VOLUNTARY CLEANUP PROGRAM FINAL REPORT

for

SITE NO. V-00150-7

VOLUNTARY CLEANUP AGREEMENT NO. A7-0466-0702

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DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REGION 7

Prepared by:

PLUMLEY ENGINEERING
8232 Loop Road
Baldwinsville, New York 13027
(315) 638-8587
Project No. 2003074

DALE ROBERT VOLLMER
056798

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1.0 INTRODUCTION

This Final Report is submitted pursuant to the Voluntary Cleanup Agreement, Index No. A7-0466-0702 (Voluntary Cleanup Agreement) for Site No. V-00150-7, which is the parcel known as 7980-7984 Brewerton Road, Cicero, Onondaga County, which has a Tax Map ID No. of 043.01-17.1 (Site). As set forth in Section 4.8 of the New York State Department of Environmental Conservation (DEC) approved Remedial Work Plan dated February 2004 (Work Plan), this Final Report will summarize the investigation and remedial activities at the Site, including the results of a qualitative public health exposure assessment based on the restricted future site use for commercial/industrial purposes. As discussed herein, the Final Report concludes that no further remedial activities are required for the contemplated use of the Site, and therefore the Release and Covenant Not to Sue should be issued by DEC.

The attached *Site Plan* (Figure 1) details the main features on the property. The property contains two abandoned buildings and a large paved and gravel-surfaced area for vehicle traffic and parking. The building formerly used as dry cleaning establishment was demolished in 2004, as per the approved remedial work plan. The remaining two buildings were used as automotive repair and restaurant businesses. Only a small portion of the site is surfaced with grass, located along the eastern boundary. There are no residential properties located near the site. Route 11 borders the western side of the property and commercial lots, including an instant oil change facility to the south, a Wegman's grocery store to the east and a Dunn tire store to the north, border the rest of the property. No streams or wetland areas are located on the property. The nearest surface water features are wetland areas located approximately 400 feet to the west and east of the property.

A dry cleaner operated on the site from approximately 1987 to 1999. Prior to that, the building was used as a car wash. Subsurface environmental site assessment work previously completed by others indicated the existence of environmental impacts to soil and groundwater associated with dry cleaning compounds.

2.0 SUMMARY OF FIELD ACTIONS COMPLETED

2.1 Remedial Excavation

A number of field actions were completed to characterize the nature and extent of contamination and to reduce contaminant impact at the site. The following is a summary of field actions completed that caused a significant reduction of soil contaminant concentrations.

2.2 Building Demolition and Utility Abandonment

Pursuant to Section 3.4 of the Work Plan, the former dry cleaner building was demolished in the summer of 2004 and the subsurface utilities were abandoned. As part of this work, the former disposal sump was removed.

2.3 Remedial Excavation Investigation Program

Pursuant to Sections 3.5, 3.6, 4.3 and 4.4 of the Work Plan, eleven test pits and sixteen soil borings were completed to investigate the nature and extend of the soil contamination. Additionally, pursuant to Section 3.7 of the Work Plan, six groundwater wells were installed and sampled, along with the two pre-existing groundwater wells already installed at the Site to assess groundwater quality. Soil and groundwater samples were collected for analysis during this investigation. Results of the investigation were presented to the DEC in the September 9, 2004 letter report, which set forth the excavation limits pursuant to Section 3.8 of the Work Plan. The DEC approved the excavation limits, after some revision, by letter dated December 8, 2004, with an acknowledgement that there would be some residual contamination remaining after project completion.

2.4 Remedial Excavation Activities

As required by Sections 3.9 and 4.6 of the Work Plan, the remedial excavation was initiated on January 10, 2004. On Day 1, soils from beneath the former dry cleaner sump were excavated. The former sump was marked in the field during the building demolition. In preparation for the soil excavation, a 40-foot by 40-foot area centered over the former sump was staked and an internal 30-foot by 30-foot area was staked. Soils from grade to 4 feet deep within a square area extending from the 30-foot by 30-foot area at 4 feet deep, extending out to the 40-foot by 40-foot area at the surface, were excavated and stockpiled to the south of the excavation on polyethylene sheeting. Each bucket of soil was screened with a photoionization detection (PID) meter and also for visual or olfactory signs of contamination.

No field indicators of contamination were detected during this portion of the excavation activities. As water initially flowed into the excavation from the northwest corner during this activity, the excavation was completed last in this corner. Three grab soil samples and one composite soil sample were collected from the clean soil pile prior to the conclusion of site work on Day 1.

On Day 2, water that had collected overnight in the excavation was pumped into a temporary frac tank. The excavation of the interior 30-foot by 30-foot area was then completed. Soils excavated on Day 2 were placed on polyethylene sheeting south of the excavation. During this excavation, strong solvent odors were evident once the interior excavation area had penetrated approximately 3 to 4 feet below grade. At the 4 to 5-foot depth, dark soil staining was evident. A portion of the excavated soils from directly beneath the former sump were heavily stained, had a potent odor and PID readings, in one instance, that exceeded the instrument upper limit of 10,000 parts per million (ppm). PID readings in the removed soil generally ranged from 10 to 350 ppm.

The DEC-approved excavation limits were 30 feet by 30 feet at the surface, tapering to 15 feet by 15 feet at a depth below grade of 15 feet. The excavation was continued until these approximate dimensions were achieved, and was continued until all visual soil staining was removed and olfactory odors declined. The final excavation was measured with dimensions of 19 feet by 16.5 feet, to a depth of 15 feet below grade.

The backhoe bucket was used to collect post-excavation soil samples from each sidewall and from the excavation bottom. Samples were screened with the PID meter and all readings were zero ppm. Prior to collection of each post-excavation soil sample, the excavation bucket was washed over the polyethylene sheeting containing the contaminated soil pile with a solution of Alconox soap and water to remove all visual soils and to clean the bucket surface. Once the excavator brought soil to an accessible location on the side of the excavation, the soil inside was separated to expose a fresh surface and a sample collected into a clean, labeled, 6-ounce glass jar and sealed. All samples were placed into a thermally insulated container for transport to the analytical laboratory, accompanied by chain of custody documentation.

The excavation bottom was backfilled with eight buckets of clean No. 2 stone and a 6-inch diameter Schedule 40 PVC remediation well was installed in the hole. This well had 10 feet of slotted screen and a 5-foot riser. At that time, a friction fit cap was placed on the well. (After the excavation was completely backfilled and compacted, this well was subsequently retrofitted with a steel flush mount curb box cemented into place and a locking cap placed onto the well top.) The remainder of the excavation was backfilled with clean No. 2 stone from the bottom to approximately 5 feet below grade.

The "clean" soil was excavated from a 0 to 4 feet depth over the former sump and placed east of the excavation. This soil had been clean backfill emplaced when the building was demolished and the concrete sump excavated in the summer of 2004. Soil samples from the "clean" pile and the post-excavation soil samples from the walls and floor of the open excavation were submitted to Severn Trent Analytical Laboratory for analysis of TCL[1] and STARS[2] volatile organic compounds (VOCs) by EPA Method 8260. Severn Trent is a New York State certified analytical laboratory for the analyses performed. The results are provided in Table 1. On January 14, 2006, analytical data from Severn Trent Laboratories, Inc. was faxed to the DEC with a request for approval to backfill the soil back into the excavation. After data review by the DEC, a verbal approval to backfill this soil was received.

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[1] Target Compound List

[2] DEC Spill Technology and Remediation Series (STARS) Memo #1 – *Petroleum-Contaminated Soil Guidance Policy*, dated August 1992.

On January 17, 2005, the excavation backfill was brought to grade. The backhoe operator had previously placed clean No. 2 stone evenly through the excavation, overlain by a geo-textile fabric and covered with a thin layer of clean No. 2 stone. The "clean" soils were then placed on the excavation surface over the No. 2 stone. At the time of backfill, the "clean" soil could not be adequately compacted due to water in the excavation. This soil was allowed to settle naturally, then 1 foot of clean crusher run gravel was placed over the soil and compacted.

2.5 Post-Excavation Soil Sample Results

As required in the Work Plan, the Volunteers excavated the grossly contaminated soil beneath the former sump believed to be the main source and discharge location on the site. A comparison of the analytical data for disposed soils to post-excavation soil sampling data demonstrates a two orders of magnitude reduction at the source area, the former dry cleaner sump. During the excavation, soils were segregated into near surface soils that contained native and recent clean fill resulting from removal of the concrete sump (samples ESP-S-01 through ESP-S-06), and deeper native soils from the middle and bottom of the excavation (WSP-S-07 through WSP-S-12) that contained the most heavily impacted soils.

The concentrations of perchloroethene (PCE) in the excavation sidewalls and bottom are presented in Table 2. The PCE degradation products of trichloroethylene, 1,2-dichloroethylene and vinyl chloride were also present at significantly lower concentrations in these samples. Figure 2 shows the location of each sample. The samples confirm that the significant source contamination was removed from the site, with minor residual contamination remaining within the excavation limits.

The subsurface conditions were characterized through soil boring B-1, which was completed to 52 feet below ground surface (bgs). The presence of 5 feet of clay was identified. Soil boring B-7, completed directly over the former sump to a depth of 18 feet bgs, showed that the clay surface was encountered at a depth of 13.5 feet bgs. This boring also displayed both PID readings and split spoon soil analytical results indicating the PCE contamination declined below a depth of approximately 14 feet bgs. Specifically, B-7 documented the vertical change in PID readings, as shown in Table 3.

Concern that the underlying clay layer not be breached during the excavation, coupled with the PID and analytical data from B-7, lead to the decision to excavate only to a depth of 15 feet bgs.

As set forth above, significant chlorinated solvent contamination was found below the former sump. This soil contamination spread vertically downward from the former sump to the clay layer. It also dissolved into groundwater and moved downgradient (northward) and along utility trench gravels out toward Route 11.

The excavation was successful in removing a significant source of contamination from the site. However, residual contamination remains at this site under the former sump and in the utility pipe bedding extending from the former building out to Route 11.

3.0 POST-EXCAVATION REQUIREMENTS

Pursuant to Section 4.7 of the Work Plan, a round of groundwater samples were collected and analyzed (refer to Section 2.4 for a summary of groundwater quality). Additionally, Section 4.7 of the Work Plan required that after the investigation tasks and the remedial excavation work, the Volunteers were obligated to submit a soil vapor sampling and analysis program, as well as a sampling and analysis plan for surface soil samples. The DEC approved the Volunteers' Post-Excavation Requirements Plan on February 17, 2006. As part of the Post-Excavation Requirements Plan, Volunteers proposed to implement an Interim Remedial Measure ("IRM"), which will be discussed next.

3.1 Interim Remedial Measure – Sodium Permanganate

An IRM was implemented to attenuate off-site plume migration. A 100-foot long trench was designed and installed transverse to the groundwater flow from the former sump area and located near the northern site boundary. Figure 3 presents a schematic of the installed treatment trench.

In addition, four injection pits were constructed into the former water / sewer line bedding from the former building toward Route 11 to allow for injection of chemical oxidant into the bedding material. Site investigation determined this bedding to be a likely conduit for transport of solvents from the sump area toward the western site boundary. An estimate of the groundwater travel time through the low permeability site soils (silts) suggests that groundwater movement through this soil type is on the order of 10 feet per year. In some locations, the near surface soils are more permeable and may transmit water a much greater distance. The IRM was targeted to reduce groundwater concentrations in the plume center, thereby decreasing the overall impact on groundwater quality.

From May 2 through May 4, 2006, an injection of diluted sodium permanganate was made to a 100-foot long remedial trench and also to four injection pits installed in the sandy bedding of the former water and sewer utility piping for the former dry cleaning establishment. A total of thirteen 55-gallon drums of liquid 40% sodium permanganate was diluted and pumped into the remediation areas: ten drums into the 100-foot long remedial trench and three drums into the four injection pits. A portable 550-gallon tank was brought to the site and filled multiple times with potable water for use as a portion of the total dilution water. The trench transecting the known groundwater plume was installed south of the line formed by MW-1 through MW-3, as shown on Figure 1. The trench was excavated approximately 4 feet wide (due to wall collapse) for the approximately 25 feet at the west end, then 2 feet wide for the remaining 75 feet in length. The trench depth is approximately 8 feet. The trench was backfilled with approximately 105 tons of clean No. 2 gravel (~75 cubic yards). Four 4-inch diameter schedule 40 PVC riser pipes wrapped in filter fabric were placed into the trench at approximately 20 to 25-foot spacing during the gravel backfilling. A geo-textile filter fabric was laid over the gravel before replacing approximately 2 to 3 feet of surface soils (removed prior to trench excavation) as soil cover at the ground surface.

Soils excavated from below the water table were stockpiled on-site onto poly sheeting and covered with poly sheeting until its disposition could be established. Per STARS Memo # 1 guidance for sampling of a 50 to 100-cubic yard soil pile, one composite and two grab soil samples were collected and analyzed for TCL + STARS VOCs per EPA Method 8260. The grab sample results were non-detect (ND) for all constituents in one and 29 microgram per kilogram (μg/kg) total VOCs in the second sample. The composite sample contained 15 μg/kg total VOCs. These results were submitted to the DEC on February 1, 2006, and upon review, approval was granted by the DEC to retain this soil on-site. In a February 17, 2006 letter to the DEC, this approval was acknowledged and this soil was spread on unpaved ground at the site.

3.2 Groundwater Investigation

3.2.1 Shallow Groundwater Investigation

A total of ten on-site (nine installed plus one from a previous investigation) and three off-site shallow wells were sampled across four sampling events to evaluate both groundwater quality and the shallow groundwater flow direction. Figure 1 shows the location of all shallow groundwater monitoring wells and the latest groundwater contours based on depth measurements collected on July 18, 2006.

Well construction for all but TW-5 and RW-1 is 2-inch diameter Schedule 40 PVC casing, consisting of 0.010-slot well screen with solid riser to the ground surface. These wells are secured with locked caps inside flush mount steel curb boxes. The boring annuluses were sealed with No. 2 (or equivalent) clean sand to within approximately 1 to 2 feet of ground surface, overlain by bentonite and finished near the top 6 inches with concrete. RW-1 is a Schedule 40 PVC 6-inch diameter recovery well with 10 feet of slotted screen and 5 feet of solid riser pipe. This well is installed into clean No. 2 gravel backfilled into the excavation of the former dry cleaner sump. It has a flush mount steel curb box sealed neared the ground surface with concrete. TW-5 is a temporary 1-inch diameter Schedule 40 PCV well that sticks up above the ground surface approximately 4 feet. It has a sand pack to within approximately 1 foot of ground surface and a bentonite seal to grade.

Shallow groundwater elevation readings have been collected on the full compliment of shallow wells in November 2005, March 2006 and July 2006. The flow direction has remained steady to the northwest. There has been observed a perturbation of localized flow caused by water storage around RW-1 and in the remedial trench, both of which were backfilled with clean No. 2 gravel. However, the overall flow pattern to the northwest is evident.

3.2.2 Deep Groundwater Investigation

A total of five deep groundwater wells (MW-6D, MW-7D, MW-8D, MW-15D and MW-16D) have been installed at the site to evaluate whether free phase products penetrated the shallow aquitard located from approximately 12 to 17 feet bgs across the investigation area. The surface of a 3 to 10-foot thick clay layer aquitard encountered in site wells exists at an approximate depth range of 12 to 13 feet bgs. Below this site-wide feature, interlayered zones of more permeable sands and gravel and low permeability fine-grained silts were encountered until a densely packed till was reached at a depth range of from 48 to 56 feet bgs. Figure 4 shows the location of the deep wells and the groundwater contours from depth to groundwater measurements made on July 18, 2006.

A cased well method for installing the deep wells was used to minimize, to the extent practical, the possibility of cross contamination between aquifers. The surficial water table aquifer (contaminated with dissolved-phase site contaminants as determined by the shallow well program) was sealed off from the lower aquifer by drilling a nominal 8 to 10-inch diameter borehole with hollow stem augers (4.25 or 6.25-inch inside diameter) into the clay aquitard, as determined by employing continuous split spoon sampling methods to confirm stratigraphy. Next, a nominal 4-inch diameter steel casing was installed in the borehole and grouted into place using the auger pull-back and tremie method. The grout was allowed to set for a minimum of 24 hours prior to further drilling. The final depth of the grouted casing was approximately 15 feet. Drilling then continued until the augurs encountered till or refusal. The above method accurately describes the installation of MW-6D, MW-7D, MW-15D and MW-16D. MW-8D was stopped at a total depth of 41 feet below grade after advancement of 2 feet into a cohesive fine sand, silt and clay layer that was determined to be a likely containment layer for the contaminants of concern.

Flow direction for the deep groundwater was based only on deep wells completed into the same stratigraphic horizon, therefore excluding use of groundwater measurements in MW-8D. Flow direction based on the November 2005 measurement in three deep wells was found to be to the south-southeast in March 2006 and to the northeast in July 2006. In terms of the deep groundwater flow direction from the former sump area, in November 2005 MW-16D may be characterized as peripherally downgradient, while in July 2006 MW-6D was located directly downgradient.

The groundwater quality in the deep wells was sampled in the order of installation. Deep wells MW-6D, MW-7D and MW-8D were sampled in November 2005, and MW-15D and MW-16D were sampled in April 2006.

3.2.3 Summary of Groundwater Sampling Results

3.2.3.1 Shallow Groundwater

Shallow groundwater has been investigated through ten shallow on-site wells and three shallow off-site wells. The number of shallow wells in this investigation was expanded to investigate the entire site and to assess off-site groundwater conditions. Since excavation and disposal of source area soils from directly below the former dry cleaning sump in January 2005, on-site shallow wells have shown a downward trend in total VOCs, including CES-MW-1, MW-11, MW-2, and most dramatically, RW-1 (installed directly into the source area).MW-1, MW-2 and MW-3 are directly down gradient of the former dry cleaner sump. Among these wells, MW-2, historically the most heavily affected well outside the source area, has shown a steep decline in total VOC concentration. PCE degradation processes are reducing its concentrations, as demonstrated by the declining trend shown below. Additionally, in MW-11, where PCE and TCE concentrations have been below detection limits, a downward trend in 1,2-DCE concentration is evident.

Well	11/15/05 (µg/l)	07/18/06 (µg/l)	09/13/06 (µg/l)	Compound
MW-2	1,900	560	410	PCE
MW-3	86	11	25	PCE
TW-5	320	200	160	PCE
MW-11	250	150	120	1,2-DCE

The IRM performed at this site was targeted to attenuate the plume center in conjunction with the source area removal. Together the IRM and source area removal have severed the downgradient shallow plume from its source. Table 4 presents an historical summary of total VOC groundwater quality. Table 5 presents individual results from all well sampling events.

3.2.3.2 Deep Groundwater

Analytical results from samples from each of the five deep groundwater wells indicate no free phase dense non-aqueous phase liquid (DNAPL) exists below the aquitard layer in the deep acquifer. Three wells had non-detectable levels of VOCs (MW-6D, MW-7D and MW-16D). Two deep wells (MW-8D and MW-15D) contained low concentrations of VOCs: the three compounds detected in MW-8D were at or below the State Standard for each compound, while MW-15D contained one compound (PCE) above the 5 micrograms per liter (µg/l) State Standard at a concentration of 13 µg/l. However, re-sampling of MW-15D showed a concentration of 1.7 µg/l for PCE.

In summary, while groundwater monitoring of the five deep wells did show one compound above the State Standard in one test, subsequent re-testing of this well showed the concentration to be well below the State Standard. This data clearly demonstrates that no significant release of DNAPL to the deep aquifer occurred and that the trace quantities of contaminants in the deep aquifer do not warrant further action.

3.3 Soil Vapor Results

Pursuant to the Post-Excavations Requirements Plan, two rounds of soil gas vapor sampling were conducted. First, a round of samples was collected on November 15, 2005 in ten soil vapor points across the Site. Additional sampling was then conducted on the adjacent property, Dunn Tire, as requested by the DEC. This sampling required installation of two soil vapor points through the floor of the Dunn Tire building. During the sample round conducted on March 18 and 19, 2006 while the business was closed, three additional vapor samples were also collected, including one outdoor ambient and two indoor air samples.

3.3.1 Site Soil Gas Vapor

In November 2005, ten soil vapor sampling points were installed at the site in accordance with the Draft DOH February 2005 Guidance Policy for Evaluating Soil Vapor Intrusion in the State of New York (DOH guidelines). Parratt-Wolff, Inc. installed these points using a Geo-Probe™ track-mounted drilling rig. A stainless steel well point was installed in each hole, the annulus filled with glass beads and a flush mount steel curb box cemented into place. Site soil vapor sampling was performed on November 15, 2005 at ten soil vapor points. Sampling was performed in accordance with DOH guidelines.

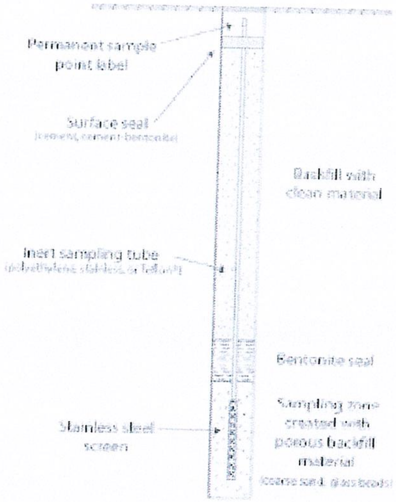
A leak test was performed by inverting a stainless steel dome over the vapor point and sealing its perimeter with modeling clay. The soil vapor point was then purged of stagnant gases using a peristaltic pump for 30 seconds. The dome is fitted with two connector valves: one is used to release helium under the dome and the second is connected to a helium analyzer outside the dome and inside the dome to the tubing for the soil gas vapor point. A pressurized one-liter summa canister of helium gas is used to release helium under the dome while simultaneously the helium detector is collecting and analyzing gas pulled from the vapor point for helium. A successful leak test results in less than or equal to a 20% helium concentration from the soil gas vapor point. All soil gas vapor points passed this leak test (i.e. helium concentrations below 20% in soil gas).

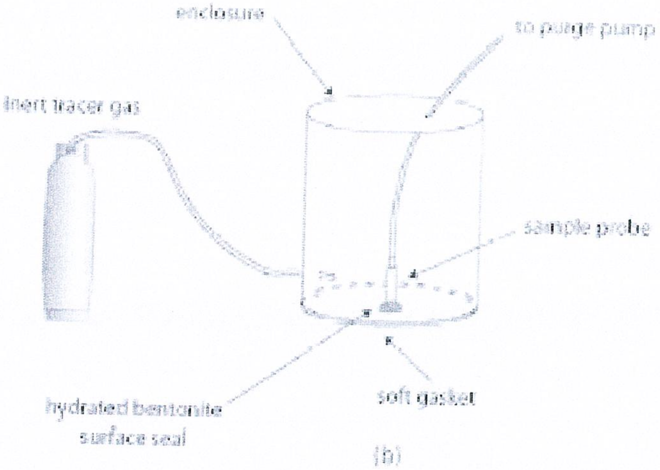
Based on successful leak testing, the vapor points were deemed suitably constructed and sealed for soil gas vapor sampling. Each point was connected to the dome valve for an 8-hour time weighted sampling of soil gases into a vacuum summa canister equipped with a vacuum gauge. Centek Laboratories, LLC in Syracuse, New York analyzed the summa canisters for VOC content by EPA Method T-015. Site soil vapor sampling results are presented in Table 6.

3.3.2 Dunn Tire Soil Gas Sampling

Two soil vapor sampling points were installed on March 7, 2006 in the Dunn Tire building to depths of 14 to 16 inches below the concrete slab. The construction of the soil vapor sampling points consisted of the installation of GeoProbe™ sampling points in accordance with DOH guidance. Two sub-slab sampling points were installed in the Dunn Tire facility at depths between 14 and 16 inches below the concrete slab. The construction included a stainless steel well point, glass beads and a bentonite seal. These points are inside the building and finished with flush mount steel protective casing with screw covers. A round of sub-slab soil vapor and indoor air quality monitoring was conducted from March 18 to 19, 2006. Two indoor air samples were collected from inside the Dunn Tire facility and one outdoor air sample was collected.

Each of the sub-slab sampling points was purged for 30 seconds with a peristaltic sampling pump to remove "stagnant" air from the sampling location. This pump was set at a flow rate of approximately 1 liter per minute, purging an estimated 0.5 liters from each sampling point. Each sampling location was checked for gross short-circuiting by injecting 1 liter of helium gas into a 4-liter stainless enclosure obtained from the laboratory. A Restec Catalogue No. 22451 helium leak detector was utilized to check for leaks in accordance with the procedures outlined in the Draft DOH Soil Vapor Guidance Policy mentioned above. No soil vapor sampling location exceeded 10% helium during the field testing, indicating the construction of the soil vapor sampling points was adequately limiting short-circuiting to the atmosphere. A schematic of the soil vapor sampling point construction and the field-constructed leak test appear below:

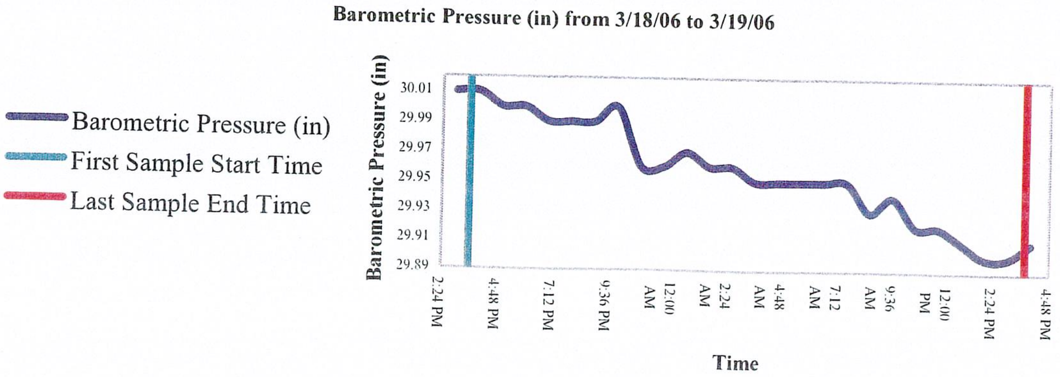




(b)

As set forth in the Post-Excavation Requirements Plan, 1-liter Summa™ canisters were selected for the soil vapor sampling. The sampling rate of the Summa™ canisters was preset at the laboratory for an 8-hour sampling period, resulting in a flow rate of 0.002 liters per minute. The Summa™ canister at location SVE-2 was 1.4-liters to allow for the collection of matrix spike and matrix spike duplicate (MS/MSD) samples. The regulator for this sampling location was preset at the laboratory for an 8-hour sampling period, resulting in a flow rate of 0.003 liters per minute. Both regulator settings are below the DOH specified flow rate of 0.2 liters per minute.

Barometric pressure for the sampling period was tracked and appears on the chart below. Collection of the first sample began at 3:35 p.m. on March 18, 2006 and collection of the last sample ceased at approximately 3:55 p.m. on March 19, 2006. As can be seen on the chart, the majority of this sampling interval coincides with a period of falling barometric pressure.



As previously stated, this sampling period was selected to optimize the soil vapor sampling, as the soil vapor mobility would be toward the atmosphere and there is less likelihood of short-circuiting directly to atmosphere during sample collection.

A total of five samples were collected during the sub-slab soil vapor investigation activities conducted on March 18 and 19, 2006. All vapor samples were submitted to Centek Laboratories, LLC for analysis of VOCs per EPA Method TO-15. The analytical results are summarized as follows:

- *SV-1 (sub-slab soil vapor sample, office area):* The total VOC concentration detected at this location was 7,634 micrograms per cubic meter (µg/m³). Twenty-six VOCs were detected in the sub-slab soil vapor sample collected at this location. The site COC PCE was detected at this location at a concentration below its NYSDOH draft guidelines of 100 µg/m³. The TCE concentration detected at this location (29.5µg/m³) exceeded its NYSDOH draft guidelines of 5µg/m³. A concentration of 6.3% tracer gas was detected at this soil vapor sampling location during the field testing.

- *SV-2 (sub-slab soil vapor sample, shop area):* The total VOC concentration detected at this location was 18,485µg/m³. Twenty-four VOCs were detected in the sub-slab soil vapor sample collected at this location. The site COC PCE was detected at this location at a concentration below its NYSDOH draft guidelines of 100 µg/m³. The TCE concentration detected at this location (33.3 µg/m³) exceeded its NYSDOH draft guidelines of 5µg/m³. A concentration of 9.5% tracer gas was detected at this soil vapor sampling location during the field testing.

- *IA-1 (indoor air sample, office area):* The total VOC concentration detected at this location was 195 µg/m³. Twenty-six VOCs were detected in the indoor air sample collected at this location. The site COCs PCE and TCE were detected at this location at concentrations below their respective NYSDOH draft guidelines.

PID scans in this vicinity indicated a peak VOC concentration of 160 parts per billion (ppb).

- *IA-2 (indoor air sample, shop area):* The total VOC concentration detected at this location was 314 µg/m^3. Twenty-four VOCs were detected in the soil vapor sample collected at this location. The site COCs PCE and TCE were detected at this location at concentrations below their respective NYSDOH draft guidelines. PID scans in this vicinity were negative (0 ppb VOC concentration), though a strong odor associated with the tires was observed.

- *OA-1 (outdoor air, at Dunn/Northstar boundary):* The total VOC concentration detected at this location was 37 µg/m^3. Twelve VOCs were detected in the soil vapor sample collected at this location. No site COCs (PCE, TCE, DCE and VC) were detected at this location. PID scans in this vicinity were negative (0 ppb VOC concentration), and no odors were observed.

During the PID sweep, a shop employee was observed to have applied aftershave/cologne that resulted in PID readings near the facility bathroom as high as 160 ppb. The DOH reviewed this data and in its May 19, 2006 correspondence, concluded that contaminants of concern do not appear to be penetrating the Dunn Tire by citing that indoor air quality that is above background is directly attributable to chemicals in products used and stored at Dunn Tire. The indoor air quality is subject to the Occupational Safety and Health Agency (OSHA) exposure standards and the concentrations are below the OSHA exposure limits, indicating no further action is required.

Refer to Figure 1 for soil vapor sampling locations, and Table 7 and the Laboratory Analytical Results for additional information.

3.4 Surface Soil Sampling

Pursuant to Section 3.8 of the Work Plan, surface soil samples were required in the vicinity of the dry cleaning facility that will not be paved. As set forth in a proposed site development plan provided by Widewaters Property Development Company through their attorney on December 5, 2005, the Site is proposed to be developed with a significant amount of paving. The Volunteer proposed soil samples in areas that will not be paved, which locations were approved by the DEC on June 6, 2006. The sample locations are shown on Figure 6. The DEC reviewed and approved the May 25, 2006 letter indicating these samples would be analyzed for the eight RCRA metals and TCL VOCs by EPA Method 8260. These samples were submitted to Life Science Laboratories (LSL) for analysis. Due to quality control variances, these samples were reanalyzed (within the EPA allowable holding time) by LSL for specific analytes. The metal results do not indicate any unusual metals concentrations in the surface soils. All VOC compounds were below the method limit of detection. Table 8 contains a summary of analytical metal and VOC results.

4.0 NATURE AND EXTENT OF CONTAMINATION

4.1 Standards, Criteria and Guidance

Pursuant to Section 3.2 of the Work Plan, the following guidance or regulatory criteria will be used to evaluate the analytical results obtained from the investigation activities:

Soil	DEC Technical Administrative Guidance Memorandum (TAGM) No. 4046, *Determination of Soil Cleanup Objectives and Cleanup Levels*, dated January 1994 and revised April 10, 2001.
Groundwater	DEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1, *Ambient Water Quality Standards and Guidance Values*, dated June 1998 and 6NYCRR Part 703 – Groundwater Quality Standards, dated June 1998.

4.2 Chemicals of Concern

A review of the historical information and available soil and groundwater analytical data from prior investigations in the area was completed to identify the chemicals of concern (COCs) for this Site. The primary COCs are the halogenated VOCs associated with dry cleaning.

Halogenated VOCs: Sampling and analysis data from prior site investigation work demonstrated the presence of halogenated VOCs in soil and groundwater. The following halogenated VOCs have been shown to be the primary site COCs:

- 1,1-dichloroethane
- 1,1-dichloroethene
- c-1,2-dichloroethene
- 1,4-dichlorobenzene
- chloroethane
- methylene chloride
- chloroform (trichloromethane)
- t-1,2-dichloroethene
- tetrachloroethylene
- trichloroethene
- vinyl chloride

The investigation work performed to implement the Work Plan confirmed this designation.

Petroleum VOCs: None of the historical research provided evidence that petroleum VOC products were an integral part of the former dry cleaning operation. However, these compounds had historical use in the industry and prior sampling and analysis data for soil and groundwater from the Site revealed the presence of petroleum VOCs. Therefore, the following were identified as "secondary" COCs.

- Benzene
- 1,3,5-trimethylbenzene
- 1,2,4-trimethylbenzene
- ethylbenzene
- m&p-xylene
- o-xylene
- toluene

The investigation work performed in implementing the Work Plan confirmed this designation.

MTBE: MTBE was not proposed as a COC, but was requested by the DEC to be on the list. Analysis for MTBE was included in site analyses.

SVOCs: SVOCs were not proposed as COCs, since none had been detected in the area of the dry cleaning building on the Site. However, SVOC analyses were included for five deep groundwater monitoring wells with the results that all wells were non-detect for all SVOC constituents.

4.3 Contaminant Fate and Transport Characteristics

As discussed in Section 3.1.2 of the Work Plan, the fate and transport properties of the site COCs chemical classes were briefly generalized in order to evaluate their expected potential occurrence at the Site, which was confirmed as part of the Work Plan. The following is a general summary.

Halogenated VOCs: The general chemical properties for the most prevalent halogenated VOCs are summarized as follows:

- The compounds have specific densities greater than water.
- The compounds have moderate to high vapor pressures and are considered volatile.

- The compounds are moderately soluble in water.

- Vapor densities for these compounds are greater than that of air.

- Sorption coefficient data suggests these compounds are not highly sorptive to soil.

- The physical properties of the site contaminants suggest they partition readily into the groundwater and soil vapor phases.

Petroleum VOCs: These compounds tend to have relatively high values of solubility in water and are more easily leached in the soil column. Their relatively high vapor pressures tend to increase their occurrence in the vapor phase.

4.4 Extent of Contamination Remaining at the Site

Groundwater contaminants are PCE and degradation products, primarily trichloroethylene, 1,2-dichloroethylene and vinyl chloride. Other chlorinated degradation products are present but at significantly lower concentrations than the compounds listed above. In addition, traces of MTBE occur in several wells in concentrations at or below the Technical and Operational Guidance Series (TOGS 1.1.1) threshold of 10 μg/l.

Based on a network of on and off-site groundwater monitoring wells, groundwater contamination remaining at the site exists within a groundwater plume extending from the former sump area to the north-northwest. This plume extends onto the Dunn Tire site to the north. Groundwater contamination also moved linearly along the former water-sewer utility bedding out toward Route 11. There has been minor migration of groundwater contaminants to the west toward MW-10, but the concentrations are one to two orders of magnitude lower in this well than in the plume center.

The plume boundary extends from the former sump north to under the Dunn Tire building, but does not emerge on the north side of Dunn Tire. The plume curves westward to MW-14 on the west side of Dunn Tire and wraps back southeastward toward the former dry cleaner sump. The extension along the former utility bedding reaches outside the primary groundwater plume to MW-11.

Since the removal of soils from the source area in January 2005, groundwater in RW-1 (installed in the source area during backfill operations) has declined from 164.8 ppm to a high of 0.050 ppm in three post excavation samples collected over an eight month time period. The remnant groundwater plume north of the former source area extends onto the adjacent site, but shows a declining trend in wells including CES-MW-1, MW-2, TW-5, and MW-11.

5.0 QUALITATIVE HUMAN HEALTH EXPOSURE ASSESSMENT

Based on the information obtained from the investigation, a qualitative human health exposure assessment (EA) for the Site has been completed. The purpose of the assessment was to qualitatively determine the route, intensity, frequency and duration of potential human exposures to the COCs. The assessment evaluates the exposure setting (site characteristics), characterizes fate and transport properties of the COCs, and identifies the elements of exposure pathways that could lead to potential human health exposures. The EA includes characterizing exposed populations, if any.

An exposure pathway describes how exposure to a site contaminant may occur. The five elements of an exposure pathway include: 1) a contaminant source, 2) contaminant release and transport mechanisms, 3) a point of exposure, 4) a route of exposure and 5) a receptor population. Release and transport mechanisms are the way the contaminant may be brought into contact with a receptor. The point of exposure is the location where exposure may occur. An exposure route is the manner in which the contaminant can enter the receptor body (inhalation, dermal absorption, ingestion or penetration). The receptor population is the group likely to be exposed at the point of exposure.

It has been demonstrated that PCE and its degradation products and a trace quantity of petroleum solvents exist at this Site. These contaminants, however, pose no risk to humans if one or more of the five exposure pathway elements do not exist.

This Site will be served by municipal water and sewer utilities. Any structure used for human occupancy will have a sub-slab depressurization system installed to alleviate any residual risk due to vapor instrusion potential. Pursuant to Section 4.8 of the Work Plan, this EA focuses on future commercial site use, and considers the potential for impact to construction workers during site development.

5.1 Exposure Setting

The potential exposure setting at this Site is directly related to proposed land use for the subject site. The likely commercial use of the property will be commercial retail or restaurant establishment, and the Site will contain a Declaration of Covenants and Restrictions, which will limit the use of the Site to commercial / industrial uses. Based on the proposed plans for the Site, the bulk of the site would be covered with either a slab on grade building or paved parking area. There will be little vegetative ground cover with exception of near building landscaping and a small portion of the site perimeter with turf or other vegetative ground cover.

5.2 Potential Exposure Pathways

An exposure assessment considers the following five elements of an exposure pathway:

- Contaminant sources.
- Contaminant source release and transport (migration) pathways.
- An exposure point (location or area where contacts can occur).
- An exposure route ("uptake" mechanism, i.e. ingestion).
- A receptor population.

An exposure pathway is complete when all five elements are present and documented. An exposure pathway can be eliminated if any one of the five elements does not exist in the past, present or future conditions. A potential exposure pathway exists if any one of the five elements comprising an exposure pathway is not documented. Each element of an exposure pathway is discussed below.

5.2.1 Contaminant Source

The likely contaminant source would be volatilization from groundwater, but could also be volatilization as contaminants desorb from soil. The site has been shown to contain PCE and its daughter products, primarily trichloroethylene, 1,1-dichloroethylene, or vinyl chloride. There are additional chlorinated ethenes and ethanes that can be formed from degradation of PCE, but in much smaller proportion to the dominant species found. This source is residual after the soil excavation performed in January 2005.

5.2.2 Contaminant Release and Transport Mechanisms

The contaminant release mechanism to groundwater is either desorption from soil particles and advective transport downgradient with groundwater flow, or to a much lesser degree, molecular dispersion in all directions. As the site investigation concluded that the source area was removed and no free phase DNAPL exists in the shallow or deep environment, the source of contaminants available for transport is residual contamination in the subsurface. Another release and transport mechanism is volatilization of contaminants into the soil vadose zone and transport as a gas either to atmosphere or into a structure through its foundation.

5.2.3 Exposure Points

Exposure points are the locations where exposure to contaminants might occur. The most likely exposure point is inside the commercial structure erected at the site. A secondary exposure point would be in areas of excavation during site development or repair to subterranean utilities.

5.2.4 Exposure Routes

Exposure routes for the COCs are inhalation and dermal absorption. All of the COCs are volatile and capable of penetrating through the skin if contact with affected soil is made and remains over a moderate time period.

5.2.5 Receptor Population

The receptor populations are workers and customers of the commercial establishment, and construction and utility repair workers performing construction or repair services within the designated soil zone (refer to Soil Management Plan).

A summary of EA elements evaluated for these contaminants is presented in Tables 5A through 5E below.

Table 5A - Release and Transport Mechanisms

Receiving Medium	Pathway	Release Sources
Air	• Vapor migration from contaminated subsurface soil and groundwater into buildings and to outdoor locations.	• Surface soils • Shallow groundwater plume • Subsurface soils
Groundwater	• Downgradient migration of contaminated groundwater to off-site areas.	• Subsurface soils

This EA considered direct contact with contaminants by potential receptors. Direct contact exposure may result from contacting contaminants at their source location.

Table 5B – Exposure Points

Contaminated Medium	Points of Exposure
Subsurface Soils / Groundwater	During Construction Activities: • Contact with affected medium within affected soil management zone during site excavation or significant grading activities.
Groundwater	• Vapor intrusion inside future commercial building.

Table 5C – Exposure Routes

Residual Contaminated Medium	Routes of Exposure
Subsurface Soil	Dermal absorption, inhalation
Groundwater	Ingestion, Inhalation, Dermal absorption

Table 5D – Receptor Population

Land Use and Population Analysis		
Conditions	**Description**	**Activity Analysis**
Land Uses	• Site is zoned for commercial use.	• Current and expected future conditions.
	• Land to the east, west, and south is under commercial use.	• Current and expected future conditions.
Potential Receptor Populations Relative to Site	On-Site future use: • Indoor commercial workers / customers.	• Current and expected future conditions. • Standard work day/ week schedules.
	• Construction workers (indoors and outdoors).	• Occasional activities; current and expected future conditions.

Table 5E – Summary of Conceptual Exposure Analysis completes the EA. This table indicates the completed pathways for exposure to site contaminants and recommends action to mitigate these pathways. Potentially completed exposure pathways to site contaminants are limited to subsurface excavation activities. A Soil Management Plan, engineering and institutional controls are proposed to mitigate these pathways.

Table 5E – Summary of Conceptual Exposure Scenario Analyses

Potentially Exposed Population	Exposure Route, Medium and Exposure Point	Pathway Complete?	Reason for Selection or Non-Selection	Exposure Risk	Action
On-Site Construction Worker	Ingestion of groundwater	No	Municipal water supply serves area.	NA	NA
	Inhalation of volatiles from subsurface soils	Yes	Incidental exposure during excavation activities.	Minimal**	Soil Mgmt Plan
	Inhalation of volatiles from shallow groundwater	Yes	Incidental exposure during excavation activities.	Minimal**	Soil Mgmt Plan
	Dermal contact with shallow groundwater	Yes	Exposure during excavation activities.	Minimal *	Soil Mgmt Plan
	Dermal contact with subsurface soils	Yes	Exposure during excavation activities.	Minimal **	Soil Mgmt Plan

Table 5E – Summary of Conceptual Exposure Scenario Analyses (Continued)

Potentially Exposed Population	Exposure Route, Medium and Exposure Point	Pathway Complete?	Reason for Selection or Non-Selection	Exposure Risk	Action
On-Site Future Worker	Ingestion of groundwater	No	Municipal water supply serves area.	NA	NA
	Inhalation of volatiles from subsurface soils	No	New building to have sub-slab depressurization system.	NA	NA
	Inhalation of volatiles from shallow groundwater	No	New building to have sub-slab depressurization system.	NA	NA
	Dermal contact / ingestion of shallow groundwater	No	Municipal water supply.	NA	NA
	Dermal contact with surficial soils	No	No exposure - majority of site is to be paved / landscaped / covered by site structure	NA	NA
	Dermal contact with subsurface soils	No	No exposure - majority of site is to be paved / landscaped / covered by site structure	NA	NA
Off-Site Construction Worker	Inhalation of volatiles from shallow groundwater	Yes	Incidental exposure during excavation activities.	Minimal	Soil Mgmt Plan
	Dermal contact with shallow groundwater	Yes	Exposure during excavation activities.	Minimal *	Soil Mgmt Plan

Notes:

* Groundwater contaminant concentrations of 1 ppm or less indicate minimal risk to human health from incidental dermal contact.

** Soil is impacted within designated Site zone. Remedial excavation / controlled management of soil disturbance during site redevelopment will minimize exposure.

NA Not Applicable

Unless otherwise noted, rationale applies to both current and future conditions.

6.0 SITE USE: RESTRICTED COMMERCIAL / INDUSTRIAL

The Declaration of Covenants and Restrictions will limit the use of the Site to restricted commercial/industrial use. The Town of Cicero currently zones the site for regional commercial use. The Declaration of Covenants will prohibit use or discharge of groundwater and will require soil be managed in accordance with the Soil Management Plan. A sub-slab depressurization (SSD) system will be required to be installed in renovated or newly constructed structures intended for human occupation at this Site.

7.0 SITE REMEDY

The remedy for this site was selected based on the information obtained throughout the course of the site characterization that included an extensive investigation of the shallow groundwater quality, surficial soil analyses, review of historical site investigations, a remedial excavation and an IRM. The crucial action was the remedial excavation that removed the bulk of the site contamination under the former dry cleaner sump. A residual groundwater plume exists that was targeted for localized interruption by the IRM. Based on the groundwater data, a trend has emerged for declining groundwater concentrations. The IRM was intended to accelerate this decline by targeting the plume center to reduce its downgradient impact. The primary issue related to this Site is soil vapor intrusion, however, this issue will be addressed through engineering controls. The nature of chlorinated solvent impact requires that engineering controls be implemented as a precaution to eliminate a potential exposure pathway.

7.1 Monitored Natural Attenuation

In conjunction with the source removal completed and the IRM, the proposed remedy for additional environmental improvement at this site is monitored natural attenuation. The primary source area was removed in January 2005 and three quarterly samples collected from RW-1 installed in the former sump area have shown VOC concentrations of 50 ppb or less in comparison to a pre-excavation concentration of 164,800 ppb (164.8 ppm).

7.2 Overall Protectiveness of Public Health and Environment

The proposed remedy has included in a source area removal that left residual contamination and an IRM that impeded the groundwater plume. These actions, coupled with Declaration of Covenants and Restrictions, will prevent completion of all potential public health exposure pathways. The remedy is therefore protective of public health and represents a significant improvement of the initial site conditions.

7.3 Short-Term Effectiveness and Impact

In the short term, groundwater concentrations remain above the State guideline concentrations, but are shown to be declining due to source area removal completed in January 2005 and active impedance of plume migration and limited reduction through the IRM. The impact observed is a declining groundwater concentration trend.

7.4 Long-Term Effectiveness and Permanence

The proposed remedy will produce a continued improvement of site conditions. The remedy protects human health through institutional and engineering controls, but is anticipated in the long term to stand alone to render the site to a minimal health concern even for subsurface excavation. Analytical results from samples of the soils excavated to construct the remedial trench for the IRM illustrate this point. In the fall of 2005, soils excavated from within the groundwater plume were shown to contain a maximum of 29 μg/kg of total VOCs. The plume itself has shown decreasing concentrations. In the 20 months since excavation of the source area, these concentrations have decreased, not precipitously, but rather more slowly. This scenario is consistent with decay of a plume severed from an ongoing source and one less likely to present a significant rebound in concentrations over the long term.

7.5 Reduction of Toxicity, Mobility or Volume

The residual compounds present on the site retain their toxicity and mobility. Over the near term, degradation of the chlorinated solvents can produce daughter products of varying toxicity. The primary improvement results from reduced contaminant volume. This was accomplished in two actions: the source area removal that excavated and disposed of approximately 180 to 200 cubic yards of impacted soil from directly beneath the release point and the IRM. Also, the IRM established a temporary barrier wall to prohibit plume migration of dissolved residual and also to reduce contaminant mass that had migrated along the former water/sewer utility bedding. Based on data gathered to date, the plume is in decay.

7.6 Implementability

The proposed remedy is implementable in that the source area excavation was completed in January 2005 and an IRM was performed in May 2006. The Operations, Maintenance and

Monitoring Plan requires that eight consecutive quarters of groundwater samples be collected and analyzed to demonstrate that the plume continues its decline. At the conclusion of the quarterly groundwater monitoring, a summary report shall be prepared that draws conclusions on the progress toward site improvement and will include recommendation for future actions on the basis of the data.

8.0 NO NEED FOR FURTHER REMEDIATION

The activities completed to date support the issuance of the Release and Covenant Not to Sue pursuant to the Voluntary Cleanup Agreement.

Site No. V-00150-7
VCA No. A7-0466-0702
Town of Cicero, Onondaga County, New York

TABLE 1 - POST EXCAVATION SOIL SAMPLING RESULTS - SIDEWALLS AND BOTTOM

Sample ID	PCE Concentration (mg/kg)
E-1 North Wall	4.000
E-2 East Wall	0.097
E-3 South Wall	0.008
E-4 West Wall	4.500
E-5 Bottom	21.000

Site No. V-00150-7
VCA No. A7-0466-0702
Town of Cicero, Onondaga County, New York

TABLE 2 - ANALYTICAL RESULTS - SUMP SOIL DISPOSAL

Sump Soil Disposal			
Sample ID	**PCE Concentration (mg/kg)**	**Sample ID**	**PCE Concentration (mg/kg)**
ESP-S-01	53	WSP-S-07	200
ESP-S-02	5	WSP-S-08	170
ESP-S-03	20	WSP-S-09	0.07
ESP-S-04	10	WSP-S-10	1,300
ESP-S-05	24	WSP-S-11	350
ESP-S-06	11	WSP-S-12	88

Site No. V-00150-7
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Town of Cicero, Onondaga County, New York

TABLE 3 - BORING B-7 PID READINGS / ANALYTICAL RESULTS SUMMARY

Sample Date: July 16, 2004

Matrix: Soil

Soil Boring B-7				
Depth Below Ground (ft)	**PID Reading (ppm)**	**Total VOCs (ppm)**	**Sample ID**	**Notes**
0 to 2	0			
2 to 4	49			
4 to 6	111	500	SB-7 (4-6)	
6 to 8	39			
8 to 10	41			
10 to 12	50	14	SB-7 (10-12)	
12 to 14	185	622	SB-7 (12-14)	Top of clay at 13.5 feet bgs.
14 to 16	17			Bottom of excavation at 15 feet bgs.
16 to 18	8	9.2	SB-7 (16-18)	Bottom of clay extrapolated from B-1 to be at 18.5 feet, boring B 7 sealed after completion. Temporary monitoring well TW-4 installed adjacent to 12-foot depth.

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TABLE 4 - SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS - TOTAL VOCS

MONITORING INFORMATION		MONITORING WELL								
ANALYTICAL METHOD	SAMPLING DATE	CES-MW-1	CES-MW-2	MW-1	MW-2	MW-3	MW-4	TW-5	MW-6D	MW-7D
		Total Compound Concentration (µg/L)								
EPA 8260 (TCL)	07/26/04	207	5	560	2,960	247	ND	1,162	NI	NI
EPA 8260 (TCL/STARS)	11/15/05	52	NS	295	3,115	522	ND	36	ND	ND
EPA 8260 (TCL)	05/02/06	147	NS	664	1,069	261	NS	980	NS	NS
EPA 8260 (TCL)	07/18/06	118	NS	NS	NS	NS	NS	725	NS	NS
EPA 8260 (TCL)	09/13/06	22	NS	NS	1,374	254	NS	890	NS	NS

MONITORING INFORMATION		MONITORING WELL								
ANALYTICAL METHOD	SAMPLING DATE	MW-8D	MW-9	MW-10	MW-11 **	MW-12	MW-13	MW-14	MW-15D	RW-1 *
		Total Compound Concentration (µg/L)								
EPA 8260 (TCL)	07/26/04	NI	NI	NI	1,198	NI	NI	NI	NI	164,800
EPA 8260 (TCL/STARS)	11/15/05	18	4	82	315	1,081	2	115	13	8
EPA 8260 (TCL)	05/11/06	NS	NS	NS	NS	NS	NS	NS	NS	28
EPA 8260 (TCL)	07/18/06	NS	NS	NS	191	1410	3	820	NS	50
EPA 8260 (TCL)	09/13/06	NS	NS	NS	151	NS	NS	NS	NS	NS

Notes:

NI	Not installed
NS	Not sampled
µg/L	micrograms per liter, equivalent to parts per billion (ppb)

* RW-1 installed into former sump after soil excavation to replace TW-4 installed into sump prior to soil excavation

** 07/26/04 data shown for MW-11 was collected from Test Pit 3-A/3-B as a grab water sample, MW-11 was installed wtihin a few feet of these Test Pits.

Site No. V-00150-7
VCA No. A7-0466-0702
Town of Cicero, Onondaga County, New York

TABLE 5 - GROUNDWATER SAMPLES - TCL and STARS VOCs

Date Sampled: As Shown

Matrix: Groundwater

Compound	State Standard[1] (µg/L)	Monitoring Well Location			
		CES-MW-1	CES-MW-1	CES-MW-1	CES-MW-1
		11/15/05	05/02/06	07/18/06	09/13/06
		Compound Concentration (µg/L)			
1,1,1-Trichloroethane (1,1,1-TCA)	5	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	1	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	5	ND	ND	ND	ND
1,1-Dichloroethene (1,1-DCE)	5	ND	1	ND	ND
1,2,4-Trichlorobenzene	5	ND	NA	NA	ND
1,2-Dichloroethane (1,2-DCA)	0.6	ND	ND	ND	ND
1,2-Dichloroethene (total) (1,2-DCE)	5	***25***	***72***	***33***	***7***
1,2-Dichloropropane	1	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	NA	NA	ND
2-Butanone (MEK)	50	ND	ND	ND	ND
2-Hexanone	50	ND	ND	ND	ND
4-Isopropyltoluene (cymene)	5	ND	NA	NA	ND
4-Methyl-2-Pentanone (MIBK)	---	ND	ND	ND	ND
Acetone	50	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND
Carbon Disulfide	60	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND
Chloromethane (methyl chloride)	5	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4*	ND	ND	ND	ND
Dibromochloromethane	50	ND	ND	ND	ND
Ethyl Benzene	5	ND	ND	ND	ND
Isopropylbenzene (Cumene)	5	ND	NA	NA	ND
Methyl tert-butyl Ether (MTBE)	10	ND	NA	NA	ND
Methylene Chloride	5	ND	ND	ND	ND
Naphthalene	10	ND	NA	NA	ND
n-Butylbenzene	5	ND	NA	NA	ND
n-Propylbenzene	5	ND	NA	NA	ND
sec-Butylbenzene	5	ND	NA	NA	ND
Styrene	5	ND	ND	ND	ND
tert-Butyl Alcohol (TBA)	---	ND	NA	NA	ND
tert-Butylbenzene	5	ND	NA	NA	ND
Tetrachloroethene (PCE)	5	ND	2	2	ND
Toluene	5	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4*	ND	ND	ND	ND
Trichloroethene (TCE)	5	ND	***17***	2	ND
Vinyl Chloride	2	***27***	***55***	***82***	***15***
Xylenes (total)	5*	ND	ND	ND	ND
Total VOCs	---	52	147	118	22

Notes:

[1] State standard is in reference to the NYSDEC Division of Water's Technical and Operational Guidance Series (TOGS) (1.1.1), Ambient Water *Quality Standards* and Guidance Values, reissued June 1998.

VOC analysis per EPA Method 8260

µg/L	micrograms per liter (equivalent to parts per billion, ppb)
ND	Not detected at cocnentration greater than laboratory method detection limit
NA	Analysis for STARS LIST compound not requested
---	No promulgated State Standard

Compounds that exceeded State Standards are denoted in ***BOLD***

0.4*	Applies to the sum of cis- and trans-1,3-dichloropropene
5*	Applies to the sum of xylene isomers (o-, m- and p-isomers)
J	Indicates an estimated value.
D	Reported value is from the dilution run.
NJ	Tentative identified estimated concentration

TABLE 5 - GROUNDWATER SAMPLES - TCL and STARS VOCs

Date Sampled: As Shown

Matrix: Groundwater

Compound	**State Standard[1] (µg/L)**	**Monitoring Well Location**				
		MW-1	**MW-1**	**MW-2**	**MW-2**	**MW-2**
		11/15/05	**05/02/06**	**11/15/05**	**05/02/06**	**09/13/06**
		Compound Concentration (µg/L)				
1,1,1-Trichloroethane (1,1,1-TCA)	**5**	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	**5**	ND	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	**1**	ND	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	**5**	ND	ND	ND	ND	ND
1,1-Dichloroethene (1,1-DCE)	**5**	ND	ND	1	ND	ND
1,2,4-Trichlorobenzene	**5**	ND	NA	ND	NA	ND
1,2-Dichloroethane (1,2-DCA)	**0.6**	ND	ND	ND	ND	ND
1,2-Dichloroethene (total) (1,2-DCE)	**5**	***67***	***190***	***472***	***240***	***640***
1,2-Dichloropropane	**1**	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**5**	ND	NA	ND	NA	ND
2-Butanone (MEK)	**50**	ND	ND	ND	ND	ND
2-Hexanone	**50**	ND	ND	ND	ND	ND
4-Isopropyltoluene (cymene)	**5**	ND	NA	ND	NA	ND
4-Methyl-2-Pentanone (MIBK)	**---**	ND	ND	ND	ND	ND
Acetone	**50**	ND	ND	ND	ND	ND
Benzene	**1**	ND	ND	ND	ND	ND
Bromodichloromethane	**50**	ND	ND	ND	ND	ND
Bromoform	**50**	ND	ND	ND	ND	ND
Bromomethane	**5**	ND	ND	ND	ND	ND
Carbon Disulfide	**60**	ND	ND	ND	ND	ND
Carbon Tetrachloride	**5**	ND	ND	ND	ND	ND
Chlorobenzene	**5**	ND	ND	ND	ND	ND
Chloroethane	**5**	1 J	ND	1 J	ND	ND
Chloroform	**7**	ND	ND	ND	ND	ND
Chloromethane (methyl chloride)	**5**	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	**0.4***	ND	ND	ND	ND	ND
Dibromochloromethane	**50**	ND	ND	ND	ND	ND
Ethyl Benzene	**5**	ND	ND	ND	ND	ND
Isopropylbenzene (Cumene)	**5**	ND	NA	ND	NA	ND
Methyl tert-butyl Ether (MTBE)	**10**	2 J	NA	5 J	NA	ND
Methylene Chloride	**5**	ND	ND	ND	ND	ND
Naphthalene	**10**	ND	NA	ND	NA	ND
n-Butylbenzene	**5**	ND	NA	ND	NA	ND
n-Propylbenzene	**5**	ND	NA	ND	NA	ND
sec-Butylbenzene	**5**	ND	NA	ND	NA	ND
Styrene	**5**	ND	ND	ND	ND	ND
tert-Butyl Alcohol (TBA)	**---**	150 J	NA	150 J	NA	ND
tert-Butylbenzene	**5**	ND	NA	ND	NA	ND
Tetrachloroethene (PCE)	**5**	***180***	***290***	***1900***	***560***	***410***
Toluene	**5**	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	**0.4***	ND	ND	ND	ND	ND
Trichloroethene (TCE)	**5**	***39***	***120***	***570***	***200***	***250***
Vinyl Chloride	**2**	***8***	***63***	***170***	***69***	***74***
Xylenes (total)	**5***	ND	ND	ND	ND	ND
Total VOCs	**---**	446	663	3,269	1,069	1,374

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TABLE 5 - GROUNDWATER SAMPLES - TCL and STARS VOCs

Date Sampled: As Shown **Matrix:** Groundwater

Compound	State Standard[1] (μg/L)	Monitoring Well Location		
		MW-3	MW-3	MW-3
		11/15/05	05/02/06	09/13/06
		Compound Concentration (μg/L)		
1,1,1-Trichloroethane (1,1,1-TCA)	**5**	ND	ND	ND
1,1,2,2-Tetrachloroethane	**5**	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	**1**	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	**5**	ND	ND	ND
1,1-Dichloroethene (1,1-DCE)	**5**	ND	ND	ND
1,2,4-Trichlorobenzene	**5**	ND	NA	ND
1,2-Dichloroethane (1,2-DCA)	**0.6**	ND	ND	ND
1,2-Dichloroethene (total) (1,2-DCE)	**5**	***260***	***140***	***130***
1,2-Dichloropropane	**1**	ND	ND	ND
1,3,5-Trimethylbenzene	**5**	ND	NA	ND
2-Butanone (MEK)	**50**	ND	ND	ND
2-Hexanone	**50**	ND	ND	ND
4-Isopropyltoluene (cymene)	**5**	ND	NA	ND
4-Methyl-2-Pentanone (MIBK)	**---**	ND	ND	ND
Acetone	**50**	ND	ND	ND
Benzene	**1**	ND	ND	ND
Bromodichloromethane	**50**	ND	ND	ND
Bromoform	**50**	ND	ND	ND
Bromomethane	**5**	ND	ND	ND
Carbon Disulfide	**60**	ND	ND	ND
Carbon Tetrachloride	**5**	ND	ND	ND
Chlorobenzene	**5**	ND	ND	ND
Chloroethane	**5**	ND	ND	ND
Chloroform	**7**	ND	ND	ND
Chloromethane (methyl chloride)	**5**	ND	ND	ND
cis-1,3-Dichloropropene	**0.4***	ND	ND	ND
Dibromochloromethane	**50**	ND	ND	ND
Ethyl Benzene	**5**	ND	ND	ND
Isopropylbenzene (Cumene)	**5**	ND	NA	ND
Methyl tert-butyl Ether (MTBE)	**10**	10	NA	ND
Methylene Chloride	**5**	ND	ND	ND
Naphthalene	**10**	ND	NA	ND
n-Butylbenzene	**5**	ND	NA	ND
n-Propylbenzene	**5**	ND	NA	ND
sec-Butylbenzene	**5**	ND	NA	ND
Styrene	**5**	ND	ND	ND
tert-Butyl Alcohol (TBA)	**---**	ND	NA	ND
tert-Butylbenzene	**5**	ND	NA	ND
Tetrachloroethene (PCE)	**5**	***86***	***11***	***25***
Toluene	**5**	ND	ND	ND
trans-1,3-Dichloropropene	**0.4***	ND	ND	ND
Trichloroethene (TCE)	**5**	***100***	***63***	***64***
Vinyl Chloride	**2**	***66***	***47***	***35***
Xylenes (total)	**5***	ND	ND	ND
Total VOCs	**---**	522	261	254

TABLE 5 - GROUNDWATER SAMPLES - TCL and STARS VOCs

Date Sampled: As Shown **Matrix:** Groundwater

Compound	State Standard[1] (µg/L)	Monitoring Well Location			
		TW-5	TW-5	TW-5	TW-5
		11/15/05	05/02/06	07/18/06	09/13/06
		Compound Concentration (µg/L)			
1,1,1-Trichloroethane (1,1,1-TCA)	**5**	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	**5**	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	**1**	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	**5**	ND	ND	ND	ND
1,1-Dichloroethene (1,1-DCE)	**5**	ND	ND	ND	ND
1,2,4-Trichlorobenzene	**5**	ND	NA	NA	NA
1,2-Dichloroethane (1,2-DCA)	**0.6**	ND	ND	ND	ND
1,2-Dichloroethene (total) (1,2-DCE)	**5**	*7*	***360***	***280***	***380***
1,2-Dichloropropane	**1**	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**5**	ND	NA	NA	NA
2-Butanone (MEK)	**50**	ND	ND	ND	ND
2-Hexanone	**50**	ND	ND	ND	ND
4-Isopropyltoluene (cymene)	**5**	ND	NA	NA	NA
4-Methyl-2-Pentanone (MIBK)	---	ND	ND	ND	ND
Acetone	**50**	ND	ND	ND	ND
Benzene	**1**	ND	ND	ND	ND
Bromodichloromethane	**50**	ND	ND	ND	ND
Bromoform	**50**	ND	ND	ND	ND
Bromomethane	**5**	ND	ND	ND	ND
Carbon Disulfide	**60**	ND	ND	ND	ND
Carbon Tetrachloride	**5**	ND	ND	ND	ND
Chlorobenzene	**5**	ND	ND	ND	ND
Chloroethane	**5**	ND	ND	ND	ND
Chloroform	**7**	ND	ND	ND	ND
Chloromethane (methyl chloride)	**5**	ND	ND	ND	ND
cis-1,3-Dichloropropene	**0.4***	ND	ND	ND	ND
Dibromochloromethane	**50**	ND	ND	ND	ND
Ethyl Benzene	**5**	ND	ND	ND	ND
Isopropylbenzene (Cumene)	**5**	ND	NA	NA	NA
Methyl tert-butyl Ether (MTBE)	**10**	ND	NA	NA	NA
Methylene Chloride	**5**	ND	ND	ND	ND
Naphthalene	**10**	ND	NA	NA	NA
n-Butylbenzene	**5**	ND	NA	NA	NA
n-Propylbenzene	**5**	ND	NA	NA	NA
sec-Butylbenzene	**5**	ND	NA	NA	NA
Styrene	**5**	ND	ND	ND	ND
tert-Butyl Alcohol (TBA)	---	ND	NA	NA	NA
tert-Butylbenzene	**5**	ND	NA	NA	NA
Tetrachloroethene (PCE)	**5**	*23*	***320***	***200***	***160***
Toluene	**5**	ND	ND	ND	ND
trans-1,3-Dichloropropene	**0.4***	ND	ND	ND	ND
Trichloroethene (TCE)	**5**	5	***190***	***160***	***200***
Vinyl Chloride	**2**	2	***110***	***85***	***150***
Xylenes (total)	**5***	ND	ND	ND	ND
Total VOCs	---	36	980	725	890

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TABLE 5 - GROUNDWATER SAMPLES - TCL and STARS VOCs

Date Sampled: As Shown

Matrix: Groundwater

Compound	State Standard[1] (µg/L)	Monitoring Well Location				
		MW-6D	MW-7D	MW-8D	MW-9	MW-10
		11/15/05	11/15/05	11/15/05	11/15/05	11/15/05
1,1,1-Trichloroethane (1,1,1-TCA)	**5**	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	**5**	ND	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	**1**	ND	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	**5**	ND	ND	2	4	ND
1,1-Dichloroethene (1,1-DCE)	**5**	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	**5**	ND	ND	ND	ND	ND
1,2-Dichloroethane (1,2-DCA)	**0.6**	ND	ND	ND	ND	ND
1,2-Dichloroethene (total) (1,2-DCE)	**5**	ND	ND	ND	ND	***60***
1,2-Dichloropropane	**1**	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**5**	ND	ND	ND	ND	ND
2-Butanone (MEK)	**50**	ND	ND	ND	ND	ND
2-Hexanone	**50**	ND	ND	ND	ND	ND
4-Isopropyltoluene (cymene)	**5**	ND	ND	ND	ND	ND
4-Methyl-2-Pentanone (MIBK)	**---**	ND	ND	ND	ND	ND
Acetone	**50**	ND	ND	ND	ND	ND
Benzene	**1**	ND	ND	ND	ND	ND
Bromodichloromethane	**50**	ND	ND	ND	ND	ND
Bromoform	**50**	ND	ND	ND	ND	ND
Bromomethane	**5**	ND	ND	ND	ND	ND
Carbon Disulfide	**60**	ND	ND	ND	ND	ND
Carbon Tetrachloride	**5**	ND	ND	ND	ND	ND
Chlorobenzene	**5**	ND	ND	ND	ND	ND
Chloroethane	**5**	1 J	ND	2	ND	1 J
Chloroform	**7**	ND	ND	ND	ND	ND
Chloromethane (methyl chloride)	**5**	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	**0.4***	ND	ND	ND	ND	ND
Dibromochloromethane	**50**	ND	ND	ND	ND	ND
Ethyl Benzene	**5**	ND	ND	ND	ND	ND
Isopropylbenzene (Cumene)	**5**	ND	ND	ND	ND	ND
Methyl tert-butyl Ether (MTBE)	**10**	1 J	ND	9	ND	3 NJ
Methylene Chloride	**5**	ND	ND	5	ND	ND
Naphthalene	**10**	ND	ND	ND	ND	ND
n-Butylbenzene	**5**	ND	ND	ND	ND	ND
n-Propylbenzene	**5**	ND	ND	ND	ND	ND
sec-Butylbenzene	**5**	ND	ND	ND	ND	ND
Styrene	**5**	ND	ND	ND	ND	ND
tert-Butyl Alcohol (TBA)	**---**	150 J	ND	ND	ND	150 J
tert-Butylbenzene	**5**	ND	ND	ND	ND	ND
Tetrachloroethene (PCE)	**5**	ND	ND	ND	ND	2
Toluene	**5**	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	**0.4***	ND	ND	ND	ND	ND
Trichloroethene (TCE)	**5**	ND	ND	ND	ND	***16***
Vinyl Chloride	**2**	ND	ND	ND	ND	1
Xylenes (total)	**5***	ND	ND	ND	ND	ND
Total VOCs	**---**	ND	ND	18	4	233

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TABLE 5 - GROUNDWATER SAMPLES - TCL and STARS VOCs

Date Sampled: As Shown

Matrix: Groundwater

Compound	State Standard[1] (µg/L)	Monitoring Well Location				
		MW-11	MW-11	MW-11	MW-12	MW-12
		11/15/05	07/18/06	09/13/06	11/15/05	07/18/06
		Compound Concentration (µg/L)				
1,1,1-Trichloroethane (1,1,1-TCA)	**5**	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	**5**	ND	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	**1**	ND	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	**5**	ND	ND	ND	ND	ND
1,1-Dichloroethene (1,1-DCE)	**5**	ND	ND	ND	1	ND
1,2,4-Trichlorobenzene	**5**	ND	NA	ND	ND	NA
1,2-Dichloroethane (1,2-DCA)	**0.6**	ND	ND	ND	ND	ND
1,2-Dichloroethene (total) (1,2-DCE)	**5**	***250 D***	***150***	***120***	***360 D***	***370***
1,2-Dichloropropane	**1**	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**5**	ND	NA	ND	ND	NA
2-Butanone (MEK)	**50**	ND	ND	ND	ND	ND
2-Hexanone	**50**	ND	ND	ND	ND	ND
4-Isopropyltoluene (cymene)	**5**	ND	NA	ND	ND	NA
4-Methyl-2-Pentanone (MIBK)	**---**	ND	ND	ND	ND	ND
Acetone	**50**	ND	ND	ND	ND	ND
Benzene	**1**	ND	ND	ND	ND	ND
Bromodichloromethane	**50**	ND	ND	ND	ND	ND
Bromoform	**50**	ND	ND	ND	ND	ND
Bromomethane	**5**	ND	ND	ND	ND	ND
Carbon Disulfide	**60**	ND	ND	ND	ND	ND
Carbon Tetrachloride	**5**	ND	ND	ND	ND	ND
Chlorobenzene	**5**	ND	ND	ND	ND	ND
Chloroethane	**5**	ND	ND	ND	1 J	ND
Chloroform	**7**	ND	ND	ND	ND	ND
Chloromethane (methyl chloride)	**5**	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	**0.4***	ND	ND	ND	ND	ND
Dibromochloromethane	**50**	ND	ND	ND	ND	ND
Ethyl Benzene	**5**	ND	ND	ND	ND	ND
Isopropylbenzene (Cumene)	**5**	ND	NA	ND	ND	NA
Methyl tert-butyl Ether (MTBE)	**10**	2	NA	ND	4 J	NA
Methylene Chloride	**5**	ND	ND	ND	ND	ND
Naphthalene	**10**	ND	NA	ND	ND	NA
n-Butylbenzene	**5**	ND	NA	ND	ND	NA
n-Propylbenzene	**5**	ND	NA	ND	ND	NA
sec-Butylbenzene	**5**	ND	NA	ND	ND	NA
Styrene	**5**	ND	ND	ND	ND	ND
tert-Butyl Alcohol (TBA)	**---**	ND	NA	ND	150 J	NA
tert-Butylbenzene	**5**	ND	NA	ND	ND	NA
Tetrachloroethene (PCE)	**5**	ND	ND	ND	***350***	***550***
Toluene	**5**	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	**0.4***	ND	ND	ND	ND	ND
Trichloroethene (TCE)	**5**	ND	***5***	***3***	***290***	***410***
Vinyl Chloride	**2**	***63***	***36***	***28***	***77***	***80***
Xylenes (total)	**5***	ND	ND	ND	ND	ND
Total VOCs	**---**	315	191	151	1,233	1,410

TABLE 5 - GROUNDWATER SAMPLES - TCL and STARS VOCs

Date Sampled: As Shown

Matrix: Groundwater

Compound	State Standard[1] (µg/L)	Monitoring Well Location				
		MW-13	MW-13	MW-14	MW-14	MW-15D
		11/15/05	07/18/06	11/15/05	07/18/06	11/15/05
		Compound Concentration (µg/L)				
1,1,1-Trichloroethane (1,1,1-TCA)	5	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	1	ND	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	5	ND	ND	ND	ND	ND
1,1-Dichloroethene (1,1-DCE)	5	ND	ND	1 J	ND	ND
1,2,4-Trichlorobenzene	5	ND	NA	ND	NA	ND
1,2-Dichloroethane (1,2-DCA)	0.6	ND	ND	ND	ND	ND
1,2-Dichloroethene (total) (1,2-DCE)	5	2 D	***3***	***95***	***540***	ND
1,2-Dichloropropane	1	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	NA	ND	NA	ND
2-Butanone (MEK)	50	ND	ND	ND	ND	ND
2-Hexanone	50	ND	ND	ND	ND	ND
4-Isopropyltoluene (cymene)	5	ND	NA	ND	NA	ND
4-Methyl-2-Pentanone (MIBK)	---	ND	ND	ND	ND	ND
Acetone	50	ND	ND	ND	ND	ND
Benzene	1	ND	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND
Carbon Disulfide	60	ND	ND	ND	ND	ND
Carbon Tetrachloride	5	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	1 J	ND	ND
Chloroform	7	ND	ND	ND	ND	ND
Chloromethane (methyl chloride)	5	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4*	ND	ND	ND	ND	ND
Dibromochloromethane	50	ND	ND	ND	ND	ND
Ethyl Benzene	5	ND	ND	ND	ND	ND
Isopropylbenzene (Cumene)	5	ND	NA	ND	NA	ND
Methyl tert-butyl Ether (MTBE)	10	ND	NA	2 J	NA	ND
Methylene Chloride	5	ND	ND	ND	ND	ND
Naphthalene	10	ND	NA	ND	NA	ND
n-Butylbenzene	5	ND	NA	ND	NA	ND
n-Propylbenzene	5	ND	NA	ND	NA	ND
sec-Butylbenzene	5	ND	NA	ND	NA	ND
Styrene	5	ND	ND	ND	ND	ND
tert-Butyl Alcohol (TBA)	---	ND	NA	150 J	NA	ND
tert-Butylbenzene	5	ND	NA	ND	NA	ND
Tetrachloroethene (PCE)	5	ND	ND	ND	ND	***13***
Toluene	5	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4*	ND	ND	ND	ND	ND
Trichloroethene (TCE)	5	ND	ND	2	ND	ND
Vinyl Chloride	2	ND	ND	***16***	***280***	ND
Xylenes (total)	5*	ND	ND	ND	ND	ND
Total VOCs	---	2	3	267	820	13

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TABLE 5 - GROUNDWATER SAMPLES - TCL and STARS VOCs

Date Sampled: As Shown

Matrix: Groundwater

Compound	**State Standard[1] (µg/L)**	**Monitoring Well Location**				
		RW-1	**RW-1**	**RW-1**	**Long Trench**	**Shallow Trench**
		11/15/05	**05/11/06**	**07/18/06**	**05/02/06**	**05/02/06**
		Compound Concentration (µg/L)				
1,1,1-Trichloroethane (1,1,1-TCA)	**5**	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	**5**	ND	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	**1**	ND	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	**5**	ND	ND	ND	ND	ND
1,1-Dichloroethene (1,1-DCE)	**5**	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	**5**	ND	NA	NA	NA	NA
1,2-Dichloroethane (1,2-DCA)	**0.6**	ND	ND	ND	ND	ND
1,2-Dichloroethene (total) (1,2-DCE)	**5**	4	***10***	***13***	***160***	ND
1,2-Dichloropropane	**1**	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**5**	ND	NA	NA	NA	NA
2-Butanone (MEK)	**50**	ND	ND	ND	ND	ND
2-Hexanone	**50**	ND	ND	ND	ND	ND
4-Isopropyltoluene (cymene)	**5**	ND	NA	NA	NA	NA
4-Methyl-2-Pentanone (MIBK)	**---**	ND	ND	ND	ND	ND
Acetone	**50**	ND	ND	ND	ND	ND
Benzene	**1**	ND	ND	ND	ND	ND
Bromodichloromethane	**50**	ND	ND	ND	ND	ND
Bromoform	**50**	ND	ND	ND	ND	ND
Bromomethane	**5**	ND	ND	ND	ND	ND
Carbon Disulfide	**60**	ND	ND	ND	ND	ND
Carbon Tetrachloride	**5**	ND	ND	ND	ND	ND
Chlorobenzene	**5**	ND	ND	ND	ND	ND
Chloroethane	**5**	ND	ND	ND	ND	ND
Chloroform	**7**	ND	2	ND	ND	ND
Chloromethane (methyl chloride)	**5**	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	**0.4***	ND	ND	ND	ND	ND
Dibromochloromethane	**50**	ND	ND	ND	ND	ND
Ethyl Benzene	**5**	ND	ND	ND	ND	ND
Isopropylbenzene (Cumene)	**5**	ND	NA	NA	NA	NA
Methyl tert-butyl Ether (MTBE)	**10**	ND	NA	NA	NA	NA
Methylene Chloride	**5**	ND	ND	ND	ND	ND
Naphthalene	**10**	ND	NA	NA	NA	NA
n-Butylbenzene	**5**	ND	NA	NA	NA	NA
n-Propylbenzene	**5**	ND	NA	NA	NA	NA
sec-Butylbenzene	**5**	ND	NA	NA	NA	NA
Styrene	**5**	ND	ND	ND	ND	ND
tert-Butyl Alcohol (TBA)	**---**	ND	NA	NA	NA	NA
tert-Butylbenzene	**5**	ND	NA	NA	NA	NA
Tetrachloroethene (PCE)	**5**	3	***12***	7	***250***	ND
Toluene	**5**	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	**0.4***	ND	ND	ND	ND	ND
Trichloroethene (TCE)	**5**	1	2	***9***	***140***	ND
Vinyl Chloride	**2**	ND	***17***	***21***	***44***	ND
Xylenes (total)	**5***	ND	ND	ND	ND	ND
Total VOCs	**---**	8	43	50	594	ND

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TABLE 6 - SITE SOIL VAPOR - TCL VOCS

Date Sampled: As Shown **Matrix:** Soil Vapor

Compound	NYSDOH Study[1] (μg/m^3)	NYSDOH Standard[2] (μg/m^3)	2003 OSHA / ACGIH Standards[3] (μg/m^3)	Compound Concentration (μg/m^3)				
				SVE-1	SVE-2	SVE-3	SVE-4	SVE-5
				11/15/05	11/15/05	11/15/05	11/15/05	11/15/05
1,1,1-Trichloroethane (1,1,1-TCA)	<0.25 - 1.4	---	1,903	ND	ND	ND	ND	1
1,1,2,2-Tetrachloroethane	<0.25	---	35,000	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	<0.25	---	54,560	ND	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane (Freon 113)	NS	---	7,600,000	ND	ND	ND	ND	1
1,1-Dichloroethane	<0.25	---	400,000	ND	ND	ND	ND	ND
1,1-Dichloroethene	<0.25	---	4,000	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	---	NS	ND	ND R	ND	ND	ND
1,2,4-Trimethylbenzene	<0.25	---	54,600	3	10 J	5	7	7
1,2-Dibromoethane (EDB)	<0.25	---	153,690	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	<0.25	---	300,000	ND	ND J	ND	ND	ND
1,2-Dichloroethane	<0.25	---	202,000	ND	ND	ND	ND	ND
1,2-Dichloropropane	<0.25	---	350,000 (V)	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	<0.25	---	NS	2	5 J	3	4	4
1,3-Butadiene	NS	---	2,210	ND	ND R	ND	ND	ND
1,3-Dichlorobenzene	<0.25	---	NS	ND	ND J	ND	ND	ND
1,4-Dichlorobenzene	NA	---	450,000	1	2 J	2	ND	2
1,4-Diethyldioxide (1,4-Dioxane)	NS	---	360,000	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane (Isooctane)	NS	---	NS	ND	3 J	ND	2	2
2-Butanone (MEK)	NS	---	590,000	ND	ND J	ND	ND	ND
2-Hexanone (MBK)	NS	---	410,000	ND	ND	ND	ND	ND
4-Ethyltoluene	NS	---	NS	1	4 J	1	2	2
4-Methyl-2-Pentanone (MIBK)	NS	---	410,000	ND	ND	ND	ND	ND
Acetone (2-propanone)	10 - 46	---	2,400,000	ND	ND	ND	ND	ND
Benzene	1.2 - 5.7	---	3,190	1	19 J	1	5	6
Benzyl chloride (Chloromethylbenzene)	NS	---	5,180	ND	ND J	ND	ND	ND
Bromodichloromethane	NA	---	NS	ND	ND	ND	ND	ND
Bromoform	NA	---	5,170	ND	ND	ND	ND	ND
Bromomethane (Methyl Bromide)	<0.25	---	19,420	ND	ND	ND	ND	ND
Carbon Disulfide	NS	---	62,200	ND	41 J	0.3 J	6	4
Carbon Tetrachloride	<0.25 - 0.68	---	62,900	ND	ND	ND	ND	ND
Chlorobenzene	<0.25	---	350,000	ND	ND	ND	ND	ND
Chloroethane	NS	---	2,640,000	ND	ND	ND	ND	ND
Chloroform	<0.25 - 0.54	---	240,000 (C)	ND	ND	ND	1	5
Chloromethane (Methyl Chloride)	<0.25 - 2.0	---	103,000	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	<0.25	---	790,000	ND	13 J	ND	38	38
cis-1,3-Dichloropropene	NS	---	NS	ND	ND	ND	ND	ND
Cyclohexane	NS	---	1,050,000	ND	21 J	ND	7	5
Dibromochloromethane	NA	---	NS	ND	ND	ND	ND	ND
Dichlorodifluoromethane (Freon 12)	NA	---	4,950,000	3	8 J	3	3	15
Dichlorotetrafluoroethane (Freon 114)	NS	---	7,000,000	ND	ND	ND	ND	ND
Ethyl Acetate	NS	---	1,400,000	ND	ND	ND	ND	ND
Ethyl Benzene	0.43 - 2.8	---	435,000	2	14 J	3	6	6
Hexachloro-1,3-butadiene	NS	---	NS	ND	ND R	ND	ND	ND
Isopropyl alcohol (2-Propanol)	NS	---	960,000	ND	ND J	ND	ND	ND
m/p-Xylenes	0.52 - 4.7	---	435,000	5	39 J	8	13	14
Methyl tert-Butyl Ether (MTBE)	<0.25 - 6.7	---	144,210	ND	3 J	ND	ND	ND
Methylene Chloride	0.38 - 6.3	60	86,750	19	7 J	45	38	47
n-Heptane	NS	---	2,050,000	1 J	42 J	1	11	9
n-Hexane	0.63 - 6.5	---	1,800,000	1	47 J	1	11	10
o-Xylene	0.39 - 3.1	---	435,000	2	10 J	2	4	4
Propylene	NS	---	NS	ND	ND	ND	ND	ND
Styrene	<0.25 - 0.68	---	426,000	6	16 J	9	9	10
Tetrachloroethene (PCE)	<0.25 - 1.2	100	678,000	ND	7 J	1	8	***281***
Tetrahydrofuran	NS	---	590,000	ND	ND	ND	ND	ND
Toluene	4.2 - 25	---	754,000	5	69 J	7	18	23
trans-1,2-Dichloroethene	NS	---	NS	ND	ND	ND	5	ND
trans-1,3-Dichloropropene	NS	---	22,690 (V)	ND	ND	ND	ND	ND
Trichloroethene (TCE)	<0.25	5	537,000	ND	ND	ND	1	***222***
Trichlorofluoromethane (Freon 11)	NS	---	5,600,000	2	1 J	2	2	2
Vinyl Acetate	NS	---	NS	ND	ND	ND	ND	ND
Vinyl Bromide (Bromoethene)	NS	---	NS	ND	ND	ND	ND	ND
Vinyl Chloride	<0.25	---	2,560	ND	2,400 J	ND	297	1
Vinylacetonitrile (Allyl chloride)	NS	---	3,000	ND	ND	ND	ND	ND

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TABLE 6 - SITE SOIL VAPOR - TCL VOCS

Date Sampled: As Shown

Matrix: Soil Vapor

Compound	**NYSDOH Study[1] (μg/m³)**	**NYSDOH Standard[2] (μg/m³)**	**2003 OSHA / ACGIH Standards[3] (μg/m³)**	**Compound Concentration (μg/m³)**				
				SVE-6 **11/15/05**	**SVE-7** **11/15/05**	**SVE-8** **11/15/05**	**SV-9** **11/15/05**	**SV-10** **11/15/05**
1,1,1-Trichloroethane (1,1,1-TCA)	<0.25 - 1.4	---	1,903	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	<0.25	---	35,000	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	<0.25	---	54,560	ND	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane (Freon 113)	NS	---	7,600,000	ND	ND	1 J	ND	ND
1,1-Dichloroethane	<0.25	---	400,000	ND	ND	ND	ND	ND
1,1-Dichloroethene	<0.25	---	4,000	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	---	NS	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	<0.25	---	54,600	7	7	5	15	7
1,2-Dibromoethane (EDB)	<0.25	---	153,690	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	<0.25	---	300,000	ND	ND	ND	ND	ND
1,2-Dichloroethane	<0.25	---	202,000	ND	ND	ND	ND	ND
1,2-Dichloropropane	<0.25	---	350,000 (V)	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	<0.25	---	NS	3	3	3	9	3
1,3-Butadiene	NS	---	2,210	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	<0.25	---	NS	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	NA	---	450,000	ND	ND	2	ND	
1,4-Diethyldioxide (1,4-Dioxane)	NS	---	360,000	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane (Isooctane)	NS	---	NS	3	ND	ND	102	1
2-Butanone (MEK)	NS	---	590,000	ND	ND	ND	ND	ND
2-Hexanone (MBK)	NS	---	410,000	ND	ND	ND	ND	ND
4-Ethyltoluene	NS	---	NS	2	2	1	5	2
4-Methyl-2-Pentanone (MIBK)	NS	---	410,000	ND	ND	ND	ND	ND
Acetone (2-propanone)	10 - 46	---	2,400,000	ND	ND	ND	ND	ND
Benzene	1.2 - 5.7	---	3,190	3	2	1	10	5
Benzyl chloride (Chloromethylbenzene)	NS	---	5,180	ND	ND	ND	ND	ND
Bromodichloromethane	NA	---	NS	ND	ND	ND	ND	ND
Bromoform	NA	---	5,170	ND	ND	ND	ND	ND
Bromomethane (Methyl Bromide)	<0.25	---	19,420	ND	ND	ND	ND	ND
Carbon Disulfide	NS	---	62,200	19	3	0.3 J	66	5
Carbon Tetrachloride	<0.25 - 0.68	---	62,900	ND	ND	ND	ND	ND
Chlorobenzene	<0.25	---	350,000	ND	ND	ND	ND	ND
Chloroethane	NS	---	2,640,000	ND	ND	ND	ND	ND
Chloroform	<0.25 - 0.54	---	240,000 (C)	ND	ND	ND	1	ND
Chloromethane (Methyl Chloride)	<0.25 - 2.0	---	103,000	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	<0.25	---	790,000	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	NS	---	NS	ND	ND	ND	ND	ND
Cyclohexane	NS	---	1,050,000	14	140	ND	76	5
Dibromochloromethane	NA	---	NS	ND	ND	ND	ND	ND
Dichlorodifluoromethane (Freon 12)	NA	---	4,950,000	5	3	3	ND	3
Dichlorotetrafluoroethane (Freon 114)	NS	---	7,000,000	ND	ND	ND	ND	ND
Ethyl Acetate	NS	---	1,400,000	ND	ND	ND	ND	ND
Ethyl Benzene	0.43 - 2.8	---	435,000	7	5	3	10	7
Hexachloro-1,3-butadiene	NS	---	NS	ND	ND	ND	ND	ND
Isopropyl alcohol (2-Propanol)	NS	---	960,000	ND	ND	ND	ND	ND
m/p-Xylenes	0.52 - 4.7	---	435,000	16	14	7	32	20
Methyl tert-Butyl Ether (MTBE)	<0.25 - 6.7	---	144,210	ND	ND	ND	ND	ND
Methylene Chloride	0.38 - 6.3	60	86,750	44	53	7	ND	
n-Heptane	NS	---	2,050,000	21	6	1	50	9
n-Hexane	0.63 - 6.5	---	1,800,000	65	1,350	1	103	17
o-Xylene	0.39 - 3.1	---	435,000	5	4	2	8	5
Propylene	NS	---	NS	ND	ND	ND	ND	ND
Styrene	<0.25 - 0.68	---	426,000	9	10	8	14	10
Tetrachloroethene (PCE)	<0.25 - 1.2	100	678,000	6	ND	ND	4	3
Tetrahydrofuran	NS	---	590,000	ND	ND	ND	ND	ND
Toluene	4.2 - 25	---	754,000	22	28	7	52	33
trans-1,2-Dichloroethene	NS	---	NS	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	NS	---	22,690 (V)	ND	ND	ND	ND	ND
Trichloroethene (TCE)	<0.25	5	537,000	ND	ND	ND	ND	ND
Trichlorofluoromethane (Freon 11)	NS	---	5,600,000	1	2	2	ND	1
Vinyl Acetate	NS	---	NS	ND	ND	ND	ND	ND
Vinyl Bromide (Bromoethene)	NS	---	NS	ND	ND	ND	ND	ND
Vinyl Chloride	<0.25	---	2,560	ND	ND	ND	ND	ND
Vinylacetonitrile (Allyl chloride)	NS	---	3,000	ND	ND	ND	ND	ND

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TABLE 7 - DUNN TIRE AIR AND SOIL VAPOR - TCL VOCS

Date Sampled: As Shown

Matrix: Soil Vapor

Compound	NYSDOH Study[1] (µg/m^3)	NYSDOH Standard[2] (µg/m^3)	2003 OSHA / ACGIH Standards[3] (µg/m^3)	Compound Concentration (µg/m^3)				
				SV-1	IA-2	SV-2	IA-1	OA-1
				Dunn Tire Office - 3/4/06		Dunn Tire Shop - 3/4/06		Outdoor - 3/4/06
1,1,1-Trichloroethane (1,1,1-TCA)	<0.25 - 1.4	---	1,903	1 J	ND	5	ND	ND
1,1,2,2-Tetrachloroethane	<0.25	---	35,000	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	<0.25	---	54,560	ND	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane (Freon 113)	NS	---	7,600,000	ND	ND	ND	ND	ND
1,1-Dichloroethane	<0.25	---	400,000	3	ND	ND	ND	ND
1,1-Dichloroethene	<0.25	---	4,000	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NS	---	NS	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	<0.25	---	54,600	20	7	11	5	1
1,2-Dibromoethane (EDB)	<0.25	---	153,690	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	<0.25	---	300,000	ND	ND	ND	ND	ND
1,2-Dichloroethane	<0.25	---	202,000	ND	ND	ND	ND	ND
1,2-Dichloropropane	<0.25	---	350,000 (V)	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	<0.25	---	NS	6	2	5	2	ND
1,3-Butadiene	NS	---	2,210	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	<0.25	---	NS	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	NA	---	450,000	ND	1	ND	1 J	ND
1,4-Diethyldioxide (1,4-Dioxane)	NS	---	360,000	ND	ND	ND	ND	ND
2,2,4-Trimethylpentane (Isooctane)	NS	---	NS	6	2	ND	2	ND
2-Butanone (MEK)	NS	---	590,000	ND	1 J	ND	1 J	1 J
2-Hexanone (MBK)	NS	---	410,000	ND	ND	ND	ND	ND
4-Ethyltoluene	NS	---	NS	12	3	10	2	1 J
4-Methyl-2-Pentanone (MIBK)	NS	---	410,000	3	59	3	28	ND
Acetone (2-propanone)	10 - 46	---	2,400,000	40	74	41	36	26
Benzene	1.2 - 5.7	---	3,190	17	3	13	2	1
Benzyl chloride (Chloromethylbenzene)	NS	---	5,180	ND	ND	ND	ND	ND
Bromodichloromethane	NA	---	NS	ND	ND	2	ND	ND
Bromoform	NA	---	5,170	ND	ND	ND	ND	ND
Bromomethane (Methyl Bromide)	<0.25	---	19,420	ND	ND	ND	ND	ND
Carbon Disulfide	NS	---	62,200	32	6	54	2	ND
Carbon Tetrachloride	<0.25 - 0.68	---	62,900	ND	ND	ND	ND	ND
Chlorobenzene	<0.25	---	350,000	ND	ND	ND	ND	ND
Chloroethane	NS	---	2,640,000	ND	ND	ND	ND	ND
Chloroform	<0.25 - 0.54	---	240,000 (C)	2	ND	16	ND	ND
Chloromethane (Methyl Chloride)	<0.25 - 2.0	---	103,000	1	1	ND	1	1
cis-1,2-Dichloroethene	<0.25	---	790,000	8	ND	15	1	ND
cis-1,3-Dichloropropene	NS	---	NS	ND	ND	ND	ND	ND
Cyclohexane	NS	---	1,050,000	227	4	812	2	ND
Dibromochloromethane	NA	---	NS	ND	ND	ND	ND	ND
Dichlorodifluoromethane (Freon 12)	NA	---	4,950,000	2	3	2	3	3
Dichlorotetrafluoroethane (Freon 114)	NS	---	7,000,000	ND	ND	ND	ND	ND
Ethyl Acetate	NS	---	1,400,000	ND	ND	ND	ND	ND
Ethyl Benzene	0.43 - 2.8	---	435,000	19	5	17	2	ND
Hexachloro-1,3-butadiene	NS	---	NS	ND	ND	ND	ND	ND
Isopropyl alcohol (2-Propanol)	NS	---	960,000	ND	ND	ND	ND	ND
m/p-Xylenes	0.52 - 4.7	---	435,000	65	18	54	13 J	1 J
Methyl tert-butyl Ether (MTBE)	<0.25 - 6.7	---	144,210	ND	ND	ND	1	ND
Methylene Chloride	0.38 - 6.3	60	86,750	1	1	1	1	0 J
n-Heptane	NS	---	2,050,000	60	32	64	18	ND
n-Hexane	0.63 - 6.5	---	1,800,000	6,740	8	10,600	6	0 J
o-Xylene	0.39 - 3.1	---	435,000	19	5	13	3	ND
Propylene	NS	---	NS	ND	ND	ND	ND	ND
Styrene	<0.25 - 0.68	---	426,000	2	7	8	3	ND
Tetrachloroethene (PCE)	<0.25 - 1.2	100	678,000	15	56	86	37	ND
Tetrahydrofuran	NS	---	590,000	ND	ND	ND	ND	ND
Toluene	4.2 - 25	---	754,000	303	13	6,620	18	1
trans-1,2-Dichloroethene	NS	---	NS	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	NS	---	22,690 (V)	ND	ND	ND	ND	ND
Trichloroethene (TCE)	<0.25	5	537,000	30	1	33	2	ND
Trichlorofluoromethane (Freon 11)	NS	---	5,600,000	3	4	2	3	1
Vinyl Acetate	NS	---	NS	ND	ND	ND	ND	ND
Vinyl Bromide (Bromoethene)	NS	---	NS	ND	ND	ND	ND	ND
Vinyl Chloride	<0.25	---	2,560	ND	ND	ND	ND	ND
Vinylacetonitrile (Allyl chloride)	NS	---	3,000	ND	ND	ND	ND	ND

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TABLE 8 - SURFACE SOILS - RCRA METALS and TCL VOCs

Date Sampled: As Shown

Matrix: Surface Soil

Compound	Recommended Soil Cleanup Level[1] (mg/kg)	Compound Concentration (mg/kg)			
		SS-1 0.5' b.g.s.	SS-1RE 0.5' b.g.s.	SS-2 0.5' b.g.s.	SS-2RE 0.5' b.g.s.
		6/5/06	6/5/06	6/5/06	6/5/06
RCRA METALS					
Arsenic	7.5 or SB	ND<1	ND<1 **	ND<1	ND<1 **
Barium	300 or SB	37.0 *	38.0 **	40.0 *	39.0 **
Cadmium	1 or SB	1.5 *	1.8	1.8 *	2.0 **
Chromium	10 or SB	8.4 *	8.8	9.1 *	9.0
Lead	SB	7.6	7.6	27.0	27.0
Mercury	0.1	ND<0.03	ND<0.03	0.04	0.04
Selenium	2 or SB	6.1	6.1 **	5.3	5.3 **
Silver	SB	ND<1	ND<1	ND<1	ND<1 **
TCL VOCs					
ALL ANALYTICAL DATA NON-DETECT FOR VOCs (ND)					

Notes:

[1] DEC Technical Administration Guidance Memorandum (TAGM) No. 4046, *Determination of Soil Cleanup Objectives and Cleanup Levels*, dated January 24, 1994, as modified by DEC Memorandum of April 10, 2001. Allowable concentration with no dilution/attenuation factor. See TAGM 4046. Soil cleanup objectives were developed for soil organic carbon content of 1% and should be adjusted for actual carbon content, if known.

RCRA	Resource Conservation and Recovery Act list of metals
TCL	Target Compound List of organic compounds
mg/kg	milligrams per kilogram
SB	Site background determined cleanup level. [Background levels for lead vary widely. Average background levels in metropolitan areas typically range from 300 to 500 ppm.]
ND<	Not detected, less than
*	The result of a calibration check sample associated with this analysis was greater than the established control limit. Sample reanalysis (RE) conducted.
**	Refer to attached case narrative below for additional information.

CASE NARRATIVE - LIFE SCIENCE LABORATORY

Arsenic - The result of a single calibration check associated with this analysis was lower than the established control limit. All other quality control associated with this analyte was within acceptable limits.

Barium - The result of a single calibration check associated with this analysis was greater than the established control limit by 1.2%. All other quality control associated with this analyte was within acceptable limits.

Cadmium - APPLICABLE TO SAMPLE SS-2RE ONLY - The result of a single calibration check associated with this analysis was greater than the established control limit by 0.3%. All other quality control associated with this analyte was within acceptable limits.

Selenium - The result of a single calibration check associated with this analysis was greater than the established control limit Additionally, the relative percent difference for the duplicate analysis of sample SS-1RE was greater than the established control limit. All other quality control associated with this analyte was within acceptable limits.

Silver - The result of the laboratory control sample associated with this analysis was less than the established control limit, therefore the analytical results may be biased low. All other quality control associated with this analyte was within acceptable limits.

APPENDIX A

OPERATIONS, MAINTENANCE AND MONITORING PLAN FOR GROUNDWATER

Operation, Maintenance, And Monitoring Plan For Groundwater Monitoring at

7980-7984 Brewerton Road in the Cicero, County of Onondaga, New York
Voluntary Cleanup Program VCA No. A7-0466-0702

INTRODUCTION AND PURPOSE

This Operation, Maintenance, and Monitoring (OM&M) Plan is prepared for the property located at 7980-7984 Brewerton Road in the Cicero, County of Onondaga, New York. This OM&M Plan is required for groundwater monitoring to be performed at the site for eight consecutive quarters following release to the site owner by the New York State Department of Environmental Conservation (DEC) of legal liability for past site contamination through completion of the Voluntary Clean-up Program.

Quarterly groundwater monitoring for eight consecutive quarters shall be performed to document the trend of groundwater concentrations. Institutional controls require the performance of quarterly groundwater monitoring at this site. Calendar quarters 1 through 4 will include groundwater quality sampling and analysis for monitoring wells to include

- MW-1, MW-2, MW-3, TW-5, MW-11, CES-MW-1, MW-12, and MW-14.

For QA/QC purposes, 90% of the samples collected in calendar quarter 3 will be analyzed and reported by the analytical laboratory with Category A documentation and 10% with Category B documentation. The third quarter round will also include four additional QA/QC samples in the form of a trip blank, field blank, a matrix spike and a matrix spike duplicate. Groundwater elevation readings will be collected during all sampling rounds. All groundwater samples shall be analyzed for TCL VOCs by EPA Method 8260 and submitted to a New York State Department of Health certified laboratory for analysis.

Existing site monitoring wells not included in the monitoring network shall be abandoned in general accordance with DEC requirements for monitoring well decommissioning.

REPORTING

Reported results of sampling for calendar quarters 1, 2 and 3 shall include raw and tabular "hits" data only. Reporting of calendar quarter 4 results shall include an annual summary of groundwater quality results and the overall trend observed since completion of the IRM in the summer of 2006. The annual report will also include a groundwater contour map based on the third quarter groundwater elevation measurements.

SAMPLING PROCEDURE

Sample collection shall be performed in accordance with the following standard operating procedure for groundwater sampling. These procedures ensure that a groundwater sample collected is representative of the hydrogeologic formation and will be utilized anytime a monitoring well is sampled. There are no specific definitions for this procedure. Consult the Equipment Checklist for required materials. Precautions on the chemical preservative Material Safety Data Sheets must be followed.

Instructions

1. Obtain appropriate sample containers from the laboratory.

2. Prepare sampling equipment necessary for the program.

    a. Consult the Equipment Checklist.

    b. Reserve equipment, if necessary. NOTE: Try to have enough equipment on-site to avoid decontamination while sampling.

    c. Check, test and clean all equipment before leaving for the site.

d. Always bring more than enough personal protective equipment and expendables (ex. gloves, tyvek, rope etc.) on-site to complete the program.

3. Examine the monitoring well.

    a. Confirm the well identification.

    b. Note any damage in the groundwater field log.

4. Place a plastic sheet around the monitoring well so the field equipment (bailer, rope, meters, etc.) is not in direct contact with the ground, avoiding contamination.

5. Wipe the monitoring well's outer casing cover clean of any foreign material that might enter the well when it is opened.

6. If locked, unlock the monitoring well. NOTE: Securely lock the monitoring well when it is left unattended and is not in direct view.

7. If organic contamination is suspected in the groundwater, monitor the well headspace with a photoionization detection (PID) meter.

    a. Open the outer well casing cover just enough to insert the PID probe.

    b. Monitor the well headspace for organic vapors.

    c. Remove the probe and close the casing cover.

    d. Record the results in the groundwater field log.

    e. Establish appropriate levels of personal protection.

8. Remove the outer well casing cover.

9. Put on a new pair of disposable gloves before doing any field measurements, preventing cross-contamination.

10. Measure the depth to water and the total depth of the monitoring well with an electronic water level indicator.

11. Calculate the water volume within the well.

<u>Monitoring Well Volume Calculation</u>:

SWL =	Depth to Water	C =	Conversion Factor
TD =	Total Depth of Well	N =	Number of Volumes to Evacuate
L =	Length of Water Column	TV =	Total Volume to Evacuate

TD - SWL = L

L x C = 1 well volume

1 well volume x N = TV

<u>Common Conversion Factors</u>:

0.16	2 inch well
0.65	4 inch well

NOTE:	Quick field calculations for 3 well volume evacuation.
2-inch well:	divide the length of the water column (L) by 2
4 inch well:	multiply the length of the water column (L) by 2

12. Three well volumes are to be evacuated from each well prior to sampling. Either a dedicated bailer or a peristaltic pump with dedicated tubing shall be used to evacuate each well.

13. If initial field readings (i.e. eh, temperature, pH, specific conductivity, etc.) are necessary:

a. Measurements are taken from the first water evacuated from the well. NOTE: Always calibrate field meters on site daily before initial use and check the calibration periodically.

b. Field reading are taken in the following order:

ORP/eh

temperature

pH

specific conductivity

c. Record the readings in the groundwater field log.

14. If a bailer is going to be used to evacuate the monitoring well:

a. Push only the bailer loop through the protective polyethylene wrap, leaving the rest of the bailer covered.

b. Attach a spool of 3/16-inch polypropylene rope to the bailer, using at least two half hitches, and weave the rope end through the main rope several times.

c. Keep the bailer in the protective wrap until just before it is lowered into the monitoring well.

d. Gently lower the bailer into the well until it contacts the water surface. NOTE: The contact is felt through the rope and may be audible.

e. An immiscible layer check will be done prior to evacuation with the bailer:

- Lower the bailer about 2 feet into the water (skim the surface).
- Retrieve the bailer.

NOTE: The bailer rope is still attached to the spool and care must be taken to avoid contamination of the rope spool. In addition, the retrieved rope must not come in contact with sources of contamination.

- Pour the bailer contents into a clear glass container for observation.
- Return the bailer to the well.
- Record any amount of free product and associated observations in the field log (i.e. odor, sheen).

f. Gently lower the bailer to the bottom of the well.

NOTE: The bailer must go all the way to the bottom to ensure there is enough rope if the well must be bailed dry.

g. Cut the bailer rope from the spool.

h. Begin bailing.

- Gently retrieve the bailer.
- Empty the bailer into a graduated 5-gallon bucket.
- Gently lower the bailer 1 or 2 feet below the surface of the water.
- Repeat steps 1, 2 and 3 until the required water volume has been removed or the well is dry.

15. Evacuated well water is dumped away from the well so it doesn't flow back toward any monitoring well.

NOTE: If the evacuated water is contaminated (i.e. free product, strong odor or sheen), the purge water shall be stored on-site in a 55-gallon drum. Notify the client of the status of the drum after each sampling event and arrange appropriate disposal.

16. a. For samples collected for analysis by volatile parameters, 95% well recovery is not required. Sampling for VOCs should be performed as soon as sufficient volume of a sample can be collected without disturbing any sediment that may be present at the bottom of the well.

NOTE: VOC samples must be collected within 2 hours of well evacuation.

b. For samples collected for analysis by semi-volatile parameters, 95% well recovery is required prior to sampling. If 95% recovery is not noted within 24 hours, the DEC shall be consulted for proper sample collection procedure. This procedure is likely to consist of collecting the sample while taking care not to disturb any sediment that may be present at the well bottom.

17. If samples for both volatile and semi-volatile analysis are to be collected from the same well and 95% well recovery is not noted within 2 hours of well evacuation, the DEC shall be consulted for proper sample collection procedure. This will likely consist of collecting the samples separately by the procedures outlined in item 16.

18. Before collecting any samples:

a. Check the sample containers are properly labeled as to client name, sample location, analysis to be performed and container preservation.

b. Check sample containers are stored in a contaminant-free environment.

19. Samples are collected from the screened portion of the monitoring well in the order of the parameters' volatilization sensitivity unless otherwise specified in the scope of work.

a. Volatile organics

b. Field readings

c. Total organic carbon

d. Extractable organics

e. Total metals

f. Dissolved metals

g. Phenols

h. Cyanides

i. Sulfate and chloride

j. Turbidity

k. Nitrate and ammonia

l. Radionuclides

20. Begin sample collection.

a. Do not overfill preserved sample containers. This may result in inadequately preserved samples.

b. Containers for volatile analysis are filled slowly in such a way that the sample runs down the inner wall of the container, reducing volatilization of the sample.

c. Containers for alkalinity and volatile analysis are filled with no headspace.

NOTE: If headspace is present in the container after it is capped, it is emptied out and refilled. The label is corrected to read "unpreserved", if necessary.

   d. Containers for semi-volatile analysis are filled with as little headspace as possible.

   e. Keep the quality control requirements of the program in mind and collect adequate sample volumes.

21. Immediately after sampling:

   a. Store all collected samples in a cooler maintained at approximately 4 degrees Celsius.

   b. Place the custody seals on the containers or coolers if the scope of work calls for them.

   c. Fill out the chain of custody form.

   d. Check to be sure the groundwater field log is complete.

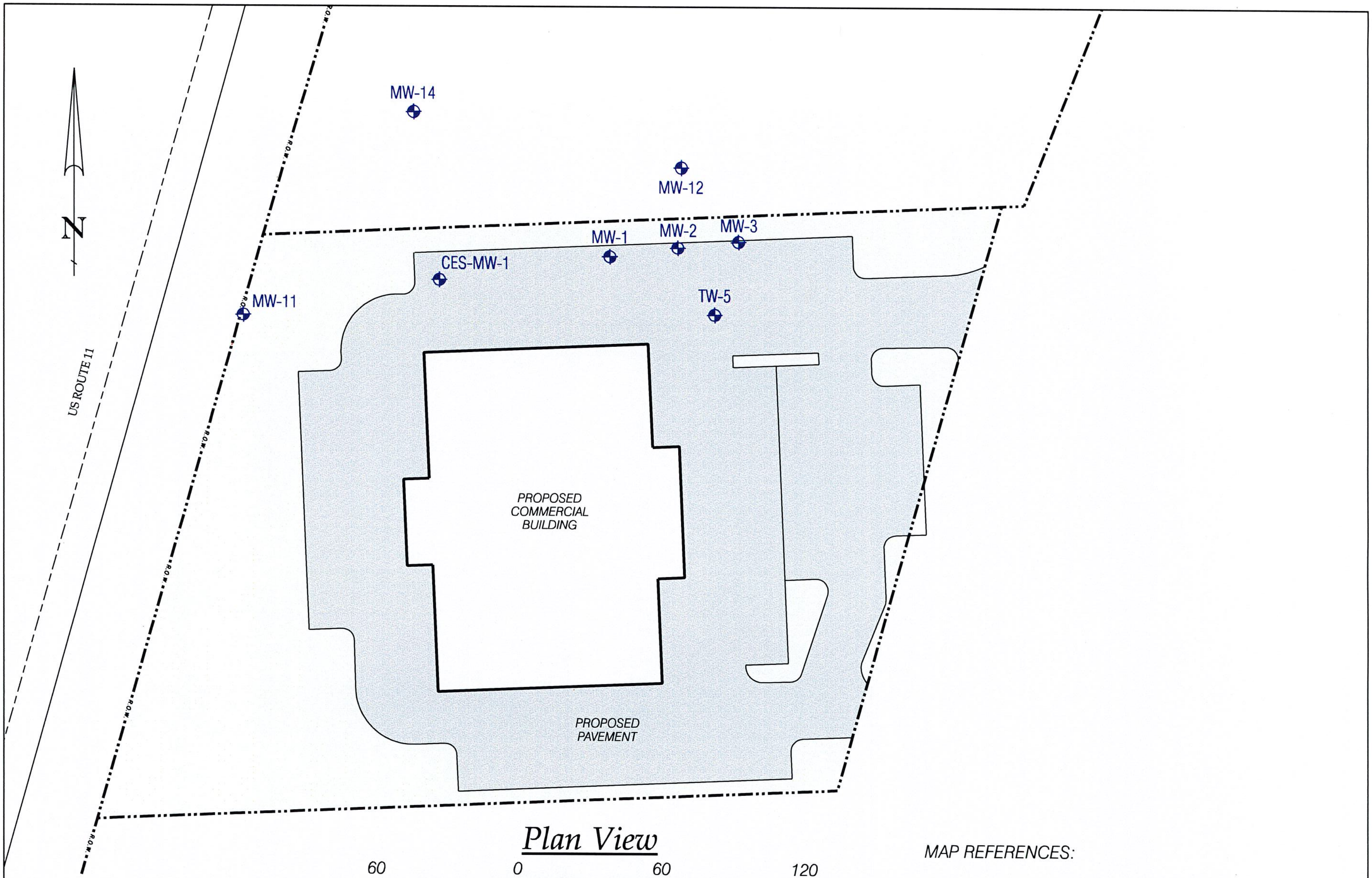
   NOTE: Field notes are critical to inform the client and laboratory personnel about the conditions of the well and other observations (i.e. weather, strange odors, bent casing or flooded wells). These notes may help in running the samples, as well as interpreting the analytical results.

22. Collect the used expendables (i.e. gloves, rope etc.) in a plastic bag and properly dispose of them.

23. Lock the monitoring well.

24. Deliver the samples to the laboratory within all appropriate holding times for the parameters to be analyzed.

25. Clean all the used sampling equipment per Standard Procedures for Decontamination.



Plan View

60 0 60 120

1" = 60'

SCALE FEET

MAP REFERENCES:

1. COMPOSITE [SURVEY] MAP, ALFRED N. IANUZI, JR. L.S., FEBRUARY 26, 1987.

PLUMLEY ENGINEERING

PLUMLEY ENGINEERING, P.C.
8232 LOOP ROAD
BALDWINSVILLE, NY 13027

TELEPHONE: (315) 638-8587
FAX: (315) 638-9740
WWW.PLUMLEYENG.COM

Civil and Environmental Engineering

REVISIONS:	DATE:	BY:
⚠		

NOTE: NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

DESC.: OM&M PLAN - MONITORING WELLS

PROJ.: VOLUNTARY CLEANUP PROGRAM
VCA No. A7-0466-0702

CLIENT: HANCOCK & ESTABROOK, LLP

LCTN.: TOWN OF CICERO, ONONDAGA COUNTY, NEW YORK

VOLUNTARY CLEAN P PROGRAM

PROJECT No.:	2003074
FILE NAME.:	OMM
SCALE:	1"=60'
DATE:	2006
ENG'D BY:	WJS
DRAWN BY:	JMD
CHECKED BY:	WJS

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APPENDIX B

DECLARATION OF COVENANTS AND RESTRICTIONS

DECLARATION of COVENANTS and RESTRICTIONS

THIS COVENANT is made the ___ day of ________, 2006, by Arthur H. Katz and Calvin Katz, having an office for the transaction of business at 1101 Monroe Street Toledo, Ohio, 43624.

WHEREAS, 7980-7984 Brewerton Road, Cicero, Onondaga County, New York is the subject of a Voluntary Agreement executed by Arthur H. Katz, Calvin Katz and Dale A. Desnoyers, as part of the New York State Department of Environmental Conservation's (the "Department's") Voluntary Cleanup Program, namely that parcel of real property located on 7980-7984 Brewerton Road in the Village of Cicero, County of Onondaga, State of New York, which is part of lands conveyed by E.W. George Properties, Inc. to Arthur H. Katz and Calvin Katz by deed dated March 25, 1986 and recorded in the Onondaga County Clerk's Office on March 25, 1986 in Book 3244 of Deeds at Page 190 and being more particularly described in Appendix "A," attached to this declaration and made a part hereof, and hereinafter referred to as "the Property"; and

WHEREAS, the Department approved a remedy to eliminate or mitigate all significant threats to the environment presented by the contamination disposed at the Property and such remedy requires that the Property be subject to restrictive covenants.

NOW, THEREFORE, Arthur H. Katz and Calvin Katz, for itself and its successors and/or assigns, covenants that:

First, the Property subject to this Declaration of Covenants and Restrictions is as shown on a map attached to this declaration as Appendix "B" and made a part hereof, and consists of the metes and bounds as attached hereto as Appendix "A".

Not there

Second, unless prior written approval by the Department or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, there shall be no construction, use or occupancy of the Property that results in the disturbance or excavation of the Property, which threatens the integrity of the soil cap, or which results in unacceptable human exposure to contaminated soils. The soils may be distributed on the Property in accordance with the Soil Management Plan attached hereto as Appendix "C"

Third, the owner of the Property shall maintain the cap covering the Property by maintaining its grass cover or, after obtaining the written approval of the Relevant Agency, by capping the Property with another material.

Fourth, the owner of the Property shall prohibit the Property from ever being used for purposes other than for commercial/industrial uses without the express written waiver of such prohibition by the Relevant Agency.

Fifth, the owner of the Property shall prohibit the use of the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Relevant Agency.

Sixth, the owner of the Property shall continue in full force and effect any institutional and engineering controls required under the Agreement and maintain such controls unless the owner first obtains permission to discontinue such controls from the Relevant Agency. Any building constructed or utilized on the Property must contain a sub-slab depressurization ("SSD") system to be operated in accordance with the SSD Manual attached hereto as Appendix "D".

Seventh, this Declaration is and shall be deemed a covenant that shall run with the land and shall be binding upon all future owners of the Property, and shall provide that the owner and its successors and assigns consent to enforcement by the Relevant Agency of the prohibitions and restrictions that Paragraph X of the Agreement require to be recorded, and hereby covenant not to contest the authority of the Relevant Agency to seek enforcement.

Eighth, any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

IN WITNESS WHEREOF, the undersigned has executed this instrument the day written below.

STATE OF NEW YORK)
COUNTY OF) ss:

On the _____ day of __________ in the year 2006 before me, the undersigned, a Notary Public in and for said State, personally appeared __________________, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

____
Notary Public

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THIS IS A LEGAL INSTRUMENT AND SHOULD BE EXECUTED UNDER SUPERVISION OF AN ATTORNEY.

THIS INDENTURE, made the 25 day of March 1986,

BETWEEN E. W. GEORGE PROPERTIES, INC., 6124 Pine Grove Road, Clay, New York, 13041,

grantor

ARTHUR H. KATZ and CALVIN KATZ, equally as tenants in common,
1101 [illegible]
[illegible]

grantee

CICERO

4:15 PM 03/25/86 1546 $.50/
4:15 PM 03/25/86 1547 1100.00/

WITNESSETH, that the grantor, in consideration of ---ONE AND NO/100 ($1.00) DOLLARS and other good and valuable consideration------------------------------------ paid by the grantee, hereby grants and releases unto the grantee, the heirs or successors and assigns of the grantee forever,

ALL THAT TRACT OR PARCEL OF LAND, situate in the Town of Cicero, Onondaga County, New York, being a part of Farm Lot No. 66 of said Town of Cicero, bounded and described as follows: Beginning at a point in the center line of New York State Route 11, formerly the Plank Road, at the northwest corner of the premises conveyed to Hans P. Hansen by Lewis A. Reynolds and Cora B. Reynolds, his wife, by deed dated October 16, 1933, and recorded in the Onondaga County Clerk's Office on October 18, 1933, in Book 734 of Deeds at page 155 &c.; running thence South, 88° 22' East, along the Northerly line of the lands and premises described in said deed, 375.72 feet to a point; running thence South, 21° 30' West on a line parallel with the center line of said Route 11, a distance of 255 feet to a point; running thence North 88° 22' West, a distance of 375.72 feet to a point in the center line of said New York State Route 11; running thence North, 21° 30' East, along the center line of said Route 11, a distance of 255 feet to the point or place of beginning.

SUBJECT to easements, covenants and restrictions of record, if any, affecting said premises.

INTENDING to convey the same premises as were conveyed to D. R. Evans, Inc., now known as E. W. George Properties, Inc., a New York Corporation, by Ciannilli Realty Co., Inc., by deed dated June 15th, 1973 and recorded in the Onondaga County Clerk's Office June 15th, 1973, in Book of Deeds 2504 at Page 193.

THIS CONVEYANCE is of premises which do not constitute all or substantially all of the assets of the party of the first part. The certificate of incorporation of the party of the first part does not require any consent of stockholders to the sale of the property.

1,100.

011.60

TOGETHER with the appurtenances and all the estate and rights of the grantor in and to said premises.

TO HAVE AND TO HOLD the premises herein granted unto the grantee, the heirs or successors and assigns of the grantee forever. AND the grantor covenants as follows:

FIRST.—The grantee shall quietly enjoy the said premises;

SECOND.—The grantor will forever warrant the title to said premises;

This deed is subject to the trust provisions of Section 13 of the Lien Law. The words "grantor" and "grantee" shall be construed to read in the plural whenever the sense of this deed so requires.

IN WITNESS WHEREOF, the grantor has executed this deed the day and year first above written.

In presence of:

25 day of March 1986
3244 190
2504
193

E. W. GEORGE PROPERTIES, INC. L.S.

Earl W George pres L.S.

BY: EARL W. GEORGE, PRESIDENT

STATE OF NEW YORK, COUNTY OF ONONDAGA ss.:

On the 25 day of March 1986 before me personally came EARL W. GEORGE to me known, who, being by me duly sworn, did depose and say that deponent resides at No. 6124 Pine Grove Road, Clay, N.Y. 13041 deponent is President of E. W. George Properties, Inc. the corporation described in and which executed, the foregoing instrument; ~~[illegible]~~ and that he signed his name thereto by order of the board of directors of said corporation.

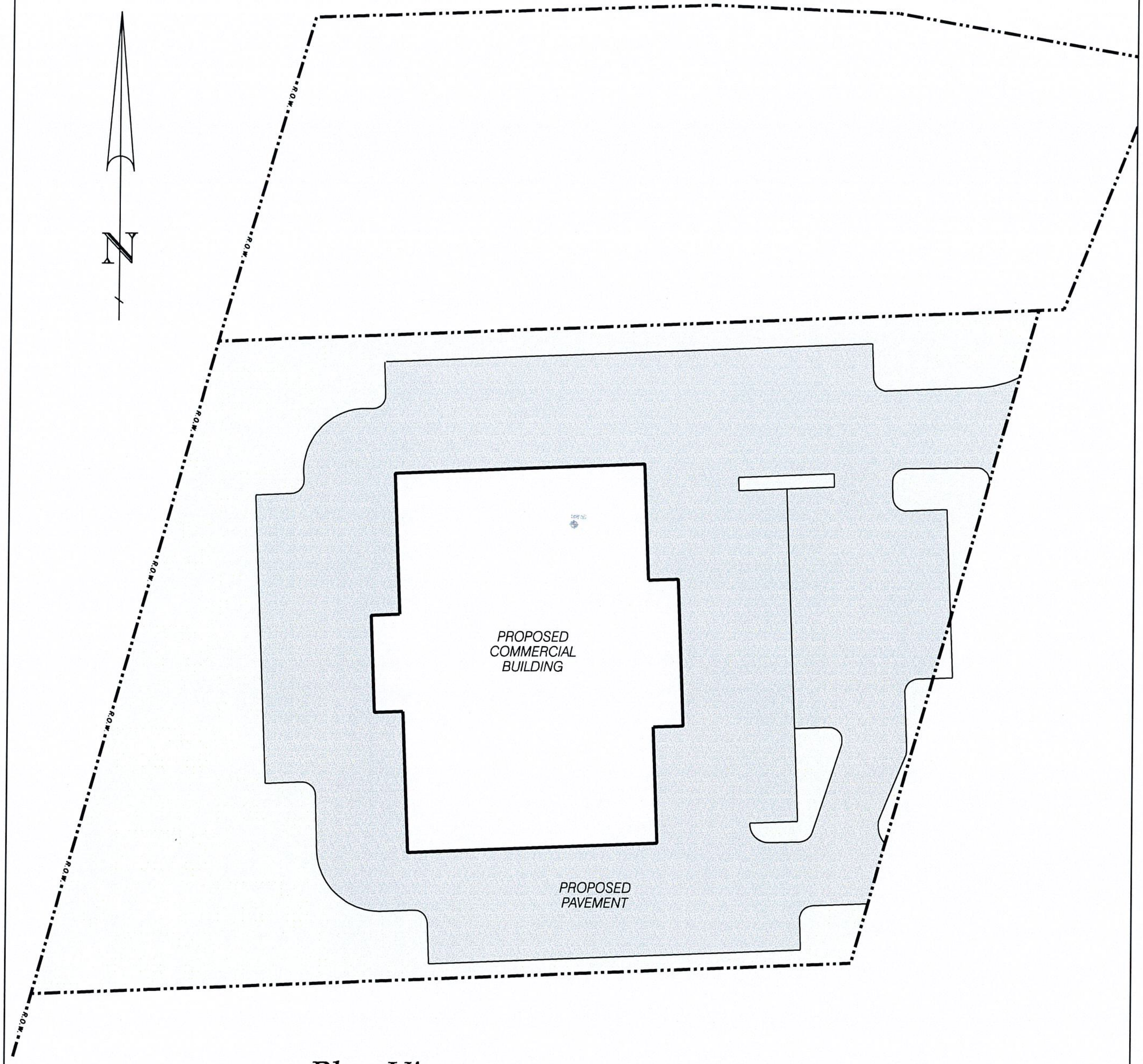
NOTARY PUBLIC

Exp 2/30/88

STATE OF NEW YORK, COUNTY OF ss.:

On the day of 19 , before me personally came

to me known to be the individual described in, and who executed the foregoing instrument, and acknowledged that he executed the same.



Plan View

1" = 60'

60 0 60 120

SCALE FEET

MAP REFERENCES:

1. COMPOSITE [SURVEY] MAP, ALFRED N. IANUZI, JR. L.S., FEBRUARY 26, 1987.

PLUMLEY ENGINEERING

Civil and Environmental Engineering

PLUMLEY ENGINEERING, P.C.
8232 LOOP ROAD
BALDWINSVILLE, NY 13027

TELEPHONE: (315) 638-8587
FAX: (315) 638-9740
WWW.PLUMLEYENG.COM

DESCRIPTION: PROPERTY SUBJECT TO DECLARATION OF COVENANTS & RESTRICTIONS

PROJECT: VOLUNTARY CLEAN UP PROGRAM
VCA No. A7-0466-0702

CLIENT: HANCOCK & ESTABROOK, LLP

LOCATION: TOWN OF CICERO, ONONDAGA COUNTY, NEW YORK

APPENDIX B

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Appendix A

Appendix B

Appendix C

Soil Management Plan

This plan presents precautionary safety steps to be implemented whenever disturbance of soil from below one foot in depth within the designated zone for soil management on the map attached to this Plan. This plan must be kept on site and be available to direct utility, construction, or other workers who may disturb soils from beneath one foot below the ground surface.

The designated zone may contain residual affected soil that is governed by this plan. A 10-foot buffer has been incorporated into the designated zone. Site soil outside the designated zone may be disturbed without restriction. Disturbance shall mean any digging, excavation (whether manual or mechanically), trenching, dozing, landscaping, natural or other activity that results in exposing or bringing to the surface of soils located one foot or more below the land surface before the disturbance began.

The following steps shall be taken to minimize the potential exposure hazard at this site within the designated zone.

1. Before disturbance of soils within the designated zone that will penetrate 1 foot or more into the ground, this document shall be reviewed to identify the required steps to safely and appropriately handle subsurface soils.

2. The top foot of soils can be scraped over the area of excavation and set aside for replacement.

3. All site workers who may come into physical contact with designated zone soils from below 1 foot in depth shall wear protective gloves on the hands (i.e. nitrile, chemical resistant or equivalent) suitable for handling chlorinated solvent impacted soils. Workers in direct contact with subsurface soils should change the gloves daily, or immediately if the gloves becomes punctured, torn or tacky on the outside surface.

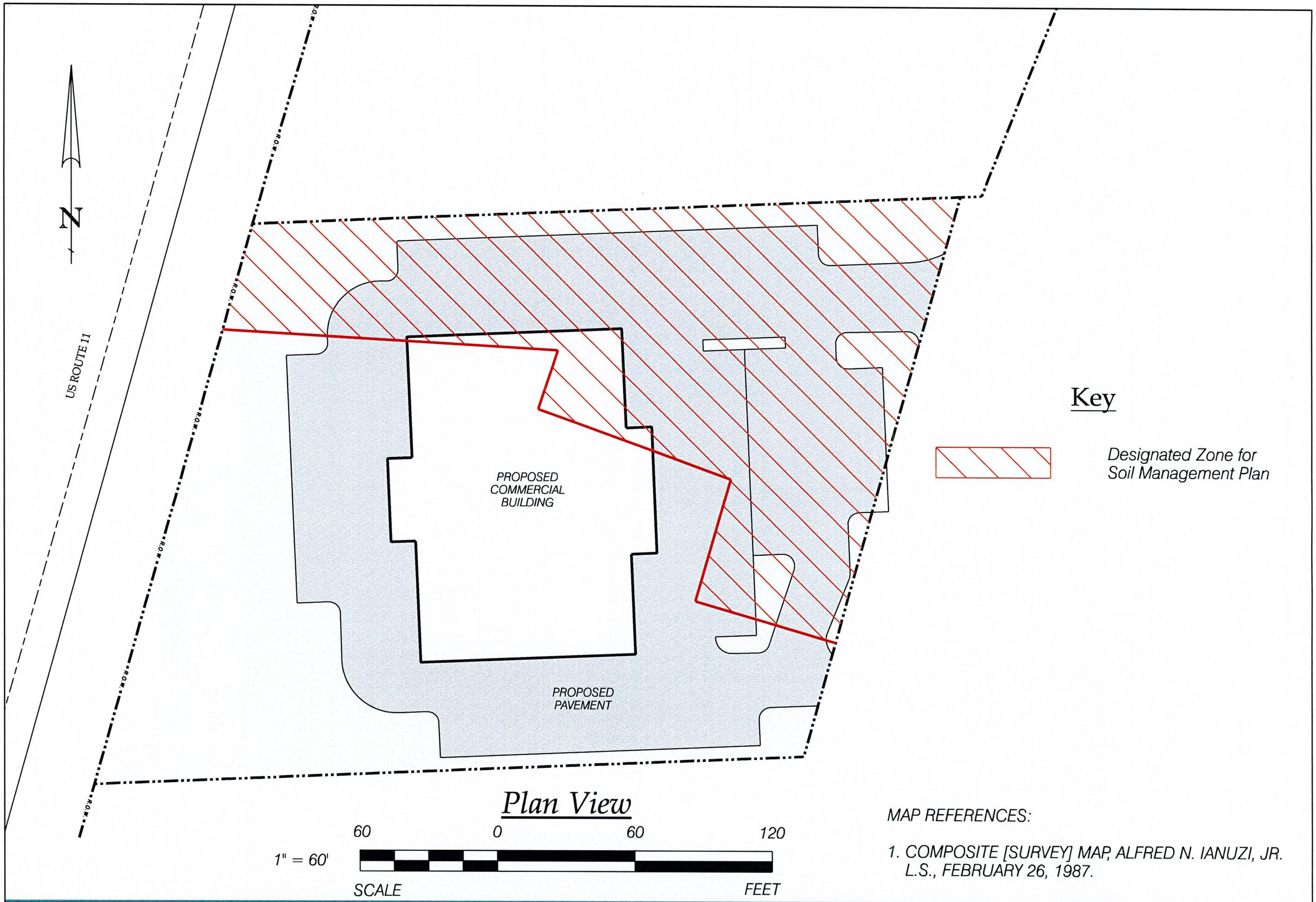
4. Plastic sheeting (thickness 6 mil or greater) shall be spread over a sufficient area and be bounded with a perimeter berm at least 3 inches high. The sheeting shall overlap the top of the perimeter berm.

5. Excavated soils taken from below 1 foot in depth shall be stockpiled on the plastic sheeting.

6. If the excavated soils are to remain on the sheeting overnight, the soil pile shall be covered by plastic sheeting that is weighted around the perimeter to minimize infiltration of precipitation into the soil.

7. At the conclusion of the excavation activity, the soil on the plastic sheeting may be replaced into the ground. This soil must then be covered with 1 foot of clean topsoil. The soil scraped from the land surface initially may be used for this purpose, with additional clean soil brought to the site, as needed.

8. If all or some of the stockpiled soil cannot be returned to its original subsurface position, several options are available to determine its appropriate disposition. The soils either must be sent off-site to an appropriate landfill or treatment facility, or the New York State Department of Environmental Conservation (DEC) must be contacted to confirm the sampling required to evaluate whether it may be placed elsewhere on the property. The DEC Region 7 general telephone number is (315) 426-7400 and the Division of Solid & Hazardous Materials may be reached at (315) 426-7419.



Plan View

MAP REFERENCES:

1. COMPOSITE [SURVEY] MAP, ALFRED N. IANUZI, JR. L.S., FEBRUARY 26, 1987.

PLUMLEY ENGINEERING

Civil and Environmental Engineering

PLUMLEY ENGINEERING, P.C.
8232 LOOP ROAD
BALDWINSVILLE, NY 13027

TELEPHONE: (315) 638-8587
FAX: (315) 638-9740
WWW.PLUMLEYENG.COM

REVISIONS:	DATE:	BY:
⚠		

NOTE: NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

VOLUNTARY CLEAN P PROGRAM

DESC.: DESIGNATED ZONE FOR SOIL MANAGEMENT PLAN

PROJ.: VOLUNTARY CLEANUP PROGRAM
VCA No. A7-0466-0702

CLIENT: HANCOCK & ESTABROOK, LLP

LCTN.: TOWN OF CICERO, ONONDAGA COUNTY, NEW YORK

PROJECT No.: 2003074
FILE NAME.: Exhibit B
SCALE: 1"=60'
DATE: 2006
ENG'D BY: WJS
DRAWN BY: JMD
CHECKED BY: WJS

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Appendix D

Sub-Slab Depressurization System Manual

This Plan sets forth the requirements for the sub-slab depressurization (SSD) system that must be installed into any existing or newly constructed occupied site structure. An SSD system is intended to protect the public from potential exposure to soil vapors and must be operated continuously except during routine maintenance, interruption of electrical service, mechanical failure or other temporary condition that inhibits system function. This manual must be kept on site and available to maintenance personnel for their use in performing maintenance.

System Description

SSD piping typically consists of sub-slab Schedule 40 PVC 0.020-slot piping and risers. It includes an exhaust fan capable of producing approximately 1.00 to 1.25 inches of water vacuum at the specified exhaust flow rate. The fan must be located above the highest occupied level of the structure or at the rooftop near the atmospheric discharge point, such that the piping in the occupied portions of the building are under negative pressure during fan operation. Typical systems also include a manometer/vacuum gauge, an audible/visible alarm located in a utility closet where the SSD piping penetrates the floor slab, and a fan speed controller (optional).

The fan must be capable of drawing vapors from beneath the building while maintaining a minimum vacuum in the sub-slab of 0.002 inches of water column at all times during system operation. A typical design provides a sub-slab vacuum of greater than 0.025 inches of water column vacuum in the sub-slab to minimize ongoing vacuum monitoring requirements of the New York State Department of Health.

System Operation

The motive force for the SSD system (i.e. fan) shall remain in the "on" condition at all times except when public electric utility service is interrupted. In the event of electrical service disruption, the system shall be operational within a reasonable time period after electrical service is restored. This unit shall be cleaned and maintained per the fan manufacturer specifications. The fan shall also be manually checked once per calendar year to assure it is operating properly and, if it is not operating properly, action must be taken to repair or replace the unit in a timely manner.

Maintenance

The fan, riser piping, discharge point and manometer/ vacuum gauge are the important system elements. The fan shall be inspected at least annually and maintained in accordance with the manufacturer's recommendations. The exposed run of the riser pipe shall be inspected annually to assure that no cuts, cracks, or punctures exist. All necessary repairs shall be made in a timely manner. The discharge point of the piping on the rooftop shall be inspected to assure that no blockage has occurred due to nesting insects. Typically the atmospheric discharge point is fitted with a mesh screen with a mesh opening suitable to prevent nesting insects from crawling into the pipe to build a nest. However, an annual inspection and repair/action will assure the discharge point remains unimpeded to the discharge of air/vapor from the fan. The manometer/vacuum gauge (located in a utility closet at the floor slab level) shall be checked annually to assure it is in working order and has no deficiency that prevents it from displaying the vacuum in the system piping. The flexible tubing shall be visually inspected for cracks, punctures or abrasions, and replaced as necessary. Verify the fan speed controller (if installed) is operational by moving it from its set point and observing a change in the manometer/vacuum gauge. The visible/audible alarm can be checked by temporarily shutting off the fan to trip the alarm.

Recordkeeping

Records of the repair, inspection and maintenance actions taken to sustain the SSD system operation must be made and retained at the site for review during preparation of the annual inspection report to be prepared by a licensed professional engineer or qualified environmental professional. A *Maintenance and Inspection Log* is attached to this Manual for this purpose.

Not attached

Post Mitigation System Confirmation Testing

Post-installation confirmation testing will be performed to demonstrate proper installation and effectiveness of the SSD system, per New York State Department of Health (DOH) soil vapor mitigation guidance. The DOH guidance requires that a differential in pressure between the indoor air and the sub-slab must be a minimum of 0.002 inches of water column with the indoor air pressure being greater. After installation of the SSD system, the actual sub-slab pressure will be measured and if it does not exhibit a vacuum of equal to or greater than 0.002 inches of water column (relative to indoor air), then the system fan will be replaced with a fan capable of generating a larger static vacuum beneath the slab. If the sub-slab does not exhibit a vacuum of equal to or greater than 0.025 inches of water column relative to the indoor air, then four quarters of seasonal differential pressure monitoring are required by the DEC. This seasonal pressure monitoring would determine if the seasonal sub-slab pressure remains a minimum of 0.002 inches lower than the indoor air pressure year-round.

APPENDIX C

DATA USABILITY REPORT

Data Validation Services
120 Cobble Creek Road P. O. Box 208
North Creek, N. Y. 12853
Phone 518-251-4429
Facsimile 518-251-4428

August 26, 2006

Scott Zollo
Plumley Engineering
8232 Loop Rd.
Baldwinsville, NY 13027

RE: Data Review Report for the North Star Cicero site
AES Project Nos. 040608013, 040611024, 040720032, and 040727025
LSL No. 0519387
Centeck No. 0511010

Dear Mr. Zollo:

A limited review has been completed for the data packages generated by Adirondack Environmental Services, Inc. (AES), Life Science Laboratories, Inc. (LSL), and Centek that pertain to samples collected 06/07/04 through 07/26/04 and 11/04/05 through 11/15/06 at the North Star Cicero site. Thirty-one soil samples and thirteen aqueous samples collected in June and July 2004 were analyzed for the full target compound list volatiles. Seven of these soil samples were also analyzed for TCL semivolatiles. Seventeen aqueous samples and one soil sample collected in November 2005 were analyzed for TCL and STARS volatiles. Four of those aqueous samples were also analyzed for TCL/STARS semivolatiles and RCRA metals. Ten air samples were processed for volatiles by USEPA method TO-15. Laboratory methodologies utilized for the soils and waters were those of the USEPA SW846 methods EPA 8260B, EPA 8270C, and EPA 6010B/7470, with additional QC requirements of the NYSDEC ASP. Sample matrix spikes and equipment/trip blanks were also processed.

The LSL data package for one soil and seventeen aqueous samples collected in November 2005 contains full NYSDEC Category B equivalent deliverables. The AES laboratory data packages for the soil and aqueous samples collected in June/July 2004 contain only QC summary forms (those of Category B) associated with the sample analyses, with no back-up raw data. The Centek laboratory data package for the air samples is generated with full data back-up and QC summary forms that are associated with only one of the air samples and the trip blank. Therefore, only that sample has been evaluated. Results for ten air samples were reported.

Ten percent of the samples underwent validation at the NYSDEC Data Usability Summary Report (DUSR) level, utilizing the LSL and Centek data packages (with the necessary ASP Category B). These samples, all of which were collected in November 2005, include soil sample MW-11 10'-12' (for volatiles and semivolatiles), and aqueous samples MW-1 (volatiles), MW-2 (volatiles) MW-6D (volatiles, semivolatiles, and metals), MW-10 (volatiles, semivolatiles, and metals), MW-12 (volatiles), MW-14 (volatiles), and SVE-2. Although this represents 10% on a total number of each analysis type, it is not proportional to matrix, collection date, or laboratory.

The reported summary forms have been reviewed for application of validation qualifiers, per the USEPA Region 2 validation SOPs and the USEPA National Functional Guidelines for Data Review, as affects the usability of the sample data. The following items were reviewed:

- Laboratory Narrative Discussion
- Custody Documentation
- Holding Times
- Surrogate and Internal Standard Recoveries
- Matrix Spike Recoveries/Duplicate Correlations
- Preparation/Calibration Blanks
- Control Spike/Laboratory Control Samples
- Instrumental Tunes and IDLs
- Calibration/CRA/CRI Standards (for validated samples)
- ICP Serial Dilution
- Sample Result Verification (for validated samples)
- Method Compliance (for validated samples)

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the review levels noted above. Entries in QC summary form errors that were noted during the review are not detailed herein unless sample reported values are affected.

In summary, numerous results for the samples are qualified as estimated in value due either to outlying holding times from collection, matrix effects, or instrumentation. Four analytes in the validated air sample are not usable due to an apparent matrix effect. Some low-level detections are considered external contamination and edited to reflect non-detection.

Copies of the laboratory case narratives and laboratory identification summaries are attached to this text, and should be reviewed in conjunction with this report. Included with this report are red-ink edited report forms for the validated samples that represent final qualified results for those samples.

There are several general qualifications noted in this report that apply to non-validated samples as well as those validated. This should be noted by the end-user of the data. For this report, the qualifications have been noted only on the attached forms of validated samples.

Custody/Sample Receipt

The custody form for the air samples does not include an entry for release time.

In many instances, samples were not transported to the laboratory within two days of collection, with up to five days between collection and laboratory receipt. The affected samples have been evaluated using technical holding times of those required from VTSR plus two.

Volatiles by EPA 8260B

The ten soil and five aqueous samples collected 6/07/04 and 6/09/04 for volatile analysis were received after overnight delivery at 20°C and 24°C. All results for these samples are therefore qualified as estimated ("J"/ "UJ"), with a low bias.

The detection of methyl-t-butyl ether in MW-10 is qualified as tentative in identification and estimated in value ("NJ") due to poor spectral quality.

Results initially reported by the laboratory with the "E" flag are to be derived from the dilution analyses of the samples. All other results are to be used from the initial analysis. The values from those dilutions are then to be qualified as estimated ("J"), with a low bias, due to the outlying holding time of those analyses. This should be applied to the un-validated samples as well as those shown on the attached report forms (validated samples). The outlying holding times were not noted in the laboratory case narrative.

The detections of cis-1,2-dichloroethene, trichloroethene, and tetrachloroethene in MW-4 and MW-13 could reflect carryover from the previously analyzed samples. The reanalyses were performed beyond holding time. The initial results are to be used, but with those three detections edited to reflect non-detection at the reporting limit, or at the originally reported concentration, whichever is greater.

Results for SB-3-4-6, the Trip Blank of 7/16/04 and the holding blank of November 2005 are qualified as estimated, and have a possible low bias, due to outlying technical holding times (resulting from delay between collection and VTSR).

TP-2B shows a slightly low recovery for one surrogate standard; the results are already to bre qualified as estimated due to elevated temperature at sample receipt.

Detections of acetone and methylene chloride in the aqueous and soil samples collected in July 2004 are considered external contamination (as evidenced by the presence in associated blanks), and are to be edited to nondetection ("U") at the CRDL.

Detections of methylene chloride and naphthalene in the soil samples collected in November 2005 are considered external contamination (as evidenced by the presence in associated method blanks), and are to be edited to nondetection ("U") at the CRDL.

Matrix spikes of GW-1, TP-7, MW-1, SB-7-10-12 (medium level), SB-2-4-6, SB-7-4-6, and MW-10 show acceptable accuracy and precision for the analytes evaluated.

Results for t-butyl alcohol in the samples collected in November 2005 are to be raised to a reporting limit of 150 ug/L (1500 ug/kg for soil) (reflecting the daily calibration concentration), qualified as estimated ("UJ"), and are of borderline usability, due to very low response factors in the calibration standards. Addition-ally, the initial calibration for this compound was performed using standards processed over many days timeframe, including after the samples were analyzed. This compound inherently does not perform well in the volatile processing.

Calibrations standards associated with validated samples show other responses within validation guidelines, with the exception of chloroethane and methyl-t-butyl ether in the samples collected in November 2005, results for which are to be qualified as estimated ("J" or "UJ") in those samples.

Some samples are processed at dilution due to target analyte constituency. This is compliant with the protocol, but results in elevated reporting limits for non-detected analytes.

Semivolatile Analyses by EPA8270C

Results for all soil samples collected 7/15/04 and 7/16/04 are qualified as estimated, with a low bias, due to outlying technical holding time (samples were received by the laboratory four and five days after collection). Laboratory holding times were within required timeframe from VTSR.

Detected results for samples analyzed by AES that are within twofold of the reporting limit concentrations are to be qualified as estimated ("J"), as they fall below the established linear range of the instrument.

Matrix spikes of SB-7-4-6 and MW-10 show acceptable accuracy and precision, with the exception of low recoveries for benzo(g,h,i)perylene (36%) in MW-10. The result for that compound in the parent sample is qualified as estimated ("UJ"), with a possible low bias.

Detections of bis(2-ethylhexyl)phthalate and di-n-butylphthalate in the all samples except that for bis(2-ethylhexyl)phthalate in SB-7-4-6 are considered external contamination (as evidenced by the presence in associated blanks), and are to be edited to nondetection ("U") at the CRDL, or originally reported concentration, whichever is greater.

The reporting limits ("U" values) for 2,4-dinitrophenol in the samples collected in July 2004 and November 2005 are to be edited to reflect values six times those reported due to poor responses (RRFs below 0.05) in the associated lower level initial calibration standards.

Instrument tunes were within required ranges, and surrogate and internal standard recoveries were acceptable.

Metals Analyses

The matrix spike of MW-10 shows acceptable recoveries, but a duplicate correlation above validation guidelines for chromium (54%RPD). The results for this element in the project samples are therefore to be qualified as estimated ("J"/"UJ").

Lead and selenium produced non-compliant elevated responses in the calibration and/or preparation blanks. Lead also produced elevated recoveries (550% and 570%) in the low-level CRI standards, and large negative responses in the preparation blank. Therefore, low-level detections of selenium in the samples are suspect as being external contamination, and edited to reflect non-detection. Additionally, all lead results are to be qualified as estimated ("J"/ "UJ").

Results for silver and arsenic in all samples are to be qualified as estimated ("J"/"UJ"), with a low bias, due to low recoveries (30% to 48%) in the associated low-level CRI standards.

The ICP serial dilution of MW-10 shows acceptable correlations (the QC summary form for this evaluation shows an incorrect sample ID).

Two calibration standard recoveries were marginally above the required limit; sample results are not significantly affected.

The result for barium in the equipment blank of November 2005 should show a reporting limit of "0.02" ug/L (not "0.00").

All of the field sample report forms should have been flagged with the outlying QC laboratory flags ("*").

Some of the Interference Check Sample summary forms are incomplete. Recoveries are acceptable.

Volatiles by TO-15

Due to elevated internal standard responses, all detected values in SVE-2 are qualified as estimated ("J"). It is unknown whether the other project samples exhibited similar outlying internal standard responses; detected results in those samples should be used with caution.

The matrix spikes of SVE-2 exhibit numerous outlying recoveries due to the apparent matrix effect. Analytes 1,2,4-trichlorobenzene, and hexachloro-1,3-butadiene show recoveries below 10% in at least one of the two spikes, and results for those compounds in the parent sample are therefore not usable ("R"). Propylene and 1,3-butadiene show erratic results (recoveries between 335% and 8200%), and the result for those compounds in the parent sample are therefore to be rejected ("R"). Results for these four analytes in the other project samples should be used with caution. Numerous other compounds also exhibited outlying matrix spike recoveries. The detected results in the parent sample are already qualified as estimated due to internal standard responses. Additionally, results for 1,2-dichlorobenzene, 1,3-dichlorobenzene, benzyl chloride, and isopropyl alcohol are also to be qualified as estimated ("UJ") in the parent sample.

Results for 1,2,4-trimethylbenzene in all samples are to be qualified as estimated ("J") due to elevated response in the associated calibration standard (27%D).

Detected results for m-xylene and p-xylene in the samples are to be qualified as estimated ("J") due to lack of analytical resolution.

Data Completeness

The Centek data package for the air samples does not include the signed verbatim statement required of the NYSDEC Category B data packages.

No release date or time was present on the custody form for the air samples. There is no laboratory summary form listing the samples processed for TO-15.

The laboratory receive date on the chain-of-custody pertaining to eight samples collected in July 2004 differed from the laboratory receipt date on the package summary forms. Holding times are evaluated from the custody entry and are acceptable.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

Judy Harry

VALIDATION QUALIFIER DEFINITIONS

DATA QUALIFIER DEFINITIONS

The following definitions provide brief explanations of the national qualifiers assigned to results in the data review process. If the Regions choose to use additional qualifiers, a complete explanation of those qualifiers should accompany the data review.

U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

N - The analysis indicates the present of an analyte for which there is presumptive evidence to make a "tentative identification."

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R - The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

LABORATORY SAMPLE IDs AND CASE NARRATIVES

SDG Narrative
0519387

Client:	**Plumley Engineering, P.C.**
Project Number:	**2003074**
Project Location:	**North Star Cicero, New York**
Date:	**January 31, 2006**

The following data package contains results from the North Star Cicero samples collected November 4, 2005 and November 15, 2005. The samples were assigned to LSL Sample Delivery Group (SDG) number 059387.

All analyses were performed within the method specific hold time.

Volatile Analysis

The raw data analyte list is more extensive that the analyte list present on the summary forms, which reflect those analytes requested by the client.

Tert-Butyl Alcohol (TBA) was analyzed under a separate processing method and is not included in the Laboratory Control Sample (LCS) or the Matrix Spike / Matrix Spike Duplicate (MS/MSD) or CCV4. Additionally, TBA recoveries in some of the CCVs are below the QC limit.

Sample MW-8D was reanalyzed to check for carryover from sample MW-3. The reanalysis was reported and both runs are included in the data package. Sample MW-4 was reanalyzed to check for carryover from sample MW-3. Sample MW-13 was reanalyzed to check for possible carryover.

Sample MW-1 was reanalyzed for PCE at dilution and the results from both runs are reported. Sample MW-2 was re-analyzed at dilution and the results from both runs are reported. Samples MW-3, MW-11, and MW-12 were reanalyzed due to high hits.

Semi-Volatile Analysis

The Laboratory Control Sample (LCS) solutions were not spiked with seven compounds and these are noted with an "ND" in the result column. The method does not require that all analytes are included in the LCS spike.

Due to a software error, several compounds are listed in duplicate on the Form 1B LCS data sheets in the main data package. The extra compounds have been crossed out.

The percent recoveries for the surrogate 2-Fluorophenol in samples MW-6D and MW-8D were below the QC limit.

The lowest standard point in the initial calibration curve was dropped for 2,4-Dinitrophenol and 4,6-Dinitro-2-methylphenol. The method allows for this, however, the computer software does not and corrections had to made by hand to Form 6B and Form 7B.

Metals Analysis

Trace amounts of Arsenic and Selenium were detected in the preparation blank above the CRDL.

The percent recoveries for Barium in the CCVs were slightly (<1%) above the established QC limit. This may cause the reported result to be biased high.

The RPDs (relative percent difference) for Chromium and Lead in the duplicate analyses were above the QC limit.

A default setting for the ICSA and ICSAB resulted in an apparent out of control flag for Silver in the raw data.

Please do not hesitate to contact me if you have any questions regarding this report.

I certify that this data package is in compliance with the terms and conditions of the Protocol, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in the hardcopy data package has been authorized by the Laboratory Manager, or the Manager's designee, as verified by the following signature.

Sincerely,

Joseph L Jeraci,

Dr. Joseph Jeraci
President
Life Science Laboratories Inc.

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Case Narrative

Client: Plumley Engineering – North Star / Cicero, New York

Case: PLE 0404

SDG: SB-7-10-12

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
SB-15-10-12	040720032-021	07/20/04	14:15	Soil
SB-7-10-12	040720032-022	07/20/04	14:15	Soil
SB-7-12-14	040720032-023	07/20/04	14:15	Soil

Volatile Organics

1) The samples were analyzed using EPA Method 8260 following the criteria for NYSDEC ASP.

2) The samples received on 7/20/04 had a temperature of 8 °C.

3) The %RSD's for the compounds Bromoform and 1,1,2,2-Tetrachloroethane in the initial calibration analyzed on 6/30/04 were outside the criteria established by the method. The %RSD's for these compounds were 27.9 % and 32.8 %, respectively. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for these compounds.

4) The %D for the compound Chloroform in the continuing calibration analyzed on 7/26/04 was outside the criteria established by the method. The %D for this compound was 25.1 %. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

5) Sample SB-7-10-12 (AES sample number 040720032-022) was used for the medium level soil matrix spike and the matrix spike duplicate analysis. All recoveries were within acceptable limits.

6) The following samples were analyzed using a medium level analysis. This was due to the high level of compounds present. The dilution given below is the overall dilution based on the amount of methanol extract used.

Client ID	Laboratory ID	Dilution
SB-15-10-12	040720032-021	1:20
SB-7-10-12	040720032-022	1:100
SB-7-12-14	040720032-023	1:4000

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Case Narrative

Client: Plumley Engineering – North Star / Cicero, New York

Case: PLE 0404

SDG: SB-2-4-6

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
Equipment Blank	040720032-001	07/20/04	14:15	Water
Trip Blank	040720032-002	07/20/04	14:15	Water
SB-2-4-6	040720032-003	07/20/04	14:15	Soil
SB-3-4-6	040720032-004	07/20/04	14:15	Soil
SB-4-4-6	040720032-005	07/20/04	14:15	Soil
SB-5-4-6	040720032-006	07/20/04	14:15	Soil
SB-6-10-12	040720032-007	07/20/04	14:15	Soil
SB-7-16-18	040720032-008	07/20/04	14:15	Soil
SB-8-10-12	040720032-009	07/20/04	14:15	Soil
SB-9-2-4	040720032-010	07/20/04	14:15	Soil
SB-10-2-4	040720032-011	07/20/04	14:15	Soil
SB-11-10-12	040720032-012	07/20/04	14:15	Soil
SB-12-10-12	040720032-013	07/20/04	14:15	Soil
SB-13-8-10	040720032-014	07/20/04	14:15	Soil
SB-14-2-4	040720032-015	07/20/04	14:15	Soil
SB-16-4-6	040720032-016	07/20/04	14:15	Soil
SB-6-4-6	040720032-017	07/20/04	14:15	Soil
SB-7-4-6	040720032-018	07/20/04	14:15	Soil
SB-8-4-6	040720032-019	07/20/04	14:15	Soil
SB-11-2-4	040720032-020	07/20/04	14:15	Soil

Volatile Organics

1) The samples were analyzed using EPA Method 8260 following the criteria for NYSDEC ASP.

2) The samples received on 7/20/04 had a temperature of 8 °C.

3) The %RSD's for the compounds Bromoform and 1,1,2,2-Tetrachloroethane in the initial calibration analyzed on 6/30/04 were outside the criteria established by the method. The %RSD's for these compounds were 27.9 % and 32.8 %, respectively. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for these compounds.

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11) The following samples were diluted prior to analysis. This was due to the high level of compounds present.

Client ID	Laboratory ID	Dilution
SB-11-10-12	040720032-012	1:5
SB-13-8-10	040720032-014	1:10
SB-8-4-6	040720032-019	1:5

12) The column used in Instrument C for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm. The trap used for this instrument is a VOCARB 4000 with Carbopack C&B / Carboxen 1000 & 1001.

Semi-Volatile Organics

1) The samples were analyzed using EPA Method 8270 following the criteria for NYSDEC ASP.

2) The %RSD for the compound Pentachlorophenol in the initial calibration analyzed on 8/12/04 was outside the criteria established by the method. The %RSD for this compound was 25.1 %. According to the protocol, four semi-volatile organic compounds may exceed the %RSD limit of 20.5 % as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was less than 40 % and the RRF was greater than 0.010 for this compound.

3) The %D for the compound Pentachlorophenol in the continuing calibration analyzed on 8/13/04 was outside the criteria established by the method. The %D for this compound was 39.2 %. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % as long as the %D is less than 40 % and the RRF is above 0.010. The %D was less than 40 % and the RRF was greater than 0.010 for this compound.

4) Sample SB-7-4-6 (AES sample number 040720032-018) was used for the matrix spike and the matrix spike duplicate analysis. All recoveries were within acceptable limits.

"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 8/25/04

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Case Narrative

Client: Plumley Engineering – North Star / Cicero, New York

Case: PLE 0405

SDG: CE-MW-1

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
MW-1	040727025-001	07/27/04	10:10	Water
MW-2	040727025-002	07/27/04	10:10	Water
MW-3	040727025-003	07/27/04	10:10	Water
MW-4	040727025-004	07/27/04	10:10	Water
TW-5	040727025-005	07/27/04	10:10	Water
TW-4	040727025-006	07/27/04	10:10	Water
CE-MW-1E	040727025-007	07/27/04	10:10	Water
CE-MW-2E	040727025-008	07/27/04	10:10	Water
Trip Blank	040727025-009	07/27/04	10:10	Water
Equipment Blank	040727025-010	07/27/04	10:10	Water

Volatile Organics

1) The samples were analyzed using EPA Method 8260 following the criteria for NYSDEC ASP.

2) The samples received on 7/27/04 had a temperature of 8 °C.

3) The %RSD's for the compounds Bromoform and 1,1,2,2-Tetrachloroethane in the initial calibration analyzed on 6/30/04 were outside the criteria established by the method. The %RSD's for these compounds were 27.9 % and 32.8 %, respectively. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for these compounds.

4) The %D for the compound Trichloroethene in the continuing calibration analyzed on 7/29/04 was outside the criteria established by the method. The %D for this compound was 27.1 %. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

5) Sample MW-1 (AES sample number 040727025-001) was used for the matrix spike and the matrix spike duplicate analysis. All recoveries were within acceptable limits.

6) The following samples were diluted prior to analysis. This was due to the high level of compounds present.

Client ID	Laboratory ID	Dilution
MW-1	040727025-001	1:2
MW-2	040727025-002	1:20
TW-5	040727025-005	1:5
TW-4	040727025-006	1:1000

7) The column used in Instrument C for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm. The trap used for this instrument is a VOCARB 4000 with Carbopack C&B / Carboxen 1000 & 1001.

"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 8/25/04

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Case Narrative

Client: Plumley Engineering – North Star Dry Cleaners / Cicero, NY

Case: PLE 0401

SDG: GW-1

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
TP-7	040608013-001	06/08/04	10:17	Soil
TP-8	040608013-002	06/08/04	10:17	Soil
GW-1	040608013-003	06/08/04	10:17	Water
TP-1A	040611024-001	06/11/04	10:00	Soil
TP-1B	040611024-002	06/11/04	10:00	Soil
TP-2A	040611024-003	06/11/04	10:00	Soil
TP-2B	040611024-004	06/11/04	10:00	Soil
TP-3A	040611024-005	06/11/04	10:00	Soil
TP-3B	040611024-006	06/11/04	10:00	Soil
TP-5	040611024-007	06/11/04	10:00	Soil
TP-6	040611024-008	06/11/04	10:00	Soil
GW-1B	040611024-009	06/11/04	10:00	Water
GW-2B	040611024-010	06/11/04	10:00	Water
GW-3A	040611024-011	06/11/04	10:00	Water
GW-3B	040611024-012	06/11/04	10:00	Water

Volatile Organics

1) The samples were analyzed using EPA Method 8260 following the criteria for NYSDEC ASP.

2) The samples received on 6/8/04 had a temperature of 24 °C and the samples received on 6/11/04 had a temperature of 20 °C.

3) The calibration curve for the compound Methyl-tert-butyl ether (MTBE) was analyzed on 6/15/04. None of the samples had this compound present.

4) The %RSD for the compound Vinyl Chloride in the initial calibration analyzed on 5/28/04 was outside the criteria established by the method. The %RSD for this compound was 25.0 %. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for this compound.

5) The %D for the compound 1,1-Dichloroethene in the continuing calibration analyzed on 6/14/04 was outside the criteria established by the method. The %D for this compound was 35.2 %. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

6) The %D's for the compounds 1,1-Dichloroethene and 1,1-Dichloroethane in the continuing calibration analyzed on 6/15/04 were outside the criteria established by the method. The %D's for these compounds were 36.3 % and 25.2 %, respectively. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for these compounds.

7) Sample GW-1 (AES sample number 040608013-003) was used for the water matrix spike and the matrix spike duplicate analysis. All recoveries were within acceptable limits.

8) Sample TP-7 (AES sample number 040608013-001) was used for the soil matrix spike and the matrix spike duplicate analysis. All recoveries were within acceptable limits.

9) The surrogate recovery for Toluene-d8 on sample TP-2B (AES sample numbers 040611024-004) was outside specified limits. This sample was not re-analyzed due to an oversight.

10) The column used in Instrument C for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm. The trap used for this instrument is a VOCARB 4000 with Carbopack C&B / Carboxen 1000 & 1001.

"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 7/14/04

SDG Narrative
0519387

Client:	**Plumley Engineering, P.C.**
Project Number:	**2003074**
Project Location:	**North Star Cicero, New York**
Date:	**January 31, 2006**

The following data package contains results from the North Star Cicero samples collected November 4, 2005 and November 15, 2005. The samples were assigned to LSL Sample Delivery Group (SDG) number 059387.

All analyses were performed within the method specific hold time.

Volatile Analysis

The raw data analyte list is more extensive that the analyte list present on the summary forms, which reflect those analytes requested by the client.

Tert-Butyl Alcohol (TBA) was analyzed under a separate processing method and is not included in the Laboratory Control Sample (LCS) or the Matrix Spike / Matrix Spike Duplicate (MS/MSD) or CCV4. Additionally, TBA recoveries in some of the CCVs are below the QC limit.

Sample MW-8D was reanalyzed to check for carryover from sample MW-3. The reanalysis was reported and both runs are included in the data package. Sample MW-4 was reanalyzed to check for carryover from sample MW-3. Sample MW-13 was reanalyzed to check for possible carryover.

Sample MW-1 was reanalyzed for PCE at dilution and the results from both runs are reported. Sample MW-2 was re-analyzed at dilution and the results from both runs are reported. Samples MW-3, MW-11, and MW-12 were reanalyzed due to high hits.

Semi-Volatile Analysis

The Laboratory Control Sample (LCS) solutions were not spiked with seven compounds and these are noted with an "ND" in the result column. The method does not require that all analytes are included in the LCS spike.

Due to a software error, several compounds are listed in duplicate on the Form 1B LCS data sheets in the main data package. The extra compounds have been crossed out.

The percent recoveries for the surrogate 2-Fluorophenol in samples MW-6D and MW-8D were below the QC limit.

The lowest standard point in the initial calibration curve was dropped for 2,4-Dinitrophenol and 4,6-Dinitro-2-methylphenol. The method allows for this, however, the computer software does not and corrections had to made by hand to Form 6B and Form 7B.

Metals Analysis

Trace amounts of Arsenic and Selenium were detected in the preparation blank above the CRDL.

The percent recoveries for Barium in the CCVs were slightly (<1%) above the established QC limit. This may cause the reported result to be biased high.

The RPDs (relative percent difference) for Chromium and Lead in the duplicate analyses were above the QC limit.

A default setting for the ICSA and ICSAB resulted in an apparent out of control flag for Silver in the raw data.

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Sincerely,

Joseph L Jeraci, Pres

Dr. Joseph Jeraci
President
Life Science Laboratories Inc.

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Case Narrative

Client: Plumley Engineering – North Star / Cicero, New York

Case: PLE 0404

SDG: SB-2-4-6

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
Equipment Blank	040720032-001	07/20/04	14:15	Water
Trip Blank	040720032-002	07/20/04	14:15	Water
SB-2-4-6	040720032-003	07/20/04	14:15	Soil
SB-3-4-6	040720032-004	07/20/04	14:15	Soil
SB-4-4-6	040720032-005	07/20/04	14:15	Soil
SB-5-4-6	040720032-006	07/20/04	14:15	Soil
SB-6-10-12	040720032-007	07/20/04	14:15	Soil
SB-7-16-18	040720032-008	07/20/04	14:15	Soil
SB-8-10-12	040720032-009	07/20/04	14:15	Soil
SB-9-2-4	040720032-010	07/20/04	14:15	Soil
SB-10-2-4	040720032-011	07/20/04	14:15	Soil
SB-11-10-12	040720032-012	07/20/04	14:15	Soil
SB-12-10-12	040720032-013	07/20/04	14:15	Soil
SB-13-8-10	040720032-014	07/20/04	14:15	Soil
SB-14-2-4	040720032-015	07/20/04	14:15	Soil
SB-16-4-6	040720032-016	07/20/04	14:15	Soil
SB-6-4-6	040720032-017	07/20/04	14:15	Soil
SB-7-4-6	040720032-018	07/20/04	14:15	Soil
SB-8-4-6	040720032-019	07/20/04	14:15	Soil
SB-11-2-4	040720032-020	07/20/04	14:15	Soil

Volatile Organics

1) The samples were analyzed using EPA Method 8260 following the criteria for NYSDEC ASP.

2) The samples received on 7/20/04 had a temperature of 8 °C.

3) The %RSD's for the compounds Bromoform and 1,1,2,2-Tetrachloroethane in the initial calibration analyzed on 6/30/04 were outside the criteria established by the method. The %RSD's for these compounds were 27.9 % and 32.8 %, respectively. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for these compounds.

4) The %D for the compound Vinyl Chloride in the continuing calibration analyzed on 7/22/04 was outside the criteria established by the method. The %D for this compound was 26.4 %. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

5) The %D for the compound Chloroform in the continuing calibration analyzed on 7/26/04 was outside the criteria established by the method. The %D for this compound was 25.1 %. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

6) The %D for the compound 1,1-Dichloroethene in the continuing calibration analyzed on 7/27/04 was outside the criteria established by the method. The %D for this compound was 28.8 %. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

7) The %D for the compound Trichloroethene in the continuing calibration analyzed on 7/29/04 was outside the criteria established by the method. The %D for this compound was 27.1 %. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

8) Sample SB-2-4-6 (AES sample number 040720032-003) was used for the low level soil matrix spike and the matrix spike duplicate analysis. All recoveries were within acceptable limits.

9) Sample SB-7-4-6 (AES sample number 040720032-018) was used for the medium level soil matrix spike and the matrix spike duplicate analysis. All recoveries were within acceptable limits.

10) The following samples were analyzed using a medium level analysis. This was due to the high level of compounds present. The dilution given below is the overall dilution based on the amount of methanol extract used.

Client ID	Laboratory ID	Dilution
SB-7-16-18	040720032-008	1:50
SB-12-10-12	040720032-013	1:100
SB-7-4-6	040720032-018	1:4000

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Case Narrative

Client: Plumley Engineering – North Star / Cicero, New York

Case: PLE 0404

SDG: SB-7-10-12

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
SB-15-10-12	040720032-021	07/20/04	14:15	Soil
SB-7-10-12	040720032-022	07/20/04	14:15	Soil
SB-7-12-14	040720032-023	07/20/04	14:15	Soil

Volatile Organics

1) The samples were analyzed using EPA Method 8260 following the criteria for NYSDEC ASP.

2) The samples received on 7/20/04 had a temperature of 8 °C.

3) The %RSD's for the compounds Bromoform and 1,1,2,2-Tetrachloroethane in the initial calibration analyzed on 6/30/04 were outside the criteria established by the method. The %RSD's for these compounds were 27.9 % and 32.8 %, respectively. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for these compounds.

4) The %D for the compound Chloroform in the continuing calibration analyzed on 7/26/04 was outside the criteria established by the method. The %D for this compound was 25.1 %. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

5) Sample SB-7-10-12 (AES sample number 040720032-022) was used for the medium level soil matrix spike and the matrix spike duplicate analysis. All recoveries were within acceptable limits.

6) The following samples were analyzed using a medium level analysis. This was due to the high level of compounds present. The dilution given below is the overall dilution based on the amount of methanol extract used.

Client ID	Laboratory ID	Dilution
SB-15-10-12	040720032-021	1:20
SB-7-10-12	040720032-022	1:100
SB-7-12-14	040720032-023	1:4000

7) The column used in Instrument C for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm. The trap used for this instrument is a VOCARB 4000 with Carbopack C&B / Carboxen 1000 & 1001.

Semi-Volatile Organics

1) The samples were analyzed using EPA Method 8270 following the criteria for NYSDEC ASP.

2) The %RSD for the compound Pentachlorophenol in the initial calibration analyzed on 8/12/04 was outside the criteria established by the method. The %RSD for this compound was 25.1 %. According to the protocol, four semi-volatile organic compounds may exceed the %RSD limit of 20.5 % as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was less than 40 % and the RRF was greater than 0.010 for this compound.

3) The %D for the compound Pentachlorophenol in the continuing calibration analyzed on 8/13/04 was outside the criteria established by the method. The %D for this compound was 39.2 %. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % as long as the %D is less than 40 % and the RRF is above 0.010. The %D was less than 40 % and the RRF was greater than 0.010 for this compound.

4) Sample SB-7-4-6 (AES sample number 040720032-018) was used for the matrix spike and the matrix spike duplicate analysis. All recoveries were within acceptable limits.

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Laboratory Manager

Date: 8/25/04

11) The following samples were diluted prior to analysis. This was due to the high level of compounds present.

Client ID	Laboratory ID	Dilution
SB-11-10-12	040720032-012	1:5
SB-13-8-10	040720032-014	1:10
SB-8-4-6	040720032-019	1:5

12) The column used in Instrument C for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm. The trap used for this instrument is a VOCARB 4000 with Carbopack C&B / Carboxen 1000 & 1001.

Semi-Volatile Organics

1) The samples were analyzed using EPA Method 8270 following the criteria for NYSDEC ASP.

2) The %RSD for the compound Pentachlorophenol in the initial calibration analyzed on 8/12/04 was outside the criteria established by the method. The %RSD for this compound was 25.1 %. According to the protocol, four semi-volatile organic compounds may exceed the %RSD limit of 20.5 % as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was less than 40 % and the RRF was greater than 0.010 for this compound.

3) The %D for the compound Pentachlorophenol in the continuing calibration analyzed on 8/13/04 was outside the criteria established by the method. The %D for this compound was 39.2 %. According to the protocol, four semi-volatile organic compounds may exceed the %D limit of 25.0 % as long as the %D is less than 40 % and the RRF is above 0.010. The %D was less than 40 % and the RRF was greater than 0.010 for this compound.

4) Sample SB-7-4-6 (AES sample number 040720032-018) was used for the matrix spike and the matrix spike duplicate analysis. All recoveries were within acceptable limits.

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Laboratory Manager

Date: 8/25/04

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Case Narrative

Client: Plumley Engineering – North Star / Cicero, New York

Case: PLE 0405

SDG: CE-MW-1

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
MW-1	040727025-001	07/27/04	10:10	Water
MW-2	040727025-002	07/27/04	10:10	Water
MW-3	040727025-003	07/27/04	10:10	Water
MW-4	040727025-004	07/27/04	10:10	Water
TW-5	040727025-005	07/27/04	10:10	Water
TW-4	040727025-006	07/27/04	10:10	Water
CE-MW-1E	040727025-007	07/27/04	10:10	Water
CE-MW-2E	040727025-008	07/27/04	10:10	Water
Trip Blank	040727025-009	07/27/04	10:10	Water
Equipment Blank	040727025-010	07/27/04	10:10	Water

Volatile Organics

1) The samples were analyzed using EPA Method 8260 following the criteria for NYSDEC ASP.

2) The samples received on 7/27/04 had a temperature of 8 °C.

3) The %RSD's for the compounds Bromoform and 1,1,2,2-Tetrachloroethane in the initial calibration analyzed on 6/30/04 were outside the criteria established by the method. The %RSD's for these compounds were 27.9 % and 32.8 %, respectively. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for these compounds.

4) The %D for the compound Trichloroethene in the continuing calibration analyzed on 7/29/04 was outside the criteria established by the method. The %D for this compound was 27.1 %. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

5) Sample MW-1 (AES sample number 040727025-001) was used for the matrix spike and the matrix spike duplicate analysis. All recoveries were within acceptable limits.

6) The following samples were diluted prior to analysis. This was due to the high level of compounds present.

Client ID	Laboratory ID	Dilution
MW-1	040727025-001	1:2
MW-2	040727025-002	1:20
TW-5	040727025-005	1:5
TW-4	040727025-006	1:1000

7) The column used in Instrument C for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm. The trap used for this instrument is a VOCARB 4000 with Carbopack C&B / Carboxen 1000 & 1001.

"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 8/25/04

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Case Narrative

Client: Plumley Engineering – North Star Dry Cleaners / Cicero, NY

Case: PLE 0401

SDG: GW-1

Sample ID	Laboratory Sample ID	Date Received	VTSR	Matrix
TP-7	040608013-001	06/08/04	10:17	Soil
TP-8	040608013-002	06/08/04	10:17	Soil
GW-1	040608013-003	06/08/04	10:17	Water
TP-1A	040611024-001	06/11/04	10:00	Soil
TP-1B	040611024-002	06/11/04	10:00	Soil
TP-2A	040611024-003	06/11/04	10:00	Soil
TP-2B	040611024-004	06/11/04	10:00	Soil
TP-3A	040611024-005	06/11/04	10:00	Soil
TP-3B	040611024-006	06/11/04	10:00	Soil
TP-5	040611024-007	06/11/04	10:00	Soil
TP-6	040611024-008	06/11/04	10:00	Soil
GW-1B	040611024-009	06/11/04	10:00	Water
GW-2B	040611024-010	06/11/04	10:00	Water
GW-3A	040611024-011	06/11/04	10:00	Water
GW-3B	040611024-012	06/11/04	10:00	Water

Volatile Organics

1) The samples were analyzed using EPA Method 8260 following the criteria for NYSDEC ASP.

2) The samples received on 6/8/04 had a temperature of 24 °C and the samples received on 6/11/04 had a temperature of 20 °C.

3) The calibration curve for the compound Methyl-tert-butyl ether (MTBE) was analyzed on 6/15/04. None of the samples had this compound present.

4) The %RSD for the compound Vinyl Chloride in the initial calibration analyzed on 5/28/04 was outside the criteria established by the method. The %RSD for this compound was 25.0 %. According to the protocol, two volatile organic compounds may exceed the %RSD limit of 20.5 % as long as the %RSD is less than 40 % and the RRF is above 0.010. The %RSD was below 40 % and the RRF was greater than 0.010 for this compound.

5) The %D for the compound 1,1-Dichloroethene in the continuing calibration analyzed on 6/14/04 was outside the criteria established by the method. The %D for this compound was 35.2 %. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for this compound.

6) The %D's for the compounds 1,1-Dichloroethene and 1,1-Dichloroethane in the continuing calibration analyzed on 6/15/04 were outside the criteria established by the method. The %D's for these compounds were 36.3 % and 25.2 %, respectively. According to the protocol, two volatile organic compounds may exceed the %D limit of 25.0 % as long as the %D is less than 40 % and the RRF is above 0.010. The %D was below 40 % and the RRF was greater than 0.010 for these compounds.

7) Sample GW-1 (AES sample number 040608013-003) was used for the water matrix spike and the matrix spike duplicate analysis. All recoveries were within acceptable limits.

8) Sample TP-7 (AES sample number 040608013-001) was used for the soil matrix spike and the matrix spike duplicate analysis. All recoveries were within acceptable limits.

9) The surrogate recovery for Toluene-d8 on sample TP-2B (AES sample numbers 040611024-004) was outside specified limits. This sample was not re-analyzed due to an oversight.

10) The column used in Instrument C for analysis was an RTX-502.2, 60 meters long with an internal diameter of 0.32 mm. The trap used for this instrument is a VOCARB 4000 with Carbopack C&B / Carboxen 1000 & 1001.

"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 7/14/04

CLIENT:	Plumley Engineering
Project:	Northstar
Lab Order:	C0511010

CASE NARRATIVE

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the case narrative. All samples were received and analyzed within the EPA recommended holding times. Samples were analyzed using the methods outlined in the following references:

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999.

See Corrective Action: [221] LCS did not meet criteria for samples.
See Corrective Action: [222] MS/MSD did not meet criteria for samples.
See Corrective Action: [223] IS did not meet criteria for samples.
See Corrective Action: [224] IS did not meet criteria for samples.

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Corrective Action Report

Date Initiated:	20-Nov-05	**Corrective Action Report ID:**	221
Initiated By:	Russell Pellegrino	**Department:**	MSVOA

Corrective Action Description

CAR Summary: LCS did not meet criteria for samples.

Description of Nonconformance: BS1UT-112005 did not meet criteria for 1,2,4-trichlorobenzene, 1,3,5-trimethylbenzene & hexachloro-1,3-butadiene.

Description of Corrective Action: No corrective action taken at this time.

Performed By: Russell Pellegrino **Completion Date:** 21-Nov-05

Client Notification

Client Notification Required: No **Notified By:**

Comment:

Quality Assurance Review

Nonconformance Type: Deficiency

Further Action required by QA: At this time no further corrective action taken.

Approval and Closure

Technical Director / Deputy Tech. Dir.:	Russell Pellegrino	Close Date:	22-Nov-05
QA Officer Approval:	Nick Scala	QA Date:	21-Nov-05

Centek Laboratories, LLC

Corrective Action Report

Date Initiated:	18-Nov-05	**Corrective Action Report ID:**	222
Initiated By:	Russell Pellegrino	**Department:**	MSVOA

Corrective Action Description

CAR Summary: MS/MSD did not meet criteria for samples.

Description of Nonconformance: Several compounds did not meet criteria for sample C0511010-002 MS/MSD. Both MS/MSD show similar results. This is most likely due to matrix.

Description of Corrective Action: Both MS/MSD show similar results.

Performed By: Russell Pellegrino **Completion Date:** 19-Nov-05

Client Notification

Client Notification Required: No **Notified By:**

Comment:

Quality Assurance Review

Nonconformance Type: Deficiency

Further Action required by QA: No further corrective action taken. All sets data submitted.

Approval and Closure

Technical Director / Deputy Tech. Dir.: Russell Pellegrino Close Date: 20-Nov-05

QA Officer Approval: Nick Scala QA Date: 19-Nov-05

Centek Laboratories, LLC

Corrective Action Report

Date Initiated: 18-Nov-05 **Corrective Action Report ID:** 223

Initiated By: Russell Pellegrino **Department:** MSVOA

Corrective Action Description

CAR Summary: IS did not meet criteria for samples.

Description of Nonconformance: IS was higher and did not meet criteria for sample C0511010-002, 002DL, & 002 MS/MSD. This is most likely due to matrix.

Description of Corrective Action: Samples were analyzed at a higher concentration with similar results. All sets of data submitted.

Performed By: Russell Pellegrino **Completion Date:** 19-Nov-05

Client Notification

Client Notification Required: No **Notified By:**

Comment:

Quality Assurance Review

Nonconformance Type: Deficiency

Further Action required by QA: No further corrective action taken. All sets data submitted.

Approval and Closure

Technical Director / Deputy Tech. Dir.: Russell Pellegrino Close Date: 20-Nov-05

QA Officer Approval: Nick Scala QA Date: 19-Nov-05

Centek Laboratories, LLC

Corrective Action Report

Date Initiated:	20-Nov-05	**Corrective Action Report ID:**	224
Initiated By:	Russell Pellegrino	**Department:**	MSVOA

Corrective Action Description

CAR Summary: IS did not meet criteria for samples.

Description of Nonconformance: IS was higher and did not meet criteria for sample C0511010-002DL. This is most likely due to matrix.

Description of Corrective Action: Samples were analyzed at a higher concentration with similar results. All sets of data submitted.

Performed By: Russell Pellegrino **Completion Date:** 21-Nov-05

Client Notification

Client Notification Required: No **Notified By:**

Comment:

Quality Assurance Review

Nonconformance Type: Deficiency

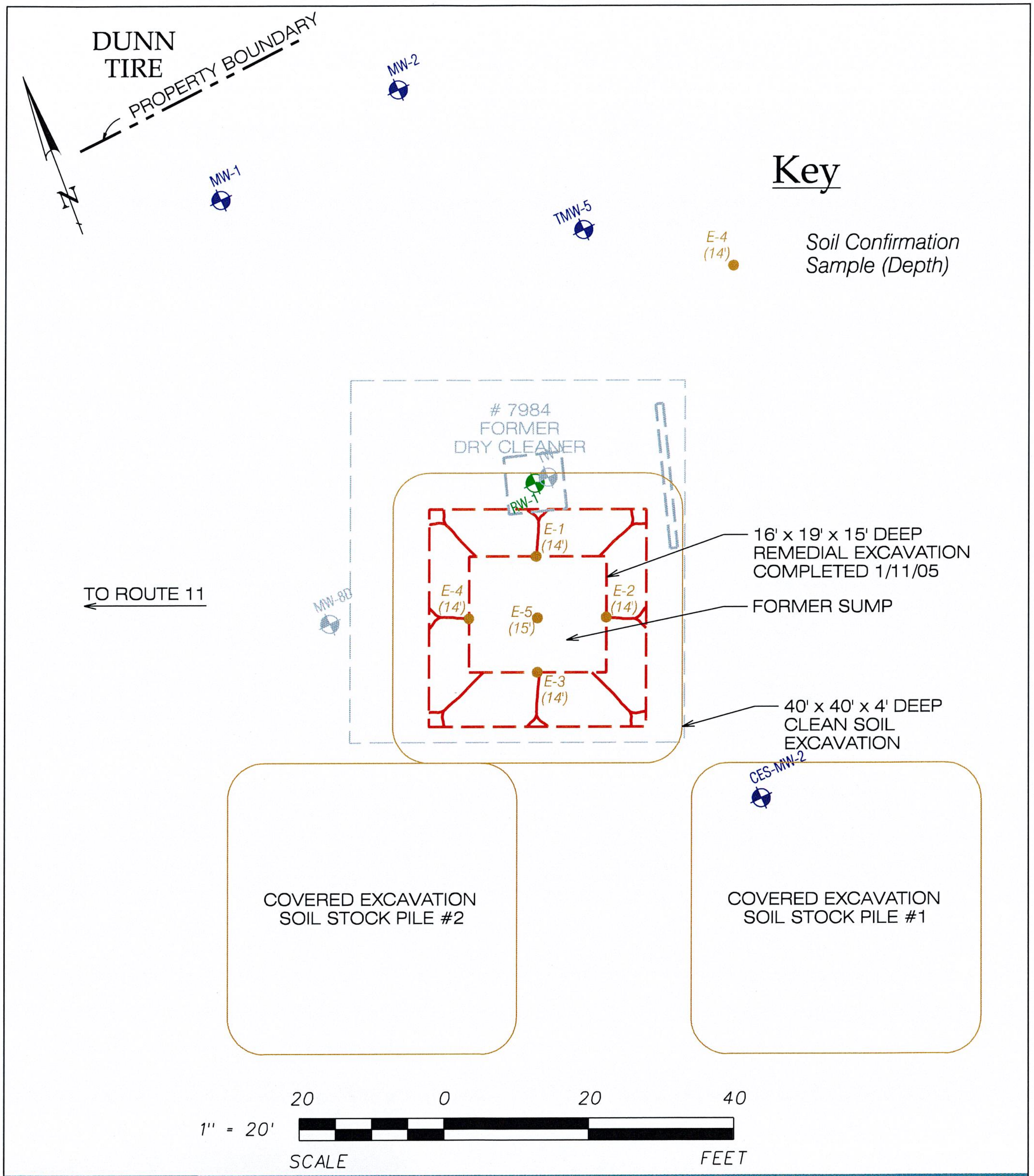
Further Action required by QA: No further corrective action taken. All sets data submitted.

Approval and Closure

Technical Director / Deputy Tech. Dir.: Russell Pellegrino Close Date: 22-Nov-05

QA Officer Approval: Nick Scala QA Date: 21-Nov-05

Last Updated BY RUSS Updated: 14-Dec-2005 4:02 PM Reported 14-Dec-2005 4:09 PM



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PLUMLEY ENGINEERING, P.C.
8232 LOOP ROAD
BALDWINSVILLE, NY 13027

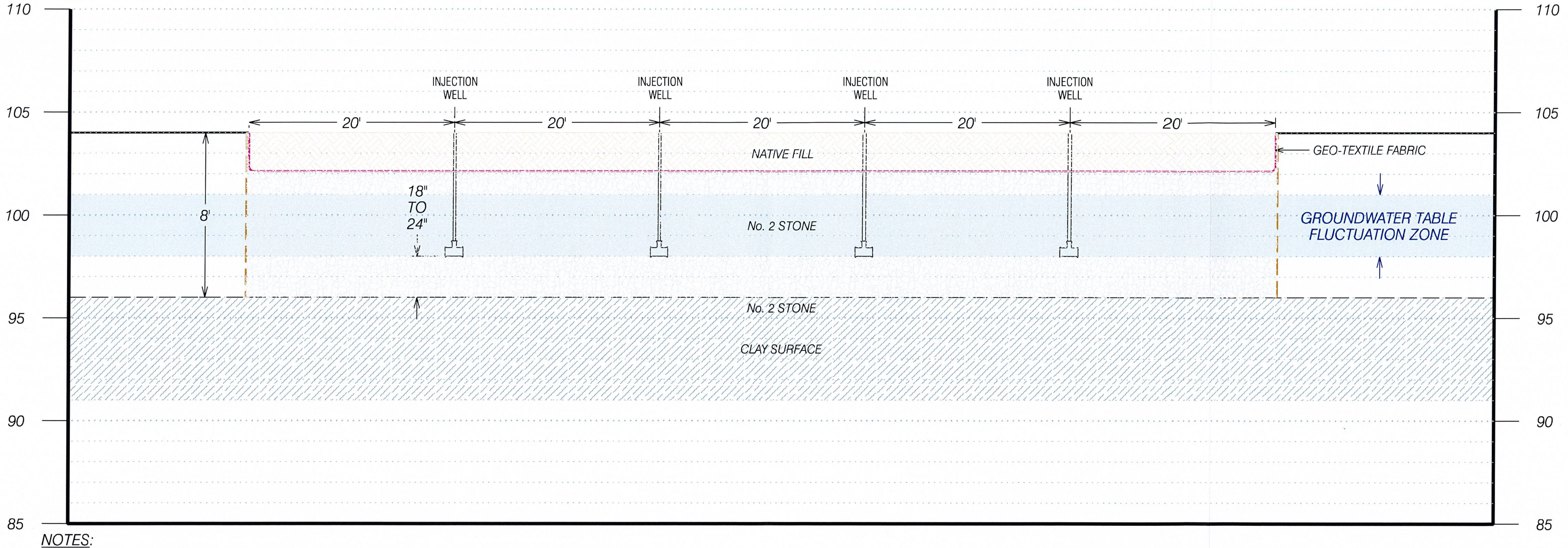
TELEPHONE: (315) 638-8587
FAX: (315) 638-9740
WWW.PLUMLEYENG.COM

Civil and Environmental Engineering

DESCRIPTION	LOCATION OF SAMPLE FROM REMEDIAL EXCAVATION SIDEWALLS AND BOTTOM
PROJECT:	VOLUNTARY CLEAN UP PROGRAM VCA No. A7-0466-0702
CLIENT:	HANCOCK & ESTABROOK, LLP
LOCATION:	TOWN OF CICERO, ONONDAGA COUNTY, NEW YORK

FIGURE 2

...\2003074.00\Drawings\8.5x11.dgn 10/4/2006 10:54:44 AM



NOTES:

1. Riser & horizontal piping is 4" dia. Schedule 40 PVC. Horizontal piping was hand slotted and an end fitted "T" on the bottom.
2. Injection wells stick up 18-24" above grade and are fitted with locking caps.
3. Each well was wrapped in filter fabric.
4. Depth of horizontal pipe was dependent on soil stability conditions encountered in the field. General trench depth is 8' below grade.

TREATMENT TRENCH SECTION

SCALE: 1" = 10 ' HORIZONTAL
1" = 5' VERTICAL

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BALDWINSVILLE, NY 13027

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Civil and Environmental Engineering

REVISIONS:	DATE:	BY:
△ REVISED INJECTION WELL PLACEMENT.	09/30/05	WJS

NOTE: NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

PROJECT:
VOLUNTARY CLEANUP PROGRAM
VCA No. A7-0466-0702
DWG. TITLE:
GROUNDWATER INTERCEPTOR/TREATMENT TRENCH SCHEMATIC
CLIENT:
HANCOCK & ESTABROOK, LLP
LOCATION:
TOWN OF CICERO, ONONDAGA COUNTY, NEW YORK

PROJECT No.: 2003074
FILE NAME.: SC01P
SCALE: AS NOTED
DATE: SEPT. 2005
ENG'D BY: WJS
DRAWN BY: JTG/JMD
CHECKED BY: DRV

SHEET NO.:
FIGURE 3

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Existing

MW-8D ⊕	*Deep Monitoring Well Location*
◐	*Injection Well*
▨	*Injection Trench Location*
—— OH ——	*Overhead Electric Line*
—— W ——	*Water Service Line*
– – – NG – – –	*Natural Gas Service*
97.20 ——	*Deep Groundwater Contour (Based on 07-18-06 Data)*
98.33	*Groundwater Elevation (Based on 07-18-06 Data)*

Note:

The deep groundwater contours and the deep groundwater direction were calculated by using the groundwater elevation at the following deep monitoring wells MW-6D, MW-7D, MW-15D & MW-16D. Deep monitoring well MW-8D was excluded since this well was not screened in the same stratum as the wells mentioned above.

1" = 20'
20 0 20 40
SCALE FEET

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BALDWINSVILLE, NY 13027

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REVISIONS:	DATE:	BY:
△		

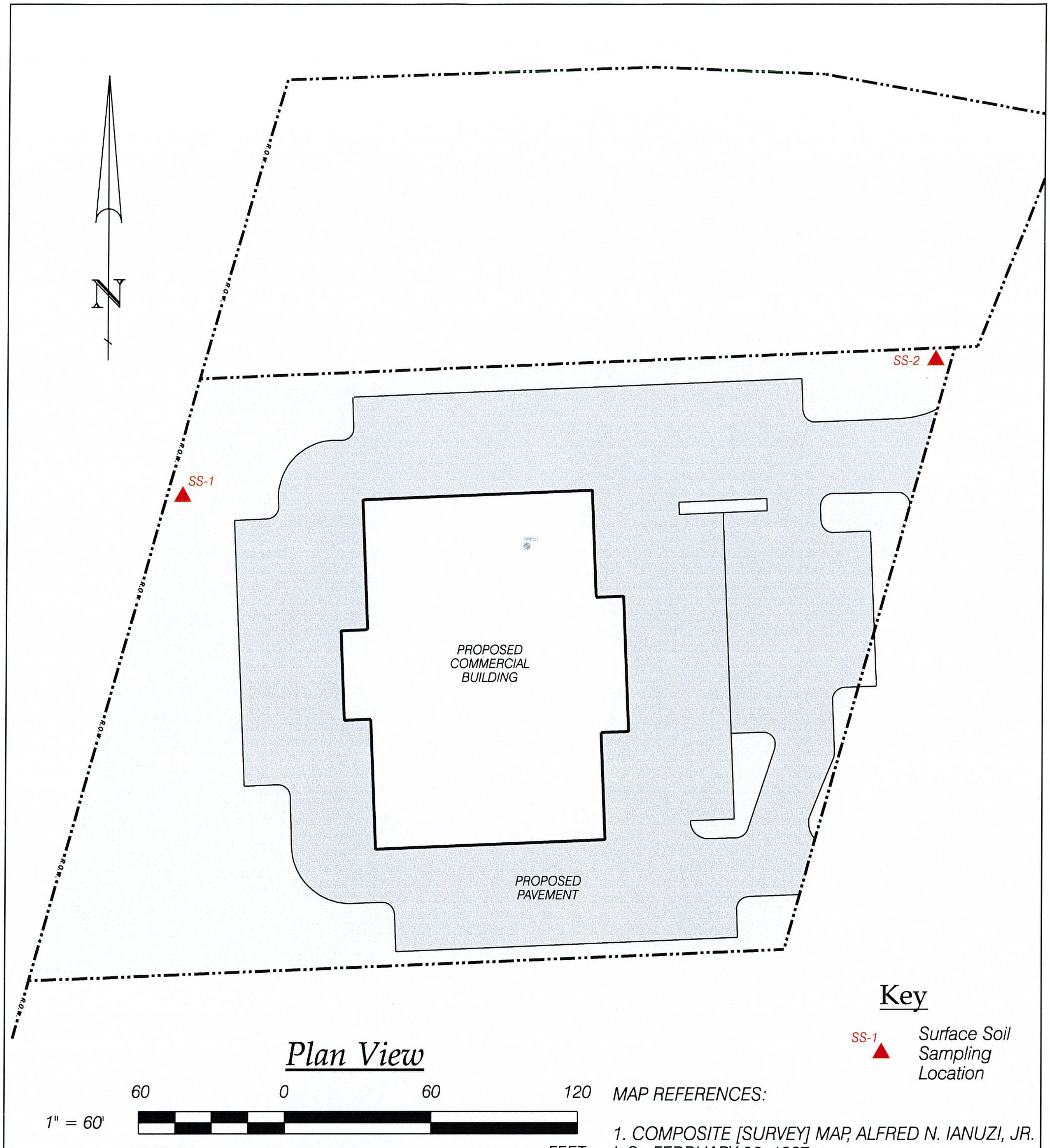
NOTE: NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

PROJECT: VOLUNTARY CLEANUP PROGRAM
VCA No. A7-0466-0702
CLIENT: HANCOCK & ESTABROOK, LLP
LOCATION: TOWN OF CICERO, ONONDAGA COUNTY, NEW YORK

DWG. TITLE:
DEEP GROUNDWATER MONITORING
WELLS AND GROUNDWATER CONTOURS
07/18/06

PROJECT No.: 2003074
FILE NAME.: Figure4
SCALE: 1" = 20'
DATE: JUL. 2006
ENG'D BY: DTH
DRAWN BY: JMD
CHECKED BY: WJS

SHEET NO.:
FIGURE 4



Plan View

MAP REFERENCES:

1. COMPOSITE [SURVEY] MAP, ALFRED N. IANUZI, JR. L.S., FEBRUARY 26, 1987.

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PLUMLEY ENGINEERING, P.C.
8232 LOOP ROAD
BALDWINSVILLE, NY 13027
TELEPHONE: (315) 638-8587
FAX: (315) 638-9740
WWW.PLUMLEYENG.COM

Civil and Environmental Engineering

DESCRIPTION: SURFACE SOIL SAMPLE LOCATIONS

PROJECT: VOLUNTARY CLEAN UP PROGRAM
VCA No. A7-0466-0702

CLIENT: HANCOCK & ESTABROOK, LLP

LOCATION: TOWN OF CICERO, ONONDAGA COUNTY, NEW YORK

FIGURE 5

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