TECHNOLOGIES, INC.

Remedial Investigation Work Plan

Revision 2

CIABATTONI BROWNFIELDS SITE
ID# C 344068
153 South Liberty Drive
Stony Point
Rockland County, New York

Prepared for:

Mr. Josh Beyer, P.E.
Director of Development
Sembler/Treasure New York Joint Venture
c/o Sembler Florida, Inc.
5858 Central Avenue
Saint Petersburg, FL 33707

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
BROWNFIELDS CLEANUP PROGRAM
21 South Putt Corners Road
New Paltz, NY 12561

Prepared by:

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Project #050409

This Remedial Investigation Work Plan has been prepared for *Mr. Josh Beyer* by *A2L Technologies, Inc.*, a Florida Registered Engineering Business (Certificate No. EB0006968).

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1.0. INTRODUCTION

A2L Technologies, Inc. was retained by Mr. Josh Beyer of The Sembler Company to prepare a Remedial Investigation Work Plan (RIWP) pursuant to the Brownfields Cleanup Program (BCP), as administered by the New York State Department of Environmental Conservation (NYSDEC). The assessment activities as described within the RIWP will be performed after approval by the BCP. The RIWP is being provided to propose a reasonable and scientifically based plan for assessing the horizontal and vertical extent of petroleum distillate contamination released during the previous operation of a gasoline service station at the site. A description of the site history and project history, including previous assessments, is included herein. The location of the subject site is shown in Figure 1, and the assessment area is shown in Figure 2 (Site Plan).

1.1 Assessment Objectives

The objectives of the remedial investigation work plan are summarized as follows:

1. Map and describe relevant features of the subject facility and immediately adjacent areas.
2. Summarize the regional hydrogeology and aquifer characteristics of the subject area.
3. Summarize and describe proposed assessment methodology and field techniques.
4. Describe the site specific geologic and hydrogeologic conditions for the impacted and potentially affected hydrologic zones.
5. Determine the areal extent (horizontal and vertical) of adsorbed and dissolved petroleum hydrocarbons.

1.2 Scope of Work

The scope of work activities required for completion of the Remedial Investigation Work Plan (RIWP) are outlined as follows:

1. Compile relevant site history of the subject property and project to date through research of client records, public records, interviews, etc.
2. Map and describe relevant geographical features of the subject facility and adjacent areas through site reconnaissance and available literature and maps.
3. Obtain pertinent regional hydrogeological and aquifer characteristics via literature.
4. The brownfield site redevelopment commenced in October 2007 with the demolition of the existing structures and the preparation of the sub-grade for construction of a slab-on-grade building. As part of this development it has been determined that the clean fill placed into the former UST tank farm pit area was not compacted and would not support the proposed structure. Part of the site engineering will involve the removal of the fill placed into the UST tank farm area to approximately 12' below grade and compact the area in one (1) foot lifts to the surface. Additional clean fill will be placed and compacted in the area, to the desired elevation. During the excavation of the clean fill, a technician will be present to screen the soils with an OVA prior to replacement and compaction in the pit. Periodic representative samples will be collected from the bucket of the excavator and evaluated using head space analysis for elevated organic vapor emissions. If readings are observed to be greater than 75 ppm, the soil will be segregated and stockpiled on polyethylene sheeting for disposal at an approved facility after

proper characterization.

5. During site development the existing five groundwater monitoring wells are anticipated to be damaged or destroyed. In order to provide additional groundwater quality information, the monitoring wells were sampled on September 11, 2007. The samples were extracted using EPA low flow methods and submitted to a NYSDOH Laboratory for analysis using the 8260B STARS method for VOC's. Samples were obtained from MW-1, MW-2 and MW-3, whereas, MW-4 and MW-5 were dry and not sampled. The results from MW-1 and MW-2 did not identify any constituents above the limits of detection for the method. The sample from MW-3, located in the former UST pit area, identified concentrations of benzene (1.2µg/l), toluene (13µg/l) and isopropylbenzene (5 µg/l) above the NYSDEC TOGS value. The complete laboratory analytical results are presented in Appendix B. Subsequently, the monitoring wells were decommissioned on October 11, 2007 in accordance with Rockland County Department of Health regulations to prevent a potential release of hazardous materials to the aquifer during site redevelopment.

6. Perform soil assessment in the area east of the former underground storage tanks (USTs) and dispensers to the northeast of the former gas station building. Four (4) soil borings will be installed throughout the subject site as illustrated in Figure 2 - Proposed Soil Boring and Monitoring Well Location Map. Two (2) additional soil borings will be installed along the western most portion of South Liberty Drive (US Route 9w & 202) right-of-way directly adjacent to the subject site. Each soil sample will be obtained in a pre-cleaned two (2) inch steel split spoon sampler. The soil collected from each

of split spoons will be examined in the field for physical evidence of contamination (i.e. odor, staining) and subjected to a headspace analysis for the presence of gross volatile organics via a photo-ionization detector (PID). Decontamination procedures shall be employed between sampling to prevent cross-contamination. Based upon the physical examination of the soil samples and OVA responses, six (6) soil samples, one from each boring, will be selected and submitted to a State-certified laboratory for analysis. If no distinguishing characteristics are identified in the soils collected, the sample extracted adjacent to the vadose zone will be submitted for analysis from each respective boring. All soil samples will be packaged in laboratory containers, properly labeled and preserved on ice in a cooler. The soil samples collected will be analyzed for New York State Spill Technology and Remediation Series Memo # 1 (STARS) Volatile Organic Compounds via EPA Method 8260B, lead (Pb) and chromium (Cr) EPA Method 6010 for(mass analysis), hexavalent and trivalent chromium (Cr^{+6} & Cr^{+3}) using analytical method SW-846 7196A and TCLP analysis using EPA Method 1311. Additionally, soil samples will be collected at up to six off-site locations at 0 - 6" below native ground surface to establish background levels of Cr^{+6} & Cr^{+3}, and total Pb to establish background levels.

7. Perform ground water assessment of the subject site and down gradient accessible areas to further characterize the contamination discovered during the initial Phase II site assessment activities and the Supplemental Site Assessment report. The previously described soil borings will be completed as permanent two-inch diameter PVC monitoring wells. Each well 10'

screened interval will be installed to bisect the water table to allow for seasonal fluctuations. The annular space between the borehole and the PVC will be packed with clean, washed silica sand two feet above the screened interval. Clean Bentonite chips will be placed on top of the sand pack and shall continue to the ground surface. The chips will be hydrated with potable water to prevent surface water infiltration. Each well will be capped with a locking, expanding cap and covered with a bolt down aluminum cover mounted flush with grade and cemented in place. Each of the wells will be constructed in accordance with all applicable Rockland County Department of Health regulatory requirements. The monitoring wells will be placed as shown in Figure 2 - Proposed Soil Boring and Monitoring Well Location Map.

8. The location and elevation of each monitoring well will be surveyed. The elevation of an on-site benchmark (stationary flat surface) will be arbitrarily established as 100 ft in elevation. The survey data will be used to establish the groundwater elevation at each monitoring well. The groundwater elevations will be used to construct a groundwater contour map, which will illustrate groundwater flow direction and hydraulic gradient at the site. At least two rounds of water levels will be collected to verify groundwater contours and flow direction.

9. To evaluate the groundwater quality beneath the site, groundwater samples will be collected from each newly installed monitoring well on site. Groundwater samples will be collected from each well in accordance with USEPA Low Flow purge and sample guidelines. Groundwater samples will be collected into laboratory-provided containers, labeled, and placed in an

iced cooler for shipment to the laboratory. The ground water samples collected will be analyzed using EPA Method 8260B for Volatile Organic Compounds (STARS VOA and VOH), total and field filtered (0.45µ) RCRA metals (As, Ba, Cd, Cr, Pb, Hg, Se, Ag) using EPA Method 200.7.

10. Generate the RIWP report for submittal to the regulatory agency.

1.3 Facility/Site History

With the exception of the remaining asphalt paved parking areas, there are currently no improvements present on the subject site. The structures were removed from the property at the beginning of October. The Site has historically operated as a gasoline service station with initial construction in 1953 and operating under various ownership and management until August 2003 when all underground storage tanks were removed and the station vacated. When the UST's were removed, petroleum contamination within the soils was identified in the gasoline and waste oil tank farm area's.

1.4 Project History

Historical documentation indicates that the original tanks (installed 1953) were removed in 1980 by Ira D. Conklin & Sons, Inc. (IDC) and replaced with three (3) 10,000 gallon gasoline underground storage tanks (UST's) and two dispensers. In 1982, a complaint was filed by Annie's Diner which stated that the gas station was dumping oil behind the building. There was no documentation within the file indicating that any oil dumping had occurred or that any waste oil contaminated soils was cleaned up at the site.

A NYSDEC Spill Report Form was submitted on November 18, 1995 due to the failure of the tank tightness testing. The tank was retested and passed and received closure from the NYSDEC on March 26, 1998. In August 2003, IDC removed the three (3) 10,000 gallon gasoline underground storage tanks (UST's) and one (1) 550 gallon waste

oil UST. During the excavation process, it was established that the soil was contaminated and a NYSDEC Spill Report Form was submitted on August 20, 2003. Approximately 600 tons of soil were removed from the tank excavation area and 150 tons of soil removed from the waste oil UST excavation. Laboratory results for the soil extracted upon excavation indicated contaminants above the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) #4046 Recommended Soil Cleanup Objective (RSCO) level at the east wall (under South Liberty Drive) and bottom of the excavation. Upon inspection of the site, the Rockland County Department of Health representative requested the removal of the hydraulic lifts and dispensers on the site. On November 1, 2004, the removal of three (3) in-ground hydraulic lifts and the dispenser island commenced. Approximately 1,780 tons of petroleum contaminated soil were removed from both excavations. Soil sample results indicated levels above the NYSDEC TAGM #4046 Recommended Soil Cleanup Objectives along the east wall only. The remaining laboratory results did not exceed the applicable RSCO levels. No groundwater sampling was performed as a result of the discovery of excessively contaminated soils. A letter from IDC to Majac Enterprises (UST Owners) on December 28, 2004 indicated the presence of contaminated soil along the south wall of the hydraulic lift excavation.

A Phase II Environmental Site Assessment was published in April 2006 and documented the initial site investigation of the former service station facility. During this investigation the soils and groundwater around the former - underground storage tank farm, waste oil tank, dispenser island and the hydraulic lifts were screened and sampled for petroleum hydrocarbon contamination. The summary of the findings is presented below.

- Nine direct push soil borings were installed in the following areas: two within the former waste oil UST tank farm; two within the former gasoline UST tank farm and dispenser area; one northwest of the former gasoline UST tank farm; one in the

former interior hydraulic lift location; and three along the back side of the service station building. Soil samples were collected and analyzed in the field for physical evidence of contamination (i.e. odor, staining, elevated OVA readings). A sample was collected from 4' to 6' BLS within waste oil UST tank farm area and analyzed for STARS VOCs, STARS SVOCs and 8 RCRA metals. A sample was collected from 17' to 19' BLS from the former gasoline UST tank farm area and analyzed for STARS VOCs and 8 RCRA metals. A sample was collected from 6' to 8' BLS within the former interior hydraulic lift area and analyzed for STARS VOCs, STARS SVOCs, PCBs and 8 RCRA metals. A sample was collected from 0' to 2' BLS from behind the service station building and analyzed for STARS VOCs, STARS SVOCs and 8 RCRA metals.

- The water table was encountered at approximately 17' - 25' below ground surface. The groundwater level is consistent with that documented during the removal of the tanks.
- Natural geologic units encountered at the site below the gravelly back fill material consisted of reddish brown and grayish brown silty sand and gravel underlain by a well sorted medium sand. Bedrock was not encountered during the investigation.
- Physical evidence of contamination (i.e. staining, odors, Photoionization Detector (PID) measurements) was observed from the soil samples extracted from the waste oil UST area, UST and Dispenser area, and in-ground hydraulic lift.
- No levels of VOC's, above the laboratories limits of detection, were established within the sampled soil in the area of the former waste oil UST.
- No levels of VOC's, above the laboratories limits of detection, were identified within the sampled soil in the area of the alleged dumping at the rear of the gas station building.

- No levels of VOC's, above the laboratories limits of detection, were identified within the sampled soil in the area of the former in-ground hydraulic lifts. Additionally, Benzene was detected slightly above TOGS value in the groundwater sample, with Selenium being the only dissolved metal exceeding the regulatory limit.
- Based on the results of sampling, groundwater at the former dispenser island and UST area have been impacted by numerous petroleum constituents above NYSDEC groundwater quality standards. The extent of the impact has not been delineated, and the potential exists that the groundwater impact may extend off-site.
- Metals concentrations exceeding the regulatory limits were established within the soil samples (chromium) and groundwater samples (totals - barium, chromium, lead, selenium, silver and dissolved - selenium). The source of the elevated metals is unknown.

Based on the findings of the April 2006 Phase II Environmental Site Assessment a supplemental Site Assessment Report was prepared and required additional soils and groundwater sampling at the site. The finished report was published in December of 2006 and the findings are presented below.

- Five monitoring wells were installed using a direct push rotary drill rig at predetermined locations on the site. Soil borings 1, 3, 4, 5 were advanced to 20 feet below land surface and finished as a 2" monitoring well with a locking cap. Soil borings were advanced to 15' below land surface and finished as a 2" monitoring well with a locking cap.
- Natural geologic units encountered at the site below the gravelly backfill material consist of reddish-brown and grayish-brown silty sand and gravel underlain by a well sorted medium sand. Bedrock was not encountered during the investigation.
- All soil screening PID results were found to be at non-detectable levels, however a

strong petroleum odor was detected from 16' - 20' below grade during the installation of monitoring well MW-03 (former UST area).

- Chromium was detected in all three soil samples collected (including the upgradient "background" sample) at concentrations ranging from 38 to 61 milligram/killigram (mg/kg), exceeding the RSCO value of 10 mg/kg. The Eastern USA background chromium soil concentration of 15 to 40 mg/kg was exceeded at the MW-03 and MW-05 sample locations.
- Numerous analytes were detected in three of the four sampled monitoring wells, including gasoline constituents and breakdown compounds. Monitoring wells MW-3 and MW-4 were determined to contain VOC compounds in excess of NYSDEC TOGS values. Several analytes were detected at monitoring well MW-03 and included: ethylbenzene (63 µg/l); total xylenes (56 µg/l); isopropylbenzene (32 µg/l); n-propylbenzene (76 µg/l); 1.3,5-trimethylbenzene (27 µg/l); 1,2,4-trimethylbenzene (120 µg/l, estimated); sec-butylbenzene (11 µg/l); napthalene (48 µg/l, estimated). The analytes in MW-04 at levels exceeding their respective state groundwater quality standards included: benzene (310 µg/l); toluene (470 µg/l); ethylbenzene (310 µg/l); total xylenes (750 µg/l); isopropylbenzene (54 µg/l); n-propylbenzene (52 µg/l); 1,3,5-trimethylbenzene (100 µg/l); 1,2,4-trimethylbenzene (260 µg/l); p-isopropyltoluene (6.9 µg/l) napthalene (73 µg/l, estimated).

Based on the results of this Supplemental Site Assessment, it appears that the groundwater samples collected indicate that the contamination plume originating from the former UST area has migrated eastward and may extend off-site to the east. Additionally, chromium was detected in all three soil samples collected (including the upgradient "background" sample) at concentrations ranging from 38 to 61 mg/kg, exceeding the RSCO value of 10 mg/kg. The Eastern USA background chromium soil concentration of 15 to 40

mg/kg was exceeded at the MW-03 and MW-05 sample locations.

2.0 GEOGRAPHICAL GEOLOGICAL AND HYDROGEOLOGICAL SETTING

2.1 Site Location and Local Land Use

The Ciabattoni Brownfields site is located at 153 Liberty Drive in the Town of Stony Point, Rockland County, NY. The site is specifically identified as Tax Lot 20.15-1-17. The total areal extent of the property is 0.23 +/- acres. The site is located along the east side of US Route 9W & 202, just south of the intersection with Filors Lane. Commercial and service establishments bound the site on all sides except the west, where a residential neighborhood is present.

2.2 Regional Topography, Geology and Hydrogeology

2.2.1 Regional Topography and Drainage

The area of the subject site is characterized by hills with changes in elevation from north to south and to the west. The subject site is at an approximate elevation of 114 feet above mean sea level (USGS Topographic Map, Haverstraw Quadrangle). According to the EDR database report, the subject site is located outside of the 100 and 500-year flood zones, as designated by the Federal Emergency Management Association (FEMA), and is not listed to contain federal wetland areas as designated by the National Wetland Inventory (NWI). The nearest major body of water is the Hudson River, which is located approximately 1 mile to the east of the subject site.

2.2.2 Geological and Hydrogeological Setting

Most of Rockland County is located within the Newark Basin. The area of the subject site is located within the Palisades sill which is comprised of basalt and red sandstone rock layers. The Newark Group is made up of both sedimentary and

igneous rocks consisting of the Brunswick Formation interlayered with Watchung basalt in the area of the site. The Brunswick Formation is made up largely of sandstone and conglomerate containing interbedded shale. The water supply in Rockland County is primarily from the Ramapo River Basin Aquifer System. The ground water system in the portion of Rockland County in which the subject property lies consists of two aquifer systems, the Ramapo Mahwah Primary Aquifer and the Newark Group bedrock aquifer. Site sampling indicates that the depth to groundwater at the site is typically encountered from seventeen to twenty five feet BLS.

All groundwater in the Brunswick Formation occurs in interconnecting fractures that have resulted mainly from jointing. There is some additional void space in the sandstone and conglomerate beds where cementing material is lacking either because it was never deposited or because it has been dissolved and removed by circulating groundwater. Public water supplies are most commonly drawn from 8" - 10" wells at a depth of 300' - 400' below land surface.

3.0 INVESTIGATIVE METHODOLOGY

The Remedial Investigation Work Plan of the subject site will involve several assessment methods. The objective of this remedial investigation will be to close known data gaps in the previous investigations performed at the site. Specifically, in accordance with the requirements of NYDEC Draft DER-10 the site investigation will:

1. Delineate the areal and vertical extent and mass of contaminants in all media at or emanating from the site;
2. Determine the surface and subsurface characteristics of the site, including topography and depth to groundwater;

3. Identify the sources of contamination, the migration paths, and actual or potential receptors of contaminants on or through air, soil, bedrock, sediment, groundwater, surface water, utilities, and structures at a contaminated site, without regard to property boundaries;
4. Collect and evaluate all data necessary to evaluate remedial action alternatives;
5. Collect and evaluate all data necessary to evaluate the actual and potential threats to public health and the environment. This would include evaluating all current and future potential public health exposure pathways, as well as potential impacts to biota;
6. Collect all data necessary to develop discharge limitations for any controlled discharge to an environmental medium which may be required for any remedial action alternative under consideration;
7. If appropriate, identify removal, treatment, containment, or other interim remedial measures to:
    i. Remove, treat or contain any source areas identified, or
    ii. Prevent, mitigate, or remedy environmental damage or human exposure to contaminants while remedial alternatives are being evaluated.

Soil borings and permanent ground water monitoring wells will be installed as previously described in Section 1.2 of this document. Field techniques and laboratory procedures employed during the Site Assessment will comply with the NYDEC standards as set forth in Draft DEC-10, Section 2.0 QA For Sampling and Lab Analysis. The following details each of these assessment methods.

3.1 Site Specific Hydrogeological Investigation Methods

The following section describes the techniques to be used to determine the site specific hydrogeological characteristics of the subsurface. This includes the determination of the lithology by visual examination of core samples and drill cuttings obtained during the installation of the groundwater monitoring wells.

3.1.1 Soil Boring and Sampling Methods

Soil borings and permanent groundwater monitoring wells will be installed in the areas designated using a rotary drill rig (refer to Figure 2 for locations). The proposed soil borings will be installed northeast, southeast and east of the former UST and dispenser area with the use of a hollow stem auger. Soil samples will be obtained in two foot intervals using a 2" steel split spoon sampler. Decontamination procedures shall be employed between sampling to prevent cross-contamination.

3.2 Soil Quality Investigation Methods

Analysis of unsaturated soils will be performed from the ground surface to the soil/groundwater interface for the presence of adsorbed hydrocarbons. The soil screening investigation will be conducted to further delineate the area of impact by hydrocarbons and to determine locations for the collection of soil samples for laboratory analysis. Soil samples will be extracted from designated boring locations as established by the previous screening.

3.2.1 Soil Screening Investigation

The soil samples collected from each of the two foot split spoon samples will be examined in the field for physical evidence of contamination (i.e. odor, staining) and subjected to a headspace analysis for the presence of gross volatile organics via a photo-ionization detector (PID). All soil samples will be labeled and preserved on ice in a cooler.

3.2.2 Soil Sampling

Soil samples will be collected from the locations of greatest OVA response or at the soil/groundwater interface. Based upon the physical examination of the soil samples, one (1) soil sample from each boring will be selected and submitted to a State-certified laboratory for analysis. The soil sample will be placed into laboratory-provided glass sampling containers and placed on ice for shipment to the laboratory for analysis. The soil samples collected will be analyzed for New York State Spill Technology and Remediation Series Memo # 1 (STARS) Volatile Organic Compounds via EPA Method 8260B, lead (Pb) and chromium (Cr) EPA Method 6010 for(mass analysis), hexavalent and trivalent chromium (Cr^{+6} & Cr^{+3}) using analytical method SW-846 7196A and TCLP analysis using EPA Method 1311.

Soil samples will be collected at up to six off-site locations at 0 - 6" below native ground surface to establish background levels of Cr^{+6} & Cr^{+3}, and total Pb to establish background levels.

3.2.3 Soil Vapor Intrusion Work Plan

The soil vapor intrusion work plan was developed in accordance with the NYSDOH October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York. The work plan is presented within Appendix D of this document.

3.3 Groundwater Quality Investigation Methods

The groundwater quality investigation will be conducted in order to assess the groundwater impacts by hydrocarbons below the subject property in the area of the former UST tank farm and fuel dispensers.

3.3.1 Monitoring Well Placement Rationale

The proposed permanent monitoring wells will be placed downgradient of the identified groundwater contamination. The Supplemental Site Assessment

groundwater evaluation identified that the groundwater flow direction is towards Liberty Drive to the east of the former UST tank farm and dispenser area. After site redevelopment, one groundwater monitoring well will be placed in the approximate area of former MW-2 to provide an upgradient monitoring point. One groundwater monitoring well is to be placed in the north/central portion of the site to provide a northern boundary of the observed groundwater contamination plume. One groundwater monitoring well will be placed in the approximate location of the former UST tank farm area. Two monitoring wells are proposed to be installed, within the right of way with US Routes 9W & 202 just beyond the eastern property boundary with South Liberty Drive to provide a northern and southern offsite groundwater assessment points. One additional monitoring well will be installed in the southeastern most portion of the subject site to provide a groundwater assessment point. The proposed monitoring well locations are identified on Figure 2, Proposed Monitoring Well Location Map.

3.3.2 Monitoring Well Installation Method

The permanent groundwater wells will be installed using a rotary drill rig. Each well will be installed approximately five (5) feet below the observed water table. The annular space between the borehole and the PVC will be packed with clean, washed silica sand two feet above the screened interval and sealed to the ground surface with pelletized bentonite hydrated with potable water to prevent surface water infiltration. Each well will be capped with a locking, expanding cap and covered with a steel cover mounted flush with grade and cemented in place.

3.3.3 Groundwater Sampling

Groundwater samples will be collected from each newly installed and existing monitoring wells on site. Groundwater samples will be collected from each

well in accordance with USEPA Low Flow purge and sample guidelines. Groundwater samples will be collected into laboratory-provided containers, labeled, and placed in an iced cooler for shipment to the laboratory. The ground water samples collected will be analyzed using EPA Method 8260B for Volatile Organic Compounds (STARS VOA and VOH), total and field filtered (0.45µ) RCRA metals (As, Ba, Cd, Cr, Pb, Hg, Se, Ag) using EPA Method 200.7. The containers will be labeled and placed into a cooler, preserved at 4^0 C, and delivered with a properly completed Chain-of-Custody to a certified laboratory.

3.4 Local Receptor Investigation Methodology

As part of the assessment, an investigation of potential local receptors within a half mile radius of the subject facility will be conducted. The receptor investigation will include the generation of a database report of well listings provided by Environmental Data Resources, Inc. to identify any permitted domestic, irrigation, and municipal wells within a half mile radius of the subject facility. A visual survey will also be conducted of the local area to identify any surface water bodies, locate any potable wells not listed and verify those that were listed.

4.0 SUMMARY AND CONCLUSIONS

A2L Technologies, Inc. was retained by Mr. Josh Beyer to prepare a Remedial Investigation Work Plan (RIWP) pursuant to the New York State Department of Environmental Conservation Brownfields Restoration Program. The RIWP is being provided to propose assessment activities and requirements for the completion of a Remedial Investigation Work Plan (RIWP).

The RIWP and subsequent assessment work activities will be performed in accordance with the New York State Department of Environmental Conservation Draft DER-10 guidance document.

Based upon the results of the field assessment activities, a summary of findings will be

completed. The investigative techniques to be utilized during the assessment are summarized below;

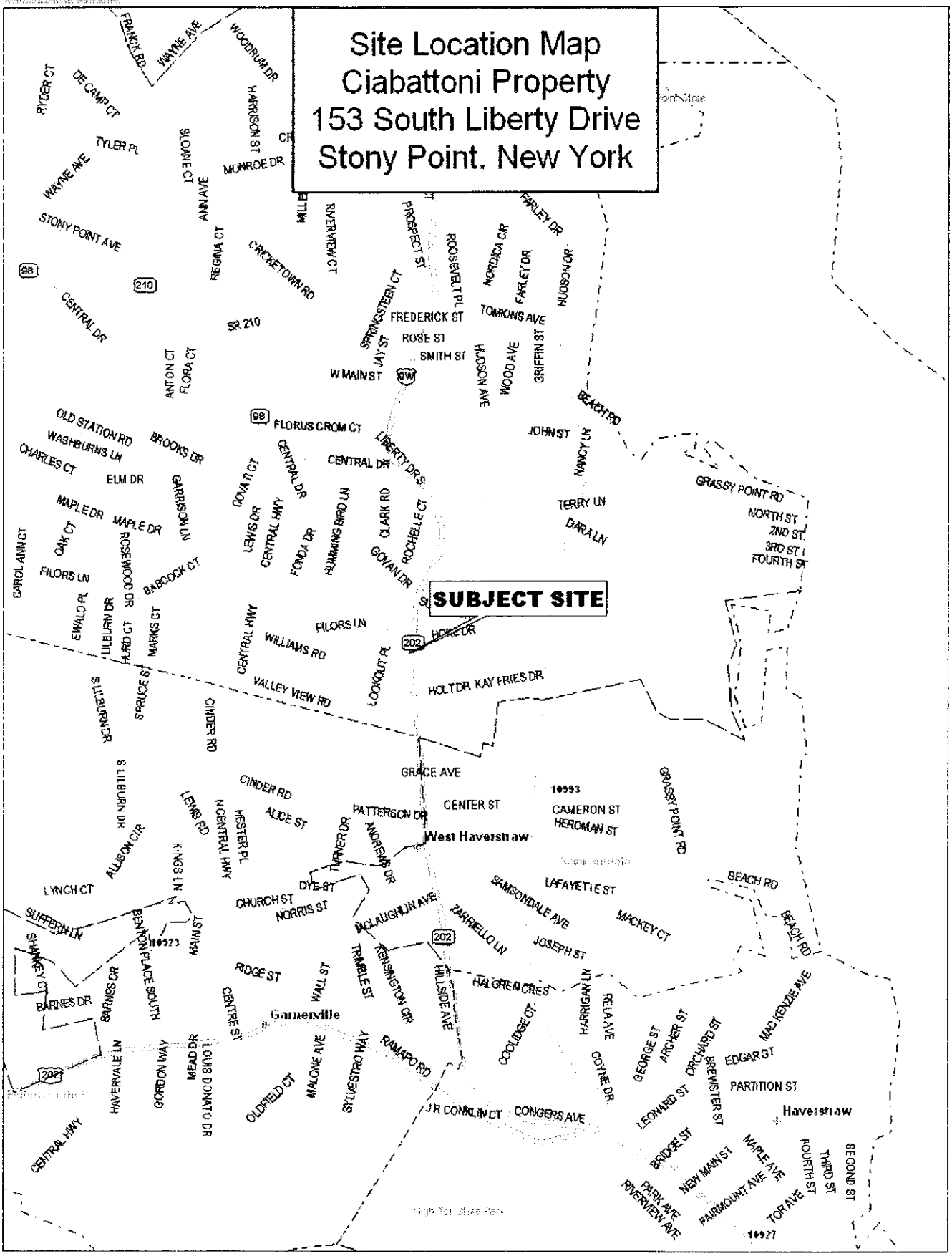
- Visual examination of soil brought to the surface during borehole installation, to determine the subsurface lithology.
- Analysis with a photoionization detector (PID) to determine the quality of the unsaturated soils of the vadose zone at the boring locations.
- Installation of permanent groundwater wells and sampling of groundwater to determine the presence of hydrocarbon impacted groundwater.
- Collection of soil samples to determine if unsaturated soils have been impacted by hydrocarbons.

The Conclusions and Recommendations will be provided based upon the field data and sample analysis. The final Report will be submitted to the New York State Department of Environmental Conservation and the New York State Department of Health. In the event that additional contamination is discovered, further assessment or remediation activities will be recommended.

FIGURE 1

Site Location Map

Site Location Map
Ciabattoni Property
153 South Liberty Drive
Stony Point, New York

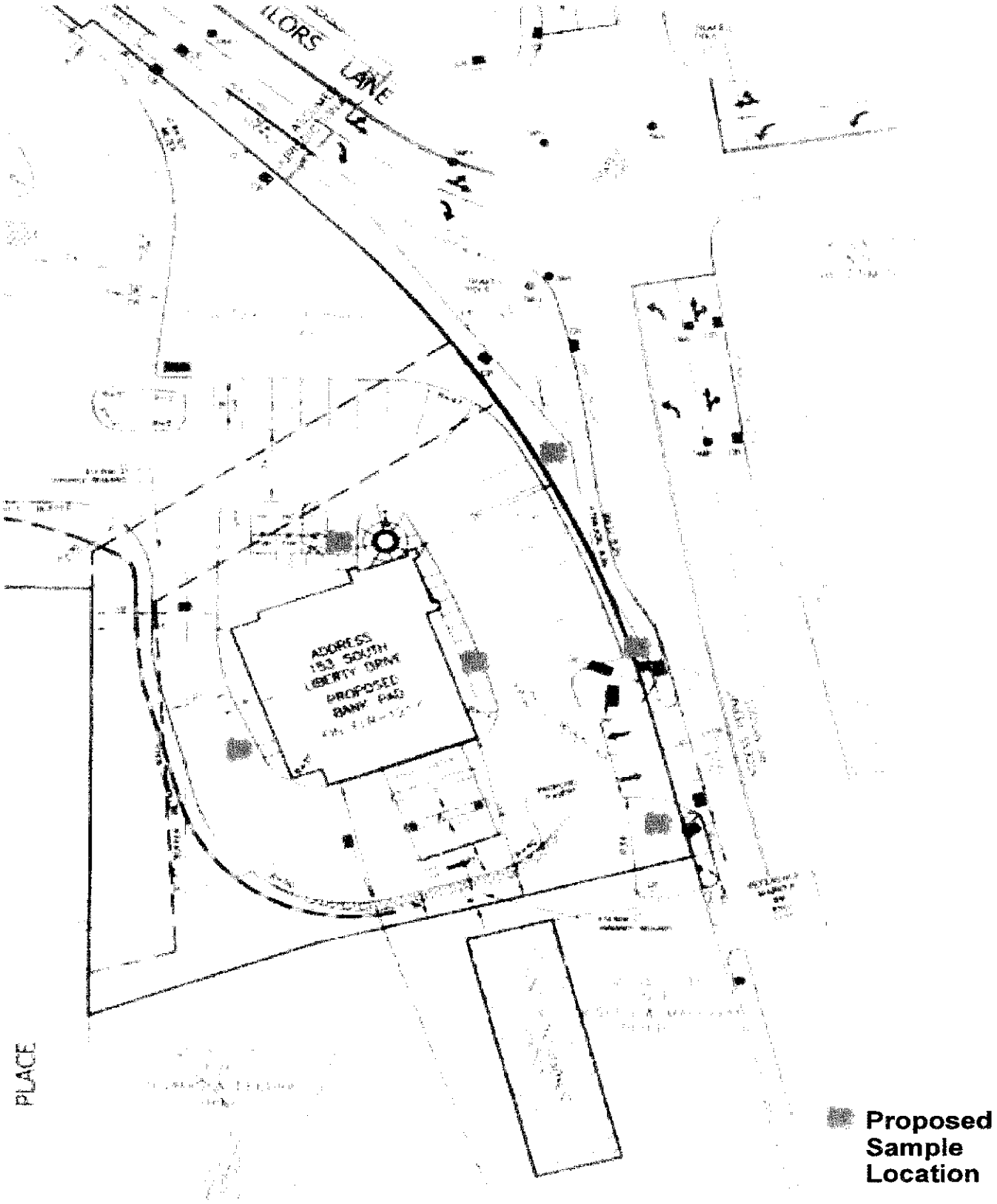


MN (13.3° W)

0 800 1600 2400 3200 4000 ft
Data Zoom 13-0

FIGURE 2

Sample Location Plan



050409	**SAMPLE LOCATION PLAN**
Figure 2	*421 Technologies, Inc.*

Appendix A

Supplemental Site Assessment Report

TECHNOLOGIES, INC.

SUPPLEMENTAL SITE ASSESSMENT REPORT

For:

CIABATTONI PROPERTY
149 & 153 South Liberty Drive
Stony Point, Rockland County, New York

Prepared For:

THE SEMBLER COMPANY
5858 Central Avenue
St. Petersburg, Florida 33707

Prepared By:

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December 7, 2006
Project 4060378

TECHNOLOGIES INC

December 7, 2006 Project #060378

Mr. Josh Beyer, P.E.
The Sembler Company
5858 Central Drive
St. Petersburg, Florida 33707

RE: CIABATTONI PROPERTY
149 & 153 South Liberty Drive
Stony Point, Rockland County, New York

Dear Mr. Beyer:

A2L Technologies, Inc. is pleased to present you with this ***Supplemental Site Assessment Report***. We would like to take this opportunity to thank you for selecting *A2L Technologies, Inc.* to assist you with this matter. This report has been prepared for the sole and exclusive use of The Sembler Company.

As always, should you have any further questions please feel free to contact us at your convenience.

Sincerely,

A2L Technologies, Inc.

D. Corey Dobson, C.E.I.
Project Geologist
Field Operations Manager

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1.0 INTRODUCTION

A2L Technologies, Inc. was authorized by the client to proceed with a *Supplemental Site Assessment Report* for the **CIABATTONI PROPERTY** located at 149 & 153 South Liberty Drive in the city of Stony Point, Rockland County, New York. This Supplemental Site Assessment Report was performed based upon the findings discovered during the assessment activities for the Phase I and Phase II Environmental Site Assessments prepared by *A2L Technologies, Inc.* dated January 12, 2006 and April 27, 2006.

2.0 SITE HISTORY

The purpose of the investigation was to delineate the extent of the contamination discovered during initial assessment activities.

In January 2006, A2L Technologies completed a Phase I ESA of the Ciabattoni property. The property was historically used as a gasoline filling station, utilizing several USTs, and as an automotive repair facility. Petroleum contaminated soil was encountered at the property during removal of the USTs and associated pumping equipment. Approximately 1,780 tons of soil was removed from the site in the former pump island and UST area. The excavation extended to approximately 18 feet below grade. Groundwater samples were not collected as part of the UST removal or remedial activities. In addition, two former in-ground hydraulic lifts were reportedly removed from the service bays within the building.

In April 2006, A2L Technologies completed a Phase II ESA at the subject property in order to determine the presence or absence of potential onsite contamination. The Phase II ESA included the installation of nine (9) soil borings, and the collection and analysis of select soil and groundwater samples. During the field activities, physical evidence of subsurface contamination (i.e. staining, odors, elevated OVA measurements) was observed on soil samples from borings performed within the former UST and dispenser area. Based on the Phase II findings, groundwater

at the former pump island and former UST area of the site has been impacted by gasoline constituents (presumably from historical fueling observations) above New York State Department of Environmental Conservation (NYSDEC) groundwater quality standards. The extent of groundwater contamination was not delineated during Phase II assessment activities, and the potential may exist that the groundwater impact may extend off-site based on the data from the groundwater sample collected from the temporary monitoring point installed at boring location SB-04.

3.0 SCOPE OF SERVICES

In order to delineate the extent of the contamination discovered during initial assessment activities, the Scope of Services for this investigation included (as per our proposal):

- Site inspection and field-determination of sample locations.
- Prior to any intrusive subsurface investigations, Underground Facilities Protection was contacted to complete a utility markout of the site. A review of available utility plans and information regarding underground utilities supplied by the site contact/owner were performed. Ground penetrating radar were utilized along the east portion of the property to assure clearance of underground utilities along the main street. A Health & Safety Plan was prepared in accordance with 29 CFR 1910.120 prior to the performance of any work.
- Perform soil assessment in the area of the former underground storage tanks (USTs) and dispensers to the north of the gas station building. Ten (10) soil borings were installed in the former UST and dispenser area with the use of a hollow stem auger. Each soil sample was obtained in new acetate liners using a four-foot, 1.75" outer diameter (O.D.) Macro core sampler. The soil samplers collected from each macro core was divided into two (2) two-foot intervals. Upon collection, each soil

sample were examined in the field for physical evidence of contamination (i.e. odor, staining) and subjected to a headspace analysis for the presence of gross volatile organics via a photo-ionization detector (PID) equipped with a 10.6 eV bulb. All soil samples were labeled and preserved on ice in a cooler. Decontamination procedures were employed between sampling to prevent cross-contamination. Based upon the physical examination of the soil samples, three (3) soil samples were selected and submitted to a State-certified laboratory for analysis. The soil samples collected were analyzed for New York State Spill Technology and Remediation Series Memo #1 (STARS) Volatile Organic Compounds via EPA Method 8260B and EPA Method 6010 for RCRA-8 Metals (mass analysis).

- Perform groundwater assessment in the area of the former USTs and dispensers to further characterize the contamination discovered during the initial Phase II activities. Five (5) of the soil borings were completed as permanent 2" diameter PVC monitoring wells. Each well was installed approximately 6 to 8 feet below the observed water table. The annular space between the borehole and the PVC was packed with clean, washed silica sand and sealed with pelletized bentonite to prevent surface water infiltration. Each well was capped with a locking, expanding cap and covered with a 5" bolt-down aluminum cover mounted flush with grade and cemented in place. The monitoring wells were placed-up gradient (1 well), within the UST and dispenser area (3 wells), and down-gradient (1 well).
- The location and elevation of each monitoring well were surveyed. The elevation of an on-site benchmark (stationary flat surface) was arbitrarily established as 100 feet in elevation. The survey data was used to establish the groundwater elevation at each monitoring well. The groundwater elevations were used to construct a groundwater contour map, which illustrates groundwater flow direction and

hydraulic gradient at the site. Two rounds of water levels were collected in order to verify groundwater contours and flow direction.

- To evaluate groundwater quality beneath the site, groundwater samples were to be collected from each of the five (5) newly-installed monitoring wells. Groundwater samples were collected from each well in accordance with USEPA Low Flow purge and sample guidelines. Well MW-05 was found to be dry and no groundwater sample could be collected. Groundwater samples were collected into laboratory-provided containers, labeled, and placed in an iced cooler for shipment to the laboratory. The four (4) groundwater samples collected were analyzed using EPA Method 8260B for Volatile Organic Compounds (STARS VOA and VOH).
- Preparation of report of activities and findings.

4.0 DESCRIPTION OF ASSESSMENT ACTIVITIES

On August 28, 2006 and September 6, 2006, the site activities were performed. A detailed description of the on-site activities and sampling follows:

4.1 Soil Boring Installation & Sampling

Preliminary soil borings were installed at each of the five (5) proposed monitoring well locations in order to screen the soils for physical evidence of contamination. The soil borings were installed to an approximate depth of 15' - 20' below grade, in order to screen the soils and determine screened interval lithology for the monitoring wells. Soil samples were not collected from monitoring well MW-04 location as soil boring SB-04 was previous screened and sampled during Phase II assessment activities.

Soil samples were collected continuously in four foot intervals using a 1¾" inner diameter (I.D.) stainless steel, four foot long Macrocore sampler. Each four foot sample was collected in a new acetate liner to ensure its integrity, then split into two (2) two foot

segments. An aliquot from each two foot interval was placed into a resealable polyethylene bag and subjected to headspace analysis using an OVA-PID equipped with a 10.6 mV lamp. All soil screening OVA results were found to be at non-detectable levels, however a strong petroleum odor was detected from 16' - 20' below grade during the installation of monitoring well MW-03 (former UST area). Soil boring logs describing the geologic conditions and comments were maintained in the field by a geologist, and are included in Appendix A.

Soil descriptions were not maintained from the MW-05 location due to heavy rain during drilling activities. The collected soil intervals were reviewed in the field for physical evidence of contamination (i.e. odor, staining, elevated OVA meter readings), placed in a labeled jar, and stored in a cooler for preservation. Soil samples were collected at the following locations:

SAMPLE ID:	SAMPLE LOCATION & DESCRIPTION:	ANALYTICAL METHODS:	SAMPLE COLLECTION INTERVAL:
MW-01 (soil)	Former Waste Oil Tank Location	8260 (STARS VOA/VOH), 6010 RCRA-8 Metals	11' - 13'
MW-03 (soil)	Former UST Location	8260 (STARS VOA/VOH), 6010 RCRA-8 Metals	15' - 17'
MW-05 (soil)	South/Southeast of Former UST and Pump Island Area	8260 (STARS VOA/VOH), 6010 RCRA-8 Metals	16' - 18'

These three (3) soil sample locations and intervals were chosen to be representative based on field observations and a review of the collected soil intervals.

4.2 Permanent Monitoring Well Installation & Sampling

The permanent monitoring wells were installed using a truck-mounted drill/probe combination rig (see Site Plan, Figure 2 - HRP report for details and location). The wells were installed using hollow steel auger flights advanced into the subsurface using rotary methods. The auger was advanced at each location to a depth of approximately 15' - 20' below land surface, based on field observations and the anticipated groundwater depth from

previous assessments.

The lower ten feet of each permanent well consisted of factory slotted PVC screen, with the upper 9.5 feet consisting of solid PVC casing. The well annulus was backfilled with a clean sand filter pack (lower 12'), a bentonite seal (2' above sand filter pack), native soil backfill for the remainder of the annulus, and was grouted to the surface. A flush concrete pad with a bolt-down aluminum cover was installed around each of the wells for protection. Each of the monitoring wells were purged until relatively sediment-free (after a minimum purge of at least three well volumes), then allowed to equilibrate for approximately one week prior to sampling.

The well was purged using low flow purging methods (less than 1.0 liter per minute) with a variable speed peristaltic pump. This method of purging is designed to minimize the disturbance of the formation being sampled, and thus is the preferred method for groundwater purging. The wells were sampled using a peristaltic pump attached to fresh dedicated polyethylene tubing. The peristaltic pump was used to slowly purge the permanent well for approximately 20 minutes, in order to evacuate the required purge volume. Groundwater samples were collected at the following locations:

SAMPLE ID:	SAMPLE LOCATION & DESCRIPTION:	ANALYTICAL METHODS:
MW-01	Upgradient Well Location	8260 (STARS VOA/VOH)
MW-02	Former Waste Oil Tank Location	8260 (STARS VOA/VOH)
MW-03	Former UST Location	8260 (STARS VOA/VOH)
MW-04	Former Pump Island Area	8260 (STARS VOA/VOH)
MW-05	East/Southeast of Former UST and Pump Island Area	No sample collected- dry well

Following the required purge criteria, stabilization parameters were measured every three to five minutes using a Flow Through Continuous Monitoring Cell. Stabilization measurements included temperature, specific conductance, pH, turbidity, and dissolved

oxygen. Further, the drawdown of the groundwater in the well was monitored continuously.

After stabilization of the readings, a representative groundwater sample was collected at each permanent monitoring well in laboratory-provided glass and plastic containers which were labeled, placed into a cooler, preserved on wet ice below 4° C, and delivered with a properly completed Chain-of-Custody form to *Hudson Environmental Services, Inc.* in South Glens Falls, New York for analysis using the specific analytical methods previously listed. Laboratory analytical results for the groundwater samples are discussed in Section 5.2 and are included in Appendix A.

5.0 FINDINGS AND RESULTS

5.1 Soil Assessment

The laboratory analysis of the collected soil samples yielded results below detectable limits for all of the analyzed constituents, except as follows:

LOCATION/ CONSTITUENT	RESULT	UNITS	NYSDEC TAGM 4046 Recommended Soil Cleanup Objectives
MW-01 soil from 11' - 13' below grade (Upgradient Location):			
Barium	69	mg/kg	300
Chromium	**38**	mg/kg	10
Lead	12	mg/kg	Site Background Levels
MW-03 soil from 15' - 17' below grade (Former UST Location):			
Arsenic	1.6	mg/kg	7.5
Barium	72	mg/kg	300
Chromium	**58**	mg/kg	10
Lead	7.9	mg/kg	Site Background Levels
Silver	1.2	mg/kg	Site Background Levels

LOCATION/ CONSTITUENT	RESULT	UNITS	NYSDEC TAGM 4046 Recommended Soil Cleanup Objectives
MW-05 soil from 16' - 18' below grade (E/SE of Former UST and Pump Island Location):			
Barium	59	mg/kg	300
Chromium	**61**	mg/kg	10
Lead	5.5	mg/kg	Site Background Levels

Analytes listed in **BOLD** indicate an exceedance of the applicable NYSDEC TAGM 4046 Soil Cleanup Objective.

Chromium was detected in all three soil samples collected (including the upgradient "background" sample) at concentrations ranging from 38 to 61 mg/kg, exceeding the RSCO value of 10 mg/kg. The Eastern USA background chromium soil concentration of 15 to 40 mg/kg was exceeded at the MW-03 and MW-05 sample locations.

5.2 Groundwater Assessment at Permanent Monitoring Wells

The laboratory analysis for the permanent monitoring wells yielded results below detectable limits for all of the analyzed constituents, except as follows:

LOCATION/ CONSTITUENT	RESULT	UNITS	NYSDEC TECHNICAL & OPERATIONAL GUIDANCE SERIES (TOGS) VALUE
MW-01 (Upgradient Well):			
Benzene	0.5	µg/L	0.7
Toluene	0.7	µg/L	5
Total Xylenes	0.5	µg/L	5
Total VOCs	1.7	µg/L	Not Established
MW-02 (Former Waste Oil Tank Location):			
No Analytes Detected			
MW-03 (Former UST Area):			
Ethylbenzene	**63**	µg/L	5
Total Xylenes	**56**	µg/L	5
Isopropylbenzene	**32**	µg/L	5

LOCATION/ CONSTITUENT	RESULT	UNITS	NYSDEC TECHNICAL & OPERATIONAL GUIDANCE SERIES (TOGS) VALUE
n-Propylbenzene	**76**	µg/L	5
1,3,5-Trimethylbenzene	**27**	µg/L	5
1,2,4-Trimethylbenzene	**120 B**	µg/L	5
sec-Butylbenzene	**11**	µg/L	5
p-Isopropyltoluene	1.6	µg/L	5
Naphthalene	**48 B**	µg/L	10
Total VOCs	434.6	µg/L	Not Established
MW-04 (Former Pump Island Area):			
Benzene	**310**	µg/L	0.7
Toluene	**470**	µg/L	5
Ethylbenzene	**310**	µg/L	5
Total Xylenes	**750**	µg/L	5
Isopropylbenzene	**54**	µg/L	5
n-Propylbenzene	**52**	µg/L	5
1,3,5-Trimethylbenzene	**100**	µg/L	5
1,2,4-Trimethylbenzene	**260**	µg/L	5
sec-Butylbenzene	3.2	µg/L	5
p-Isopropyltoluene	**6.9**	µg/L	5
Naphthalene	**73 B**	µg/L	10
Methyl Tert-Butyl Ether (MTBE)	4.9	µg/L	10
Total VOCs	2394	µg/L	Not Established

- (B) flag designates that the detected concentration is only an estimated value. Please refer to the accompanying case narrative for a complete description.
- Analytes listed in **BOLD** indicate an exceedance of the applicable NYSDEC Groundwater Quality Standard.

Numerous analytes were detected in three of the four sampled monitoring wells, including gasoline constituents and breakdown compounds. Various analytes were detected at monitoring wells MW-03 and MW-04 at levels exceeding their respective state groundwater quality standards (as defined by the NYSDEC Technical and Operational Guidance Series, 1.1.1).

6.0 SUMMARY AND CONCLUSIONS

Field assessment activities were performed for this Supplemental Site Assessment Report on August 28, 2006 and September 6, 2006. The purpose of the investigation was to delineate the extent of the contamination discovered during initial assessment activities. This Supplemental Site Assessment Report was performed based upon the findings discovered during the assessment activities for the Phase I and Phase II Environmental Site Assessments prepared by *A2L Technologies, Inc.* dated January 12, 2006 and April 27, 2006.

Investigative techniques utilized during the environmental assessment are summarized below:

- Visual examination of soil brought to the surface during boring installation to determine the subsurface lithology.
- Analysis with an Organic Vapor Analyzer (OVA) equipped with a photo-ionization detector (PID) to determine the quality of the unsaturated soils.
- Soil sampling at three locations in order to determine the presence or absence of subsurface contamination, as well as to establish background metals concentrations.
- Groundwater sampling at the permanent monitoring well locations, in order to delineated the groundwater contamination plume.

A summary of the assessment findings is as follows:

- The water table at the subject site was established to be at a depth of approximately 17' to 20' or more below land surface.
- Natural geologic units encountered at the site below the gravelly backfill material consist of reddish-brown and grayish-brown silty sand and gravel underlain by a well sorted medium sand. Bedrock was not encountered during the investigation.

- All soil screening OVA results were found to be at non-detectable levels, however a strong petroleum odor was detected from 16' - 20' below grade during the installation of monitoring well MW-03 (former UST area).
- Chromium was detected in all three soil samples collected (including the upgradient "background" sample) at concentrations ranging from 38 to 61 mg/kg, exceeding the RSCO value of 10 mg/kg. The Eastern USA background chromium soil concentration of 15 to 40 mg/kg was exceeded at the MW-03 and MW-05 sample locations.
- Numerous analytes were detected in three of the four sampled monitoring wells, including gasoline constituents and breakdown compounds. Various analytes were detected at monitoring wells MW-03 and MW-04 at levels exceeding their respective state groundwater quality standards (as defined by the NYSDEC Technical and Operational Guidance Series, 1.1.1).

Based on the results of this Supplemental Site Assessment, it appears that the groundwater samples collected indicate that the contamination plume originating from the former UST area has migrated eastward and may extend off-site to the east. Additionally, chromium was detected in all three soil samples collected (including the upgradient "background" sample) at concentrations ranging from 38 to 61 mg/kg, exceeding the RSCO value of 10 mg/kg. The Eastern USA background chromium soil concentration of 15 to 40 mg/kg was exceeded at the MW-03 and MW-05 sample locations.

If the onsite buildings or new buildings are to be used, a soil gas survey is warranted to assess potential exposure to the VOCs identified in the soil and groundwater at the site. If the site is to be redeveloped and soil vapor is determined to be an issue, the landowner may wish to consider building designs that incorporate passive and/or active soil vapor remedial systems. Any site activities the involve disturbing site soils should consider that impacted petroleum contaminated

soils and/or groundwater may be encountered and may require removal and off-site disposal. It should be noted that additional assessment and remedial actions may be required by the NYSDEC (eg. In-situ treatment such as ORC® injection or dual phase positive displacement groundwater recovery).

7.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONAL(S)

Prepared by: _____

D. Corey Dobson, C.E.I.
Project Geologist
Field Operations Manager

Reviewed by: _____

Kent R. Ward ASP, CFEA, REPA
Vice President
Director of Environmental Services
Registered Environmental Property Assessor (NREP)

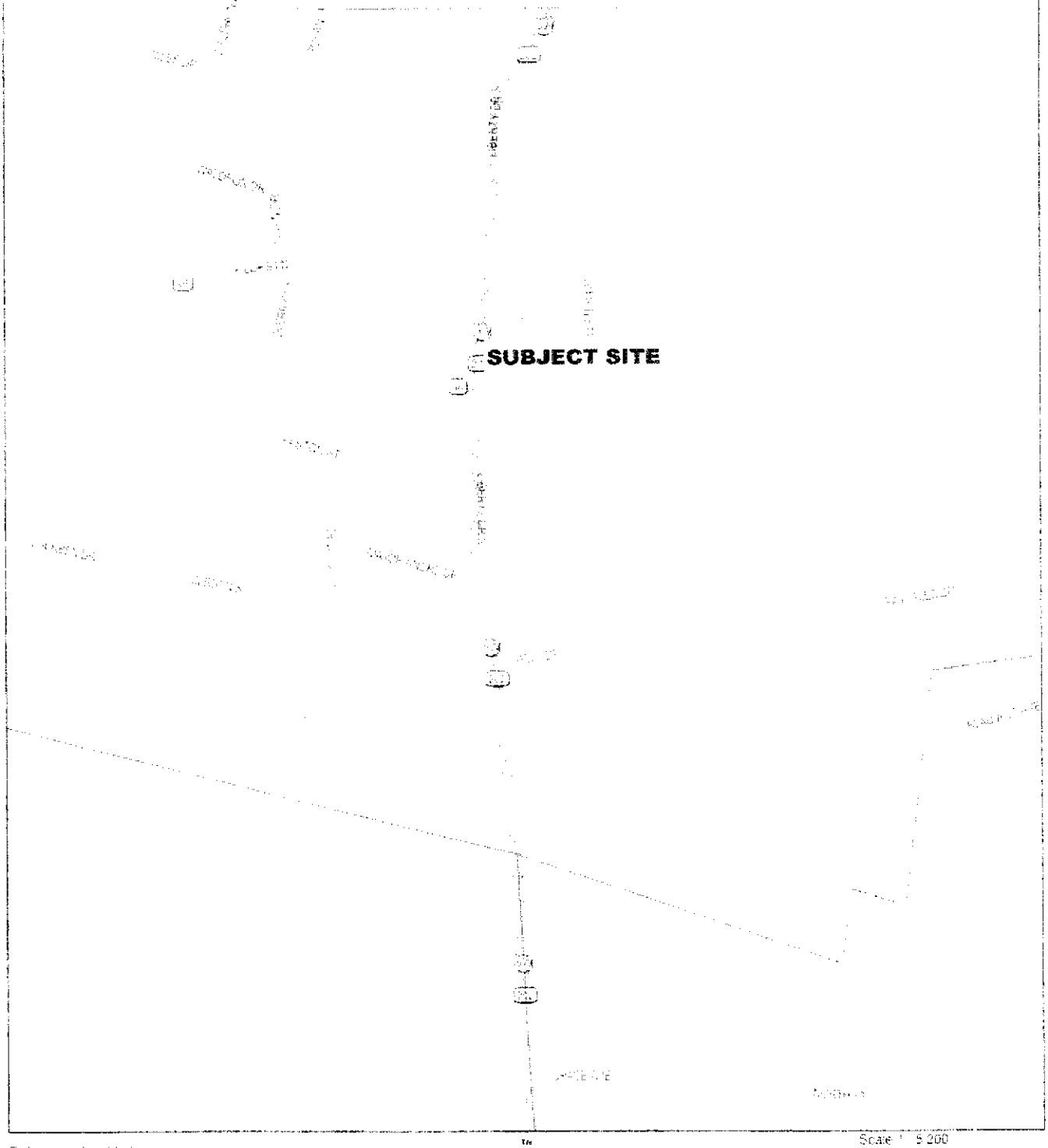
_____

Larry G. Schmaltz, P.E.
President
Registered Environmental Property Assessor (NREP)
Certified Remediation Specialist (EAA)

FIGURE 1

Site Location Map

Site Location Map
Ciabattoni Property
149 & 153 S. Liberty Drive
Stony Point, New York
Project # 050409



Scale 1" = 5,200

1" = 430.3 ft

Data Zoom 15-3

FIGURE 2

Site Plan

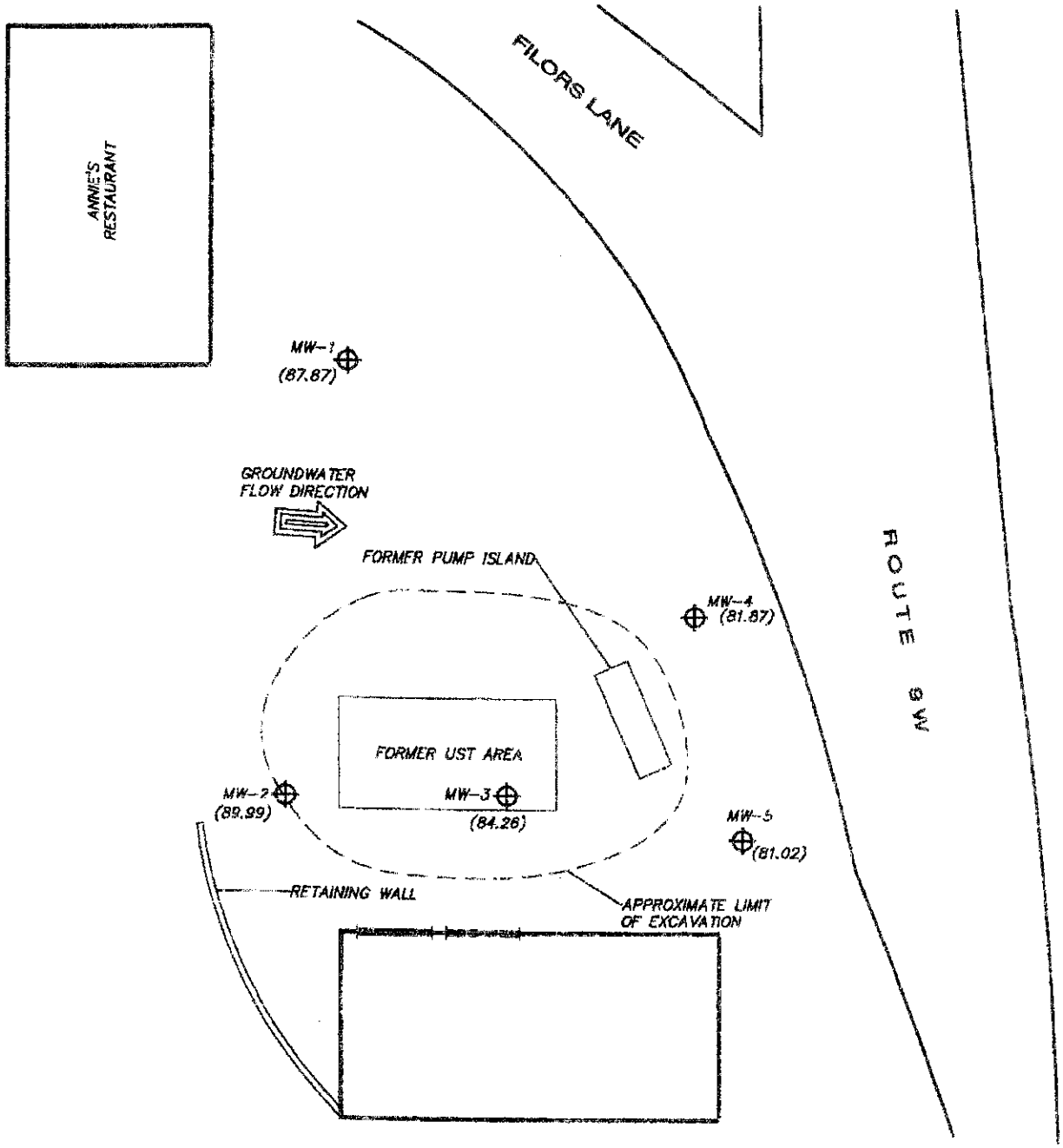
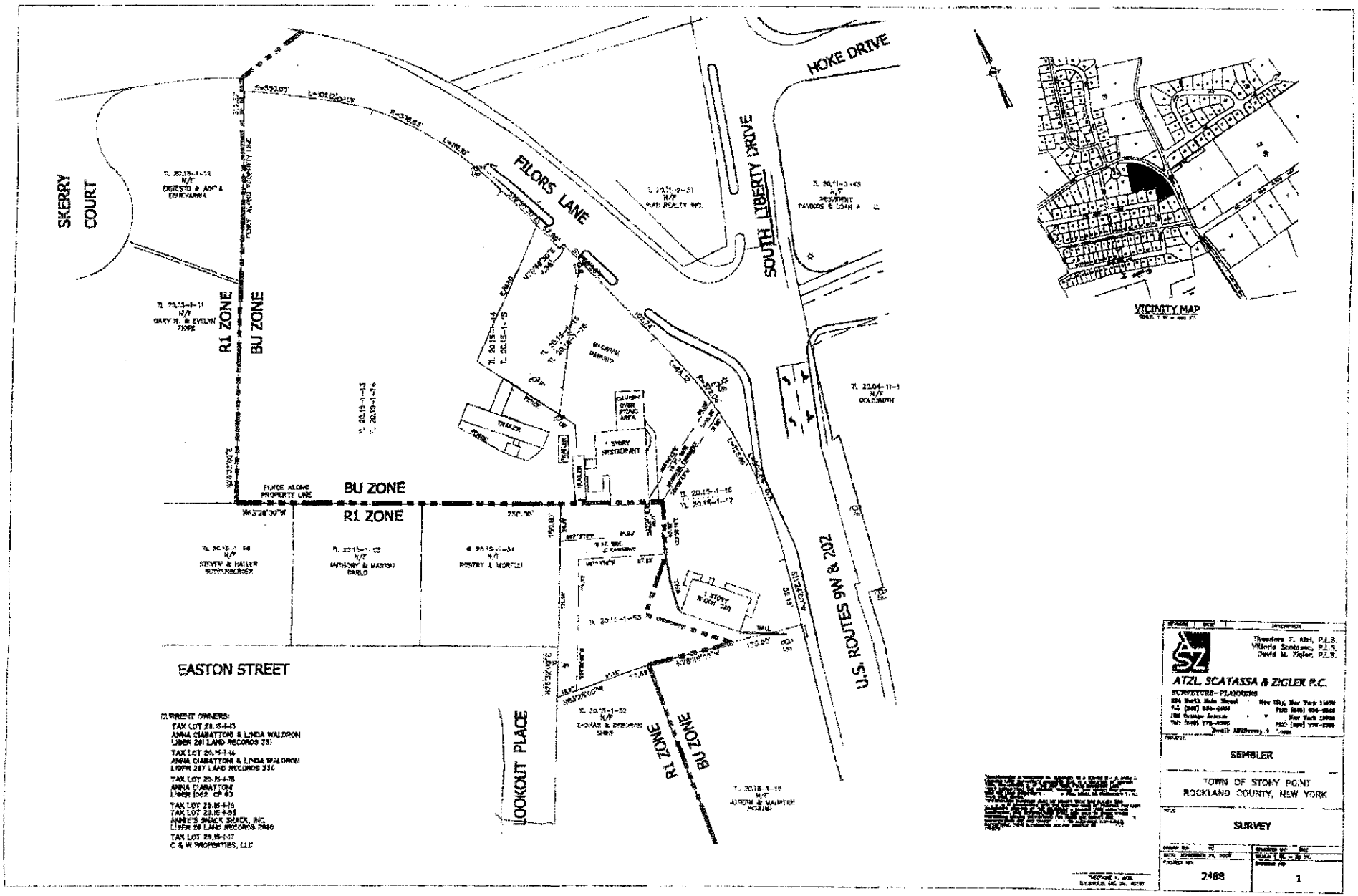


FIGURE 2
SITE PLAN
149 SOUTH LIBERTY DRIVE
STONY POINT, NEW YORK
HRP # ATW0002.P2
1" = 20'

J:\A\ATWOL - A2L TECHNOLOGIES, INC\15.3 SOUTH LIBERTY DR, STONY POINT, NY\ATW0002\P2\CAD\SITE PLAN.dwg, 10/24/2006 1:39:25 PM, Adobe PDF

FIGURE 3

Property Survey


SKERRY COURT
FILORS LANE
HOKE DRIVE
SOUTH LIBERTY DRIVE
R1 ZONE
BU ZONE
BU ZONE
R1 ZONE
FENCE ALONG PROPERTY LINE
1 STORY RESTAURANT
TRAILER
EASTON STREET
LOOKOUT PLACE
R1 ZONE
BU ZONE
U.S. ROUTES 9W & 202
VICINITY MAP
CURRENT OWNERS:
TAX LOT 20.15-4-13
ANNA CIABATTONI & LINDA WALDRON
LIBER 295 LAND RECORDS 331
TAX LOT 20.15-1-14
ANNA CIABATTONI & LINDA WALDRON
LIBER 287 LAND RECORDS 331
TAX LOT 20.15-4-15
ANNA CIABATTONI
LIBER 1069 OF 93
TAX LOT 20.15-4-16
TAX LOT 20.15-4-53
ANNIE'S SNACK SHACK, INC.
LIBER 26 LAND RECORDS 2480
TAX LOT 20.15-1-17
C & W PROPERTIES, LLC
ATZL, SCATASSA & ZIGLER P.C.
SURVEYORS - PLANNERS
SEMBLER
TOWN OF STONY POINT
ROCKLAND COUNTY, NEW YORK
SURVEY
2488
1

APPENDIX A

HRP Associates, Inc.
Site Characterization Report

Creating the Right Solutions Together

CONNECTICUT
[illegible]

NEW YORK
[illegible]

PENNSYLVANIA
[illegible]

SOUTH CAROLINA
[illegible]

October 24, 2006

Mr. Larry Schmaltz, P.E.
President/C.E.O.
A2L Technologies, Inc.
10220 Harney Road NE
Thonotosassa, Florida 33592

RE: FURTHER INVESTIGATION SITE CHARACTERIZATION AT THE CIABATTNONI PROPERTY, STONY POINT, NEW YORK

Dear Mr. Schmaltz:

In July 2006, HRP Associates, Inc. (HRP) was retained to complete further site characterization at the Ciabattoni Property at 153 South Liberty Drive in the City of Stony Point, New York (the site). This project included the installation of five (5) monitoring wells and the collection and analysis of select soil and groundwater samples. The remainder of this letter discusses the project background, field activities, findings/conclusions, as well as HRP's recommendations.

BACKGROUND

In January 2006, A2L Technologies completed a Phase I ESA of the Ciabattoni property in Stony Point, New York. A2L reported that the site was historically used as a gasoline filling station, utilizing several underground storage tanks (USTs) and as an automobile service facility. According to the Phase I ESA, petroleum contaminated soil was encountered at the property during removal of USTs and pumping equipment. Approximately 1,780 tons of soil was removed from the site in the former pump island and UST area. The excavation extended to approximately 18 feet below grade. Groundwater samples were not collected as part of the UST removal or remedial activities.

In addition, two former in-ground hydraulic lifts were reportedly removed from the service bays of the site building.

To evaluate environmental concerns related to historical on-site operations, A2L contracted HRP Associates to complete a Phase II Environmental Site Assessment (Phase II ESA) at the subject property.

In April 2006, HRP completed a Phase II ESA at the subject property to evaluate the site's former uses and to investigate the status of underlying soil and groundwater quality in the noted areas were contamination was historically documented. The Phase II ESA included the installation of nine (9) soil borings, and the collection and analysis of select soil samples and groundwater samples.

During the field activities, physical evidence of contamination (i.e. staining, odors, elevated PID measurements) was observed on soil samples from borings within the former UST and dispenser area.

Based on our findings, groundwater at the former pump island and former UST area of the site has been impacted by BTEX (presumably from historical fueling operations) above NYSDEC groundwater quality standards. In addition, petroleum odors were also observed on groundwater during the Phase II. However, the extent of impact has not been delineated, and the potential exists that the groundwater impact may extend off-site based on the data from groundwater sample collected from location SB-04.

HRP completed this further site characterization to evaluate potential impacts to the site soils and groundwater from historical activities.

FIELD ACTIVITIES/FINDINGS

Prior to conducting any intrusive subsurface activities, HRP requested that Underground Facilities Protection Organization (ticket number 08156-119-022) complete a utility mark out of the site. In addition, HRP prepared a project specific health and safety plan, in accordance with 29 CFR 1910.120.

Subsurface Investigation

To evaluate the condition of site soils and groundwater, HRP and Aztech Technologies (Aztech) mobilized to the site on August 28, 2006 to install a total of five (5) soil borings which were subsequently completed as monitoring wells (referred to as MW-01 through MW-05), and collect representative soil and groundwater samples using a truck-mounted combination direct push and hollow stem auger drill rig. Monitoring well locations were selected located based on the presumed groundwater flow direction proximate to the historical USTs and dispenser area. The monitoring well locations are shown on Figure 2 and are summarized below.

Soil Boring I.D.	Location
MW-01	Former waste oil tank location
MW-02	Former waste oil tank location
MW-03	Former UST area
MW-04	Former pump-island area
MW-05	Northwest of former UST and pump-island area

Soil Characterization

During the subsurface investigation, the soil borings were advanced to depths ranging from 15 to 20 feet below ground surface (bgs). Soil samples were not collected from Monitoring well MW-4 as it was installed in the sample location as previous soil boring SB-04. Soil samples were collected continuously in four-foot intervals using a 1 and ¾-inch inner diameter (I.D.) stainless steel, four-foot long Macrocore sampler. Each four-foot soil sample was collected in a new, acetate liner to ensure the sample's integrity, and then split into two (2), two-foot segments. An aliquot from each two foot interval was placed into a re-sealable polyethylene bag (ziploc®) and subjected to headspace analysis using a photoionization detector (PID) equipped with a 10.6 mv lamp.

Soil boring logs describing the geologic conditions and comments were maintained in the field by an HRP geologist, and are included in Attachment #1. It should be noted that soil descriptions were not maintained for monitoring well MW-05 due to heavy rains during drilling. The collected soil samples

were reviewed in the field for physical evidence of contamination (i.e. odor, staining, elevated meter readings), placed in a labeled jar, and stored in a cooler for preservation.

Based upon field review of the collected soil samples, HRP selected the following three (3) soil samples for laboratory analysis:

Soil Boring ID	Sample Depth	Analyses
MW-01	11-13'	STARS VOCs (USEPA Method 8021B), 8 RCRA Metals (mass analysis)
MW-03	15-17'	
MW-05	16-18'	

STARS: New York State Department of Environmental Conservation Spill Technology and Remediation Series
VOC: Volatile Organic Compounds
USEPA: United States Environmental Protection Agency
8 RCRA Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver)

Groundwater Characterization

Each soil boring was completed as 2-inch inside diameter schedule 40 PVC permanent monitoring wells. Each monitoring well was installed approximately 5 feet into the observed water table and was equipped with ten feet of 0.010-inch slot screen, followed by riser, to grade. The annular space between the borehole and the well material was backfilled with #0 sand to approximately two-feet above the top of the screen. The remainder of the annulus was backfilled with bentonite chips and subsequently hydrated with clean water. The monitoring wells were capped with locking, expandable caps, and covered with five-inch, bolt down cast iron covers mounted flush with grade and cemented in place.

One monitoring well (MW-1) was installed in the presumed up-gradient direction of the former USTs and dispenser area. The remaining monitoring wells (MW-2 through MW-5) were installed within or in the presumed down gradient direction of the former UST and dispenser area.

After completion, each monitoring well was developed in order to establish a connection between the well screen, sand pack and the surrounding aquifer, and to ensure a representative groundwater sample. Well development was conducted using dedicated tubing and a peristaltic pump. During well development, wells were pumped until the discharge water was relatively sediment free and a minimum of three (3) borehole volumes was removed.

In addition, the location and elevation of each monitoring well was surveyed. HRP utilized a Berger SAL-1 auto level mounted on a tripod to conduct a relative elevation survey across the site. The elevation of an on-site benchmark (stationary flat surface) was arbitrarily established as 100 feet in elevation. Each monitoring well's measuring point (black mark on casing) was surveyed relative to the benchmark elevation to establish the measuring point elevation.

HRP collected two rounds of water level measurements (September 6 and 19, 2006) by measuring the depth to the water level in each well using an electronic water level indicator. Water levels were measured to the nearest .01 feet below the measuring point elevation. The water level

measurements were used to construct a groundwater contour map, which was used to determine the groundwater flow direction and hydraulic gradient at the site. A groundwater contour map is provided as Figure 3.

Approximately one week following monitoring well installation, HRP returned to the site to collect groundwater samples from each of the five on-site monitoring wells. However, monitoring well MW-5 was not sampled due to insufficient water volume (dry). Groundwater samples were collected in accordance with USEPA low flow purge and sample guidelines. The four (4) groundwater samples were submitted for analysis of NYSDEC STARS VOCs via EPA Method 8021B.

Subsurface Investigation Findings

Lithology
During the subsurface investigation, HRP noted that below the gravelly backfill material, (up to 17 feet) site's geology generally consisted of reddish brown and grayish brown silty sand and gravel underlain by a well sorted medium sand. Bedrock was not encountered during the investigation.

Groundwater was encountered at depths ranging from approximately 14 to 20 feet below ground surface (bgs) at the site.

Groundwater Flow
Based on the findings of the water level measurements and survey data, the direction of groundwater flow at the site flows to the east at a generally steep gradient towards the Hudson River approximately ¾ mile east of the site.

Observations
As shown in the soil borings logs, during the field activities, physical evidence of contamination (i.e. staining, odors, elevated PID measurements) were noted associated with soil samples from soil borings MW-3, MW-4, and MW-5. No obvious physical evidence of contamination was observed on soil samples from borings MW-1 or MW-2.

Petroleum odors were observed on groundwater samples at monitoring wells MW-3 and MW-4. No physical evidence of contamination was observed on groundwater samples at monitoring wells MW-1, MW-2, or MW-5.

Analytical results

As previously stated, a total of three (3) soil samples (MW-01, 11-13'; MW-03, 15-17'; and MW-05, 16-18') were submitted to a state-certified laboratory for analysis. HRP compared the soil sample results to the NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) #4046-Determination of Recommended Soil Cleanup Objectives (RSCOs). The analytical results for the three soil samples are summarized in Table 1 and discussed below. The laboratory report forms can be reviewed in Attachment #2.

HRP submitted four (4) groundwater samples (MW-01, MW-02, MW-03, and MW-04) for analysis of STARS VOCs via EPA Method 8021B. HRP compared the groundwater sample results to the NYSDEC's Technical and Operational Guidance Series (TOGS) 1.1.1. The analytical results for the

four groundwater samples are summarized in Table 2 and discussed below. The laboratory report forms can be reviewed in Attachment #2.

A summary of soil and groundwater analytical results by area of concern is provided below:

Upgradient Area

One soil sample (MW-01, 11-13') was submitted for analysis from the presumed up gradient location of the former gasoline USTs and dispenser area. No STARS VOCs were detected in this sample. Low concentrations of metals were detected in this soil sample. Chromium (38 mg/kg) was detected above the RSCO value of 10 mg/kg but within Eastern USA background concentrations of 15 to 40 mg/kg.

One groundwater sample (MW-01) was analyzed from the presumed up gradient area. Low concentrations of STARS VOCs (benzene, toluene, and xylene) were detected below TOGS values

Former UST and Pump Island Area

Two soil samples (MW-03, 15-17'; and MW-05 16-18') were submitted for analysis from the former UST and pump island area. No STARS VOCs were detected within these soil samples. , However, low concentrations of metals were detected in these soil samples. Chromium (58 mg/kg in MW-03, 15-17'; and 61 mg/kg in MW-05, 16-18') was detected above the RSCO value of 10 mg/kg and above the Eastern USA background concentrations of 15 to 40 mg/kg.

Three groundwater samples (MW-02, MW-03, and MW-04) were analyzed from the former UST and pump island area. No STARS VOCs were detected in groundwater sample MW-02. STARS VOCs (Ethylbenzene, 63 ug/l; Total Xylenes, 56 ug/l; Isopropylbenzene, 32 ug/l; n-propylbenzene, 76 ug/l; 1,3,5-Trimethylbenzene, 27 ug/l; 1,2,4-Trimethylbenzene, 120 ug/l (estimated); sec-Butylbenzene, 11 ug/l; Napthalene 48 ug/l (estimated)) were detected above TOGS values in groundwater sample MW-03. STARS VOCs (Benzene, 310 ug/l; Toluene, 470 ug/l; Ethylbenzene, 310 ug/l; Total Xylenes, 750 ug/l; Isopropylbenzene, 54 ug/l; n-propylbenzene, 52 ug/l; 1,3,5-Trimethylbenzene, 100 ug/l; 1,2,4-Trimethylbenzene, 260 ug/l; p-Isopropyltoluene, 6.9 ug/l; Napthalene 73 ug/l (estimated)) were detected above TOGS values in groundwater sample MW-04.

CONCLUSIONS

Based upon the data collected to date, HRP has the following conclusions:

- In August and September 2006, HRP completed a Further Investigation at the Ciabattoni Property located at 153 South Liberty Drive in Stony Point, New York to further evaluate and characterize the site's former uses and to investigate the potential for offsite migration of groundwater contamination. The Further Site Characterization included the installation of five (5) soil borings completed as permenant monitoring wells, the collection and analysis of select soil samples and groundwater samples, and the evaluation of the groundwater flow direction and gradient.

- During the field activities, physical evidence of contamination (i.e. staining, odors, elevated PID measurements) was observed on soil samples from borings MW-3, MW-4, and MW-05. No physical evidence of contamination was observed on soil or groundwater samples from soil borings/monitoring wells MW-01, or MW-02.

- No significant concentrations of STARS VOCs or metals were detected in soil sample MW-01, 11-13', collected from the presumed up gradient location of the former gasoline USTs and dispensers. In addition no significant concentrations of STARS VOCs were detected in groundwater sample MW-01, collected from this area. As such, potential impacts related to the former site operations (gasoline filling station) are not expected to be significant.
- No significant concentrations of STARS VOCs or metals were detected in soil samples collected within the former UST and dispenser area (MW-03, 15-17'; and MW-05, 16-18'). Based on the remedial actions conducted onsite to date, including UST, dispenser, and contaminated soil removal, the unsaturated soil at the site is not considered a threat to public health or the environment.
- The groundwater flow direction at the site is at a generally steep gradient to the east.
- Based on our findings, groundwater (MW-03, and MW-04) at the former pump island and former UST area of the site has been impacted by BTEX (presumably from historical fueling operations) above NYSDEC groundwater quality standards. Petroleum odors were observed on groundwater at borings MW-03, MW-04, and MW-05. It appears, based on the groundwater flow direction and gradient, that the groundwater contamination likely extends offsite to the east (beneath South Liberty Drive).

RECOMMENDATIONS

Based on our findings to date, HRP offers the following recommendations:

- Further investigation offsite (soil borings/permanent monitoring wells) is warranted east of the subject property to evaluate the extent of groundwater contamination.

- An exposure assessment should be conducted in order to identify potential receptors, such as private/residential drinking water wells.

- If the on-site buildings or new buildings are to be used, a soil gas survey is warranted to assess potential exposure to the VOCs identified in the soil and groundwater. If the site is to be redeveloped and soil vapor is determined to be an issue, the landowner may wish to consider building designs that incorporates passive and/or active soil vapor remedial systems. Any site activities that involve disturbing site soils should consider that potential impacted petroleum contaminated soils and/or groundwater may be encountered and may require removal and off-site disposal.

It should be noted that additional remedial actions may be required by the NYSDEC (eg. In-situ treatment such as ORC® injection or dual phase positive displacement groundwater recovery)

We appreciate the opportunity to provide environmental consulting services for A2L Technologies. If you have any questions about this letter-report, please do not hesitate to contact HRP Associates, Inc. at (518) 899-3011.

Sincerely,
HRP ASSOCIATES, INC.

Eric Lovenduski
Senior Project Geologist

Jeffrey R. Sotek, PE, CSP, CIH
Senior Project Manager

TABLE 1 - Summary of Soil Sample Results
Ciabattoni Property
153 South Liberty Drive
Stony Point, New York
August 2006

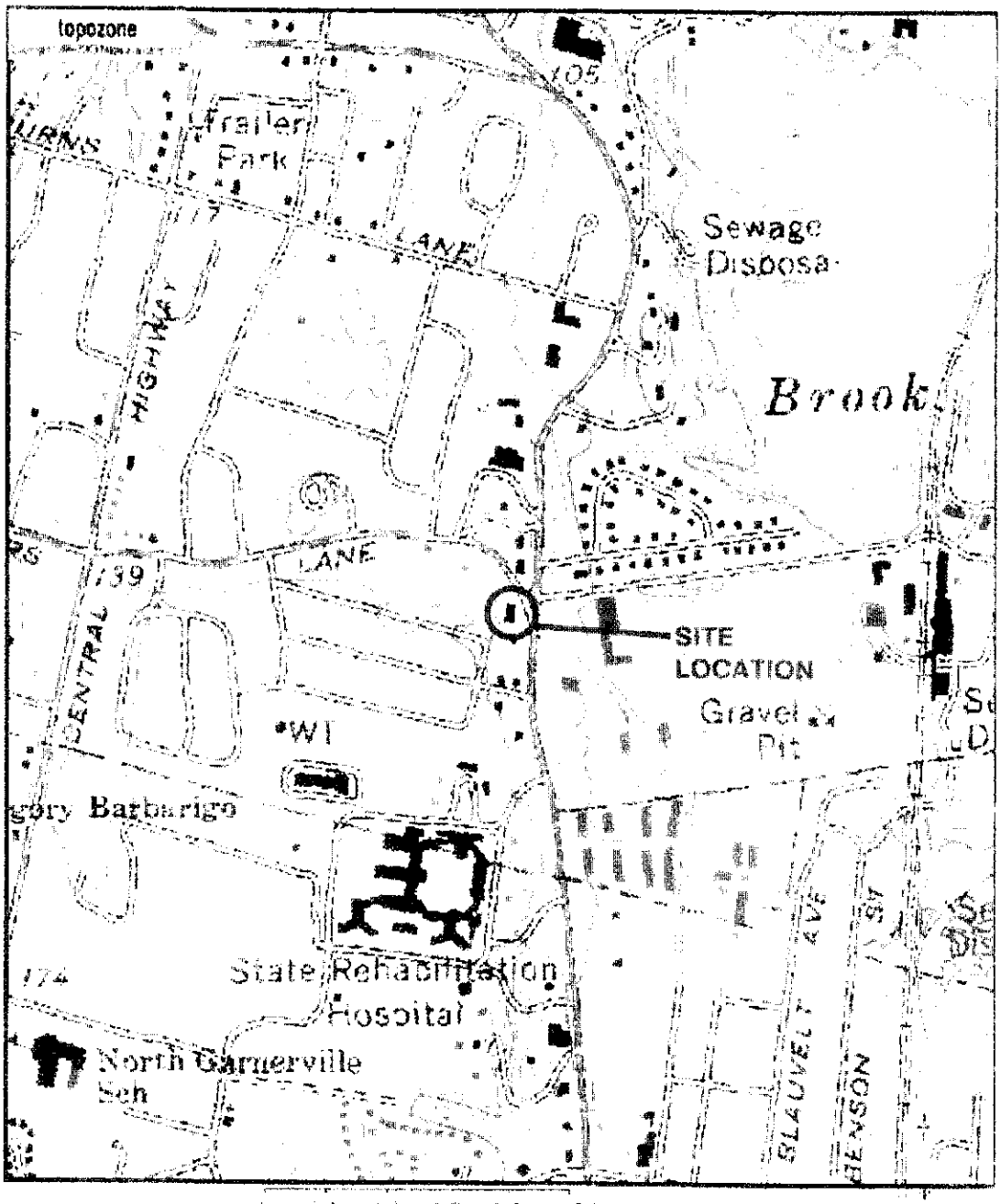
	Soil Sample I.D.			
Parameter	**MW-01, 11-13'**	**MW-03, 15-17'**	**MW-05, 16-18'**	**NYSDEC TAGM 4046 Recommended Soil Cleanup Objectives**
Arsenic	<0.90	1.6	<0.91	7.5
Barium	69	72	59	300
Chromium	**38**	**58**	**61**	10
Lead	12	7.9	5.5	SB
Silver	<0.56	1.2	<0.56	SB

All values reported as ppm (mg/kg)
Soil samples that exceeded NYSDEC TAGM values are bolded and shaded
No STARS volatile organic compounds were detected
SB=Site Background

TABLE 2
Summary of Groundwater Sample Results
Ciabattoni Property
153 South Liberty Drive
Stony Point, New York
September 2006

Parameter	Groundwater Sample I.D.				TOGS Values
	MW-01	MW-02	MW-03	MW-04	
Benzene	0.5	<0.5	<0.5	**310**	0.7
Toluene	0.7	<0.5	<0.5	**470**	5
Ethylbenzene	<0.5	<0.5	**63**	**310**	5
Xylenes--total	0.5	<0.5	**56**	**750**	5
Isopropylbenzene	<0.5	<0.5	**32**	**54**	5
n-Propylbenzene	<0.5	<0.5	**76**	**52**	5
1,3,5-Trimethylbenzene	<0.5	<0.5	**27**	**100**	5
1,2,4-Trimethylbenzene	<0.5	<0.5	**120B**	**260**	5
sec-Butylbenzene	<0.5	<0.5	**11**	3.2	5
p-Isopropyltoluene	<0.5	<0.5	1.6	**6.9**	5
Napthalene	<0.5	<0.5	**48B**	**73B**	10
MTBE*	<0.5	<0.5	<0.5	4.9	10
Total VOCs	1.7	ND	434.6	2,394	NE

Notes:
TOGS=NYSDEC Technical and Operational Guidance Series (1.1.1)
All results in µg/l.
Ground water samples that exceeded NYSDEC GWQS are bolded and shaded.
B Indicates estimated concentration
NE indicates no standards established



Map center is UTM 18 584914E 4563458N (WGS84/NAD83)
Haverstraw quadrangle
Projection is UTM Zone 18 NAD83 Datum

FIGURE 1
SITE LOCATION
149 SOUTH LIBERTY DRIVE
STONY POINT, NEW YORK
HRP # ATW0001.P2

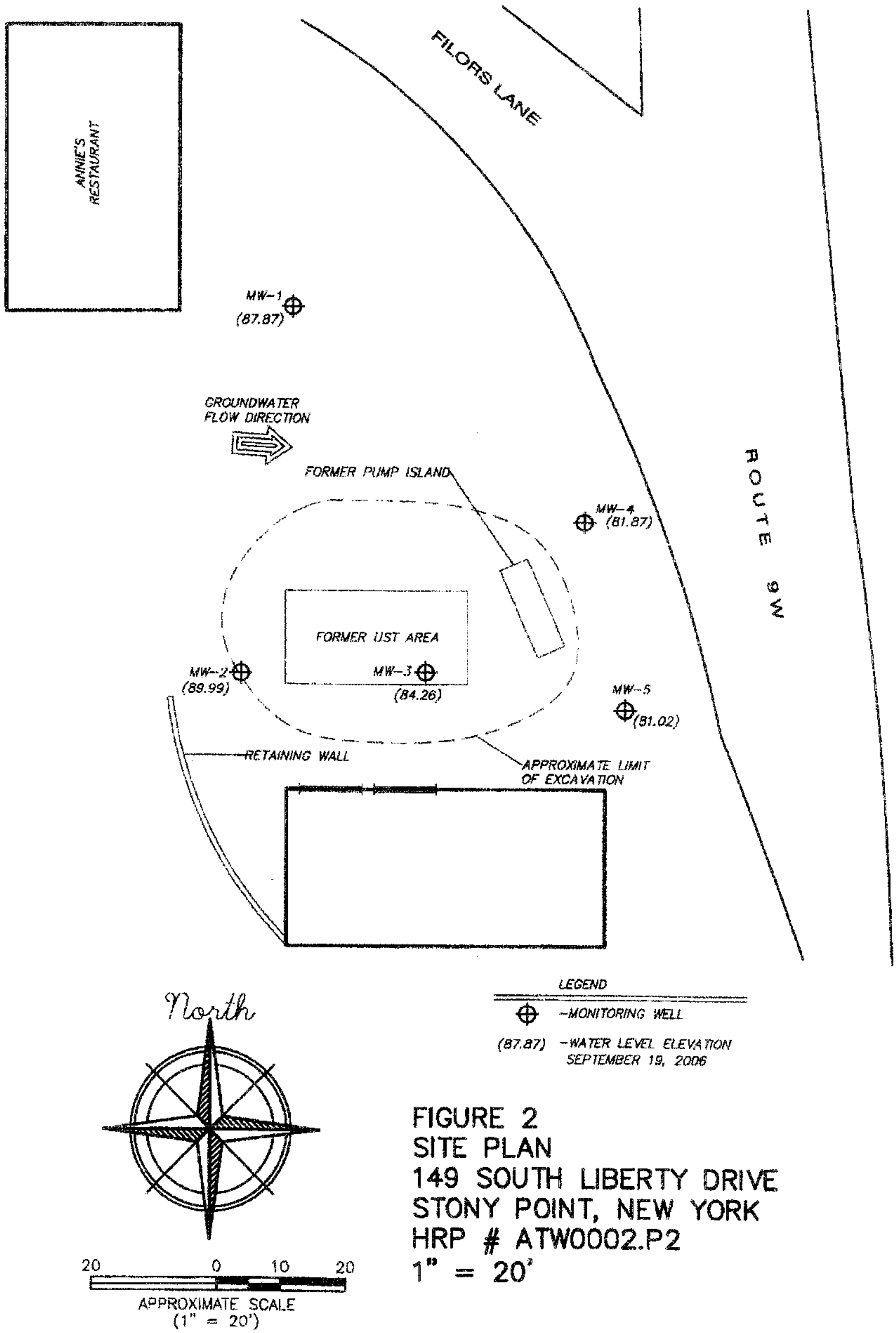
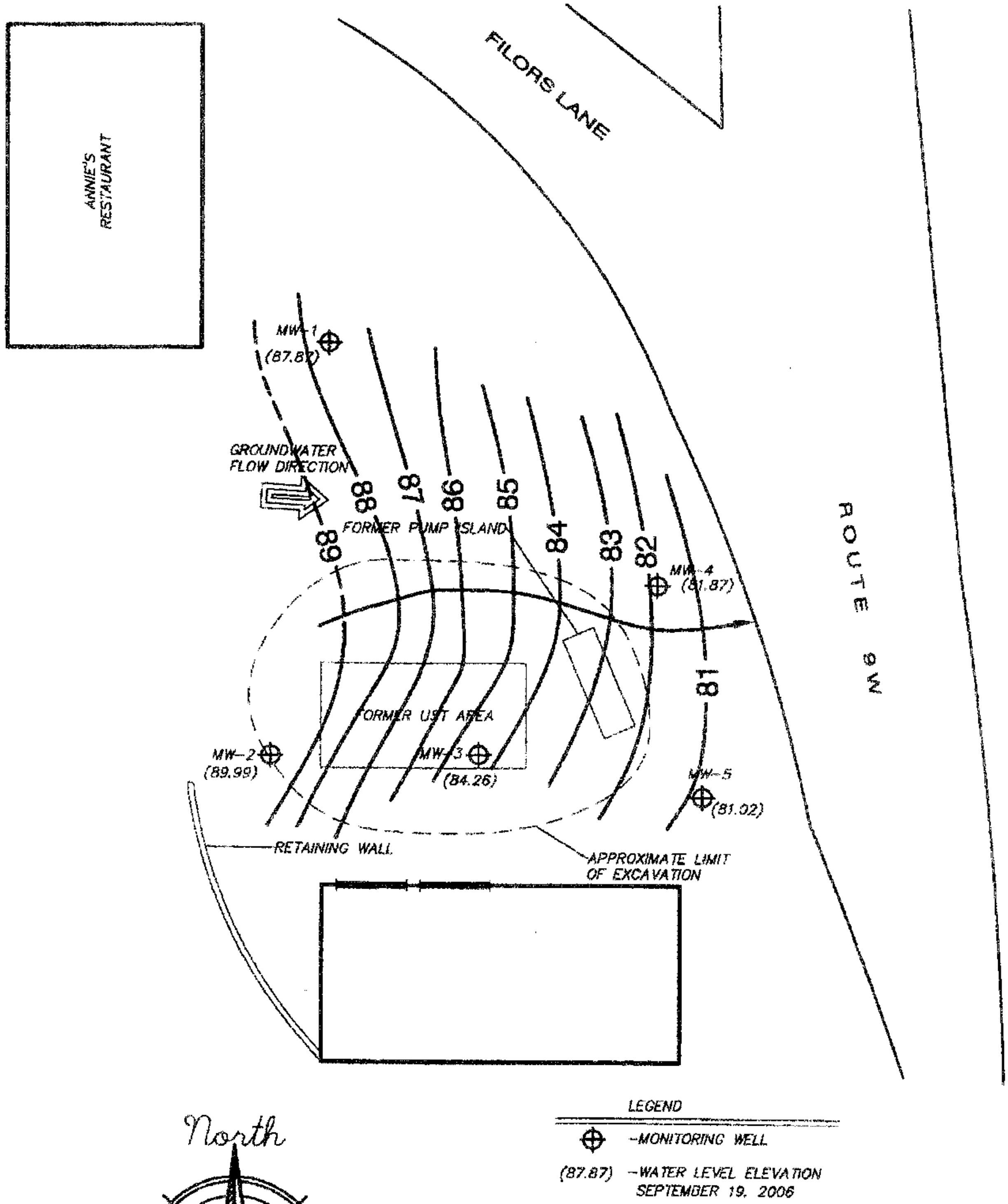


FIGURE 2
SITE PLAN
149 SOUTH LIBERTY DRIVE
STONY POINT, NEW YORK
HRP # ATW0002.P2
1" = 20'



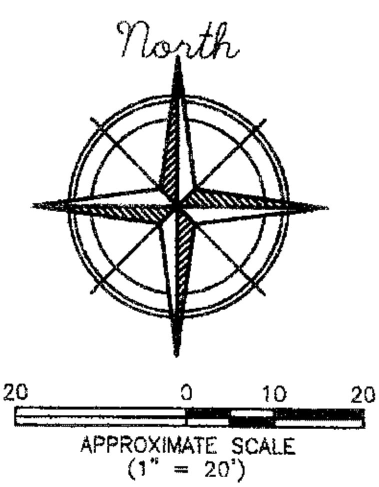


FIGURE 3
GROUNDWATER FLOW MAP
SEPTERMBER 19, 2006
149 SOUTH LIBERTY DRIVE
STONY POINT, NEW YORK
HRP # ATW0002.P2
1" = 20'

ATTACHMENT #1

SOIL BORING LOGS

HRP ASSOCIATES, INC.

Engineering & Geology

DRILLING LOG

Hole #
Well # MW-1
Location: In front of Annies Restaurant

Contractor:
Driller: Tim/Aztec
Hammer (Wt/Fall):
Rig Type: Drill/Combo
Type: Macrocore
I.D.:

Sheet No.: 1 of 1
Project:
HRP Job #: ATW0002.P2
Site Name:
Site Address: 153 South Liberty Drive, Stony Point, NY

Start: 6:45 AM
Finish: 7:30 AM
HRP Rep: E. Lovenduski
8/29/2006

Depth (6" intervals)	Macro-cove Sample	Well	Sample Interval (ft)	Recovery (ft)	Density or Consistency/ Moisture	Profile Change (ft)	Remarks (color, structure, grain size, staining, odor)	Depth/PID (ppm)
0		Surface						
1			0' - 4'	1.75'	loose/dry	4"	Asphalt	
2						6"	Brown black medium-coarse SAND, trace silt	
3					moist/loose	11"	Brown Medium SAND, trace fine angular gravel, silt	
4								
5			4' - 8'	3'	mois/ med. Density	3'	Lt. Brown fine SAND, little silt, trace fine angular gravel	
6								
7								
8								
9			Augered from 8 to 9 feet bgs. No samples.					
10			9'-13'	1.8'	moist/ medium density	14"	Lt. Brown fine SAND, little silt, trace fine angular gravel	
11								
12					loose/moist	8'	Greyish brown/black fine SAND, trace Silt, slight petroleum odor at 11-13'	
13								
14			Augered from 13 to 14 feet bgs. No samples.					
15			14'-18'	2'	dry/loose	24"	Lt. Brownish grey coarse SAND, some fine rounded gravel, trace Silt	
16								
17								
18								
19								
20'			End of Auger at 19.5'.					

GROUNDWATER OBSERVATIONS				SAMPLE PENETRATION RESISTANCE 140 lb. Wt. Falling 30" on 2" O.D. Sampler		Proportions
Depth	Date	Casing/ Screen	Stability Time	Cohesionless Density	Cohesive Consistence	
				0 - 4 very loose	0 - 2 very soft	trace 0-10%
				5 - 9 loose	3 - 4 soft	little 10-20%
				10 - 29 med. dense	5 - 8 m/stiff	some 20-35%
				30 - 49 dense	9 - 15 stiff	and 30-50%
				50+ very dense	16 - 30 v/stiff	
					31+ hard	

Concrete | Sand Pack | Bentonite | Screen | Native

HRP ASSOCIATES, INC.

Engineering & Geology

DRILLING LOG

Hole #
Well # MW-2
Location: Upgradient of former USTs

Contractor:
Driller: Tim/Aztec
Hammer (Wt/Fall):
Rig Type: Drill/Combo
Type: Macrocore
I.D.:

Sheet No.: 1 of 1
Project:
HRP Job #: ATW0002.P2
Site Name:
Site Address: 153 South Liberty Drive

Start: 2:00 PM
Finish:
HRP Rep: N. Garry
8/28/2006

Depth (6" intervals)	Macro-cove Sample	Well	Sample Interval (ft)	Recovery (ft)	Density or Consistency/ Moisture	Profile Change (ft)	Remarks (color, structure, grain size, staining, odor)	Depth/PID (ppm)
0		Surface						
1			0 - 5	1.4	dry		gravel fill/ brown stiff silt	
2								
3								
4								
5			4' - 8'	2.5	dry		gravel/ brown, medium density SILT	
6								
7								
8								
9			Augered to 10' bgs. No samimples					
10								
11			10'-14'	2.1	dry		gravel/Greyish, hard compact SILT	
12								
13								
14								
15								
16								
17								
18								
19								

GROUNDWATER OBSERVATIONS				SAMPLE PENETRATION RESISTANCE 140 lb. Wt. Falling 30" on 2" O.D. Sampler		Proportions
Depth	Date	Casing/ Screen	Stability Time	Cohesionless Density	Cohesive Consistence	
				0 - 4 very loose	0 - 2 very soft	trace 0-10%
				5 - 9 loose	3 - 4 soft	little 10-20%
				10 - 29 med. dense	5 - 8 mstiff	some 20-35%
				30 - 49 dense	9 - 15 stiff	and 30-50%
				50+ very dense	16 - 30 v/stiff	
					31+ hard	

Concrete | Sand Pack | Bentonite | Screen | Native

HRP ASSOCIATES, INC.

Engineering & Geology

DRILLING LOG

Hole #
Well # MW-3
Location: Middle of previous 10,000 gallon tank locations

Contractor:
Driller: Tim/Aztec
Hammer (Wt/Fall):
Rig Type: Drill/Combo
Type: Macrocore
I.D.:

Sheet No.: 1 of 2
Project:
HRP Job #: ATW0002.P2
Site Name:
Site Address: 153 South Liberty Drive

Start: 2:00 PM
Finish:
HRP Rep: N. Garry

Depth (6" intervals)	Macro-core Sample	Well	Sample Interval (ft)	Recovery (ft)	Density or Consistency/ Moisture	Profile Change (ft)	Remarks (color, structure, grain size, staining, odor)	Depth/PID (ppm)
0		Surface						
1			0' - 4'	NA	dry/medium density		gravel/fill	NA
2								
3								
4								
5			4' - 8'	NA	Loose/Moist		Greyish brown sand/silt	NA
6								
7								
8								
9			8'-12'	NA				NA
10								
11								
12								
13			12-16'	NA				NA
14								
15								
16								
17			16'-19'	1.8'				0 strong odor
18								
19								
20			19'-23'	1'	Loose, wet		Sand and gravel	
21								
22								
23								

GROUNDWATER OBSERVATIONS				SAMPLE PENETRATION RESISTANCE 140 lb. Wt. Falling 30" on 2" O.D. Sampler		Proportions
Depth	Date	Casing/ Screen	Stability Time	Cohesionless Density	Cohesive Consistency	
				0 - 4 very loose	0 - 2 very soft	trace 0-10%
				5 - 9 loose	3 - 4 soft	little 10-20%
				10 - 29 med. dense	5 - 8 m/stiff	some 20-35%
				30 - 49 dense	9 - 15 stiff	and 30-50%
				50 + very dense	16 - 30 v/stiff	
					31+ hard	

Concrete Sand Pack Bentonite Screen Native

HRP ASSOCIATES, INC.

Engineering & Geology

DRILLING LOG

Hole #
Well # MW-4
Location: East side excavation

Contractor:
Driller: Tim/Aztec
Hammer (Wt/Fall):
Rig Type: Drill/Combo
Type: Macrocore
I.D.:

Sheet No.: 1 of 1
Project:
HRP Job #: ATW0002.P2
Site Name:
Site Address: 153 South Liberty Drive, Stony Point, NY

Start: 10am
Finish:
HRP Rep: N. Garry

Depth (6" intervals)	Macro-core Sample	Well	Sample Interval (ft)	Recovery (ft)	Density or Consistency/ Moisture	Profile Change (ft)	Remarks (color, structure, grain size, staining, odor)	Depth/PID (ppm)
0		Surface						
1								
2			0' - 4'					
3								
4								
5								
6			4' - 8'					
7								
8								
9								
10			8'-12'					
11								
12								
13			12'-15'					
14								
15								
16								
17			15'-19'					
18								
19								

GROUNDWATER OBSERVATIONS

Depth	Date	Casing/ Screen	Stability Time

SAMPLE PENETRATION RESISTANCE
140 lb. Wt. Falling 30" on 2" O.D. Sampler

Cohesionless Density	Cohesive Consistence	Proportions
0 - 4 very loose	0 - 2 very soft	trace 0-10%
5 - 9 loose	3 - 4 soft	little 10-20%
10 - 29 med. dense	5 - 8 m/stiff	some 20-35%
30 - 49 dense	9 - 15 stiff	and 30-50%
50+ very dense	16 - 30 v/stiff	
	31+ hard	

Concrete | Sand Pack | Bentonite | Screen | Native

HRP ASSOCIATES, INC.

Engineering & Geology

DRILLING LOG

Hole #
Well # MW-5
Location: East side excavation

Contractor:
Driller: Tim/Aztec
Hammer (Wt/Fall):
Rig Type: Drill/Combo
Type: Macrocore
I.D.:

Sheet No.: 1 of 1
Project:
HRP Job #: ATW0002.P2
Site Name:
Site Address: 153 South Liberty Drive Stony Point, NY

Start: 12:15pm
Finish:
HRP Rep: N. Garry

Depth (6" intervals)	Macro-cove Sample	Well	Sample Interval (ft)	Recovery (ft)	Density or Consistency/ Moisture	Profile Change (ft)	Remarks (color, structure, grain size, staining, odor)	Depth/PID (ppm)
0		Surface						
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								

GROUNDWATER OBSERVATIONS

Depth	Date	Casing/ Screen	Stability Time

SAMPLE PENETRATION RESISTANCE
140 lb. Wt. Falling 30" on 2" O.D. Sampler

Cohesionless Density	Cohesive Consistency
0 - 4 very loose	0 - 2 very soft
5 - 9 loose	3 - 4 soft
10 - 29 med. dense	5 - 8 m/stiff
30 - 49 dense	9 - 15 stiff
50+ very dense	16 - 30 v/stiff
	31+ hard

Proportions

trace	0-10%
little	10-20%
some	20-35%
and	30-50%

Concrete | Sand Pack | Bentonite | Screen | Native

ATTACHMENT #2

LABORATORY REPORT FORMS

HUDSON ENVIRONMENTAL SERVICES, INC.
Mail: 22 Hudson Falls Rd. So. Glens Falls, NY 12803
Delivery: 211 Perry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

ANALYTICAL TEST RESULTS
N.Y.S.D.O.H. LAB ID#11140

CLIENT: HRP Associtos, Inc.
DATE SAMPLED: 06/27/06

SAMPLE DESCRIPTION: MW-1 (1-12')
DATE SAMPLE RECD: 09/06/06

MATRIX: Soil
TIME SAMPLED: 7:50 am

LOCATION: Stony Pt
TYPE SAMPLE: Composite

H.E.S. #: 060906301
SAMPLER: K.Lovenguard/HRP

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
Arsenic	SW846-6010B	<0.90	mg/kg	09/15/06
Barium	SW846-6010B	69	mg/kg	09/15/06
Cadmium	SW846-6010B	<0.17	mg/kg	09/15/06
Chromium	SW846-6010B	38	mg/kg	09/15/06
Lead	SW846-6010B	10	mg/kg	09/15/06
Mercury	SW846-7471A	<0.05	mg/kg	09/15/06
Selenium	SW846-6010B	<3.2	mg/kg	09/15/06
Silver	SW846-7761	<0.16	mg/kg	09/15/06
Total Solids	EPA 160.3	98	%	09/15/06

HUDSON ENVIRONMENTAL SERVICES, INC.
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: BKF Assoc. Inc. Inc.

SAMPLE DESCRIPTION: MW-1 (11-13')

H.E.S. #: 960305-01 (Continued)

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
MTBE	SW846-8260B	<14	ug/kg	03/14/06
Benzene	SW846-8260B	<14	ug/kg	03/14/06
Toluene	SW846-8260B	<14 B	ug/kg	03/14/06
Ethylbenzene	SW846-8260B	<14	ug/kg	03/14/06
Total Xylenes	SW846-8260B	<14 B	ug/kg	03/14/06
Isopropylbenzene	SW846-8260B	<14	ug/kg	03/14/06
n-Propylbenzene	SW846-8260B	<14	ug/kg	03/14/06
1,3,5-Trimethylbenzene	SW846-8260B	<14	ug/kg	03/14/06
tert-Butylbenzene	SW846-8260B	<14	ug/kg	03/14/06
1,2,4-Trimethylbenzene	SW846-8260B	<14	ug/kg	03/14/06
sec-Butylbenzene	SW846-8260B	<14	ug/kg	03/14/06
p-Isopropyltoluene	SW846-8260B	<14	ug/kg	03/14/06
n-Butylbenzene	SW846-8260B	<14	ug/kg	03/14/06
Naphthalene Non-Target Peaks	SW846-8260B	<14 B Negative	ug/kg	03/14/06

HUDSON ENVIRONMENTAL SERVICES, INC.
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: URS Associates, Inc.

SAMPLE DESCRIPTION: MW-3(15-17')

MATRIX: Soil

LOCATION: Stony Pt

H.E.S. #: 060905802

DATE SAMPLED: 09/06/06

DATE SAMPLE RECD: 09/08/06

TIME SAMPLED: 12:00 pm

TYPE SAMPLE: Composite

SAMPLER: E.Lovenduski/URS

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
Arsenic	SW846-6010B	1.6	mg/kg	09/13/06
Barium	SW846-6010B	72	mg/kg	09/13/06
Cadmium	SW846-6010A	<0.1	mg/kg	09/13/06
Chromium	SW846-6010B	58	mg/kg	09/13/06
Lead	SW846-6010B	7.9	mg/kg	09/13/06
Mercury	SW846-7470A	<0.3	mg/kg	09/13/06
Selenium	SW846-6010B	<3.2	mg/kg	09/13/06
Silver	SW846-7761	1.2	mg/kg	09/13/06
Total Solids	EPA 160.3	89	%	09/13/06

HUDSON ENVIRONMENTAL SERVICES, INC.
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: HRP Associates, Inc.

SAMPLE DESCRIPTION: MW 3115-17'

H.E.S. #: 0609060802 (Continued)

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
MTBE	SW846-8260B	<14	ug/kg	09/14/06
Benzene	SW846-8260B	<14	ug/kg	09/14/06
Toluene	SW846-8260B	<14 B	ug/kg	09/14/06
Ethylbenzene	SW846-8260B	<14	ug/kg	09/14/06
Total Xylenes	SW846-8260B	<14 B	ug/kg	09/14/06
Isopropylbenzene	SW846-8260B	<14	ug/kg	09/14/06
n-Propylbenzene	SW846-8260B	<14	ug/kg	09/14/06
1,3,5-Trimethylbenzene	SW846-8260B	<14	ug/kg	09/14/06
tert-Butylbenzene	SW846-8260B	<14	ug/kg	09/14/06
1,2,4-Trimethylbenzene	SW846-8260B	<14	ug/kg	09/14/06
sec-Butylbenzene	SW846-8260B	<14	ug/kg	09/14/06
p-Isopropyltoluene	SW846-8260B	<14	ug/kg	09/14/06
n-Butylbenzene	SW846-8260B	<14	ug/kg	09/14/06
Naphthalene	SW846-8260B	<14 B	ug/kg	09/14/06
Non-Target Peaks		Negative		

HUDSON ENVIRONMENTAL SERVICES, INC.
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: HRP Associates, Inc.

SAMPLE DESCRIPTION: MW-5(16-18')

MATRIX: Soil

LOCATION: Stony Pt

H.E.S. #: 060906B[illegible]

DATE SAMPLED: 08/29/06

DATE SAMPLE REC'D: 09/06/06

TIME SAMPLED: 1:30 pm

TYPE SAMPLE: Composite

SAMPLER: E.Lovenduski/HRP

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
Arsenic	SW846-6010B	<0.91	mg/kg	09/18/06
Barium	SW846-6010B	59	mg/kg	09/18/06
Cadmium	SW846-6010B	<0.17	mg/kg	09/18/06
Chromium	SW846-6010B	61	mg/kg	09/18/06
Lead	SW846-6010B	[illegible]	mg/kg	09/18/06
Mercury	SW846-7470A	<0.05	mg/kg	09/18/06
Selenium	SW846-6010B	[illegible]	mg/kg	09/18/06
Silver	SW846-7761	<0.56	mg/kg	09/18/06
Total Solids	EPA 160.3	89	%	09/18/06

HUDSON ENVIRONMENTAL SERVICES, INC.
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: HRP Associates, Inc.

SAMPLE DESCRIPTION: MW 5(16-18')

H.E.S. #: 06090eB03 (Continued)

PARAMETER	METHOD	RESULT	UNITS	TEST DATE
MTBE	SW846-8260B	<14	ug/kg	09/14/06
Benzene	SW846-8260B	<14	ug/kg	09/14/06
Toluene	SW846-8260B	<14 B	ug/kg	09/14/06
Ethylbenzene	SW846-8260B	<14	ug/kg	09/14/06
Total Xylenes	SW846-8260B	<14 B	ug/kg	09/14/06
Isopropylbenzene	SW846-8260B	<14	ug/kg	09/14/06
n-Propylbenzene	SW846-8260B	<14	ug/kg	09/14/06
1,3,5-Trimethylbenzene	SW846-8260B	<14	ug/kg	09/14/06
tert-Butylbenzene	SW846-8260B	<14	ug/kg	09/14/06
1,2,4-Trimethylbenzene	SW846-8260B	<14	ug/kg	09/14/06
sec-Butylbenzene	SW846-8260B	<14	ug/kg	09/14/06
p-Isopropyltoluene	SW846-8260B	<14	ug/kg	09/14/06
n-Butylbenzene	SW846-8260B	<14	ug/kg	09/14/06
Naphthalene	SW846-8260B	614 B	ug/kg	09/14/06
Non-Target Peaks		Negative		

Approval By:

Technical Director
Dr. Mirza N. Hussain

Date: September 19, 2006

CHAIN OF CUSTODY RECORD

HUDSON ENVIRONMENTAL SERVICES, INC.
MAIL ADDRESS: 22 HUDSON FALLS ROAD, SOUTH GLENS FALLS, NY 12803
SHIPPING ADDRESS: 211 FERRY BLVD., SOUTH GLENS FALLS, NY 12803
PH #:(518)747-1060 - FAX #: (518)747-1062
E-MAIL: hudsonlabs@verizon.net - WEBSITE: heslabs.com

Client's Name: Eric Lorendt sk. - HRP
Mail Address:
Contact Person:
Project Location: Stony Pt
Purchase Order #: 4358
HES Contact:
Phone #: 855-5411
Fax #:
EMAIL:

HES Use Only HES LAB ID #	Sample ID/Description	Date Collected	Time A = am P = pm	Matrix	Comp. or Grab	# Conts.	Analysis Required
060906B01	MW-1 (11-13')	8/29/06	0750	SO	C	1	STARS VOCs 8 metals
B02	MW-3 (15-17')	8/29/06	1200	SO	C	1	STARS VOCs 8 metals
B03	MW-5 (16-18')	8/29/06	1330	SO	C	1	STARS VOCs 8 metals

Matrix: S = Soil, SE = Sediment, SO = Solid; SL = Sludge, O = Oil, DW = Drinking Water, GW = Ground Water; SW = Surface Water, L = Leachate, A = Air, WI = Wipe; DS = Drum Solids, DL = Drum Liquid, X = Other, WW = Waste Water

Special Instructions:

Sampled by:(Print) Eric Lorendt sk (Sign) Date/Time 8/5/06
Received by(Print) (Sign) Date/Time

Relinquished by(Print) (Sign) Date/Time 9/5/06 1300
Received by(Print) B.B. (Sign) Date/Time 9/5/06 1400

Relinquished by(Print) (Sign) Date/Time
Received by(Print) (Sign) Date/Time

Dispatched by(Print) (Sign) Date/Time
Method of Shipment:

Received @ Laboratory: (Print) B.B. (Sign) Date/Time 9/6/06 8:15
Turnaround Time:
Due Date:
Lab Approval: Y/N
HES INITIALS

HES USE ONLY

Samples were Shipped/Hand/Delivered
Ambient/Chilled:
Broken/Leaking: Y - N
Properly Preserved: Y - N
Received Within Holding Time: Y - N

COC Tape Was Present
On Outer Package: Y - N
Broken on Outer Package: Y - N
Present on Sample: Y - N
Broken on Sample: Y - N

COC Record Was Present Upon Receipt of Samples Y - N

Discrepsancies Between Sample Labels and COC Record Y - N

HUDSON ENVIRONMENTAL SERVICES, INC.
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

ANALYTICAL TEST RESULTS
N.Y.S.D.O.H. LAB ID#11141

CLIENT: [illegible] Associates, Inc.

DATE SAMPLED: [illegible]

SAMPLE DESCRIPTION: MW-[illegible]

TIME SAMPLED: [illegible] am

MATRIX: Groundwater

LAB SAMPLE NUMBER: [illegible]

LOCATION: [illegible], NY

TYPE SAMPLE: Grab

C.R.S.#: [illegible]

SAMPLER: [illegible]

PARAMETER	METHOD	RESULT	PQL	UNITS	TEST DATE
MTBE	SW846-8260	[illegible]	[illegible]	ug/l	[illegible]
Benzene	SW846-8260	[illegible]	[illegible]	ug/l	[illegible]
Toluene	SW846-8260	[illegible]	[illegible]	ug/l	[illegible]
Ethylbenzene	SW846-8260	[illegible]	[illegible]	ug/l	[illegible]
Total Xylenes	SW846-8260	[illegible]	[illegible]	ug/l	[illegible]
Isopropylbenzene	SW846-8260	[illegible]	[illegible]	ug/l	[illegible]
n-Propylbenzene	SW846-8260	[illegible]	[illegible]	ug/l	[illegible]
1,3,5-Trimethylbenzene	SW846-8260	[illegible]	[illegible]	ug/l	[illegible]
tert-Butylbenzene	SW846-8260	[illegible]	[illegible]	ug/l	[illegible]
1,2,4-Trimethylbenzene	SW846-8260	[illegible]	[illegible]	ug/l	[illegible]
sec-Butylbenzene	SW846-8260	[illegible]	[illegible]	ug/l	[illegible]
p-Isopropyltoluene	SW846-8260	[illegible]	[illegible]	ug/l	[illegible]
n-Butylbenzene	SW846-8260	[illegible]	[illegible]	ug/l	[illegible]
Naphthalene	SW846-8260	[illegible]	[illegible]	ug/l	[illegible]
Non-Target Peaks		Negative			

HUDSON ENVIRONMENTAL SERVICES, INC.
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: HRP Associates, Inc.

SAMPLE DESCRIPTION: MW-2

MATRIX: Groundwater

LOCATION: Stony Pt, NY

H.E.S.#: 06090/207

DATE SAMPLED: 09/06/06

TIME SAMPLED: 1:20 pm

DATE SAMPLE RECD: 09/07/06

TYPE SAMPLE: Grab

SAMPLER: A.Burke/HRP

PARAMETER	METHOD	RESULT	MR	UNITS	TEST DATE
MTBE	SW846-8260B	<0.5	0.5	ug/l	09/11/06
Benzene	SW846-8260B	<0.5	0.5	ug/l	09/11/06
Toluene	SW846-8260B	<0.5	0.5	ug/l	09/11/06
Ethylbenzene	SW846-8260B	<0.5	0.5	ug/l	09/11/06
Total Xylenes	SW846-8260B	<0.5	0.5	ug/l	09/11/06
Isopropylbenzene	SW846-8260B	<0.5	0.5	ug/l	09/11/06
n-Propylbenzene	SW846-8260B	<0.5	0.5	ug/l	09/11/06
1,3,5-Trimethylbenzene	SW846-8260B	<0.5	0.5	ug/l	09/11/06
tert-Butylbenzene	SW846-8260B	<0.5	0.5	ug/l	09/11/06
1,2,4-Trimethylbenzene	SW846-8260B	<0.5	0.5	ug/l	09/11/06
sec-Butylbenzene	SW846-8260B	<0.5	0.5	ug/l	09/11/06
p-Isopropyltoluene	SW846-8260B	<0.5	0.5	ug/l	09/11/06
n-Butylbenzene	SW846-8260B	<0.5	0.5	ug/l	09/11/06
Naphthalene	SW846-8260B	<0.5 B	0.5	ug/l	09/11/06
Non-Target Peaks		None			

HUDSON ENVIRONMENTAL SERVICES, INC.
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: ERP Associates, Inc.
SAMPLE DESCRIPTION: MW-3
MATRIX: Groundwater
LOCATION: Stony Pt, NY
H.E.S.#: 060907B13

DATE SAMPLED: 6/06/06
TIME SAMPLED: 2:10 pm
DATE SAMPLE RECD: 6/07/06
TYPE SAMPLE: Grab
SAMPLER: A.Burke/ERP

PARAMETER	METHOD	RESULT	MRL	UNITS	TEST DATE
MTBE	SW846-8260B	<0.5	0.5	ug/l	06/11/06
benzene	SW846-8260B	<0.5	0.5	ug/l	06/11/06
Toluene	SW846-8260B	<0.5	0.5	ug/l	06/11/06
Ethylbenzene	SW846-8260B	2.1	0.5	ug/l	06/11/06
Total Xylenes	SW846-8260B	1.6	0.5	ug/l	06/11/06
Isopropylbenzene	SW846-8260B	1.3	0.5	ug/l	06/11/06
n-Propylbenzene	SW846-8260B	2.7	0.5	ug/l	06/11/06
1,3,5-Trimethylbenzene	SW846-8260B	3.8	0.5	ug/l	06/11/06
tert-Butylbenzene	SW846-8260B	<0.5	0.5	ug/l	06/11/06
1,2,4-Trimethylbenzene	SW846-8260B	2.8	0.5	ug/l	06/11/06
sec-Butylbenzene	SW846-8260B	0.9	0.5	ug/l	06/11/06
p-Isopropyltoluene	SW846-8260B	1.4	0.5	ug/l	06/11/06
n-Butylbenzene	SW846-8260B	<0.5	0.5	ug/l	06/11/06
Naphthalene	SW846-8260B	0.9 B	0.5	ug/l	06/11/06
Non-Target Peaks		Negative			

HUDSON ENVIRONMENTAL SERVICES, INC.
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 231 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

CLIENT: HRP Associates, Inc.

DATE SAMPLED: 08/06/06

SAMPLE DESCRIPTION: MW-4

TIME SAMPLED: 3:15 pm

MATRIX: Groundwater

DATE SAMPLE RECD: 08/07/06

LOCATION: Stony Pt, NY

TYPE SAMPLE: Grab

H.E.S.#: 060807N04

SAMPLER: A.Burke/HRP

PARAMETER	METHOD	RESULT	MRL	UNITS	TEST DATE
MTBE	SW846-8260B	4.9	0.5	ug/l	08/11/06
Benzene	SW846-8260B	3.7	0.5	ug/l	08/11/06
Toluene	SW846-8260B	4.0	0.5	ug/l	08/11/06
Ethylbenzene	SW846-8260B	31	0.5	ug/l	08/11/06
Total Xylenes	SW846-8260B	7.0	0.5	ug/l	08/11/06
Isopropylbenzene	SW846-8260B	8.4	0.5	ug/l	08/11/06
n-Propylbenzene	SW846-8260B	32	0.5	ug/l	08/11/06
1,3,5-Trimethylbenzene	SW846-8260B	130	0.5	ug/l	08/11/06
tert-Butylbenzene	SW846-8260B	<0.5	0.5	ug/l	08/11/06
1,2,4-Trimethylbenzene	SW846-8260B	260	0.5	ug/l	08/11/06
sec-Butylbenzene	SW846-8260B	2.2	0.5	ug/l	08/11/06
p-Isopropyltoluene	SW846-8260B	6.9	0.5	ug/l	08/11/06
n-Butylbenzene	SW846-8260B	<0.5	0.5	ug/l	08/11/06
Naphthalene	SW846-8260B	73.8	0.5	ug/l	08/11/06
Non-Target Peaks		Negative			

NOTE: MRL = Minimum Reporting Limit

B = The above test results meet all the requirements of NELAC with the following exception: For method 8260B, method blank contamination was found.

Approval By:

Technical Director
Dr. Mirza M. Hussain

Date: September 5, 2006

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CHAIN OF CUSTODY RECORD

HUDSON ENVIRONMENTAL SERVICES, INC.
MAIL ADDRESS: 22 HUDSON FALLS ROAD, SOUTH GLENS FALLS, NY 12803
SHIPPING ADDRESS: 211 FERRY BLVD., SOUTH GLENS FALLS, NY 12803
PH #:(518)747-1060 - FAX #: (518)747-1062
E-MAIL: hudsonlabs@verizon.net - WEBSITE: heslabs.com

Client's Name: HRP
Contact Person: A. Burke / E. Lovenduski
Project Location: Stony Pt. NY
Purchase Order #: HES Contact:

Mail Address: 100 Saratoga Village Blvd., Suite 27
Malta, NY 12020
Phone #: 899-3011 Fax #: 899-8129 EMAIL: aburke@hrpassociates.com

HES Use Only HES LAB ID #	Sample ID/Description	Date Collected	Time A = am P = pm	Matrix	Comp or Grab	# Conts.	Analysis Required
060907K01	MW-1	9/6	11:10 A	GW	Grab	3 40 ml vials	STARS VOCs 8260 B
K02	MW-2	9/6	1:20 P	GW	Grab	3 vials	STARS VOCs 8260 B
K03	MW-3	9/6	2:15 P	GW	Grab	3 vials	STARS VOCs 8260 B
K04	MW-4	9/6	3:15 P	GW	Grab	3 vials	STARS VOCs 8260 B

Matrix:
S = Soil, SE = Sediment, SQ = Solid
SL = Sludge, O = Oil, DW = Drinking Water, GW = Ground Water
SW = Surface Water, L = Leachate, A = Air, WI = Wipe
DS = Drum Solids, DL = Drum Liquid, X = Other, WW = Waste Water

Special Instructions:

Sampled by:(Print) ANNA BURKE (Sign) Anna Burke Date/Time 9/6/06 3 pm
Relinquished by(Print) ANNA BURKE (Sign) Anna Burke Date/Time 9/6/06 11:25am
Received by(Print) (Sign) Date/Time 9/7/06 1125
Relinquished by(Print) (Sign) Date/Time
Received by(Print) (Sign) Date/Time
Dispatched by(Print) (Sign) Date/Time
Method of Shipment:
Received @ Laboratory: (Print) (Sign) Date/Time 9-7-06 1200
Turnaround Time: NORMAL 7-DAY Due Date: 9/18/06
Lab Approval: Y/N HES INITIALS

HES USE ONLY

Samples were Shipped/Hand/Delivered Ambient/Chilled: 8°C
Broken/Leaking: Y (N)
Properly Preserved: (Y) N
Received Within Holding Time: (Y) N

COC Tape Was Present On Outer Package: Y - N
Broken on Outer Package: Y - N
Present on Sample: Y - N
Broken on Sample: Y - N

COC Record Was Present Upon Receipt of Samples: Y N

Discrepsancies Between Sample Labels and COC Record: Y (N)

Appendix B

September 11, 2007 Groundwater Analytical Report

HUDSON ENVIRONMENTAL SERVICES, INC.
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

ANALYTICAL TEST RESULTS
N.Y.S.D.O.H. LAB ID#11140

CLIENT: A2L Technologies

DATE SAMPLED: 09/11/07

SAMPLE DESCRIPTION: MW-1

TIME SAMPLED: 10:05 am

MATRIX: Groundwater

DATE SAMPLE RECD: 09/17/07

LOCATION: Ciaba Moni Property, Story Point NY

TYPE SAMPLE: Grab

H.E.S.#: 070917A01

SAMPLER: Joe Clemis/ A2L Technologies

PARAMETER	METHOD	RESULT	MRL	UNITS	TEST DATE
MTBE	SW846-8260B	ND	1	ug/l	09/18/07
Benzene	SW846-8260B	ND	0.7	ug/l	09/18/07
Toluene	SW846-8260B	ND	1	ug/l	09/18/07
Ethylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
Total Xylenes	SW846-8260B	ND	2	ug/l	09/18/07
Isopropylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
n-Propylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
1,3,5-Trimethylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
tert,Butylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
1,2,4-Trimethylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
sec-Butylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
p-Isopropyltoluene	SW846-8260B	ND	1	ug/l	09/18/07
n-Butylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
Naphthalene	SW846-8260B	ND	1	ug/l	09/18/07

HUDSON ENVIRONMENTAL SERVICES, INC.
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Perry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

ANALYTICAL TEST RESULTS
N.Y.S.D.O.H. LAB ID#11140

CLIENT: A2L Technologies

DATE SAMPLED: 09/11/07

SAMPLE DESCRIPTION: MW-2

TIME SAMPLED: 11:04 am

MATRIX: Groundwater

DATE SAMPLE RECD: 09/17/07

LOCATION: Ciaba Poni Property, Stony Point NY

TYPE SAMPLE: Grab

H.E.S.#: 070917AC2

SAMPLER: Joe Clemis/ A2L Technologies

PARAMETER	METHOD	RESULT	MRL	UNITS	TEST DATE
MTBE	SW846-8260B	ND	1	ug/l	09/18/07
Benzene	SW846-8260B	ND	0.7	ug/l	09/18/07
Toluene	SW846-8260B	ND	1	ug/l	09/18/07
Ethylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
Total Xylenes	SW846-8260B	ND	2	ug/l	09/18/07
Isopropylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
n-Propylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
1,3,5-Trimethylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
tert,Butylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
1,2,4-Trimethylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
sec-Butylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
p-Isopropyltoluene	SW846-8260B	ND	1	ug/l	09/18/07
n-Butylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
Naphthalene	SW846-8260B	ND	1	ug/l	09/18/07

HUDSON ENVIRONMENTAL SERVICES, INC.
Mail: 22 Hudson Falls Rd., So. Glens Falls, NY 12803
Delivery: 211 Ferry Blvd., So. Glens Falls, NY 12803
Phone: 518/747-1060 Fax: 518/747-1062

ANALYTICAL TEST RESULTS
N.Y.S.D.O.H. LAB ID#11140

CLIENT: A2L Technologies

DATE SAMPLED: 09/11/07

SAMPLE DESCRIPTION: MW-3

TIME SAMPLED: 10:44 am

MATRIX: Groundwater

DATE SAMPLE RECD: 09/17/07

LOCATION: Ciaba Moni Property, Stony Point NY

TYPE SAMPLE: Grab

H.E.S.#: 070917A03

SAMPLER: Joe Clemis/ A2L Technologies

PARAMETER	METHOD	RESULT	MRL	UNITS	TEST DATE
MTBE	SW846-8260B	1.2	1	ug/l	09/18/07
Benzene	SW846-8260B	13	0.7	ug/l	09/18/07
Toluene	SW846-8260B	ND	1	ug/l	09/18/07
Ethylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
Total Xylenes	SW846-8260B	ND	2	ug/l	09/18/07
Isopropylbenzene	SW846-8260B	5	1	ug/l	09/18/07
n-Propylbenzene	SW846-8260B	4	1	ug/l	09/18/07
1,3,5-Trimethylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
tert,Butylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
1,2,4-Trimethylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
sec-Butylbenzene	SW846-8260B	1.5	1	ug/l	09/18/07
p-Isopropyltoluene	SW846-8260B	ND	1	ug/l	09/18/07
n-Butylbenzene	SW846-8260B	ND	1	ug/l	09/18/07
Naphthalene	SW846-8260B	ND	1	ug/l	09/18/07

MRL = Minimum Reporting Limit
ND= Not Detected

Approval By:

Technical Director
Dr. Garima Sharma
Date: 10/01/07

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DEP-SOP-001/01
FS 2200 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Ciabattoni, Brownfields Site	SITE LOCATION: Stony Point, NY	
WELL NO: MW-1	SAMPLE ID: MW-1	DATE: September 11, 2007

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 9.5 – 19.5	STATIC DEPTH TO WATER (feet): 17.52	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (19.5 feet 17.52 – feet) X 0.16 gallons/foot = 0.32 gallons

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (0.006 gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 19.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 19.5	PURGING INITIATED AT: 0938	PURGING ENDED AT: 1003	TOTAL VOLUME PURGED (gallons): 0.91

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
0959	0.75	0.75	0.04	18.53	7.20	18.52	913	0.26	4.32	Clear	None
1001	0.08	0.83	0.04	18.53	7.23	18.50	909	0.26	4.15	Clear	None
1003	0.08	0.91	0.04	18.53	7.23	18.49	909	0.25	3.97	Clear	None

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Clemis, A2L Technologies Inc.	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1005	SAMPLING ENDED AT: 1008
PUMP OR TUBING DEPTH IN WELL (feet): 19.5	SAMPLE PUMP FLOW RATE (mL per minute): <100mL/min (VOCs)	TUBING MATERIAL CODE: PE/S	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
MW-1	2	CG	40 ml	HCl			8260 B Stars VOC	RFPP

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

DEP-SOP-001/01
FS 2200 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Ciabattoni, Brownfields Site	SITE LOCATION: Stony Point, NY	
WELL NO: MW-2	SAMPLE ID: MW-2	DATE: September 11, 2007

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 5.0 – 15.0	STATIC DEPTH TO WATER (feet): 13.82	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (15.0 feet 13.82 – feet) X 0.16 gallons/foot = 0.3 gallons

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (0.006 gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 14.9	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.0	PURGING INITIATED AT: 0922	PURGING ENDED AT: 0924	TOTAL VOLUME PURGED (gallons): 0.3

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
0924	~1 L	Dry			6.52	17.59	1062		NM	W	

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Clemis, A2L Technologies Inc.	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1104	SAMPLING ENDED AT: 1106
PUMP OR TUBING DEPTH IN WELL (feet): 15.0	SAMPLE PUMP FLOW RATE (mL per minute): <100mL/min (VOCs)	TUBING MATERIAL CODE: PE/S	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: _____ µm Filtration Equipment Type: _____	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
MW-2	2	CG	40 ml	HCl			8260 B Stars VOC	RFPP

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

DEP-SOP-001/01
FS 2200 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Ciabattoni, Brownfields Site	SITE LOCATION: Stony Point, NY	
WELL NO: MW-3	SAMPLE ID: MW-3	DATE: September 11, 2007

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 10.0 – 20.0	STATIC DEPTH TO WATER (feet): 16.35	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (20.0 feet 16.35 – feet) X 0.16 gallons/foot = 0.58 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (0.006 gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 18.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 18.0	PURGING INITIATED AT: 1020	PURGING ENDED AT: 1042	TOTAL VOLUME PURGED (gallons): 1.53

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
1038	1.25	1.25	0.07	17.91	6.95	16.76	1487	0.16	5.25	Cl Yellow	Petro
1040	0.14	1.39	0.07	17.91	6.95	16.77	1487	0.16	5.07	Cl Yellow	Petro
1042	0.14	1.53	0.07	17.91	6.95	16.79	1490	0.15	4.98	Cl Yellow	Petro

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Clemis, A2L Technologies Inc.	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 1044	SAMPLING ENDED AT: 1048
PUMP OR TUBING DEPTH IN WELL (feet): 18.0	SAMPLE PUMP FLOW RATE (mL per minute): <100mL/min (VOCs)	TUBING MATERIAL CODE: PE/S	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		
MW-3	2	CG	40 ml	HCl			8260 B Stars VOC	RFPP

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

DEP-SOP-001/01
FS 2200 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Ciabattoni, Brownfields Site	SITE LOCATION: Stony Point, NY	
WELL NO: MW-4	SAMPLE ID: MW-4	DATE: September 11, 2007

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 10.0 – 20.0	STATIC DEPTH TO WATER (feet): Dry	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: **1 WELL VOLUME =** (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Clemis, A2L Technologies Inc.	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet): N/A	SAMPLE PUMP FLOW RATE (mL per minute): <100mL/min (VOCs)	TUBING MATERIAL CODE: PE/S	
FIELD DECONTAMINATION: (Y) N	FIELD-FILTERED: Y (N) FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

Dry well – no purge, no sample.

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: **1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

DEP-SOP-001/01
FS 2200 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Ciabattoni, Brownfields Site	SITE LOCATION: Stony Point, NY	
WELL NO: MW-5	SAMPLE ID: MW-5	DATE: September 11, 2007

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 7.0 – 17.0	STATIC DEPTH TO WATER (feet): 18.88	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: **1 WELL VOLUME** = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (17.0 feet 18.88 – feet) X 0.16 gallons/foot = 250 mls

EQUIPMENT VOLUME PURGE: **1 EQUIPMENT VOL.** = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (0.006 gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 19.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 20.0	PURGING INITIATED AT: 0839	PURGING ENDED AT: 0840	TOTAL VOLUME PURGED (gallons): 250 ml

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
0840	~250 ml	Dry			6.75	20.56	604	NM	5.56	Clear	None

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Joe Clemis, A2L Technologies Inc.	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT: 0840	SAMPLING ENDED AT: 0842
PUMP OR TUBING DEPTH IN WELL (feet): 20.0	SAMPLE PUMP FLOW RATE (mL per minute): <100mL/min (VOCs)	TUBING MATERIAL CODE: PE/S	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type:	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:
No recovery, no sample

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Appendix C

Site Health and Safety Plan

10220 Harney Road NE, Thonotosassa, FL 33592
PH (813) 248-8558 FAX (813) 248-8656
www.A2LTechnologies.com

TECHNOLOGIES, INC.

HEALTH AND SAFETY PLAN

Ciabattoni Brownfields Site
Site No. : C344068
153 South Liberty Drive
Stony Point, NY
Rev. February 18, 2008

Prepared for:

New York State Department of Health
145 Huguenot Street
New Rochelle, New York 10801-5228

and

New York State Department of Environmental Conservation
21 South Putt Corners Road
New Paltz, NY 12561-1620

Prepared By:

A2L TECHNOLOGIES, INC.
10220 Harney Road NE
Thonotosassa, Florida 33592
(813) 248-8558

February 22, 2008

Project #050409

TABLE OF CONTENTS

HEALTH AND SAFETY PLAN

CIABATTONI BROWNFIELDS SITE
STONY POINT, ROCKLAND COUNTY, NEW YORK

The Health and Safety Plan (HASP) is intended to provide a basic framework for the implementation of the site assessment at the **CIABATTONI BROWNFIELDS SITE** located at 153 South Liberty Drive, Stony Point, New York. The work is being conducted under the New York State Brownfields Program. The procedures provided herein are intended as a guide for all *A2L Technologies, Inc.* (A2L) and subcontractor employees who will be involved in the performance of the project.

The primary objective of the HASP is to establish work-safety guidelines, requirements and procedures before field activities begin. The following information was prepared specifically for field operations. The approved HASP will be provided to personnel to aid in accomplishing the following objectives:

- Monitoring the effectiveness of the HASP as it is conducted in the field by performing field operation audits;
- Following up on any necessary corrective actions;
- Interacting with NYSDOH and NYSDEC representatives regarding modifications of health and safety actions, and
- Stopping work should work-site conditions warrant such action.

All personnel will have had health and safety training in accordance with OSHA Standard 29 CFR 1910.120.

1.0 ORGANIZATION AND RESPONSIBILITIES

The organization and responsibilities for implementing safe site-investigation procedures, and specifically for the requirements contained in this manual, are described in this section.

1.1 Project Manager

The A2L Health and Safety Officer, Larry G. Schmaltz, P.E., will be responsible for the overall implementation and monitoring of the health and safety program by:

- Ensuring appropriate protective equipment is available and properly used by personnel, in accordance with the HASP;
- Ensuring personnel health and safety awareness by providing them with proper training and familiarity with procedures and contingency plans;
- Ensuring all personnel are apprised of potential hazards associated with the site conditions and operations;
- Supervising and monitoring the safety performance of personnel to ensure their work practices are conducted in accordance with the HASP;
- Correcting any work practices or conditions that would expose personnel to possible injury or hazardous condition;
- Communications with the onsite Health and Safety Officer (HSO);
- Promptly initiating emergency alerts, and
- Communicating with the client and/or regulatory agency representatives.

1.2 Onsite Health and Safety Officer

The onsite Health and Safety Officer (HSO) will be the designated representative of A2L (Joseph Clemis) and will be present during site activities. The onsite HSO will be accountable for the direct supervision of personnel from the subcontractors and other A2L personnel with regard to.

- Health and safety program compliance;
- Maintaining a high level of health and safety consciousness among employees at the work site; and
- reporting accidents and undertaking corrective action.

1.3 Field Personnel

Field personnel will report directly to the onsite HSO, and will be required to:

- Be familiar with, and conform to, provisions of the HASP;
- Ensure that they are well informed of potential hazards at the work site and exercise informed consent in their work;
- Report any accidents or hazardous conditions to the onsite HSO; and
- Have a complete familiarity with their job requirements and the health and safety procedures involved.

Prior to the start of field activities, a meeting will be held to discuss the potential hazards at the site, with a review of the required protective clothing and procedures observed at this site. As needed, daily meetings will be held to discuss any changes in the hazards.

2.0 HAZARD EVALUATION

Phase II Environmental Site Assessment activities involving groundwater and soils sampling have identified the primary organic and inorganic chemical constituents of concern at the Site include gasoline constituants, chromium and lead. The objective of this HASP is the protection of personnel and adjacent property occupants from exposure to these substances by inhalation, oral ingestion, dermal absorption, or eye contact.

Material and Safety Data Sheets (MSDS) for gasoline, chromium and lead summarizing the potential exposure hazards are included as ATTACHMENT 1.

The onsite HSO is responsible for determining the level of personal protection equipment required. The HSO will perform a preliminary evaluation to confirm personal protective equipment requirements once the site has been entered. When work-site conditions warrant, the onsite HSO will modify the level of protection to be utilized. The existence of a situation more hazardous than anticipated will result in the suspension of work until the Project Manager and client representative have been notified and appropriate instructions have been provided to the field team.

3.0 COMMUNITY AIR MONITORING PLAN

Pursuant to NYSDEC Draft DER-10, Appendix 1A, a Community Air Monitoring Plan (CAMP) is required for any intrusive work performed at this site. A CAMP requires real-time monitoring for volatile organic compounds (VOC) and particulates (i.e. dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e. off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The CAMP helps to confirm that work activities do not spread contamination off-site through the air. Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas. Previous investigations at the Site have identified that volatile organic compounds and chromium are the primary contaminants of concern.

3.1 VOC Monitoring, Response Levels and Actions

Volatile organic compounds (VOCs) will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations will be measured at the start of each

workday and periodically thereafter to establish background conditions. The monitoring work will be performed using a portable hand held photoionization detector (PID), appropriate to measure the types of contaminants known or suspected to be present. The equipment will be calibrated using 100 ppm isobutylene at the beginning of each day. The equipment will be capable of calculating and recording 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown. All 15-minute readings will be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

3.2 Particulate Monitoring, Response Levels and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration will be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work will be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

All readings will be recorded and be available for State (DEC and DOH) personnel to review.

4.0 LEVELS OF PROTECTION

The level of protection anticipated to perform work on this investigation is Level D. Only protective equipment deemed suitable by the onsite HSO for use at the work site would be worn. Any changes in protection levels shall be documented by the onsite HSO.

Field personnel will exercise informed judgement on protective equipment requirements at active work sites or at work sites that have been repeatedly occupied without apparent harm. In any case where doubt exists, the safest course of action will be taken. The protective equipment that may be used by field personnel is listed below.

4.1 Level D

- Hard hat;
- Safety glasses, shatterproof prescription glasses, or chemical splash goggles;
- Boots/shoes, leather or chemical-resistant, steel toe and shank;
- Coveralls, and
- Chemical-resistant gloves.

At a minimum, protective headgear, including protective hearing devices, eyewear and footwear will be worn at all times by personnel working around the excavation and drilling equipment. When work-site conditions dictate, protective gloves and chemical-resistant boots shall be required for those personnel handling contaminated soils and water.

Should consistent levels of organic vapor concentrations greater than 25 ppm above background levels be detected by the PID in the work area, work will stop and all personnel will leave the work area. The Project Manager and the HSO have chosen a level of 25 ppm because it provides an adequate safety margin before the compounds of concern at the site present a threat to site personnel.

In the event work space concentrations rise above 25 ppm, Level C protection will be initiated as Level C protection is described below.

4.2 Level C

- Hard Hat;
- Boots, leather, steel toe and shank;
- Outer boots, chemical-resistant;
- Chemical-resistant gloves (Solvex);
- Tyvek or Saranex suit;
- Air purifying respirator assuming O_2 levels are greater than 19.5% oxygen.

If workspace concentrations rise above 50 ppm for a protracted period of time, work will be discontinued.

4.3 Level B and Level A

Work will not be conducted if Level B or Level A protection is required.

5.0 SAFE WORK PRACTICES AND HYGIENE

In addition to the use of protective equipment, other procedures will be followed to minimize risk:

- All consumptive activities, including eating, chewing gum, drinking, or smoking are prohibited during the monitoring well installation, trenching, sampling, and decontamination activities;
- An adequate source of potable water for emergency use will be available at the site (two liters per person per day);
- Fire extinguishers will be available at the work site for use on equipment or small fires when appropriate; and

- An adequately stocked first-aid kit will be maintained at the work site during operational hours.

Additional safe work practices include:

- Stand and work upwind from the well and rig to reduce the amount of vapors inhaled.
- Use protective clothing, especially gloves and goggles.
- Use care while sampling to prevent product from being splashed or spilled on skin and/or in eyes.
- Double check to make sure New York Dig Safely has been called and has marked all electrical, cable, and phone lines on the site.
- Stay clear of all operating equipment. Be aware of all equipment and in what mode the equipment is operating.

5.1 Heat Stress

In order to avoid heat stress, several preventive measures may be observed:

- Workers will drink a 16-ounce glass of water prior to work (in the morning and after lunch). Water will be contained in a cooler, maintained at a temperature below 60F. Workers will be encouraged to drink approximately every 29 minutes during days of extreme heat.
- In extreme hot weather, field activities will be conducted in the early mornings and late afternoons.
- Rest breaks in cool or shaded areas will be enforced as needed.
- Toilet facilities will be made available at or near the site.
- Be aware of the signs of frostbite and take immediate remedial measures.
- Good hygiene practices will be encouraged, stressing the importance of

allowing the clothing to dry during rest periods. Anyone who notices skin problems should receive medical attention immediately.

- If there are support personnel available outside the work zone, they should observe the workers in the exclusion zone to monitor signs of stress, frequency of breaks, etc.

6.0 WORK ZONE

To prevent unauthorized personnel from entering areas where active operations are being performed, the area enclosing the operation will be marked with flagging.

This zone will be entered in Level D protection. However, individual work sites within the zone may require higher levels of protection based on air monitoring results during the various activities. If this becomes the case, separate work sites will be established based on the level of protection required. Field personnel are instructed to leave the area if monitoring shows readings above the permissible exposure limits.

7.0 DECONTAMINATION

An area will be set aside within the work zone for decontamination. The type of decontamination procedures will be based on the level of protection required. Decontamination of Level D protective wear may consist of brushing heavily soiled boots to remove soils, rinsing gloves, and safety glasses (and overboots, if worn) with water, and removing and storing coveralls in plastic bags before leaving the work zone, if heavily soiled or suspected of having been in contact with site contaminants.

8.0 CONTINGENCY PLAN FOR EMERGENCIES

In the event of a safety health emergency, appropriate corrective measures must

immediately be taken to assist those who have been injured or exposed and to protect others from hazard. The onsite HSO will be notified of the incident immediately. If necessary, first aid will be rendered.

Onsite personnel will report any accident to the onsite HSO and an accident report form filled out. The following are the emergency contacts for this project:

A2L Technologies, Inc.
Health & Safety Officer Larry G. Schmaltz
(813) 248-8558

Police
Emergency Ambulance/Police 911

Hospital
Helen Hayes Hospital
Route 9W
West Haverstraw, NY 10993
(845)786.4000

8.1 Directions to Hospital

Directions From: Ciabattoni Brownfields Site

Take Liberty Drive (9W) South approximately 0.5 mile on West side of roadway.

9.0 TRAINING

All site workers, including site managers, will be questioned by the onsite HSO that the field personnel have been trained in the proper use of protective clothing and equipment in accordance with 29 CFR Part 1910.120, including:

- Purpose of wearing respirators;
- How the respirator works;
- Limitations;
- Fit testing;
- Maintenance; and

- Maintenance; and
- Conditions of use

10.0 MEDICAL SURVEILLANCE

The HSO will insure that each site worker involved participates in an ongoing medical surveillance program.

A2L TECHNOLOGIES, INC.

Larry G. Schmaltz, P.E
Health & Safety Officer

TEXACO REFINING & MARKETING -- 00365 TEXACO UNLEADED - AUTOMOTIVE GASOLINE
MATERIAL SAFETY DATA SHEET
NSN: 9130001487102
Manufacturer's CAGE: 2R503
Part No. Indicator: B
Part Number/Trade Name: 00365 TEXACO UNLEADED

General Information

Item Name: AUTOMOTIVE GASOLINE
Company's Name: TEXACO REFINING AND MARKETING INC
Company's Street: 1111 RUSK ST
Company's City: HOUSTON
Company's State: TX
Company's Country: US
Company's Zip Code: 77002-3310
Company's Emerg Ph #: 914-831-3400 800-424-9300(CHEMTREC)
Company's Info Ph #: 512-459-6543
Distributor/Vendor # 1: SCHULTE OIL CO (405-262-3121)
Distributor/Vendor # 1 Cage: 4R019
Record No. For Safety Entry: 024
Tot Safety Entries This Stk#: 053
Status: FE
Date MSDS Prepared: 15DEC92
Safety Data Review Date: 22JUL93
Supply Item Manager: KY
MSDS Preparer's Name: MANAGER,PRODUCT SERVICES
Preparer's Company: TEXACO INC.
Preparer's St Or P. O. Box: P. O. BOX 509
Preparer's City: BEACON
Preparer's State: NY
Preparer's Zip Code: 12508
MSDS Serial Number: BRFLK
Specification Number: VV-G-1609
Spec Type, Grade, Class: REGULAR UNLEADED
Hazard Characteristic Code: F2
Unit Of Issue: GL
Unit Of Issue Container Qty: BULK
Type Of Container: BULK
Net Unit Weight: UNKNOWN
NRC/State License Number: NONE
Net Propellant Weight-Ammo: NONE

Ingredients/Identity Information

Proprietary: NO
Ingredient: GASOLINE
Ingredient Sequence Number: 01
Percent: 95-99.9
NIOSH (RTECS) Number: LX3300000
CAS Number: 8006-61-9
OSHA PEL: 300 PPM/500 STEL
ACGIH TLV: 300 PPM/500STEL;9293
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO

Ingredient: HYDROCARBON GAS CONTAINED IN INGREDIENT #1
Ingredient Sequence Number: 02
Percent: UNKNOWN
NIOSH (RTECS) Number: MW3860000
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: NOT ESTABLISHED
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO
Ingredient: OLEFINS
Ingredient Sequence Number: 03
Percent: UNKNOWN
NIOSH (RTECS) Number: 1000795OL
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: NOT ESTABLISHED
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO
Ingredient: BENZENE (SARA III)
Ingredient Sequence Number: 04
Percent: .2-3.5
NIOSH (RTECS) Number: CY1400000
CAS Number: 71-43-2
OSHA PEL: 1PPM/5STEL;1910.1028
ACGIH TLV: 10 PPM; A2; 9293
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO
Ingredient: METHYL TERT-BUTYL ETHER (SARA III)
Ingredient Sequence Number: 05
Percent: 0-15
NIOSH (RTECS) Number: KN5250000
CAS Number: 1634-04-4
OSHA PEL: NOT ESTABLISHED
ACGIH TLV: NOT ESTABLISHED
Other Recommended Limit: NONE RECOMMENDED

Physical/Chemical Characteristics

Appearance And Odor: LIQUID;LIGHT STRAW TO LIGHT RED;GASOLINE-LIKE ODOR
Boiling Point: >90F,>32C
Vapor Pressure (MM Hg/70 F): 465-775
Vapor Density (Air=1): 3-4
Specific Gravity: .7-.77
Evaporation Rate And Ref: UNKNOWN
Solubility In Water: SLIGHT
Percent Volatiles By Volume: 100
Autoignition Temperature: 850F

Fire and Explosion Hazard Data

Flash Point: -40F,-40C
Flash Point Method: COC
Lower Explosive Limit: 1.4
Upper Explosive Limit: 7.6
Extinguishing Media: DRY CHEMICAL,FOAM,CARBON DIOXIDE

Special Fire Fighting Proc: WATER MAY BE INEFFECTIVE ON FLAMES,BUT CAN BE USED TO COOL FIRE EXPOSED CONTAINERS.USE A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING.
Unusual Fire And Expl Hazrds: VAPORS ARE HEAVIER THAN AIR AND TRAVEL ALONG THE GROUND,POSING A FLASHBACK HAZARD(FLOWING GASOLINE GENERATES STATIC ELECRICITY).

Reactivity Data

Stability: YES
Cond To Avoid (Stability): HEAT,SPARKS ...OTHER SOURCES OF IGNITION.
Materials To Avoid: STRONG OXIDIZERS.
Hazardous Decomp Products: CARBON MONOXIDE,CARBON DIOXIDE,IRRITATING ALDEHYDES AND KETONES.
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): NONE

Health Hazard Data

LD50-LC50 Mixture: LD50 ORAL RAT(EST)=5 G/KG
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: YES
Route Of Entry - Ingestion: NO
Health Haz Acute And Chronic: EYES:IRRITANT.SKIN:THIS MATERIEL IS ABSORBED BY THE SKIN(HAZARD LEVEL HAS NOT BEEN DETERMINED);IRRITANT.INHAL:IRRITATES NOSE AND THROAT.MAY CAUSE ASPHYXIATION IN ENCLOSED SPACES.INGEST:MAY CAUSE
LUNG DAMAGE IF VOMITTED AFTER SWALLOWING.CHRONIC:BENZENE CAUSES LEUKEMIA IN
HUMANS.
Carcinogenicity - NTP: YES
Carcinogenicity - IARC: YES
Carcinogenicity - OSHA: YES
Explanation Carcinogenicity: CONTAINS Benzene [71-43-2] WHICH IS LISTED BY NTP AND IARC AND REGULATED BY OSHA AS A CARCINOGEN.
HEADACHE,NAUSEA,VOMITING,DIZZINESS,DROWSINESS,EUPHORIA,LOSS OF COORDINATION,DISORIENTATION.
Med Cond Aggravated By Exp: REPEATED SKIN CONTACT MAY AGGRIVATE EXISTING DERMATITIS.
Emergency/First Aid Proc: EYES:FLUSH WITH WATER FOR 15 MINUTES WHILE LIFTING LIDS.CALL PHYSICIAN.SKIN:REMOVE CONTAMINATED CLOTHING;WASH WITH SOAP AND WATER.CALL PHYSICIAN IF IRRITATION PERSISTS.INGEST:DO NOT INDUCE VOMITING WITHOUT ADVICE OF A PHYSICIAN.GET PROMPT QUALIFIED MEDICAL ATTENTION.INHAL:REMOVE TO FRESH AIR.GIVE ARTIFICIAL RESPIRATION OR OXYGEN IF NEEDED.GET PROMPT MEDICAL ATTENTION.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: ELIMINATE SOURCES OF IGNITION.VENTILATE AREA.AVOID BREATHING VAPORS;STAY UPWIND;USE A SCBA.REMOVE WITH A NON-FLAMMABLE ADSORBANT(EG,DIATOMACEOUS EARTH);PUT IN AN APPROPRIATE CONTAINER
FOR DISPOSAL.KEEP OUT OF WATERWAYS.
Neutralizing Agent: NONE
Waste Disposal Method: THIS MATERIEL IS CONSIDERED TO BE HAZARDOUS PER RCRA,WITH REGARD TO BENZENE TOXICITY AND IGNITABILITY.

Precautions-Handling/Storing: TRANSPORT,HANDLE AND STORE PER OSHA 1910.106.GROUND AND BOND SHIPPING CONTAINERS.USE SPARK-PRROF TOOLS.
Other Precautions: USE CAUTION WHEN OPENING CONTAINERS WHICH MAY BE UNDER PRESSURE.

Control Measures

Respiratory Protection: IN THE ABSENCE OF ENVIROMENTAL CONTROLS A NIOSH ORGANIC VAPOR RESPIRATOR MAY BE USED;IN ENCLOSED SPACES A SELF-CONTAINED BREATHING APPARATUS SHOULD BE USED.
Ventilation: ENVIRONMENTAL CONTROLS TO MAINTAIN TLV BELOW 500PPM.
Protective Gloves: NITRILE,TEFLON,VITON.
Eye Protection: GOGGLES/FACE SHIELD.
Other Protective Equipment: CLOTHING TO PREVENT SKIN CONTACT.
Work Hygienic Practices: WASH HANDS.SEPERATE WORK CLOTHES FROM STREET CLOTHES.LAUNDER WORK CLOTHES BEFORE REUSE.KEEP FOOD OUT OF THE WORK AREA.
Suppl. Safety & Health Data: NONE.

Transportation Data

Trans Data Review Date: 93203
DOT PSN Code: GTN
DOT Proper Shipping Name: GASOLINE
DOT Class: 3
DOT ID Number: UN1203
DOT Pack Group: II
DOT Label: FLAMMABLE LIQUID
IMO PSN Code: HRV
IMO Proper Shipping Name: GASOLINE
IMO Regulations Page Number: 3141
IMO UN Number: 1203
IMO UN Class: 3.1
IMO Subsidiary Risk Label: -
IATA PSN Code: RMF
IATA UN ID Number: 1203
IATA Proper Shipping Name: MOTOR SPIRIT
IATA UN Class: 3
IATA Label: FLAMMABLE LIQUID
AFI PSN Code: MUC
AFI Prop. Shipping Name: GASOLINE
AFI Class: 3
AFI ID Number: UN1203
AFI Pack Group: II
AFI Basic Pac Ref: 7-7
Additional Trans Data: NONE

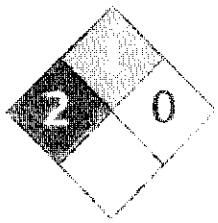
Disposal Data

Label Data

Label Required: YES
Technical Review Date: 22JUL93
Label Date: 15DEC92
MFR Label Number: 00365TEX UNLEAD

Label Status: G
Common Name: 00365 TEXACO UNLEADED
Signal Word: DANGER!
Acute Health Hazard-Moderate: X
Contact Hazard-Moderate: X
Fire Hazard-Severe: X
Reactivity Hazard-None: X
Special Hazard Precautions: EYES:IRRITANT.SKIN:THIS MATERIEL IS ABSORBED BY THE SKIN(HAZARD LEVEL NOT DETERMINED);IRRITANT.INHAI :IRRITATES NOSE AND THROAT.MAY CAUSE ASPHYXIATION IN ENCLOSED SPACES.INGEST:MAY CAUSE LUNG DAMAGE IF VOMITTED AFTER SWALLOWING.CHRONIC:BENZENE CAUSES LEUKEMIA IN HUMANS. FIRST AID: EYES:FLUSH WITH WATER FOR 15 MINUTES WHILE LIFTING LIDS. CALL PHYSICIAN.SKIN:REMOVE CONTAMINATED CLOTHING:WASH WITH SOAP AND WATER.
CALL PHYSICIAN IF IRRITATION PERSISTS.INGEST:DO NOT INDUCE VOMITING WITHOUT ADVICE OF A PHYSICIAN.GET PROMPT QUALIFIED MEDICAL ATTENTION.INHAL:REMOVE TO FRESH AIR.GIVE ARTIFICIAL RESPIRATION OR OXYGEN IF NEEDED.GET PROMPT MEDICAL ATTENTION
Protect Eye: Y
Protect Skin: Y
Protect Respiratory: Y
Label Name: TEXACO REFINING AND MARKETING INC
Label Street: 1111 RUSK ST
Label City: HOUSTON
Label State: TX
Label Zip Code: 77002-3310
Label Country: US
Label Emergency Number: 914-831-3400 800-424-9300(CHEMTREC)

Science
Chemicals & Laboratory Equipment



Health	2
Reactivity	0
Personal Protection	E

Material Safety Data Sheet
Chromium MSDS

Section 1: Chemical Product and Company Identification

Product Name: Chromium

Catalog Codes: SLC4711, SLC3709

CAS#: 7440-47-3

RTECS: GB4200000

TSCA: TSCA 8(b) inventory: Chromium

CI#: Not applicable

Synonym: Chromium metal; Chrome; Chromium Metal Chips 2" and finer

Chemical Name: Chromium

Chemical Formula: Cr

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online:

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Chromium	7440-47-3	100

Toxicological Data on Ingredients: Chromium LD50: Not available. LC50: Not available.

Section 3: Hazards Identification

Potential Acute Health Effects:
Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. Slightly hazardous in case of ingestion.

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
The substance may be toxic to kidneys, lungs, liver, upper respiratory tract.
Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention

Skin Contact:
In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: 580°C (1076°F)

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Some metallic oxides.

Fire Hazards in Presence of Various Substances:
Slightly flammable to flammable in presence of open flames and sparks, of heat.
Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards:
Moderate fire hazard when it is in the form of a dust (powder) and burns rapidly when heated in flame.
Chromium is attacked vigorously by fused potassium chlorate producing vivid incandescence.
Pyrophoric chromium unites with nitric oxide with incandescence.
Incandescent reaction with nitrogen oxide or sulfur dioxide.

Special Remarks on Explosion Hazards:
Powdered Chromium metal + fused ammonium nitrate may react violently or explosively.
Powdered Chromium will explode spontaneously in air.

Section 6: Accidental Release Measures

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids, alkalis.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 0.5 (mg/m3) from ACGIH (TLV) [United States]
TWA: 1 (mg/m3) from OSHA (PEL) [United States]
TWA: 0.5 (mg/m3) from NIOSH [United States]
TWA: 0.5 (mg/m3) [United Kingdom (UK)]
TWA: 0.5 (mg/m3) [Canada]Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Metal solid.)

Odor: Odorless.

Taste: Not available.

Molecular Weight: 52 g/mole

Color: Silver-white to Grey.

pH (1% soln/water): Not applicable.

Boiling Point: 2642°C (4787.6°F)

Melting Point: 1900°C (3452°F) +/- 10 deg. C

Critical Temperature: Not available.

Specific Gravity: 7.14 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility:
Insoluble in cold water, hot water.
Soluble in acids (except Nitric), and strong alkalies.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, acids, alkalis.

Corrosivity: Not available.

Special Remarks on Reactivity:
Incompatible with molten Lithium at 180 deg. C, hydrogen peroxide, hydrochloric acid, sulfuric acid, most caustic alkalies and alkali carbonates, potassium chlorate, sulfur dioxide, nitrogen oxide, bromine pentafluoride.
It may react violently or ignite with bromine pentafluoride.
Chromium is rapidly attacked by fused sodium hydroxide + potassium nitrate.
Potentially hazardous incompatibility with strong oxidizers.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals:
LD50: Not available.
LC50: Not available.

Chronic Effects on Humans:
CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for

human.) by IARC.
May cause damage to the following organs: kidneys, lungs, liver, upper respiratory tract.

Other Toxic Effects on Humans:
Hazardous in case of skin contact (irritant), of inhalation.
Slightly hazardous in case of ingestion.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:
May cause cancer based on animal data. There is no evidence that exposure to trivalent chromium causes cancer in man.

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects:
May cause skin irritation.
Eyes: May cause mechanical eye irritation.
Inhalation: May cause irritation of the respiratory tract and mucous membranes of the respiratory tract.
Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting, diarrhea.
Chronic Potential Health Effects:
Inhalation: The effects of chronic exposure include irritation , sneezing, reddness of the throat, bronchospasm, asthma, cough, polyps, chronic inflammation, emphysema, chronic bronchitis, pharyngitis, bronchopneumonia, pneumoconoisis. Effects on the nose from chronic chromium exposure include irritation, ulceration, and perforation of the nasal septum. Inflammation and ulceration of the larynx may also occur.
Ingestion or Inhalation: Chronic exposure may cause liver and kidney damage.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:

Connecticut hazardous material survey.: Chromium
Illinois toxic substances disclosure to employee act: Chromium
Illinois chemical safety act: Chromium
New York release reporting list: Chromium
Rhode Island RTK hazardous substances: Chromium
Pennsylvania RTK: Chromium
Minnesota: Chromium
Michigan critical material: Chromium
Massachusetts RTK: Chromium
Massachusetts spill list: Chromium
New Jersey: Chromium
New Jersey spill list: Chromium
Louisiana spill reporting: Chromium
California Director's List of Hazardous Substances: Chromium
TSCA 8(b) inventory: Chromium
SARA 313 toxic chemical notification and release reporting: Chromium
CERCLA: Hazardous substances.: Chromium: 5000 lbs. (2268 kg)

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):
R40- Limited evidence of carcinogenic effect
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves.
Lab coat.
Dust respirator. Be sure to use an approved/certified respirator or equivalent.
Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 10/10/2005 08:16 PM

Last Updated: 10/10/2005 08:16 PM

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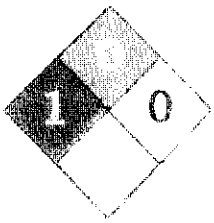

Health	1
Reactivity	0
Personal Protection	E

Material Safety Data Sheet
Lead MSDS

Section 1: Chemical Product and Company Identification

Product Name: Lead

Catalog Codes: SLL1291, SLL1669, SLL1081, SLL1459, SLL1834

CAS#: 7439-92-1

RTECS: OF7525000

TSCA: TSCA 8(b) inventory: Lead

CI#: Not available.

Synonym: Lead Metal, granular; Lead Metal, foil; Lead Metal, sheet; Lead Metal, shot

Chemical Name: Lead

Chemical Formula: Pb

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online:

CHEMTREC (24HR Emergency Telephone), call:
1 800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Lead	7439-92-1	100

Toxicological Data on Ingredients: Lead LD50: Not available. LC50: Not available.

Section 3: Hazards Identification

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:
Slightly hazardous in case of skin contact (permeator).
CARCINOGENIC EFFECTS: Classified A3 (Proven for animal.) by ACGIH. 2B (Possible for human.) by IARC.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
The substance may be toxic to blood, kidneys, central nervous system (CNS).
Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Serious Skin Contact: Not available.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: Some metallic oxides.

Fire Hazards in Presence of Various Substances: Non-flammable in presence of open flames and sparks, of shocks, of heat.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: When heated to decomposition it emits highly toxic fumes of lead.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not

present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:
Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:
TWA: 0.05 (mg/m3) from ACGIH (TLV) [United States]
TWA: 0.05 (mg/m3) from OSHA (PEL) [United States]
TWA: 0.03 (mg/m3) from NIOSH [United States]
TWA: 0.05 (mg/m3) [Canada]Consult local authorities for acceptable exposure limits

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid. (Metal solid.)

Odor: Not available.

Taste: Not available.

Molecular Weight: 207.21 g/mole

Color: Bluish-white. Silvery. Gray

pH (1% soln/water): Not applicable.

Boiling Point: 1740°C (3164°F)

Melting Point: 327.43°C (621.4°F)

Critical Temperature: Not available.

Specific Gravity: 11.3 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Insoluble in cold water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials, excess heat

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:
Can react vigorously with oxidizing materials.
Incompatible with sodium carbide, chlorine trifluoride, trioxane + hydrogen peroxide, ammonium nitrate, sodium azide, disodium acetylide, sodium acetylide, hot concentrated nitric acid, hot concentrated hydrochloric acid, hot concentrated sulfuric acid, zirconium.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Inhalation. Ingestion.

Toxicity to Animals:
LD50: Not available.
LC50: Not available.

Chronic Effects on Humans:
CARCINOGENIC EFFECTS: Classified A3 (Proven for animal.) by ACGIH, 2B (Possible for human.) by IARC.
May cause damage to the following organs: blood, kidneys, central nervous system (CNS).

Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:
Acute Potential:
Skin:
Lead metal granules or dust: May cause skin irritation by mechanical action.
Lead metal foil, shot or sheets: Not likely to cause skin irritation.
Eyes:
Lead metal granules or dust: Can irritate eyes by mechanical action.

Lead metal foil, shot or sheets: No hazard. Will not cause eye irritation.
Inhalation:
In an industrial setting, exposure to lead mainly occurs from inhalation of dust or fumes.
Lead dust or fumes: Can irritate the upper respiratory tract (nose, throat) as well as the bronchi and lungsby mechanical action. Lead dust can be absorbed through the respiratory system. However, inhaled lead does not accumulate in the lungs. All of an inhaled dose is eventually abssorbed or transferred to the gastrointestinal tract. Inhalation effects of exposure to fumes or dust of inorganic lead may not develop quickly. Symptoms may include metallic taste, chest pain, decreased physical fitness, fatigue, sleep disturbance, headache, irritability, reduces memory, mood and personality changes, aching bones and muscles, constipation, abdominal pains, decreasing appetite. Inhalation of large amounts may lead to ataxia, deliriuim, convulsions/seizures, coma, and death.
Lead metal foil, shot, or sheets: Not an inhalation hazard unless metal is heated. If metal is heated, fumes will be released. Inhalation of these fumes may cause "fume metal fever", which is characterized by flu-like symptoms. Symptoms may include metallic taste, fever, nausea, vomiting, chills, cough, weakness, chest pain, generalized muscle pain/aches, and increased white blood cell count.
Ingestion:
Lead metal granules or dust: The symptoms of lead poisoning include abdominal pain or cramps (lead cholic), spasms, nausea, vomiting, headache, muscle weakness, hallucinations, distorted perceptions, "lead line" on the gums, metallic taste, loss of appetite, insomnia, dizziness and other symptoms similar to that of inhalation. Acute poisoning may result in high lead levels in the blood and urine, shock, coma and death in extreme cases.
Lead metal foil, shot or sheets: Not an ingestion hazard for usual industrial handling.

Section 12: Ecological Information

Ecotoxicity: Not available

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Lead
California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (female) which would require a warning under the statute: Lead
California prop. 65: This product contains the following ingredients for which the State of California has found to

cause reproductive harm (male) which would require a warning under the statute: Lead
California prop. 65 (no significant risk level): Lead: 0.0005 mg/day (value)
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Lead
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Lead
Connecticut hazardous material survey.: Lead
Illinois toxic substances disclosure to employee act: Lead
Illinois chemical safety act: Lead
New York release reporting list: Lead
Rhode Island RTK hazardous substances: Lead
Pennsylvania RTK: Lead

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC):
R20/22- Harmful by inhalation and if swallowed.
R33- Danger of cumulative effects.
R61- May cause harm to the unborn child.
R62- Possible risk of impaired fertility.
S36/37- Wear suitable protective clothing and gloves.
S44- If you feel unwell, seek medical advice (show the label when possible).
S53- Avoid exposure - obtain special instructions before use.

HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 0

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves.
Lab coat.
Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Safety glasses.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 10/10/2005 08:21 PM

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Appendix D

Soil Vapor Investigation Work Plan

Soil Vapor Intrusion Work Plan

For:

CIABATTONI BROWNFIELDS SITE
ID# C 344068
153 South Liberty Drive
Stony Point
Rockland County, New York

Prepared for:

Mr. Josh Beyer, P.E.
Director of Development
Sembler/Treasure New York Joint Venture
c/o Sembler Florida, Inc.
5858 Central Avenue
Saint Petersburg, FL 33707

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
BROWNFIELDS CLEANUP PROGRAM
21 South Putt Corners Road
New Paltz, NY 12561

Prepared by:

A2L TECHNOLOGIES, INC.
10220 Harney Road NE
Thonotosassa, Florida 33592
(813) 248-8558

March 17, 2008
Project #050409

TABLE OF CONTENTS

1.0. INTRODUCTION

A2L Technologies, Inc. was retained by Mr. Josh Beyer of The Sembler Company to prepare a Soil Vapor Intrusion Work Plan (SVIWP) for the Ciabattoni Brownfields site located at 153 South Liberty Drive, Stony Point, NY. Petroleum hydrocarbons were identified in the soils at the site during previous investigations. This SVIWP has been prepared in response to a request by New York State Department of Environmental Conservation (NYSDEC) dated December 24, 2007.

1.1 Assessment Objectives

The objectives of the soil vapor intrusion work plan are summarized as follows:

1. Evaluate the sub-slab concentrations of chemicals related to the release of petroleum hydrocarbons that may potentially migrate to indoor air.
2. Evaluate exterior ambient air concentrations of chemicals.
3. Evaluate subsurface concentrations of chemicals related to the release of petroleum hydrocarbons within the area surrounding the site to determine if potential off-site impacts are present.

1.2 Scope of Work

This Work Plan proposes and describes methods for collection of sub-slab soil, exterior ambient and surficial soils air samples in accordance with the New York State Department of Health (NYSDOH) October 2006 *Guidance for Evaluating Soil Vapor Intrusion in the State of New York.* The current structure being constructed consists of a 3,950 square foot slab-on-grade foundation. The foundation was prepared by bringing two and one half feet of clean soils from off site borrow pits and compacting to 95% modified proctor. The footings and other features were prepared and a polyethelyne vapor barrier installed prior to poring the four inch slab to a finished elevation of 121'. The building will be used for a commercial banking establishment.

We propose to collect two sub-slab soil vapor samples below the foundation of the building. The sub-slab vapor samples will be collected simultaneously as well as two adjacent ambient indoor air samples. Concurrent with the indoor air sampling, one upwind outdoor air sample will be collected. The sub-slab soil vapor samples will be collected at points identified in Figure 1.

Additionally, to evaluate the subsurficial soil vapor concentration in the adjacent areas adjacent to the building, we propose to install three temporary vapor monitoring points as identified in Figure 2.

All of the samples will be collected with SUMMA® passivated stainless steel canisters over a 2-hour time period. An evacuated 6-liter SUMMA® canister (> 28" Hg) will provide a recoverable whole gas sample of approximately 5.5 liters when allowed to fill to a vacuum of 2" Hg. The intakes of the indoor air and outdoor air samples will be set at five (5) feet above ground surface, to represent the typical breathing zone for an adult. The canisters will subsequently submitted to a New York State ELAP approved laboratory for analysis.

2.0 FIELD ACTIVITIES PLAN

2.1 Pre-Field Activities

The pre-field activities consist of a visit to the site to install the temporary sub-slab monitoring points at the locations identified in Figure 1. Additionally, we will ensure that proper utility clearance is performed prior to any intrusive exterior temporary monitoring points being installed.

The NYSDOH Indoor Air Quality Questionnaire and Building Inventory Field Form (Appendix A) will be completed while conducting the building survey and chemical inventory. Drilling permits will not be required for the proposed soil vapor sampling.

2.2 Sub-Slab Soil Vapor Sampling

To collect sub-slab soil vapor samples, drill holes will be advanced using an electric hammer drill to obtain access to the soil beneath the slab. Glass beads will be installed with 1/8" food grade polyethylene tubing and sealed with fast setting concrete grout. The proposed monitoring points are presented in Figure 1. Prior to collecting the samples the sampling train will be evacuated using low flow methods (<0.2 LPM) to purge the system one to three volumes. The samples will subsequently be collected in a 6 liter SUMMA® passivated stainless steel canister fitted with the appropriate flow controller for a two hour sample collection. During the sampling, a tracer compound, isopropanol, will be used for quality control/quality assurance as defined in Final NYSDOH CEH BEEI Soil Vapor Intrusion Guidance document section 2.7.5. The tracer liquid will be applied to a papertowel soaked in the liquid tracer that is placed over all connection points and over the penetration in the slab during sample collection. As illustrated in the Final NYSDOH CEH BEEI Soil Vapor Intrusion Guidance document Figure 2.4 (D).

2.3 Exterior Surficial Sampling

To collect exterior subgrade soil vapor samples, an AMS Soil Vapor Sampling system will be utilized to install temporary soil vapor extraction points at four feet below ground surface. After the stainless steel probe tip is advanced to depth the sample train consisting of food grade polyethylene tubing (1/8" O.D.) will be evacuated using low flow methods (<0.2 LPM) to purge the system one to three volumes. The samples will be collected in a 6 liter SUMMA® passivated stainless steel canister fitted with the appropriate flow controller for a two hour sample collection. During the sampling, a tracer compound, ispropanol, will be used for quality control/quality assurance as defined in NYSDOH guidance document section 2.7.5.

2.4 Indoor Air Sampling

Two air samples will be obtained from adjacent to the sub-slab SVI points within the open area of the building. This samples will be taken from five feet above the floor to simulate the average adults breathing zone The samples will be taken concurrent (within minutes of each other) with the subslab and outdoor air sampling. The samples will be collected in a 6 liter SUMMA® passivated stainless steel canister fitted with the appropriate flow controller for a two hour sample collection.

2.5 Outdoor Air Sampling

An outdoor air sample will be collected simultaneously with the indoor air samples to evaluate the potential influence, if any, of outdoor air on indoor air quality. This sample will be collected simultaneously with soil vapor samples to identify potential outdoor air interferences associated with infiltration of outdoor air into the sampling apparatus while the soil vapor was collected.

3.0 DATA RECORDING AND MANAGEMENT

Measurements will be recorded in a bound field logbook and on the necessary chain of custody. Each of the sampling events previously described requires method specific notations as delineated within each subsection of the NYDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, October 2006. Soil borings and permanent ground water monitoring wells will be installed as previously described in Section 1.2 of this document. Field techniques and laboratory procedures employed during the Site Assessment will comply with the NYDEC standards

as set forth in Draft DEC-10, Section 2.0 QA For Sampling and Lab Analysis. The following details each of these assessment methods.

4.0 LABORATORY ANALYSIS

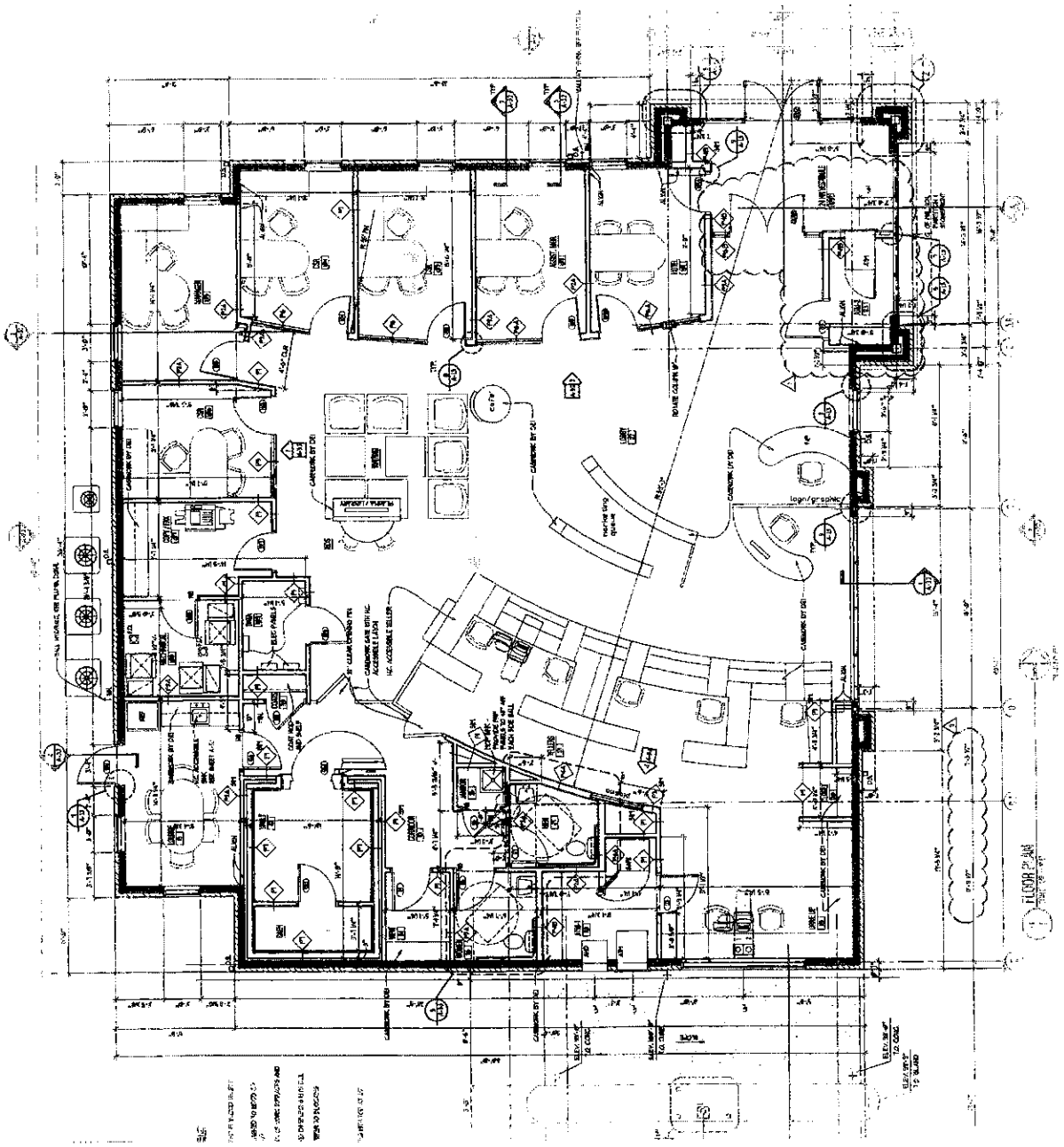
The soil vapor samples will be analyzed for petroleum-specific volatile organic compounds, including using USEPA Method TO-15 at a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory (Landcaster Laboratories). Constituents specific to a petroleum hydrocarbon source, specifically gasoline, will be analyzed for using the proposed method. The proposed method detection limits are method specific and will be are as low as the laboratory can provide.

5.0 QUALITY ASSURANCE/QUALITY CONTROL

Quality assurance/quality control (QA/QC) samples for the soil vapor analysis at this site will include one trip blank per shipment. Laboratory QA/AC analysis will include a method blank and laboratory control samples. Extreme care will be used during all aspects of vapor sample collection to ensure that sampling error is minimized and high-quality data are obtained.

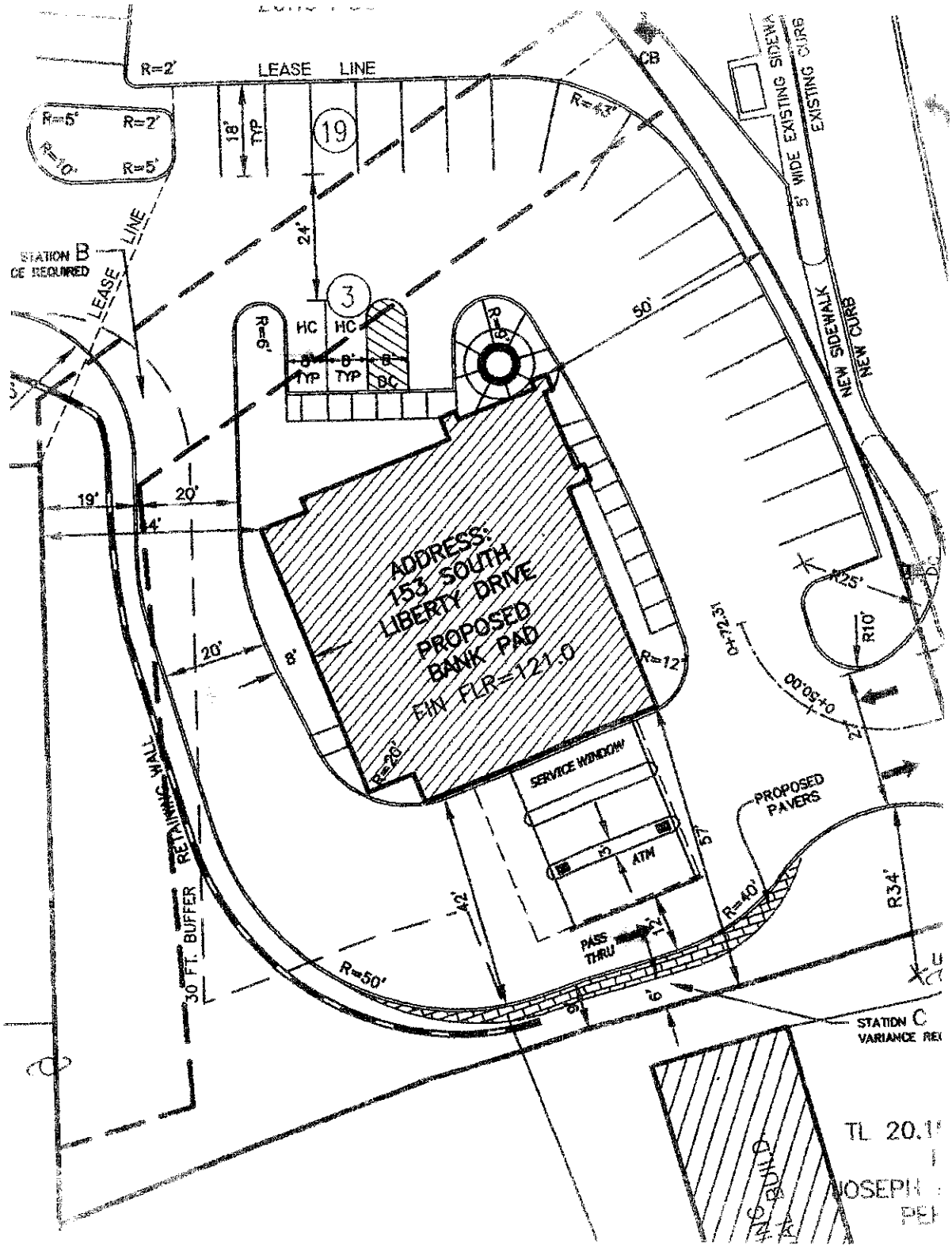
6.0 Schedule and Reporting

A2L is prepared to commence the field activities for the soil vapor intrusion study at the Ciabattoni Brownfields site in Stony Point, NY as soon as this plan is approved. The installation of the sub-slab and the exterior monitoring points is anticipated to take one day and the sampling the following day. It is anticipated the sampling will be completed during the heating season, late March or early April after the building exterior is completed and the HVAC systems installed. However, the HVAC system services the entire bank area and will be operational annually after the bank is opened in May. The receipt of laboratory analysis of the obtained soil vapor samples are anticipated within three weeks of submittal to the laboratory. The completed Soil Vapor Intrusion Report is anticipated to be submitted to the NYSDEC within 90 days of receipt of laboratory analytical data. The report will present the data collected during the field investigation and will include a description of the field activities, methods of investigation and the findings of the field sampling investigation. Laboratory analytical reports will be provided as appendices to the report.



North

050409	**Figure 1 SVI Sub-Slab Monitoring Points**
	A2L Technologies, Inc.



North

050409	**Figure 2 Exterior SVI Monitoring Points**
	A2L Technologies, Inc.