sales property located between Luther Avenue and Albion Avenue in Liverpool, New York. The Construction Remediation Plan has been formulated to remove the soils affected by a release of petroleum and solvent products on the site, to allow for the construction of a planned building on the subject properties. Figure 5 presents an anticipated schedule for the remedial and investigation portions of the project. This schedule will be subject to modification should site conditions revealed during the construction alter the known conditions presented in this report.

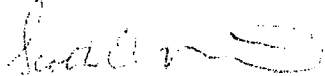
If you have any questions, please feel free to contact our office at your convenience.

Respectfully submitted,

C & H ENGINEERS, P.C.



Thomas W. Heenan, P.E.  
Principal



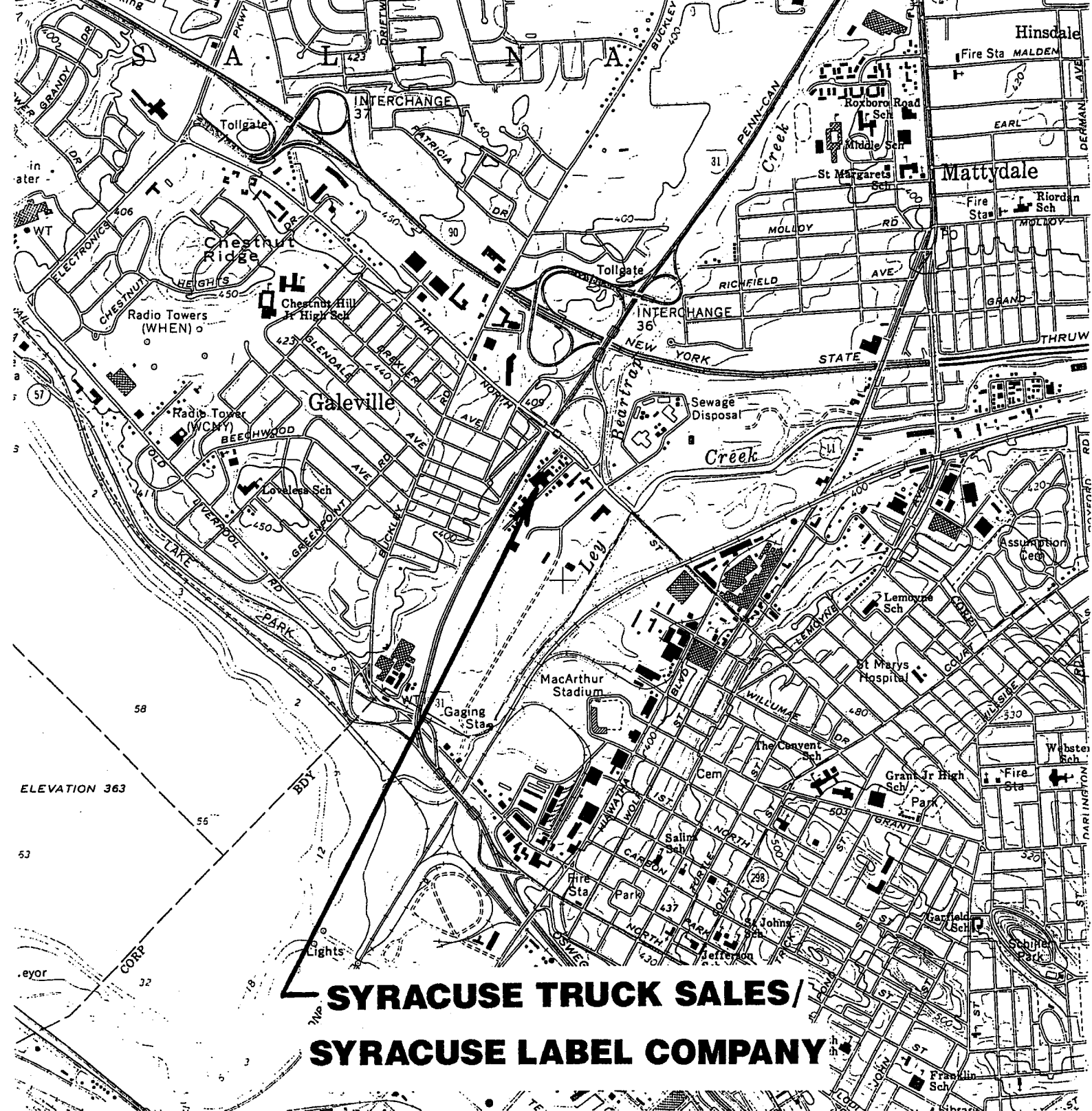
Scott D. Nostrand  
Senior Project Engineer

SDN:jl

Enclosures



## **FIGURES**



**FIGURE 1**  
**LOCATION PLAN**  
 SYRACUSE TRUCK SALES/  
 SYRACUSE LABEL COMPANY  
 SCALE: 1"=2000'

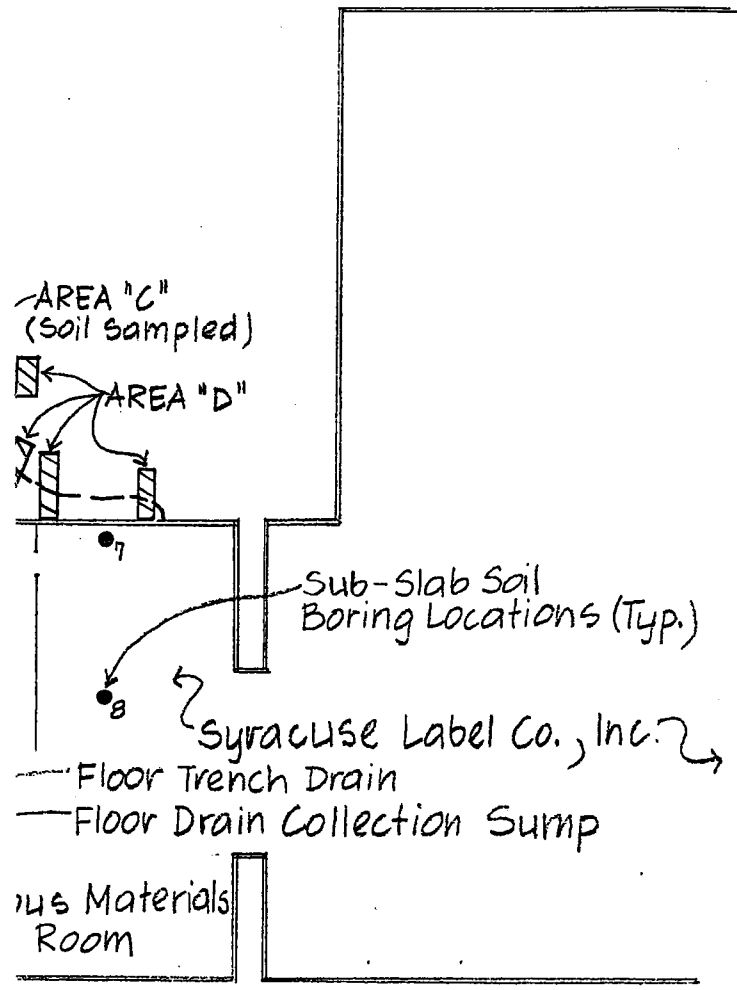
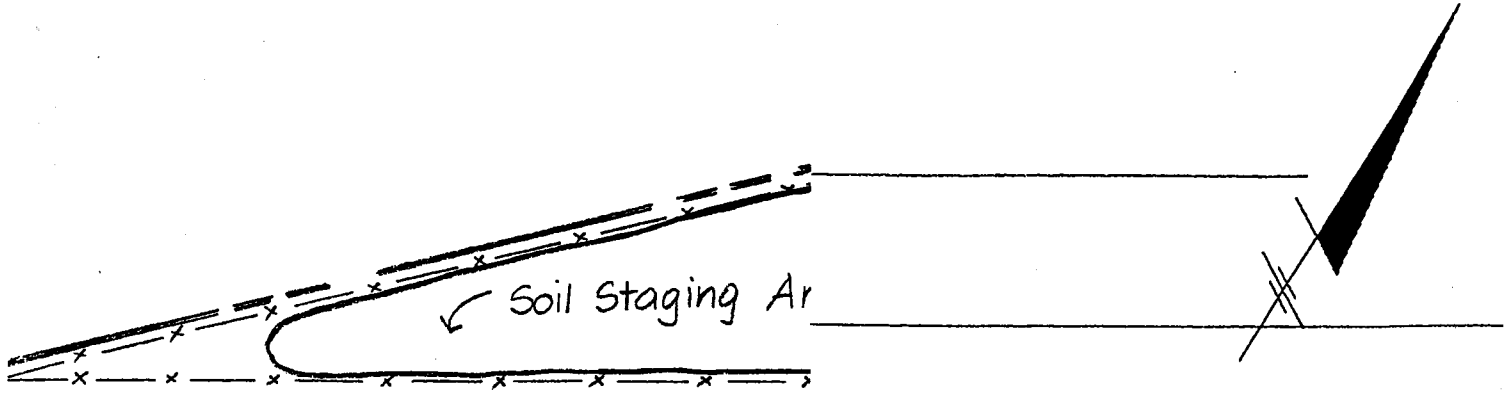
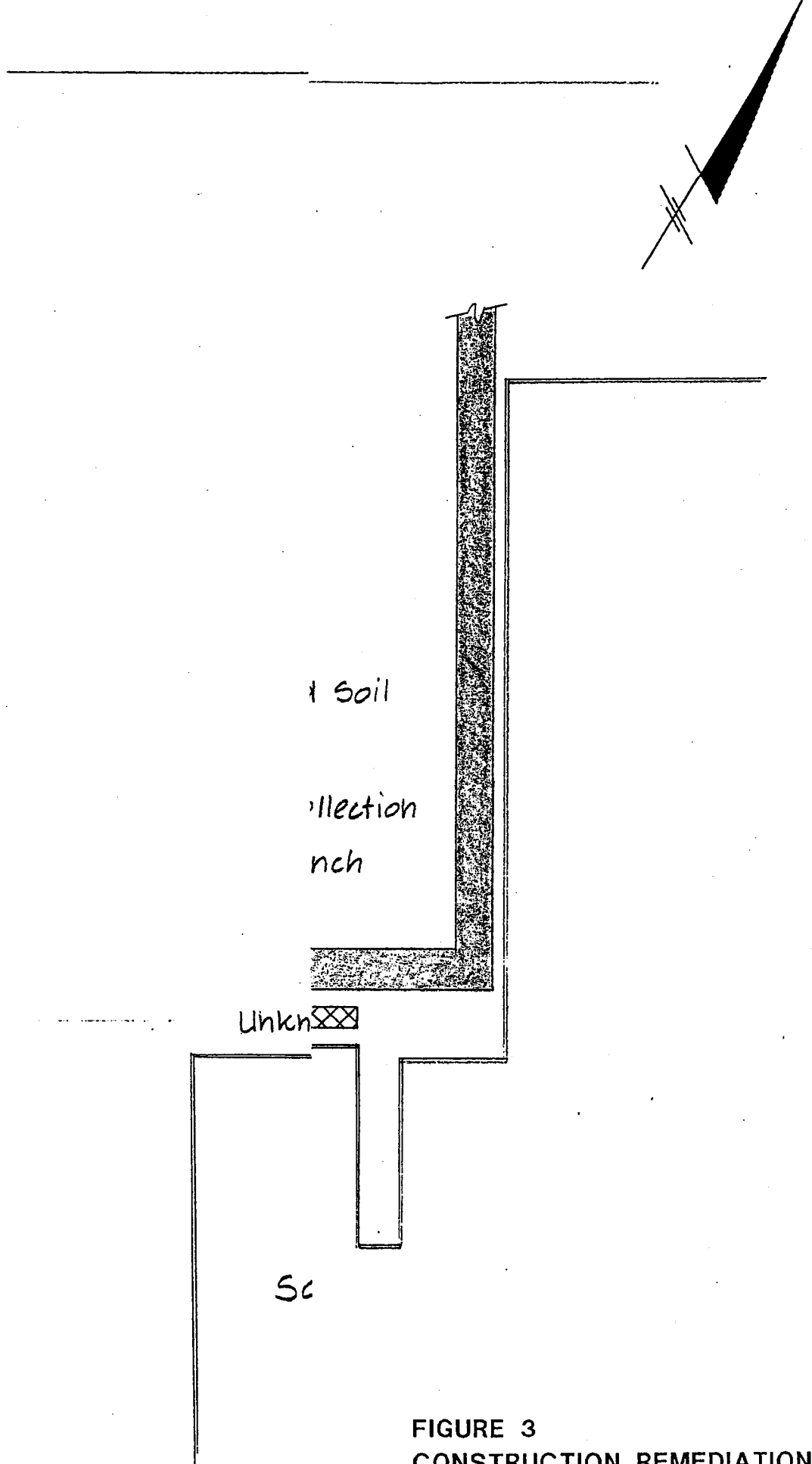
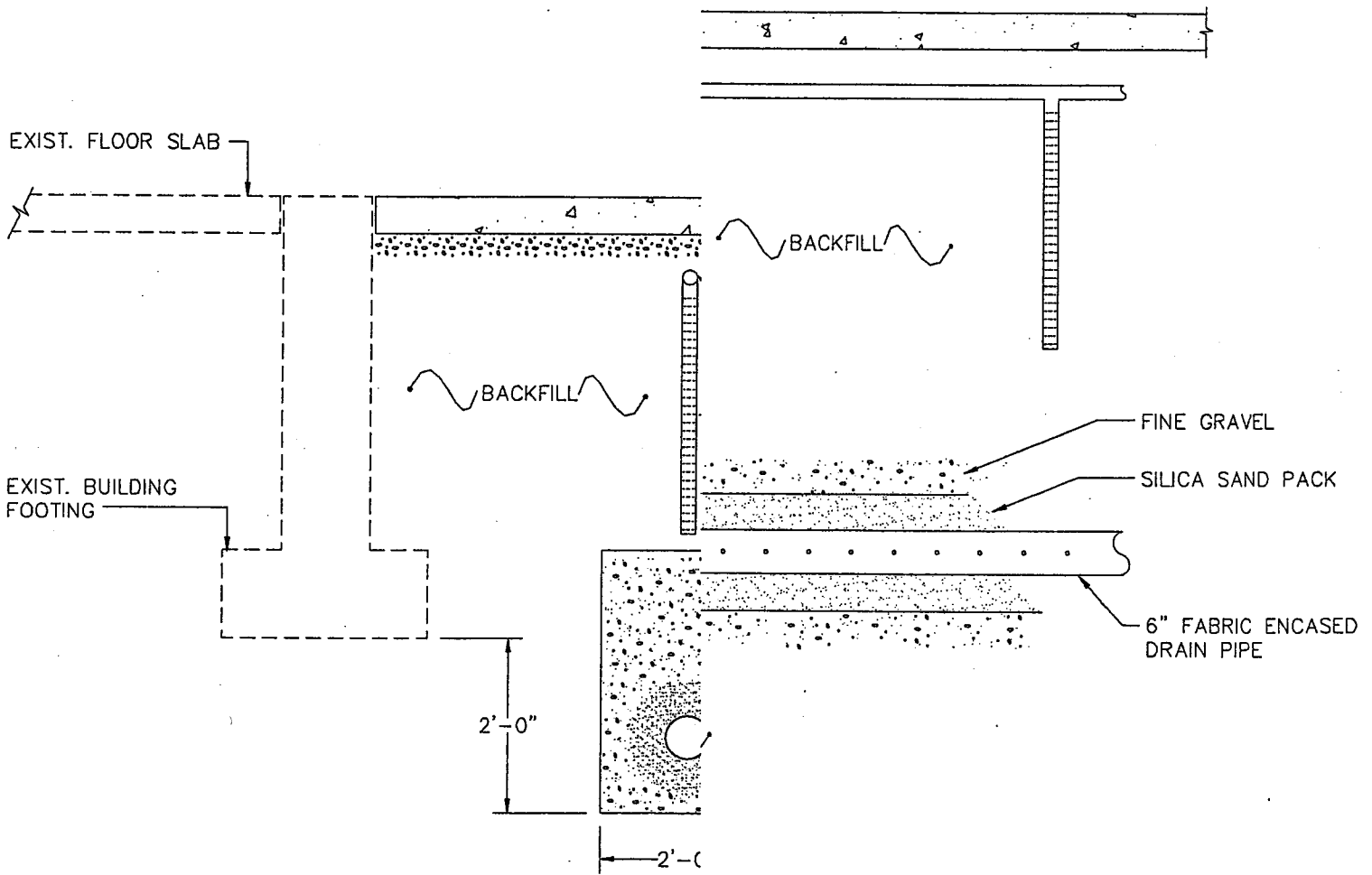


FIGURE 2  
PROPERTY BOUNDARY SKETCH  
SCALE: 1"=30'

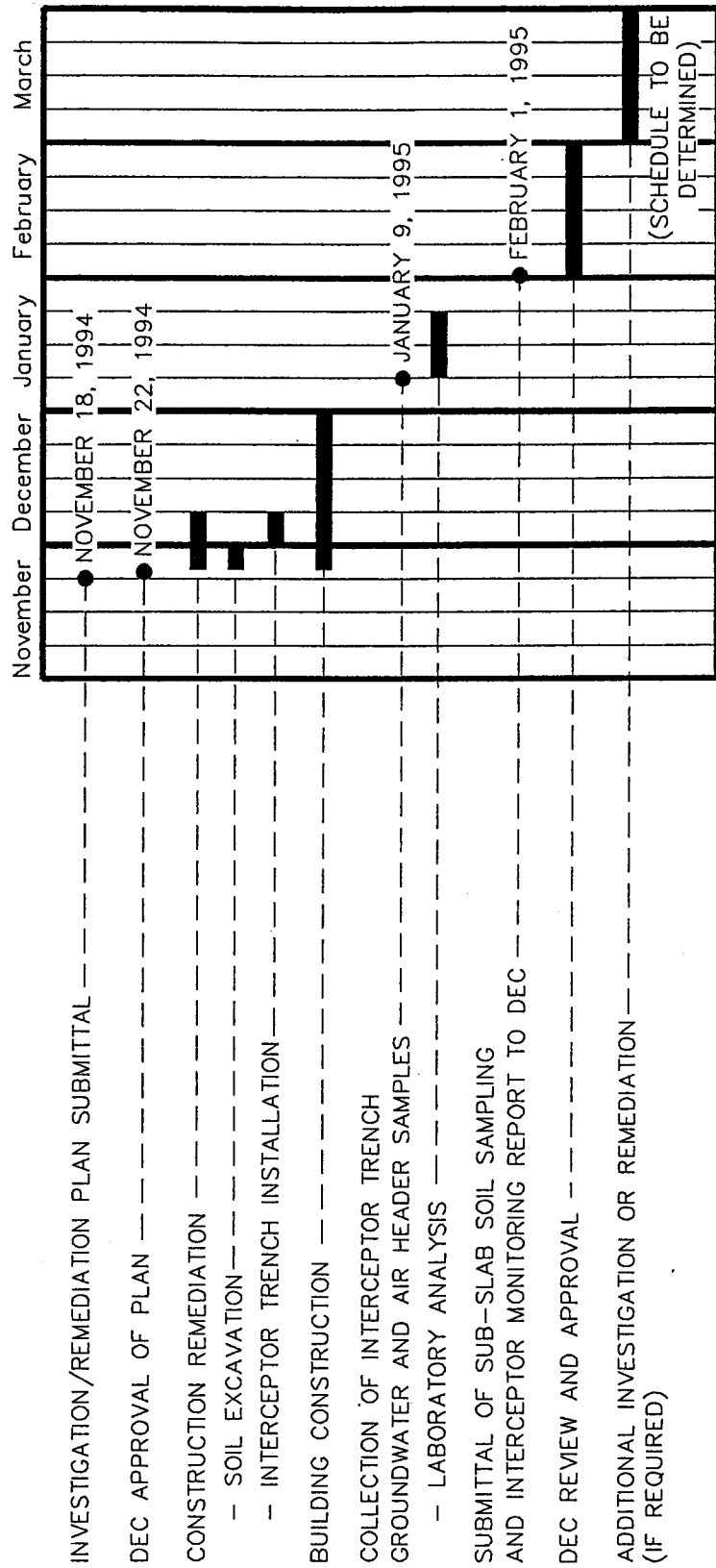


**FIGURE 3**  
**CONSTRUCTION REMEDIATION**  
**WORK PLAN**  
SCALE: 1"=16'



**FIGURE 4**  
**GROUNDWATER COLLECTION AND SOIL VAPOR EXTRACTION INTERCEPTOR TRENCH DRAWING**  
 SCALE: 1/2"=1'-0"

**FIGURE 5  
PROPOSED CONSTRUCTION REMEDIATION  
AND INVESTIGATION PLAN SCHEDULE**



## TABLES

**TABLE 1**

**Summary of Detected Compounds  
From Soil Test Pits**

**Syracuse Truck Sales Southeast Test Pit (Area C)**

	<u>Compound</u>	<u>Detected Concentration (ppb)</u>	<u>DEC<sup>1</sup> Standards (ppb)</u>
<u>Volatiles by EPA Method 8021</u>	sec-Butylbenzene	13.9	100.0
	p-Isopropyltoluene	8.1	100.0
	Tetrachloroethene	15,300.0	1,400.0 <sup>2</sup>
	Trichloroethene	281.0	700.0 <sup>2</sup>
	1,2,4-Trimethylbenzene	24.0	100.0
	1,3,5-Trimethylbenzene	9.0	100.0

**Syracuse Label Test Pits (Area D)**

	<u>Compound</u>	<u>Detected Concentration (ppb)</u>	<u>DEC<sup>1</sup> Standards (ppb)</u>
<u>Total Petroleum Hydrocarbons by NYSDOH 310-13</u>	TPH (Kerosene)	694 ppm	
<u>Volatiles by EPA Method 8021</u>	n-Butylbenzene	6,080	100.0
	Ethylbenzene	478	100.0
	Isopropylbenzene	2,540	100.0
	p-Isopropyltoluene	2,070	100.0
	Napthalene	5,730	200.0
	1,2,4-Trimethylbenzene	1,130	100.0
	1,3,5-Trimethylbenzene	738	100.0
	o-Xylene	351	100.0
	m, p-Xylene	144	200.0
<u>Semi-Volatiles by EPA Method 8270</u>	Anthracene	570	1,000.00
	Benzo(b)fluoranthene	170	0.04
	Chrysene	180	0.04
	Fluoranthene	390	1,000.0
	Fluorene	680	1,000.0
	Napthalene	1,600	200.0
	Phenanthrene	680	1,000.0
	Pyrene	270	1,000.0

Notes:

ppb parts per billion

ppm parts per million

1. DEC Soil Guidance Values, Spill Technology and Remediation Series Memo #1, Petroleum-Contaminated Soil Guidance Policy, August 1992.
2. Soil Cleanup Objective, DEC Division of Hazardous Waste Remediation Technical and Administrative Guidance Memorandum, January 1994.



**TABLE 2****Sub-Slab Soil Vapor Survey Results\***

<u>Soil Boring</u>	<u>Open Bore Hole Organic Vapor Concentration (ppm)</u>	<u>Headspace Soil Organic Vapor Concentration (ppm) 2 - 3' of Depth</u>	<u>Headspace Soil Organic Vapor Concentration (ppm) 3 - 4' of Depth</u>
1	85	90	40
2	100	40	60
3	80	36	5
4	660	50	48
5	500	20	10
6	250	40	35
7	100	5	3
8	18	2	4

Notes:

ppm = parts per million

\* = Organic vapor concentration in ppm as detected by Hnu 101 photoionization detector.

**APPENDIX**  
**LABORATORY ANALYSIS RESULT SHEETS**

3845 ROUTE 11 SOUTH, P.O. BOX 5150  
CORTLAND, N.Y. 13045 607-753-3403

Client: **C & H Engineers**  
**431 East Fayette Street**  
**Syracuse, NY 13202**  
Site: Sharp Property

Report Date: 10/24/94  
Sampling Date: 10/17/94  
Sampled By: Mike Saviola  
Date Received: 10/17/94  
Analyzed by: MM, 10/20/94

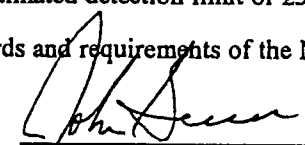
**Sample ID: N/E Fence Line Test Pit**

**VOLATILES BY METHOD 8260**

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/kg	5.0	ND
Bromobenzene	108-86-1	ug/kg	5.0	ND
Bromochloromethane	74-97-5	ug/kg	5.0	ND
Bromodichloromethane	75-27-4	ug/kg	5.0	ND
Bromoform	75-25-2	ug/kg	5.0	ND
Bromomethane	74-83-9	ug/kg	10	ND
n-Butylbenzene	104-51-8	ug/kg	5.0	ND
sec-Butylbenzene	135-98-8	ug/kg	5.0	*13.9*
tert-Butylbenzene	98-06-6	ug/kg	5.0	ND
Carbon Tetrachloride	56-23-5	ug/kg	5.0	ND
Chlorobenzene	108-90-7	ug/kg	5.0	ND
Chloroethane	75-00-3	ug/kg	10	ND
Chloroform	67-66-3	ug/kg	5.0	ND
Chloromethane	74-87-3	ug/kg	10	ND
2-Chlorotoluene	95-49-8	ug/kg	5.0	ND
4-Chlorotoluene	106-43-4	ug/kg	5.0	ND
Dibromochloromethane	124-48-1	ug/kg	5.0	ND
1,2-Dibromo-3-chloropropan	96-12-8	ug/kg	5.0	ND
1,2-Dibromoethane	106-93-4	ug/kg	5.0	ND
Dibromomethane	74-95-3	ug/kg	5.0	ND
1,2-Dichlorobenzene	95-50-1	ug/kg	5.0	ND
1,3-Dichlorobenzene	541-73-1	ug/kg	5.0	ND
1,4-Dichlorobenzene	106-46-7	ug/kg	5.0	ND
Dichlorodifluoromethane	75-71-8	ug/kg	5.0	ND
1,1-Dichloroethane	75-34-3	ug/kg	5.0	ND
1,2-Dichloroethane	107-06-2	ug/kg	5.0	ND
1,1-Dichloroethene	75-35-4	ug/kg	5.0	ND
cis-1,2-Dichloroethene	156-59-4	ug/kg	5.0	ND
trans-1,2-Dichloroethene	156-60-5	ug/kg	5.0	ND
1,2-Dichloropropane	78-87-5	ug/kg	5.0	ND
1,3-Dichloropropane	142-28-9	ug/kg	5.0	ND
2,2-Dichloropropane	590-20-7	ug/kg	5.0	ND
1,1-Dichloropropene	563-58-6	ug/kg	5.0	ND
Ethylbenzene	100-41-4	ug/kg	5.0	ND
Hexachlorobutadiene	87-68-3	ug/kg	5.0	ND
Isopropylbenzene	98-82-8	ug/kg	5.0	ND
p-Isopropyltoluene	99-87-6	ug/kg	5.0	*8.1*
Methylene Chloride	75-09-2	ug/kg	5.0	ND
Naphthalene	91-20-3	ug/kg	5.0	ND
n-Propylbenzene	103-65-1	ug/kg	5.0	ND
Styrene	100-42-5	ug/kg	5.0	ND
1,1,1,2-Tetrachloroethane	630-20-6	ug/kg	5.0	ND
1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	5.0	ND
Tetrachloroethene	127-18-4	ug/kg	5.0	*15,300*
Toluene	108-88-3	ug/kg	5.0	ND
1,2,3-Trichlorobenzene	87-61-6	ug/kg	5.0	ND
1,2,4-Trichlorobenzene	120-82-1	ug/kg	5.0	ND
1,1,1-Trichloroethane	71-55-6	ug/kg	5.0	ND
1,1,2-Trichloroethane	79-00-5	ug/kg	5.0	ND
Trichloroethene	79-01-6	ug/kg	5.0	*281*
Trichlorofluoromethane	75-69-4	ug/kg	5.0	ND
1,2,3-Trichloropropane	96-18-4	ug/kg	5.0	ND
1,2,4-Trimethylbenzene	95-63-6	ug/kg	5.0	*24.0*
1,3,5-Trimethylbenzene	108-67-8	ug/kg	5.0	*9.0*
Vinyl Chloride	75-01-4	ug/kg	10	ND
Total Xylenes (o,m,p)	1330-20-7	ug/kg	5.0	ND

Note: Chromatogram was scanned for ethyl acetate ions, no matches found at an estimated detection limit of 25 ug/kg.  
ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



**Laboratory Director**  
**ELAP ID - 10795**

NOV - 4 1994

C & H ENGINEERS, P.C.

Report Date: 11/03/94  
Lab Log Number: 9410324

**LABORATORY REPORT**

---

Client: C & H ENGINEERS

Site: Syracuse Label

Sample Date: 10/27/94 by S. Nostrand

Sample: Solid - Foundation

Method: o Flame Ionization Detector, and/or GC/MS  
o Adapted from NYSDOH 310-13 methodology

---

**TOTAL PETROLEUM HYDROCARBON  
QUANTITATION**

Foundation

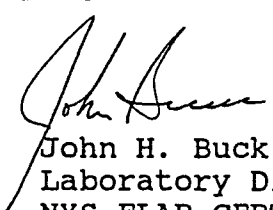
694 ug/g as kerosene

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**PRODUCT CHARACTERIZATION**

The peak pattern and compounds present in the sample are consistent with a kerosene fuel product. There is an indication of "weathering" which indicates an old spill or one which has been exposed to the elements.

-----  
This analysis is certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.

  
John H. Buck, P.E.  
Laboratory Director  
NYS ELAP CERT 10795

3845 ROUTE 11 SOUTH, P.O. BOX 5150  
CORTLAND, N.Y. 13045 607-753-3403

Client: **C & H Engineers**  
431 East Fayette Street  
Syracuse, NY 13202  
Site: Syracuse Label  
31404

Report Date: 11/03/94  
Sampling Date: 10/27/94  
Sampled By: S. Nostrand  
Date Received: 10/27/94  
Analyzed by: EAC, 10/31/94

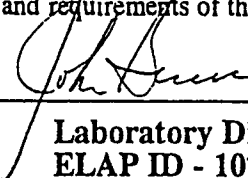
Sample ID: Foundation

VOLATILES BY METHOD EPA 8021

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/kg	130	nd
Bromobenzene	108-86-1	ug/kg	130	nd
Bromochloromethane	74-97-5	ug/kg	130	nd
Bromodichloromethane	75-27-4	ug/kg	130	nd
Bromoform	75-25-2	ug/kg	130	nd
Bromomethane	74-83-9	ug/kg	130	nd
n-Butylbenzene	104-51-8	ug/kg	130	*6080*
sec-Butylbenzene	135-98-8	ug/kg	130	nd
tert-Butylbenzene	98-06-6	ug/kg	130	nd
Carbon Tetrachloride	56-23-5	ug/kg	130	nd
Chlorobenzene	108-90-7	ug/kg	130	nd
Chloroethane	75-00-3	ug/kg	130	nd
Chloroform	67-66-3	ug/kg	130	nd
Chloromethane	74-87-3	ug/kg	130	nd
2-Chlorotoluene	95-49-8	ug/kg	130	nd
4-Chlorotoluene	106-43-4	ug/kg	130	nd
Dibromochloromethane	124-48-1	ug/kg	130	nd
1,2-Dibromo-3-chloropropan	96-12-8	ug/kg	130	nd
1,2-Dibromoethane	106-93-4	ug/kg	130	nd
Dibromomethane	74-95-3	ug/kg	130	nd
1,2-Dichlorobenzene	95-50-1	ug/kg	130	nd
1,3-Dichlorobenzene	541-73-1	ug/kg	130	nd
1,4-Dichlorobenzene	106-46-7	ug/kg	130	nd
Dichlorodifluoromethane	75-71-8	ug/kg	130	nd
1,1-Dichloroethane	75-34-3	ug/kg	130	nd
1,2-Dichloroethane	107-06-2	ug/kg	130	nd
1,1-Dichloroethene	75-35-4	ug/kg	130	nd
cis-1,2-Dichloroethene	156-59-4	ug/kg	130	nd
trans-1,2-Dichloroethene	156-60-5	ug/kg	130	nd
1,2-Dichloropropane	78-87-5	ug/kg	130	nd
1,3-Dichloropropane	142-28-9	ug/kg	130	nd
2,2-Dichloropropane	590-20-7	ug/kg	130	nd
1,1-Dichloropropene	563-58-6	ug/kg	130	nd
cis-1,3-Dichloropropene	10061-01-5	ug/kg	130	nd
trans-1,3-Dichloropropene	10061-02-6	ug/kg	130	nd
Ethylbenzene	100-41-4	ug/kg	130	*478*
Hexachlorobutadiene	87-68-3	ug/kg	130	nd
Isopropylbenzene	98-82-8	ug/kg	130	*2540*
p-Isopropyltoluene	99-87-6	ug/kg	130	*2070*
Methylene Chloride	75-09-2	ug/kg	130	nd
Naphthalene	91-20-3	ug/kg	130	*5730*
Propylbenzene	103-65-1	ug/kg	130	nd
Styrene	100-42-5	ug/kg	130	nd
1,1,1,2-Tetrachloroethane	630-20-6	ug/kg	130	nd
1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	130	nd
Tetrachloroethene	127-18-4	ug/kg	130	nd
Toluene	108-88-3	ug/kg	130	nd
1,2,3-Trichlorobenzene	87-61-6	ug/kg	130	nd
1,2,4-Trichlorobenzene	120-82-1	ug/kg	130	nd
1,1,1-Trichloroethane	71-55-6	ug/kg	130	nd
1,1,2-Trichloroethane	79-00-5	ug/kg	130	nd
Trichloroethene	79-01-6	ug/kg	130	nd
Trichlorofluoromethane	75-69-4	ug/kg	130	nd
1,2,3-Trichloropropane	96-18-4	ug/kg	130	nd
1,2,4-Trimethylbenzene	95-63-6	ug/kg	130	*1130*
1,3,5-Trimethylbenzene	108-67-8	ug/kg	130	*738*
Vinyl Chloride	75-01-4	ug/kg	130	nd
o-Xylene	95-47-6	ug/kg	130	*351*
m,p-Xylenes	108-38-3/1	ug/kg	130	*144*

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

  
Laboratory Director  
ELAP ID - 10795

Client: C & H Engineers  
431 East Fayette Street  
Syracuse, NY 13202

Site: Syracuse Label

Report Date: 11/02/94  
Sampling Date: 10/27/94  
Sampled By: S. Nostrand  
Date Received: 10/27/94  
Analyzed by: MM, 11/02/94

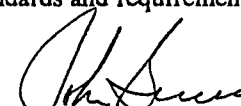
Sample ID: Foundation

PAH BY METHOD By EPA 8270

ANALYTE	CAS #	UNITS	DL	RESULT
acenaphthene	83-32-9	ug/kg	170	ND
acenaphthylene	208-96-8	ug/kg	170	ND
anthracene	120-12-7	ug/kg	170	*570*
benzo(a)anthracene	56-55-3	ug/kg	330	ND
benzo(a)pyrene	50-32-8	ug/kg	170	ND
benzo(b)fluoranthene	205-99-2	ug/kg	170	*170*
benzo(g,h,i)perylene	191-24-2	ug/kg	170	ND
benzo(k)fluoranthene	207-08-9	ug/kg	170	ND
chrysene	218-01-9	ug/kg	170	*180*
dibenzo(a,h)anthracene	53-70-3	ug/kg	170	ND
fluoranthene	206-44-0	ug/kg	170	*390*
fluorene	86-73-7	ug/kg	170	*680*
indeno(1,2,3-c,d)pyrene	193-39-5	ug/kg	170	ND
naphthalene	91-20-3	ug/kg	170	*1600*
phenanthrene	85-01-8	ug/kg	330	*680*
pyrene	129-00-0	ug/kg	170	*270*

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



Laboratory Director  
ELAP ID - 10795

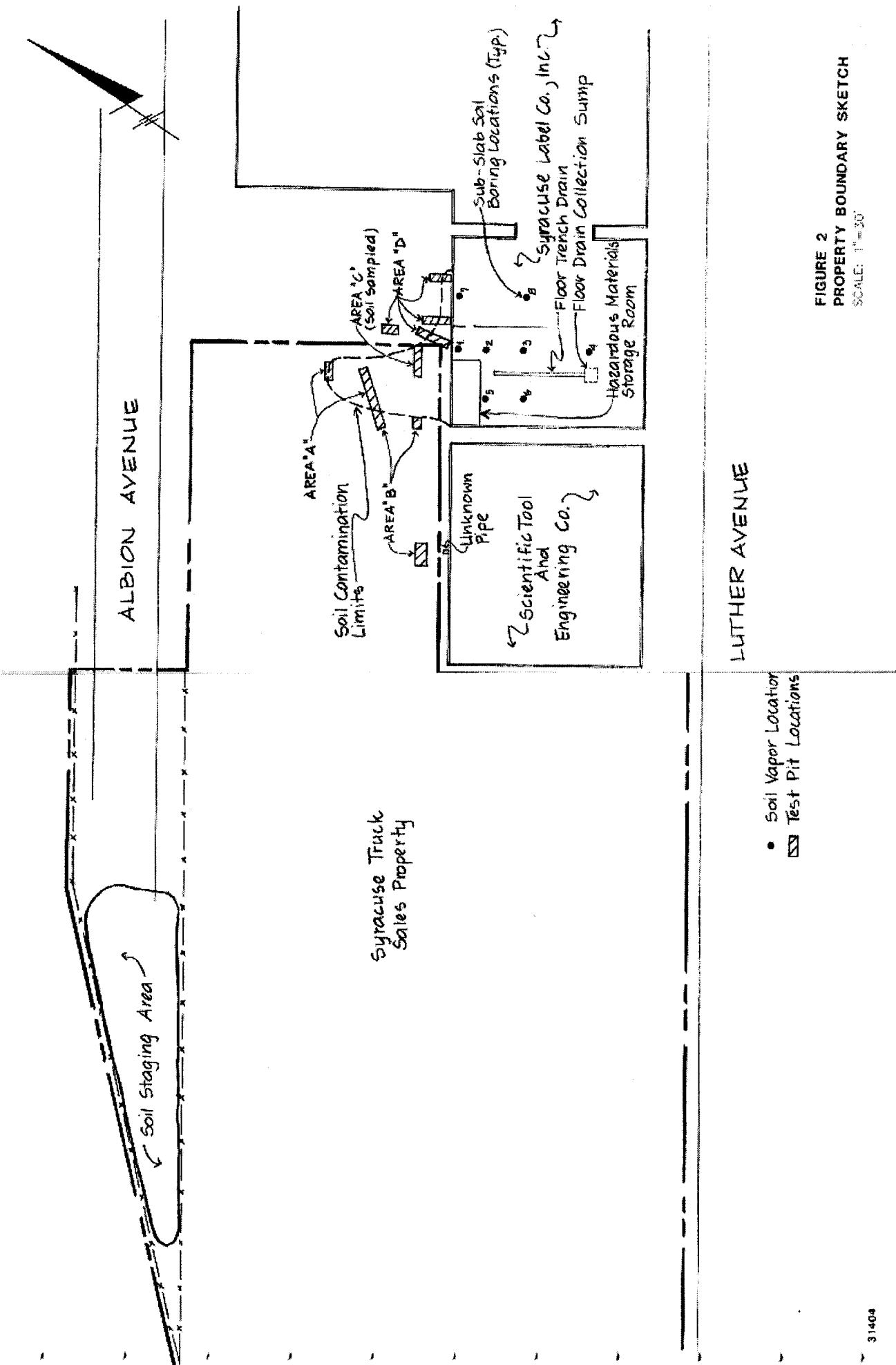


FIGURE 2  
 PROPERTY BOUNDARY SKETCH  
 SCALE: 1"=30'

- Soil Vapor Location
- ▣ Test Pit Locations

ALBION AVENUE

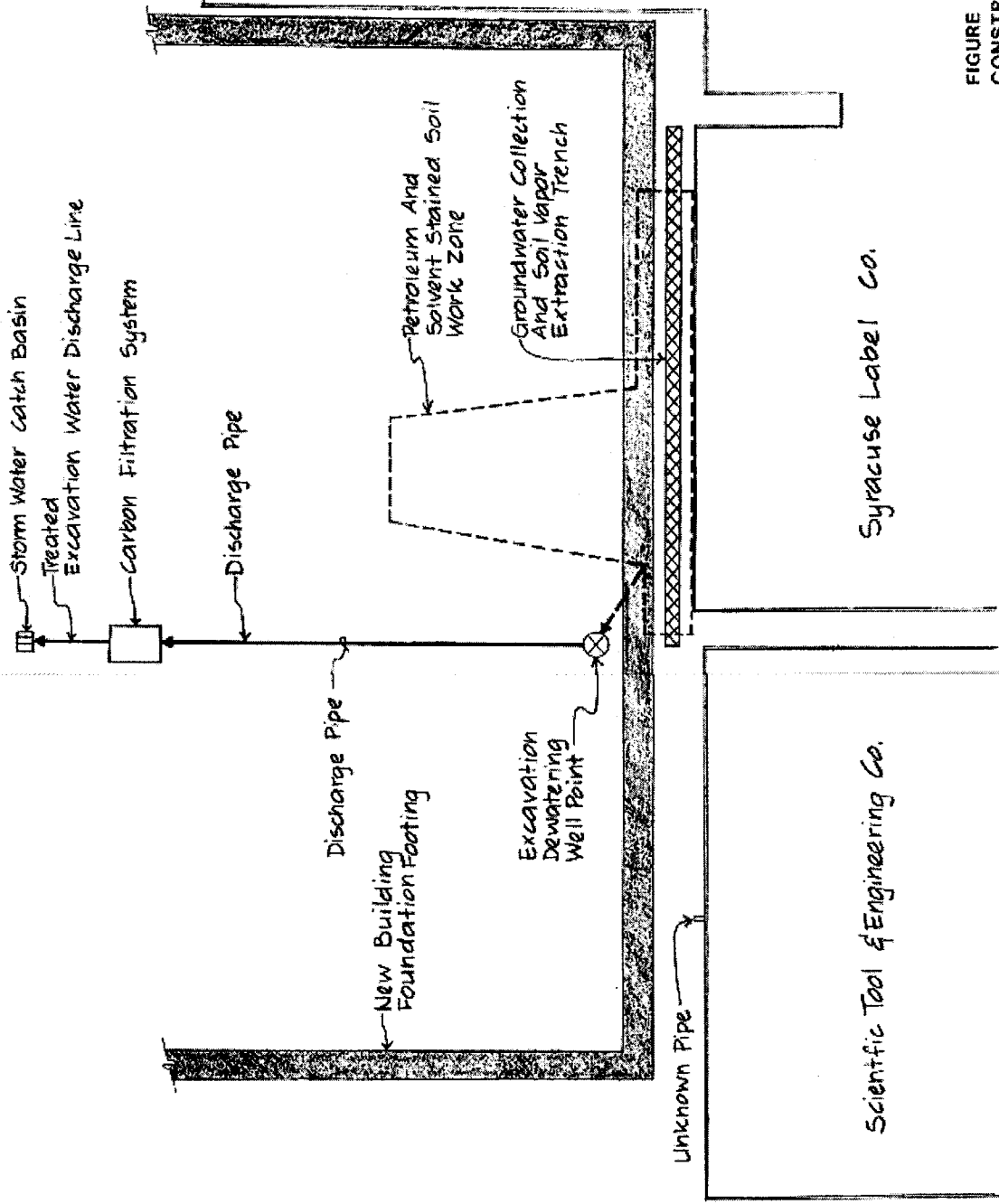
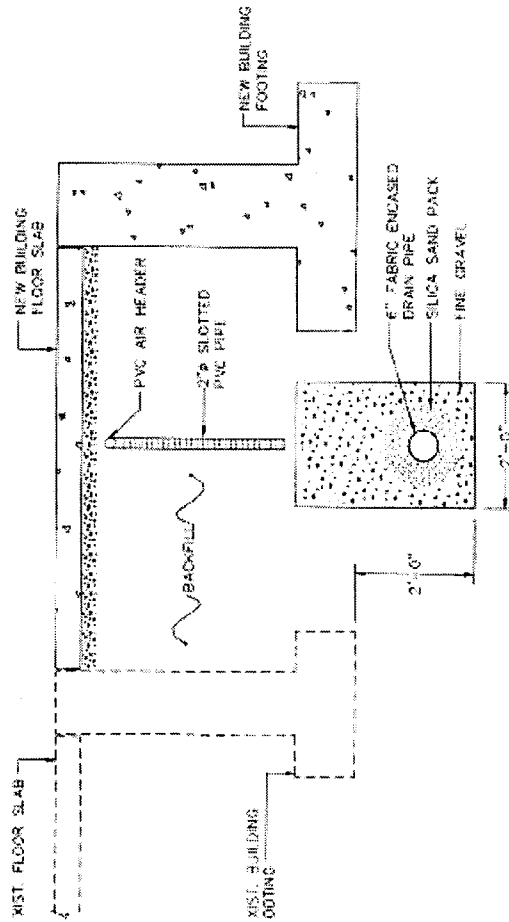
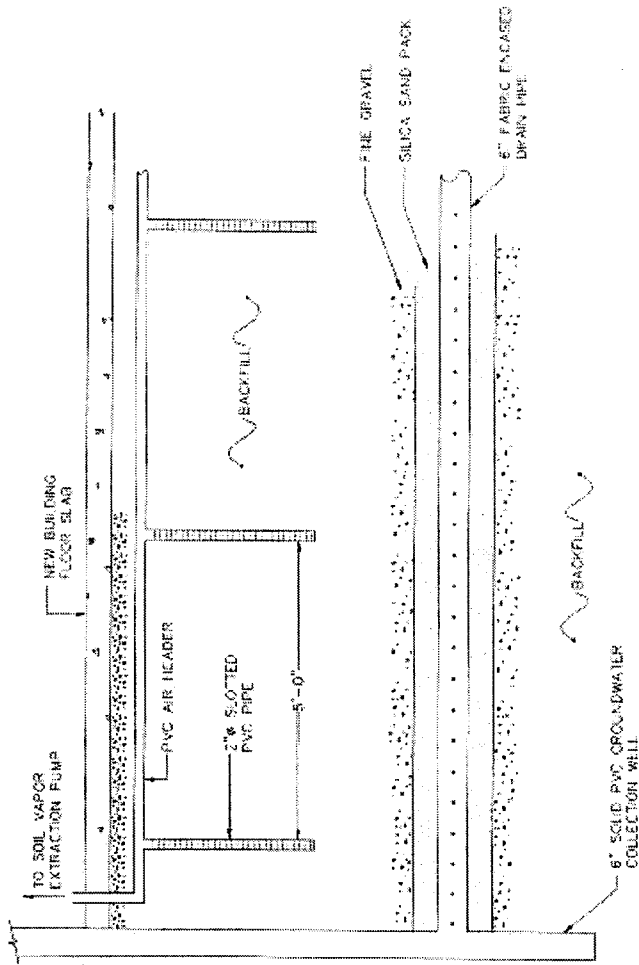


FIGURE 3  
CONSTRUCTION REMEDIATION  
WORK PLAN  
SCALE: 1"=16'





**FIGURE 4**  
**GROUNDWATER COLLECTION AND SOIL**  
**VAPOR EXTRACTION INTERCEPTOR**  
**TRENCH DRAWING**  
 SCALE: 1/2"=1'-0"

# C&H engineers, p.c.

PROFESSIONAL ENGINEERING SERVICES

July 11, 1995

Mr. Christopher F. Mannes III  
Environmental Engineer I  
NYSDEC Region 7  
Division of Spills Management  
615 Erie Boulevard West  
Syracuse, NY 13204-2400

Re: Soil Disposal  
Syracuse Label/ Syracuse Truck Sales  
File: 31404 #2

Dear Mr. Mannes:

In accordance with our discussion, I have enclosed information pertaining to the removal of the staged soil from the Syracuse Label/ Syracuse Truck Sales property. The staged soil was removed by Earthwatch Waste Systems, Inc. on April 17, 18, and 19, 1995. Earthwatch removed 351 tons of soil from the site for disposal at the Ontario County Landfill. The following information is enclosed for your files:

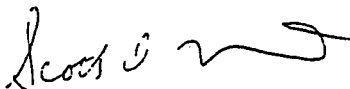
1. Laboratory results of composite samples of the staged soil.
2. Earthwatch Waste Systems Invoice for soil disposal.
3. Weigh tickets for disposal of soil.
4. Earthwatch Waste Systems Non-Hazardous Solid Waste Manifests.

Now that the construction of the new warehouse building on the site has been completed, we are conducting additional testing of the soils at the site, and evaluating the quality of groundwater and soil vapor within the collection trench located adjacent to the original face of the Syracuse Label building. The results from this analysis should be complete by the end of the month, and a project summary report will be submitted in August. This report will summarize the remedial and investigative activities conducted at the site, and assess whether further remedial activities are required, or whether the spill file may be closed. As we discussed, this report will also address the discovery of the additional petroleum contaminated soil on the southeast side (Luther Avenue) of the Syracuse Label building by Niagara Mohawk in June.

If you have any additional questions regarding this project, please do not hesitate to contact me.

Very truly yours,

C & H ENGINEERS, P.C.



Scott D. Nostrand  
Senior Project Engineer

Enclosures

cc: Mr. Peter Rhodes, Syracuse Label  
Mr. & Mrs. Everett Sharp

# C&H engineers, p.c.

PROFESSIONAL ENGINEERING SERVICES

---

March 9, 1995

Mr. Chris McCune  
Earthwatch Waste Systems, Inc.  
3527 Harlem Road  
Buffalo, NY 14225

Re: Soil Disposal  
Syracuse Label/ Syracuse Truck Sales  
File: 31404 #2

Dear Mr. McCune:

I am enclosing for your review, the results of Toxicity Characteristic Leaching Procedure (TCLP) and RCRA characteristic tests performed on two composite samples of petroleum and solvent contaminated soil staged at the Syracuse Label/Syracuse Truck Sales property in Syracuse, New York. This soil was excavated from a building construction site following the detection of petroleum and solvent compounds in the soils. Approximately 200 cubic yards of soil are staged on site. The laboratory results confirm that the soil may be considered a non-hazardous waste material.

Pending your approval for the disposal of this soil, we would like to arrange for the transport and disposal of the soil from the site, in accordance with your February 9, 1995 quote of \$45.00/ton. Please let me know what paperwork will be required to arrange for the soil disposal. We would like you to contract directly with the property owners, Syracuse Label Company, and Ms. Elaine Sharp, for the transport and disposal fees. C & H Engineers will arrange for on-site loading, and coordinate the removal project. Please call me to discuss this matter.

We look forward to working with you.

C & H ENGINEERS, P.C.

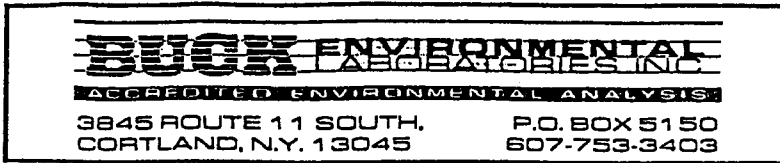


Scott D. Nostrand  
Senior Project Engineer

SDN:jl

Enclosures

cc: Mr. Peter Rhodes, Syracuse Label  
Mr. & Mrs. Everett Sharp



**Laboratory Report**  
 Lab Log No:9502101

Client: C & H ENGINEERS  
 431 EAST FAYETTE STREET  
 SYRACUSE NY 13202-

Report Date: 03/06/95  
 Sampling Date: 02/10/95  
 Sampled By: M.T.S.  
 Date Received: 02/10/95

Site: SYRACUSE LABEL

Sample ID: SOIL COMPOSITE - NORTH PILES

ANALYTE	METHOD	ANALYZED	BY	UNITS	DL	RESULTS
pH	9045	02/16/95	JEC	Units	0.1	8.03
pH note: 20 g of sample in 100 ml of nanopure of pH 7.87						
Ignitability	1010	02/15/95	GB	Deg.F	1	NI to 180
Reactive Cyanide	PARA 7.3.3.2	02/13/95	JR	ug/g	20	ND
Reactive Sulfide	PARA 7.3.4.2	02/13/95	JR	ug/g	20	ND
TCLP Extraction	1311	02/15/95	GB	COMP.	0	complete
TCLP ZHE Volatile Extractio	EPA 1311	02/15/95	GB		0	complete

*This laboratory analysis has been performed in accordance with generally accepted laboratory practices and requirements of the New York State Department of Health ELAP Program. Buck Environmental Laboratories, Inc. makes no recommendations, representations or warranties other than as specifically set forth in this report and shall not be responsible or liable for any action or the consequences of any action taken in connection with this report.*

(ND => not detected above DL indicated)  
 (DL => detection limit)  
 (mg/L => ppm in water)  
 (ug/g => ppm in solid)

Inorganic.frz

John H. Buck, P.E.  
 Laboratory Director  
 ELAP ID:10795

**BUCK ENVIRONMENTAL LABORATORIES INC.**  
**ACCREDITED ENVIRONMENTAL ANALYSIS**

3845 ROUTE 11 SOUTH, P.O. BOX 5150  
 CORTLAND, N.Y. 13045 607-753-3403

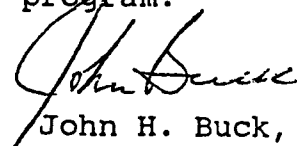
**TOXICITY CHARACTERISTICS LEACHING PROCEDURE**  
**VOLATILE AND BNA COMPOUNDS**

Client: C & H ENGINEERS Report Date: 03/06/95  
 431 E. Fayette St. Date Received: 02/10/95  
 Syracuse, NY 13202 Sampled By: S. Nostrand  
 Extraction: TCLP 1311  
 Sample: North Piles Percent Solids: 79.4%  
 Soil Composite Lab Log No: 9502101

Cas No.	Compound	Regulatory Level (mg/l)	Result (mg/l)
71-43-2	Benzene	0.5	ND (<.005)
56-23-5	Carbon Tetrachloride	0.5	ND (<.005)
108-90-7	Chlorobenzene	100.0	ND (<.005)
67-66-3	Chloroform	6.0	ND (<.005)
106-46-7	1,4-Dichlorobenzene	7.5	ND (<.005)
107-06-2	1,2-Dichloroethane	0.5	ND (<.005)
75-35-4	1,1-Dichloroethylene	0.7	ND (<.005)
78-93-3	Methyl Ethyl Ketone	200.0	ND (<.100)
127-18-4	Tetrachloroethylene	0.7	.007
79-01-6	Trichloroethylene	0.5	ND (<.005)
75-01-4	Vinyl Chloride	0.2	ND (<.010)
121-14-2	2,4-Dinitrotoluene	0.13	ND (<.010)
118-74-1	Hexachlorobenzene	0.13	ND (<.005)
87-68-3	Hexachlorobutadiene	0.5	ND (<.005)
67-72-1	Hexachloroethane	3.0	ND (<.005)
98-95-3	Nitrobenzene	2.0	ND (<.005)
110-86-1	Pyridine	5.0	ND (<.010)
95-48-7	o-Cresol	200.0	ND (<.010)
108-39-4	m-Cresol	200.0	ND (<.010)
106-44-5	p-Cresol	200.0	ND (<.010)
- - -	Cresol	200.0	ND (<.010)
87-86-5	Pentachlorophenol	100.0	ND (<.005)
95-95-4	2,4,5-Trichlorophenol	400.0	ND (<.010)
88-06-2	2,4,6-Trichlorophenol	2.0	ND (<.005)

ND - None detected greater than detection limits noted.  
 Fluid Extraction Method: Fluid #1

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.

  
 John H. Buck, P.E.  
 Laboratory Director  
 NYS ELAP ID 10795

**BUCK ENVIRONMENTAL  
LABORATORIES INC.**

ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045P.O. BOX 5150  
607-753-3403**TOXICITY CHARACTERISTICS LEACHING PROCEDURE  
METALS**

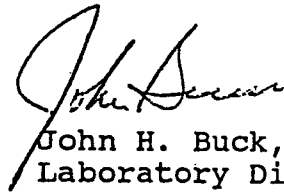
Client: **C & H ENGINEERS** Report Date: 03/06/95  
431 E. Fayette St. Date Received: 02/10/95  
Syracuse, NY 13202 Sampled By: S. Nostrand  
Extraction: TCLP 1311  
Sample: North Piles Percent Solids: 79.4%  
Soil Composite Lab Log No: 9502101

Cas No.	Compound	Regulatory Level (mg/L)	Result (mg/L)
7440-39-2	Arsenic	5.0	ND (<.100)
7440-39-3	Barium	100.0	.570
7440-43-9	Cadmium	1.0	ND (<.050)
7440-47-3	Chromium	5.0	ND (<.050)
7439-92-1	Lead	5.0	ND (<.100)
7439-97-6	Mercury	0.2	ND (<.0008)
7782-49-2	Selenium	1.0	ND (<.100)
7440-22-4	Silver	5.0	ND (<.100)

Fluid Extraction Method: Fluid #1

ND - None detected greater than detection limits noted.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.



John H. Buck, P.E.  
Laboratory Director  
NYS ELAP ID 10795

**BUCK ENVIRONMENTAL LABORATORIES INC.**

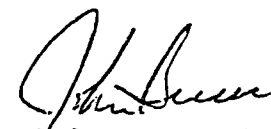
ACCREDITED ENVIRONMENTAL ANALYSIS

3345 ROUTE 11 SOUTH,  
PORTLAND, N.Y. 13045P.O. BOX 5150  
607-753-3403**TOXICITY CHARACTERISTICS LEACHING PROCEDURE**  
**PESTICIDES and HERBICIDES**Client: **C & H ENGINEERS**  
431 E. Fayette St.  
Syracuse, NY 13202Report Date: 03/06/95  
Date Received: 02/10/95  
Sampled By: S. Nostrand  
Extraction: TCLP 1311  
Percent Solids: 79.4%  
Lab Log No: 9502101Sample: North Piles  
Soil Composite

Cas No.	Compound	Regulatory Level (mg/L)	Result (mg/L)
57-74-9	Chlordane	0.03	ND(<.0008)
72-20-8	Endrin	0.02	ND(<.0008)
76-44-8	Heptachlor	0.008	ND(<.0008)
	Heptachlor Epoxide	0.008	ND(<.0008)
58-89-9	Lindane	0.4	ND(<.0008)
72-43-5	Methoxychlor	10.0	ND(<.0008)
8001-35-2	Toxaphene	0.5	ND(<.004)
94-75-7	2,4,D	10.0	ND(<.004)
93-72-1	2,4,5-TP (Silvex)	1.0	ND(<.002)

ND - None detected greater than detection limits noted.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.

  
John H. Buck, P.E.  
Laboratory Director  
NYS ELAP ID 10795



Laboratory Report  
Lab Log No:9502101

Client: C & H ENGINEERS  
431 EAST FAYETTE STREET  
SYRACUSE NY 13202-

Report Date: 03/06/95  
Sampling Date: 02/10/95  
Sampled By: M.T.S.  
Date Received: 02/10/95

Site: SYRACUSE LABEL

Sample ID: SOIL COMPOSITE - SOUTH PILES

ANALYTE	METHOD	ANALYZED	BY	UNITS	DL	RESULTS
pH	9045	02/16/95	JEC	Units	0.1	8.06
pH note: 20 g of sample in 100 ml of nanopure of				pH	7.87	
Ignitability	1010	02/15/95	GB	Deg.F	1	150
Reactive Cyanide	PARA 7.3.3.2	02/13/95	JR	ug/g	20	ND
Reactive Sulfide	PARA 7.3.4.2	02/13/95	JR	ug/g	20	ND
TCLP Extraction	1311	02/15/95	GB	COMP.	0	complete
TCLP ZHE Volatile Extractio	EPA 1311	02/15/95	GB		0	complete

*This laboratory analysis has been performed in accordance with generally accepted laboratory practices and requirements of the New York State Department of Health ELAP Program. Buck Environmental Laboratories, Inc. makes no recommendations, representations or warranties other than as specifically set forth in this report and shall not be responsible or liable for any action or the consequences of any action taken in connection with this report.*

(ND => not detected above DL indicated)  
(DL => detection limit)  
(mg/L => ppm in water)  
(ug/g => ppm in solid)

*Inorganic.txt*

John H. Buck, P.E.  
Laboratory Director  
ELAP ID:10795



**BUCK ENVIRONMENTAL LABORATORIES INC.**  
**ACCREDITED ENVIRONMENTAL ANALYSIS**

3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045

P.O. BOX 5150  
607-753-3403

**TOXICITY CHARACTERISTICS LEACHING PROCEDURE**  
**VOLATILE AND BNA COMPOUNDS**

Client: **C & H ENGINEERS**  
431 E. Fayette St.  
Syracuse, NY 13202

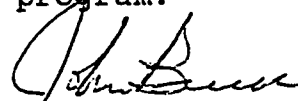
Report Date: 03/06/95  
Date Received: 02/10/95  
Sampled By: S. Nostrand  
Extraction: TCLP 1311  
Percent Solids: 77.6%  
Lab Log No: 9502101

Sample: South Piles  
Soil Composite

Cas No.	Compound	Regulatory Level (mg/l)	Result (mg/l)
71-43-2	Benzene	0.5	ND (<.005)
56-23-5	Carbon Tetrachloride	0.5	ND (<.005)
108-90-7	Chlorobenzene	100.0	ND (<.005)
67-66-3	Chloroform	6.0	ND (<.005)
106-46-7	1,4-Dichlorobenzene	7.5	ND (<.005)
107-06-2	1,2-Dichloroethane	0.5	ND (<.005)
75-35-4	1,1-Dichloroethylene	0.7	ND (<.005)
78-93-3	Methyl Ethyl Ketone	200.0	ND (<.100)
127-18-4	Tetrachloroethylene	0.7	ND (<.005)
79-01-6	Trichloroethylene	0.5	ND (<.005)
75-01-4	Vinyl Chloride	0.2	ND (<.010)
121-14-2	2,4-Dinitrotoluene	0.13	ND (<.010)
118-74-1	Hexachlorobenzene	0.13	ND (<.005)
87-68-3	Hexachlorobutadiene	0.5	ND (<.005)
67-72-1	Hexachloroethane	3.0	ND (<.005)
98-95-3	Nitrobenzene	2.0	ND (<.005)
110-86-1	Pyridine	5.0	ND (<.010)
95-48-7	o-Cresol	200.0	ND (<.010)
108-39-4	m-Cresol	200.0	ND (<.010)
106-44-5	p-Cresol	200.0	ND (<.010)
- - -	Cresol	200.0	ND (<.010)
87-86-5	Pentachlorophenol	100.0	ND (<.005)
95-95-4	2,4,5-Trichlorophenol	400.0	ND (<.010)
88-06-2	2,4,6-Trichlorophenol	2.0	ND (<.005)

ND - None detected greater than detection limits noted.  
Fluid Extraction Method: Fluid #1

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.



John H. Buck, P.E.  
Laboratory Director  
NYS ELAP ID 10795

**BUCK ENVIRONMENTAL LABORATORIES INC.**

ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045P.O. BOX 5150  
607-753-3403**TOXICITY CHARACTERISTICS LEACHING PROCEDURE**  
**METALS**

Client: C & H ENGINEERS  
431 E. Fayette St.  
Syracuse, NY 13202

Report Date: 03/06/95  
Date Received: 02/10/95  
Sampled By: S. Nostrand  
Extraction: TCLP 1311  
Percent Solids: 77.6%  
Lab Log No: 9502101

Sample: South Piles  
Soil Composite

Cas No.	Compound	Regulatory Level (mg/L)	Result (mg/L)
7440-39-2	Arsenic	5.0	ND (<.100)
7440-39-3	Barium	100.0	.650
7440-43-9	Cadmium	1.0	ND (<.050)
7440-47-3	Chromium	5.0	ND (<.050)
7439-92-1	Lead	5.0	ND (<.100)
7439-97-6	Mercury	0.2	ND (<.0008)
7782-49-2	Selenium	1.0	ND (<.100)
7440-22-4	Silver	5.0	ND (<.100)

Fluid Extraction Method: Fluid #1

ND - None detected greater than detection limits noted.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.



John H. Buck, P.E.  
Laboratory Director  
NYS ELAP ID 10795

**BUCK ENVIRONMENTAL**  
LABORATORIES INC.  
ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045

P.O. BOX 5150  
607-753-3403

**TOXICITY CHARACTERISTICS LEACHING PROCEDURE**  
**PESTICIDES and HERBICIDES**

Client: C & H ENGINEERS  
431 E. Fayette St.  
Syracuse, NY 13202

Report Date: 03/06/95  
Date Received: 02/10/95  
Sampled By: S. Nostrand  
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Sample: South Piles  
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Cas No.	Compound	Regulatory Level (mg/L)	Result (mg/L)
57-74-9	Chlordane	0.03	ND(<.0008)
72-20-8	Endrin	0.02	ND(<.0008)
76-44-8	Heptachlor	0.008	ND(<.0008)
	Heptachlor Epoxide	0.008	ND(<.0008)
58-89-9	Lindane	0.4	ND(<.0008)
72-43-5	Methoxychlor	10.0	ND(<.0008)
8001-35-2	Toxaphene	0.5	ND(<.004)
94-75-7	2,4,D	10.0	ND(<.004)
93-72-1	2,4,5-TP (Silvex)	1.0	ND(<.002)

ND - None detected greater than detection limits noted.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.



John H. Buck, P.E.  
Laboratory Director  
NYS ELAP ID 10795





3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

CRACUSE LABEL COMPANY  
10 LUTHER AVENUE

EVERPOOL, NY 13068  
VINNY ALAIMO

FOR TRANSPORTATION & DISPOSAL

DATE: 4/28/95

INVOICE NO: 16377

EWS NO: 2542

TERMS: LEGAL ACTION

QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	AMOUNT
		FACILITY: ONTARIO COUNTY		
23.70	TON	WEIGHT TICKET # 000020250 ON 04/17/95 MANIFEST # 71192	45.00	1,025.55
22.00	TON	WEIGHT TICKET # 000020254 ON 04/17/95 MANIFEST # 71173 (TONS = 15.05)	45.00	990.00
22.00	TON	WEIGHT TICKET # 000020258 ON 04/17/95 MANIFEST # 71174 (TONS = 17.21)	45.00	990.00
22.00	TON	WEIGHT TICKET # 000020274 ON 04/17/95 MANIFEST # 71175 (TONS = 20.99)	45.00	990.00
22.00	TON	WEIGHT TICKET # 000020303 ON 04/17/95 MANIFEST # 71176 (TONS = 17.60)	45.00	990.00
21.00	TON	WEIGHT TICKET # 000020307 ON 04/17/95 MANIFEST # 71177 (TONS = 15.44)	45.00	990.00
22.00	TON	WEIGHT TICKET # 000020321 ON 04/17/95 MANIFEST # 71178 (TONS = 15.40)	45.00	990.00
23.52	TON	WEIGHT TICKET # 000020358 ON 04/18/95 MANIFEST # 71179	45.00	1,058.40
22.00	TON	WEIGHT TICKET # 000020361 ON 04/18/95 MANIFEST # 71180 (TONS = 19.87)	45.00	990.00
22.00	TON	WEIGHT TICKET # 000020370 ON 04/18/95 MANIFEST # 71181 (TONS = 21.13)	45.00	990.00
22.00	TON	WEIGHT TICKET # 000020395 ON 04/18/95 MANIFEST # 71191 (TONS = 21.56)	45.00	990.00
22.00	TON	WEIGHT TICKET # 000020404 ON 04/18/95 MANIFEST # 71190 (TONS = 20.32)	45.00	990.00



3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

SYRACUSE LABEL COMPANY  
115 LUTHER AVENUE

LEVERPOOL, NY 13022  
KATHY ALAIMO

FOR TRANSPORTATION & DISPOSAL

DATE: 4/20/95

INVOICE NO: 18377

EWE NO: 2542

TERMS: LEGAL ACTION

QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	AMOUNT
22.00	TON	WEIGHT TICKET # 000020415 ON 04/18/95 MANIFEST # 71189 (TONS = 19.93)	45.00	990.00
22.00	TON	WEIGHT TICKET # 000020441 ON 04/18/95 MANIFEST # 71188 (TONS = 20.64)	45.00	990.00
22.00	TON	WEIGHT TICKET # 000020445 ON 04/18/95 MANIFEST # 71182 (TONS = 21.73)	45.00	990.00
22.00	TON	WEIGHT TICKET # 000020489 ON 04/19/95 MANIFEST # 71187 (TONS = 17.40)	45.00	990.00
22.00	TON	WEIGHT TICKET # 000020476 ON 04/19/95 MANIFEST # 71186 (TONS = 20.92)	45.00	990.00
22.00	TON	WEIGHT TICKET # 000020616 ON 04/19/95 MANIFEST # 71184 (TONS = 19.50)	45.00	990.00
		ONONDAGA COUNTY TAX @ 7 %	1,251.63	1,251.63

TOTAL AMOUNT DUE \$ 19,178.63

THERE IS A 22 TON MINIMUM REQUIRED  
PER LOAD

lot No  
020250  
le #01

Ontario County Solid Waste  
2525 Rt. 332  
Canandaigua NY 14425

Date 04/17/95  
Time 09:06:58  
09:18:10

to: EARTH  
WATCH WASTE SYSTEMS, INC.  
7 HARLEM ROAD  
FALO NY 14225

6 Truck Out-bound

Gross 72900 00Lbs  
Tare 27320 00Lbs

Material \$  
Delivery \$  
Misc \$  
Fuel \$

COMMINGLED  
CYCLING BUILDING  
ce/Tn

Net 45580 00Lbs  
22.500

GH MASTER (AJC)

VER  
MARKS CONTRACT

MAN # 71192

*CNY # 16377*

Waste	Date :04/17/95	Time :09.43.30
20258	2525 Rt. 332	
# #01	Canandaigua NY 14425	09.54.01

Order : EARTH  
 WATCH WASTE SYSTEMS, INC.  
 HARLEM ROAD  
 ALO NY 14225

Order No :  
 1A  
 Load No : 1069  
 Total Tn : 10585.67  
 Miles

Truck Out-bound	Gross	60600.00Lbs	Material \$
	Tare	26180.00Lbs	Delivery \$
CONTAMINATED SOIL		-----	Misc \$
FILL	Net	34420.00Lbs	
e/Tn		17.2100Tns	Total Due \$

H MASTER (NYC)  
 ER *Ray Deuff*  
 RKS CONTRACT *M90 # 71174*



Waste  
020254  
le #01

Date : 04/17/95  
2525 Rt. 332  
Canandaigua NY 14425

Inv #  
16377

4126

Time : 09.31.18  
09.39.15

Customer : EARTH  
WATCH WASTE SYSTEMS, INC.  
7 HARLEM ROAD  
FALO NY 14225

Order No : 1

Load No : 1068  
Total Tn : 10568.46  
Miles :

Truck Out-bound

Gross 54920.00Lbs  
Tare 24820.00Lbs

Material \$  
Delivery \$  
Misc \$

CONTAMINATED SOIL

Net 30100.00Lbs  
15.0500Tns

Total Due \$

IDFILL  
ce/Tn

SHIP MASTER (AJC )

DRIVER

MARKS CONTRACT

MAN # 71173

323 21 @ 17  
559.57  
22.79 @ 10

Waste  
0020274  
ale #01

Date :04/17/95  
2525 Rt. 332  
Canandaigua NY 14425

Time :10.15.23  
10.30.08

Customer :EARTH  
WATCH WASTE SYSTEMS, INC.  
27 HARLEM ROAD  
BUFFALO NY 14225

Order No :1  
1A  
Load No : 1070  
Total Tn : 10606.66  
Miles :

Truck Out-bound	Gross	67620.00Lbs	Material \$
CONTAMINATED SOIL	Tare	25640.00Lbs	Delivery \$
		-----	Misc \$
LANDFILL	Net	41980.00Lbs	
Weight/Tn		20.9900Tns	Total Due \$

TRUCK MASTER (AJC )

DRIVER

MARKS CONTRACT

MAN # 71175

Waste  
020303  
le #01

Date :04/17/95  
2525 Rt. 332  
Canandaigua NY 14425

Time :12.18.59  
12.28.03

to: EARTH  
WATCH WASTE SYSTEMS, INC.  
7 HARLEM ROAD  
FALO NY 14225

Order No 11  
Load No 1078  
Total In 10690.39  
Miles

16 Truck Out-bound  
CONTAMINATED SOIL  
DFILL  
ce/Tn

Gross 62120.00Lbs  
Tare 26920.00Lbs  
-----  
Net 35200.00Lbs  
17.6000Tns

Material \$  
Delivery \$  
Misc \$  
-----  
Total Due \$

GH MASTER (AJC )

VER

*David A. [Signature]*

MARKS CONTRACT

*MAN # 71176*

aste  
 20307  
 e #01

Date :04/17/95  
 2525 Rt. 332  
 Canandaigua NY 14425

Time :12.32.09  
 12.40.14

Owner :EARTH  
 WATCH WASTE SYSTEMS, INC.  
 HARLEM ROAD  
 ALO NY 14225

Order No  
 11A  
 Load No 1080  
 Total Tn 10717.28  
 Miles

Truck Out-bound	Gross	55500.00Lbs	Material \$
	Tare	24620.00Lbs	Delivery \$
CONTAMINATED SOIL		-----	Misc \$
FILL	Net	30880.00Lbs	
e/Tn		15.4400Tns	Total Due \$

H MASTER (AJC )

ER *Vance P. Hill*

IRKS CONTRACT *MAN # 71177*

Waste  
0020321  
ale #01

Date :04/17/95  
2525 Rt. 332  
Canandaigua NY 14425

Time :13.03.31  
13.17.07

Customer :EARTH  
WATCH WASTE SYSTEMS, INC.  
77 HARLEM ROAD  
BUFFALO NY 14225

Order No :1  
1A  
Load No : 1082  
Total Tn : 10744.01  
Miles

0 Truck Out-bound  
CONTAMINATED SOIL  
DFILL  
ce/Tn

Gross 56940.00Lbs  
Tare 26140.00Lbs  
-----  
Net 30800.00Lbs  
15.4000Tns

Material \$  
Delivery \$  
Misc \$  
-----  
Total Due \$

GH MASTER (A)C )

VER

*Kay [Signature]*

MARKS CONTRACT

Man # 71178

Waste Date :04/18/95  
 0020358 2525 Rt. 332 Time :09.15.23  
 File #01 Canandaigua NY 14425 09.25.13

Customer :EARTH  
 EARTHWATCH WASTE SYSTEMS, INC.  
 27 HARLEM ROAD  
 BUFFALO NY 14225

Order No :1  
 1A  
 Load No : 1093  
 Total Tn : 10848.10  
 Miles :

16	Truck Out-bound	Gross	73760.00Lbs	Material \$
		Tare	26720.00Lbs	Delivery \$
	CONTAMINATED SOIL		-----	Misc \$
	LANDFILL	Net	47040.00Lbs	
	Weight/Tn		23.5200Tns	Total Due \$

DRIVER MASTER (AJC)

DRIVER

MARKS CONTRACT

*Don J. [Signature]*  
MAN # 71179

Waste  
020361  
File #01

Date :04/18/95  
2525 Rt. 332  
Canandaigua NY 14425

Time :09.35.51  
09.47.03

Customer :EARTH  
WATCH WASTE SYSTEMS, INC.  
27 HARLEM ROAD  
BUFFALO NY 14225

1095  
0874.49

Truck Out-bound  
CONTAMINATED SOIL

Gross 65960.00Lbs  
Tare 26220.00Lbs  
-----  
Net 39740.00Lbs  
19.8700Tns

Material \$  
Delivery \$  
Misc \$  
-----  
Total Due \$

W/ GH MASTER (AJC)

REVER

*Ray Griffin*

MARKS CONTRACT Man # 71180

\*Waste  
0020370  
ale #01

Date :04/18/95  
2525 Rt. 332  
Canandaigua NY 14425

Time :10.07.33  
10.20.13

Customer :EAF.TH  
EARTHWATCH WASTE SYSTEMS, INC.  
27 HARLEM ROAD  
BUFFALO NY 14225

Order No. 1096  
Total Price 10895.62

Truck Out-bound  
CONTAMINATED SOIL  
DIFILL  
ce/Tn

Gross 68040.00 lbs  
Tare 25780.00 lbs  
Net 42260.00 lbs  
21.1300 Tns

Material \$  
Delivery \$  
Misc \$  
Total Due \$

UGH MASTER (AJC )

VER *[Signature]*  
MARKS CONTRACT MAN # 71181



Waste #01  
020395

Date : 04/18/95  
2525 Rt. 332  
Canandaigua NY 14425

Time : 12.04.57  
12.14.54

Customer : EARTHWATCH WASTE SYSTEMS, INC.  
7 HARLEM ROAD  
FALO NY 14425

Order No  
Load No 1105  
Total Miles 10992.36

16 Truck Out-bound  
CONTAMINATED SOIL  
DFILL  
ce/Tn

Gross 69880.00Lbs  
Tare 26760.00Lbs  
Net 43120.00Lbs  
21.580075

Material \$  
Delivery \$  
Misc \$  
Total Due \$

GH MASTER (AJC)  
VER *Walter A. Pettit*  
MARKS CONTRACT Man # 71191

Waste Date : 04/18/95  
 020404 2525 Rt. 332 Time 12:18:58  
 File #01 Canandaigua NY 14425 12:33:25

Customer : EARTH  
 WATCH WASTE SYSTEMS, INC.  
 17 HARLEM ROAD  
 BUFFALO NY 14225  
 Order No. 1107  
 Total \$ 11021.54

20	Truck Out-bound	Gross	66760.00Lbs	Material	\$
		Tare	26120.00Lbs	Delivery	\$
	CONTAMINATED SOIL			Misc	\$
	REFILL	Net	40640.00Lbs		
	1Tn		20.3200Tns	Total Due	\$

DRIVER (A/C)  
 DRIVER *Ray Scuffi*  
 MARKS CONTRACT Man # 71190

Waste  
020415  
le #01

Date :04/18/95  
2525 Rt. 332  
Canandaigua NY 14425

Time :13.06.10  
13.18.08

Customer :EARTH  
WATCH WASTE SYSTEMS, INC.  
7 HARLEM ROAD  
FALO NY 14225

Order No  
1109  
11050.78

Truck Out-bound  
CONTAMINATED SOIL

Gross 65300.00Lbs  
Tare 25440.00Lbs  
Net 39860.00Lbs  
19.9300Lbs

Material \$  
Delivery \$  
Misc \$  
Total Due \$

WASTE  
ce/Tn

GH MASTER (AJC )

VER *[Signature]*

MARKS CONTRACT *MAN # 71189*

Waste  
0020441  
Sale #01

Date :04/18/95  
2525 Rt. 332  
Canandaigua NY 14425

Time :14.55.46  
15.03.49

Customer :EAFTH  
EARTHWATCH WASTE SYSTEMS, INC.  
17 HARLEM ROAD  
BUFFALO NY 14225

Invoice # 1115  
Total Due 1112.90

16 Truck Out-bound  
CONTAMINATED SOIL  
DFILL  
ce/Tn

Gross 67760.00 lbs  
Tare 26480.00 lbs  
-----  
Net 41280.00 lbs  
20,640.00 lbs

Material \$  
Delivery \$  
Misc \$  
Total Due \$

GH MASTER (AJC)

VER *Donald A. Pettit*  
MARKS CONTRACT Man# 71188

Waste Date :04/19/95  
 020445 2525 Rt. 332 Time :07.05.33  
 le #01 Canandaigua NY 14425 -07.15.52

tomar :EARTH  
 THWATCH WASTE SYSTEMS, INC.  
 7 HARLEM ROAD  
 FALO NY 14225

1119  
 1160.15

0	Truck Out-bound	Gross	69900.00Lbs	Material	\$
		Tare	26440.00Lbs	Delivery	\$
	CONTAMINATED SOIL			Misc	\$
DFILL		Net	43460.00Lbs		
ce/Tn			21.7500Tn	Total Due	\$

GH MASTER (AJC)

VEP

MARKS CONTRACT

*Ray Lewis*  
*MAN# 71182*

Waste  
0020469  
ale #01

Date :04/19/95  
2525 Rt. 332  
Canandaigua NY 14425

Time :09.47.58  
09.59.21

Customer :EARTH  
WATCH WASTE SYSTEMS, INC.  
27 HARLEM ROAD  
BUFFALO NY 14225

Order No  
1122  
195.61

20 Truck Out-bound  
CONTAMINATED SOIL  
4DFILL  
ice/Tn

Gross 61100.00Lbs  
Tare 26300.00Lbs  
Net 34800.00Lbs  
17.4000Tn

Material \$  
Delivery \$  
Misc \$  
Total Due \$

IGH MASTER (AJC )

IVER *Kay Seruffi*

MARKS CONTRACT *MAN # 71187*

Waste  
0020476  
ale #01

Date :04/19/95  
2525 Rt. 332  
Canandaigua NY 14425

Time :10.14.01  
10.33.59

Customer :EARTH  
WATCH WASTE SYSTEMS, INC.  
27 HARLEM ROAD  
BUFFALO NY 14225

Order No. 1123  
Invoice No. 11216-53

4 Truck Out-bound  
CONTAMINATED SOIL  
LANDFILL  
Tons/Tn

Gross 67580.00Lbs  
Tare 25740.00Lbs  
Net 41840.00Lbs  
20.9200Tn

Material \$  
Delivery \$  
Misc \$  
Total Due \$

IGH MASTER (AJC )

IVER *[Signature]*

MARKS CONTRACT MAN # 71186

d. Waste  
00020516  
calc #01

Date :04/19/95  
2525 Rt. 332  
Canandaigua NY 14425

Time 13:20.57  
13:42.12

Customer :EARTH  
ARTHWATCH WASTE SYSTEMS, INC.  
527 HARLEM ROAD  
BUFFALO NY 14225

Order No  
Load No 1135  
Total 1342.39

S20	Truck Out-bound	Gross	64960.00Lbs	Material \$
		Tare	25960.00Lbs	Delivery \$
G	CONTAMINATED SOIL			Misc \$
ANDFILL		Net	39000.00Lbs	
rice/Tn			19.5000Tns	Total Due \$

EIGH MASTER (AJC)

RIVER

*Key Scarpis*  
*MAN# 71184*

EMARKS CONTRACT



# Earthwatch

WASTE SYSTEMS, INC.

3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

71192

## NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER <i>Red Bull Dev</i> <i>1018 W.H. Hooker Rd.</i> <i>Rochester N.Y. 14609</i>	DATE	TIME IN / OUT	
	<i>4-17-95</i>	<i>8:00</i>	<i>8:10</i>
	EWS #	<i>2512</i>	
TRUCK # <i>216</i>	TRAILER #		

CONSIGNEE:  ONTARIO COUNTRY LANDFILL POST LANE ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # <i>(716) 398-4482</i>	SHIPPER  SYRACUSE LABEL 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	WEIGHT IN
		WEIGHT OUT
		BILLED WEIGHT

SHIPPER SIGNATURE <i>[Signature]</i>	PRINT NAME <i>Michael Sirota</i>
DRIVER SIGNATURE <i>[Signature]</i>	PRINT NAME <i>DANIEL A. PETTIT</i>

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE (NO INITIALS) _____	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.
FIRM _____ DATE _____ BY _____ TIME <input type="checkbox"/> AM <input type="checkbox"/> PM _____	

# Earthwatch

WASTE SYSTEMS, INC.

3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

71173

## NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER <i>Chase Trucking</i> 5536 Clark Rd. Conesus, N.Y. 14435	DATE	TIME IN / OUT	
	4/17/95	8:10	8:25
	EWS #	2542	
TRUCK # 7	TRAILER #		

CONSIGNEE:  ONTARIO COUNTRY LANDFILL POST LANE ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # (716) 396-4482	SHIPPER  SYRACUSE LABEL 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	WEIGHT IN
		WEIGHT OUT
		BILLED WEIGHT

SHIPPER SIGNATURE *Michael Savino* <sup>Duly authorized</sup> PRINT NAME Michael Savino for Syracuse Label  
DRIVER SIGNATURE *Vance K. Kupper* PRINT NAME Vance K. Kupper

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE (NO INITIALS) _____	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION	
FIRM _____ DATE _____ BY _____ TIME <input type="checkbox"/> AM <input type="checkbox"/> PM	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.

1st Copy - Earthwatch

2nd Copy - Driver

3rd Copy - Land Fill

4th Copy Shipper

# Earthwatch

## WASTE SYSTEMS, INC.

3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

# 71174

### NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER <i>Shimoda Truck &amp; Transporting</i> <i>1570 Emerson St</i> <i>Rochester NY 14606</i>	DATE	TIME IN / OUT	
	<i>4/17/95</i>	<i>7:25</i>	<i>7:40</i>
	EWS #	<i>2542</i>	
TRUCK # <i>20</i>	TRAILER # <i>N/A</i>		

CONSIGNEE: <b>ONTARIO COUNTRY LANDFILL</b> <b>POST LANE ROAD (RT 5/20)</b> <b>STANLEY, NEW YORK 14561</b> (716) 396-4482 PHONE #	SHIPPER <b>SYRACUSE LABEL</b> <b>110 LUTHER AVENUE</b> <b>LIVERPOOL, NEW YORK 13088</b>
-------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	WEIGHT IN
		WEIGHT OUT
		BILLED WEIGHT

SHIPPER SIGNATURE <i>M. Saviola</i>	PRINT NAME <i>Michael Saviola for Syracuse Label</i>
DRIVER SIGNATURE <i>Raymond Gresetti</i>	PRINT NAME <i>Raymond Gresetti</i>

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE _____ (NO INITIALS)	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION FIRM _____ DATE _____ BY _____ TIME <input type="checkbox"/> AM <input type="checkbox"/> PM	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.

# Earthwatch

WASTE SYSTEMS, INC.

3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

71175

## NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER  <i>Sampson Fuel &amp; Trucking</i> 1570 Emerson Street Rochester, N.Y. 14606	DATE	TIME IN / OUT	
	<i>4/17/95</i>	<i>8:45</i>	<i>9:10</i>
	EWS #	<i>2542</i>	
TRUCK # <i>4</i>	TRAILER # <i>N/A</i>		

CONSIGNEE:  ONTARIO COUNTRY LANDFILL POST LANE ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # (716) 396-4482	SHIPPER  SYRACUSE LABEL 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
<i>1</i>	<i>TRUCKLOAD OF NON-HAZARDOUS SOIL</i>	WEIGHT IN WEIGHT OUT BILLED WEIGHT

SHIPPER SIGNATURE *M. J. Sil (141 Engineers, PC) Rep. for Syracuse* PRINT NAME *Michael Savola for Signature*

DRIVER SIGNATURE *Tim Mulhern* PRINT NAME *Timothy Mulhern*

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE _____ (NO INITIALS)	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.
FIRM _____ DATE _____ BY _____ TIME _____ <input type="checkbox"/> AM <input type="checkbox"/> PM	

# Earthwatch

WASTE SYSTEMS, INC.

3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

71176

## NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER <i>Earthwatch</i>  GOMSON Fuel & Trucking 1370 Emerson Street Rochester, NY 14606	DATE	TIME IN / OUT	
	4/17/95	10:45A	11:04
TRUCK #		TRAILER #	
216			
EWS #		2510	

CONSIGNEE:  ONTARIO COUNTRY LANDFILL POST LANE ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # (716) 396-4482	SHIPPER  SYRACUSE LABEL 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	WEIGHT IN
		WEIGHT OUT
		BILLED WEIGHT

SHIPPER SIGNATURE *Scott Nodman* PRINT NAME SCOTT NODMAN - CH

DRIVER SIGNATURE *David A. Pettit* PRINT NAME DAVID A. PETTIT

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE _____ (NO INITIALS)	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.
FIRM _____ DATE _____ BY _____ TIME <input type="checkbox"/> AM <input type="checkbox"/> PM	

# Earthwatch

WASTE SYSTEMS, INC.

3527 Harlem Road  
 Buffalo, NY 14225  
 (716) 833-3286  
 Fax (716) 833-5670

71177

## NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER  Samson Fuel & Trucking (owner) 1570 Emerson St Rochester, NY 14606	DATE		TIME IN / OUT	
	4/17/95		11:05A	11:23A
	EWS # 2542			
TRUCK # 7	TRAILER #			

CONSIGNEE:  ONTARIO COUNTRY LANDFILL POST LANE ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # (716) 396-4482	SHIPPER  SYRACUSE LABEL 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	WEIGHT IN WEIGHT OUT BILLED WEIGHT

SHIPPER SIGNATURE *Scott O. Nostrom* (with EWS logo) PRINT NAME Scott O. Nostrom

DRIVER SIGNATURE *David Ruffen* PRINT NAME David Ruffen

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE _____ (NO INITIALS)	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION FIRM _____ DATE _____ BY _____ TIME _____ <input type="checkbox"/> AM <input type="checkbox"/> PM	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.

# Earthwatch

## WASTE SYSTEMS, INC.

3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

71178

### NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER  Samson Fuel & Trucking 1570 Emerson Street Rochester, NY 14606	DATE		TIME IN / OUT	
	4/17/95		11:34	11:43
	EWS # 2542			
TRUCK # 20	TRAILER #			

CONSIGNEE:  ONTARIO COUNTRY LANDFILL POST LANE ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # (716) 396-4482	SHIPPER  SYRACUSE LABEL 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL.	WEIGHT IN
		WEIGHT OUT
		BILLED WEIGHT

SHIPPER SIGNATURE <u>Scott O. Nostrand</u>	PRINT NAME <u>Scott O. Nostrand</u>
DRIVER SIGNATURE <u>Raymond Girotti</u>	PRINT NAME <u>Raymond Girotti</u>

SPECIAL INSTRUCTIONS:

OR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE (NO INITIALS) _____	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION	
FIRM _____ DATE _____ BY _____ TIME <input type="checkbox"/> AM <input type="checkbox"/> PM	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.

1st Copy - Earthwatch

2nd Copy - Driver

3rd Copy - Land Fill

4th Copy Shipper

# Earthwatch

WASTE SYSTEMS, INC.

3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

71179

## NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER Earthwatch c/o Samson Fuel & Trucking 1570 Emerson St. Rochester, NY 14606	DATE	TIME IN / OUT	
	4/17/95	7:45 A	8:10 A
	EWS #		
TRUCK #	216	TRAILER #	2512

CONSIGNEE:  ONTARIO COUNTRY LANDFILL POST LANK ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # (716) 396-4482	SHIPPER  SYRACUSE LABEL 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	WEIGHT IN
		WEIGHT OUT
		BILLED WEIGHT

SHIPPER SIGNATURE *Scott D. Nostromo* PRINT NAME SCOTT D. NOSTROMO GILLEGINS  
 DRIVER SIGNATURE *Donald F. Pettit* PRINT NAME Donald F. Pettit

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE (NO INITIALS) _____	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION FIRM _____ DATE _____ BY _____ TIME _____ <input type="checkbox"/> AM <input type="checkbox"/> PM	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.



# Earthwatch

WASTE SYSTEMS, INC.

3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

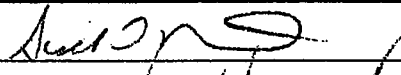
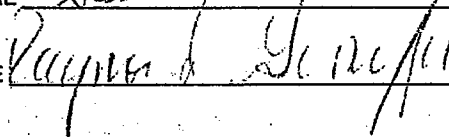
71180

## NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER  Camson Fuel & Trucking 1570 Emerson St. Rochester, NY 14606	DATE		TIME IN / OUT	
	4/18/95		8:10a	8:15
	EWS # 2542			
TRUCK # 20	TRAILER #			

CONSIGNEE:  ONTARIO COUNTRY LANDFILL POST LANE ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # (716) 396-4482	SHIPPER  SYRACUSE LABRL 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	WEIGHT IN
		WEIGHT OUT
		BILLED WEIGHT

SHIPPER SIGNATURE 	PRINT NAME <u>SCOTT NOSTRANO CHIEF ENGINEER</u>
DRIVER SIGNATURE 	PRINT NAME <u>RAYMOND GIOSAFATI</u>

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE _____ (NO INITIALS)	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.
FIRM _____ DATE _____ BY _____ TIME _____ <input type="checkbox"/> AM <input type="checkbox"/> PM	

1st Copy - Earthwatch

2nd Copy - Driver

3rd Copy - Land Fill

4th Copy Shipper

**NON-HAZARDOUS SOLID WASTE MANIFEST**

TRANSPORTER Samson Fuel & Trucking 1570 Emerson Street Rochester, NY 14606	DATE	TIME IN / OUT	
	4/18/95	8:25A	8:50A
	EWS #		
TRUCK #	4	TRAILER #	

CONSIGNEE: ONTARIO COUNTRY LANDFILL POST LANE ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # (716) 398-4482	SHIPPER SYRACUSE LABEL 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
-------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	WEIGHT IN
		WEIGHT OUT
		BILLED WEIGHT

SHIPPER SIGNATURE *Scott D. Nostrom* PRINT NAME SCOTT D. NOSTROM Categories

DRIVER SIGNATURE *[Signature]* PRINT NAME [Name]

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE _____ (NO INITIALS)	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION FIRM _____ DATE _____ BY _____ TIME _____ <input type="checkbox"/> AM <input type="checkbox"/> PM	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.

# Earthwatch

WASTE SYSTEMS, INC.

3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

71191

## NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER Samson Fuel & Trucking 1570 Emerson St. Rochester, N.Y. 14606	DATE		TIME IN / OUT	
	4/18/95		10:45	11:05
	EWS # 2542			
TRUCK # 216	TRAILER # N/A			

CONSIGNEE:  ONTARIO COUNTRY LANDFILL POST LANE ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # (716) 398-4482	SHIPPER  SYRACUSE LABEL 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	WEIGHT IN
		WEIGHT OUT
		BILLED WEIGHT

SHIPPER SIGNATURE *Mike Saviole* (C.H. Logans, Inc.) Label PRINT NAME Mike Saviole for Syr. Label

DRIVER SIGNATURE *Daniel A. Pettit* PRINT NAME DANIEL A. PETTIT

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE _____ (NO INITIALS)	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.
FIRM _____ DATE _____ BY _____ TIME _____ <input type="checkbox"/> AM <input type="checkbox"/> PM	

71190

# Earthwatch

WASTE SYSTEMS, INC.

3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

## NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER  Samson Fuel & Trucking 1570 Emerson St. Rochester, N.Y. 14606	DATE  4/18/95	TIME IN / OUT  11:05 / 11:15
	EWS #  2542	
TRUCK #  20	TRAILER #  N/A	

CONSIGNEE:  ONTARIO COUNTRY LANDFILL POST LANE ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # (716) 396-4482	SHIPPER  SYRACUSE LABEL 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	<p>WEIGHT IN</p> <p>WEIGHT OUT</p> <p>BILLED WEIGHT</p>

SHIPPER SIGNATURE <i>[Signature]</i> <sup>Authorized Rep. for Syracuse Label</sup>	PRINT NAME Michael J. Saviole Sr. Syracuse Label
DRIVER SIGNATURE <i>[Signature]</i>	PRINT NAME Raymond G. Bennett

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE (NO INITIALS) _____	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION	
FIRM _____ DATE _____ BY _____ TIME _____ <input type="checkbox"/> AM <input type="checkbox"/> PM	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.

# Earthwatch

## WASTE SYSTEMS, INC.

3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

71189

### NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER <i>Samson Fuel &amp; Trucking</i> <i>1570 Emerson Street</i> <i>Rochester, N.Y. 14606</i>	DATE <i>4/18/95</i>	TIME IN / OUT <i>11:40 AM</i>
	EWS # <i>2542</i>	
TRUCK # <i>4</i>	TRAILER # <i>N/A</i>	

CONSIGNEE:  <b>ONTARIO COUNTRY LANDFILL</b> POST LANE ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # <i>(716) 396-4482</i>	SHIPPER  <b>SYRACUSE LABEL</b> 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
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NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	WEIGHT IN
		WEIGHT OUT
		BILLED WEIGHT <i>11,551</i>

SHIPPER SIGNATURE *Michael J. Savio* (with initials) <sup>Very thorough and</sup> <sub>label</sub> PRINT NAME *Michael J. Savio for Syracuse Label*

DRIVER SIGNATURE *[Signature]* PRINT NAME *[Name]*

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE _____ (NO INITIALS)	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION	
FIRM _____ DATE _____ BY _____ TIME <input type="checkbox"/> AM <input type="checkbox"/> PM	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.

# Earthwatch

WASTE SYSTEMS, INC.

3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

71188

## NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER Samson Fuel & Trucking 1570 Emerson Street Rochester, N.Y. 14606	DATE	TIME IN / OUT	
	4/18/95	1:20	1:35
	EWS # 2542		
TRUCK # Z16	TRAILER # N/A		

CONSIGNEE:  ONTARIO COUNTRY LANDFILL POST LANE ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # (716) 396-4482	SHIPPER  SYRACUSE LABEL 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	WEIGHT IN WEIGHT OUT BILLED WEIGHT

SHIPPER SIGNATURE [Signature] PRINT NAME Michael Savola for Syracuse Label

DRIVER SIGNATURE [Signature] PRINT NAME DANIEL A. FORTIT

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE (NO INITIALS) _____	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION FIRM _____ DATE _____ BY _____ TIME _____ AM _____ PM _____	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.

71182

# Earthwatch

WASTE SYSTEMS, INC.

3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

## NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER <i>Somson Fuel &amp; Trucking</i> <i>1570 Emerson St.</i> <i>Rochester, N.Y.</i>	DATE	TIME IN / OUT	
	<i>4/18/95</i>	<i>1:50</i>	<i>2:10</i>
	EWS #	<i>2542</i>	
TRUCK #	TRAILER #		

CONSIGNEE:  <b>ONTARIO COUNTRY LANDFILL</b> <b>POST LANE ROAD (RT 5/20)</b> <b>STANLEY, NEW YORK 14561</b> PHONE # <i>(716) 396-4482</i>	SHIPPER  <b>SYRACUSE LABEL</b> <b>110 LUTHER AVENUE</b> <b>LIVERPOOL, NEW YORK 13088</b>
---------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	WEIGHT IN
		WEIGHT OUT
		BILLED WEIGHT

SHIPPER SIGNATURE *[Signature]* *For Syracuse Label* PRINT NAME *Michael Savio* *For Syr. Label*

DRIVER SIGNATURE *[Signature]* PRINT NAME *Roger G. Giesse*

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE _____ (NO INITIALS)	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION FIRM _____ DATE _____ BY _____ TIME _____ <input type="checkbox"/> AM <input type="checkbox"/> PM	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.

**NON-HAZARDOUS SOLID WASTE MANIFEST**

TRANSPORTER Samson Fuel & Trucking 1570 Emerson Street Palmsen, N.Y. 14606	DATE		TIME IN / OUT	
	4/19/95		8:20A	8:35A
	EWS # 2542			
TRUCK # 20	TRAILER #			

CONSIGNEE:  ONTARIO COUNTRY LANDFILL POST LANE ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # (716) 396-4482	SHIPPER  SYRACUSE LABEL 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	WEIGHT IN
		WEIGHT OUT
		BILLED WEIGHT

SHIPPER SIGNATURE <i>[Signature]</i>	PRINT NAME <u>Scott D. Nostrand - CH 431</u>
DRIVER SIGNATURE <i>[Signature]</i>	PRINT NAME <u>Raymond G. Grosse</u>

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE _____ (NO INITIALS)	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.
FIRM _____ DATE _____ BY _____ TIME _____ <input type="checkbox"/> AM <input type="checkbox"/> PM	



71186

# Earthwatch

WASTE SYSTEMS, INC.

3527 Harlem Road  
Buffalo, NY 14225  
(716) 833-3286  
Fax (716) 833-5670

## NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER  Samson Fuel & Trucking 1570 Emerson Street Rochester, NY 14606	DATE		TIME IN / OUT	
	4/19/95		8:35	8:55a
	EWS # 2512			
TRUCK # 4	TRAILER #			

CONSIGNEE:  ONTARIO COUNTRY LANDFILL POST LANE ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # (716) 396-4482	SHIPPER  SYRACUSE LABEL 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	<p>WEIGHT IN</p> <p>WEIGHT OUT</p> <p>BILLED WEIGHT</p>

SHIPPER SIGNATURE Scott D. Nostrand PRINT NAME Scott D. Nostrand C.H. ENGINEER

DRIVER SIGNATURE Tim Mulhern PRINT NAME Timothy Mulhern

SPECIAL INSTRUCTIONS:

FOR APPROVAL:

CONSIGNEE PRINT NAME \_\_\_\_\_

CONSIGNEE SIGN HERE \_\_\_\_\_  
(NO INITIALS)

RECEIVED  
ABOVE  
MATERIAL IN  
GOOD  
CONDITION

FIRM \_\_\_\_\_ DATE \_\_\_\_\_  
BY \_\_\_\_\_ TIME \_\_\_\_\_  AM  PM

Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.

The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.

1st Copy - Earthwatch

2nd Copy - Driver

3rd Copy - Land Fill

4th Copy Shipper

# Earthwatch

WASTE SYSTEMS, INC.

3527 Harlem Road  
 Buffalo, NY 14225  
 (716) 833-3286  
 Fax (716) 833-5670

71184

## NON-HAZARDOUS SOLID WASTE MANIFEST

TRANSPORTER Samson Fuel + Trucking 1570 Emerson St. Rochester, NY 14606	DATE	TIME IN / OUT	
	4/19/95	11:10A	12:30P
	EWS #		
TRUCK #	TRAILER #		

CONSIGNEE: ONTARIO COUNTRY LANDFILL POST LANE ROAD (RT 5/20) STANLEY, NEW YORK 14561 PHONE # (716) 396-4482	SHIPPER SYRACUSE LABEL 110 LUTHER AVENUE LIVERPOOL, NEW YORK 13088
-------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------

NO. PIECES	ARTICLES OR DESCRIPTION	WEIGHT
1	TRUCKLOAD OF NON-HAZARDOUS SOIL	WEIGHT IN WEIGHT OUT BILLED WEIGHT

SHIPPER SIGNATURE [Signature] PRINT NAME Scott D. Norman (716) 211-1001

DRIVER SIGNATURE [Signature] PRINT NAME [Signature]

SPECIAL INSTRUCTIONS:

FOR APPROVAL: CONSIGNEE PRINT NAME _____ CONSIGNEE SIGN HERE _____ (NO INITIALS)	Solid waste being interpreted to mean only solid waste or waste containing animal and vegetable matter, rubbish, trash, debris, ashes and metal non-toxic sludge and other waste materials which is not a radioactive volatile, highly flammable explosive toxic or hazardous nature as listed.
RECEIVED ABOVE MATERIAL IN GOOD CONDITION FIRM _____ DATE _____ BY _____ TIME _____ <input type="checkbox"/> AM <input type="checkbox"/> PM	The transporter herein named agrees to hold harmless and to indemnify EWS against all losses and claims as a result of shipment of any material not listed on this manifest.

1st Copy - Earthwatch

2nd Copy - Driver

3rd Copy - Land Fill

4th Copy Shipper

**Attachment III**  
**Site Remediation Summary Report**  
**(C&H Engineers, August, 22 1994)**

---

**SITE REMEDIATION SUMMARY REPORT**

**Syracuse Truck Sales/Syracuse Label Company  
DEC Spill No. 94-09529**

**(C & H Engineers Project No. 31404)**

**August 22, 1995**

**Prepared For:  
Mr. Peter Rhodes  
Syracuse Label Company  
110 Luther Avenue  
Liverpool, NY 13088**

**Prepared by:  
C & H Engineers, P.C.  
431 East Fayette Street  
Syracuse, NY 13202**

## TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
1	INTRODUCTION.....	1
	1.0 General.....	1
2	CONSTRUCTION REMEDIATION .....	3
	2.0 General.....	3
	2.1 Site Dewatering .....	3
	2.2 Soil Excavation.....	4
	2.2.1 Excavation Pit Clearance Sampling.....	6
	2.2.2 Staged Soil.....	7
	2.3 Building Construction Excavations.....	7
	2.4 Interceptor Trench.....	8
	2.5 Syracuse Label Building Subslab Soils.....	10
	2.6 Luther Avenue Utility Excavation .....	12
3	CONCLUSIONS AND RECOMMENDATIONS.....	14
	3.1 Summary of Findings .....	14
	3.2 Recommendations.....	17

### FIGURES AND ATTACHMENTS

- A. Remediation Site Plan - Figure 1
- B. Laboratory Results - Carbon Filter Effluent
- C. Remediation Excavation Pit Plan - Figure 2
- D. Results of Excavation Pit Clearance Sampling - Table 1
- E. Laboratory Results - Test Pit Clearance Soil Samples
- F. Laboratory Results - Staged Soil Samples
- G. Letter To DEC - July 11, 1995
- H. Laboratory Results - Footer Excavation Liquid
- I. Laboratory Results - Footer Excavation Trench Groundwater
- J. Results of Soil Vapor Collection Pipe Atmosphere Analysis
- K. Laboratory Results - Sub-Slab Soil Boring 11/9/94;  
Foundation Wall Seep; and  
Sub-Slab Soil Boring 6/28/95.
- L. Utility Excavation Staged Soil Disposal Manifest and Weigh Tickets
- M. Laboratory Results - Utility Excavation Staged Soil Pile

## SECTION 1 - INTRODUCTION

### 1.0 General

This report summarizes the remedial activities conducted on the former Syracuse Truck Sales and Syracuse Label Company properties due to the discovery of solvent and petroleum compounds in the subsurface soils of the site. The presence of the volatile organic compounds was reported to the New York State Department of Environmental Conservation (DEC), and the site was assigned Spill File No. 94-09529.

While conducting an Environmental Assessment of the former Syracuse Truck Sales property prior to transfer of the lot to Syracuse Label Company for construction of a warehouse structure, subsurface conditions of environmental concern were discovered along the property boundary between the Syracuse Truck Sales and Syracuse Label properties. As a result of the Environmental Assessment, test pit excavations were conducted on the Syracuse Truck Sales and Syracuse Label properties in October 1994. These test pits revealed the existence of petroleum and solvent contaminated soils to the north of the Syracuse Label Company building's west wing. Laboratory analysis of soil samples collected from the test pits identified kerosene compounds in the soils adjacent to the existing Syracuse Label building, and tetrachloroethene solvent in the soils to the north of the building, on the former Syracuse Truck Sales property. Based on the results of the test pits, a contaminated soil zone was defined to the north of the existing Syracuse Label structure.

Due to the identification of kerosene in soils adjacent to the building, and historic use of kerosene in the building by a previous owner, a soil vapor survey was conducted beneath the existing slab of the west wing of the Syracuse Label building. Kerosene-type petroleum products were detected in the soils beneath this structure. The test pit excavations and subslab soil survey were summarized in a Site Investigation Report and Construction Remediation Plan prepared by C & H Engineers in November of 1994. The report presented a remedial plan to excavate the contaminated soils to the north of the Syracuse Label building, in order to allow for transfer of the Syracuse Truck Sales property to Syracuse Label Company, and subsequent construction of a new warehouse building.

The DEC requested that the property owners (Syracuse Label Company and Mr. & Mrs. Everett Sharp) enter into a Petroleum Spill Stipulation Agreement for cleanup of the petroleum and solvent contaminated soils. The Site Investigation Report and Construction Remediation Plan was issued as part of the Stipulation Agreement and was approved by the DEC on December 1, 1994. The activities conducted during the remediation project, and the current state of the property are described in the following sections.

## SECTION 2 - CONSTRUCTION REMEDIATION

### 2.0 General

Soil excavation was initiated on December 1, 1994 in accordance with the Construction Remediation Plan. The excavation activities were conducted through December 6, 1994. The excavation was conducted adjacent to, and north of, the existing Syracuse Label building's west wing (see Figure 1). During the excavation, a photoionization detector (PID) was utilized to field screen soils for the presence of volatile organic vapors. Surficial soils in which no volatile organic compounds were detected with the PID, were staged to the side of the excavation for use as backfill. The soils with detectable volatile organic vapors were placed in a dump truck and transported to a soil staging area located on the northwestern portion of the site.

### 2.1 Site Dewatering

During the test pit excavations conducted in October of 1994, it was determined that a high groundwater table existed on the property (within three feet of the soil surface). In order to excavate soils below the groundwater table, a site dewatering well point would be installed adjacent to the northwest corner of the Syracuse Label building (see Figure 1). Discharge of water from the dewatering system was conducted in accordance with the Stipulation Agreement. The well point consisted of a vertical 3 foot diameter culvert pipe, which had been perforated, wrapped with a drainage filter fabric, and installed to a depth of approximately 14 feet into a pit that was backfilled with gravel. Groundwater was pumped from the culvert through two carbon filters connected in series, and discharged to a stormwater drainage ditch along Albion Avenue. The carbon filter drums were provided by Action Technical Services, and the groundwater pumping system started on November 30. The Stipulation Agreement allowed for the discharge of groundwater to the stormwater ditch, as long as water quality met the Wastewater Discharge Limits provided in the DEC's guidance document for Petroleum Spill Stipulation Agreements (Table 2 - Wastewater Limits for Surface Water Discharges). The DEC also required that tetrachloroethene concentrations in the wastewater be maintained below 5 parts per billion (ppb). In order to monitor the quality of water discharged from the carbon filtration system, a daily composite sample of groundwater discharged from the system was collected and analyzed for chlorinated and volatile organic compounds and pH (EPA Methods 8021 and 150.1).



The filtration system effluent data collected between November 30 and December 7, 1994 are presented in Attachment B. No volatile or chlorinated organic compounds were detected in the filter system effluent discharged to the surface water collection ditch during this project. This data verifies that the filtration system adequately removed residual petroleum and solvent compounds that may have been located in the groundwater pumped from the site.

## 2.2 Soil Excavation

Excavation of the petroleum and solvent contaminated soils from the property was initiated on December 1, 1994, adjacent to the Syracuse Label building. As indicated above, a PID was utilized to field screen soils for the presence of volatile organic compounds prior to moving soil to the contaminated soil staging pile. Soils from grade to a depth of approximately 2 feet were shown by field screening to be free of volatile organic vapors. These soils were staged adjacent to the excavation for use as backfill. Soils below 2 feet of grade showed indications of petroleum stains, and volatile organic compounds were detected with the PID. These soils were removed and staged as petroleum contaminated soil, on the northwestern portion of the Syracuse Label/Syracuse Truck Sales property.

The excavations were initiated adjacent to the west wing of the existing Syracuse Label building, to the east of the installed well point. Soils were excavated from an area which was approximately 10 feet wide and extended for 56 feet along the north side of the building (see Figure 2). The excavation pit was extended approximately 10 feet to the north of the structure until field screening no longer identified the presence of volatile organic compounds in the soils. The average depth of this excavation was 6 feet. Volatile organic compounds were detected at concentrations ranging from 2 to 20 parts per million (ppm) in the soils from the excavation. A petroleum sheen was noted on the soils removed from the area adjacent to the building footer. This sheen was similar to that observed during test pit excavations. Laboratory analysis of the test pit soil samples had identified the presence of kerosene in the soil. Upon removal of the stained soils, the base of the excavation was screened with a PID. PID readings ranged from 1 to 2 ppm, indicating the absence of significant petroleum compounds in the soils at this depth.

Test pit excavations conducted on the site had identified the presence of tetrachloroethene in a 10 to 15 foot wide strip of soil extending approximately 30 feet to the north of the kerosene contaminated soil area along the north of the building (described above). The PID was utilized to identify the location of the solvent plume at the north face of the kerosene excavation pit. The PID was also utilized to screen the surficial soils for indications of solvents. No volatile organic compounds were detected in the top 1 foot of soil from the solvent stained area, and the soil was stripped and staged adjacent to the excavation for use as backfill. At a depth of approximately 1 foot, solvent vapors were detected with the PID at a concentration of up to 20 ppm. Soils below 1 foot of depth were excavated and staged as solvent contaminated soil on the northwest portion of the property. The strip of solvent contaminated soil extended approximately 34 feet from the north wall of the Syracuse Label building. The soil strip was 18 feet wide along the north face of the kerosene excavation pit, and tapered to a width of 9 feet on the north. Soils within this area were excavated to depths of 8 to 9 feet. At this depth, the soil consisted of a mottled gray clay, and the PID detected pockets of organic vapors on the excavation pit floor.

A test pit was installed to 18 feet in the excavation floor to determine if contaminated soils extended significantly below the work area. PID readings were observed in soils from the base of the test pit ranging from 2 to 25 ppm. C & H Engineers collected a sample of soil from the deep test pit for laboratory analysis (see Section 2.2.1 below). Following the collection of this deep test pit soil sample, the test pit was backfilled.

Field screening identified the presence of volatile organic compounds at depths of up to 18 feet below the surface of the property. The areal extent of soils at this depth which are effected by volatile compounds is unknown, and it was determined that it was not practical to excavate soils on this property to unknown depth. The soil excavation was limited, therefore, to the 9 foot depth of the primary excavation pit.

### 2.2.1 Excavation Pit Clearance Sampling

In order to confirm that the remedial excavation had resulted in removal of the significant petroleum and solvent contaminated soils on the site (to a depth of 9 feet), the PID was used to field screen soils along the face of the excavation pits. The locations of the PID field screening soil samples are identified on Figure 2 and the results presented in Table 1. The field screening was conducted utilizing a head space analysis technique. Soil samples from the face of the excavation pit were placed in sealed plastic bags, and the atmosphere within the bag allowed to equilibrate with the soil for a period of 15 to 30 minutes. The PID meter was utilized to measure the concentration of organic vapors in the soil head space within the bag. Head space readings from these soil samples averaged 1 to 2 ppm. Three samples resulted in the detection of volatile organic vapors above 5 ppm. The field screening indicated that the majority of surficial contaminated soils on the site had been identified, and excavated for disposal.

C & H Engineers also installed four test pits within 2 to 3 feet of the edge of the excavation pits to determine if petroleum or solvent contaminated soils extended beyond the excavated areas. Test pits were installed to the northwest and northeast of the kerosene excavation pit, and to northwest and northeast of the solvent excavation pit (see Figure 2). A composite sample of soil was collected from each test pit and submitted for laboratory analysis of volatile and semi-volatile organic compounds by EPA Methods 8021 and 8270. The analytical results are summarized on Table 1, and the full Laboratory Reports presented in Attachment E.

Tetrachloroethene was detected in two of the four test pit clearance soil samples. This solvent compound was detected at concentrations of 4.9 and 1.0 ppb in the northeast solvent area and northwest kerosene area test pits, respectively. The concentration of solvent detected in these soils is significantly below DEC soil cleanup standards, and does not appear to be of significant environmental concern.

The composite soil sample collected from the deep test pit installed in the center of the solvent contaminated excavation pit was also analyzed. Tetrachloroethene, toluene, and trichloroethene were detected at concentrations of 78.0, 1.01, and 0.433 ppm, respectively. The concentration of solvent compounds detected in this test pit is higher than the concentration of solvent detected at the edges of

the remedial excavation pit, however, only tetrachloroethene was detected at a concentration which was above the DEC clean-up standard. As indicated above, due to the unknown depth of soils affected by the solvent, or the effect of the solvent on groundwater quality, no further excavation was conducted. No other volatile or semi-volatile organic compounds were detected in the clearance soil samples.

### 2.2.2 Staged Soil

The excavation of the petroleum and solvent contaminated soils from the Syracuse Label and former Syracuse Truck Sales property, resulted in the removal of 351 tons of contaminated soil. The soils were staged on, and covered by, plastic on the northwestern portion of the site, beyond the construction area. The staged soil was sampled and analyzed for its toxicity characteristic, ignitability, and reactivity, as required by the identified disposal site. The analytical results of the soil disposal sampling are presented in Attachment F. The soils did not exhibit ignitable or reactive characteristics. The toxicity characteristic leaching procedure (TCLP) analysis detected tetrachloroethene and barium, at concentrations of 0.007 and 0.570 ppm, in one composite soil sample, and barium at a concentration of 0.65 ppm in a second composite soil sample. The concentration of these compounds is below the hazardous waste regulatory level, indicating the soils could be disposed of as non-hazardous waste. The soils were approved for disposal at the Ontario County Landfill in Flint, New York, and removed from the site by Earthwatch Waste Systems on April 17, 18, and 19, 1994. Copies of the shipping manifests, weigh tickets, and invoices for soil disposal were forwarded to the DEC on July 11, 1995. A copy of the cover letter provided with this submission is presented in Attachment G.

### 2.3 Building Construction Excavations

As part of the Construction Remediation Plan, the excavation work conducted for the new building foundation was reviewed for indications of environmental concern on other portions of the property. The building and site contractors were instructed to contact C & H Engineers upon the discovery of soil conditions of potential environmental concern, and C & H Engineers observed the condition of the building footer excavations during the project. No conditions of significant environmental concern were identified on other portions of the property, with the exception of the area described below.

On December 19, 1995, C & H Engineers was notified by the site contractor of the presence of a green fluid in the footer excavation on the east side of the site (see Figure 2). This area is east of the solvent and petroleum excavation area, and is adjacent to the north wing of the existing Syracuse Label buildings. This area was formerly a parking lot. Based on the color of the fluid, it appeared to be residual antifreeze from a vehicle previously parked on the parking lot. No significant soil stains were observed along the face of the excavation where the green colored liquid was identified. C & H Engineers notified the DEC of the presence of the liquid, and indicated that the liquid would be contained in drums on the site, and analyzed to determine if it contained compounds of significant environmental concern. The liquid was pumped into three 55-gallon drums, and the soils below the liquid were excavated and staged with the other contaminated soils. A sample of the unknown liquid was collected and analyzed for volatile organic compounds by EPA Method 8021, and Total Glycols by Method ASP 89-9. No volatile organic compounds were identified within the fluid. Total Glycols were identified at a concentration of 0.27 ppm. The laboratory results are presented in Attachment H. Based on the absence of petroleum and solvent compounds within this fluid, and the removal of the fluid from the excavation, no further site remediation activities were conducted. The excavated soils were disposed of along with the other staged soils from the property, and the drummed fluid has been stored at Syracuse Label. Syracuse Label is proceeding with the laboratory analysis required for disposal of the drummed fluid.

#### **2.4 Interceptor Trench**

In order to prevent the transfer of kerosene compounds identified in the soils beneath the existing Syracuse Label building, into the remediated portion of the site located beneath the new warehouse structure, the Construction Remediation Plan included the installation of an interceptor trench system adjacent to the north face of the existing Syracuse Label foundation. The interceptor trench system was installed to allow for the potential collection of groundwater and soil vapors from below the new warehouse. The system includes a horizontal corrugated plastic drainage tile pipe, encased in a filter fabric mesh, installed below the base of the existing building foundation footer. This drainage pipe is connected to a vertical pipe, located to the northwest of the structure. This pipe extends into the new warehouse building. The interceptor trench system also includes a series of vertical monitoring well screens, placed at 5 foot intervals along the length of the Syracuse Label building, which are connected

to a common header pipe, that penetrates through the floor of the new warehouse. The purpose for the installation of this air header system is to allow for the collection of soil vapors, should petroleum vapors accumulate beneath the new warehouse building. Installation of the groundwater collection pipe system was initiated on December 7, 1994, and was completed on December 9, 1994. The soil vapor collection piping was installed on January 23, 1995 by the building site contractor. These systems were to be evaluated following construction of the warehouse.

On August 4, 1995, C & H Engineers visited the completed Syracuse Label warehouse building in order to collect a groundwater sample from the collection pipe system, and to evaluate the quality of air within the soil vapor collection system. Prior to collecting samples of groundwater from the collection pipe, the piping system was purged to remove stagnant groundwater. C & H Engineers utilized a submersible pump to remove groundwater from the collection pipe system. The groundwater was pumped into 55-gallon drums and is contained on site pending laboratory analysis, and eventual disposal. Approximately 150 gallons of groundwater were removed from the collection pipe prior to collecting the groundwater sample. At the start of the purging cycle, groundwater removed from the pipe was turbid. The turbidity decreased significantly after the removal of 100 gallons of groundwater from this system. At the conclusion of the groundwater purge, a disposable PVC bailer was utilized to collect a sample of groundwater from the collection pipe. The sample was placed within laboratory prepared containers and transported to Buck Environmental Laboratories for analysis of volatile and semi-volatile organic compounds by EPA Methods 8021 and 8270. The laboratory analytical results identified the detection of four volatile organic compounds within the groundwater from the collection pipe. The full laboratory results are presented in Attachment I. N-Butylbenzene, Cis-1,2-dichloroethene, Tetrachloroethene, and Trichloroethene were detected at concentration of 1.2, 12.8, 1.6, and 3.3 ppb, respectively. The concentrations of the detected compounds are below the DEC's groundwater standards, with the exception of Cis-1,2-dichloroethene which exceeds the DEC's general principal organic contaminant standard of 5 ppb (see Section 3). No other volatile organic or semi-volatile compounds were detected in the groundwater sample.

C & H Engineers also evaluated the quality of the air within the soil vapor collection piping with a PID meter. An air sampling pump was connected to the air header pipe, in order to purge the atmosphere located within the piping system. The air sampling pump was run for approximately one hour at a volumetric flow rate of 3.6 liters per minute. This resulted in the removal of 3 to 5 air volumes prior to sampling. At the conclusion of the purging cycle, the PID meter was utilized to analyze the concentration of volatile organic vapors within the atmosphere of the header system at periodic intervals for 1.5 hours following the purge (see Table 2 - Attachment J). The range of volatile organic compounds detected by the PID meter was 0.4 to 0.6 ppm, which is not significantly above the background detection limit for this meter. Based on the air header system analysis, it does not appear that significant volatile organic compounds are accumulating within the vadose zone soils located below the new warehouse structure.

## **2.5 Syracuse Label Building Subslab Soils**

The November 18, 1994, Site Investigation Report presented the results of a soil vapor survey conducted below the floor of the west wing of the Syracuse Label facility. The purpose of conducting the soil vapor survey was to determine if contaminated soils were located below the building due to the former reported use of this structure as an undercoating facility, where kerosene was used to remove undercoating residuals from building floor surfaces. The soil vapor survey identified the presence of volatile organic compounds in six of eight subslab borings installed through the building floor slab. In order to quantify the petroleum compounds located within the soils below this building, C & H Engineers collected a composite sample of soil from soil vapor survey borings 1 through 6 (see Figure 1). This composite soil sample was submitted for laboratory analysis of volatile and semi-volatile organic compounds by EPA Methods 8021 and 8270. The laboratory analysis results were not available for the November 18, 1994 report, but are presented in Attachment K.

Nine volatile and semi-volatile organic compounds were detected in the soils collected from below the floor slab in November. All of the detected compounds were observed at concentrations which exceed the DEC Spill Technology and Remediation Series Memo #1 (STARS) Petroleum Contaminated Soil Guidance Values. The concentration of petroleum compounds observed in these soils, suggests that groundwater quality may be affected by the petroleum products.

While conducting the remediation excavations to the north of the building in December 1994, and upon the removal of soil adjacent to the building foundation, fluid was observed to seep from the building foundation into the excavation pit. This fluid was likely groundwater which infiltrated beneath the subject building. C & H Engineers collected a sample of the water seeping from the building foundation. This sample was analyzed for volatile and chlorinated organic compounds by EPA Method 8021. Four chlorinated volatile organic compounds were detected by the analysis. The laboratory report is presented in Attachment K. Tetrachloroethene, Trichloroethene, and trans 1,2-dichloroethene were present at concentrations which exceed groundwater standards. These compounds are indicative of solvent contamination. It is not known if the solvents were present in the water seeping from the foundation due to the presence of solvent compounds in the soils located to the north of the Syracuse Label building (and movement of contaminated groundwater beneath the building), or if soils below the foundation may have been the source of the contaminated solvent products.

In order to determine if soils beneath the existing Syracuse Label structure contained solvent products, additional subslab soil samples were collected from the site on June 28, 1995. The soil samples were collected from the vapor survey soil borings initially installed through the floor in November 1994. One composite soil sample was collected from boring no. 4, which is located adjacent to the collection sump on the south side of the Syracuse Label production facility. The second soil sample was composited from borings 1, 2, 3, 5, and 6, located in the central and northern portions of the production facility. Environmental Products and Services, Inc., the subcontractor conducting the soil sampling activities, indicated that free petroleum product was visible on the soil while collecting the sample from boring no. 4. The soil samples were submitted to Environmental Laboratory Services for analysis of chlorinated organic compounds by EPA Method 8021.

Four volatile organic compounds were detected in the soil sample from boring no. 4. Five volatile organic compounds were detected in the soil sample collected from borings 1, 2, 3, 5, and 6. The full laboratory reports are presented in Attachment K. The concentration of organic compounds detected from these soil samples exceeds the DEC STARS Guidance Values for petroleum contaminated soils.



The detected volatile compounds are indicative of petroleum (possibly kerosene) contamination. No chlorinated organic compounds were detected in the soil samples. The detection limits for the analyses were 69 ppb for the sample from boring no. 4, and 64 ppb for the sample from borings 1, 2, 4, 5, and 6.

## **2.6 Luther Avenue Utility Excavation**

During excavations to install a new natural gas service line to the Syracuse Label facility in May of 1995, Niagara Mohawk Power Corporation discovered an area of petroleum contaminated soil adjacent to the Syracuse Label facility on Luther Avenue. Stained soils were observed surrounding a pipe sleeve for the existing natural gas service line, and a brown sheen was visible on groundwater which collected in the base of the excavation. Niagara Mohawk excavated the stained soils and staged them on plastic on the northwestern portion of the Syracuse Label property, for eventual disposal by Syracuse Label. Approximately 20 tons of petroleum contaminated soil were removed from this excavation.

Syracuse Label hired Clean Harbors of New York to characterize, transport, and dispose of the petroleum contaminated soils. Clean Harbors removed the soil from the property on July 7, 1995. The soil was disposed of at the BFI Landfill in Niagara Falls, New York. The disposal manifests and weight tickets are presented in Attachment L.

It is unknown if the petroleum contaminated soil removed from the utility excavation was associated with the soils located beneath the Syracuse Label facility, or related to a release from a previously existing underground storage tank located to the west of the utility excavation, which was removed from the property in 1992. In order to quantify the petroleum contamination identified in the utility excavation and assess its affect on groundwater quality, and to determine if chlorinated solvents were observed within this soil, C & H Engineers collected a composite sample of the staged soil for laboratory analysis by EPA Method 8021 and DOH Method 310-13. Six volatile organic compounds associated with petroleum products were detected within the soil sample. The laboratory report is presented in Attachment M. The concentration of petroleum hydrocarbons identified in the soil sample

do not exceed the DEC's STARS Guidance Values for petroleum contaminated soil. Based on this analysis, it appears that the petroleum compounds surrounding the utility service line consisted of residual petroleum compounds which are not likely to affect groundwater quality. No petroleum hydrocarbons were detected by NYS DOH Method 310-13.

While reviewing the DEC Oil Spill files related to the Syracuse Label property, C & H Engineers noted that Spill no. 9204555 remains Active at the site. Based on the information in the DEC file, it appears that this spill is associated with the former leaking underground storage tank removed from the site in 1992. As indicated above, it is not known if the petroleum contaminated soils identified within the utility excavation are related to the former underground petroleum storage tank or other sources. Remedial activities conducted following removal of the tank in 1992, involved the excavation of contaminated soils associated with this tank. The removal of the soils should have resulted closure of this spill file. It is unknown if the DEC will require further activities regarding this spill file.

spill File

solvents petroleum

test pits 1999 petroleum/solvent impacted soil  
kerosene PCE

10' x 56' x 6'

on former Spruce  
Truck Sales

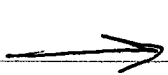
Contaminant zone north of Spruce label

remedy completed under DEC oversight

Groundwater within 3'

dewatered w/ carbon filtration and  
discharge to stormwater ditch.

0-2' lys ↓ PID



Excavated pit to 10' found PID impacts

No test pits or samples along SL side

351 fons removed

## SECTION 3 - CONCLUSIONS AND RECOMMENDATIONS

### 3.1 Summary of Findings

The site investigation and remedial activities conducted at the Syracuse Label and former Syracuse Truck Sales property have resulted in the removal of source contaminated soils from an area of the property where a new warehouse building was constructed. Residual solvent compounds may remain in soils at a depth of greater than 9 feet to the north of the building and petroleum compounds may remain in soils beneath the existing building. Based on the results of the remedial activities conducted in December 1994, and the sampling activities conducted through August, 1995, C & H Engineers offers the following summary of activities and results:

#### Site Soil Remediation - New Warehouse Area

- Remedial excavation resulted in the removal of 351 tons of petroleum and solvent contaminated soils from a depth of up to 9 feet from an area to the north of the original Syracuse Label building (location of new warehouse structure).
- Carbon filtration of the groundwater removed to dewater the excavation site was effective in removing residual petroleum and/or solvent compounds.
- Staged Soil was analyzed and shown to be non-hazardous soil. Soil was disposed of at the Ontario County Landfill by Earthwatch Waste Systems, Inc.
- Clearance soil samples from the edge of the excavated zone document the absence of solvent and petroleum products above DEC clean-up criteria.

- Soils beneath the excavation zone may contain solvent compounds which exceed DEC clean-up criteria.
- The impact of residual solvents and petroleum in the soils on the local groundwater quality is unknown.

#### New Warehouse Foundation Excavation

- The “green liquid” observed in the building footer excavation was contained in drums for subsequent disposal. No volatile organic compounds were detected in the liquid.
- The detection of Total Glycols in the water suggests that the “green liquid” may be antifreeze from a former parked vehicle.
- The soil excavated from the “green liquid” area was staged on site, and disposed of with the remaining contaminated soils.
- No other soil was noted in the building foundation excavation, that is of potential environmental concern.

#### Interceptor Trench - North of Original Building

- A groundwater collection and soil vapor collection piping system have been installed as part of an Interceptor trench system, below the floor of the new warehouse building, adjacent to the north wall of the existing Syracuse Label building.
- Tetrachloroethene was detected in a sample of groundwater from the collection pipe at a concentration below the DEC groundwater standards.

- Cis-1,2-Dichlorethene was detected in the groundwater from the collection pipe at a concentration exceeding the DEC principal organic contaminant standard of 5 parts per billion. No individual groundwater standard has been promulgated for this compound.
- The groundwater quality results do not indicate the transfer of petroleum compounds (kerosene) from the soils beneath the building, to the remediated area below the new warehouse.
- Significant concentrations of volatile organic vapors were not observed within the atmosphere removed from the subsurface soil vapor collection system.

#### Soils Below Existing Syracuse Label Building

- Petroleum compounds were detected in soils from beneath the existing west wing of the Syracuse Label building, at concentrations which exceed DEC petroleum contaminated soil guidance values.
- A visible petroleum sheen was reported in the soil near boring 4 (next to floor drain sump).
- No solvent compounds were detected in the soils below the Syracuse Label building.
- The impact of petroleum compounds detected in the sub-slab soils on local groundwater quality is unknown.

#### Luther Avenue Utility Excavation

- Petroleum compounds were detected in soil removed from a Niagara Mohawk utility excavation on Luther Avenue, at concentrations below the DEC petroleum contaminated soil guidance values.

- It is not known if the petroleum stained soils in the utility excavation are related to the petroleum stained soils detected below the Syracuse Label building, the former adjacent underground storage tank, or both.
- The DEC spill file associated with the adjacent underground storage tank remains Active, although closure of this file should be possible based on sampling conducted pursuant to remedial activities conducted in May of 1995.

### **3.2 RECOMMENDATIONS**


Based on the results of the remedial and investigative activities conducted from October 1994 to August 1995, C & H Engineers offers the following recommendations:

1. C & H Engineers recommends that this report be submitted to the DEC Region 7 Division of Spills Management to document the remedial activities conducted as part of the Petroleum Spill Stipulation Agreement between the DEC, Syracuse Label, and Mr. & Mrs. Everett Sharp.
2. Based on the presence of tetrachloroethene solvent in deep soils below the new warehouse building, the detection of a solvent compound (Cis-1,2-dichloroethene) above DEC groundwater standards in the shallow groundwater beneath the new warehouse, and the detection of petroleum compounds beneath the Syracuse Label Building, C & H Engineers recommends that a groundwater investigation be performed surrounding the Syracuse Label facility, in order to determine if the petroleum compounds detected in the soils and groundwater on the site are affecting local groundwater quality.

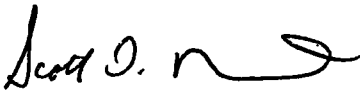
3. The DEC Spill file related to the former underground storage tank should be reviewed (Spill No. 9204555) to determine if additional activities are required by the DEC, in order to close the file. If no additional activities are required, Syracuse Label should request that the DEC close the spill file.
  
4. Due to the detection of a volatile organic compound above the DEC groundwater quality standard, the groundwater purged from the interceptor trench collection pipe system should be analyzed and disposed of in accordance with applicable state and federal regulations.

Respectfully submitted,

C & H ENGINEERS, P.C.



Thomas W. Heenan, P.E.  
Principal



Scott D. Nostrand  
Senior Project Engineer

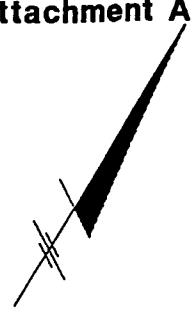
SDN:alb

Enclosures

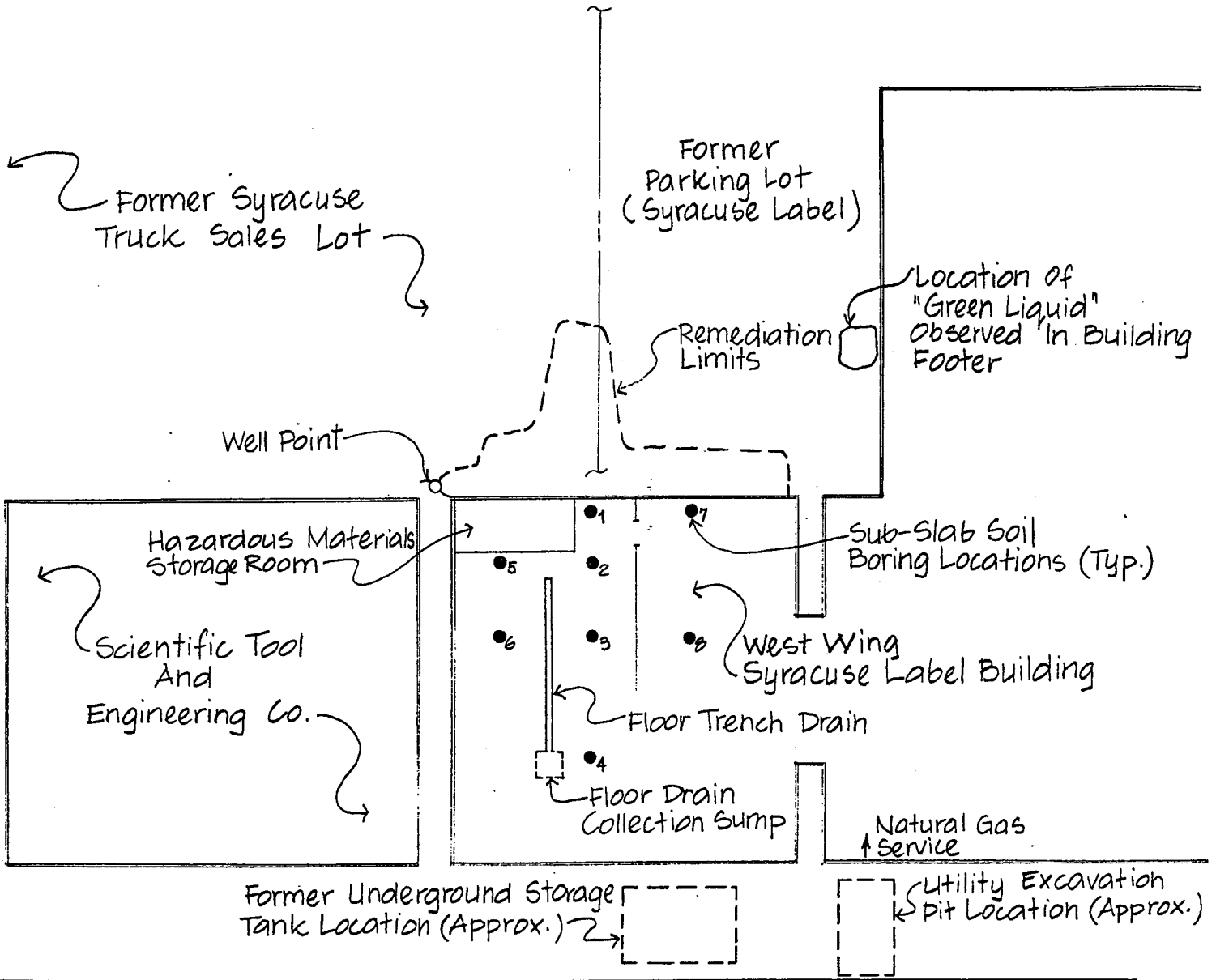


**ATTACHMENT A**

**REMEDIATION SITE PLAN - FIGURE 1**



ALBION AVENUE



LUTHER AVENUE

- Soil Vapor Locations

REMEDIATION SITE PLAN - FIGURE 1

Syracuse Label/ Syracuse Truck Sales

Scale: 1" = 30'

**ATTACHMENT B**

**LABORATORY RESULTS - CARBON FILTER EFFLUENT**

**BUCK ENVIRONMENTAL LABORATORIES INC.**  
ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045

P.O. BOX 5150  
607-753-3403

**LABORATORY REPORT**  
Lab Log No: 9411336

C & H ENGINEERS, P.C.

Client: **C & H Engineers**  
**431 East Fayette Street**  
**Syracuse, NY 13202**  
Site: Syracuse Label

Report Date: 12/01/94  
Sampling Date: 11/30/94  
Sampled By: Scott Nostrand  
Date Received: 11/30/94  
Analyzed by: EAC, 11/30/94

**Sample ID: Carbon Filtration Effluent**

**VOLATILES BY METHOD EPA 8021**

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/l	1.0	nd
Bromobenzene	108-86-1	ug/l	1.0	nd
Bromochloromethane	74-97-5	ug/l	1.0	nd
Bromodichloromethane	75-27-4	ug/l	1.0	nd
Bromoform	75-25-2	ug/l	1.0	nd
Bromomethane	74-83-9	ug/l	1.0	nd
n-Butylbenzene	104-51-8	ug/l	1.0	nd
sec-Butylbenzene	135-98-8	ug/l	1.0	nd
tert-Butylbenzene	98-06-6	ug/l	1.0	nd
Carbon Tetrachloride	56-23-5	ug/l	1.0	nd
Chlorobenzene	108-90-7	ug/l	1.0	nd
Chloroethane	75-00-3	ug/l	1.0	nd
Chloroform	67-66-3	ug/l	1.0	nd
Chloromethane	74-87-3	ug/l	1.0	nd
2-Chlorotoluene	95-49-8	ug/l	1.0	nd
4-Chlorotoluene	106-43-4	ug/l	1.0	nd
Dibromochloromethane	124-48-1	ug/l	1.0	nd
1,2-Dibromo-3-chloropropan	96-12-8	ug/l	1.0	nd
1,2-Dibromoethane	106-93-4	ug/l	1.0	nd
Dibromomethane	74-95-3	ug/l	1.0	nd
1,2-Dichlorobenzene	95-50-1	ug/l	1.0	nd
1,3-Dichlorobenzene	541-73-1	ug/l	1.0	nd
1,4-Dichlorobenzene	106-46-7	ug/l	1.0	nd
Dichlorodifluoromethane	75-71-8	ug/l	1.0	nd
1,1-Dichloroethane	75-34-3	ug/l	1.0	nd
1,2-Dichloroethane	107-06-2	ug/l	1.0	nd
1,1-Dichloroethene	75-35-4	ug/l	1.0	nd
cis-1,2-Dichloroethene	156-59-4	ug/l	1.0	nd
trans-1,2-Dichloroethene	156-60-5	ug/l	1.0	nd
1,2-Dichloropropane	78-87-5	ug/l	1.0	nd
1,3-Dichloropropane	142-28-9	ug/l	1.0	nd
2,2-Dichloropropane	590-20-7	ug/l	1.0	nd
1,1-Dichloropropene	563-58-6	ug/l	1.0	nd
cis-1,3-Dichloropropene	10061-01-5	ug/l	1.0	nd
trans-1,3-Dichloropropene	10061-02-6	ug/l	1.0	nd
Ethylbenzene	100-41-4	ug/l	1.0	nd
Hexachlorobutadiene	87-68-3	ug/l	1.0	nd
Isopropylbenzene	98-82-8	ug/l	1.0	nd
p-Isopropyltoluene	99-87-6	ug/l	1.0	nd
Methylene Chloride	75-09-2	ug/l	1.0	nd
Naphthalene	91-20-3	ug/l	1.0	nd
Propylbenzene	103-65-1	ug/l	1.0	nd
Styrene	100-42-5	ug/l	1.0	nd
1,1,1,2-Tetrachloroethane	630-20-6	ug/l	1.0	nd
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	1.0	nd
Tetrachloroethene	127-18-4	ug/l	1.0	nd
Toluene	108-88-3	ug/l	1.0	nd
1,2,3-Trichlorobenzene	87-61-6	ug/l	1.0	nd
1,2,4-Trichlorobenzene	120-82-1	ug/l	1.0	nd
1,1,1-Trichloroethane	71-55-6	ug/l	1.0	nd
1,1,2-Trichloroethane	79-00-5	ug/l	1.0	nd
Trichloroethene	79-01-6	ug/l	1.0	nd
Trichlorofluoromethane	75-69-4	ug/l	1.0	nd
1,2,3-Trichloropropane	96-18-4	ug/l	1.0	nd
1,2,4-Trimethylbenzene	95-63-6	ug/l	1.0	nd
1,3,5-Trimethylbenzene	108-67-8	ug/l	1.0	nd
Vinyl Chloride	75-01-4	ug/l	1.0	nd
o-Xylene	95-47-6	ug/l	1.0	nd
m,p-Xylenes	108-38-3/1	ug/l	1.0	nd

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

*John Seaman*  
Laboratory Director  
ELAP ID - 10795

**CHAIN OF CUSTODY RECORD**

CLIENT C-H Engineers  
 ADDRESS 431 E. Fayette St  
 PHONE NO. 315 472-6980  
 REPORT TO ATTN: Scott Nostrand

NORMAL QA/QC  
 PREMIUM QA/QC  
 NORMAL TURNAROUND  
 EXPEDITE AT PREMIUM  
 CLIENT AUTHORIZ. SIGN.

X  
X - 1 day

PROJECT NAME Sydney Label  
 PO NO. 31404  
 SAMPLED BY Scott Nostrand

**ANALYSIS REQUESTED**

DATE	TIME	LOCATION	ANALYSIS REQUESTED					
			MATRIX (AIR, SOLID, WATER)	GRAB OR COMPOSITE	NUMBER OF CONTAINERS	VOLUME OF CONTAINERS	PRESERVATIVE USED	PH
11:30	11:45 AM	Carbon Filtration Effluent	M	G	2	500A	HCL	8021-1111

DATE	TIME	RELINQUISHED BY	ACCEPTED BY	ADDITIONAL COMMENTS
11:30	11:55 A	<u>Scott Nostrand</u>	<u>Keely Kindala</u>	

3845 ROUTE 11 SOUTH, P.O. BOX 5150  
 CORTLAND, N.Y. 13045 607-753-3403

Client: **C & H Engineers**  
**431 East Fayette Street**  
**Syracuse, NY 13202**  
 Site: Syracuse Label

Report Date: 12/02/94  
 Sampling Date: 12/01/94  
 Sampled By: SDN  
 Date Received: 12/01/94  
 Analyzed by: EAC, 12/01/94

**Sample ID: Effluent Composite**

**VOLATILES BY METHOD EPA 8021**

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/l	1.0	nd
Bromobenzene	108-86-1	ug/l	1.0	nd
Bromochloromethane	74-97-5	ug/l	1.0	nd
Bromodichloromethane	75-27-4	ug/l	1.0	nd
Bromoform	75-25-2	ug/l	1.0	nd
Bromomethane	74-83-9	ug/l	1.0	nd
n-Butylbenzene	104-51-8	ug/l	1.0	nd
sec-Butylbenzene	135-98-8	ug/l	1.0	nd
tert-Butylbenzene	98-06-6	ug/l	1.0	nd
Carbon Tetrachloride	55-23-5	ug/l	1.0	nd
Chlorobenzene	108-90-7	ug/l	1.0	nd
Chloroethane	75-00-3	ug/l	1.0	nd
Chloroform	67-66-3	ug/l	1.0	nd
Chloromethane	74-87-3	ug/l	1.0	nd
2-Chlorotoluene	95-49-8	ug/l	1.0	nd
4-Chlorotoluene	106-43-4	ug/l	1.0	nd
Dibromochloromethane	124-48-1	ug/l	1.0	nd
1,2-Dibromo-3-chloropropan	96-12-8	ug/l	1.0	nd
1,2-Dibromoethane	106-93-4	ug/l	1.0	nd
Dibromomethane	74-95-3	ug/l	1.0	nd
1,2-Dichlorobenzene	95-50-1	ug/l	1.0	nd
1,3-Dichlorobenzene	541-73-1	ug/l	1.0	nd
1,4-Dichlorobenzene	106-46-7	ug/l	1.0	nd
Dichlorodifluoromethane	75-71-8	ug/l	1.0	nd
1,1-Dichloroethane	75-34-3	ug/l	1.0	nd
1,2-Dichloroethane	107-06-2	ug/l	1.0	nd
1,1-Dichloroethene	75-35-4	ug/l	1.0	nd
cis-1,2-Dichloroethene	156-59-4	ug/l	1.0	nd
trans-1,2-Dichloroethene	156-60-5	ug/l	1.0	nd
1,2-Dichloropropane	78-87-5	ug/l	1.0	nd
1,3-Dichloropropane	142-28-9	ug/l	1.0	nd
2,2-Dichloropropane	590-20-7	ug/l	1.0	nd
1,1-Dichloropropene	563-58-6	ug/l	1.0	nd
cis-1,3-Dichloropropene	10061-01-5	ug/l	1.0	nd
trans-1,3-Dichloropropene	10061-02-6	ug/l	1.0	nd
Ethylbenzene	100-41-4	ug/l	1.0	nd
Hexachlorobutadiene	87-68-3	ug/l	1.0	nd
Isopropylbenzene	98-82-8	ug/l	1.0	nd
p-Isopropyltoluene	99-87-6	ug/l	1.0	nd
Methylene Chloride	75-09-2	ug/l	1.0	nd
Naphthalene	91-20-3	ug/l	1.0	nd
Propylbenzene	103-65-1	ug/l	1.0	nd
Styrene	100-42-5	ug/l	1.0	nd
1,1,1,2-Tetrachloroethane	630-20-6	ug/l	1.0	nd
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	1.0	nd
Tetrachloroethene	127-18-4	ug/l	1.0	nd
Toluene	108-88-3	ug/l	1.0	nd
1,2,3-Trichlorobenzene	87-61-6	ug/l	1.0	nd
1,2,4-Trichlorobenzene	120-82-1	ug/l	1.0	nd
1,1,1-Trichloroethane	71-55-6	ug/l	1.0	nd
1,1,2-Trichloroethane	79-00-5	ug/l	1.0	nd
Trichloroethene	79-01-6	ug/l	1.0	nd
Trichlorofluoromethane	75-69-4	ug/l	1.0	nd
1,2,3-Trichloropropane	96-18-4	ug/l	1.0	nd
1,2,4-Trimethylbenzene	95-63-6	ug/l	1.0	nd
1,3,5-Trimethylbenzene	108-67-8	ug/l	1.0	nd
Vinyl Chloride	75-01-4	ug/l	1.0	nd
o-Xylene	95-47-6	ug/l	1.0	nd
m,p-Xylenes	108-38-3/1	ug/l	1.0	nd

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

*John Deane*  
 Laboratory Director  
 ELAP ID - 10795

**BUCK ENVIRONMENTAL**  
**LABORATORIES INC.**  
ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045

P.O. BOX 5150  
607-753-3403

**LABORATORY REPORT**  
**Lab Log No: 9412017**

Client: C & H Engineers  
431 East Fayette Street  
Syracuse, NY 13202

Report Date: December 2, 1994  
Sampling Date: 12/01/94  
Sampled By: SDN  
Date Received: 12/01/94

Site: Syracuse Label

Sample ID: Effluent

TEST	METHOD	ANALYZED	BY	UNITS	DL	RESULT
pH	150.1/9040	12/02/94	TRA	units	.1	8.08

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

  
Laboratory Director  
ELAP ID - 10795

## CHAIN OF CUSTODY RECORD

CLIENT C-11 Engineers  
 ADDRESS 431 E. Fayette St  
Syracuse NY 13202  
 PHONE NO. 315 472 6980  
 REPORT TO ATTN: Scott Nostrand

NORMAL QA/QC  
 PREMIUM QA/QC  
 NORMAL TURNAROUND  
 EXPEDITE AT PREMIUM  
 CLIENT AUTHORIZ. SIGN. [Signature]

PROJECT NAME Syncore Jabel  
 PO NO. 31404  
 SAMPLED BY SON

### ANALYSIS REQUESTED

DATE	TIME	LOCATION	ANALYSIS REQUESTED															
			MATRIX (AIR, SOLID, WATER)	COMPOSITE	NUMBER OF CONTAINERS	VOLUME OF CONTAINERS	PREPRESVATIVE	USED										
11:30	3:30p	Effluent 1013 composite																
11:30	5:20p	Effluent 213 } TO 23																
12-1	8:00am	Effluent 3013																
12-1	8:00am	Effluent																
12-1	9:15A	Wall Scarp																

DATE	TIME	RELINQUISHED BY	ACCEPTED BY	ADDITIONAL COMMENTS
12/1	10:30	1 [Signature]	1 [Signature]	Wall Scarp - 1 week turnaround
12/1	10:50	2 [Signature]	2 [Signature]	others - 24 hours
12/1	10:50	3 [Signature]	3	
		4	4	



**BUCK ENVIRONMENTAL LABORATORIES INC.**

ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045P.O. BOX 5150  
607-753-3403Client: *C & H Engineers*  
*431 East Fayette Street*  
*Syracuse, NY 13202*  
Site: Syracuse Label**LABORATORY REPORT**  
Lab Log No: 9412036Report Date: 12/06/94  
Sampling Date: 12/02/94  
Sampled By: SDN  
Date Received: 12/02/94  
Analyzed by: EAC, 12/03/94**Sample ID: Effluent - Composite of 4****VOLATILES BY METHOD EPA 8021**

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/l	1.0	nd
Bromobenzene	108-86-1	ug/l	1.0	nd
Bromochloromethane	74-97-5	ug/l	1.0	nd
Bromodichloromethane	75-27-4	ug/l	1.0	nd
Bromoform	75-25-2	ug/l	1.0	nd
Bromomethane	74-83-9	ug/l	1.0	nd
n-Butylbenzene	104-51-8	ug/l	1.0	nd
sec-Butylbenzene	135-98-8	ug/l	1.0	nd
tert-Butylbenzene	98-06-6	ug/l	1.0	nd
Carbon Tetrachloride	56-23-5	ug/l	1.0	nd
Chlorobenzene	108-90-7	ug/l	1.0	nd
Chloroethane	75-00-3	ug/l	1.0	nd
Chloroform	67-66-3	ug/l	1.0	nd
Chloromethane	74-87-3	ug/l	1.0	nd
2-Chlorotoluene	95-49-8	ug/l	1.0	nd
4-Chlorotoluene	106-43-4	ug/l	1.0	nd
Dibromochloromethane	124-48-1	ug/l	1.0	nd
1,2-Dibromo-3-chloropropan	96-12-8	ug/l	1.0	nd
1,2-Dibromoethane	106-93-4	ug/l	1.0	nd
Dibromomethane	74-95-3	ug/l	1.0	nd
1,2-Dichlorobenzene	95-50-1	ug/l	1.0	nd
1,3-Dichlorobenzene	541-73-1	ug/l	1.0	nd
1,4-Dichlorobenzene	106-46-7	ug/l	1.0	nd
Dichlorodifluoromethane	75-71-8	ug/l	1.0	nd
1,1-Dichloroethane	75-34-3	ug/l	1.0	nd
1,2-Dichloroethane	107-06-2	ug/l	1.0	nd
1,1-Dichloroethene	75-35-4	ug/l	1.0	nd
cis-1,2-Dichloroethene	156-59-4	ug/l	1.0	nd
trans-1,2-Dichloroethene	156-60-5	ug/l	1.0	nd
1,2-Dichloropropane	78-87-5	ug/l	1.0	nd
1,3-Dichloropropane	142-28-9	ug/l	1.0	nd
2,2-Dichloropropane	590-20-7	ug/l	1.0	nd
1,1-Dichloropropene	563-58-6	ug/l	1.0	nd
cis-1,3-Dichloropropene	10061-01-5	ug/l	1.0	nd
trans-1,3-Dichloropropene	10061-02-6	ug/l	1.0	nd
Ethylbenzene	100-41-4	ug/l	1.0	nd
Hexachlorobutadiene	87-68-3	ug/l	1.0	nd
Isopropylbenzene	98-82-8	ug/l	1.0	nd
p-Isopropyltoluene	99-87-6	ug/l	1.0	nd
Methylene Chloride	75-09-2	ug/l	1.0	nd
Naphthalene	91-20-3	ug/l	1.0	nd
Propylbenzene	103-65-1	ug/l	1.0	nd
Styrene	100-42-5	ug/l	1.0	nd
1,1,1,2-Tetrachloroethane	630-20-6	ug/l	1.0	nd
1,1,1,2,2-Tetrachloroethane	79-34-5	ug/l	1.0	nd
Tetrachloroethene	127-18-4	ug/l	1.0	nd
Toluene	108-88-3	ug/l	1.0	nd
1,2,3-Trichlorobenzene	87-61-6	ug/l	1.0	nd
1,2,4-Trichlorobenzene	120-82-1	ug/l	1.0	nd
1,1,1-Trichloroethane	71-55-6	ug/l	1.0	nd
1,1,2-Trichloroethane	79-00-5	ug/l	1.0	nd
Trichloroethene	79-01-6	ug/l	1.0	nd
Trichlorofluoromethane	75-69-4	ug/l	1.0	nd
1,2,3-Trichloropropane	96-18-4	ug/l	1.0	nd
1,2,4-Trimethylbenzene	95-63-6	ug/l	1.0	nd
1,3,5-Trimethylbenzene	108-67-8	ug/l	1.0	nd
Vinyl Chloride	75-01-4	ug/l	1.0	nd
o-Xylene	95-47-6	ug/l	1.0	nd
m,p-Xylenes	108-38-3/1	ug/l	1.0	nd

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.


  
Laboratory Director  
ELAP ID - 10795

**BUCK ENVIRONMENTAL**  
**LABORATORIES INC.**  
ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045

P.O. BOX 5150  
607-753-3403

**LABORATORY REPORT**

Lab Log No: 9412036

Client: C & H Engineers  
431 East Fayette Street  
Syracuse, NY 13202

Report Date: December 6, 1994  
Sampling Date: 12/02/94  
Sampled By: SDN  
Date Received: 12/02/94

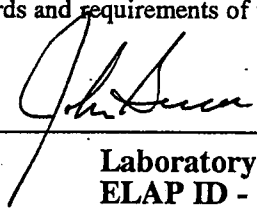
Site: Syracuse Label

Sample ID: Effluent

TEST	METHOD	ANALYZED	BY	UNITS	DL	RESULT
pH	150.1/9040	12/05/94	TRA	units	.1	8.12

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



Laboratory Director  
ELAP ID - 10795

**CHAIN OF CUSTODY RECORD**

CLIENT: CH Engineers      NORMAL QA/QC:       PREMIUM QA/QC:

ADDRESS: \_\_\_\_\_      NORMAL TURNAROUND: \_\_\_\_\_      EXPEDITE AT PREMIUM: \_\_\_\_\_

PHONE NO.: 315 472 6980      CLIENT AUTHORIZ. SIGN: [Signature]

REPORT TO ATTN: Scott Neshard

PROJECT NAME: Syracuse Label

PO NO.: 314104

SAMPLED BY: SON

**ANALYSIS REQUESTED**

DATE	TIME	LOCATION	COMPOSITE	MATRIX (AIR, SOLID, WATER)	GRAB OR COMPOSITE	NUMBER OF CONTAINERS	VOLUME OF CONTAINERS	CONTAINERS PRESERVATIVE USED
12.7	1:00P	Effluent 1014	X	W	G	2		MCC
12.8	4:00P	Effluent 2014	X	W	G	2		
12.2	8:00A	Effluent 394	X	W	G	2		
12.2	11:15A	Effluent 494	X	W	G	2		
		COMPOSITE	X		C	2		
12.2	11:15A	Effluent	X	W	G	1		none

DATE	TIME	RELINQUISHED BY	ACCEPTED BY	ADDITIONAL COMMENTS
12.2	11:50A	[Signature]	K. Kuntzella	

Client: *C & H Engineers*  
 431 East Fayette Street  
 Syracuse, NY 13202  
 Site: Syracuse Label

Report Date: 12/06/94  
 Sampling Date: 12/05/94  
 Sampled By: SDN  
 Date Received: 12/05/94  
 Analyzed by: EAC, 12/06/94

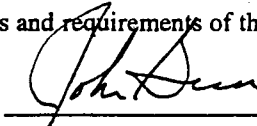
**Sample ID: Effluent Composite**

**VOLATILES BY METHOD EPA 8021**

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/l	1.0	nd
Bromobenzene	108-86-1	ug/l	1.0	nd
Bromochloromethane	74-97-5	ug/l	1.0	nd
Bromodichloromethane	75-27-4	ug/l	1.0	nd
Bromoform	75-25-2	ug/l	1.0	nd
Bromomethane	74-83-9	ug/l	1.0	nd
n-Butylbenzene	104-51-8	ug/l	1.0	nd
sec-Butylbenzene	135-98-8	ug/l	1.0	nd
tert-Butylbenzene	98-06-6	ug/l	1.0	nd
Carbon Tetrachloride	56-23-5	ug/l	1.0	nd
Chlorobenzene	108-90-7	ug/l	1.0	nd
Chloroethane	75-00-3	ug/l	1.0	nd
Chloroform	67-66-3	ug/l	1.0	nd
Chloromethane	74-87-3	ug/l	1.0	nd
2-Chlorotoluene	95-49-8	ug/l	1.0	nd
4-Chlorotoluene	106-43-4	ug/l	1.0	nd
Dibromochloromethane	124-48-1	ug/l	1.0	nd
1,2-Dibromo-3-chloropropan	96-12-8	ug/l	1.0	nd
1,2-Dibromoethane	106-93-4	ug/l	1.0	nd
Dibromomethane	74-95-3	ug/l	1.0	nd
1,2-Dichlorobenzene	95-50-1	ug/l	1.0	nd
1,3-Dichlorobenzene	541-73-1	ug/l	1.0	nd
1,4-Dichlorobenzene	106-46-7	ug/l	1.0	nd
Dichlorodifluoromethane	75-71-8	ug/l	1.0	nd
1,1-Dichloroethane	75-34-3	ug/l	1.0	nd
1,2-Dichloroethane	107-06-2	ug/l	1.0	nd
1,1-Dichloroethene	75-35-4	ug/l	1.0	nd
cis-1,2-Dichloroethene	156-59-4	ug/l	1.0	nd
trans-1,2-Dichloroethene	156-60-5	ug/l	1.0	nd
1,2-Dichloropropane	78-87-5	ug/l	1.0	nd
1,3-Dichloropropane	142-28-9	ug/l	1.0	nd
2,2-Dichloropropane	590-20-7	ug/l	1.0	nd
1,1-Dichloropropene	563-58-6	ug/l	1.0	nd
cis-1,3-Dichloropropene	10061-01-5	ug/l	1.0	nd
trans-1,3-Dichloropropene	10061-02-6	ug/l	1.0	nd
Ethylbenzene	100-41-4	ug/l	1.0	nd
Hexachlorobutadiene	87-68-3	ug/l	1.0	nd
Isopropylbenzene	98-82-8	ug/l	1.0	nd
p-Isopropyltoluene	99-87-6	ug/l	1.0	nd
Methylene Chloride	75-09-2	ug/l	1.0	nd
Naphthalene	91-20-3	ug/l	1.0	nd
Propylbenzene	103-65-1	ug/l	1.0	nd
Styrene	100-42-5	ug/l	1.0	nd
1,1,1,2-Tetrachloroethane	630-20-6	ug/l	1.0	nd
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	1.0	nd
Tetrachloroethene	127-18-4	ug/l	1.0	nd
Toluene	108-88-3	ug/l	1.0	nd
1,2,3-Trichlorobenzene	87-61-6	ug/l	1.0	nd
1,2,4-Trichlorobenzene	120-82-1	ug/l	1.0	nd
1,1,1-Trichloroethane	71-55-6	ug/l	1.0	nd
1,1,2-Trichloroethane	79-00-5	ug/l	1.0	nd
Trichloroethene	79-01-6	ug/l	1.0	nd
Trichlorofluoromethane	75-69-4	ug/l	1.0	nd
1,2,3-Trichloropropane	96-18-4	ug/l	1.0	nd
1,2,4-Trimethylbenzene	95-63-6	ug/l	1.0	nd
1,3,5-Trimethylbenzene	108-67-8	ug/l	1.0	nd
Vinyl Chloride	75-01-4	ug/l	1.0	nd
o-Xylene	95-47-6	ug/l	1.0	nd
m,p-Xylenes	108-38-3/1	ug/l	1.0	nd

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

  
 Laboratory Director  
 ELAP ID - 10795

**CHAIN OF CUSTODY RECORD**

CLIENT: C+H Engineers      NORMAL QA/QC \_\_\_\_\_  
 ADDRESS: 431 E. Fayette St      PREMIUM QA/QC X  
Syr NY 13202      NORMAL TURNAROUND \_\_\_\_\_  
 PHONE NO: 315 472 6980      EXPEDITE AT PREMIUM \_\_\_\_\_  
 REPORT TO ATTN: Scott Nishwand      CLIENT AUTHORIZ. SIGN: [Signature]

PROJECT NAME: Syngene Label Co.      ANALYSIS REQUESTED \_\_\_\_\_  
 PO NO: 31404      \_\_\_\_\_  
 SAMPLED BY: SDN      \_\_\_\_\_

DATE	TIME	LOCATION	8021 - full	8700-5748	8700-5748	8700-5748	MATRIX (AIR, SOLID, WATER)	COMPOSITE NUMBER OF CONTAINERS	VOLUME OF CONTAINERS USED	PREPARATIVE
10.3	4:30p	Deep Pit	X	X			S	6	1	
12.5	8:30A	Effluent 1922	AA				W	6	2	1111
12.5	11:20a	Effluent 8725	AA				W	6	2	J
12.5		Company	X							
12.5	11:20a	Effluent		X			W	6	1	

DATE	TIME	RELINQUISHED BY	ACCEPTED BY	ADDITIONAL COMMENTS
12.5	11:30A	[Signature]	[Signature]	Deep Pit - Normal Turnaround
	2			
	3			
	4			

**BUCK ENVIRONMENTAL**  
**LABORATORIES INC.**

3845 ROUTE 11 SOUTH, P.O. BOX 5150  
CORTLAND, N.Y. 13045 607-753-3403

**LABORATORY REPORT**  
Lab Log No: 9412066

Client: C & H Engineers  
431 East Fayette Street  
Syracuse, NY 13202

Report Date: December 6, 1994  
Sampling Date: 12/05/94  
Sampled By: SDN  
Date Received: 12/05/94

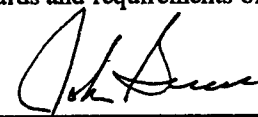
Site: Syracuse Label

Sample ID: Effluent

TEST	METHOD	ANALYZED	BY	UNITS	DL	RESULT
pH	150.1/9040	12/05/94	TRA	units	.1	7.53

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



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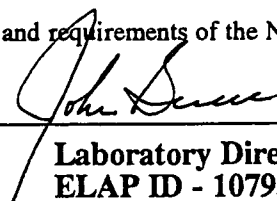
Laboratory Director  
ELAP ID - 10795

3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045P.O. BOX 5150  
607-753-3403Client: **C & H Engineers**  
**431 East Fayette Street**  
**Syracuse, NY 13202**  
Site: Syracuse LabelReport Date: 12/08/94  
Sampling Date: 12/05/94  
Sampled By: SDN  
Date Received: 12/06/94  
Analyzed by: EAC, 12/07/94**Sample ID: Effluent Composite****VOLATILES BY METHOD EPA 8021**

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/l	1.0	nd
Bromobenzene	108-86-1	ug/l	1.0	nd
Bromochloromethane	74-97-5	ug/l	1.0	nd
Bromodichloromethane	75-27-4	ug/l	1.0	nd
Bromoform	75-25-2	ug/l	1.0	nd
Bromomethane	74-83-9	ug/l	1.0	nd
n-Butylbenzene	104-51-8	ug/l	1.0	nd
sec-Butylbenzene	135-98-8	ug/l	1.0	nd
tert-Butylbenzene	98-06-6	ug/l	1.0	nd
Carbon Tetrachloride	56-23-5	ug/l	1.0	nd
Chlorobenzene	108-90-7	ug/l	1.0	nd
Chloroethane	75-00-3	ug/l	1.0	nd
Chloroform	67-66-3	ug/l	1.0	nd
Chloromethane	74-87-3	ug/l	1.0	nd
2-Chlorotoluene	95-49-8	ug/l	1.0	nd
4-Chlorotoluene	106-43-4	ug/l	1.0	nd
Dibromochloromethane	124-48-1	ug/l	1.0	nd
1,2-Dibromo-3-chloropropan	96-12-8	ug/l	1.0	nd
1,2-Dibromoethane	106-93-4	ug/l	1.0	nd
Dibromomethane	74-95-3	ug/l	1.0	nd
1,2-Dichlorobenzene	95-50-1	ug/l	1.0	nd
1,3-Dichlorobenzene	541-73-1	ug/l	1.0	nd
1,4-Dichlorobenzene	106-46-7	ug/l	1.0	nd
Dichlorodifluoromethane	75-71-8	ug/l	1.0	nd
1,1-Dichloroethane	75-34-3	ug/l	1.0	nd
1,2-Dichloroethane	107-06-2	ug/l	1.0	nd
1,1-Dichloroethene	75-35-4	ug/l	1.0	nd
cis-1,2-Dichloroethene	156-59-4	ug/l	1.0	nd
trans-1,2-Dichloroethene	156-60-5	ug/l	1.0	nd
1,2-Dichloropropane	78-87-5	ug/l	1.0	nd
1,3-Dichloropropane	142-28-9	ug/l	1.0	nd
2,2-Dichloropropane	590-20-7	ug/l	1.0	nd
1,1-Dichloropropene	563-58-6	ug/l	1.0	nd
cis-1,3-Dichloropropene	10061-01-5	ug/l	1.0	nd
trans-1,3-Dichloropropene	10061-02-6	ug/l	1.0	nd
Ethylbenzene	100-41-4	ug/l	1.0	nd
Hexachlorobutadiene	87-68-3	ug/l	1.0	nd
Isopropylbenzene	98-82-8	ug/l	1.0	nd
p-Isopropyltoluene	99-87-6	ug/l	1.0	nd
Methylene Chloride	75-09-2	ug/l	1.0	nd
Naphthalene	91-20-3	ug/l	1.0	nd
Propylbenzene	103-65-1	ug/l	1.0	nd
Styrene	100-42-5	ug/l	1.0	nd
1,1,1,2-Tetrachloroethane	630-20-6	ug/l	1.0	nd
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	1.0	nd
Tetrachloroethene	127-18-4	ug/l	1.0	nd
Toluene	108-88-3	ug/l	1.0	nd
1,2,3-Trichlorobenzene	87-61-6	ug/l	1.0	nd
1,2,4-Trichlorobenzene	120-82-1	ug/l	1.0	nd
1,1,1-Trichloroethane	71-55-6	ug/l	1.0	nd
1,1,2-Trichloroethane	79-00-5	ug/l	1.0	nd
Trichloroethene	79-01-6	ug/l	1.0	nd
Trichlorofluoromethane	75-69-4	ug/l	1.0	nd
1,2,3-Trichloropropane	96-18-4	ug/l	1.0	nd
1,2,4-Trimethylbenzene	95-63-6	ug/l	1.0	nd
1,3,5-Trimethylbenzene	108-67-8	ug/l	1.0	nd
Vinyl Chloride	75-01-4	ug/l	1.0	nd
o-Xylene	95-47-6	ug/l	1.0	nd
m,p-Xylenes	108-38-3/1	ug/l	1.0	nd

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

  
Laboratory Director  
ELAP ID - 10795

**BUCK ENVIRONMENTAL LABORATORIES INC.**  
ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH, P.O. BOX 5150  
CORTLAND, N.Y. 13045 607-753-3403

**LABORATORY REPORT**  
Lab Log No: 9412084

Client: C & H Engineers  
431 East Fayette Street  
Syracuse, NY 13202

Report Date: December 8, 1994  
Sampling Date: 12/06/94  
Sampled By: SDN  
Date Received: 12/06/94

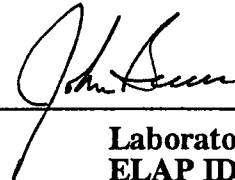
Site: Syracuse Label

Sample ID: Effluent

TEST	METHOD	ANALYZED	BY	UNITS	DL	RESULT
pH	150.1/9040	12/08/94	KLW	units	.1	8.02

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



Laboratory Director  
ELAP ID - 10795



**CHAIN OF CUSTODY RECORD**

CLIENT C1H Engineers  
 ADDRESS 431 E. Fayette St  
Syracuse, NY 13202  
 PHONE NO. 315 472 6980  
 REPORT TO ATTN: Scott D. Nostrand

NORMAL QA/QC  
 PREMIUM QA/QC  
 NORMAL TURNAROUND  
 EXPEDITE AT PREMIUM  
 CLIENT AUTHORIZ. SIGN. [Signature]

PROJECT NAME Syc Level  
 PO NO. 3140Y  
 SAMPLED BY SPN

**ANALYSIS REQUESTED**

DATE	TIME	LOCATION	MATRIX REQUESTED				ADDITIONAL COMMENTS
			(AIR, SOLID, WATER)	GRAB OR COMPOSITE	NUMBER OF CONTAINERS	VOLUME OF CONTAINERS USED PRESERVATIVE	
12.5	2:30P	Effluent 1074	W	G	2	HCL	
12.5	5:00P	Effluent 294	W	G	2		
12.6	8:15 A	Effluent 394	W	G	2		
12.6	11am	Effluent 494	W	G	2		
12.6		Composity ←					
12.6	8:15	Effluent					

DATE	TIME	RELINQUISHED BY	ACCEPTED BY
12/6	11:45	[Signature]	Kellytinella
	2		
	3		
	4		

Client: *C & H Engineers*  
 431 East Fayette Street  
 Syracuse, NY 13202  
 Site: Syracuse Label

Report Date: 12/08/94  
 Sampling Date:  
 Sampled By: SDN  
 Date Received: 12/07/94  
 Analyzed by: EAC, 12/08/94

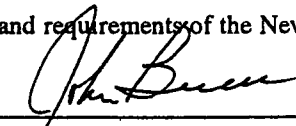
**Sample ID: Filter Effluent Composite**

**VOLATILES BY METHOD EPA 8021**

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/l	1.0	nd
Bromobenzene	108-86-1	ug/l	1.0	nd
Bromochloromethane	74-97-5	ug/l	1.0	nd
Bromodichloromethane	75-27-4	ug/l	1.0	nd
Bromoform	75-25-2	ug/l	1.0	nd
Bromomethane	74-83-9	ug/l	1.0	nd
n-Butylbenzene	104-51-8	ug/l	1.0	nd
sec-Butylbenzene	135-98-8	ug/l	1.0	nd
tert-Butylbenzene	98-06-6	ug/l	1.0	nd
Carbon Tetrachloride	56-23-5	ug/l	1.0	nd
Chlorobenzene	108-90-7	ug/l	1.0	nd
Chloroethane	75-00-3	ug/l	1.0	nd
Chloroform	67-66-3	ug/l	1.0	nd
Chloromethane	74-87-3	ug/l	1.0	nd
2-Chlorotoluene	95-49-8	ug/l	1.0	nd
4-Chlorotoluene	106-43-4	ug/l	1.0	nd
Dibromochloromethane	124-48-1	ug/l	1.0	nd
1,2-Dibromo-3-chloropropan	96-12-8	ug/l	1.0	nd
1,2-Dibromoethane	106-93-4	ug/l	1.0	nd
Dibromomethane	74-95-3	ug/l	1.0	nd
1,2-Dichlorobenzene	95-50-1	ug/l	1.0	nd
1,3-Dichlorobenzene	541-73-1	ug/l	1.0	nd
1,4-Dichlorobenzene	106-46-7	ug/l	1.0	nd
Dichlorodifluoromethane	75-71-8	ug/l	1.0	nd
1,1-Dichloroethane	75-34-3	ug/l	1.0	nd
1,2-Dichloroethane	107-06-2	ug/l	1.0	nd
1,1-Dichloroethene	75-35-4	ug/l	1.0	nd
cis-1,2-Dichloroethene	156-59-4	ug/l	1.0	nd
trans-1,2-Dichloroethene	156-60-5	ug/l	1.0	nd
1,2-Dichloropropane	78-87-5	ug/l	1.0	nd
1,3-Dichloropropane	142-28-9	ug/l	1.0	nd
2,2-Dichloropropane	590-20-7	ug/l	1.0	nd
1,1-Dichloropropene	563-58-6	ug/l	1.0	nd
cis-1,3-Dichloropropene	10061-01-5	ug/l	1.0	nd
trans-1,3-Dichloropropene	10061-02-6	ug/l	1.0	nd
Ethylbenzene	100-41-4	ug/l	1.0	nd
Hexachlorobutadiene	87-68-3	ug/l	1.0	nd
Isopropylbenzene	98-82-8	ug/l	1.0	nd
p-Isopropyltoluene	99-87-6	ug/l	1.0	nd
Methylene Chloride	75-09-2	ug/l	1.0	nd
Naphthalene	91-20-3	ug/l	1.0	nd
Propylbenzene	103-65-1	ug/l	1.0	nd
Styrene	100-42-5	ug/l	1.0	nd
1,1,1,2-Tetrachloroethane	630-20-6	ug/l	1.0	nd
1,1,2,2-Tetrachloroethane	79-34-5	ug/l	1.0	nd
Tetrachloroethene	127-18-4	ug/l	1.0	nd
Toluene	108-88-3	ug/l	1.0	nd
1,2,3-Trichlorobenzene	87-61-6	ug/l	1.0	nd
1,2,4-Trichlorobenzene	120-82-1	ug/l	1.0	nd
1,1,1-Trichloroethane	71-55-6	ug/l	1.0	nd
1,1,2-Trichloroethane	79-00-5	ug/l	1.0	nd
Trichloroethene	79-01-6	ug/l	1.0	nd
Trichlorofluoromethane	75-69-4	ug/l	1.0	nd
1,2,3-Trichloropropane	96-18-4	ug/l	1.0	nd
1,2,4-Trimethylbenzene	95-63-6	ug/l	1.0	nd
1,3,5-Trimethylbenzene	108-67-8	ug/l	1.0	nd
Vinyl Chloride	75-01-4	ug/l	1.0	nd
o-Xylene	95-47-6	ug/l	1.0	nd
m,p-Xylenes	108-38-3/1	ug/l	1.0	nd

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

  
 Laboratory Director  
 ELAP ID - 10795

**BUCK ENVIRONMENTAL**  
LABORATORIES, INC.  
ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045

P.O. BOX 5150  
607-753-3403

**LABORATORY REPORT**  
Lab Log No: 9412106

Client: C & H Engineers  
431 East Fayette Street  
Syracuse, NY 13202

Report Date: December 8, 1994  
Sampling Date: 12/07/94  
Sampled By: SDN  
Date Received: 12/07/94

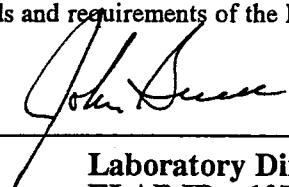
Site: Syracuse Label

Sample ID: Effluent

TEST	METHOD	ANALYZED	BY	UNITS	DL	RESULT
pH	150.1/9040	12/08/94	TRA	units	.1	7.68

ND - None detected greater than detection limits (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



Laboratory Director  
ELAP ID - 10795

**CHAIN OF CUSTODY RECORD**

CLIENT: C+H Engineers  
 ADDRESS: 431 E Fayette St  
 Syracuse, NY 13202  
 PHONE NO.: 315 432 6980  
 REPORT TO ATTN: Scott D. NOSTRAND

NORMAL QA/QC  
 PREMIUM QA/QC  
 NORMAL TURNAROUND  
 EXPEDITE AT PREMIUM  
 CLIENT AUTHORIZ. SIGN: *[Signature]*

PROJECT NAME: Syracuse Label  
 PO NO.: 31404  
 SAMPLED BY: SON

**ANALYSIS REQUESTED**

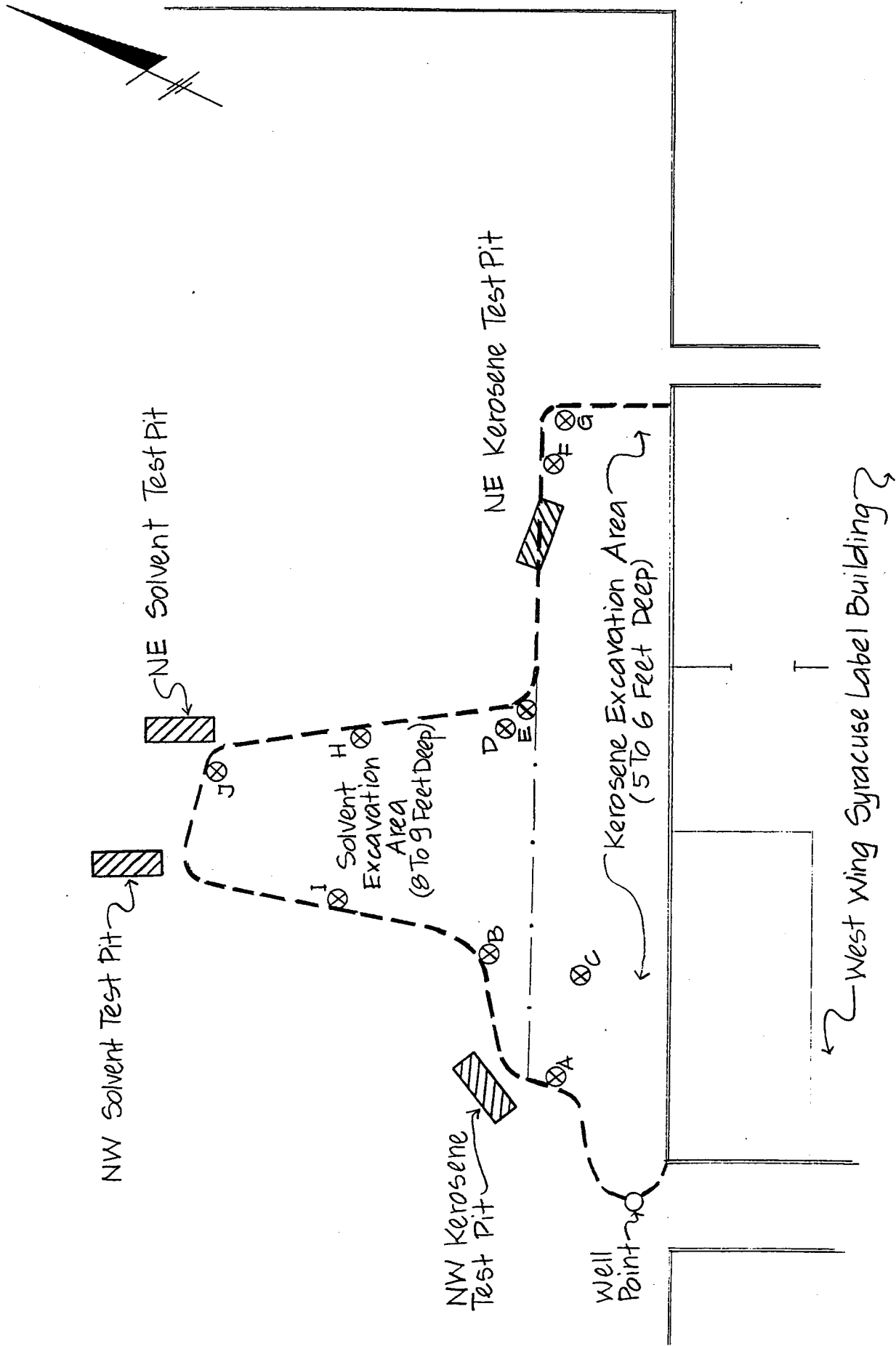
DATE	TIME	LOCATION	MATRIX (AIR, SOLID, WATER)	GRAB OR COMPOSITE	NUMBER OF CONTAINERS	VOLUMES OF CONTAINERS	PRESERVATIVE USED
12-6	2:30P	Filter Effluent 144	W	G	2		1-KC
12-6	5:30P	Filter Eff 214	W	G	2		
12-7	8:30A	Filter Eff 314	W	G	2		
12-7	11:20A	Filter Eff. 414	W	G	2		
		Composite		C			
12-7	11:20A	PH	W	G	1		

PH  
8021-111-1208

DATE	TIME	RELINQUISHED BY	ACCEPTED BY	ADDITIONAL COMMENTS
12-7	11:47A	<i>[Signature]</i>	<i>[Signature]</i>	
	2			
	3			
	4			

**ATTACHMENT C**



**REMEDATION EXCAVATION PIT PLAN - FIGURE 2**



REMEDATION EXCAVATION PIT PLAN - FIGURE 2

Syracuse Label/ Syracuse Truck Sales

Scale: 1" = 10'

-  Clearance Test Pits
-  Excavation Field Screening Sample Location (see Table 1)

**ATTACHMENT D**

**RESULTS OF EXCAVATION PIT CLEARANCE SAMPLING - TABLE 1**

**Results of Excavation Pit Clearance Sampling  
Syracuse Label/ Syracuse Truck Sales**

**Excavation Field Screening**

<u>Sample Location<sup>1</sup></u>	<u>PID<sup>2</sup> Organic Vapor Concentration (ppm<sup>3</sup>)</u>
A	1.0
B	2.0
C	8.0
D	2.0
E	2.0
F	2.0
G	2.0
H	7.0
I	12.0
J	2.0

**Detected Compounds in Test Pit Clearance Soil Samples**

<u>Test Pit</u>	<u>Compound</u>	<u>Concentration (ppm)</u>	<u>DEC Clean-up Standards (ppm)<sup>7</sup></u>
NW <sup>4</sup> Solvent	Tetrachloroethene	0.0049	1.4
NE <sup>5</sup> Solvent	nd <sup>6</sup>		
NW Kerosene	Tetrachloroethene	0.001	1.4
NE Kerosene	nd		
18' Deep Pit	Tetrachloroethene	78	1.4
	Toluene	1.01	1.5
	Trichloroethene	0.433	0.7

**Notes:**

1. See Figure 2 for sample location
2. PID: Photoionization Detector
3. ppm: parts per million
4. NW: northwest
5. NE: northeast
6. nd: not detected
7. Recommended soil cleanup objectives - Volatile Organic Contaminants  
DEC Division of Hazardous Waste Remediation - Technical and  
Administrative Guidance Memorandum: Determination of Soil Cleanup  
Objectives and Cleanup Levels, January 24, 1994



**ATTACHMENT E**

**LABORATORY RESULTS - TEST PIT CLEARANCE SOIL SAMPLES**

**BUCK ENVIRONMENTAL LABORATORIES INC.**  
 ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH,  
 CORTLAND, N.Y. 13045

P.O. BOX 5150  
 607-753-3403

**LABORATORY REPORT**

Lab Log No: 9412086

Client: **C & H Engineers**  
 431 East Fayette Street  
 Syracuse, NY 13202  
 Site: Syracuse Label

Report Date: 12/14/94  
 Sampling Date: 12/06/94  
 Sampled By: SDN  
 Date Received: 12/06/94  
 Analyzed by: EAC, 12/10/94

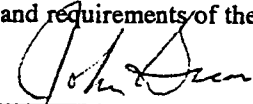
Sample ID: 40' TP (perc)

**VOLATILES BY METHOD EPA 8021**

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/kg	1.0	nd
Bromobenzene	108-86-1	ug/kg	1.0	nd
Bromochloromethane	74-97-5	ug/kg	1.0	nd
Bromodichloromethane	75-27-4	ug/kg	1.0	nd
Bromoform	75-25-2	ug/kg	1.0	nd
Bromomethane	74-83-9	ug/kg	1.0	nd
n-Butylbenzene	104-51-8	ug/kg	1.0	nd
sec-Butylbenzene	135-98-8	ug/kg	1.0	nd
tert-Butylbenzene	98-06-6	ug/kg	1.0	nd
Carbon Tetrachloride	56-23-5	ug/kg	1.0	nd
Chlorobenzene	108-90-7	ug/kg	1.0	nd
Chloroethane	75-00-3	ug/kg	1.0	nd
Chloroform	67-66-3	ug/kg	1.0	nd
Chloromethane	74-87-3	ug/kg	1.0	nd
2-Chlorotoluene	95-49-8	ug/kg	1.0	nd
4-Chlorotoluene	106-43-4	ug/kg	1.0	nd
Dibromochloromethane	124-48-1	ug/kg	1.0	nd
1,2-Dibromo-3-chloropropan	96-12-8	ug/kg	1.0	nd
1,2-Dibromoethane	106-93-4	ug/kg	1.0	nd
Dibromomethane	74-95-3	ug/kg	1.0	nd
1,2-Dichlorobenzene	95-50-1	ug/kg	1.0	nd
1,3-Dichlorobenzene	541-73-1	ug/kg	1.0	nd
1,4-Dichlorobenzene	106-46-7	ug/kg	1.0	nd
Dichlorodifluoromethane	75-71-8	ug/kg	1.0	nd
1,1-Dichloroethane	75-34-3	ug/kg	1.0	nd
1,2-Dichloroethane	107-06-2	ug/kg	1.0	nd
1,1-Dichloroethene	75-35-4	ug/kg	1.0	nd
cis-1,2-Dichloroethene	156-59-4	ug/kg	1.0	nd
trans-1,2-Dichloroethene	156-60-5	ug/kg	1.0	nd
1,2-Dichloropropane	78-87-5	ug/kg	1.0	nd
1,3-Dichloropropane	142-28-9	ug/kg	1.0	nd
2,2-Dichloropropane	590-20-7	ug/kg	1.0	nd
1,1-Dichloropropene	563-58-6	ug/kg	1.0	nd
cis-1,3-Dichloropropene	10061-01-5	ug/kg	1.0	nd
trans-1,3-Dichloropropene	10061-02-6	ug/kg	1.0	nd
Ethylbenzene	100-41-4	ug/kg	1.0	nd
Hexachlorobutadiene	87-68-3	ug/kg	1.0	nd
Isopropylbenzene	98-82-8	ug/kg	1.0	nd
p-Isopropyltoluene	99-87-6	ug/kg	1.0	nd
Methylene Chloride	75-09-2	ug/kg	1.0	nd
Naphthalene	91-20-3	ug/kg	1.0	nd
Propylbenzene	103-65-1	ug/kg	1.0	nd
Styrene	100-42-5	ug/kg	1.0	nd
1,1,1,2-Tetrachloroethane	630-20-6	ug/kg	1.0	nd
1,1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	1.0	nd
Tetrachloroethene	127-18-4	ug/kg	1.0	*4.9*
Toluene	108-88-3	ug/kg	1.0	nd
1,2,3-Trichlorobenzene	87-61-6	ug/kg	1.0	nd
1,2,4-Trichlorobenzene	120-82-1	ug/kg	1.0	nd
1,1,1-Trichloroethane	71-55-6	ug/kg	1.0	nd
1,1,2-Trichloroethane	79-00-5	ug/kg	1.0	nd
Trichloroethene	79-01-6	ug/kg	1.0	nd
Trichlorofluoromethane	75-69-4	ug/kg	1.0	nd
1,2,3-Trichloropropane	96-18-4	ug/kg	1.0	nd
1,2,4-Trimethylbenzene	95-63-6	ug/kg	1.0	nd
1,3,5-Trimethylbenzene	108-67-8	ug/kg	1.0	nd
Vinyl Chloride	75-01-4	ug/kg	1.0	nd
o-Xylene	95-47-6	ug/kg	1.0	nd
m,p-Xylenes	108-38-3/1	ug/kg	1.0	nd

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



Laboratory Director  
 ELAP ID - 10795

**BUCK ENVIRONMENTAL LABORATORIES INC.**  
**ACCREDITED ENVIRONMENTAL ANALYSIS**

3845 ROUTE 11 SOUTH, P.O. BOX 5150  
 CORTLAND, N.Y. 13045 607-753-3403

Client: *C & H Engineers*  
 431 East Fayette Street  
 Syracuse, NY 13202  
 Site: Syracuse Label

**LABORATORY REPORT**  
 Lab Log No: 9412086

Report Date: 12/14/94  
 Sampling Date: 12/06/94  
 Sampled By: SDN  
 Date Received: 12/06/94  
 Analyzed by: EAC, 12/10/94

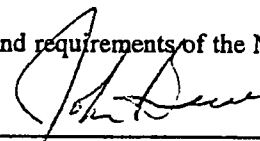
Sample ID: N pit (perc)

**VOLATILES BY METHOD EPA 8021**

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/kg	1.0	nd
Bromobenzene	108-86-1	ug/kg	1.0	nd
Bromochloromethane	74-97-5	ug/kg	1.0	nd
Bromodichloromethane	75-27-4	ug/kg	1.0	nd
Bromoform	75-25-2	ug/kg	1.0	nd
Bromomethane	74-83-9	ug/kg	1.0	nd
n-Butylbenzene	104-51-8	ug/kg	1.0	nd
sec-Butylbenzene	135-98-8	ug/kg	1.0	nd
tert-Butylbenzene	98-06-6	ug/kg	1.0	nd
Carbon Tetrachloride	56-23-5	ug/kg	1.0	nd
Chlorobenzene	108-90-7	ug/kg	1.0	nd
Chloroethane	75-00-3	ug/kg	1.0	nd
Chloroform	67-66-3	ug/kg	1.0	nd
Chloromethane	74-87-3	ug/kg	1.0	nd
2-Chlorotoluene	95-49-8	ug/kg	1.0	nd
4-Chlorotoluene	106-43-4	ug/kg	1.0	nd
Dibromochloromethane	124-48-1	ug/kg	1.0	nd
1,2-Dibromo-3-chloropropan	96-12-8	ug/kg	1.0	nd
1,2-Dibromoethane	106-93-4	ug/kg	1.0	nd
Dibromomethane	74-95-3	ug/kg	1.0	nd
1,2-Dichlorobenzene	95-50-1	ug/kg	1.0	nd
1,3-Dichlorobenzene	541-73-1	ug/kg	1.0	nd
1,4-Dichlorobenzene	106-46-7	ug/kg	1.0	nd
Dichlorodifluoromethane	75-71-8	ug/kg	1.0	nd
1,1-Dichloroethane	75-34-3	ug/kg	1.0	nd
1,2-Dichloroethane	107-06-2	ug/kg	1.0	nd
1,1-Dichloroethene	75-35-4	ug/kg	1.0	nd
cis-1,2-Dichloroethene	156-59-4	ug/kg	1.0	nd
trans-1,2-Dichloroethene	156-60-5	ug/kg	1.0	nd
1,2-Dichloropropane	78-87-5	ug/kg	1.0	nd
1,3-Dichloropropane	142-28-9	ug/kg	1.0	nd
2,2-Dichloropropane	590-20-7	ug/kg	1.0	nd
1,1-Dichloropropene	563-58-6	ug/kg	1.0	nd
cis-1,3-Dichloropropene	10061-01-5	ug/kg	1.0	nd
trans-1,3-Dichloropropene	10061-02-6	ug/kg	1.0	nd
Ethylbenzene	100-41-4	ug/kg	1.0	nd
Hexachlorobutadiene	87-68-3	ug/kg	1.0	nd
Isopropylbenzene	98-82-8	ug/kg	1.0	nd
p-Isopropyltoluene	99-87-6	ug/kg	1.0	nd
Methylene Chloride	75-09-2	ug/kg	1.0	nd
Naphthalene	91-20-3	ug/kg	1.0	nd
Propylbenzene	103-65-1	ug/kg	1.0	nd
Styrene	100-42-5	ug/kg	1.0	nd
1,1,1,2-Tetrachloroethane	630-20-6	ug/kg	1.0	nd
1,1,1,2-Tetrachloroethane	79-34-5	ug/kg	1.0	nd
Tetrachloroethene	127-18-4	ug/kg	1.0	nd
Toluene	108-88-3	ug/kg	1.0	nd
1,2,3-Trichlorobenzene	87-61-6	ug/kg	1.0	nd
1,2,4-Trichlorobenzene	120-82-1	ug/kg	1.0	nd
1,1,1-Trichloroethane	71-55-6	ug/kg	1.0	nd
1,1,2-Trichloroethane	79-00-5	ug/kg	1.0	nd
Trichloroethene	79-01-6	ug/kg	1.0	nd
Trichlorofluoromethane	75-69-4	ug/kg	1.0	nd
1,2,3-Trichloropropane	96-18-4	ug/kg	1.0	nd
1,2,4-Trimethylbenzene	95-63-6	ug/kg	1.0	nd
1,3,5-Trimethylbenzene	108-67-8	ug/kg	1.0	nd
Vinyl Chloride	75-01-4	ug/kg	1.0	nd
o-Xylene	95-47-6	ug/kg	1.0	nd
m,p-Xylenes	108-38-3/1	ug/kg	1.0	nd

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



Laboratory Director  
 ELAP ID - 10795

**BUCK ENVIRONMENTAL LABORATORIES, INC.**

ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045P.O. BOX 5150  
607-753-3403**LABORATORY REPORT**

Lab Log No: 9412086

Client: **C & H Engineers**  
**431 East Fayette Street**  
**Syracuse, NY 13202**  
Site: Syracuse LabelReport Date: 12/14/94  
Sampling Date: 12/06/94  
Sampled By: SDN  
Date Received: 12/06/94  
Analyzed by: EAC, 12/10/94**Sample ID: NW wall (kero pit)****VOLATILES BY METHOD EPA 8021**

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/kg	1.0	nd
Bromobenzene	108-86-1	ug/kg	1.0	nd
Bromochloromethane	74-97-5	ug/kg	1.0	nd
Bromodichloromethane	75-27-4	ug/kg	1.0	nd
Bromoform	75-25-2	ug/kg	1.0	nd
Bromomethane	74-83-9	ug/kg	1.0	nd
n-Butylbenzene	104-51-8	ug/kg	1.0	nd
sec-Butylbenzene	135-98-8	ug/kg	1.0	nd
tert-Butylbenzene	98-06-6	ug/kg	1.0	nd
Carbon Tetrachloride	56-23-5	ug/kg	1.0	nd
Chlorobenzene	108-90-7	ug/kg	1.0	nd
Chloroethane	75-00-3	ug/kg	1.0	nd
Chloroform	67-66-3	ug/kg	1.0	nd
Chloromethane	74-87-3	ug/kg	1.0	nd
2-Chlorotoluene	95-49-8	ug/kg	1.0	nd
4-Chlorotoluene	106-43-4	ug/kg	1.0	nd
Dibromochloromethane	124-48-1	ug/kg	1.0	nd
1,2-Dibromo-3-chloropropan	96-12-8	ug/kg	1.0	nd
1,2-Dibromoethane	106-93-4	ug/kg	1.0	nd
Dibromomethane	74-95-3	ug/kg	1.0	nd
1,2-Dichlorobenzene	95-50-1	ug/kg	1.0	nd
1,3-Dichlorobenzene	541-73-1	ug/kg	1.0	nd
1,4-Dichlorobenzene	106-46-7	ug/kg	1.0	nd
Dichlorodifluoromethane	75-71-8	ug/kg	1.0	nd
1,1-Dichloroethane	75-34-3	ug/kg	1.0	nd
1,2-Dichloroethane	107-06-2	ug/kg	1.0	nd
1,1-Dichloroethene	75-35-4	ug/kg	1.0	nd
cis-1,2-Dichloroethene	156-59-4	ug/kg	1.0	nd
trans-1,2-Dichloroethene	156-60-5	ug/kg	1.0	nd
1,2-Dichloropropane	78-87-5	ug/kg	1.0	nd
1,3-Dichloropropane	142-28-9	ug/kg	1.0	nd
2,2-Dichloropropane	590-20-7	ug/kg	1.0	nd
1,1-Dichloropropene	563-58-6	ug/kg	1.0	nd
cis-1,3-Dichloropropene	10061-01-5	ug/kg	1.0	nd
trans-1,3-Dichloropropene	10061-02-6	ug/kg	1.0	nd
Ethylbenzene	100-41-4	ug/kg	1.0	nd
Hexachlorobutadiene	87-68-3	ug/kg	1.0	nd
Isopropylbenzene	98-82-8	ug/kg	1.0	nd
p-Isopropyltoluene	99-87-6	ug/kg	1.0	nd
Methylene Chloride	75-09-2	ug/kg	1.0	nd
Naphthalene	91-20-3	ug/kg	1.0	nd
Propylbenzene	103-65-1	ug/kg	1.0	nd
Styrene	100-42-5	ug/kg	1.0	nd
1,1,1,2-Tetrachloroethane	630-20-6	ug/kg	1.0	nd
1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	1.0	nd
Tetrachloroethene	127-18-4	ug/kg	1.0	nd
Toluene	108-88-3	ug/kg	1.0	nd
1,2,3-Trichlorobenzene	87-61-6	ug/kg	1.0	nd
1,2,4-Trichlorobenzene	120-82-1	ug/kg	1.0	nd
1,1,1-Trichloroethane	71-55-6	ug/kg	1.0	nd
1,1,2-Trichloroethane	79-00-5	ug/kg	1.0	nd
Trichloroethene	79-01-6	ug/kg	1.0	nd
Trichlorofluoromethane	75-69-4	ug/kg	1.0	nd
1,2,3-Trichloropropane	96-18-4	ug/kg	1.0	nd
1,2,4-Trimethylbenzene	95-63-6	ug/kg	1.0	nd
1,3,5-Trimethylbenzene	108-67-8	ug/kg	1.0	nd
Vinyl Chloride	75-01-4	ug/kg	1.0	nd
o-Xylene	95-47-6	ug/kg	1.0	nd
m,p-Xylenes	108-38-3/1	ug/kg	1.0	nd

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

Laboratory Director  
ELAP ID - 10795

**BUCK ENVIRONMENTAL LABORATORIES INC.**  
**ACCREDITED ENVIRONMENTAL ANALYSIS**

3845 ROUTE 11 SOUTH,  
 CORTLAND, N.Y. 13045

P.O. BOX 5150  
 607-753-3403

**LABORATORY REPORT**  
 Lab Log No: 9412086

Client: **C & H Engineers**  
 431 East Fayette Street  
 Syracuse, NY 13202  
 Site: Syracuse Label

Report Date: 12/14/94  
 Sampling Date: 12/06/94  
 Sampled By: SDN  
 Date Received: 12/06/94  
 Analyzed by: EAC, 12/10/94

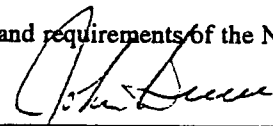
Sample ID: SW wall (kero pit)

**VOLATILES BY METHOD EPA 8021**

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/kg	1.0	nd
Bromobenzene	108-86-1	ug/kg	1.0	nd
Bromochloromethane	74-97-5	ug/kg	1.0	nd
Bromodichloromethane	75-27-4	ug/kg	1.0	nd
Bromoform	75-25-2	ug/kg	1.0	nd
Bromomethane	74-83-9	ug/kg	1.0	nd
n-Butylbenzene	104-51-8	ug/kg	1.0	nd
sec-Butylbenzene	135-98-8	ug/kg	1.0	nd
tert-Butylbenzene	98-06-6	ug/kg	1.0	nd
Carbon Tetrachloride	56-23-5	ug/kg	1.0	nd
Chlorobenzene	108-90-7	ug/kg	1.0	nd
Chloroethane	75-00-3	ug/kg	1.0	nd
Chloroform	67-66-3	ug/kg	1.0	nd
Chloromethane	74-87-3	ug/kg	1.0	nd
2-Chlorotoluene	95-49-8	ug/kg	1.0	nd
4-Chlorotoluene	106-43-4	ug/kg	1.0	nd
Dibromochloromethane	124-48-1	ug/kg	1.0	nd
1,2-Dibromo-3-chloropropan	96-12-8	ug/kg	1.0	nd
1,2-Dibromoethane	106-93-4	ug/kg	1.0	nd
Dibromomethane	74-95-3	ug/kg	1.0	nd
1,2-Dichlorobenzene	95-50-1	ug/kg	1.0	nd
1,3-Dichlorobenzene	541-73-1	ug/kg	1.0	nd
1,4-Dichlorobenzene	106-46-7	ug/kg	1.0	nd
Dichlorodifluoromethane	75-71-8	ug/kg	1.0	nd
1,1-Dichloroethane	75-34-3	ug/kg	1.0	nd
1,2-Dichloroethane	107-06-2	ug/kg	1.0	nd
1,1-Dichloroethene	75-35-4	ug/kg	1.0	nd
cis-1,2-Dichloroethene	156-59-4	ug/kg	1.0	nd
trans-1,2-Dichloroethene	156-60-5	ug/kg	1.0	nd
1,2-Dichloropropane	78-87-5	ug/kg	1.0	nd
1,3-Dichloropropane	142-28-9	ug/kg	1.0	nd
2,2-Dichloropropane	590-20-7	ug/kg	1.0	nd
1,1-Dichloropropene	563-58-6	ug/kg	1.0	nd
cis-1,3-Dichloropropene	10061-01-5	ug/kg	1.0	nd
trans-1,3-Dichloropropene	10061-02-6	ug/kg	1.0	nd
Ethylbenzene	100-41-4	ug/kg	1.0	nd
Hexachlorobutadiene	87-68-3	ug/kg	1.0	nd
Isopropylbenzene	98-82-8	ug/kg	1.0	nd
p-Isopropyltoluene	99-87-6	ug/kg	1.0	nd
Methylene Chloride	75-09-2	ug/kg	1.0	nd
Naphthalene	91-20-3	ug/kg	1.0	nd
Propylbenzene	103-65-1	ug/kg	1.0	nd
Styrene	100-42-5	ug/kg	1.0	nd
1,1,1,2-Tetrachloroethane	630-20-6	ug/kg	1.0	nd
1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	1.0	nd
Tetrachloroethene	127-18-4	ug/kg	1.0	*1.0*
Toluene	108-88-3	ug/kg	1.0	nd
1,2,3-Trichlorobenzene	87-61-6	ug/kg	1.0	nd
1,2,4-Trichlorobenzene	120-82-1	ug/kg	1.0	nd
1,1,1-Trichloroethane	71-55-6	ug/kg	1.0	nd
1,1,2-Trichloroethane	79-00-5	ug/kg	1.0	nd
Trichloroethene	79-01-6	ug/kg	1.0	nd
Trichlorofluoromethane	75-69-4	ug/kg	1.0	nd
1,2,3-Trichloropropane	96-18-4	ug/kg	1.0	nd
1,2,4-Trimethylbenzene	95-63-6	ug/kg	1.0	nd
1,3,5-Trimethylbenzene	108-67-8	ug/kg	1.0	nd
Vinyl Chloride	75-01-4	ug/kg	1.0	nd
o-Xylene	95-47-6	ug/kg	1.0	nd
m,p-Xylenes	108-38-3/1	ug/kg	1.0	nd

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



Laboratory Director  
 ELAP ID - 10795

**BUCK ENVIRONMENTAL**  
LABORATORIES, INC.  
ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH, P.O. BOX 5150  
CORTLAND, N.Y. 13045 607-753-3403

**LABORATORY REPORT**

Lab Log No: 9412086

Client: C & H Engineers  
431 East Fayette Street  
Syracuse, NY 13202

Site: Syracuse Label

Report Date: 12/09/94  
Sampling Date: 12/06/94  
Sampled By: SDN  
Date Received: 12/06/94  
Analyzed by: MM, 12/08/94

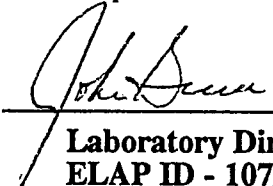
Sample ID: 40' TP (perc)

PAH BY METHOD By EPA 8270

ANALYTE	CAS #	UNITS	DL	RESULT
acenaphthene	83-32-9	ug/kg	170	ND
acenaphthylene	208-96-8	ug/kg	170	ND
anthracene	120-12-7	ug/kg	170	ND
benzo(a)anthracene	56-55-3	ug/kg	330	ND
benzo(a)pyrene	50-32-8	ug/kg	170	ND
benzo(b)fluoranthene	205-99-2	ug/kg	170	ND
benzo(g,h,i)perylene	191-24-2	ug/kg	170	ND
benzo(k)fluoranthene	207-08-9	ug/kg	170	ND
chrysene	218-01-9	ug/kg	170	ND
dibenzo(a,h)anthracene	53-70-3	ug/kg	170	ND
fluoranthene	206-44-0	ug/kg	170	ND
fluorene	86-73-7	ug/kg	170	ND
indeno(1,2,3-c,d)pyrene	193-39-5	ug/kg	170	ND
naphthalene	91-20-3	ug/kg	170	ND
phenanthrene	85-01-8	ug/kg	330	ND
pyrene	129-00-0	ug/kg	170	ND

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

  
Laboratory Director  
ELAP ID - 10795

**BUCK ENVIRONMENTAL**  
LABORATORIES, INC.  
ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045

P.O. BOX 5150  
607-753-3403

**LABORATORY REPORT**  
Lab Log No: 9412086

Client: C & H Engineers  
431 East Fayette Street  
Syracuse, NY 13202

Site: Syracuse Label

Report Date: 12/09/94  
Sampling Date: 12/06/94  
Sampled By: SDN  
Date Received: 12/06/94  
Analyzed by: MM, 12/08/94

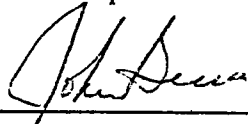
Sample ID: N' pit (perc)

PAH BY METHOD By EPA 8270

ANALYTE	CAS #	UNITS	DL	RESULT
acenaphthene	83-32-9	ug/kg	170	ND
acenaphthylene	208-96-8	ug/kg	170	ND
anthracene	120-12-7	ug/kg	170	ND
benzo(a)anthracene	56-55-3	ug/kg	330	ND
benzo(a)pyrene	50-32-8	ug/kg	170	ND
benzo(b)fluoranthene	205-99-2	ug/kg	170	ND
benzo(g,h,i)perylene	191-24-2	ug/kg	170	ND
benzo(k)fluoranthene	207-08-9	ug/kg	170	ND
chrysene	218-01-9	ug/kg	170	ND
dibenzo(a,h)anthracene	53-70-3	ug/kg	170	ND
fluoranthene	206-44-0	ug/kg	170	ND
fluorene	86-73-7	ug/kg	170	ND
indeno(1,2,3-c,d)pyrene	193-39-5	ug/kg	170	ND
naphthalene	91-20-3	ug/kg	170	ND
phenanthrene	85-01-8	ug/kg	330	ND
pyrene	129-00-0	ug/kg	170	ND

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

  
Laboratory Director  
ELAP ID - 10795

**BUCK ENVIRONMENTAL**  
LABORATORIES INC.  
ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045

P.O. BOX 5150  
607-753-3403

**LABORATORY REPORT**

Lab Log No: 9412086

Client: C & H Engineers  
431 East Fayette Street  
Syracuse, NY 13202

Site: Syracuse Label

Report Date: 12/09/94  
Sampling Date: 12/06/94  
Sampled By: SDN  
Date Received: 12/06/94  
Analyzed by: MM, 12/08/94

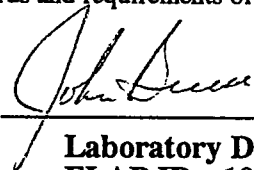
Sample ID: NW wall (kero pit)

PAH BY METHOD By EPA 8270

ANALYTE	CAS #	UNITS	DL	RESULT
acenaphthene	83-32-9	ug/kg	170	ND
acenaphthylene	208-96-8	ug/kg	170	ND
anthracene	120-12-7	ug/kg	170	ND
benzo(a)anthracene	56-55-3	ug/kg	330	ND
benzo(a)pyrene	50-32-8	ug/kg	170	ND
benzo(b)fluoranthene	205-99-2	ug/kg	170	ND
benzo(g,h,i)perylene	191-24-2	ug/kg	170	ND
benzo(k)fluoranthene	207-08-9	ug/kg	170	ND
chrysene	218-01-9	ug/kg	170	ND
dibenzo(a,h)anthracene	53-70-3	ug/kg	170	ND
fluoranthene	206-44-0	ug/kg	170	ND
fluorene	86-73-7	ug/kg	170	ND
indeno(1,2,3-c,d)pyrene	193-39-5	ug/kg	170	ND
naphthalene	91-20-3	ug/kg	170	ND
phenanthrene	85-01-8	ug/kg	330	ND
pyrene	129-00-0	ug/kg	170	ND

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



Laboratory Director  
ELAP ID - 10795



**BUCK ENVIRONMENTAL**  
LABORATORIES, INC.  
ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045

P.O. BOX 5150  
607-753-3403

**LABORATORY REPORT**  
Lab Log No: 9412086

Client: C & H Engineers  
431 East Fayette Street  
Syracuse, NY 13202

Site: Syracuse Label

Report Date: 12/09/94  
Sampling Date: 12/06/94  
Sampled By: SDN  
Date Received: 12/06/94  
Analyzed by: MM, 12/08/94

Sample ID: SW wall (kero pit)

PAH BY METHOD By EPA 8270

ANALYTE	CAS #	UNITS	DL	RESULT
acenaphthene	83-32-9	ug/kg	170	ND
acenaphthylene	208-96-8	ug/kg	170	ND
anthracene	120-12-7	ug/kg	170	ND
benzo(a)anthracene	56-55-3	ug/kg	330	ND
benzo(a)pyrene	50-32-8	ug/kg	170	ND
benzo(b)fluoranthene	205-99-2	ug/kg	170	ND
benzo(g,h,i)perylene	191-24-2	ug/kg	170	ND
benzo(k)fluoranthene	207-08-9	ug/kg	170	ND
chrysene	218-01-9	ug/kg	170	ND
dibenzo(a,h)anthracene	53-70-3	ug/kg	170	ND
fluoranthene	206-44-0	ug/kg	170	ND
fluorene	86-73-7	ug/kg	170	ND
indeno(1,2,3-c,d)pyrene	193-39-5	ug/kg	170	ND
naphthalene	91-20-3	ug/kg	170	ND
phenanthrene	85-01-8	ug/kg	330	ND
pyrene	129-00-0	ug/kg	170	ND

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

  
Laboratory Director  
ELAP ID - 10795

**BUCK ENVIRONMENTAL LABORATORIES INC.**  
**ACCREDITED ENVIRONMENTAL ANALYSIS**

3845 ROUTE 11 SOUTH,  
 CORTLAND, N.Y. 13045

P.O. BOX 5150  
 607-753-3403

**LABORATORY REPORT**  
 Lab Log No: 9412066

Client: **C & H Engineers**  
 431 East Fayette Street  
 Syracuse, NY 13202  
 Site: Syracuse Label

Report Date: 12/29/94  
 Sampling Date: 12/03/94  
 Sampled By: SDN  
 Date Received: 12/05/94  
 Analyzed by: EAC, 12/17/94

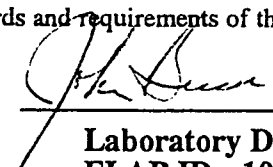
Sample ID: Deep Pit

**VOLATILES BY METHOD EPA 8021**

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/kg	250	nd
Bromobenzene	108-86-1	ug/kg	250	nd
Bromochloromethane	74-97-5	ug/kg	250	nd
Bromodichloromethane	75-27-4	ug/kg	250	nd
Bromoform	75-25-2	ug/kg	250	nd
Bromomethane	74-83-9	ug/kg	250	nd
n-Butylbenzene	104-51-8	ug/kg	250	nd
sec-Butylbenzene	135-98-8	ug/kg	250	nd
tert-Butylbenzene	98-06-6	ug/kg	250	nd
Carbon Tetrachloride	56-23-5	ug/kg	250	nd
Chlorobenzene	108-90-7	ug/kg	250	nd
Chloroethane	75-00-3	ug/kg	250	nd
Chloroform	67-66-3	ug/kg	250	nd
Chloromethane	74-87-3	ug/kg	250	nd
2-Chlorotoluene	95-49-8	ug/kg	250	nd
4-Chlorotoluene	106-43-4	ug/kg	250	nd
Dibromochloromethane	124-48-1	ug/kg	250	nd
1,2-Dibromo-3-chloropropan	96-12-8	ug/kg	250	nd
1,2-Dibromoethane	106-93-4	ug/kg	250	nd
Dibromomethane	74-95-3	ug/kg	250	nd
1,2-Dichlorobenzene	95-50-1	ug/kg	250	nd
1,3-Dichlorobenzene	541-73-1	ug/kg	250	nd
1,4-Dichlorobenzene	106-46-7	ug/kg	250	nd
Dichlorodifluoromethane	75-71-8	ug/kg	250	nd
1,1-Dichloroethane	75-34-3	ug/kg	250	nd
1,2-Dichloroethane	107-06-2	ug/kg	250	nd
1,1-Dichloroethene	75-35-4	ug/kg	250	nd
cis-1,2-Dichloroethene	156-59-4	ug/kg	250	nd
trans-1,2-Dichloroethene	156-60-5	ug/kg	250	nd
1,2-Dichloropropane	78-87-5	ug/kg	250	nd
1,3-Dichloropropane	142-28-9	ug/kg	250	nd
2,2-Dichloropropane	590-20-7	ug/kg	250	nd
1,1-Dichloropropene	563-58-6	ug/kg	250	nd
cis-1,3-Dichloropropene	10061-01-5	ug/kg	250	nd
trans-1,3-Dichloropropene	10061-02-6	ug/kg	250	nd
Ethylbenzene	100-41-4	ug/kg	250	nd
Hexachlorobutadiene	87-68-3	ug/kg	250	nd
Isopropylbenzene	98-82-8	ug/kg	250	nd
p-Isopropyltoluene	99-87-6	ug/kg	250	nd
Methylene Chloride	75-09-2	ug/kg	250	nd
Naphthalene	91-20-3	ug/kg	250	nd
Propylbenzene	103-65-1	ug/kg	250	nd
Styrene	100-42-5	ug/kg	250	nd
1,1,1,2-Tetrachloroethane	630-20-6	ug/kg	250	nd
1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	250	nd
Tetrachloroethene	127-18-4	ug/kg	250	*78000*
Toluene	108-88-3	ug/kg	250	*1010*
1,2,3-Trichlorobenzene	87-61-6	ug/kg	250	nd
1,2,4-Trichlorobenzene	120-82-1	ug/kg	250	nd
1,1,1-Trichloroethane	71-55-6	ug/kg	250	nd
1,1,2-Trichloroethane	79-00-5	ug/kg	250	nd
Trichloroethene	79-01-6	ug/kg	250	*433*
Trichlorofluoromethane	75-69-4	ug/kg	250	nd
1,2,3-Trichloropropane	96-18-4	ug/kg	250	nd
1,2,4-Trimethylbenzene	95-63-6	ug/kg	250	nd
1,3,5-Trimethylbenzene	108-67-8	ug/kg	250	nd
Vinyl Chloride	75-01-4	ug/kg	250	nd
o-Xylene	95-47-6	ug/kg	250	nd
m,p-Xylenes	108-38-3/1	ug/kg	250	nd

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.



Laboratory Director  
 ELAP ID - 10795

**BUCK ENVIRONMENTAL**  
LABORATORIES, INC.  
ACCREDITED ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH,  
CORTLAND, N.Y. 13045

P.O. BOX 5150  
607-753-3403

**LABORATORY REPORT**

Lab Log No: 9412066

Client: C & H Engineers  
431 East Fayette Street  
Syracuse, NY 13202

Site: Syracuse Label

Report Date: 12/09/94  
Sampling Date: 12/03/94  
Sampled By: SDN  
Date Received: 12/05/94  
Analyzed by: MM, 12/08/94

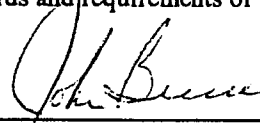
Sample ID: Deep Pit

PAH BY METHOD By EPA 8270

ANALYTE	CAS #	UNITS	DL	RESULT
acenaphthene	83-32-9	ug/kg	170	ND
acenaphthylene	208-96-8	ug/kg	170	ND
anthracene	120-12-7	ug/kg	170	ND
benzo(a)anthracene	56-55-3	ug/kg	330	ND
benzo(a)pyrene	50-32-8	ug/kg	170	ND
benzo(b)fluoranthene	205-99-2	ug/kg	170	ND
benzo(g,h,i)perylene	191-24-2	ug/kg	170	ND
benzo(k)fluoranthene	207-08-9	ug/kg	170	ND
chrysene	218-01-9	ug/kg	170	ND
dibenzo(a,h)anthracene	53-70-3	ug/kg	170	ND
fluoranthene	206-44-0	ug/kg	170	ND
fluorene	86-73-7	ug/kg	170	ND
indeno(1,2,3-c,d)pyrene	193-39-5	ug/kg	170	ND
naphthalene	91-20-3	ug/kg	170	ND
phenanthrene	85-01-8	ug/kg	330	ND
pyrene	129-00-0	ug/kg	170	ND

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

  
Laboratory Director  
ELAP ID - 10795



**ATTACHMENT F**

**LABORATORY RESULTS - STAGED SOIL SAMPLES**

**Attachment IV**  
**Limited Subsurface Investigation**  
**(Beardsley Design Associates**  
**Engineers, April 28, 2008)**

# *Limited Subsurface Investigation*

## **Syracuse Label Company, Inc.**

110 Luther Avenue  
Town of Salina, New York

2

April 28, 2008

Prepared for:

Syracuse Label Co., Inc.  
110 Luther Avenue  
Liverpool, New York 13088

**BDA** BEARDSLEY DESIGN  
ASSOCIATES

Architecture, Engineering & Landscape Architecture, P.C.

BDA Project 08405.000  
431 East Fayette Street  
Syracuse, New York 13202  
Telephone: (315) 472-6980  
Fax: (315) 472-3523

# TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
<b>1.0 INTRODUCTION .....</b>	<b>1</b>
1.1 Project History .....	1
<b>2.0 PROJECT SUMMARY.....</b>	<b>1</b>
<b>3.0 METHODOLOGY.....</b>	<b>2</b>
<b>4.0 FIELD OBSERVATIONS .....</b>	<b>3</b>
4.1 Subsurface Soil Profile.....	3
4.2 Headspace Analysis .....	3
4.3 Groundwater .....	3
4.4 Water Quality Analysis.....	3
<b>5.0 LABORATORY ANALYTICAL RESULTS.....</b>	<b>4</b>
<b>6.0 CONCLUSIONS .....</b>	<b>5</b>
<b>7.0 RECOMMENDATIONS.....</b>	<b>5</b>

## FIGURES

- 1 Location Plan
- 2 Monitoring Well Location Sketch
- 3 Groundwater Contour Map
- 4 Perc Isoconcentration Map

## TABLES

- 1 Boring Logs
- 2 Water Quality Analysis

## ATTACHMENTS

- A Laboratory Analysis Reports



Following completion of the Amendment 2 services, and the identification of perc in groundwater in wells MW-7 and MW-8, BDA proposed to install additional exterior wells to the north of Well MW-7 (Amendment 3, Phase 1 scope). Depending on the results of the sampling and analysis of these wells, additional wells were proposed for locations further to the west, interior and/or exterior to the building (Phase 2 scope). Parratt-Wolff was again subcontracted by BDA for this additional drilling and well installation. Two additional exterior borings and 2" inside diameter (I.D.) monitoring wells B-08-5 (MW-9) and B-08-6 (MW-10) were drilled to the north adjacent to Luther Avenue. Groundwater was subsequently sampled and analyzed from these wells and no perc was identified. A set of three interior wells (MW-11, MW-12, and MW-13) were then installed by Parratt-Wolff north of MW-1, MW-7, and MW-8 (Phase 2 scope). Levels of perc contamination were identified, and BDA was approved for installation of an additional three wells (MW-14, MW-15, and MW-16) by Parratt-Wolff up-gradient to the west (Phase 3 scope). Perc was not identified at these additional well locations.

### **3.0 METHODOLOGY**

Boring B-08-1 was advanced using a 2-inch-diameter macro-core sampler fitted with expendable four-foot sampling tubes. Continuous soil samples were extracted to a subsurface depth of 16 feet below grade. B-08-2, B-08-3, B-08-4, B-08-5, and B-08-6 were advanced by hollow stem auger method to a depth of 20 feet below grade with continuous 2" I.D. split barrel sampling performed at two-foot intervals. Interior borings B-08-7, B-08-8 and B-08-9 were advanced using a hand auger. Borings B-08-10, B-08-11, and B-08-12 were advanced using a 2-1/8" Geoprobe casing with an expendable point for the purpose of installing a monitoring well.

During the completion of subsurface borings B-08-1 through B-08-6, the BDA representative recorded the soil characteristics encountered at each location. Soil samples were collected for field headspace analysis to be performed with a photo-ionization detector (PID). Each sample was placed in a zip-lock bag and then screened with the PID for the presence of volatile organic compounds (VOCs). Soil samples were not obtained from borings B-08-7 through B-08-12.

A 1" I.D. PVC monitoring well with a 10-foot 0.010" slotted screen was installed at the B-08-1, B-08-10, B-08-11, and B-08-12 locations (MW-5, MW-14, MW-15, and MW-16 respectively). A 2" I.D. PVC groundwater monitoring well with a 10-foot 0.010" slotted screen was installed at each of the B-08-2 through B-08-6 locations. Each of these wells was constructed utilizing a silica sand filter pack and a bentonite pellet seal. At the B-08-7, B-08-8, and B-08-9 locations, a 4'-long by 1-1/4" I.D. stainless steel well point with a galvanized steel riser was driven to depth for the installation of wells MW-11, MW-12, and MW-13 respectively.

[REDACTED] from borings B-08-1, 2, 3, and 4 were placed into laboratory-prepared containers and submitted to Life Science Laboratories, Inc. (LSL) for analysis of VOCs by U.S. Environmental Protection Agency (EPA) Method 601B TCL.

Groundwater samples were extracted from wells MW-5, MW-6, MW-7, and MW-8 using a disposable bailer. The remaining wells, MW-9 through MW-16, were sampled using a peristaltic pump and polyethylene tubing inserted to the well bottom. Each well was purged of at least three well volumes and allowed to recover prior to sampling. Each sample was then extracted and dispensed into laboratory-prepared containers. Groundwater samples were placed into

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laboratory-prepared containers and submitted to LSL for analysis of VOCs by EPA Method 601B TCL.

#### 4.0 FIELD OBSERVATIONS

##### 4.1 Subsurface Soil Profile

In general, the soil stratigraphy encountered during boring advancement included a surfacing consisting of asphalt pavement (exterior borings) or concrete slab (interior borings). At the interior B-08-1 location, a crushed stone and gravel fill was identified to a depth of 6 feet below finish floor. A ~~crushed stone and gravel fill~~ deposit was identified underlying the fill to the boring termination depth of 16 feet. ~~Soil samples were not obtained at other interior locations.~~ At exterior locations along Luther Avenue, a miscellaneous ~~crushed gravel and sand~~ fill was encountered under the asphalt pavement to a depth of 1 to 4 feet below grade. Beneath the fill, the exterior borings encountered a ~~layer of light gray silty clay with a depth of 1 to 2 feet~~ ~~silty sand~~.

Detailed descriptions of the soil stratigraphy encountered at each boring location are included in Table 1 - Boring Logs.

##### 4.2 Headspace Analysis

Headspace organic volatile readings of soil samples from borings B-08-1, B-08-2, B-08-3, B-08-4, B-08-5, and B-08-6 were less than 10 parts per million (ppm), with the exception of samples from 0.3' to 8.0' (19.4 to 35.9 ppm), and 10.0' to 12.0' (14 ppm) in B-08-2, 4.0' to 12.0' (29.0 to 61.4 ppm) in B-08-3, and 4.0' to 6.0' (20.2 ppm) and 8.0' to 14.0' (25.5 to 30.7 ppm) in B-08-4. Headspace analytical results are included in the attached Table 1 - Boring Logs.

##### 4.3 Groundwater

~~Groundwater was not encountered at a depth estimated at 0 to 10 feet below grade during boring advancement.~~ Following installation of wells and well points, ~~groundwater levels were measured in wells at depths of 2 to 8 feet below grade.~~ Although inconclusive, it appears that the groundwater table in the area is under hydraulic pressure and ~~groundwater levels~~ ~~levels to rise substantially within the wells.~~

A groundwater contour map was constructed from groundwater measurements taken within monitoring wells on April 2, 2008 (Figure 3). An easterly sloping flow gradient is inferred from these data as depicted on the contour map.

##### 4.4 Water Quality Analysis

BDA obtained water quality data in conjunction with groundwater sampling completed for laboratory analysis. Data was collected with the intent that the parameters may be critical to evaluation of potential remediation alternatives if remediation is proved necessary. These data are included in Table 2 (attached).

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## 1.0 INTRODUCTION

Beardsley Design Associates (BDA) has conducted a Limited Subsurface Investigation at the Syracuse Label Company, Inc. (Syracuse Label) facility, in the Town of Salina, New York (see Figure 1 - Location Plan). BDA performed the investigation in order to assess the extents of potential on-site subsurface soil and groundwater impacts from ~~hexachlorocyclopentadiene (perc)~~. This report presents the results of the investigation as outlined in the December 5, 2007 Scope of Services and subsequent Amendments 1, 2, and 3.

### 1.1 Project History

Reportedly, ~~the~~ ~~Company~~ performed parts cleaning and plating (utilizing perc as a solvent) in an older section of the existing facility during the 1960s. This older section corresponds to what is now the east side of the current Syracuse Label facility that is utilized as the main production area. According to Syracuse Label personnel, ~~former~~ ~~employees~~. Much of the current investigation has been concentrated in this area of the facility.

In the late ~~1990s~~ ~~remedial~~ actions and remedial actions were completed by C&H Engineers, P.C. in the area of the warehouse portion of the Luther Avenue facility. During a remedial action that involved ~~excavating~~ ~~soils~~ ~~below~~ ~~grade~~, perc was identified within ~~soils~~ ~~up~~ ~~to~~ ~~15~~ ~~feet~~ ~~below~~ ~~grade~~. These deeper soils were ~~not~~ ~~removed~~ ~~due~~ ~~to~~ ~~groundwater~~ ~~infiltration~~. Upon completion of the limited remedial actions, the New York State Department of Environmental Conservation (NYSDEC) requested that a groundwater monitoring event be completed to prove that the remedial actions had addressed a potential contaminant plume. Although ~~petroleum~~ ~~compounds~~ were part of this groundwater monitoring event, ~~the~~ ~~samples~~ ~~were~~ ~~not~~ ~~analyzed~~ ~~for~~ ~~perc~~. Subsequent to the groundwater monitoring report, NYSDEC closed the associated spill file.

## 2.0 PROJECT SUMMARY

In December 2007, BDA sampled four existing wells and a trench interceptor to investigate the presence or absence of perc contamination in site groundwater. The laboratory analysis of samples obtained on December 10, 2007 identified the presence of perc in groundwater collected from monitoring well MW-1 at a concentration of 170 parts per billion (ppb). A subsequent sampling event of MW-1 on January 9, 2008 (Amendment 1) revealed a perc concentration of 110 ppb. Based on historical data, MW-1 is located hydraulically down gradient from the remediated area that is now located beneath the warehouse slab.

Following the identification of perc in groundwater at a concentration above the New York State groundwater standard, BDA proposed to perform additional exploration to investigate the degree and extent of perc contamination at the site. The Amendment 2 proposed drilling four additional borings and installing groundwater monitoring wells: one in the warehouse, and at three exterior locations adjacent to Luther Avenue to the north, south, and east of well MW-1. Parratt-Wolff, Inc. of East Syracuse, New York was subcontracted by BDA to advance subsurface borings at four locations on January 19 and 24, 2008, identified as B-08-1 (MW-5), B-08-2 (MW-6), B-08-3 (MW-7), and B-08-4 (MW-8), at locations shown on Figure 2-Monitoring Well Location Plan.

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**5.0 LABORATORY ANALYTICAL RESULTS**

*Soil*

Soil analytical results were compared to the Technical and Administrative Guidance Memorandum #4046 (TAGM 4046) recommended soil cleanup objectives, amended per the December 20, 2000 soil cleanup objectives for gasoline and fuel oil spills. The following is a summary of detected compounds in excess of TAGM 4046 Soil Cleanup Objectives.

Summary of Detected Compounds In Excess of TAGM 4046 Soil Cleanup Objectives			
Analyte	TAGM 4046 Soil Cleanup Objective	Soil Sample	
		B-08-3 (4'-6')	B-08-4 (8' - 10')
EPA 8260B TCL	(ug/kg)	(ug/kg)	(ug/kg)
Tetrachloroethene	14,000	26,000	23,000
Total VOCs	10,000	26,000	23,000

150,000

*Groundwater*

Groundwater analytical results were compared with the NYSDEC groundwater standards published in the Division of Water Technical and Operations Guidance Series (TOGS) Memorandum 1.1.1. The following is a summary of compounds identified in samples in excess of TOGS groundwater quality standards.

Summary of Detected Compounds In Excess of TOGS 1.1.1 Groundwater Quality Standards/Guidance Values (TOGS 1.1.1)									
Analyte	TOGS Groundwater Standard	Groundwater Sample							
		MW-1	MW-7	MW-8	MW-10	MW-11	MW-12	MW-13	MW-16
EPA 601B TCL	(ug/kg)	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Tetrachloroethene	5	170	14,000	6,200	<1	14,000	1,200	900	<1
Trichloroethene	5	--	1,700	920	<1	2,400	280	470	<1
Vinyl Chloride	2	--	560	290	29	<1,000	<20	<100	2.5
1,2Dichloroethene	5	--	2,600	1,600	<1	<1,000	<20	<100	<1

An isoconcentration map (Figure 4) was constructed for the tetrachloroethene (perc) data presented in the table above. The map depicts an area of concentration centered near the east side of the main production area. The limits of the contaminant plume defined by the isocontours is defined to the north, west, and south, and not well defined to the east towards Luther Avenue.

The complete Laboratory Analysis Reports are included in Attachment A.

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## **6.0 CONCLUSIONS**

- Conclusion No. 1:** Headspace analysis identified elevated levels of VOCs in soil samples.
- Conclusion No. 2:** Perc was identified in soil at concentrations in excess of TAGM 4046 Soil Cleanup Objectives.
- Conclusion No. 3:** Perc, in addition to TCE, vinyl chloride, and 1-2 dichloroethene, have been identified in groundwater at the site at concentrations exceeding the TOGS groundwater standards.
- Conclusion No. 4:** The highest concentrations of perc identified in soil and groundwater were found in an area near a reported former floor drain on the east side of the facility, in an area formerly used by Prince Tool & Die for a parts cleaning and plating operation.

## **7.0 RECOMMENDATIONS**

- Recommendation No. 1:** This report should be submitted to the NYSDEC for their review and comment. No additional assessment is warranted at this time pending receipt of their response.

If you should have any questions regarding the information presented in this report, please feel free to contact our office at your convenience.

Very truly yours,

BEARDSLEY DESIGN ASSOCIATES



Douglas F. Hurlbut  
Senior Designer



Richard D. McKenna  
Project Engineer

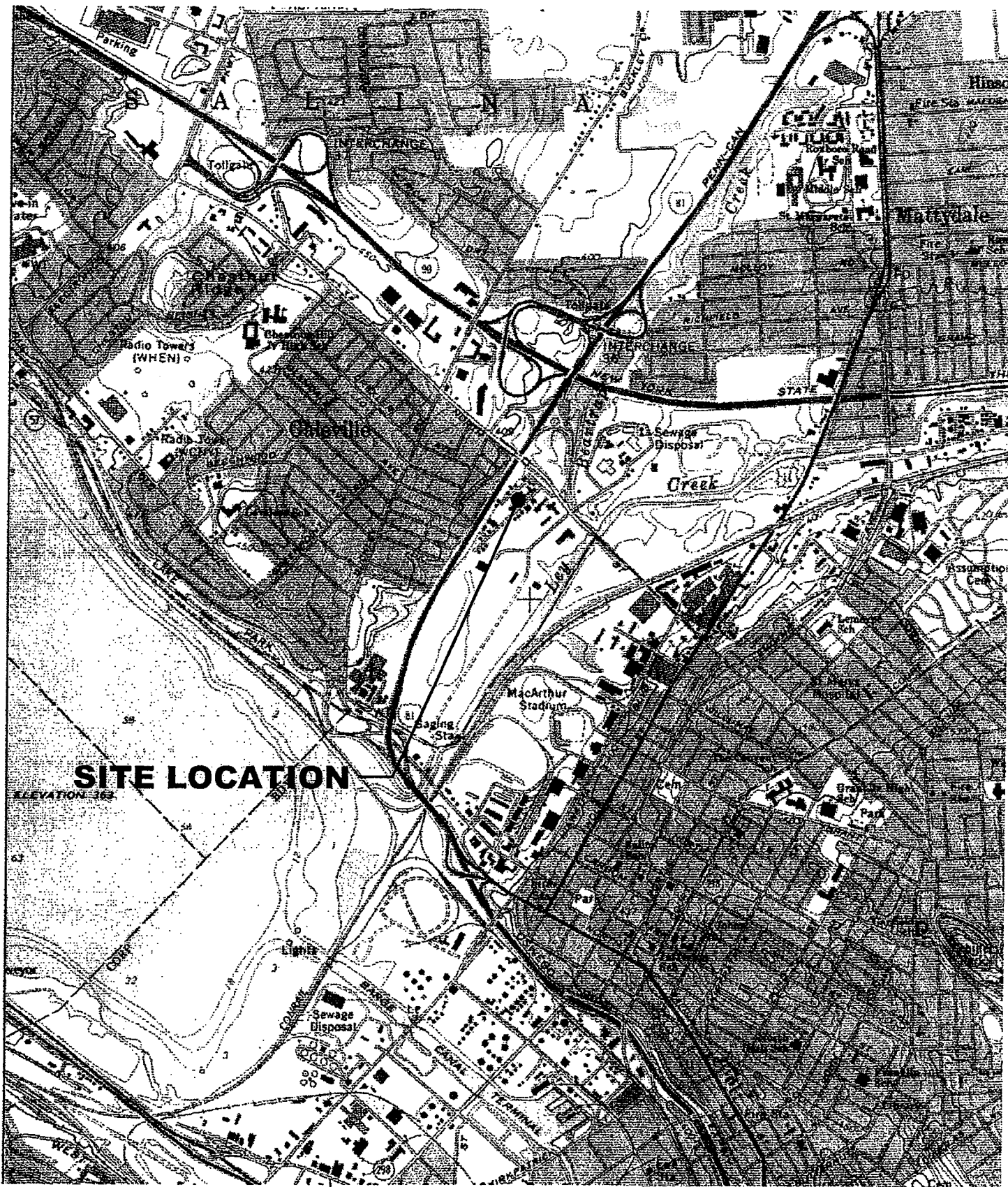
Attachments

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**FIGURES**

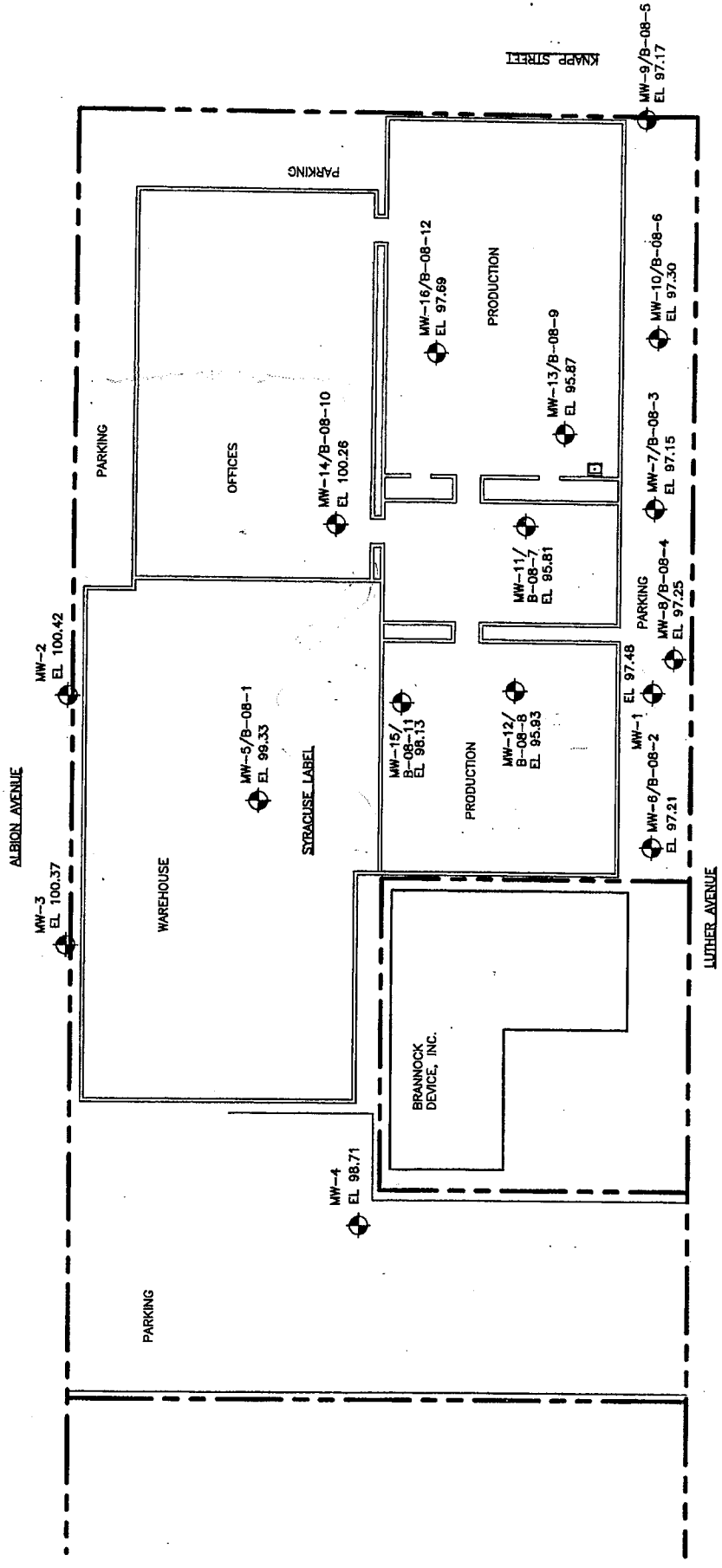


**SITE LOCATION**

**FIGURE 1 - LOCATION PLAN**

Syracuse Label Co., Inc  
 Luther Avenue  
 Liverpool, New York

Scale: 1" = 2,000'



**FIGURE 2 - MONITORING WELL LOCATIONS SKETCH**  
 Syracuse Label Co., Inc  
 Luther Avenue  
 Liverpool, New York  
 MONITORING WELL LOCATIONS

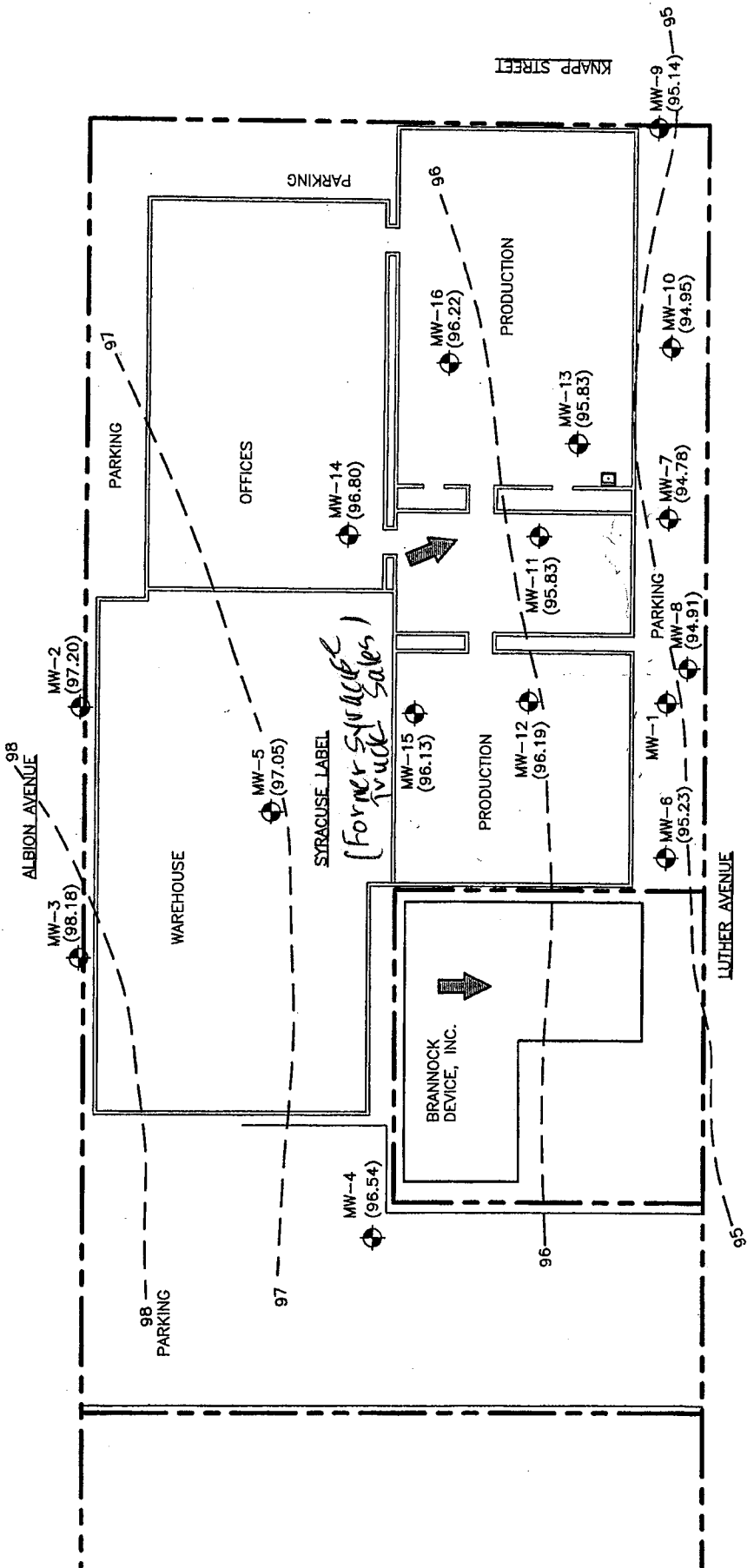
Scale: 1" = 30'

Notes:

1. MONITORING WELL  
 MW-#/BORING #
2. EL. 97.17 ELEVATION TOP OF PVC RISER

BM ELEVATION BENCHMARK, NORTH BONNET NUT  
 OF HYDRANT, ASSUMED ELEVATION 100.00'





**FIGURE 3 - GROUNDWATER CONTOUR MAP**  
**APRIL 2, 2008**

Syracuse Label Co., Inc  
 Luther Avenue  
 Liverpool, New York

MONITORING WELL LOCATIONS  
 Scale: 1" = 30'

Notes:

1. MW-# MONITORING WELL
2. (98.11) GROUNDWATER ELEVATION
3. 95 GROUNDWATER CONTOUR (INFERRED)
4. GROUNDWATER FLOW DIRECTION

BM ELEVATION BENCHMARK, NORTH BONNET NUT  
 OF HYDRANT, ASSUMED ELEVATION 100.00'



**TABLES**

**TABLE 1**  
**Boring Logs**

**Boring B-08-1/MW-5**

Installation Date: 1/19/08

Surface Elevation: 98.4'

Sample#	Interval (ft)	R (in)	Soil Profile	USCS	PID (ppm)
	0.0-0.5		6" Concrete Slab	---	---
1	0.5-4.0	29	Crushed stone and Gravel -Misc. Fill-	---	0.5
2a	4.0-6.0	48*	Similar Material -Miscellaneous Fill-	---	0.5
2b	6.0-8.0		Brown silty Clay (wet)	CL	1.7
3	8.0-12.0	22	Similar Soil (wet)	CL	0.8
4	12.0-16.0	28	Brown Silt (saturated)	ML	1.7

\* Total recovery of 48" sampling interval; Monitoring well MW-5 installed at this boring location to 16' with a 10' X 1" I.D. PVC screen and riser.

**Boring B-08-2/MW-6**

Installation Date: 1/19/08

Surface Elevation: 98.6'

Sample#	Interval (ft)	R (in)	Soil Profile	USCS	PID (ppm)
	0.0-0.3		Asphalt Pavement	---	---
1	0.3-2.0	12	Brown silty sandy Gravel -Misc. Fill-	---	35.9
2a	2.0-2.5	19*	Brown silty mf Sand (Saturated)	SM	---
2b	2.5-4.0		Brown silty Clay (moist)	CL	122
3	4.0-6.0	7	Brown clayey Silt (wet)	CL/ML	19.4
4	6.0-8.0	24	Brown silty Clay (wet)	CL	28.9
5	8.0-10.0	24	Similar Soil (moist to wet)	CL	1.9
6	10.0-12.0	5	Similar Soil (moist)	CL	14.0
7	12.0-14.0	18	Similar Soil (saturated)	CL	0.8
8	14.0-16.0	4	Brown clayey Silt (saturated)	CL/ML	0.5
9	16.0-18.0	18	Brown Silt and fine Sand (saturated)	ML	0.4
10	18.0-20.0	20	Similar Soil (saturated)	ML	0.8

\* Total recovery of 48" sampling interval; Monitoring well MW-6 installed at this boring location to 18' with a 10' X 2" I.D. PVC screen and riser.

- Notes: (1) Boring B-08-1 advanced with a tractor mounted Geoprobe. Boring B-08-2 advanced with a truck mounted Ingersol Rand A-300.  
 (2) Surface elevations are referenced to a hydrant across Luther Avenue, north bonnet nut, assumed elevation 100.00.  
 (3) R= Sample recovery from 2" diameter by 48" long macro core sampler, or 2" I.D. Split Barrel Sampler.  
 (4) USCS: Unified Soil Classification System  
 (5) PID: Photo-ionization Detector.

**TABLE 1**  
**Boring Logs**

**Boring B-08-3/MW-7**

Installation Date: 1/24/08

Surface Elevation: 97.7

Sample#	Interval (ft)	R (in)	Soil Profile	USCS	PID (ppm)
	0.0-0.3		Asphalt Pavement	---	---
1	0.3-2.0	20	Brown silty sandy Gravel -Misc. Fill-	---	0.8
2a	2.0-2.5	22*	Similar Material -Misc. Fill-	---	9.7**
2b	2.5-3.5		Grey brown Silt (moist)	ML	9.7**
2c	3.5-4.0		Grey brown silty Clay (moist)	CL	9.7**
3	4.0-6.0	24	Brown & grey mottled silty Clay (moist-wet)	CL	34.4
4	6.0-8.0	21	Brown & grey layered Silt & Clay (sat.)	ML/CL	29.0
5	8.0-10.0	24	Brown to grey layered Silt & Clay (sat.)	ML/CL	102
6	10.0-12.0	22	Grey Silt, little Clay (saturated)	ML	55.4
7	12.0-14.0	24	Grey Silt (saturated)	ML	61.4
8	14.0-16.0	20	Grey Silt, trace f Sand (saturated)	ML	---
9	16.0-18.0	24	Grey Silt, little f Sand w/ Clay layer (sat.)	ML	8.0
10	18.0-20.0	20	Grey Silt, little f Sand (saturated)	ML	4.1

\*Total recovery of 48" sampling interval; \*\*Full interval combined for head space analysis.  
 Monitoring well MW-7 installed at this boring location to 18' with a 10' X 2" I.D. PVC screen and riser.

**Boring B-08-4/MW-8**

Installation Date: 1/24/08

Surface Elevation: 97.7

Sample#	Interval (ft)	R (in)	Soil Profile	USCS	PID (ppm)
	0.0-0.3		Asphalt Pavement	---	---
1	0.3-4.0	8	Grey silty sandy Gravel (moist) -Miscellaneous Fill-	---	0.0
2a	4.0-4.5	17*	Similar Material -Misc. Fill-	---	7.7**
2	2.0-4.0		Grey brown mottled silty Clay (moist)	CL	7.7**
3	4.0-6.0	23	Similar Soil (moist)	CL	20.2
4	6.0-8.0	18	Brown silty Clay	CL	6.4
5	8.0-10.0	18	Brown & grey mottled silty Clay (saturated)	CL	30.5
6	10.0-12.0	21	Grey Silt (saturated)	ML	30.7
7	12.0-14.0	20	Similar Soil (saturated)	ML	25.5
8	14.0-16.0	24	Grey Silt with f Sand (saturated)	ML	1.5
9	16.0-18.0	20	Similar Soil (saturated)	ML	0.1
10	18.0-20.0	20	Similar Soil (saturated)	ML	0.1

\* Total recovery of 24" sampling interval; \*\* Full interval combined for head space analysis  
 Monitoring well MW-8 installed at this boring location to 18' with a 10' X 2" I.D. PVC screen and riser.

- Notes: (1) Borings advanced with a truck mounted Ingersol Rand A-300 drill rig.  
 (2) Surface elevations are referenced to a hydrant across Luther Avenue, north bonnet nut, assumed elevation 100.00.  
 (3) R= Sample recovery from 2" I.D. Split Barrel Sampler.  
 (4) USCS: Unified Soil Classification System.  
 (5) PID: Photo-ionization Detector.

**TABLE 1**  
**Boring Logs**

**Boring B-08-5/MW-9**

Installation Date: 3/17/08

Surface Elevation: 97.7

Sample#	Interval (ft)	R (in)	Soil Profile	USCS	PID (ppm)
	0.0-0.3		Asphalt Pavement	---	---
1	0.0-2.0	6	Brown Crushed Stone, Sand, Silt, Gravel (moist) -Miscellaneous Fill-	---	---
2a	2.0-2.3	17*	Brown cmf Sand, little mf Gravel (moist)	SP	0.0**
2b	2.3-4.0		Brown Clay, some Silt	CL	0.0**
3	4.0-6.0	15	Similar Soil (moist)	CL	0.0
4	6.0-8.0	12	Brown Silt & Clay w/ silty Sand layer (moist)	CL/ML	0.2
5	8.0-10.0	17	Brown Silt, some Clay (wet)	ML	0.6
6	10.0-12.0	16	Gray brown Silt, trace Clay (saturated)	ML	0.7
7	12.0-14.0	24	Similar Soil (saturated)	ML	0.0
8	14.0-16.0	5	Similar Soil (saturated)	ML	0.0
9	16.0-18.0	18	Gray Silt, little f Sand, trace Clay (sat.)	ML	0.0
10	18.0-20.0	18	Similar Soil (saturated)	ML	0.0

\* Total recovery of 24" sampling interval; \*\* Full interval combined for head space analysis  
 Monitoring well MW-9 installed at this boring location to 18' with a 10' X 2" I.D. PVC screen and riser.

**Boring B-08-6/MW-10**

Installation Date: 3/17/08

Surface Elevation: 97.8

Sample#	Interval (ft)	R (in)	Soil Profile	USCS	PID (ppm)
	0.0-0.3		Asphalt Pavement	---	---
1a	0.5-1.0	12*	Gray Crushed Stone (moist) -Misc. Fill-	---	0.0
1b	1.0-2.0		Dark brown Clay, some Silt, little mf Gravel (moist)	---	0.0
2a	2.0-2.7	22*	Similar Soil (moist)	---	0.3
2b	2.7-4.0		Mottled rusty brown & gray Clay, some Silt (moist)	CL	0.0
3	4.0-6.0	13	Brown & gray mottled Clay, little Silt (moist)	CL	0.0
4	6.0-8.0	13	Brown & gray mottled Clay, some Silt (moist-wet)	CL	0.0
5	8.0-10.0	18	Brown Silt, some Clay (wet)	ML/CL	0.4
6	10.0-12.0	13	Gray brown Silt, trace Clay (saturated)	ML	0.7
7	12.0-14.0	15	Similar Soil (saturated)	ML	0.2
8	14.0-16.0	18	Similar Soil (saturated)	ML	0.3
9	16.0-18.0	23	Gray Silt, some fine Sand (saturated)	ML	0.4
10	18.0-20.0	16	Gray Silt, little fine Sand (saturated)	ML	0.5

\* Total recovery of 24" sampling interval  
 Monitoring well MW-10 installed at this boring location to 18' with a 10' X 2" I.D. PVC screen and riser.

- Notes: (1) Borings advanced with a truck mounted Ingersol Rand A-300 drill rig.  
 (2) Surface elevations are referenced to a hydrant across Luther Avenue, flat north bonnet nut, assumed elevation 100.00.  
 (3) R= Sample recovery from 2" from 2" I.D. Split Barrel Sampler.  
 (4) USCS: Unified Soil Classification System.  
 (5) PID: Photo-ionization Detector.

**TABLE 1**  
**Boring Logs**

**Boring B-08-7/MW-11** Installation Date: 3/20/08 Surface Elevation: 98.1

Sample#	Interval (ft)	R (in)	Soil Profile	USCS	PID (ppm)
N/A	0.0-1.0	12	12" Concrete Slab	---	---
N/A	0.5-16.5	---	Brown silt, clay, fine sand (moist to sat.)	---	---

\* Installed 1-1/4" I.D. stainless steel well point with galvanized steel riser to 16.5' below grade.

**Boring B-08-8/MW-12** Installation Date: 3/20/08 Surface Elevation: 98.3

Sample#	Interval (ft)	R (in)	Soil Profile	USCS	PID (ppm)
N/A	0.0-0.9	11	11" Concrete Slab	---	---
N/A	0.9-16.5	---	Brown silt, clay, fine sand (moist to sat.)	---	---

\* Installed 1-1/4" I.D. stainless steel well point with galvanized steel riser to 16.5' below grade.

**Boring B-08-9/MW-13** Installation Date: 3/20/08 Surface Elevation: 98.0

Sample#	Interval (ft)	R (in)	Soil Profile	USCS	PID (ppm)
N/A	0.0-0.9	11	11" Concrete Slab	---	---
N/A	0.9-16.5	---	Brown silt, clay, fine sand (moist to sat.)	---	---

\* Installed 1-1/4" I.D. stainless steel well point with galvanized steel riser to 16.5' below grade.

**Boring B-08-10/MW-14** Installation Date: 4/1/08 Surface Elevation: 100.7

Sample#	Interval (ft)	R (in)	Soil Profile	USCS	PID (ppm)
N/A	0.0-0.3	3	3" Concrete Slab	---	---
N/A	0.9-18.0	---	No soil sampled	---	---

\* Installed 1" I.D. PVC well and riser with 10' length/0.010" slot screen to 18.0' below grade.

**Boring B-08-11/MW-15** Installation Date: 4/1/08 Surface Elevation: 98.3

Sample#	Interval (ft)	R (in)	Soil Profile	USCS	PID (ppm)
N/A	0.0-0.9	11	11" Concrete Slab	---	---
N/A	0.9-16.0	---	No soil sampled	---	---

\* Installed 1" I.D. PVC well and riser with 10' length/0.010" slot screen to 16.0' below grade.

**Boring B-08-12/MW-16** Installation Date: 4/1/08 Surface Elevation: 98.0

Sample#	Interval (ft)	R (in)	Soil Profile	USCS	PID (ppm)
N/A	0.0-0.9	11	11" Concrete Slab	---	---
N/A	0.9-16.0	---	No soil sampled	---	---

\* Installed 1" I.D. PVC well and riser with 10' length/0.010" slot screen to 16.0' below grade.

- Notes: (1) Borings B08-7, 8 and 9 partially advanced with a hand auger. 1-1/4" well points and riser then driven to depth using a drive cap and sledge hammer.  
 (2) Borings B08-10, 11 and 12 were advanced with 2-1/8" Geoprobe casing and expendable point to install 1" PVC monitoring well. No soils recovered.  
 (3) Surface elevations are referenced to a hydrant across Luther Avenue, flat north bonnet nut, assumed elevation 100.00.  
 (4) R= Sample recovery from 2" from 2" I.D. Split Barrel Sampler.  
 (5) USCS: Unified Soil Classification System.  
 (6) PID: Photo-ionization Detector.

**TABLE 2**  
**Water Quality Analysis**  
**January 28, 2008**

<b>Parameter</b>	<b>Well MW-7</b>	<b>Well MW-8</b>	<b>Well MW-9</b>
pH	4.63	4.69	4.65
cond (mS/cm)	0.00	0.00	0.00
turb (NTU)	443.0	462.0	471.0
DO (mg/L)	11.69	11.52	10.98
T (°C)	7.80	6.94	7.90
Sal (%)	0.0	0.0	0.0
ORP (mV)	1.73	175.00	178.00
TDS (g/L)	0.00	0.00	0.00

Notes:

Analysis performed with a Horiba U.22 Water

Quality Meter

turb: turbidity

cond: conductivity

DO: dissolved oxygen

T: temperature

Sal: salinity

ORP: Oxydation Reduction Potential

TDS: Total Dissolved Solids



**ATTACHMENT A**  
**LABORATORY ANALYSIS REPORTS**



Doug Hurlbut  
Beardsley Design Associates  
431 E. Fayette Street  
Syracuse, NY 13202

Phone: (315) 472-6980

# Laboratory Analysis Report For Beardsley Design Associates

Client Project ID:

Syracuse Label Co. 08405

LSL Project ID: 0721559

Receive Date/Time: 12/10/07 16:50

Project Received by: EB

Life Science Laboratories, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose. By the Client's acceptance and/or use of this report, the Client agrees that LSL is hereby released from any and all liabilities, claims, damages or causes of action affecting or which may affect the Client as regards to the results contained in this report. The Client further agrees that the only remedy available to the Client in the event of proven non-conformity with the above warranty shall be for LSL to re-perform the analytical test(s) at no charge to the Client. The data contained in this report are for the exclusive use of the Client to whom it is addressed, and the release of these data to any other party, or the use of the name, trademark or service mark of Life Science Laboratories, Inc. especially for the use of advertising to the general public, is strictly prohibited without express prior written consent of Life Science Laboratories, Inc. This report may only be reproduced in its entirety. No partial duplication is allowed. The Chain of Custody document submitted with these samples is considered by LSL to be an appendix of this report and may contain specific information that pertains to the samples included in this report. The analytical result(s) in this report are only representative of the sample(s) submitted for analysis. LSL makes no claim of a sample's representativeness, or integrity, if sampling was not performed by LSL personnel.

## Life Science Laboratories, Inc.

- |                                             |                |                                     |
|---------------------------------------------|----------------|-------------------------------------|
| (1) LSL Central Lab, East Syracuse, NY      | (315) 445-1105 | NYS DOH ELAP #10248 PA DEP #68-2556 |
| (2) LSL North Lab, Waddington, NY           | (315) 388-4476 | NYS DOH ELAP #10900                 |
| (3) LSL Finger Lakes Lab, Wayland, NY       | (585) 728-3320 | NYS DOH ELAP #11667                 |
| (4) LSL Southern Tier Lab, Cuba, NY         | (585) 968-2640 | NYS DOH ELAP #10760                 |
| (5) LSL MidLakes Lab, Canandaigua, NY       | (585) 396-0270 | NYS DOH ELAP #11369                 |
| (6) LSL Brittonfield Lab, East Syracuse, NY | (315) 437-0200 | NYS DOH ELAP #10155                 |

This report was reviewed by:

*[Signature]* Date: 12/17/07  
Life Science Laboratories, Inc.

A copy of this report was sent to:

# -- LABORATORY ANALYSIS REPORT

Beardsley Design Associates Syracuse, NY

Sample ID: MW-2 LSL Sample ID:

Location:

Sampled: 12/10/07 13:00 Sampled By: Client

Sample Matrix: NPW

## Analytical Method

Analyte	Result	Units	Prep Date
(1) EPA 601 Volatile Halocarbons by 624			
Tetrachloroethene	<1	ug/l	
Surrogate (1,2-DCA-d4)	104	%R	
Surrogate (Tol-d8)	102	%R	
Surrogate (4-BFB)	101	%R	

Sample ID: MW-3 LSL Sample ID:

Location:

Sampled: 12/10/07 13:30 Sampled By: Client

Sample Matrix: NPW

## Analytical Method

Analyte	Result	Units	Prep Date
(1) EPA 601 Volatile Halocarbons by 624			
Tetrachloroethene	<1	ug/l	
Surrogate (1,2-DCA-d4)	106	%R	
Surrogate (Tol-d8)	102	%R	
Surrogate (4-BFB)	99	%R	

Sample ID: MW-4 LSL Sample ID:

Location:

Sampled: 12/10/07 14:00 Sampled By: Client

Sample Matrix: NPW

## Analytical Method

Analyte	Result	Units	Prep Date
(1) EPA 601 Volatile Halocarbons by 624			
Tetrachloroethene	<1	ug/l	
Surrogate (1,2-DCA-d4)	104	%R	
Surrogate (Tol-d8)	101	%R	
Surrogate (4-BFB)	102	%R	

Sample ID: MW-1 LSL Sample ID:

Location:

Sampled: 12/10/07 14:30 Sampled By: Client

Sample Matrix: NPW

## Analytical Method

Analyte	Result	Units	Prep Date
(1) EPA 601 Volatile Halocarbons by 624			
Tetrachloroethene	170	ug/l	
Surrogate (1,2-DCA-d4)	107	%R	
Surrogate (Tol-d8)	101	%R	
Surrogate (4-BFB)	102	%R	

Life Science Laboratories, Inc.

Analysis performed at: (1) LSL Central, (2) LSL North, (3) LSL Finger Lakes, (4) LSL Southern Tier, (5) LSL



# -- LABORATORY ANALYSIS REPORT --

*Beardsley Design Associates Syracuse, NY*

Sample ID: MW-2 LSL Sample ID: 0721559-001  
Location:  
Sampled: 12/10/07 13:00 Sampled By: Client  
Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 601 Volatile Halocarbons by 624					
Tetrachloroethene	<1	ug/l		12/12/07	CRT
Surrogate (1,2-DCA-d4)	104	%R		12/12/07	CRT
Surrogate (Tol-d8)	102	%R		12/12/07	CRT
Surrogate (4-BFB)	101	%R		12/12/07	CRT

Sample ID: MW-3 LSL Sample ID: 0721559-002  
Location:  
Sampled: 12/10/07 13:30 Sampled By: Client  
Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 601 Volatile Halocarbons by 624					
Tetrachloroethene	<1	ug/l		12/12/07	CRT
Surrogate (1,2-DCA-d4)	106	%R		12/12/07	CRT
Surrogate (Tol-d8)	102	%R		12/12/07	CRT
Surrogate (4-BFB)	99	%R		12/12/07	CRT

Sample ID: MW-4 LSL Sample ID: 0721559-003  
Location:  
Sampled: 12/10/07 14:00 Sampled By: Client  
Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 601 Volatile Halocarbons by 624					
Tetrachloroethene	<1	ug/l		12/12/07	CRT
Surrogate (1,2-DCA-d4)	104	%R		12/12/07	CRT
Surrogate (Tol-d8)	101	%R		12/12/07	CRT
Surrogate (4-BFB)	102	%R		12/12/07	CRT

Sample ID: MW-1 LSL Sample ID: 0721559-004  
Location:  
Sampled: 12/10/07 14:30 Sampled By: Client  
Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 601 Volatile Halocarbons by 624					
Tetrachloroethene	170	ug/l		12/12/07	CRT
Surrogate (1,2-DCA-d4)	107	%R		12/12/07	CRT
Surrogate (Tol-d8)	101	%R		12/12/07	CRT
Surrogate (4-BFB)	102	%R		12/12/07	CRT

**-- LABORATORY ANALYSIS REPORT --**

*Beardsley Design Associates Syracuse, NY*

Sample ID: SVCS Header LSL Sample ID: 0721559-005

Location:

Sampled: 12/10/07 15:00 Sampled By: Client

Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 601 Volatile Halocarbons by 624					
Tetrachloroethene	<1	ug/l		12/12/07	CRT
Surrogate (1,2-DCA-d4)	105	%R		12/12/07	CRT
Surrogate (Tol-d8)	102	%R		12/12/07	CRT
Surrogate (4-BFB)	102	%R		12/12/07	CRT

Sample ID: Trip Blank LSL Sample ID: 0721559-006

Location:

Sampled: 12/10/07 0:00 Sampled By:

Sample Matrix: TB

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 601 Volatile Halocarbons by 624					
Tetrachloroethene	<1	ug/l		12/11/07	CRT
Surrogate (1,2-DCA-d4)	107	%R		12/11/07	CRT
Surrogate (Tol-d8)	103	%R		12/11/07	CRT
Surrogate (4-BFB)	100	%R		12/11/07	CRT



# Life Science Laboratories, Inc.

## CHAIN OF CUSTODY RECORD

LSL Central Lab  
5854 Butternut Drive  
East Syracuse, NY 13057  
Phone: (315) 445-1105  
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Wayland, NY 14572  
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Email: lsfinger@lsl-inc.com

LSL Southern Tier Lab  
30 East Main Street  
Cuba, NY 14727  
Phone: (585) 968-2640  
Fax: (585) 968-0906  
Email: lssouth@lsl-inc.com

0721559  
BeardsleyDesign

\*\*\* All areas of this Chain of Custody Record MUST be filled out in order to process samples in a timely manner in PEN ONLY \*\*\*

Report Address: Beardsley Design Assoc  
 Name: Beardsley Design Assoc  
 Company: Beardsley Design Assoc  
 Street: 431 E Fayette St  
 City/State: Syracuse, NY  
 Phone: 315 472 6980  
 Email: beardsley@beardsley.com  
 Client Project ID/Client Site ID: Signature Label Co. 08105

LSL North Lab Zip: 13202  
 Fax: \_\_\_\_\_

Authorization or P.O. # \_\_\_\_\_

Turnaround Time: 15 days  
 Normal  Pre-Authorized  3-Day\*  7-Day\*   
 14 DAY  2-Day\*  \*Additional Charges may apply

Date Needed or Special Instructions: \_\_\_\_\_

Client's Sample Identifications	Sample Date	Sample Time	Sample Type	Grab/comp	Matrix	Preserv Added	Containers		Analyses	Preserv Check	LSL ID#
							#	size/type			
MW-2	12/10	1:00pm	grab	"	water-ges	"	2	10A	51A 60A Fe, Frach, Inorganic		001 AB
MW-3	"	1:30pm	"	"	"	"	"	"	"		002
MW-4	"	2:00pm	"	"	"	"	4	"	"		003
MW-1	"	2:30pm	"	"	"	"	"	"	"		004
SVCS Header	"	3:00pm	"	"	0	"	"	"	0		005
Top Blank							2				006 AD

Custody Transfers

Sampled By: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_  
 Shipment Method: \_\_\_\_\_

Received By: APD McKenna  
 Received By: APD McKenna  
 Rec'd for Lab By: \_\_\_\_\_  
 Received Intact: Y/N

Date: 12/10/07  
 Time: 4:23 PM

Sample Temp \_\_\_\_\_

Containers this C-O-C \_\_\_\_\_

LSL use only: \_\_\_\_\_

## ***Upstate Laboratories, Inc.***

Shipping: 6034 Corporate Dr. \* E. Syracuse, NY 13057-1017 \* (315) 437-0255 \* Fax (315) 437-1209  
Mailing: Box 169 \* Syracuse, NY 13206  
Albany (518) 459-3134 \* Binghamton (607) 724-0478 \* Buffalo (716) 649-2533  
Rochester (866) 437-0255 \* New Jersey (908) 892-1807

Mr. Rich McKenna  
Beardsley Design Associates  
431 E. Fayette St.  
Syracuse, NY 13202

Wednesday, January 09, 2008

RE: Syracuse Label

Order No.: U0801141

Dear Mr. Rich McKenna:

Upstate Laboratories, Inc. received 1 sample(s) on 1/9/2008 for the analyses presented in the following report.

All analytical results relate to the samples as received by the laboratory.

All analytical data conforms with standard approved methodologies and quality control. Our quality control narrative will be included should any anomalies occur.

We have included the Chain of Custody Record as part of your report. You may need to reference this form for a more detailed explanation of your samples. Samples will be disposed of approximately one month from final report date.

Should you have any questions regarding these tests, please feel free to give us a call.

Thank you for your patronage.

Sincerely,

UPSTATE LABORATORIES, INC.

AJS (PFF)  
Anthony J. Scafa  
President/CEO

CC:

Laurie Dietz, Electronica Park, LLC: copy report

Confidentiality Statement: This report is meant for the use of the intended recipient. It may contain confidential information, which is legally privileged or otherwise protected by law. If you have received this report in error, you are strictly prohibited from reviewing, using, disseminating, distributing or copying the information.

NY Lab ID 10170

NJ Lab ID NY750

PA Lab ID 68375



**Upstate Laboratories, Inc.**

Date: 09-Jan-08

CLIENT: Beardsley Design Associates  
 Lab Order: U0801141  
 Project: Syracuse Label  
 Lab ID: U0801141-001

Client Sample ID: 001  
 Collection Date: 1/9/2008 12:30:00 PM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>PURGEABLES PRIORITY POLLUTANTS</b>						Analyst: LEF
Tetrachloroethene	110	30		µg/L	10	1/9/2008 2:59:00 PM

NOTES:  
 The reporting limits were raised due to the high concentration of target compounds.

Approved By:  PFF

Date:  1-9-08

Page 1 of 1

- Qualifiers:
- Low Level
  - R Analyte detected in the associated Method Blank
  - H Holding times for preparation or analysis exceeded
  - ND Not Detected at the Reporting Limit

- \*\* Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits



Doug Hurlbut  
Beardsley Design Associates  
431 E. Fayette Street  
Syracuse, NY 13202 USA

Phone: (315) 472-6980

Authorization: PO #08405

# Laboratory Analysis Report

## For

### Beardsley Design Associates

Client Project ID:

**08405 / Syracuse Label Co.**

LSL Project ID: **0801402**

Receive Date/Time: 01/25/08 8:40

Project Received by: LMG

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## Life Science Laboratories, Inc.

- |                                             |                |                                     |
|---------------------------------------------|----------------|-------------------------------------|
| (1) LSL Central Lab, East Syracuse, NY      | (315) 445-1105 | NYS DOH ELAP #10248 PA DEP #68-2556 |
| (2) LSL North Lab, Waddington, NY           | (315) 388-4476 | NYS DOH ELAP #10900                 |
| (3) LSL Finger Lakes Lab, Wayland, NY       | (585) 728-3320 | NYS DOH ELAP #11667                 |
| (4) LSL Southern Tier Lab, Cuba, NY         | (585) 968-2640 | NYS DOH ELAP #10760                 |
| (5) LSL MidLakes Lab, Canandaigua, NY       | (585) 396-0270 | NYS DOH ELAP #11369                 |
| (6) LSL Brittonfield Lab, East Syracuse, NY | (315) 437-0200 | NYS DOH ELAP #10155                 |

This report was reviewed by:

*Paucia Cavallaro, Ph.D.* Date: 1/31/08  
Life Science Laboratories, Inc.

A copy of this report was sent to:



# -- LABORATORY ANALYSIS REPORT --

Beardsley Design Associates Syracuse, NY

Sample ID: B-08-2 S-2b LSL Sample ID: 0801402-002

Location:

Sampled: 01/19/08 13:00 Sampled By: DH

Sample Matrix: SHW as Recd, Soil

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 8260B TCL Volatiles					
Acetone	<1000	ug/kg		1/28/08	CRT
Benzene	<200	ug/kg		1/28/08	CRT
Bromodichloromethane	<200	ug/kg		1/28/08	CRT
Bromoform	<200	ug/kg		1/28/08	CRT
Bromomethane	<200	ug/kg		1/28/08	CRT
2-Butanone (MEK)	<1000	ug/kg		1/28/08	CRT
Carbon disulfide	<200	ug/kg		1/28/08	CRT
Carbon tetrachloride	<200	ug/kg		1/28/08	CRT
Chlorobenzene	<200	ug/kg		1/28/08	CRT
Chloroethane	<200	ug/kg		1/28/08	CRT
Chloroform	<200	ug/kg		1/28/08	CRT
Chloromethane	<200	ug/kg		1/28/08	CRT
Dibromochloromethane	<200	ug/kg		1/28/08	CRT
1,1-Dichloroethane	<200	ug/kg		1/28/08	CRT
1,2-Dichloroethane	<200	ug/kg		1/28/08	CRT
1,1-Dichloroethene	<200	ug/kg		1/28/08	CRT
1,2-Dichloroethene, Total	<200	ug/kg		1/28/08	CRT
1,2-Dichloropropane	<200	ug/kg		1/28/08	CRT
cis-1,3-Dichloropropene	<200	ug/kg		1/28/08	CRT
trans-1,3-Dichloropropene	<200	ug/kg		1/28/08	CRT
Ethyl benzene	<200	ug/kg		1/28/08	CRT
2-Hexanone	<1000	ug/kg		1/28/08	CRT
Methylene chloride	<1000	ug/kg		1/28/08	CRT
4-Methyl-2-pentanone (MIBK)	<1000	ug/kg		1/28/08	CRT
Styrene	<200	ug/kg		1/28/08	CRT
1,1,2,2-Tetrachloroethane	<200	ug/kg		1/28/08	CRT
Tetrachloroethene	<200	ug/kg		1/28/08	CRT
Toluene	<200	ug/kg		1/28/08	CRT
1,1,1-Trichloroethane	<200	ug/kg		1/28/08	CRT
1,1,2-Trichloroethane	<200	ug/kg		1/28/08	CRT
Trichloroethene	<200	ug/kg		1/28/08	CRT
Vinyl chloride	<200	ug/kg		1/28/08	CRT
Xylenes (Total)	<200	ug/kg		1/28/08	CRT
Surrogate (1,2-DCA-d4)	106	%R		1/28/08	CRT
Surrogate (Tol-d8)	93	%R		1/28/08	CRT
Surrogate (4-BFB)	100	%R		1/28/08	CRT

Elevated detection limits due to the presence of a petroleum hydrocarbon pattern in the sample.

# -- LABORATORY ANALYSIS REPORT --

Beardsley Design Associates Syracuse, NY

Sample ID: B-08-3 S-5 LSL Sample ID: 0801402-003

Location:

Sampled: 01/24/08 9:00 Sampled By: DH

Sample Matrix: SHW as Recd, Soil

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 8260B TCL Volatiles					
Acetone	<10000	ug/kg		1/25/08	CRT
Benzene	<4000	ug/kg		1/25/08	CRT
Bromodichloromethane	<4000	ug/kg		1/25/08	CRT
Bromoform	<4000	ug/kg		1/25/08	CRT
Bromomethane	<4000	ug/kg		1/25/08	CRT
2-Butanone (MEK)	<10000	ug/kg		1/25/08	CRT
Carbon disulfide	<4000	ug/kg		1/25/08	CRT
Carbon tetrachloride	<4000	ug/kg		1/25/08	CRT
Chlorobenzene	<4000	ug/kg		1/25/08	CRT
Chloroethane	<4000	ug/kg		1/25/08	CRT
Chloroform	<4000	ug/kg		1/25/08	CRT
Chloromethane	<4000	ug/kg		1/25/08	CRT
Dibromochloromethane	<4000	ug/kg		1/25/08	CRT
1,1-Dichloroethane	<4000	ug/kg		1/25/08	CRT
1,2-Dichloroethane	<4000	ug/kg		1/25/08	CRT
1,1-Dichloroethene	<4000	ug/kg		1/25/08	CRT
1,2-Dichloroethene, Total	<4000	ug/kg		1/25/08	CRT
1,2-Dichloropropane	<4000	ug/kg		1/25/08	CRT
cis-1,3-Dichloropropene	<4000	ug/kg		1/25/08	CRT
trans-1,3-Dichloropropene	<4000	ug/kg		1/25/08	CRT
Ethyl benzene	<4000	ug/kg		1/25/08	CRT
2-Hexanone	<10000	ug/kg		1/25/08	CRT
Methylene chloride	<10000	ug/kg		1/25/08	CRT
4-Methyl-2-pentanone (MIBK)	<10000	ug/kg		1/25/08	CRT
Styrene	<4000	ug/kg		1/25/08	CRT
1,1,2,2-Tetrachloroethane	<4000	ug/kg		1/25/08	CRT
Tetrachloroethene	26000	ug/kg		1/28/08	CRT
Toluene	<4000	ug/kg		1/25/08	CRT
1,1,1-Trichloroethane	<4000	ug/kg		1/25/08	CRT
1,1,2-Trichloroethane	<4000	ug/kg		1/25/08	CRT
Trichloroethene	<4000	ug/kg		1/25/08	CRT
Vinyl chloride	<4000	ug/kg		1/25/08	CRT
Xylenes (Total)	<4000	ug/kg		1/25/08	CRT
Surrogate (1,2-DCA-d4)	106	%R		1/25/08	CRT
Surrogate (Tol-d8)	93	%R		1/25/08	CRT
Surrogate (4-BFB)	104	%R		1/25/08	CRT

# -- LABORATORY ANALYSIS REPORT --

Beardsley Design Associates Syracuse, NY

Sample ID: B-08-4 S-5

LSL Sample ID: 0801402-004

Location:

Sampled: 01/24/08 13:30 Sampled By: DH

Sample Matrix: SHW as Recd, Soil

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
Analyte					
(1) EPA 8260B TCL Volatiles					
Acetone	<10000	ug/kg		1/25/08	CRT
Benzene	<4000	ug/kg		1/25/08	CRT
Bromodichloromethane	<4000	ug/kg		1/25/08	CRT
Bromoform	<4000	ug/kg		1/25/08	CRT
Bromomethane	<4000	ug/kg		1/25/08	CRT
2-Butanone (MEK)	<10000	ug/kg		1/25/08	CRT
Carbon disulfide	<4000	ug/kg		1/25/08	CRT
Carbon tetrachloride	<4000	ug/kg		1/25/08	CRT
Chlorobenzene	<4000	ug/kg		1/25/08	CRT
Chloroethane	<4000	ug/kg		1/25/08	CRT
Chloroform	<4000	ug/kg		1/25/08	CRT
Chloromethane	<4000	ug/kg		1/25/08	CRT
Dibromochloromethane	<4000	ug/kg		1/25/08	CRT
1,1-Dichloroethane	<4000	ug/kg		1/25/08	CRT
1,2-Dichloroethane	<4000	ug/kg		1/25/08	CRT
1,1-Dichloroethene	<4000	ug/kg		1/25/08	CRT
1,2-Dichloroethene, Total	<4000	ug/kg		1/25/08	CRT
1,2-Dichloropropane	<4000	ug/kg		1/25/08	CRT
cis-1,3-Dichloropropene	<4000	ug/kg		1/25/08	CRT
trans-1,3-Dichloropropene	<4000	ug/kg		1/25/08	CRT
Ethyl benzene	<4000	ug/kg		1/25/08	CRT
2-Hexanone	<10000	ug/kg		1/25/08	CRT
Methylene chloride	<10000	ug/kg		1/25/08	CRT
4-Methyl-2-pentanone (MIBK)	<10000	ug/kg		1/25/08	CRT
Styrene	<4000	ug/kg		1/25/08	CRT
1,1,2,2-Tetrachloroethane	<4000	ug/kg		1/25/08	CRT
Tetrachloroethene	23000	ug/kg		1/25/08	CRT
Toluene	<4000	ug/kg		1/25/08	CRT
1,1,1-Trichloroethane	<4000	ug/kg		1/25/08	CRT
1,1,2-Trichloroethane	<4000	ug/kg		1/25/08	CRT
Trichloroethene	<4000	ug/kg		1/25/08	CRT
Vinyl chloride	<4000	ug/kg		1/25/08	CRT
Xylenes (Total)	<4000	ug/kg		1/25/08	CRT
Surrogate (1,2-DCA-d4)	111	%R		1/25/08	CRT
Surrogate (Tol-d8)	91	%R		1/25/08	CRT
Surrogate (4-BFB)	101	%R		1/25/08	CRT



**SURROGATE RECOVERY CONTROL LIMITS FOR ORGANIC METHODS**

<u>Method</u>	<u>Surrogate(s)</u>	<u>Water Limits, %R</u>	<u>SHW Limits, %R</u>
EPA 504	TCMX	80-120	NA
EPA 508	DCB	70-130	NA
EPA 515.4	DCAA	70-130	NA
EPA 524.2	1,2-DCA-d4, 4-BFB	80-120	NA
EPA 525.2	1,3-DM-2-NB, TPP, Per-d12	70-130	NA
EPA 526	1,3-DM-2-NB, TPP	70-130	NA
EPA 528	2-CP-3,4,5,6-d4, 2,4,6-TBP	70-130	NA
EPA 551.1	Decafluorobiphenyl	80-120	NA
EPA 552.2	2,3-DBPA	70-130	NA
EPA 601	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 602	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 608	TCMX, DCB	30-150	NA
EPA 624	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 625, AE	2-Fluorophenol	21-110	NA
EPA 625, AE	Phenol-d5	10-110	NA
EPA 625, AE	2,4,6-Tribromophenol	10-123	NA
EPA 625, BN	Nitrobenzene-d5	35-114	NA
EPA 625, BN	2-Fluorobiphenyl	43-116	NA
EPA 625, BN	Terphenyl-d14	33-141	NA
EPA 8010	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8020	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8021	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8081	TCMX, DCB	30-150	30-150
EPA 8082	DCB	30-150	30-150
EPA 8151	DCAA	30-130	30-120
EPA 8260	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8270, AE	2-Fluorophenol	21-110	25-121
EPA 8270, AE	Phenol-d5	10-110	24-113
EPA 8270, AE	2,4,6-Tribromophenol	10-123	19-122
EPA 8270, BN	Nitrobenzene-d5	35-114	23-120
EPA 8270, BN	2-Fluorobiphenyl	43-116	30-115
EPA 8270, BN	Terphenyl-d14	33-141	18-137
DOH 310-13	Terphenyl-d14	40-110	40-110
DOH 310-14	Terphenyl-d14	40-110	40-110
DOH 310-15	Terphenyl-d14	40-110	40-110
DOH 310-34	4-BFB	50-150	50-150
DOH 313-4	DCB	NA	30-150
8015M_GRO	4-BFB	50-150	50-150
8015M_DRO	Terphenyl-d14	50-150	50-150

Units Key:	ug/l = microgram per liter
	ug/kg = microgram per kilogram
	mg/l = milligram per liter
	mg/kg = milligram per kilogram
	%R = Percent Recovery



# Life Science Laboratories, Inc.

## CHAIN OF CUSTODY RECORD

0801402

BeardsleyDesign

LSL Central Lab  
5854 Butternut Drive  
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Phone: (315) 445-1105  
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Canand  
Phone: (585) 968-2640  
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Report Address: Dev Hurlbut  
 Company: Beardsley Design Assoc.  
 Street: 431 E. Fugate St  
 City/State: Syracuse, NY  
 Phone: 315-479-6980 Zip: 13202  
 Email: dhurlbut@beardsley.com Fax: 315-3523  
 Client Project ID/Client Site ID: 08405 / Syracuse Label Co.

Client's Sample Identifications	Sample Date	Sample Time	Type grab/comp	Matrix	Preserv Added	Containers #	Analyses		Preserv Check	ISL ID#
							size/type			
B-08-1 S-4	1/19/08	10:40 AM	grab	soil	no	1		EPA 8260 B TCL		001A
B-08-2 S-26	1/19/08	8:10 PM				1				002A
B-08-3 S-5	1/24/08	9:05 AM				1				003A
B-08-4 S-5	1/24/08	1:28 PM				1				004A

Turnaround Time will confirm by phone  
 Normal  Pre-Authorized  3-Day \*  7-Day \*   
 14 DAY  Next Day \*  2-Day \*  \*Additional Charges may apply

Date Needed or Special Instructions:

Authorization or P.O. # 08405

ISL Project Number

Containers this C-O-C

\*\*\* All areas of this Chain of Custody Record MUST be filled out in order to process samples in a timely manner IN PEN ONLY \*\*\*

Reg COC.XLS

LSL use only:  
 Sampled By: [Signature]  
 Relinquished By: [Signature]  
 Relinquished By: [Signature]  
 Shipment Method: [Signature]  
 Received By: [Signature]  
 Received By: [Signature]  
 Rec'd for Lab By: [Signature]  
 Received Intact: [Signature]  
 Date: 18 03:40  
 Time: RCV  
 Sample Temp: 20





Doug Hurlbut  
Beardsley Design Associates  
431 E. Fayette Street  
Syracuse, NY 13202 USA

Phone: (315) 472-6980

Authorization: PO #08405

# Laboratory Analysis Report For Beardsley Design Associates

Client Project ID:

08405 - Syracuse Label Co.

LSL Project ID: 0801496

Receive Date/Time: 01/28/08 15:23

Project Received by: GS

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## Life Science Laboratories, Inc.

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- (5) LSL MidLakes Lab, Canandaigua, NY
- (6) LSL Brittonfield Lab, East Syracuse, NY

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- (585) 728-3320
- (585) 968-2640
- (585) 396-0270
- (315) 437-0200

- NYS DOH ELAP #10248 PA DEP #68-2556
- NYS DOH ELAP #10900
- NYS DOH ELAP #11667
- NYS DOH ELAP #10760
- NYS DOH ELAP #11369
- NYS DOH ELAP #10155

This report was reviewed by:

*Debra M. Kempf, Q.A.*  
Life Science Laboratories, Inc.

Date:

*2/5/08*

A copy of this report was sent to:

Date Printed:

Page 1 of 5

2/1/08

# -- LABORATORY ANALYSIS REPORT --

Beardsley Design Associates Syracuse, NY

Sample ID: MW-5

LSL Sample ID: 0801496-004

Location:

Sampled: 01/28/08 14:45

Sampled By: Client

Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 8260B TCL Volatiles					
Acetone	<10	ug/l		1/30/08	BD
Benzene	<1	ug/l		1/30/08	BD
Bromodichloromethane	<1	ug/l		1/30/08	BD
Bromoform	<1	ug/l		1/30/08	BD
Bromomethane	<1	ug/l		1/30/08	BD
2-Butanone (MEK)	<10	ug/l		1/30/08	BD
Carbon disulfide	<1	ug/l		1/30/08	BD
Carbon tetrachloride	<1	ug/l		1/30/08	BD
Chlorobenzene	<1	ug/l		1/30/08	BD
Chloroethane	<1	ug/l		1/30/08	BD
Chloroform	<1	ug/l		1/30/08	BD
Chloromethane	<1	ug/l		1/30/08	BD
Dibromochloromethane	<1	ug/l		1/30/08	BD
1,1-Dichloroethane	<1	ug/l		1/30/08	BD
1,2-Dichloroethane	<1	ug/l		1/30/08	BD
1,1-Dichloroethene	<1	ug/l		1/30/08	BD
1,2-Dichloroethene, Total	<1	ug/l		1/30/08	BD
1,2-Dichloropropane	<1	ug/l		1/30/08	BD
cis-1,3-Dichloropropene	<1	ug/l		1/30/08	BD
trans-1,3-Dichloropropene	<1	ug/l		1/30/08	BD
Ethyl benzene	<1	ug/l		1/30/08	BD
2-Hexanone	<10	ug/l		1/30/08	BD
Methylene chloride	<1	ug/l		1/30/08	BD
4-Methyl-2-pentanone (MIBK)	<10	ug/l		1/30/08	BD
Styrene	<1	ug/l		1/30/08	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		1/30/08	BD
Tetrachloroethene	<1	ug/l		1/30/08	BD
Toluene	<1	ug/l		1/30/08	BD
1,1,1-Trichloroethane	<1	ug/l		1/30/08	BD
1,1,2-Trichloroethane	<1	ug/l		1/30/08	BD
Trichloroethene	<1	ug/l		1/30/08	BD
Vinyl chloride	<1	ug/l		1/30/08	BD
Xylenes (Total)	<1	ug/l		1/30/08	BD
Surrogate (1,2-DCA-d4)	100	%R		1/30/08	BD
Surrogate (Tol-d8)	100	%R		1/30/08	BD
Surrogate (4-BFB)	103	%R		1/30/08	BD

# -- LABORATORY ANALYSIS REPORT --

*Beardsley Design Associates Syracuse, NY*

Sample ID: MW-6 LSL Sample ID: 0801496-003  
 Location:  
 Sampled: 01/28/08 14:00 Sampled By: Client  
 Sample Matrix: NPW

Analytical Method			Prep	Analysis	Analyst
Analyte	Result	Units	Date	Date & Time	Initials
<i>(1)</i> EPA 8260B TCL Volatiles					
Acetone	<10	ug/l		1/30/08	BD
Benzene	<1	ug/l		1/30/08	BD
Bromodichloromethane	<1	ug/l		1/30/08	BD
Bromoform	<1	ug/l		1/30/08	BD
Bromomethane	<1	ug/l		1/30/08	BD
2-Butanone (MEK)	<10	ug/l		1/30/08	BD
Carbon disulfide	<1	ug/l		1/30/08	BD
Carbon tetrachloride	<1	ug/l		1/30/08	BD
Chlorobenzene	<1	ug/l		1/30/08	BD
Chloroethane	<1	ug/l		1/30/08	BD
Chloroform	<1	ug/l		1/30/08	BD
Chloromethane	<1	ug/l		1/30/08	BD
Dibromochloromethane	<1	ug/l		1/30/08	BD
1,1-Dichloroethane	1.9	ug/l		1/30/08	BD
1,2-Dichloroethane	<1	ug/l		1/30/08	BD
1,1-Dichloroethene	<1	ug/l		1/30/08	BD
1,2-Dichloroethene, Total	<1	ug/l		1/30/08	BD
1,2-Dichloropropane	<1	ug/l		1/30/08	BD
cis-1,3-Dichloropropene	<1	ug/l		1/30/08	BD
trans-1,3-Dichloropropene	<1	ug/l		1/30/08	BD
Ethyl benzene	<1	ug/l		1/30/08	BD
2-Hexanone	<10	ug/l		1/30/08	BD
Methylene chloride	<1	ug/l		1/30/08	BD
4-Methyl-2-pentanone (MIBK)	<10	ug/l		1/30/08	BD
Styrene	<1	ug/l		1/30/08	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		1/30/08	BD
Tetrachloroethene	<1	ug/l		1/30/08	BD
Toluene	<1	ug/l		1/30/08	BD
1,1,1-Trichloroethane	<1	ug/l		1/30/08	BD
1,1,2-Trichloroethane	<1	ug/l		1/30/08	BD
Trichloroethene	<1	ug/l		1/30/08	BD
Vinyl chloride	<1	ug/l		1/30/08	BD
Xylenes (Total)	<1	ug/l		1/30/08	BD
Surrogate (1,2-DCA-d4)	101	%R		1/30/08	BD
Surrogate (Tol-d8)	100	%R		1/30/08	BD
Surrogate (4-BFB)	106	%R		1/30/08	BD

# -- LABORATORY ANALYSIS REPORT --

Beardsley Design Associates Syracuse, NY

Sample ID: MW-7

LSL Sample ID: 0801496-001

Location:

Sampled: 01/28/08 12:55      Sampled By: Client

Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 8260B TCL Volatiles					
Acetone	<2000	ug/l		1/30/08	BD
Benzene	<200	ug/l		1/30/08	BD
Bromodichloromethane	<200	ug/l		1/30/08	BD
Bromoform	<200	ug/l		1/30/08	BD
Bromomethane	<200	ug/l		1/30/08	BD
2-Butanone (MEK)	<2000	ug/l		1/30/08	BD
Carbon disulfide	<200	ug/l		1/30/08	BD
Carbon tetrachloride	<200	ug/l		1/30/08	BD
Chlorobenzene	<200	ug/l		1/30/08	BD
Chloroethane	<200	ug/l		1/30/08	BD
Chloroform	<200	ug/l		1/30/08	BD
Chloromethane	<200	ug/l		1/30/08	BD
Dibromochloromethane	<200	ug/l		1/30/08	BD
1,1-Dichloroethane	<200	ug/l		1/30/08	BD
1,2-Dichloroethane	<200	ug/l		1/30/08	BD
1,1-Dichloroethene	<200	ug/l		1/30/08	BD
1,2-Dichloroethene, Total	2600	ug/l		1/30/08	BD
1,2-Dichloropropane	<200	ug/l		1/30/08	BD
cis-1,3-Dichloropropene	<200	ug/l		1/30/08	BD
trans-1,3-Dichloropropene	<200	ug/l		1/30/08	BD
Ethyl benzene	<200	ug/l		1/30/08	BD
2-Hexanone	<2000	ug/l		1/30/08	BD
Methylene chloride	<200	ug/l		1/30/08	BD
4-Methyl-2-pentanone (MIBK)	<2000	ug/l		1/30/08	BD
Styrene	<200	ug/l		1/30/08	BD
1,1,2,2-Tetrachloroethane	<200	ug/l		1/30/08	BD
Tetrachloroethene	14000	ug/l		1/30/08	BD
Toluene	<200	ug/l		1/30/08	BD
1,1,1-Trichloroethane	<200	ug/l		1/30/08	BD
1,1,2-Trichloroethane	<200	ug/l		1/30/08	BD
Trichloroethene	1700	ug/l		1/30/08	BD
Vinyl chloride	560	ug/l		1/30/08	BD
Xylenes (Total)	<200	ug/l		1/30/08	BD
Surrogate (1,2-DCA-d4)	105	%R		1/30/08	BD
Surrogate (Tol-d8)	100	%R		1/30/08	BD
Surrogate (4-BFB)	105	%R		1/30/08	BD

# -- LABORATORY ANALYSIS REPORT --

Beardsley Design Associates Syracuse, NY

Sample ID: MW-8

LSL Sample ID: 0801496-002

Location:

Sampled: 01/28/08 13:15

Sampled By: Client

Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 8260B TCL Volatiles					
Acetone	<2000	ug/l		1/30/08	BD
Benzene	<200	ug/l		1/30/08	BD
Bromodichloromethane	<200	ug/l		1/30/08	BD
Bromoform	<200	ug/l		1/30/08	BD
Bromomethane	<200	ug/l		1/30/08	BD
2-Butanone (MEK)	<2000	ug/l		1/30/08	BD
Carbon disulfide	<200	ug/l		1/30/08	BD
Carbon tetrachloride	<200	ug/l		1/30/08	BD
Chlorobenzene	<200	ug/l		1/30/08	BD
Chloroethane	<200	ug/l		1/30/08	BD
Chloroform	<200	ug/l		1/30/08	BD
Chloromethane	<200	ug/l		1/30/08	BD
Dibromochloromethane	<200	ug/l		1/30/08	BD
1,1-Dichloroethane	<200	ug/l		1/30/08	BD
1,2-Dichloroethane	<200	ug/l		1/30/08	BD
1,1-Dichloroethene	<200	ug/l		1/30/08	BD
1,2-Dichloroethene, Total	1600	ug/l		1/30/08	BD
1,2-Dichloropropane	<200	ug/l		1/30/08	BD
cis-1,3-Dichloropropene	<200	ug/l		1/30/08	BD
trans-1,3-Dichloropropene	<200	ug/l		1/30/08	BD
Ethyl benzene	<200	ug/l		1/30/08	BD
2-Hexanone	<2000	ug/l		1/30/08	BD
Methylene chloride	<200	ug/l		1/30/08	BD
4-Methyl-2-pentanone (MIBK)	<2000	ug/l		1/30/08	BD
Styrene	<200	ug/l		1/30/08	BD
1,1,2,2-Tetrachloroethane	<200	ug/l		1/30/08	BD
Tetrachloroethene	6200	ug/l		1/30/08	BD
Toluene	<200	ug/l		1/30/08	BD
1,1,1-Trichloroethane	<200	ug/l		1/30/08	BD
1,1,2-Trichloroethane	<200	ug/l		1/30/08	BD
Trichloroethene	920	ug/l		1/30/08	BD
Vinyl chloride	290	ug/l		1/30/08	BD
Xylenes (Total)	<200	ug/l		1/30/08	BD
Surrogate (1,2-DCA-d4)	102	%R		1/30/08	BD
Surrogate (Tol-d8)	100	%R		1/30/08	BD
Surrogate (4-BFB)	107	%R		1/30/08	BD



**SURROGATE RECOVERY CONTROL LIMITS FOR ORGANIC METHODS**

<u>Method</u>	<u>Surrogate(s)</u>	<u>Water Limits, %R</u>	<u>SHW Limits, %R</u>
EPA 504	TCMX	80-120	NA
EPA 508	DCB	70-130	NA
EPA 515.4	DCAA	70-130	NA
EPA 524.2	1,2-DCA-d4, 4-BFB	80-120	NA
EPA 525.2	1,3-DM-2-NB, TPP, Per-d12	70-130	NA
EPA 526	1,3-DM-2-NB, TPP	70-130	NA
EPA 528	2-CP-3,4,5,6-d4, 2,4,6-TBP	70-130	NA
EPA 551.1	Decafluorobiphenyl	80-120	NA
EPA 552.2	2,3-DBPA	70-130	NA
EPA 601	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 602	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 608	TCMX, DCB	30-150	NA
EPA 624	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 625, AE	2-Fluorophenol	21-110	NA
EPA 625, AE	Phenol-d5	10-110	NA
EPA 625, AE	2,4,6-Tribromophenol	10-123	NA
EPA 625, BN	Nitrobenzene-d5	35-114	NA
EPA 625, BN	2-Fluorobiphenyl	43-116	NA
EPA 625, BN	Terphenyl-d14	33-141	NA
EPA 8010	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8020	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8021	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8081	TCMX, DCB	30-150	30-150
EPA 8082	DCB	30-150	30-150
EPA 8151	DCAA	30-130	30-120
EPA 8260	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8270, AE	2-Fluorophenol	21-110	25-121
EPA 8270, AE	Phenol-d5	10-110	24-113
EPA 8270, AE	2,4,6-Tribromophenol	10-123	19-122
EPA 8270, BN	Nitrobenzene-d5	35-114	23-120
EPA 8270, BN	2-Fluorobiphenyl	43-116	30-115
EPA 8270, BN	Terphenyl-d14	33-141	18-137
DOH 310-13	Terphenyl-d14	40-110	40-110
DOH 310-14	Terphenyl-d14	40-110	40-110
DOH 310-15	Terphenyl-d14	40-110	40-110
DOH 310-34	4-BFB	50-150	50-150
DOH 313-4	DCB	NA	30-150
8015M_GRO	4-BFB	50-150	50-150
8015M_DRO	Terphenyl-d14	50-150	50-150

Units Key:  
 ug/l = microgram per liter  
 ug/kg = microgram per kilogram  
 mg/l = milligram per liter  
 mg/kg = milligram per kilogram  
 %R = Percent Recovery



# Life Science Laboratories, Inc.

## CHAIN OF CUSTODY RECORD

0801496  
BeardsleyDesign

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East Syracuse, NY 13057  
Phone: (315) 445-1105  
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**Report Address:**

Name: Doug Hurlock  
Company: Beardsley Design Co.  
Street: 431 E. Fayette St  
City/State: Syracuse, NY  
Phone: 315-472-6980  
Email: dhurlock@beardsley-design.com  
Client Project ID/Client Site ID: 08405/ Syracuse Label Co.

Zip: 13202  
Fax: 472-3828

Turnaround Time  
 Normal  
 14 DAY  
 Pre-Authorized  
 Next Day\*  
 2-Day\*  
 3-Day\*  
 7-Day\*  
 \*Additional Charges may apply

**Date Needed or Special Instructions:**

Authorization or P.O. #  
08405

Client's Sample Identifications	Sample Date	Sample Time	Type grab/comp	Matrix	Preserv Added	Containers		Analyses	Preserv Check	LSL ID#
						#	size/type			
MW-7	1/28/08	11:55pm	grab	water	yes	2	VOR	EPA 8260 B TEL		001 AB
MW-8		1:15 PM								002
MW-6		2:00pm								003
MW-5		2:45pm								004 Y

LSL use only:

Sampled By: [Signature]  
 Relinquished By: [Signature]  
 Relinquished By: [Signature]  
 Shipment Method: [Signature]

Date: 01-23-08  
 Time: 15:2

RCV:

\*\*\* All areas of this Chain of Custody Record MUST be filled out in order to process samples in a timely manner in PEN ONLY \*\*\*

Reg COC.XLS

2.0



Doug Hurlbut  
Beardsley Design Associates  
431 E. Fayette Street  
Syracuse, NY 13202 USA

Phone: (315) 472-6980

# Laboratory Analysis Report

## For

### Beardsley Design Associates

Client Project ID:

Syracuse Label Co. - BDA #08405

LSL Project ID: 0804100

Receive Date/Time: 03/18/08 11:57

Project Received by: RD

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## Life Science Laboratories, Inc.

- |                                             |                |                                     |
|---------------------------------------------|----------------|-------------------------------------|
| (1) LSL Central Lab, East Syracuse, NY      | (315) 445-1105 | NYS DOH ELAP #10248 PA DEP #68-2556 |
| (2) LSL North Lab, Waddington, NY           | (315) 388-4476 | NYS DOH ELAP #10900                 |
| (3) LSL Finger Lakes Lab, Wayland, NY       | (585) 728-3320 | NYS DOH ELAP #11667                 |
| (4) LSL Southern Tier Lab, Cuba, NY         | (585) 968-2640 | NYS DOH ELAP #10760                 |
| (5) LSL MidLakes Lab, Canandaigua, NY       | (585) 396-0270 | NYS DOH ELAP #11369                 |
| (6) LSL Brittonfield Lab, East Syracuse, NY | (315) 437-0200 | NYS DOH ELAP #10155                 |

This report was reviewed by:

*Rebecca Gammie, Ph.D.*  
Life Science Laboratories, Inc.

Date:

*3/19/08*

A copy of this report was sent to:

Page 1 of 4

Date Printed: 3/19/08



-- LABORATORY ANALYSIS REPORT --

*Beardsley Design Associates Syracuse, NY*

Sample ID: MW-10 LSL Sample ID: 0804100-001  
Location:  
Sampled: 03/18/08 10:25 Sampled By: DH  
Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 601 Volatile Halocarbons by 624					
Bromodichloromethane	<1	ug/l		3/18/08	BD
Bromoform	<1	ug/l		3/18/08	BD
Bromomethane	<1	ug/l		3/18/08	BD
Carbon tetrachloride	<1	ug/l		3/18/08	BD
Chlorobenzene	<1	ug/l		3/18/08	BD
Chloroethane	<1	ug/l		3/18/08	BD
2-Chloroethylvinyl ether	<10	ug/l		3/18/08	BD
Chloroform	<1	ug/l		3/18/08	BD
Chloromethane	<1	ug/l		3/18/08	BD
Dibromochloromethane	<1	ug/l		3/18/08	BD
1,2-Dichlorobenzene	<1	ug/l		3/18/08	BD
1,3-Dichlorobenzene	<1	ug/l		3/18/08	BD
1,4-Dichlorobenzene	<1	ug/l		3/18/08	BD
Dichlorodifluoromethane	<1	ug/l		3/18/08	BD
1,1-Dichloroethane	<1	ug/l		3/18/08	BD
1,2-Dichloroethane	<1	ug/l		3/18/08	BD
1,1-Dichloroethene	<1	ug/l		3/18/08	BD
trans-1,2-Dichloroethene	<1	ug/l		3/18/08	BD
1,2-Dichloropropane	<1	ug/l		3/18/08	BD
cis-1,3-Dichloropropene	<1	ug/l		3/18/08	BD
trans-1,3-Dichloropropene	<1	ug/l		3/18/08	BD
Methylene chloride	<1	ug/l		3/18/08	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		3/18/08	BD
Tetrachloroethene	<1	ug/l		3/18/08	BD
1,1,1-Trichloroethane	<1	ug/l		3/18/08	BD
1,1,2-Trichloroethane	<1	ug/l		3/18/08	BD
Trichloroethene	<1	ug/l		3/18/08	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		3/18/08	BD
Vinyl chloride	29	ug/l		3/18/08	BD
Surrogate (1,2-DCA-d4)	111	%R		3/18/08	BD
Surrogate (Tol-d8)	101	%R		3/18/08	BD
Surrogate (4-BFB)	102	%R		3/18/08	BD

-- LABORATORY ANALYSIS REPORT --

*Beardsley Design Associates Syracuse, NY*

Sample ID: MW-9 LSL Sample ID: 0804100-002  
Location:  
Sampled: 03/18/08 11:15 Sampled By: DH  
Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 601 Volatile Halocarbons by 624					
Bromodichloromethane	<1	ug/l		3/18/08	BD
Bromoform	<1	ug/l		3/18/08	BD
Bromomethane	<1	ug/l		3/18/08	BD
Carbon tetrachloride	<1	ug/l		3/18/08	BD
Chlorobenzene	<1	ug/l		3/18/08	BD
Chloroethane	<1	ug/l		3/18/08	BD
2-Chloroethylvinyl ether	<10	ug/l		3/18/08	BD
Chloroform	<1	ug/l		3/18/08	BD
Chloromethane	<1	ug/l		3/18/08	BD
Dibromochloromethane	<1	ug/l		3/18/08	BD
1,2-Dichlorobenzene	<1	ug/l		3/18/08	BD
1,3-Dichlorobenzene	<1	ug/l		3/18/08	BD
1,4-Dichlorobenzene	<1	ug/l		3/18/08	BD
Dichlorodifluoromethane	<1	ug/l		3/18/08	BD
1,1-Dichloroethane	<1	ug/l		3/18/08	BD
1,2-Dichloroethane	<1	ug/l		3/18/08	BD
1,1-Dichloroethene	<1	ug/l		3/18/08	BD
trans-1,2-Dichloroethene	<1	ug/l		3/18/08	BD
1,2-Dichloropropane	<1	ug/l		3/18/08	BD
cis-1,3-Dichloropropene	<1	ug/l		3/18/08	BD
trans-1,3-Dichloropropene	<1	ug/l		3/18/08	BD
Methylene chloride	<1	ug/l		3/18/08	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		3/18/08	BD
Tetrachloroethene	<1	ug/l		3/18/08	BD
1,1,1-Trichloroethane	<1	ug/l		3/18/08	BD
1,1,2-Trichloroethane	<1	ug/l		3/18/08	BD
Trichloroethene	<1	ug/l		3/18/08	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		3/18/08	BD
Vinyl chloride	<1	ug/l		3/18/08	BD
Surrogate (1,2-DCA-d4)	113	%R		3/18/08	BD
Surrogate (Tol-d8)	100	%R		3/18/08	BD
Surrogate (4-BFB)	105	%R		3/18/08	BD

-- LABORATORY ANALYSIS REPORT --

Beardsley Design Associates Syracuse, NY

Sample ID: Trip Blank LSL Sample ID: 0804100-003  
Location:  
Sampled: 03/18/08 0:00 Sampled By:  
Sample Matrix: TB

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 601 Volatile Halocarbons by 624					
Bromodichloromethane	<1	ug/l		3/18/08	BD
Bromoform	<1	ug/l		3/18/08	BD
Bromomethane	<1	ug/l		3/18/08	BD
Carbon tetrachloride	<1	ug/l		3/18/08	BD
Chlorobenzene	<1	ug/l		3/18/08	BD
Chloroethane	<1	ug/l		3/18/08	BD
2-Chloroethylvinyl ether	<10	ug/l		3/18/08	BD
Chloroform	<1	ug/l		3/18/08	BD
Chloromethane	<1	ug/l		3/18/08	BD
Dibromochloromethane	<1	ug/l		3/18/08	BD
1,2-Dichlorobenzene	<1	ug/l		3/18/08	BD
1,3-Dichlorobenzene	<1	ug/l		3/18/08	BD
1,4-Dichlorobenzene	<1	ug/l		3/18/08	BD
Dichlorodifluoromethane	<1	ug/l		3/18/08	BD
1,1-Dichloroethane	<1	ug/l		3/18/08	BD
1,2-Dichloroethane	<1	ug/l		3/18/08	BD
1,1-Dichloroethene	<1	ug/l		3/18/08	BD
trans-1,2-Dichloroethene	<1	ug/l		3/18/08	BD
1,2-Dichloropropane	<1	ug/l		3/18/08	BD
cis-1,3-Dichloropropene	<1	ug/l		3/18/08	BD
trans-1,3-Dichloropropene	<1	ug/l		3/18/08	BD
Methylene chloride	<1	ug/l		3/18/08	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		3/18/08	BD
Tetrachloroethene	<1	ug/l		3/18/08	BD
1,1,1-Trichloroethane	<1	ug/l		3/18/08	BD
1,1,2-Trichloroethane	<1	ug/l		3/18/08	BD
Trichloroethene	<1	ug/l		3/18/08	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		3/18/08	BD
Vinyl chloride	<1	ug/l		3/18/08	BD
Surrogate (1,2-DCA-d4)	105	%R		3/18/08	BD
Surrogate (Tol-d8)	101	%R		3/18/08	BD
Surrogate (4-BFB)	104	%R		3/18/08	BD



**SURROGATE RECOVERY CONTROL LIMITS FOR ORGANIC METHODS**

<u>Method</u>	<u>Surrogate(s)</u>	<u>Water Limits, %R</u>	<u>SHW Limits, %R</u>
EPA 504	TCMX	80-120	NA
EPA 508	DCB	70-130	NA
EPA 515.4	DCAA	70-130	NA
EPA 524.2	1,2-DCA-d4, 4-BFB	80-120	NA
EPA 525.2	1,3-DM-2-NB, TPP, Per-d12	70-130	NA
EPA 526	1,3-DM-2-NB, TPP	70-130	NA
EPA 528	2-CP-3,4,5,6-d4, 2,4,6-TBP	70-130	NA
EPA 551.1	Decafluorobiphenyl	80-120	NA
EPA 552.2	2,3-DBPA	70-130	NA
EPA 601	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 602	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 608	TCMX, DCB	30-150	NA
EPA 624	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 625, AE	2-Fluorophenol	21-110	NA
EPA 625, AE	Phenol-d5	10-110	NA
EPA 625, AE	2,4,6-Tribromophenol	10-123	NA
EPA 625, BN	Nitrobenzene-d5	35-114	NA
EPA 625, BN	2-Fluorobiphenyl	43-116	NA
EPA 625, BN	Terphenyl-d14	33-141	NA
EPA 8010	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8020	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8021	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8081	TCMX, DCB	30-150	30-150
EPA 8082	DCB	30-150	30-150
EPA 8151	DCAA	30-130	30-120
EPA 8260	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8270, AE	2-Fluorophenol	21-110	25-121
EPA 8270, AE	Phenol-d5	10-110	24-113
EPA 8270, AE	2,4,6-Tribromophenol	10-123	19-122
EPA 8270, BN	Nitrobenzene-d5	35-114	23-120
EPA 8270, BN	2-Fluorobiphenyl	43-116	30-115
EPA 8270, BN	Terphenyl-d14	33-141	18-137
DOH 310-13	Terphenyl-d14	40-110	40-110
DOH 310-14	Terphenyl-d14	40-110	40-110
DOH 310-15	Terphenyl-d14	40-110	40-110
DOH 310-34	4-BFB	50-150	50-150
DOH 313-4	DCB	NA	30-150
8015M_GRO	4-BFB	50-150	50-150
8015M_DRO	Terphenyl-d14	50-150	50-150

Units Key:	ug/l = microgram per liter
	ug/kg = microgram per kilogram
	mg/l = milligram per liter
	mg/kg = milligram per kilogram
	%R = Percent Recovery





Doug Hurlbut  
Beardsley Design Associates  
431 E. Fayette Street  
Syracuse, NY 13202 USA

Phone: (315) 472-6980

# Laboratory Analysis Report

## For

### Beardsley Design Associates

Client Project ID:

Syracuse Label Co. - Project # - BDA#08405

LSL Project ID: 0804404

Receive Date/Time: 03/21/08 15:20

Project Received by: RD

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| (2) LSL North Lab, Waddington, NY           | (315) 388-4476 | NYS DOH ELAP #10900                 |
| (3) LSL Finger Lakes Lab, Wayland, NY       | (585) 728-3320 | NYS DOH ELAP #11667                 |
| (4) LSL Southern Tier Lab, Cuba, NY         | (585) 968-2640 | NYS DOH ELAP #10760                 |
| (5) LSL MidLakes Lab, Canandaigua, NY       | (585) 396-0270 | NYS DOH ELAP #11369                 |
| (6) LSL Brittonfield Lab, East Syracuse, NY | (315) 437-0200 | NYS DOH ELAP #10155                 |

This report was reviewed by:

*Deborah Kempf, QA*  
Life Science Laboratories, Inc.

Date:

*3/20/08*

A copy of this report was sent to:

# -- LABORATORY ANALYSIS REPORT --

Beardsley Design Associates Syracuse, NY

Sample ID: MW-12 LSL Sample ID: 0804404-001  
Location:  
Sampled: 03/21/08 13:40 Sampled By: Client  
Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 601 Volatile Halocarbons by 624					
Bromodichloromethane	<20	ug/l		3/24/08	BD
Bromoform	<20	ug/l		3/24/08	BD
Bromomethane	<20	ug/l		3/24/08	BD
Carbon tetrachloride	<20	ug/l		3/24/08	BD
Chlorobenzene	<20	ug/l		3/24/08	BD
Chloroethane	<20	ug/l		3/24/08	BD
2-Chloroethylvinyl ether	<200	ug/l		3/24/08	BD
Chloroform	<20	ug/l		3/24/08	BD
Chloromethane	<20	ug/l		3/24/08	BD
Dibromochloromethane	<20	ug/l		3/24/08	BD
1,2-Dichlorobenzene	<20	ug/l		3/24/08	BD
1,3-Dichlorobenzene	<20	ug/l		3/24/08	BD
1,4-Dichlorobenzene	<20	ug/l		3/24/08	BD
Dichlorodifluoromethane	<20	ug/l		3/24/08	BD
1,1-Dichloroethane	<20	ug/l		3/24/08	BD
1,2-Dichloroethane	<20	ug/l		3/24/08	BD
1,1-Dichloroethene	<20	ug/l		3/24/08	BD
trans-1,2-Dichloroethene	<20	ug/l		3/24/08	BD
1,2-Dichloropropane	<20	ug/l		3/24/08	BD
cis-1,3-Dichloropropene	<20	ug/l		3/24/08	BD
trans-1,3-Dichloropropene	<20	ug/l		3/24/08	BD
Methylene chloride	<20	ug/l		3/24/08	BD
1,1,2,2-Tetrachloroethane	<20	ug/l		3/24/08	BD
Tetrachloroethene	1200	ug/l		3/24/08	BD
1,1,1-Trichloroethane	<20	ug/l		3/24/08	BD
1,1,2-Trichloroethane	<20	ug/l		3/24/08	BD
Trichloroethene	280	ug/l		3/24/08	BD
Trichlorofluoromethane (Freon 11)	<20	ug/l		3/24/08	BD
Vinyl chloride	<20	ug/l		3/24/08	BD
Surrogate (1,2-DCA-d4)	105	%R		3/24/08	BD
Surrogate (Tol-d8)	98	%R		3/24/08	BD
Surrogate (4-BFB)	101	%R		3/24/08	BD

# -- LABORATORY ANALYSIS REPORT --

Beardsley Design Associates Syracuse, NY

Sample ID: MW-13 LSL Sample ID: 0804404-002  
Location:  
Sampled: 03/21/08 14:00 Sampled By: Client  
Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 601 Volatile Halocarbons by 624					
Bromodichloromethane	<100	ug/l		3/25/08	BD
Bromoform	<100	ug/l		3/25/08	BD
Bromomethane	<100	ug/l		3/25/08	BD
Carbon tetrachloride	<100	ug/l		3/25/08	BD
Chlorobenzene	<100	ug/l		3/25/08	BD
Chloroethane	<100	ug/l		3/25/08	BD
2-Chloroethylvinyl ether	<1000	ug/l		3/25/08	BD
Chloroform	<100	ug/l		3/25/08	BD
Chloromethane	<100	ug/l		3/25/08	BD
Dibromochloromethane	<100	ug/l		3/25/08	BD
1,2-Dichlorobenzene	<100	ug/l		3/25/08	BD
1,3-Dichlorobenzene	<100	ug/l		3/25/08	BD
1,4-Dichlorobenzene	<100	ug/l		3/25/08	BD
Dichlorodifluoromethane	<100	ug/l		3/25/08	BD
1,1-Dichloroethane	<100	ug/l		3/25/08	BD
1,2-Dichloroethane	<100	ug/l		3/25/08	BD
1,1-Dichloroethene	<100	ug/l		3/25/08	BD
trans-1,2-Dichloroethene	<100	ug/l		3/25/08	BD
1,2-Dichloropropane	<100	ug/l		3/25/08	BD
cis-1,3-Dichloropropene	<100	ug/l		3/25/08	BD
trans-1,3-Dichloropropene	<100	ug/l		3/25/08	BD
Methylene chloride	<100	ug/l		3/25/08	BD
1,1,2,2-Tetrachloroethane	<100	ug/l		3/25/08	BD
Tetrachloroethene	900	ug/l		3/25/08	BD
1,1,1-Trichloroethane	<100	ug/l		3/25/08	BD
1,1,2-Trichloroethane	<100	ug/l		3/25/08	BD
Trichloroethene	470	ug/l		3/25/08	BD
Trichlorofluoromethane (Freon 11)	<100	ug/l		3/25/08	BD
Vinyl chloride	<100	ug/l		3/25/08	BD
Surrogate (1,2-DCA-d4)	106	%R		3/25/08	BD
Surrogate (Tol-d8)	98	%R		3/25/08	BD
Surrogate (4-BFB)	102	%R		3/25/08	BD



# -- LABORATORY ANALYSIS REPORT --

Beardsley Design Associates Syracuse, NY

Sample ID: MW-11 LSL Sample ID: 0804404-003  
Location:  
Sampled: 03/21/08 14:15 Sampled By: Client  
Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 601 Volatile Halocarbons by 624					
Bromodichloromethane	<1000	ug/l		3/24/08	BD
Bromoform	<1000	ug/l		3/24/08	BD
Bromomethane	<1000	ug/l		3/24/08	BD
Carbon tetrachloride	<1000	ug/l		3/24/08	BD
Chlorobenzene	<1000	ug/l		3/24/08	BD
Chloroethane	<1000	ug/l		3/24/08	BD
2-Chloroethylvinyl ether	<10000	ug/l		3/24/08	BD
Chloroform	<1000	ug/l		3/24/08	BD
Chloromethane	<1000	ug/l		3/24/08	BD
Dibromochloromethane	<1000	ug/l		3/24/08	BD
1,2-Dichlorobenzene	<1000	ug/l		3/24/08	BD
1,3-Dichlorobenzene	<1000	ug/l		3/24/08	BD
1,4-Dichlorobenzene	<1000	ug/l		3/24/08	BD
Dichlorodifluoromethane	<1000	ug/l		3/24/08	BD
1,1-Dichloroethane	<1000	ug/l		3/24/08	BD
1,2-Dichloroethane	<1000	ug/l		3/24/08	BD
1,1-Dichloroethene	<1000	ug/l		3/24/08	BD
trans-1,2-Dichloroethene	<1000	ug/l		3/24/08	BD
1,2-Dichloropropane	<1000	ug/l		3/24/08	BD
cis-1,3-Dichloropropene	<1000	ug/l		3/24/08	BD
trans-1,3-Dichloropropene	<1000	ug/l		3/24/08	BD
Methylene chloride	<1000	ug/l		3/24/08	BD
1,1,2,2-Tetrachloroethane	<1000	ug/l		3/24/08	BD
Tetrachloroethene	14000	ug/l		3/24/08	BD
1,1,1-Trichloroethane	<1000	ug/l		3/24/08	BD
1,1,2-Trichloroethane	<1000	ug/l		3/24/08	BD
Trichloroethene	2400	ug/l		3/24/08	BD
Trichlorofluoromethane (Freon 11)	<1000	ug/l		3/24/08	BD
Vinyl chloride	<1000	ug/l		3/24/08	BD
Surrogate (1,2-DCA-d4)	102	%R		3/24/08	BD
Surrogate (Tol-d8)	97	%R		3/24/08	BD
Surrogate (4-BFB)	99	%R		3/24/08	BD





Life Science Laboratories, Inc.

5854 Butternut Drive  
East Syracuse, NY 13057

Chai

0904404

Beardsley Design

48 Hr Turnaround Time

Phone # (315) 445-1105

Telefax # (315) 445-1301

Contract Ref: 001

Client: Beardsley Design Assoc. Phone # 472 6980  
Address: 431 E. Fayette St Fax # 472 2528  
Syracuse NY 13203

Doug  
HW-Nowt

Client's Site I.D.: Syracuse Label Co  
AB

Client's Project I.D.: BA #08408

LSL Sample Number	Client's Sample Identifications	Authorization:		Sample Date	Sample Time	Type grab comp.	Matrix	Preserv. Added	Containers		Analyses	Free Cl (mg/L)	Pros. Check
		Sample Date	Sample Time						#	size/type			
001	AB MW-12	3/21/08	1:40pm	✓	water	yes	2	VOA	601 B	TEL			
002	MW-13	"	2:00	✓	"	"	"	"	"	"			
003	MW-11	"	2:15	✓	"	"	"	"	"	"			
004	✓									Trip Blank			

Notes and Hazard identifications:

48 hr turnaround

Custody Transfers

Sampled By:	Received By:	Date	Time
<u>[Signature]</u>	<u>[Signature]</u>		
Relinquished By:	Received By:		
<u>[Signature]</u>	<u>[Signature]</u>		
Relinquished By:	Received for Lab By:		
<u>[Signature]</u>	<u>R. Dunbar</u>	03-21-08	15:20 RC

Shipment Method:

Samples Received Intact: Y N

13.7°C



**SURROGATE RECOVERY CONTROL LIMITS FOR ORGANIC METHODS**

<u>Method</u>	<u>Surrogate(s)</u>	<u>Water Limits, %R</u>	<u>SHW Limits, %R</u>
EPA 504	TCMX	80-120	NA
EPA 508	DCB	70-130	NA
EPA 515.4	DCAA	70-130	NA
EPA 524.2	1,2-DCA-d4, 4-BFB	80-120	NA
EPA 525.2	1,3-DM-2-NB, TPP, Per-d12	70-130	NA
EPA 526	1,3-DM-2-NB, TPP	70-130	NA
EPA 528	2-CP-3,4,5,6-d4, 2,4,6-TBP	70-130	NA
EPA 551.1	Decafluorobiphenyl	80-120	NA
EPA 552.2	2,3-DBPA	70-130	NA
EPA 601	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 602	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 608	TCMX, DCB	30-150	NA
EPA 624	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 625, AE	2-Fluorophenol	21-110	NA
EPA 625, AE	Phenol-d5	10-110	NA
EPA 625, AE	2,4,6-Tribromophenol	10-123	NA
EPA 625, BN	Nitrobenzene-d5	35-114	NA
EPA 625, BN	2-Fluorobiphenyl	43-116	NA
EPA 625, BN	Terphenyl-d14	33-141	NA
EPA 8010	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8020	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8021	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8081	TCMX, DCB	30-150	30-150
EPA 8082	DCB	30-150	30-150
EPA 8151	DCAA	30-130	30-120
EPA 8260	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8270, AE	2-Fluorophenol	21-110	25-121
EPA 8270, AE	Phenol-d5	10-110	24-113
EPA 8270, AE	2,4,6-Tribromophenol	10-123	19-122
EPA 8270, BN	Nitrobenzene-d5	35-114	23-120
EPA 8270, BN	2-Fluorobiphenyl	43-116	30-115
EPA 8270, BN	Terphenyl-d14	33-141	18-137
DOH 310-13	Terphenyl-d14	40-110	40-110
DOH 310-14	Terphenyl-d14	40-110	40-110
DOH 310-15	Terphenyl-d14	40-110	40-110
DOH 310-34	4-BFB	50-150	50-150
DOH 313-4	DCB	NA	30-150
8015M_GRO	4-BFB	50-150	50-150
8015M_DRO	Terphenyl-d14	50-150	50-150

Units Key:	ug/l = microgram per liter
	ug/kg = microgram per kilogram
	mg/l = milligram per liter
	mg/kg = milligram per kilogram
	%R = Percent Recovery



Dan Bishuk  
Beardsley Design Associates  
431 E. Fayette Street  
Syracuse, NY 13202 USA

Phone: (315) 472-6980

Authorization: Proj. #08405

# Laboratory Analysis Report

## For

### Beardsley Design Associates

Client Project ID:

Syracuse Label Co.

LSL Project ID: 0805036

Receive Date/Time: 04/02/08 16:53

Project Received by: GS

Life Science Laboratories, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose. By the Client's acceptance and/or use of this report, the Client agrees that LSL is hereby released from any and all liabilities, claims, damages or causes of action affecting or which may affect the Client as regards to the results contained in this report. The Client further agrees that the only remedy available to the Client in the event of proven non-conformity with the above warranty shall be for LSL to re-perform the analytical test(s) at no charge to the Client. The data contained in this report are for the exclusive use of the Client to whom it is addressed, and the release of these data to any other party, or the use of the name, trademark or service mark of Life Science Laboratories, Inc. especially for the use of advertising to the general public, is strictly prohibited without express prior written consent of Life Science Laboratories, Inc. This report may only be reproduced in its entirety. No partial duplication is allowed. The Chain of Custody document submitted with these samples is considered by LSL to be an appendix of this report and may contain specific information that pertains to the samples included in this report. The analytical result(s) in this report are only representative of the sample(s) submitted for analysis. LSL makes no claim of a sample's representativeness, or integrity, if sampling was not performed by LSL personnel.

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| (2) LSL North Lab, Waddington, NY           | (315) 388-4476 | NYS DOH ELAP #10900                 |
| (3) LSL Finger Lakes Lab, Wayland, NY       | (585) 728-3320 | NYS DOH ELAP #11667                 |
| (4) LSL Southern Tier Lab, Cuba, NY         | (585) 968-2640 | NYS DOH ELAP #10760                 |
| (5) LSL MidLakes Lab, Canandaigua, NY       | (585) 396-0270 | NYS DOH ELAP #11369                 |
| (6) LSL Brittonfield Lab, East Syracuse, NY | (315) 437-0200 | NYS DOH ELAP #10155                 |

This report was reviewed by:

*Debra Kempf, QA*  
Life Science Laboratories, Inc.

Date:

*4/4/08*

A copy of this report was sent to:

Page 1 of 5

Date Printed:

4/4/08

# -- LABORATORY ANALYSIS REPORT --

*Beardsley Design Associates Syracuse, NY*

Sample ID: MW-14 LSL Sample ID: 0805036-001  
 Location:  
 Sampled: 04/02/08 13:55 Sampled By: Client  
 Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 601 Volatile Halocarbons by 624					
Bromodichloromethane	<1	ug/l		4/4/08	BD
Bromoform	<1	ug/l		4/4/08	BD
Bromomethane	<1	ug/l		4/4/08	BD
Carbon tetrachloride	<1	ug/l		4/4/08	BD
Chlorobenzene	<1	ug/l		4/4/08	BD
Chloroethane	<1	ug/l		4/4/08	BD
2-Chloroethylvinyl ether	<10	ug/l		4/4/08	BD
Chloroform	<1	ug/l		4/4/08	BD
Chloromethane	<1	ug/l		4/4/08	BD
Dibromochloromethane	<1	ug/l		4/4/08	BD
1,2-Dichlorobenzene	<1	ug/l		4/4/08	BD
1,3-Dichlorobenzene	<1	ug/l		4/4/08	BD
1,4-Dichlorobenzene	<1	ug/l		4/4/08	BD
Dichlorodifluoromethane	<1	ug/l		4/4/08	BD
1,1-Dichloroethane	<1	ug/l		4/4/08	BD
1,2-Dichloroethane	<1	ug/l		4/4/08	BD
1,1-Dichloroethene	<1	ug/l		4/4/08	BD
trans-1,2-Dichloroethene	<1	ug/l		4/4/08	BD
1,2-Dichloropropane	<1	ug/l		4/4/08	BD
cis-1,3-Dichloropropene	<1	ug/l		4/4/08	BD
trans-1,3-Dichloropropene	<1	ug/l		4/4/08	BD
Methylene chloride	<1	ug/l		4/4/08	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		4/4/08	BD
Tetrachloroethene	<1	ug/l		4/4/08	BD
1,1,1-Trichloroethane	<1	ug/l		4/4/08	BD
1,1,2-Trichloroethane	<1	ug/l		4/4/08	BD
Trichloroethene	<1	ug/l		4/4/08	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		4/4/08	BD
Vinyl chloride	<1	ug/l		4/4/08	BD
Surrogate (1,2-DCA-d4)	97	%R		4/4/08	BD
Surrogate (Tol-d8)	106	%R		4/4/08	BD
Surrogate (4-BFB)	99	%R		4/4/08	BD

# -- LABORATORY ANALYSIS REPORT --

Beardsley Design Associates Syracuse, NY

Sample ID: MW-16

LSL Sample ID: 0805036-002

Location:

Sampled: 04/02/08 14:10

Sampled By: Client

Sample Matrix: NPW

Analytical Method	Result	Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 601 Volatile Halocarbons by 624					
Bromodichloromethane	<1	ug/l		4/4/08	BD
Bromoform	<1	ug/l		4/4/08	BD
Bromomethane	<1	ug/l		4/4/08	BD
Carbon tetrachloride	<1	ug/l		4/4/08	BD
Chlorobenzene	<1	ug/l		4/4/08	BD
Chloroethane	<1	ug/l		4/4/08	BD
2-Chloroethylvinyl ether	<10	ug/l		4/4/08	BD
Chloroform	<1	ug/l		4/4/08	BD
Chloromethane	<1	ug/l		4/4/08	BD
Dibromochloromethane	<1	ug/l		4/4/08	BD
1,2-Dichlorobenzene	<1	ug/l		4/4/08	BD
1,3-Dichlorobenzene	<1	ug/l		4/4/08	BD
1,4-Dichlorobenzene	<1	ug/l		4/4/08	BD
Dichlorodifluoromethane	<1	ug/l		4/4/08	BD
1,1-Dichloroethane	<1	ug/l		4/4/08	BD
1,2-Dichloroethane	<1	ug/l		4/4/08	BD
1,1-Dichloroethene	<1	ug/l		4/4/08	BD
trans-1,2-Dichloroethene	<1	ug/l		4/4/08	BD
1,2-Dichloropropane	<1	ug/l		4/4/08	BD
cis-1,3-Dichloropropene	<1	ug/l		4/4/08	BD
trans-1,3-Dichloropropene	<1	ug/l		4/4/08	BD
Methylene chloride	<1	ug/l		4/4/08	BD
1,1,2,2-Tetrachloroethane	<1	ug/l		4/4/08	BD
Tetrachloroethene	<1	ug/l		4/4/08	BD
1,1,1-Trichloroethane	<1	ug/l		4/4/08	BD
1,1,2-Trichloroethane	<1	ug/l		4/4/08	BD
Trichloroethene	<1	ug/l		4/4/08	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l		4/4/08	BD
Vinyl chloride	2.5	ug/l		4/4/08	BD
Surrogate (1,2-DCA-d4)	104	%R		4/4/08	BD
Surrogate (Tol-d8)	99	%R		4/4/08	BD
Surrogate (4-BFB)	97	%R		4/4/08	BD

**-- LABORATORY ANALYSIS REPORT --**

*Beardsley Design Associates Syracuse, NY*

Sample ID: MW-15 LSL Sample ID: 0805036-003  
Location:  
Sampled: 04/02/08 15:40 Sampled By: Client  
Sample Matrix: NPW

Analytical Method	Prep Date	Analysis Date & Time	Analyst Initials
Analyte	Result	Units	
(1) EPA 601 Volatile Halocarbons by 624			
Bromodichloromethane	<1	ug/l	BD
Bromoform	<1	ug/l	BD
Bromomethane	<1	ug/l	BD
Carbon tetrachloride	<1	ug/l	BD
Chlorobenzene	<1	ug/l	BD
Chloroethane	<1	ug/l	BD
2-Chloroethylvinyl ether	<10	ug/l	BD
Chloroform	<1	ug/l	BD
Chloromethane	<1	ug/l	BD
Dibromochloromethane	<1	ug/l	BD
1,2-Dichlorobenzene	<1	ug/l	BD
1,3-Dichlorobenzene	<1	ug/l	BD
1,4-Dichlorobenzene	<1	ug/l	BD
Dichlorodifluoromethane	<1	ug/l	BD
1,1-Dichloroethane	<1	ug/l	BD
1,2-Dichloroethane	<1	ug/l	BD
1,1-Dichloroethene	<1	ug/l	BD
trans-1,2-Dichloroethene	<1	ug/l	BD
1,2-Dichloropropane	<1	ug/l	BD
cis-1,3-Dichloropropene	<1	ug/l	BD
trans-1,3-Dichloropropene	<1	ug/l	BD
Methylene chloride	<1	ug/l	BD
1,1,2,2-Tetrachloroethane	<1	ug/l	BD
Tetrachloroethene	<1	ug/l	BD
1,1,1-Trichloroethane	<1	ug/l	BD
1,1,2-Trichloroethane	<1	ug/l	BD
Trichloroethene	<1	ug/l	BD
Trichlorofluoromethane (Freon 11)	<1	ug/l	BD
Vinyl chloride	<1	ug/l	BD
Surrogate (1,2-DCA-d4)	95	%R	BD
Surrogate (Tol-d8)	105	%R	BD
Surrogate (4-BFB)	99	%R	BD







**SURROGATE RECOVERY CONTROL LIMITS FOR ORGANIC METHODS**

<u>Method</u>	<u>Surrogate(s)</u>	<u>Water Limits, %R</u>	<u>SHW Limits, %R</u>
EPA 504	TCMX	80-120	NA
EPA 508	DCB	70-130	NA
EPA 515.4	DCAA	70-130	NA
EPA 524.2	1,2-DCA-d4, 4-BFB	80-120	NA
EPA 525.2	1,3-DM-2-NB, TPP, Per-d12	70-130	NA
EPA 526	1,3-DM-2-NB, TPP	70-130	NA
EPA 528	2-CP-3,4,5,6-d4, 2,4,6-TBP	70-130	NA
EPA 551.1	Decafluorobiphenyl	80-120	NA
EPA 552.2	2,3-DBPA	70-130	NA
EPA 601	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 602	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 608	TCMX, DCB	30-150	NA
EPA 624	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	NA
EPA 625, AE	2-Fluorophenol	21-110	NA
EPA 625, AE	Phenol-d5	10-110	NA
EPA 625, AE	2,4,6-Tribromophenol	10-123	NA
EPA 625, BN	Nitrobenzene-d5	35-114	NA
EPA 625, BN	2-Fluorobiphenyl	43-116	NA
EPA 625, BN	Terphenyl-d14	33-141	NA
EPA 8010	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8020	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8021	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8081	TCMX, DCB	30-150	30-150
EPA 8082	DCB	30-150	30-150
EPA 8151	DCAA	30-130	30-120
EPA 8260	1,2-DCA-d4, Tol-d8, 4-BFB	70-130	70-130
EPA 8270, AE	2-Fluorophenol	21-110	25-121
EPA 8270, AE	Phenol-d5	10-110	24-113
EPA 8270, AE	2,4,6-Tribromophenol	10-123	19-122
EPA 8270, BN	Nitrobenzene-d5	35-114	23-120
EPA 8270, BN	2-Fluorobiphenyl	43-116	30-115
EPA 8270, BN	Terphenyl-d14	33-141	18-137
DOH 310-13	Terphenyl-d14	40-110	40-110
DOH 310-14	Terphenyl-d14	40-110	40-110
DOH 310-15	Terphenyl-d14	40-110	40-110
DOH 310-34	4-BFB	50-150	50-150
DOH 313-4	DCB	NA	30-150
8015M_GRO	4-BFB	50-150	50-150
8015M_DRO	Terphenyl-d14	50-150	50-150

Units Key:	ug/l = microgram per liter
	ug/kg = microgram per kilogram
	mg/l = milligram per liter
	mg/kg = milligram per kilogram
	%R = Percent Recovery

