

SITE INVESTIGATION REPORT AND PROPOSED REMEDIAL ACTION

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Carle Place, NY*

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INTRODUCTION

The Johnson & Hoffman Manufacturing Corporation (J&H) facility is located at 40 Voice Road, in Carle Place, Nassau County, New York (the "Site"; see Figure 1-1 for location). This Site has been the subject of several rounds of environmental investigation between 1996 and 2002. The most recent work was performed by Environmental Resources Management (ERM) between October 2000 and August 2002. This work consisted of the following:

- A soil gas survey, soil sampling, monitoring well installation and ground water sampling was performed in October and November of 2000.
- Additional delineation of impacted soil was performed in December 2001 through February 2002.
- A confirmatory round of ground water samples was collected in May 2002.
- Final delineation of impacted soil was completed in August 2002.
- A well search and receptor analysis was performed in August 2002.

This report presents the results of the above investigations in detail, and also provides an overview of all work conducted prior to October 2000.

SITE DESCRIPTION

The Site consists of a 59,000-square foot, one story building with associated parking and grass areas, on a 4.054-acre parcel. J&H has occupied the Site since 1962. J&H produces small metal parts at the Site using processes that include metal stamping, deburring and washing.

The Site is bounded to the north by Voice Road, on the opposite side of Voice Road directly north is an electrical substation owned by the Long Island Power Authority (LIPA). Located to the south of the Site is the Long Island Rail Road right-of-way. To the east is a small commercial

building occupied by a company called Fun World. An AM radio station is situated west of the Site along with a storage yard for trucks and landscaping equipment. A site plan is provided as Figure 1-2.

1.2 *SITE HYDROGEOLOGY*

There are four distinct geologic units that exist regionally (including beneath the Site) and consist of unconsolidated deposits of clay, silt, sand, and gravel that overlie southeast-sloping consolidated bedrock. The geologic units are, in descending order relative to the land surface: Upper Glacial Formation, the Magothy Formation, the Raritan Clay Member of the Raritan Formation, and the Lloyd Sand Member of the Raritan Formation. The Upper Glacial Formation forms the surface deposits across the Site.

The water table occurs approximately 50 feet below grade within the unconfined Upper Glacial Aquifer. The Upper Glacial is approximately 100 feet thick in the area of the Site (50 feet are saturated). Underlying the Upper Glacial Aquifer is the semi-confined Magothy Aquifer, which is several hundred feet thick and widely used for water supply throughout Long Island.

1.3 *PREVIOUS INVESTIGATIONS*

The previous investigations conducted at the Site were documented in the following reports:

- "Phase I Environmental Site Assessment" (ERM, December 1996)
- "Results of Phase II Investigation" (ERM, February 1997)
- "Environmental Due Diligence Review" (McCulley, Frick & Gilman, January 1997)
- "Due Diligence Report" (MAC Consultants, April 1998)

- “Phase I Environmental Site Assessment” (Liesch Associates, April 1999)

A summary of each investigation is provided in the following subsections. All sample locations are shown on Figure 1-3; sample results are summarized on Table 1-1.

1.3.1 Phase I Environmental Site Assessment (ERM, December 1996)

This Phase I Environmental Site Assessment (ESA) was conducted according to the ASTM standard and reported the following Recognized Environmental Conditions (RECs):

- Two active floor drains in the facility discharge to a stormwater drainage system that services the parking lot west of the manufacturing building. This system consists of several interconnected dry wells that ultimately discharge to an on-site stormwater detention basin.
- Two Finishing Department wastewater trenches (located north and south of the boiler room on the east side of the building) had deteriorated concrete sidewalls. Based upon the condition of the trench sidewalls, there may be some pathway for liquids to reach the soils underlying the north trench at this location.
- Two out-of-service dry wells were located in the boiler room. At the time of this Phase I, J&H had initiated steps to properly close these structures under the jurisdiction of the Nassau County Department of Health (NCDOH).

1.3.2 Results of Phase II Investigation (ERM, February 1997)

A Phase II site investigation was performed to follow-up on the Phase I ESA described above and collect environmental samples at the three identified RECs. A summary of the reported findings is provided below:

- A sediment sample (designated SWCB-1) was collected at the base of a dry well in the stormwater drainage system west of the building. This drainage system received discharges from floor drains in the building. Petroleum hydrocarbons were identified in this sample at 4,030

mg/kg. As a result it was recommended that the stormwater infiltration basin downstream of this dry well be sampled.

- Soil samples were collected from beneath the wastewater trenches in the Finishing Department on the east side of the building (samples NT-1, NT-2 and ST-1). These samples were found to contain metals (Cr, Hg, Ni and/or Zn) slightly above the New York State Recommended Soil Cleanup Objectives (RSCOs). The presence of these metals was attributed to background conditions.
- Sediment samples were collected at the base of two dry wells in the facility boiler room (samples BRcenter-1 and BRside-2). Mercury was detected in Brcenter-1 at 0.15 mg/kg, slightly above the RSCO of 0.1 mg/kg. It was recommended that the closure of the boiler room dry wells be completed under the jurisdiction of the NCDOH. This work was performed subsequent to this investigation.

1.3.3 *Environmental Due Diligence Review (McCulley, Frick & Gilman, January 1997)*

This report included of an assessment similar in scope to a standard Phase I ESA. A summary of the findings pertaining to potential site contamination (i.e., those findings that represent RECs) is provided below:

- Two floor drains in the southwestern portion of the building discharge to the stormwater drainage system in the west parking lot.
- One steel 5,000-gallon fuel oil UST was located adjacent to the east wall of the building. At the time of this study, the UST was last tightness tested on May 7, 1996. Previously, the UST was tested annually and reported to have passed, in accordance with applicable regulations.
- One surficial soil sample was collected in the bottom of the infiltration basin at the south end of the Site (sample S-4). The analysis detected 7,500 mg/kg of petroleum hydrocarbons, which was attributed to oily discharges from normal vehicular traffic in the parking lot.
- Small metal parts, scrap metal fragments and tumbling media were found on the ground surface in two small areas in the southwestern portion of the Site. Soil sample S-3 was collected at this location and low concentrations of three metals (Cd, Hg, Pb) were detected in excess of their respective RSCOs.
- A wastewater trench was in the process of being repaired during the time of the assessment. Four 55-gallon drums of soil were removed to facilitate the necessary access to the subsurface. Soil sample S-1 was collected from the bottom of the hole. Analytical results for RCRA

metals indicated only chromium in excess of the RSCOs. Petroleum hydrocarbons were detected at 180 mg/kg. No VOCs were detected.

- The former dry well in the boiler room was in the process of being excavated during the time of the assessment. Two 55-gallon drums of soil were removed from the hole. MFG sampled the soils in the bottom of the excavation (sample S-2) and detected selected metals at very low concentrations (<10 mg/kg). Only cadmium was detected above its RSCO value. Petroleum hydrocarbons were detected at 86 mg/kg. No VOCs were detected.
- A self-contained wastewater trench was observed to be full of soapy rinse water from the tumbling and parts cleaning operations in the Finishing Department. This trench is reported to have several sections where the concrete was degraded.

1.3.4 *Due Diligence Report (MAC Consultants, April 1998)*

This project addressed a mix of compliance and potential site contamination issues. Those tasks related to environmental contamination issues are described below along with the associated findings:

- In follow-up to the previous soil quality findings in the stormwater infiltration basin, one soil sample (SW-1) was collected from the base of this structure and analyzed for poly-aromatic hydrocarbons (PAHs). This sample indicated the presence of several PAH compounds above their respective RSCO values. As a result, additional samples were collected to assess potential threats to ground water quality as described below.
- Nine additional soil samples (SW-1a, SW-2, SW-2a, SW-3, SW-3a, SW-4, SW-4a, SW-5, SW-5a) were collected throughout the infiltration basin and analyzed for poly-aromatic hydrocarbons (PAHs) using the TCLP extraction procedure. These samples were distributed between shallow (0.0 to 0.5 feet) and deep (4.0 to 4.5 feet) sampling intervals. All sampling results found no detectable levels of PAH compounds in the TCLP extract. Based on these results, no further work was recommended.
- Previous laboratory results for sample ST-1 (5.5-6.0 feet) in the Finishing Department were reviewed to evaluate the conclusion that the nickel and zinc concentrations found in excess of the RSCO values are representative of background soil quality at the Site. Based on the review performed, it was concluded that the nickel and zinc are within

the range considered representative of background and no further work would be necessary.

- The closure of the two boiler room dry wells was completed by filling each structure with clean sand, sealing the well openings with concrete, and disposing of the two drums of lead contaminated soil previously excavated. Documentation of the closure was submitted to NCDOH and USEPA. Based on the work performed, no additional action was deemed to be warranted.
- The concrete walls of the northern wastewater trench in the Finishing Department were resurfaced and two interior floor drains in the Compressor Room and Annealing Area that led to the stormwater drainage system west of the building were sealed and abandoned-in-place by J&H. The completed work was inspected and found to be acceptable.
- Waste parts and tumbling media were removed from three outside locations. Fifteen drums of material (including the upper three inches of soil) were generated. This material was transported as non-hazardous waste to an off-site disposal facility.
- A soil boring was installed adjacent to the underground tank used to store No. 2 fuel oil and a sample (SW-2) was collected at or near the tank invert elevation. The sample was analyzed for PAHs and the results indicated that no constituents were present in excess of the New York State STARS guidance values. It was also noted that the tank had recently passed a tightness test, therefore it was concluded that there was no evidence of a release.

1.3.5 Phase I Environmental Site Assessment (Liesch Associates, April 1999)

This Phase I ESA, in addition to the standard ASTM scope of work, also included the installation of three monitoring well (MWs 1, 2 and 3) and eight soil borings (SB-1 through SB-6, HA-1 and B-1). Soil and ground water were samples collected and found PCE at levels exceeding the applicable standards and guidelines. As a result, the Phase I ESA concluded that the presence of PCE in soil and ground water represented a recognized environmental condition at the Site. No other recognized environmental conditions were reported. It is noted however, that one soil sample (HA-1) contained several metals (Be, Cr, Ni, Zn) at levels slightly in excess of the RSCOs. Several metals were also detected in ground water at levels above the applicable standards.

1.3.6 *Evaluation of Historic Soil Sampling Results*

The previous investigations of soil quality at the Site identified a number of Areas of Concern (AOCs), all of which have been investigated to various extents. A list of all recognized AOCs for soil is provided as follows:

1. Floor drains in the Compressor Room and Annealing Area that formerly discharged into the stormwater drainage system west of the building;
2. Concrete wastewater trench in the Finishing Department;
3. Boiler Room dry wells;
4. Accumulation of scrap parts and tumbling media on the ground surface in the southwest portion of the Site;
5. Stormwater drainage system west of the building, including the infiltration basin located in the southwest portion of the Site;
6. 5,000-gallon No. 2 fuel oil UST; and
7. PCE impacted soil near the southeast corner of the building.

The summary descriptions of historic soil sampling at the Site presented above indicate the detection of metals in excess of the RSCOs in AOC-1 through AOC-4. These findings are discussed in further detail in Section 1.3.6.1, below. The results from AOC-5 through AOC-7 where the chemicals of concern are organic in nature are further evaluated in Section 1.3.6.2.

1.3.6.1 *Discussion of Inorganic Soil Sampling Results*

As previously noted, Table 1-1 provides a summary of all soil sampling data and lists all samples with exceedences of the RSCOs. For the metals data, Table 1-2 presents the detected concentrations and actual RSCO values. In general, Table 1-2 shows only slight exceedences of the RSCO values. In addition, two of the samples listed in Table 1-2 (HA-1 and MW-

2) were collected in areas not believed to be impacted by metals contamination, but still had exceedences of the RSCOs. These sample results suggest that metals levels slightly above the RSCOs may represent a background condition at the Site.

Remedial actions were also performed in each of the four AOCs where the primary chemicals of concern were metals. These actions are summarized below.

AOC	Remedial Actions Taken	Current Status
Floor Drains in Compressor Room and Annealing Area	Drains sealed and abandoned in place	No further action required
Wastewater Trench in Finishing Dept.	Concrete trenches were resurfaced and sealed.	No further action required
Boiler Room Dry Wells	Dry wells excavated and closed. Closure report submitted to NCDOH and USEPA.	No further action required
Accumulations of Scrap Parts on Ground Surface	Scrap parts were removed from site along with uppermost shallow soil.	No further action required

Based on the foregoing, it is concluded that no additional work is necessary at these AOCs.

1.3.6.2 *Discussion of Organic Soil Sampling Results*

Three areas of the site were historically evaluated where organic contaminants were the primary chemicals of concern. This includes the former 5,000-gallon No. 2 fuel oil UST; the wastewater drainage system; and the former use of tetrachloroethene at the facility. These sampling results are discussed below.

Soil sample B-1 was collected at the UST location and did not indicate that any fuel oil was released. No exceedences of the RSCOs were detected. In

addition, it is noted that the tank had previously passed multiple tightness tests prior to being abandoned-in-place. Based on this information, it was concluded that no further evaluation is necessary at this location.

The wastewater drainage system was evaluated through the collection of a sample in dry well SWCB-1 and a series of samples in the infiltration basin. Petroleum hydrocarbons and poly-aromatic hydrocarbons were detected in this system, however TCLP analysis indicated that these compounds are not leachable. As a result, no further investigation is necessary.

The previous soil sampling results indicated the presence of tetrachloroethene (PCE) above its RSCO value near the southeast corner of the building. Based on these findings, it was concluded that further evaluation of this area was necessary. As a result, one of the primary objectives of the subsequent investigation work conducted by ERM was delineate the extent of soil in this area with PCE above its RSCO.

1.3.7 *Evaluation of Historic Ground Water Sampling Results*

A summary of the ground water investigation conducted as part of the previous investigations is presented in the table below. This work included the installation and sampling of three monitoring wells (MW-1, MW-2 and MW-3). These wells were constructed with well screens straddling the water table. A summary of these sampling results is provided below.

Sample ID	Date	Analyses Performed	Analytes Exceeding NYSGWS
MW-1	2/16/99	VOCs, SVOCs, PP Metals	Tetrachloroethene, Sb, As, Cr, Pb
MW-2	2/16/99	VOCs, SVOCs, PP Metals	Tetrachloroethene, Sb, As, Be, Cr, Pb
MW-3	2/16/99	VOCs, SVOCs, PP Metals	Sb, As, Be, Cr, Pb

The sampling results for inorganic constituents indicate a number of exceedences of the New York State Ground Water Standards (NYSGWS). A summary of these data is provided below.

Sample ID	Analyte	Concentration (µg/L)	NYSGWS (µg/L)
MW-1	Antimony	8.0	3.0
	Arsenic	28	25
	Chromium	87	50
	Lead	62	25
MW-2	Antimony	9.0	3.0
	Arsenic	28	25
	Beryllium	3.2	3.0
	Chromium	80	50
	Lead	58	25
MW-3	Antimony	10	3.0
	Arsenic	32	25
	Beryllium	3.3	3.0
	Chromium	72	50
	Lead	64	25

As indicated above, slight exceedences of the NYSGWS for inorganic parameters are ubiquitous across the Site. However, it is noted that the upgradient monitoring well (MW-3) contains the same analytes at similar concentrations as the two downgradient wells (MW-1 and MW-2). As a result, it is concluded that metals detected in ground water at the Site in excess of the NYSGWS represents a background condition.

The sampling results for organic chemicals indicated that ground water in the southern portion of the Site contained PCE at levels in excess of the New York State Ground Water Standards (NYSGWS). Based on these findings, it was concluded that further ground water evaluation at the Site was necessary. As a result, the objectives of the subsequent investigation work conducted by ERM included defining the ground water flow regime, delineating the extent of ground water containing PCE above the

NYSGWS, and evaluating if any potential threat to human health or the environment exists.

1.3.8 *Summary of Previous Investigations*

Based on the results of the historic investigations performed at the Site and summarized above, further environmental investigation is necessary to evaluate PCE in soil and ground water. No further action is required for all other AOCs at the Site. The remainder of the work reported in this document therefore focuses on the delineation of PCE impacts in the effected media.

2.0 SCOPE OF WORK

2.1 2000 SITE INVESTIGATION

The initial phase of work was based on a work plan prepared by HRP Associates, Inc. dated 24 September 1999 (see Appendix A). The project was implemented by ERM in October and November of 2000 with no deviations from the HRP work plan. Details of the work scope are provided below.

2.1.1 Soil Gas Survey

Previous subsurface investigations at the Site identified elevated concentrations of tetrachloroethene (PCE) and its associated breakdown products within in the soils located near the southeast corner of the building in the vicinity of existing monitoring well MW-2. A soil gas survey was conducted as a screening exercise to evaluate the source(s) of these contaminants and their approximate areal extent. The soil gas survey started in the vicinity of MW-2 and expanded outward in 20-foot increments. Each soil gas sample was collected by driving a slam bar to four feet below grade. A glass tube was inserted into the resulting hole and the annulus sealed with clay. The tube was purged of at least one volume of soil gas using a small pump. The sample was then collected in a Tedlar bag and analyzed by an on-site gas chromatograph (GC) equipped with a photo-ionization detector (PID) for PCE and its breakdown products trichloroethene (TCE), cis-1,2-dichloroethene (DCE) and vinyl chloride. New glass tubes and Tedlar bags were used for each sample. The slam bar was decontaminated between samples. A sampling grid was set-up as described in the HRP work plan with only minor changes due to accessibility.

2.1.2 *Soil Boring Program*

Based on the soil gas survey results, ERM installed eight soil borings in the locations that exhibited elevated soil gas contaminant concentrations. Four soil samples were collected from each soil boring in 2-foot vertical increments (except where refusal did not permit penetration to the desired depth of eight feet). Each sample was subdivided into two one-foot aliquots, each of which were initially screened with a portable PID then analyzed using the GC/PID.

Based upon the field screening results, ERM submitted two samples from each boring (16 samples total) to a state certified laboratory for analysis of halogenated volatile organics via EPA Method 8021B. The sample with the highest contaminant levels in the field screening was selected for laboratory analysis in each boring. An additional sample was selected for vertical delineation purposes.

2.1.3 *Monitoring Well Installation*

As per the work plan, two new wells were installed at the Site. New well MW-4 was installed in the northeast corner of the Site upgradient of the source area near existing well MW-2 to evaluate the quality of ground water entering the Site. New well MW-5 was installed south (downgradient) of MW-2 to evaluate the possible presence of a ground water VOC plume.

The two new wells were installed approximately eight feet into ground water by a truck mounted hollow stem rig. The wells were constructed of two-inch I.D. schedule 40 PVC casing and ten feet of 0.010-slot well screen. The screened section of the each well was surrounded with clean filter sand with a one-foot thick bentonite seal set immediately above the filter pack. The remainder of the annular space was filled with

cement/bentonite grout to grade. Each well was secured with a locking well cap and a bolt-down cast iron road box set in concrete flush with existing grade. (See Appendix B for construction details of each new well.) After installation was complete, the two new wells were developed by pumping until the discharge was free of visible turbidity.

2.1.4 *Ground Water Sampling*

Following installation and development of the two new wells, the top of well locations for the three existing wells (MW-1, MW-2 and MW-3) and two new wells (MW-4 and MW-5) were surveyed to determine elevation relative to an on-site benchmark. As required in the work plan, the five wells were not sampled until at least ten days after development to allow equilibration of ground water conditions.

Prior to well purging, the depth to water in the all five wells was measured to determine the Site's ground water flow direction. Each well was then purged by removing at least three well volumes with a properly decontaminated pump. The sampling was performed using disposable bailers. The collected ground water samples were placed on ice for preservation and delivered to a state-certified laboratory for analysis of volatile organics via EPA Method 8021B.

2.2 *2001 – 2002 SITE INVESTIGATION*

In December 2001, additional soil sampling was performed to complete the horizontal and vertical delineation at the two identified areas where concentrations of volatile organic compounds (VOCs) exceeded the NYSDEC RSCOs.

Five borings were conducted north and west of the impacted area near MW-2. The locations of these borings are presented on Figure 3-4 and

were determined based on accessibility within the building. Four additional borings were also conducted at exterior locations approximately 15 feet north, south, east and west of previous boring SB-9 at the concrete pad. Three soil samples were collected at each of the nine boring locations (generally from 0'-2, 4-6' and 8'-10' below grade). At three locations (SB-21, SB-22 and SB-23), the deepest sample was collected at a shallower horizon in response a PID detection or auger refusal.

The most recent soil samples collected were obtained in August 2002. As part of this work, eight borings (SB-24 through SB-31) were installed near the concrete pad area to conclude the delineation in this area (see Figure 3-4). Two samples were selected for analysis in these borings based on PID screening results.

In addition, an additional round of ground water samples was collected from all Site wells. This work was conducted in May 2002.

All samples were analyzed by a State-certified laboratory for VOC by EPA Method 8260 (soil) or EPA Method 624 (water).

3.0 INVESTIGATION RESULTS

The following sections describe the results of all work performed at the Site and includes the findings of the hydrogeologic characterization, soil gas survey, soil sampling and ground water sampling.

3.1 HYDROGEOLOGIC CHARACTERIZATION

Geologic logs from all soil borings installed between November 2000 and August 2002 (a total of 27) are presented in Appendix C. These logs indicate that the native soil at the Site consists of well-stratified fine, medium and coarse sand with traces of gravel. These deposits are typical of the Upper Glacial Formation. A small amount of surficial fill was also found adjacent to and beneath the building. This fill layer extends below grade to a maximum of five feet where present and consists of clay, silt and fine sand.

Ground water was found at 48 to 49 feet below grade. Based on the surveyed well elevations and the depth to water measurements recorded on 12 December 2000, a water table contour map was constructed and is presented as Figure 3-1. As indicated in this figure, the ground water flow direction is southeast at an approximate average gradient of 0.0015. This is consistent with published data for the vicinity of the Site.

3.2 SOIL GAS SURVEY RESULTS

The soil gas survey results are presented in Table 3-1 and Figure 3-2. The figure shows that soil gas underlying the areas tested in the southern portion of the J&H Site generally contains PCE at levels ranging from ND to 100 µg-PCE/L. However, the soil gas results indicated there are three locations where soil gas concentrations were elevated in comparison to the

rest of the survey area. Each of the locations listed below were found to have soil gas concentrations greater than 200 µg-PCE/L:

1. The largest area with elevated soil gas surrounds the previously known PCE source area near monitoring well MW-2. Soil gas concentrations in this area were found to range from 126 to 1071 µg-PCE/L.
2. A single elevated point of 660 µg-PCE/L was found at survey point B-10. This location is just inside a man-door along the east wall of the building.
3. A single elevated point of 311 µg-PCE/L was found at survey point L-2. This location is adjacent to a concrete pad and storage trailers south of the building.

3.3

SOIL SAMPLING RESULTS

Based on the soil gas results, eight locations were initially selected for additional soil sampling during the investigation conducted in 2000 (see Figure 3-3). These locations are summarized as follows:

Boring ID	Location	Purpose
SB-7	Approx. 20 feet east of well MW-2	Horizontal delineation of MW-2 source area
SB-8	Approx. 40 southeast of well MW-2 at soil gas grid location E-4	Horizontal delineation of MW-2 source area and investigation of elevated soil gas detection
SB-9	Adjacent to soil gas grid location L-2	Investigation of elevated soil gas detection
SB-10	Adjacent to soil gas grid location C-6	Characterization of MW-2 source area and investigation of elevated soil gas detection
SB-11	Adjacent to soil gas grid location D-7	Characterization of MW-2 source area and investigation of elevated soil gas detection
SB-12	Approx. 10 feet east of soil gas grid location B-10	Investigation of elevated soil gas detection
SB-13	Adjacent to well MW-2	Vertical delineation of MW-2 source area
SB-14	Adjacent to soil gas grid location A-6	Horizontal delineation of MW-2 source area

As shown in the summary above, soil samples were collected in the three areas of elevated soil gas concentration. In addition, further characterization of the nature and extent of the known PCE source area around monitoring well MW-2 was also performed. Based on these sampling results, seventeen additional borings were installed in December 2001 and August 2002 to complete the delineation of the impacted areas (see Figure 3-4 for locations). These borings were situated as follows:

Boring ID	Location	Purpose
SB-15 through SB-19	15 feet north, south, east and west of SB-9	Horizontal and vertical delineation of source area near the concrete pad
SB-20 through SB-23	Various locations northwest of MW-2 inside the building	Horizontal and vertical delineation of MW-2 source area
SB-24 through SB-31	Various locations northwest, west and southwest of SB-9	Horizontal and vertical delineation of source area near the concrete pad

The soil sample analytical results from the field GC screening conducted during the 2000 investigation are presented in Table 3-2. The split-sample results from the State-certified laboratory are given in Table 3-3. Both data sets indicate exceedences of the NYSDEC RSCOs, which are summarized as follows:

Boring ID	Analytes Exceeding RSCOs (Field GC)	Analytes Exceeding RSCOs (State-Certified Lab)
SB-7	None	Acetone
SB-8	cis-1,2-DCE	cis-1,2-DCE
SB-9	PCE	None
SB-10	PCE, TCE	PCE, TCE
SB-11	PCE, cis-1,2-DCE	PCE
SB-12	None	None
SB-13	PCE, TCE, cis-1,2-DCE	PCE, TCE, cis-1,2-DCE
SB-14	None	None

The results of the samples analyzed by State-certified laboratory are generally lower in concentration than those analyzed by field GC. Based

on comparison to the RSCOs, there were two minor discrepancies between the data sets, as discussed below.

- In boring SB-9, the field GC results for PCE were slightly above the RSCO, while the State-certified laboratory results were slightly below the RSCO.
- In boring SB-11, the field GC results for cis-1,2-DCE were slightly above the RSCO, while the State-certified laboratory results were slightly below the RSCO.

Overall, the comparison between the two data sets indicates an acceptable level of corroboration. It is concluded that the combination of the field GC and State-certified laboratory samples provide adequate data to identify potential source areas at the Site.

In addition to the split-sample data, Table 3-3 provides analytical results for all other soil samples collected by ERM at the Site. These results (along with pre-existing sampling data) are presented in Figure 3-4. This figure provides a map view of the sampling results and posts the highest detected concentration in each boring. The data indicate there are two separate areas where soil concentrations exceed the NYSDEC RSCOs: (1) the area around well MW-2, extending beneath the building; and (2) near the concrete storage pad south of the building. Further discussion of these areas is given below.

Well MW-2 Area

Figure 3-4 indicates that the areal extent of soil impacts above the PCE RSCO of 1,400 µg/kg is well defined. The vertical extent of contamination can also be evaluated based on analytical results from soil samples collected at depth within the impacted area. These data are summarized in Table 3-4 and indicate that the impacted soil zone does not extend beyond ten feet below grade.

Concrete Pad Area

The results of the soil borings conducted around the concrete pad south of the building indicate full horizontal delineation of the area of impacted soil above the RSCOs (see Figure 3-4). Table 3-4 presents the vertical delineation data from within the impacted zone. These data indicate that the vertical extent of impacted soil above the RSCOs is limited to within ten feet below grade.

3.4 *GROUND WATER SAMPLING RESULTS*

The results from the ground water sampling event conducted in November 2000 are presented in Table 3-5a. Data from the May 2002 sampling round is presented in Table 3-5b. A plan view showing both data sets is given as Figure 3-5. A number of conclusions have been drawn and are presented below:

- Sampling results from wells MW-3 and MW-4 indicates that ground water entering the property from upgradient does not contain detectable levels of VOCs. Results in well MW-3 are consistent with previous sampling in 1999.
- The current levels of VOCs in the known source area at well MW-2 are within the range detected by previous sampling in 1999.
- New well MW-5 indicates the presence of a dilute VOC plume emanating from the MW-2 source area.
- The VOC impacts found in well MW-1 are likely due to the source area identified at the concrete pad, which is directly upgradient of this well.
- A comparison of the two sampling rounds indicates a generally consistent picture of ground water quality. Several minor differences are noted when comparing the November 2000 results with the December 1999 results including:
 - A slight concentration increase was noted in well MW-1; and
 - A slight concentration decrease was noted MW-5.

WELL SEARCH RESULTS

The NYSDEC office in Stony Brook, New York was contacted to obtain all known production well information within a half-mile radius of the Site. NYSDEC maintains records for production wells with capacities greater than 45 gallons per minute. The results indicated a total of 14 wells within a half-mile radius of the Site. The locations of all identified wells were plotted on USGS 7.5' Quadrangle maps of Hicksville, Lynbrook, Sea Cliff and Freeport, New York, (Figure 3-6). In addition, Table 3-6 provides a listing of all wells located within the well search radius including well owner, well address, distance and direction from the site, casing diameter, screen diameter, total depth below surface, casing length, screen length, depth to ground water, discharge rates and well use. A copy of each production well record is provided as Appendix D. A total of four wells were identified that are located more or less downgradient from the Site. These wells are highlighted on Table 3-6 and summarized below:

Well ID	Year Installed	Distance from Site	Direction from Site	Depth
N-2230	1947	1200 feet	Southeast	85 feet
N-3758	1951	950 feet	South	91 feet
N-8050	1966	2650 feet	Southeast	328 feet
N-5485	1972	2650 feet	Southeast	577 feet

The results of the well inventory indicate that the closest downgradient wells are N-2230 and N-3758. Well N-2230 usage was not specified. Well N-3758 was listed for general usage. Due to the shallow depth of these wells and the subsequent redevelopment of the area into an office building and shopping plaza, it was believed to be likely that these wells are no longer in service. To further evaluate this matter, the Carle Place Water District was contacted to determine if the street addresses in the vicinity of these wells are serviced by public water. A windshield survey was performed to verify the correct addresses covering the area of interest. This additional inquiry confirmed that 1 – 150 Old Country

Road and 150 Glen Cove Road are customers of the water district. It is therefore concluded that wells N-2230 and N-3758 are not being used for potable supply purposes.

Well N-8050 is listed for air conditioning use and is located approximately 2650 feet from the Site. It is 328 feet deep and screened in the Magothy aquifer. The permitted discharge is 140 gallons per minute. The intended use of this well does not indicate significant potential for human exposure, however further investigation was performed to determine the current status of this well through communication with the Hempstead Water District. This additional inquiry confirmed that the address of this well (100 Ring Road West) is connected to the water district distribution network. It is therefore concluded that well N-8050 is not being used for potable supply purposes.

The nearest downgradient public supply well (N-5485) is located approximately 2650 feet southeast of the Site and has a maximum permitted discharge of 1,400 gallons per minute. This well is 557 feet deep and is screened in the mid-Magothy aquifer. According to records obtained from the Nassau County Department of Health, this well was abandoned in 1991 due to nitrate and organic contamination.

DATA VALADATION

The overall objective of the data validation process is to determine what degree of confidence may be placed on the analytical results. The validation process identifies deviations from the required methods, poor quality control (QC) results, matrix interference and other analytical problems that may compromise the potential uses of the data. The analytical data were qualified and appropriately flagged by the validator. This information was taken into account during the interpretation of the data.

The validation of the J&H data was limited to the most recent soil and ground water sampling conducted during 2001 and 2002. Data Usability Summary Reports (DUSR's) were prepared for these data in accordance with the following protocols and procedures:

- The United States Environmental Protection Agency (USEPA)/ Contract Laboratory Protocol (CLP) National Functional Guidelines for Organic Data Review (February 1994);
- SOP HW-6, Revision 11, June 1996: CLP Organics Data Review and Preliminary Review;
- the 1995 New York State Analytical Services Protocols (ASP); and
- the reviewer's professional judgment.

A preliminary review of the data was performed to verify that all of the necessary paperwork, such as chain-of-custodies, traffic reports, analytical reports, and deliverable packages were present. A detailed quality assurance review was then performed by a qualified ERM chemist to verify the qualitative and quantitative reliability of the data as it was provided by the laboratory. The specific items and criteria that were reviewed are summarized in the validation reports (see Appendix E).

The validation reports highlight the data results that did not meet QC limits and therefore may have required data qualification. The validation

The validation reports highlight the data results that did not meet QC limits and therefore may have required data qualification. The validation results are presented in tables when possible, which summarize the quality control data as compared to the QC limits. These tables include information such as, blank contamination, surrogate recoveries and internal standard area counts that did not meet QC criteria. The reports also indicate the data qualification actions taken as a result of these criteria.

Based upon the data validation process, qualification of data, where appropriate, are made by the use of qualifier codes. These qualifiers serve as an indication of the qualitative and quantitative reliability of the data. The qualifier codes utilized for all samples are as follows:

- U - Compound was analyzed for, but not detected.
- J - Estimated value. Value was designated as estimated as a result of the data validation criteria. Also used to indicate tentatively identified compounds (TICs) or when an organic compound is present (mass spectral identification criteria are met), but the concentration is less than the Contract Required Quantitation Limit (CRQL).
- B - for organics: Analyte found in associated blank as well as in sample, however value is greater than the action level and has not been negated as blank contamination.
- D - Compound identified in an analysis at a secondary dilution factor.
- R - Rejected. On this project, this qualifier was used only for tentatively identified compounds (TICs) rejected due to laboratory derived contamination.

The result of the review of the J&H Site data indicate that the analytical results are valid and usable with the qualifications noted in the validation reports provided as Appendix E. All data qualifiers were taken into account during the interpretation of the analytical results. No target compound analytical data were rejected based on the validation

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

The conclusions of the Site investigation at the J&H Manufacturing Corp. facility in Carle Place, NY are listed as follows:

- The native soil at the Site consists of well-stratified fine, medium and coarse sand with traces of gravel typical of the Upper Glacial Formation. Up to five feet of surficial fill was also found adjacent to and beneath the building consisting of clay, silt and fine sand.
- Ground water at the Site flows southeast with an approximate average gradient of 0.0015.
- The soil gas survey identified three areas where soil gas concentrations were greater than 200 µg-PCE/L:
 - The largest area with elevated soil gas surrounds the previously known PCE source area near monitoring well MW-2. Soil gas concentrations in this area were found to range from 126 to 1071 µg-PCE/L.
 - A single elevated point of 660 µg-PCE/L was found at survey point B-10. This location is just inside a man-door along the east wall of the building.
 - A single elevated point of 311 µg-PCE/L was found at survey point L-2. This location is adjacent to a concrete pad and storage trailers south of the building.
- The soil sample results indicate there are two separate areas where soil concentrations exceed the NYSDEC RSCOs: (1) the previously known area around well MW-2; and (2) near the concrete storage pad and trailers south of the building.
- Soil sample results at elevated soil gas location B-10 did not indicate exceedences of the NYSDEC RSCOs.
- The vertical extent of impacted soil in the MW-2 area is less than ten feet below grade. The vertical extent of impacted soil in the concrete pad area is less than five feet below grade.
- Ground water entering the property from upgradient does not contain detectable levels of VOCs.
- A plume of VOC-impacted ground water emanates from the two impacted soil areas and potentially extends off-site.

- Public records indicate the possible presence of two shallow wells within about 1,000 feet downgradient of the Site. These wells are believed to be out-of-service/abandoned. The local water purveyor was contacted and it was confirmed that these locations are connected to their distribution system.
- The nearest public supply well is located 0.5 mile southeast of the site and is 557 feet in depth. This well has been out-of-service since 1991.

5.2 *RECOMMENDATIONS*

5.2.1 *Recommendations for Soil*

As concluded in Section 5.1, there are two areas where soil contains VOCs at concentrations exceeding the NYSDEC RSCOs:

- the previously known area around well MW-2 (hereafter referred to as Area A); and
- near the concrete storage pad and trailers south of the building (hereafter referred to as Area B).

Two basic remedial approaches were considered to address soils in these two areas: (1) in-situ remediation; and (2) soil excavation with off-site disposal. The main advantage of excavation and off-site disposal is rapid completion of the remedial process. However, there are several disadvantages of excavation and off-site disposal, including:

- The southeast corner of the building would need to be demolished to allow excavation to a depth of up to 10 feet under the building slab (applies to Area A only).
- Excavated soil would be classified as RCRA-hazardous and some of the soil would likely be land-banned, making disposal very costly.
- Excavation would result in a significant short-term disturbance.
- Excavation would result in short-term potential releases of PCE emissions that would require monitoring and possibly controls.

The most significant issue raised above is the need to address soil under the building slab in Area A. To most efficiently address soil in this location, an in-situ remedial technology is recommended. Considering

the high volatility of the contaminants of concern, in-situ soil vapor extraction (SVE) is the recommended technology for this site.

Excavation is a feasible alternative for Area B. However, if an SVE system is installed at the Site to address Area A, the cost for installing an extraction well in Area B and piping the Area B well to the SVE system would be low in comparison to excavation and off-site disposal of hazardous soil at this location. It is therefore recommended that in-situ SVE be to use to address Area B as well.

SVE is a relatively simple in-situ remedial technology for addressing VOC contamination in the vadose (unsaturated) zone. To implement this technology, a blower is used to apply a vacuum to an extraction well, or network of wells that is screened in the vadose zone through the contaminated interval. The vacuum induces a flow of vapor towards the extraction well, and as the vapor passes through the contaminated formation, VOCs volatilize into the vapor stream. The resultant VOC laden vapor is then withdrawn from the extraction well and the contaminants are removed through an emission control device prior to discharging the soil vapor to the atmosphere.

The effectiveness of SVE is greatly dependent on the volatility of the contaminants of concern, the permeability of the contaminated matrix, as well as the number and rate of pore volume exchanges accomplished. The contaminants of concern at the Site include PCE and DCE. These compounds have sufficient volatility for SVE to be effective. Based on the geologic data developed at this site, the subsurface in the impacted areas consist of a shallow fill layer of variable composition, underlain by well stratified fine, medium and coarse sand. The fill material varies from silt and clay to coarse sand and gravel. These areas of fine-grained fill will require special consideration to ensure that SVE is effective. Further discussion of this issue is provided below.

Area A System

Based on the delineation of Area A, the soil that requires remediation is restricted to an area no greater than 80 feet by 80 feet (6,400 square feet) by 10 feet deep. Based on our experience in applying SVE, we anticipate that a single SVE well would have a radius of influence (ROI) of at least 30 feet. The ROI will likely be greater than 30 feet, however a pilot test would be necessary to accurately determine the site-specific ROI. Considering the small area that needs to be addressed, the cost of a pilot test is not warranted in this situation. Rather we recommend using a conservative ROI for designing the SVE system. Based on a 30-foot ROI and using a 20% overlap to ensure complete coverage, each well would address an area of 2,260 square feet (sq. ft.). Thus a total of three extraction wells would be needed to address Area A. These wells would be located in a triangular pattern with a passive inlet well in the center to prevent a stagnation zone. It would also be recommended to install an impermeable vapor barrier at the surface in areas within Area A that are currently not covered with either concrete or asphalt. This would prevent atmospheric short-circuiting and will also prevent precipitation from being withdrawn with extracted vapors.

The above paragraph provides the general concept for the size and scope of the SVE system for Area A, however it does not address the issue of the possible presence of shallow fine grained fill. This will be evaluated in detail as part of the design process, but it is anticipated that this issue will likely be addressed by the use of nested extraction wells. Nested wells will enhance control of the subsurface gas flow and permit the flows to be concentrated at particular horizons.

Area B System

The soil sampling data indicates that the impacted zone in Area B is approximately 50 feet long by 25 feet wide by up to eight feet deep. Considering the shallow depth of contamination in this area and the absence of structures, it is recommended that a single horizontal extraction trench be installed to run the entire length of Area B (which is not yet determined) and placed in the center of the 25-foot wide area. The horizontal well would be installed by excavating a narrow trench (approximately one-foot wide) and installing a perforated pipe. The trench would be back filled with gravel and all of Area B would then be capped with an impermeable cover to prevent atmospheric short-circuiting and to prevent precipitation from being withdrawn with extracted vapors.

The above paragraph provides the general concept for the size and scope of the SVE system for Area B, however it does not address the issue of the possible presence of shallow fine-grained fill. Boring logs from within the impacted area indicate the presence of this material in borings SB-9 (1.0 feet) and SB-16 (2.0 feet), however none was found in boring SB-24. This will be evaluated in detail as part of the design process, but it is anticipated that this issue will likely be addressed by removing this material prior to installing the horizontal vapor extraction pipe. This pipe would then be installed at approximately four to five feet below grade.

SVE Equipment

The vertical wells from Area A and the horizontal well from Area B would be piped to a common manifold. Each well would have its own air control valve, gas flow monitoring port, and sample/vacuum monitoring port. The SVE equipment will include the following:

- vacuum blower;
- moisture separator;
- dilution air inlet;
- in-line air filter;
- emission control device; and
- instrumentation and controls.

The vacuum blower will induce a flow of soil vapor from each well and through the moisture separator and air filter. The blower outlet would be piped into the emission control device to remove contaminants from the vapor stream prior to being emitted to the atmosphere.

The capacity of the blower needs to be sufficient to allow sufficient pore volume changes in a given period of time and to allow a sufficient ROI to be achieved. A gas flow of 150 cubic feet per minute (cfm) for Area A would correspond to a turnover of 340 pore volumes per month. This represents a relatively aggressive design basis.

A gas flow of 50 cfm for Area B would correspond to a turnover of 1150 pore volumes per month. Assuming a horizontal screen length of about 50 feet results in an extraction flow of 1.0 cfm per foot of screen. This also represents a relatively aggressive design basis. Thus a total gas flow of 200 cfm would be more than sufficient for addressing contaminated soil in both areas simultaneously. During the design phase, these gas flow rates would be revisited and consideration will be given to a system that alternates among wells or between the two areas in order to reduce the size of the extraction blower.

The SVE system would include a moisture separator to remove condensation or entrained moisture from the vapor stream. Considering that a surface cover will be used and vapor is extracted only from the shallow soil, it is anticipated that very little liquid will accumulate in the moisture separator. Thus an automated system is not necessary to remove liquid from the moisture separator. Rather moisture would be manually

drained and containerized for characterization and off-site disposal in an appropriate manner based on the characterization results. The moisture separator would include a high level switch that would shut the system down to prevent moisture from being withdrawn into the vacuum blower.

For emission controls it is recommended that vapor phase granular activated carbon (GAC) be used. GAC is a simple and reliable technology that is very effective for removing the contaminants of concern at the site. It is proposed that two GAC vessels be used in series to ensure adequate emission controls. Based on the soil sampling results it has been estimated that a total VOC mass would likely not exceed 600 pounds. A reasonable loading efficiency for the contaminants of concern onto vapor-phase GAC is 10 pounds of VOC per 100 pounds of GAC. This would result in a total GAC usage of approximately 6,000 pounds. Spent GAC would be handled as a hazardous waste and sent off-site for regeneration.

Follow-up Required

A Remedial Action Work Plan (RAWP) will be developed that will include a conceptual design of the SVE system along with a proposed operations and monitoring plan. In addition, a confirmatory soil sampling plan will be included in the RAWP that will be the basis of establishing the SVE shutdown criteria

5.2.2 *Recommendations for Ground Water*

The conclusions presented in Section 5.1 state that VOC contamination originates from, and extends downgradient of, the two impacted soil areas documented in Section 3.3. This VOC contamination potentially extends off-site to the south. It is recognized that full delineation of VOC-impacted ground water is necessary. However, it is also noted that the

well search data does not indicate an imminent threat to human health or the environment.

It is recommended that additional investigation work be performed to complete the required ground water delineation. This will be conducted in a phased manner, with an initial phase to investigate the proximal off-site conditions, followed by later phases further away from the Site as needed to complete the delineation. The initial work will consist of the installation of three to four Geoprobe borings at off-site locations to be determined based on access considerations. These borings will penetrate to a depth of 20 feet below the water table to allow the collection of two ground water samples per boring. One shallow sample will be collected at the water table, and the second sample will be collected 20 feet below the water table for vertical delineation purposes. Concurrent with the collection of these Geoprobe samples, a full round of monitoring well samples will also be collected for the entire Site and a new water table contour map will be prepared. All samples will be analyzed for VOCs using EPA Method 624. Based on this new information, a proposal for a second phase of off-site investigation will be prepared if necessary and submitted to NYSDEC.

In addition, it is recommended that further work be performed to confirm that the two shallow off-site supply wells are no longer in service. This will be done by obtaining billing records from the local water purveyor and confirming that these addresses are being serviced by public water.

Figure 1-1
Site Location Map
Johnson & Hoffman Manufacturing Corporation
Carle Place, New York

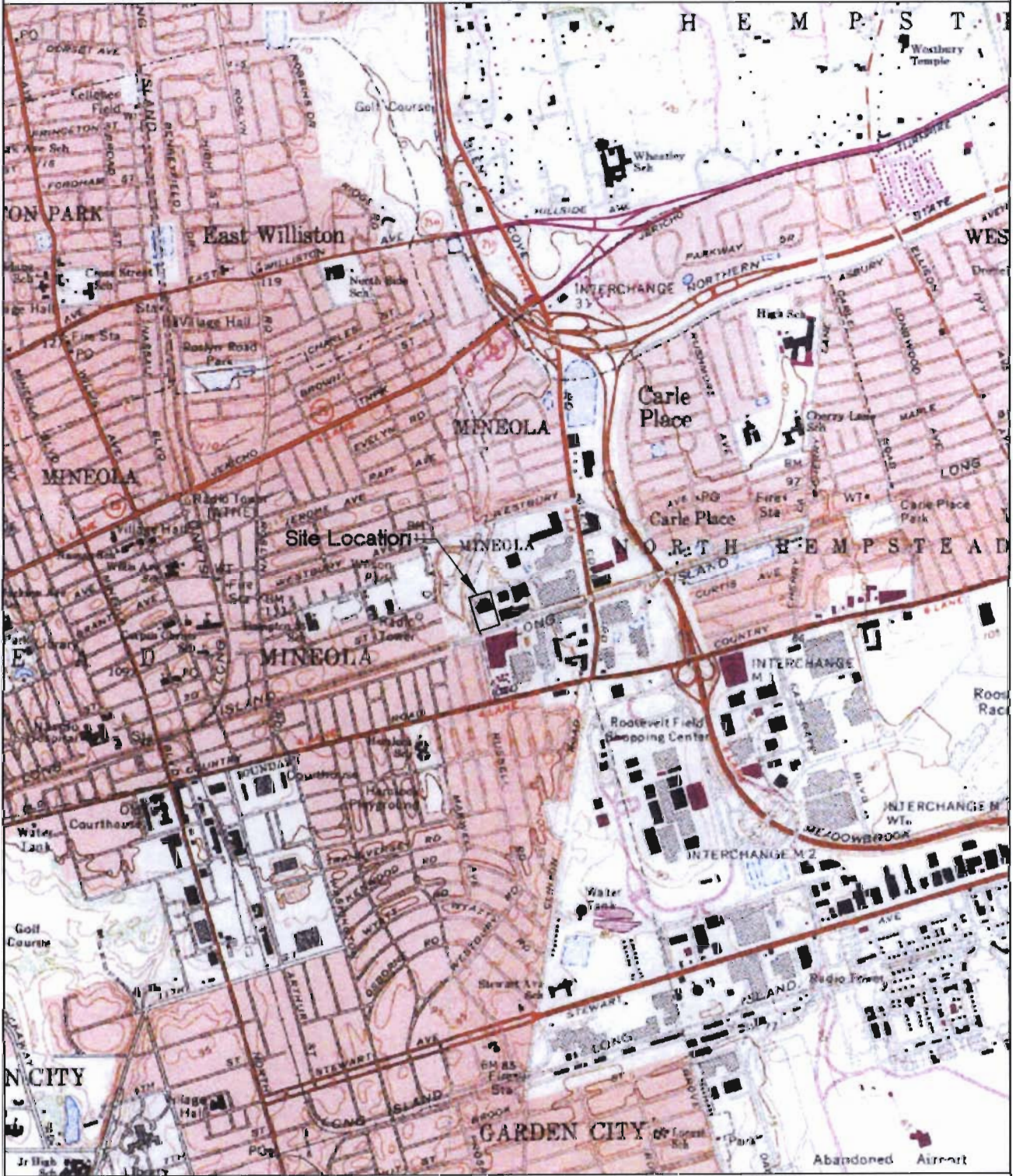
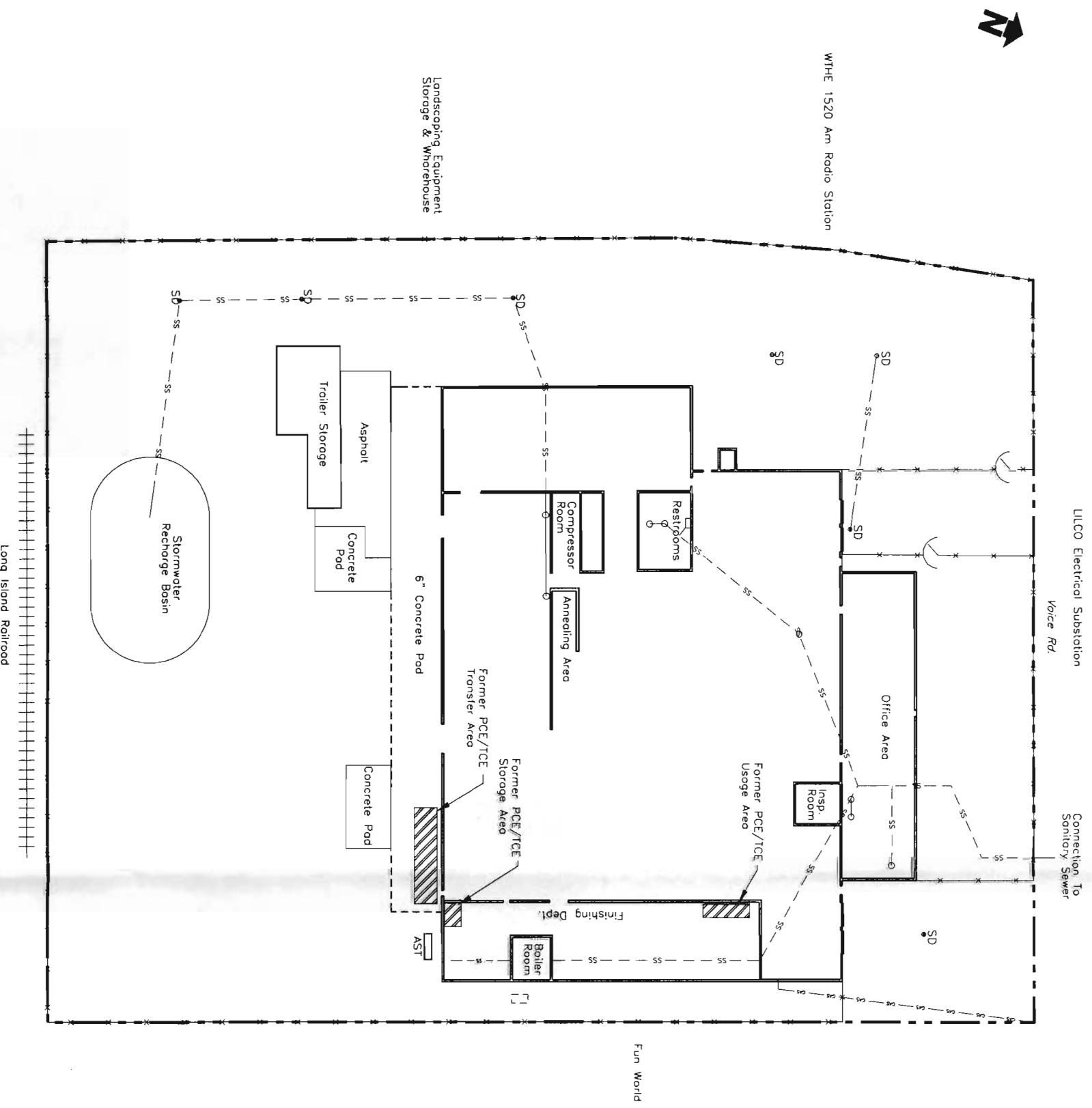


Figure 1-2
Facility Plan
 Johnson & Hoffman Manufacturing Corporation
 Carle Place, New York



WTHE 1520 Am Radio Station

Landscaping, Equipment
Storage & Warehouse

LILCO Electrical Substation

Voice Rd.

Connection To
Sanitary Sewer

Fun World

Stormwater
Recharge Basin

Long Island Railroad

- Legend**
- Property Line
 - x-x- Fence
 - ++++ Railroad
 - ss- Subsurface Drainage
 - SD ⊕ Storm Drain/Dry Well

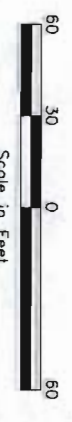
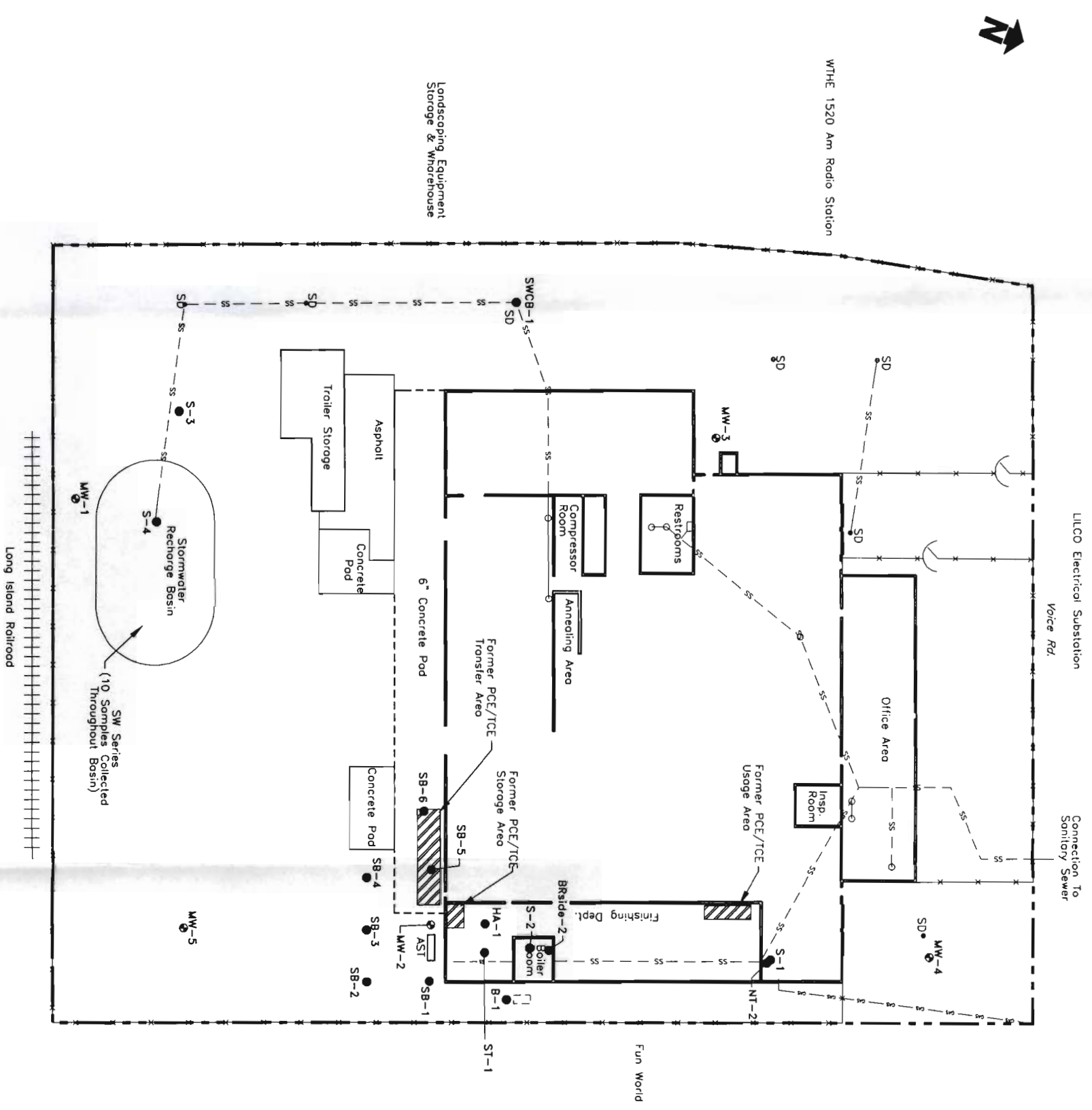


Figure 1-3
Historic (pre-2000) Soil Sample Locations
Johnson & Hoffman Manufacturing Corporation
Carle Place, New York



- Legend**
- Property Line
 - - - Fence
 - ++++ Railroad
 - - - Subsurface Drainage
 - SD ⊕ Storm Drain/Dry Well
 - ⊕ Monitoring Well
 - Soil Sample Location



Figure 3-1
Water Table Contour Map
12 December 2000
Johnson & Hoffman Manufacturing Corporation
Carle Place, New York

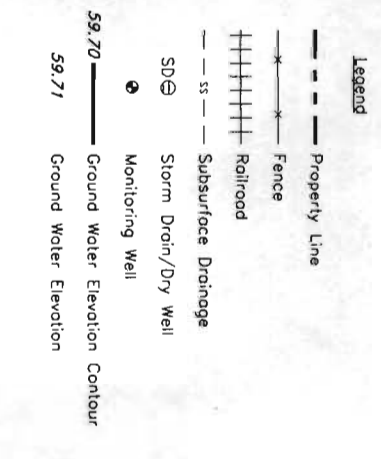
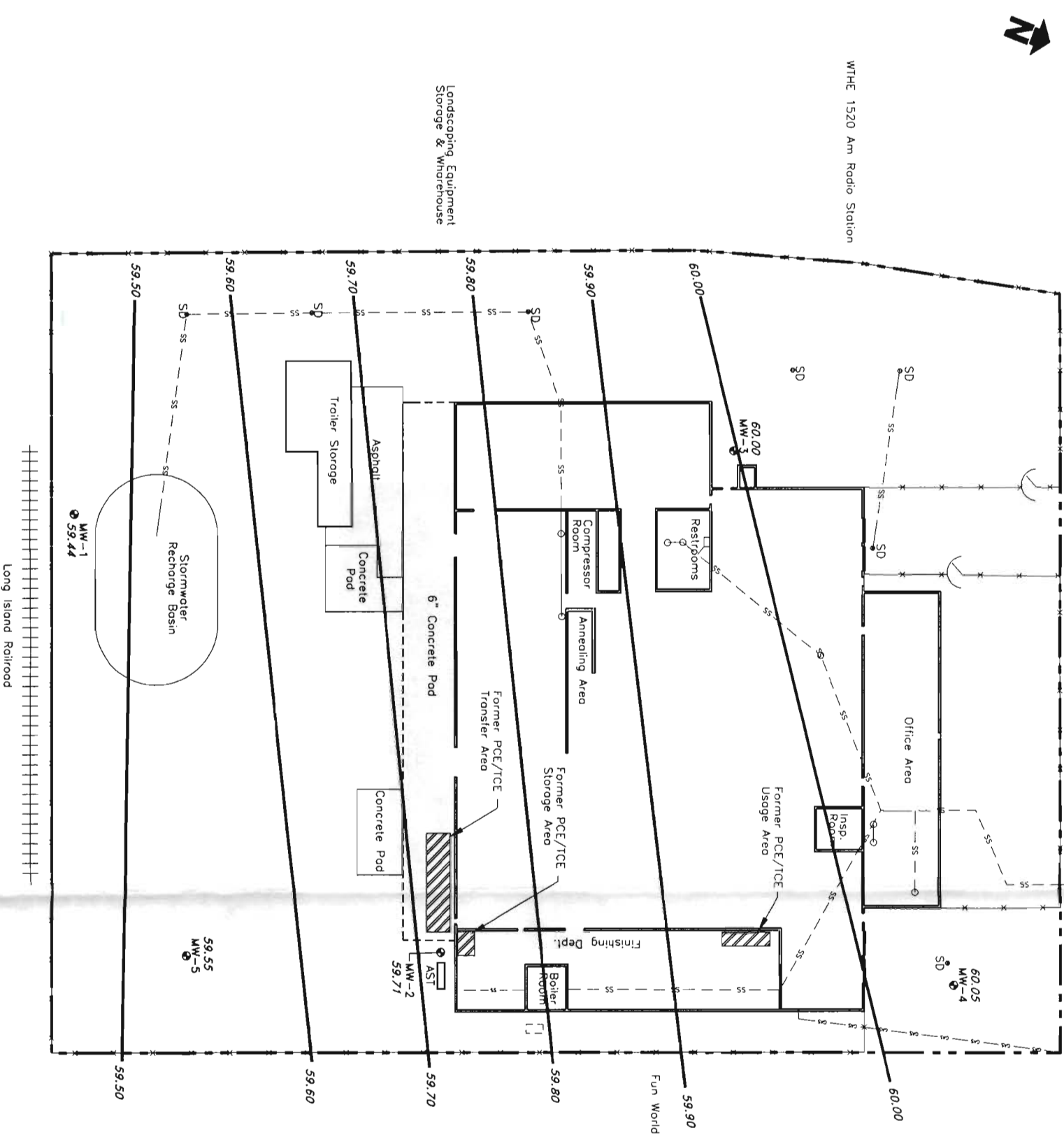


Figure 3-2
Soil Gas Survey Results
October 2000
Johnson & Hoffman Manufacturing Corporation
Carle Place, New York

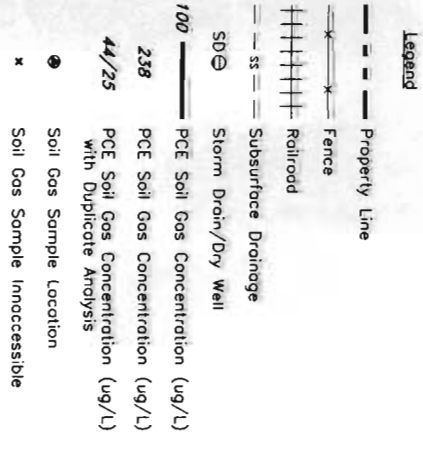
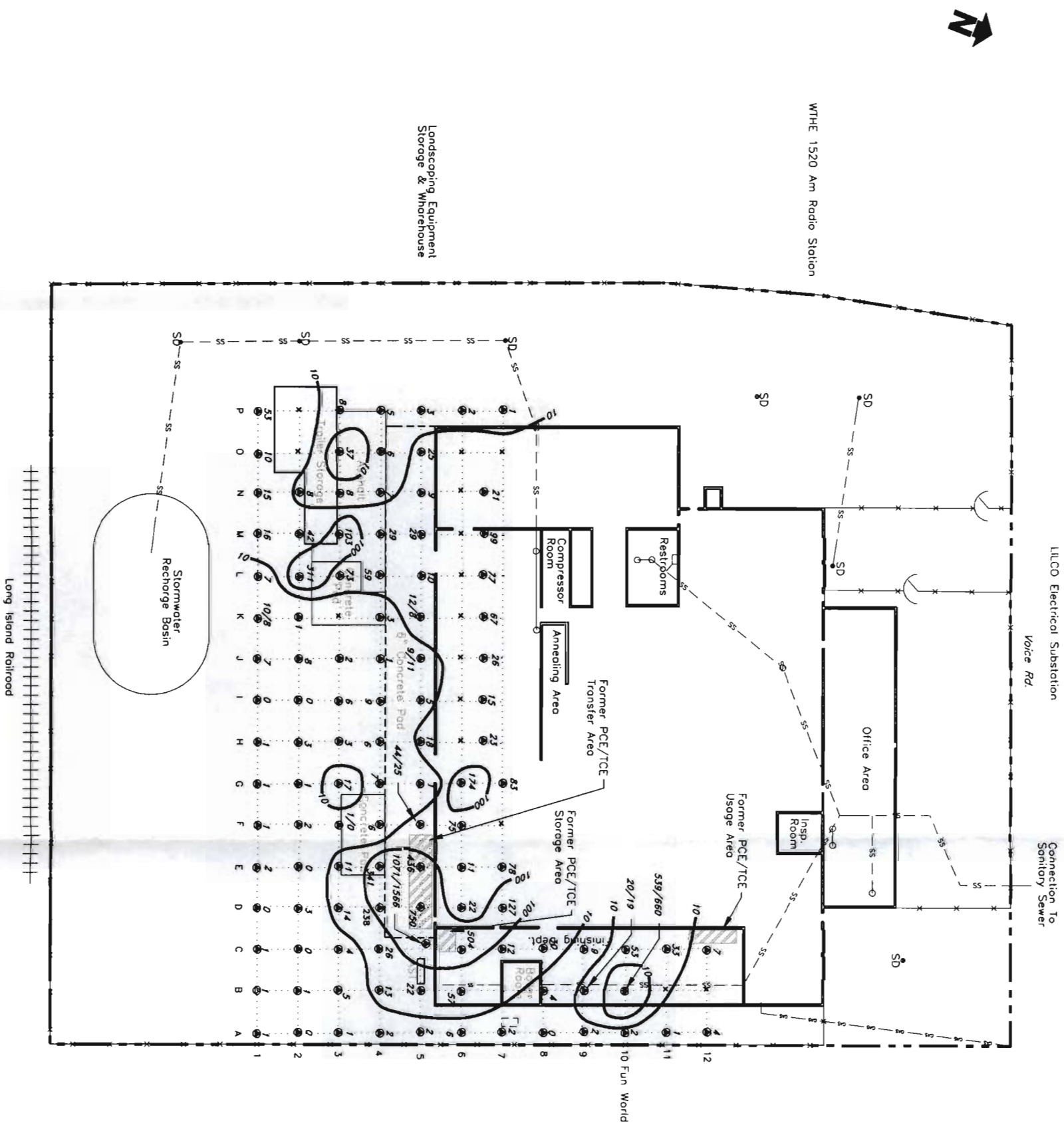
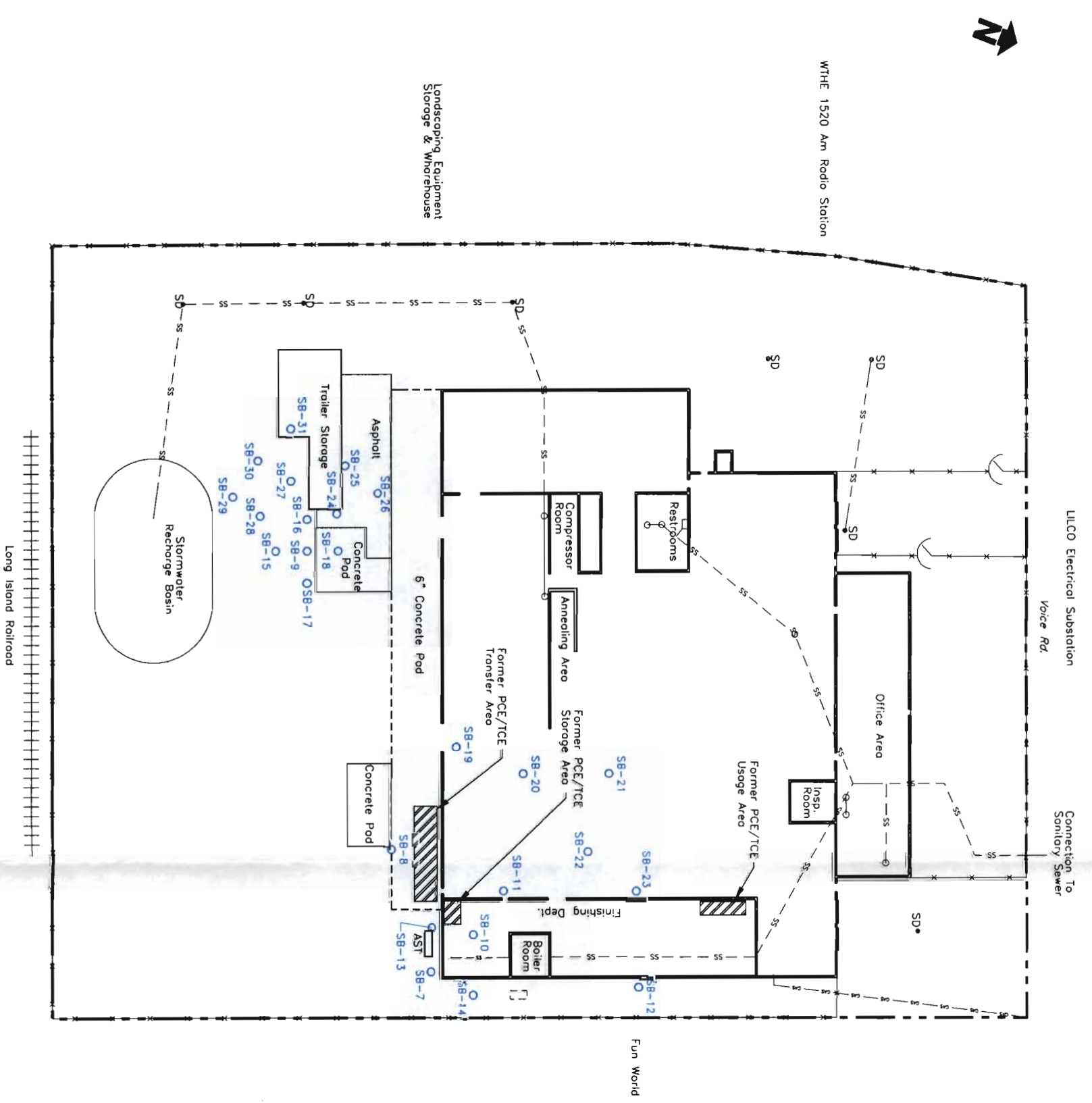


Figure 3-3
Soil Sample Locations
(2000-2002)
Johnson & Hoffman Manufacturing Corporation
Carle Place, New York



- Legend**
- Property Line
 - x-x- Fence
 - ++++ Railroad
 - s-s- Subsurface Drainage
 - SD Storm Drain/Dry Well
 - New Soil Boring Location

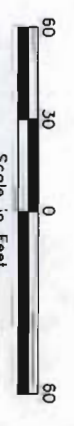
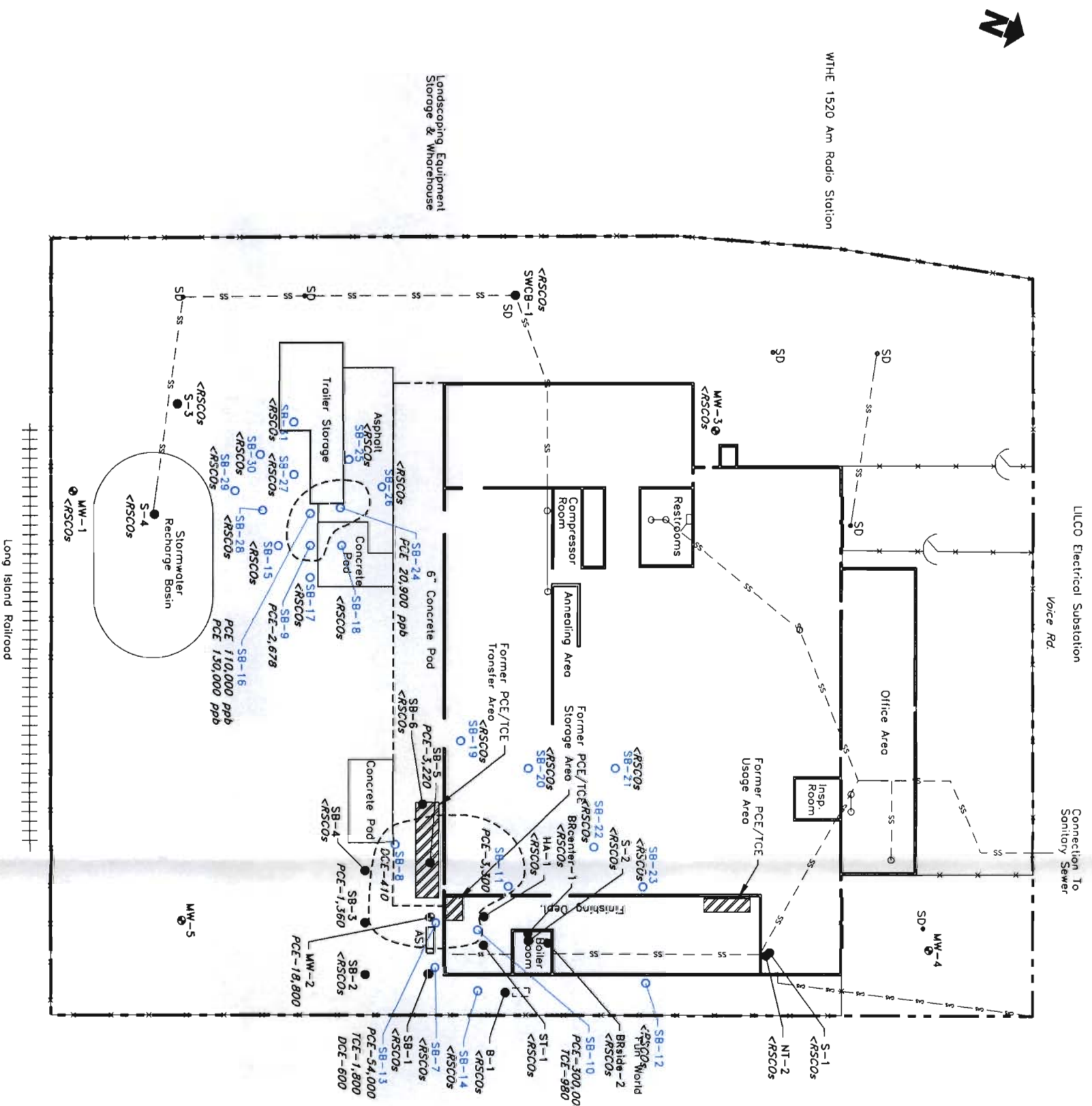


Figure 3-4
Horizontal Delineation of PCE, TCE & DCE
in Soil Above NYSDEC RSCOs
Johnson & Hoffman Manufacturing Corporation
Carle Place, New York

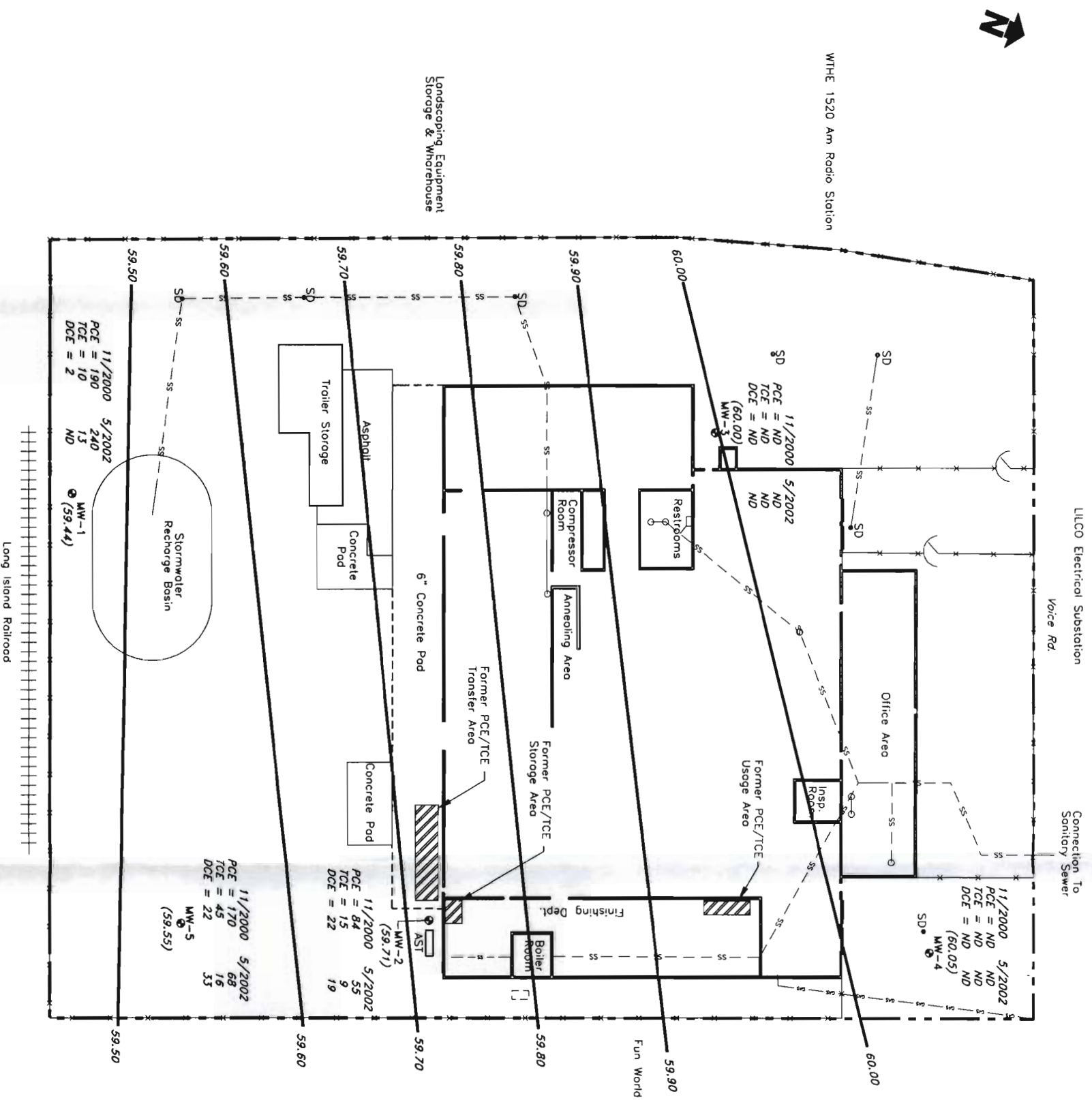


Legend

- Property Line
- - - - - Fence
- +++++ Railroad
- - - - - Subsurface Drainage
- SD ⊕ Storm Drain/Dry Well
- New Soil Boring Location (post-2000)
- Historic Soil Sample Location (pre-2000)
- ⊕ Monitoring Well
- Area of Soil Above RSCOs for PCE, TCE & DCE
- <RSCOs Less Than NYSDEC Recommended Soil Cleanup Objectives for PCE, TCE & DCE
- PCE-3,220 Detected Level of PCE = 3,220 ug/kg
- PCE RSCO 1,400 ug/kg
- DCE RSCO 250 ug/kg
- TCE RSCO 700 ug/kg

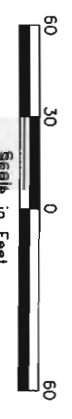


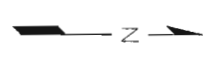
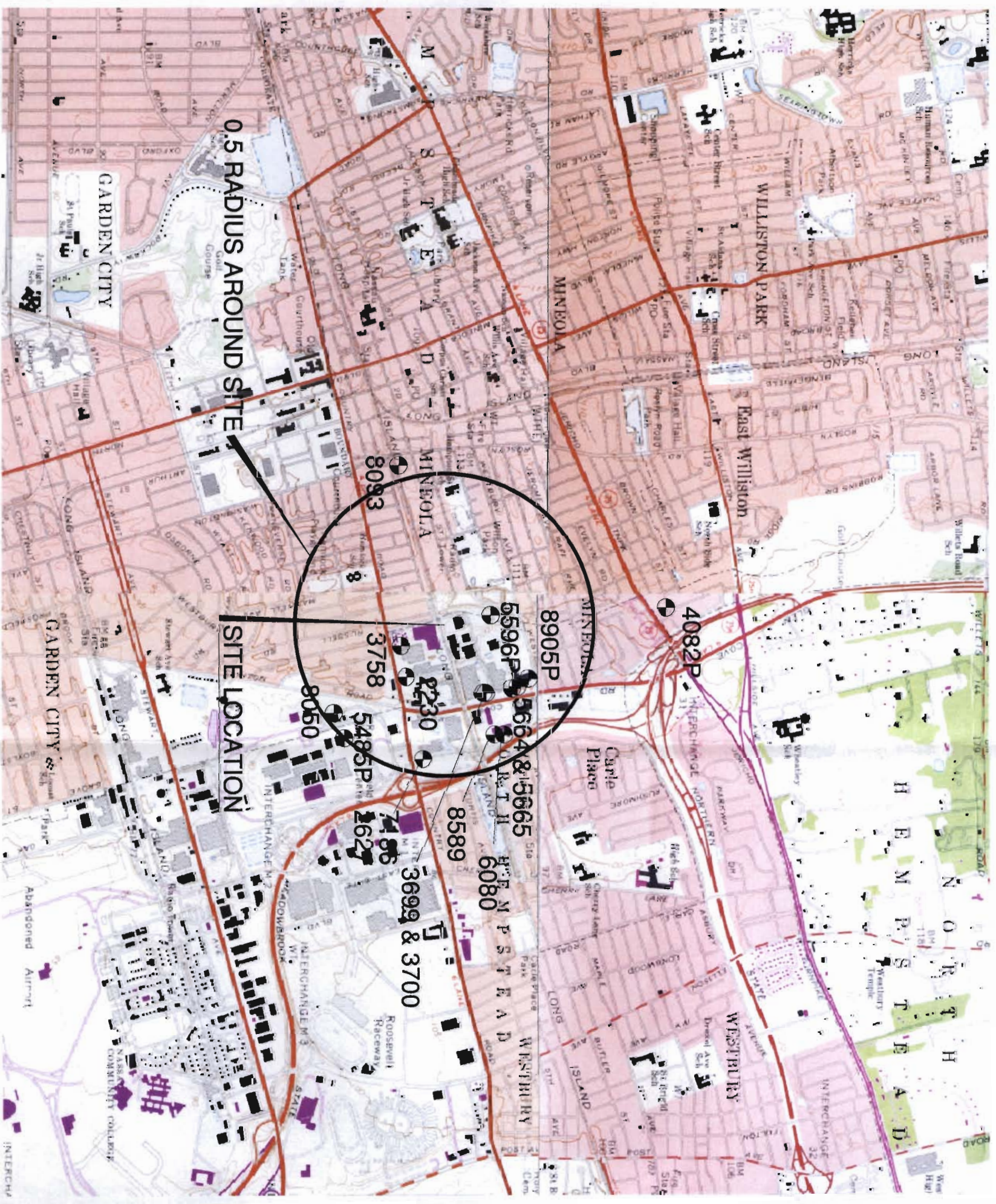
Figure 3-5
Ground Water Sampling Results
Johnson & Hoffman Manufacturing Corporation
Carle Place, New York



Legend

- Property Line
- x-x- Fence
- ++++ Railroad
- ss- Subsurface Drainage
- SD⊕ Storm Drain/Dry Well
- ⊕ Monitoring Well
- 59.70 --- Ground Water Elevation Contour (59.71)
- Ground Water Elevation (PCE = 170 PCE Concentrations in ug/L)
- ND Not Detected





- LEGEND**
-  5665 WELL LOCATION
 -  5485P PUBLIC SUPPLY WELLS



APPROXIMATE GRAPHIC SCALE

TITLE
WELL SEARCH
LOCATION MAP

PREPARED FOR
JOHNSON & HOFFMAN MANUFACTURING CORPORATION

 Environmental Resource Management BRM DRAWN MKR	SCALE	GRAPHIC	FIGURE 3-6
	DATE	1/28/02	

SOURCES: USGS HICKSVILLE, NY QUADRANGLE, 1967; LYNBROOK, NY QUADRANGLE, 1969; SEA CLIFF, NY QUADRANGLE, 1968; AND FREEPORT, NY QUADRANGLE, 1979

TABLE 1-1

Summary of Historic Soil Sampling Results
 J&H Manufacturing Site
 Carle Place, New York

Sample ID	Date	Depth (feet bg)	Analyses Performed	Analytes Exceeding RSCOs
NT-1	1/3/97	2.0 – 4.0	VOCs, TPH, PP Metals	Cr
NT-2	1/3/97	3.0 – 5.0	VOCs,	None
NT-2	1/3/97	5.5 – 6.0	VOCs, TPH, PP Metals	Cr
ST-1	1/3/97	5.5 – 6.0	VOCs, TPH, PP Metals	Cr, Hg, Ni, Zn
BRcenter-1	1/3/97	5.5 – 6.0 ¹	Pb & Hg	Hg
BRside-2	1/3/97	4.0 – 4.5 ¹	VOCs, TPH, RCRA Metals	None
SWCB-1	1/3/97	15.5 – 16.0 ¹	VOCs, TPH, PP Metals	None
S-1	1/22/97	4.0 – 4.5	VOCs, TPH, RCRA Metals	Cr
S-2	1/22/97	4.0 – 4.5	VOCs, TPH, RCRA Metals	Cd
S-3	1/22/97	0.0 – 0.25	VOCs, RCRA Metals	Cd, Hg, Pb
S-4	1/22/97	0.0 – 0.5	VOCs, TPH, RCRA Metals	Cr, Pb
SW-1	9/97	0.0 – 0.5	PAHs	See Note ²
SW-1a	11/97	4.0 – 4.5	PAHs (TCLP)	None ³
SW-2	11/97	0.0 – 0.5	PAHs (TCLP)	None ³
SW-2a	11/97	4.0 – 4.5	PAHs (TCLP)	None ³
SW-3	11/97	0.0 – 0.5	PAHs (TCLP)	None ³
SW-3a	11/97	4.0 – 4.5	PAHs (TCLP)	None ³
SW-4	11/97	0.0 – 0.5	PAHs (TCLP)	None ³
SW-4a	11/97	4.0 – 4.5	PAHs (TCLP)	None ³
SW-5	11/97	0.0 – 0.5	PAHs (TCLP)	None ³
SW-5a	11/97	4.0 – 4.5	PAHs (TCLP)	None ³
SW-T	9/97	UST invert	PAHs	None
SB-1	2/16/99	12.0 – 14.0	VOCs	None
SB-2	2/16/99	12.0 – 14.0	VOCs	None
SB-3	2/16/99	2.0 – 4.0 12.0 – 14.0	VOCs VOCs	None None
SB-4	2/16/99	6.0 – 8.0 12.0 – 14.0	VOCs VOCs	None None
SB-5	2/16/99	2.0 – 4.0 12.0 – 14.0	VOCs VOCs	PCE None
SB-6	2/16/99	4.0 – 6.0 12.0 – 14.0	VOCs VOCs	None None
HA-1	2/16/99	3.5 – 4.0	VOCs, SVOCs and PP Metals	Be, Cr, Ni, Zn
MW-1	2/12/99	14.0 – 16.0	VOCs, SVOCs and PP Metals	None
MW-2	2/12/99	2.0 – 4.0 45.0 – 47.0	VOCs, SVOCs and PP Metals	PCE, Be, Cr None

TABLE 1-1 (cont'd)

Summary of Historic Soil Sampling Results
J&H Manufacturing Site
Carle Place, New York

Sample ID	Date	Depth (feet bg)	Analyses Performed	Analytes Exceeding RSCOs
MW-3	2/12/99	44.0 – 46.0	VOCs, SVOCs and PP Metals	None
B-1	2/12/99	10.0 – 12.0 18.0 – 20.0	VOCs, SVOCs VOCs, SVOCs	None None

¹ Collected from the upper sediments at the base of a dry well.

² Benzo(a)anthracene, chrysene, benzo(b)flouroanthene, benzo(k)flouranthene, benzo(a)pyrene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene

³ No detectable concentration of PAH compounds in TCLP extract

TABLE 1-2

Inorganic Analytes Above RSCO Values in Historic Soil Samples
J&H Manufacturing Site
Carle Place, New York

Sample ID	Depth (feet bg)	Analytes Exceeding RSCOs	Analytical Result (mg/kg)	RSCO Value (mg/kg)
Wastewater Trench				
NT-1	2.0 – 4.0	Chromium	11.5	10
NT-2	5.5 – 6.0	Chromium	35.7	10
ST-1	5.5 – 6.0	Chromium	24.5	10
		Mercury	0.89	0.1
		Nickel	15.2	13
		Zinc	44.6	20
S-1	4.0 – 4.5	Chromium	142	10
Boiler Room Dry Wells				
Brcenter-1	5.5 – 6.0 ¹	Mercury	0.15	0.1
S-2	4.0 – 4.5	Cadmium	1.7	1.0
Surficial Scrap Parts				
S-3	0.0 – 0.25	Cadmium	5.8	1.0
		Mercury	0.2	0.1
		Lead	255	61
Stormwater Drainage System				
S-4	0.0 – 0.5	Chromium	30	10
		Lead	120	61
Other Samples				
HA-1	3.5 – 4.0	Beryllium	0.165	0.16
		Chromium	13.9	10
		Nickel	16.2	13
		Zinc	41.9	20
MW-2	2.0 – 4.0	Beryllium	0.195	0.16
		Chromium	11.4	10

TABLE 3-1
Johnson & Hoffman Manufacturing Corp.
 Carle Place, NY
 Soil Gas Survey
 Results in (ug/l air)

Sample ID	Gas-A1	Gas-A2	Gas-A3	Gas-A4	Gas-A5	Gas-A6	Gas-A7	Gas-A8	Gas-A9	Gas-A10	Gas-A11	Gas-A12
Sampling Date	10/25/00	11/1/00	10/25/00	10/26/00	10/24/00	10/26/00	10/24/00	10/26/00	10/25/00	10/25/00	10/26/00	10/25/00
Analysis Code	15.0	40.0	14.0	13.0	28.0	14.0	26.0	17.0	12.0	11.0	16.0	10.0
Operator Initials	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG
1,1 Dichloroethene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
t-1, 2-Dichloroethene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c-1, 2-Dichloroethene	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Trichloroethylene	0.0	0.1	0.1	0.1	0.0	0.5	0.1	0.1	0.1	0.1	0.1	0.1
Tetrachloroethene	0.3	0.2	1.1	2.1	1.6	6.0	1.8	0.4	1.6	1.9	0.9	3.6

Sample ID	Gas-B1	Gas-B2	Gas-B3	Gas-B4	Gas-B5	Gas-B6	Gas-B8	Gas-B9	Gas-B10	Gas-C1	Gas-C2	Gas-C3
Sampling Date	11/1/00	10/26/00	10/24/00	10/26/00	10/23/00	10/23/00	10/24/00	10/24/00	10/24/00	10/25/00	11/1/00	10/26/00
Analysis Code	39.0	9.0	23.0	11.0	17.0	14.0	12.0	14.0	21.0	16.0	28.0	10.0
Operator Initials	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG
1,1 Dichloroethene	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.4	0.0	0.0	0.0
t-1, 2-Dichloroethene	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.3	0.0	0.1	0.0
c-1, 2-Dichloroethene	0.0	0.0	0.0	1.8	0.2	0.8	0.0	0.4	12.2	0.0	0.0	0.1
Trichloroethylene	0.1	0.1	0.1	0.8	0.7	1.8	0.3	1.4	38.6	0.2	0.0	0.3
Tetrachloroethene	0.6	1.3	4.7	12.6	21.7	57.3	4.4	18.9	539.4	1.0	0.4	3.6

Sample ID	Gas-C4	Gas-C5	Gas-C6	Gas-C7	Gas-C8	Gas-C9	Gas-C10	Gas-C11	Gas-C12	Gas-D1	Gas-D2	Gas-D3
Sampling Date	10/23/00	10/23/00	10/23/00	10/23/00	10/24/00	10/24/00	10/24/00	10/24/00	10/24/00	11/1/00	10/24/00	10/24/00
Analysis Code	18.0	16.0	13.0	23.0	10.0	13.0	16.0	19.0	20.0	37.0	25.0	19.0
Operator Initials	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG
1,1 Dichloroethene	0.8	3.8	2.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
t-1, 2-Dichloroethene	0.1	0.9	0.5	0.5	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.6
c-1, 2-Dichloroethene	0.5	26.7	19.0	0.1	1.1	0.6	8.5	6.0	0.5	0.0	0.1	0.3
Trichloroethylene	0.9	90.0	43.0	0.4	2.5	1.0	5.2	8.5	4.3	0.0	0.2	0.3
Tetrachloroethene	26.4	1566.4	504.0	11.7	29.8	9.4	53.0	32.8	6.7	0.1	3.2	13.5

TABLE 3-1

Johnson & Hoffman Manufacturing Corp.
 Carle Place, NY
 Soil Gas Survey
 Results in (ug/l air)

Sample ID	Gas-D4	Gas-D5	Gas-D6	Gas-E1	Gas-E2	Gas-E3	Gas-E4	Gas-E5	Gas-E6	Gas-E7	Gas-F1	Gas-F2
Sampling Date	10/24/00	10/24/00	10/23/00	10/25/00	11/1/00	10/24/00	10/24/00	10/23/00	10/23/00	10/24/00	11/1/00	10/24/00
Analysis Code	12.0	9.0	20.0	17.0	35.0	20.0	14.0	25.0	21.0	24.0	34.0	29.0
Operator Initials	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG
1,1 Dichloroethene	0.0	1.7	0.9	0.0	0.0	0.0	0.1	0.7	0.9	0.0	0.0	0.0
t-1, 2-Dichloroethene	0.3	0.3	0.1	0.0	0.0	0.5	0.9	4.2	0.2	0.4	0.2	0.1
c-1, 2-Dichloroethene	23.9	21.6	0.4	0.2	0.0	0.5	19.2	80.5	0.1	20.4	0.0	0.0
Trichloroethylene	5.3	44.1	0.9	0.3	0.1	0.4	30.3	57.0	0.4	3.9	0.2	0.1
Tetrachloroethene	237.5	750.2	22.2	2.0	0.3	11.4	341.1	436.2	11.1	77.5	0.5	2.0

Sample ID	Gas-F3	Gas-F3(dup)	Gas-F4	Gas-F5	Gas-F5(dup)	Gas-F6	Gas-G1	Gas-G2	Gas-G3	Gas-G4	Gas-G5	Gas-G6
Sampling Date	11/1/00	11/1/00	10/24/00	10/24/00	10/24/00	10/26/00	10/25/00	11/1/00	10/24/00	11/1/00	11/1/00	10/26/00
Analysis Code	31.0	32.0	21.0	16.0	17.0	43.0	18.0	24.0	24.0	23.0	22.0	42.0
Operator Initials	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG
1,1 Dichloroethene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
t-1, 2-Dichloroethene	0.1	0.0	0.5	0.4	0.3	0.3	0.0	0.3	0.2	0.1	0.1	0.4
c-1, 2-Dichloroethene	0.2	0.1	0.2	1.6	0.7	6.4	0.0	0.2	1.8	1.0	0.1	11.8
Trichloroethylene	0.2	0.2	0.2	37.0	1.2	4.3	0.1	0.5	2.6	1.5	0.2	9.1
Tetrachloroethene	0.6	0.4	6.1	44.4	24.8	75.2	0.7	1.4	16.6	6.5	1.4	174.0

Sample ID	Gas-G7	Gas-H1	Gas-H2	Gas-H3	Gas-H4	Gas-H5	Gas-H6.5	Gas-I1	Gas-I2	Gas-I3	Gas-I4	Gas-I5
Sampling Date	10/24/00	11/1/00	10/24/00	11/1/00	10/24/00	10/24/00	10/25/00	10/25/00	11/1/00	10/26/00	10/26/00	11/1/00
Analysis Code	22.0	27.0	1.0	26.0	2.0	3.0	41.0	21.0	33.0	39.0	41.0	20.0
Operator Initials	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG
1,1 Dichloroethene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
t-1, 2-Dichloroethene	0.2	0.0	0.1	0.3	0.1	0.2	0.1	0.0	0.0	0.0	0.5	0.1
c-1, 2-Dichloroethene	6.9	0.2	0.2	0.6	0.8	1.6	0.6	0.0	0.0	0.7	0.9	1.1
Trichloroethylene	7.0	0.2	0.5	0.9	0.2	2.7	0.9	0.1	0.2	1.1	1.6	0.9
Tetrachloroethene	83.0	1.1	2.7	2.7	6.1	18.2	22.8	0.2	0.3	6.2	8.7	5.3

TABLE 3-1
 Johnson & Hoffman Manufacturing Corp.
 Carle Place, NY
 Soil Gas Survey
 Results in (ug/l air)

Sample ID	Gas-I6.5 10/25/00 WLG	Gas-J1 10/26/00 WLG	Gas-J2 10/26/00 WLG	Gas-J3 10/24/00 WLG	Gas-J4 11/1/00 WLG	Gas-J5 10/24/00 WLG	Gas-J5(dup) 10/24/00 WLG	Gas-J6.5 10/25/00 WLG	Gas-K1 10/26/00 WLG	Gas-K1(dup) 10/26/00 WLG	Gas-K2 10/25/00 WLG	Gas-K4 11/1/00 WLG
1,1 Dichloroethene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
t-1, 2-Dichloroethene	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
c-1, 2-Dichloroethene	1.7	0.0	0.0	0.0	0.0	0.1	0.1	1.4	0.0	0.0	0.0	0.0
Trichloroethylene	2.7	0.2	0.2	0.1	0.1	0.6	0.7	3.2	0.2	0.2	0.2	0.1
Tetrachloroethene	14.5	7.1	8.0	2.0	1.4	8.6	10.6	25.5	9.9	7.6	0.7	2.6

Sample ID	Gas-K5 10/25/00 WLG	Gas-K6.5 10/25/00 WLG	Gas-L1 10/26/00 WLG	Gas-L2 10/26/00 WLG	Gas-L3 11/1/00 WLG	Gas-L4 10/25/00 WLG	Gas-L5 11/1/00 WLG	Gas-L6.5 10/25/00 WLG	Gas-M1 10/26/00 WLG	Gas-M2 10/26/00 WLG	Gas-M3 10/25/00 WLG	Gas-M4 11/1/00 WLG
1,1 Dichloroethene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6
t-1, 2-Dichloroethene	0.0	0.0	0.0	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.2	0.0
c-1, 2-Dichloroethene	0.0	0.5	0.0	0.0	0.4	0.0	0.0	0.2	0.0	0.3	3.8	0.2
Trichloroethylene	0.4	1.8	0.2	0.9	0.8	0.6	0.4	1.0	0.5	0.6	2.1	0.6
Tetrachloroethene	11.7	67.3	6.5	311.0	73.3	58.5	10.1	76.5	15.5	42.0	102.7	28.5

Sample ID	Gas-M5 10/25/00 WLG	Gas-M6 11/1/00 WLG	Gas-M6.5 10/25/00 WLG	Gas-N1 10/26/00 WLG	Gas-N2 10/26/00 WLG	Gas-N3 11/1/00 WLG	Gas-N4 10/25/00 WLG	Gas-N5 11/1/00 WLG	Gas-N6.5 11/1/00 WLG	Gas-O1 10/26/00 WLG	Gas-O2 10/26/00 WLG	Gas-O3 10/25/00 WLG
1,1 Dichloroethene	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
t-1, 2-Dichloroethene	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
c-1, 2-Dichloroethene	0.2	0.0	0.0	0.0	0.0	0.1	0.0	1.7	0.0	0.1	0.0	0.7
Trichloroethylene	0.5	1.2	0.1	0.3	0.2	0.4	0.2	0.5	0.4	0.3	0.1	1.8
Tetrachloroethene	28.5	99.4	2.0	15.2	7.8	7.8	6.9	9.0	20.5	9.9	1.8	36.6

TABLE 3-1

Johnson & Hoffman Manufacturing Corp.

Carle Place, NY

Soil Gas Survey

Results in (ug/l air)

Sample ID	Gas-O4	Gas-O5	Gas-P1	Gas-P3	Gas-P4	Gas-P5	Gas-P6	Gas-P7
Sampling Date	11/1/00	10/25/00	10/26/00	10/25/00	10/25/00	10/25/00	11/2/00	11/2/00
Analysis Code	13.0	32.0	20.0	38.0	36.0	37.0	9.0	10.0
Operator Initials	WLG	WLG	WLG	WLG	WLG	WLG	WLG	WLG
1,1 Dichloroethene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1,1, 2-Dichloroethene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c-1, 2-Dichloroethene	0.0	1.2	0.3	0.1	0.0	0.0	0.0	0.0
Trichloroethylene	0.3	0.7	1.2	0.3	0.2	0.1	0.1	0.2
Tetrachloroethene	5.7	25.0	52.8	8.3	5.2	2.5	1.5	1.1

Sample ID	SB-7(0-1)	SB-7(1-2)	SB-7(2-3)	SB-7(3-4)	SB-7(4-5)	SB-7(5-6)	SB-7(6-7)	SB-7(7-8)	SB-8(0-2)	SB-8(0-2dup)	SB-8(2-4)
Sampling Date	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00
Analysis Code	17	18	20	21	22	23	24	19	25	32	26
Analysis Date	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00
Operator Initials	JMM	JMM	JMM	JMM	JMM	JMM	JMM	JMM	JMM	JMM	JMM
1,1 Dichloroethene	400	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
t-1, 2-Dichloroethene	300	0.0	1.4	2.8	1.6	2.2	2.0	2.3	0.5	2.5	0.1
c-1, 2-Dichloroethene	250	0.0	14.2	78.5	80.6	115.1	71.1	1.4	0.6	0.0	10.1
Trichloroethylene	700	0.0	0.6	0.8	0.4	174.7	6.2	0.4	2.3	0.6	6.4
Tetrachloroethene	1400	0.0	2.9	1.9	1.3	24.4	15.7	3.2	119.8	28.2	96.8

Sample ID	SB-8(2-4)	SB-8(4-5)	SB-8(5-6)	SB-8(6-7)	SB-8(7-8)	SB-9(0-1)	SB-9(1-2)	SB-9(2-4)	SB-9(4-5)	SB-9(5-6)	SB-9(6-7)
Sampling Date	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00
Analysis Code	26	26	29	30	31	27	37	39	41	42	43
Analysis Date	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00
Operator Initials	JMM	JMM	JMM	JMM	JMM	JMM	JMM	JMM	JMM	JMM	JMM
1,1 Dichloroethene	400	0.0	0.0	0.0	0.0	0.0	0.0	6.9	0.0	0.0	0.0
t-1, 2-Dichloroethene	300	0.1	8.5	2.6	0.3	0.3	1.5	0.8	0.1	1.1	1.5
c-1, 2-Dichloroethene	250	10.1	695.1	379.1	1.7	0.0	0.0	0.0	84.6	0.0	0.0
Trichloroethylene	700	6.4	74.6	94.3	38.6	2.3	2.0	0.6	2.3	0.0	1.3
Tetrachloroethene	1400	96.8	364.1	749.2	190.3	15.4	1185.4	139.7	678.3	171.6	918.5

Sample ID	SB-9(7-8)	SB-10(0-2)	SB-10(2-3)	SB-10(3-4)	SB-10(4-5)	SB-10(5-6)	SB-11(0-1)	SB-11(1-2)	SB-11(2-3)	SB-11(3-4)
Sampling Date	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00
Analysis Code	38	46	47	50	51	52	59	60	61	62
Analysis Date	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00	11/02/00
Operator Initials	JMM	JMM	JMM	JMM	JMM	JMM	JMM	JMM	JMM	JMM
1,1 Dichloroethene	400	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
t-1, 2-Dichloroethene	300	0.0	0.3	0.0	0.0	0.8	5.7	12.3	2.4	1.9
c-1, 2-Dichloroethene	250	0.0	26.2	8.1	21.7	64.3	335.7	588.9	247.6	171.9
Trichloroethylene	700	0.0	27.9	8.8	62.5	41.9	62.3	31.3	3.4	17.1
Tetrachloroethene	1400	817.9	808.6	1556.0	7393.1	2157.2	2272.7	371.5	216.1	396.3

Results reported in ug/kg
 Shaded cells indicate NYSDEC RSCO exceedence.

Sample ID	SB-11(4-6)	SB-12(0-1)	SB-12(1-2)	SB-12(4-6)	SB-12(6-8)	SB-13(0-1)	SB-13(1-2)	SB-13(2-4)	SB-13(4-5)	SB-13(5-6)	SB-13(6-8)
Sampling Date	11/02/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00
Analysis Code	63	10	11	12	13	15	16	22	23	24	19
Analysis Date	11/02/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00
Operator Initials	JMM	JMM	JMM	JMM	JMM	JMM	JMM	JMM	JMM	JMM	JMM
1,1 Dichloroethene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	283.8	56.5	48.0	51.7
1,1, 2-Dichloroethene	0.0	0.0	0.0	0.0	0.5	0.0	1.0	52.6	14.3	17.8	19.4
c-1, 2-Dichloroethene	1.5	0.0	0.0	0.0	0.0	11.0	50.9	497.1	1609	2775.1	
Trichloroethylene	0.6	1.1	0.5	0.6	0.8	16.9	112.5	1243	6729	5061	
Tetrachloroethene	14.2	1.8	5.8	56.2	3.6	1846.0	7002.9	9822.1	6274.9	6276.5	

Sample ID	SB-13(6-8)DJ	SB-13(12-14)	SB-14(0-1)	SB-14(1-2)	SB-14(2-4)	SB-14(4-6)	SB-14(6-8)
Sampling Date	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00
Analysis Code	20	25	30	31	32	34	33
Analysis Date	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00	11/03/00
Operator Initials	JMM	JMM	JMM	JMM	JMM	JMM	JMM
1,1 Dichloroethene	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1,1, 2-Dichloroethene	0.0	0.0	0.1	0.6	1.1	1.2	0.7
c-1, 2-Dichloroethene	498.5	2.2	0.0	1.1	16.0	26.0	12.6
Trichloroethylene	3577.6	1.4	0.4	1.2	25.8	36.7	2.8
Tetrachloroethene	70626.2	62.1	3.4	12.2	231.8	283.3	41.2

Results reported in ug/kg
 Shaded cells indicate NYSDEC RSCO exceedence.

TAB -3
Johnson & Hoffman Manufacturing Corp.
 Carle Place, NY
 Soil Analytical Results (State-Certified Lab)

Type Date Collected Sample ID	TAGM NYSDEC RSCO	Soil		Duplicate	Soil		Soil
		12/19/2001 SB-15 (0-2')	12/19/2001 SB-15 (8-10')		12/19/2001 SB-16 (0-2')	12/19/2001 SB-16 (8-10')	
Chloromethane	NS	6 U	5 U	5600 UJ	5600 UJ	5 U	5 U
Vinyl chloride	NS	6 U	5 U	5600 U	5600 U	5 U	5 U
Bromomethane	200	6 UJ	5 UJ	5600 UJ	5600 UJ	5 UJ	5 UJ
Chloroethane	NS	6 U	5 U	5600 U	5600 U	5 U	5 U
1,1-Dichloroethane	NS	6 U	5 U	5600 U	5600 U	5 U	5 U
Carbon disulfide		6 U	5 U	5600 UJ	5600 UJ	5 U	5 U
Acetone	200	11 UJ	16 UJ	14000 UJ	14000 UJ	22 J	13 J
Methylene chloride	400	13 UJ	5 UJ	5600 UJ	5600 UJ	5 UJ	5 UJ
1,1-Dichloroethane	200	6 U	5 U	5600 U	5600 U	5 U	5 U
2-Butanone (MEK)	NS	11 UJ	10 UJ	5600 UJ	5600 UJ	10 UJ	11 UJ
Chloroform	300	6 U	5 U	5600 U	5600 U	5 U	5 U
1,1,1-Trichloroethane	800	6 U	5 U	5600 U	5600 U	5 U	5 U
Carbon tetrachloride	600	6 U	5 U	5600 U	5600 U	5 U	5 U
1,2-Dichloroethene (total)	250 ¹	6 U	5 U	5600 U	5600 U	5 U	5 U
Benzene	60	2 J	5 U	5600 U	5600 U	5 U	5 U
1,2-Dichloroethane	100	6 U	5 U	5600 U	5600 U	5 U	5 U
Trichloroethene	700	6 U	5 U	5600 U	5600 U	5 U	5 U
1,2-Dichloropropane	NS	6 U	5 U	5600 U	5600 U	5 U	5 U
Bromodichloromethane	NS	6 U	5 U	5600 U	5600 U	5 U	5 U
cis-1,3-Dichloropropene	NS	6 U	5 U	5600 UJ	5600 UJ	5 U	5 U
4-Methyl-2-pentanone (MIBK)	NS	11 U	10 U	5600 U	5600 U	10 U	11 U
Toluene	1,500	5 J	5 U	5600 U	5600 U	1 J	0.6 J
trans-1,3-Dichloropropene	300	6 U	5 U	5600 U	5600 U	5 U	5 U
1,1,2-Trichloroethane	NS	6 U	5 U	5600 U	5600 U	5 U	5 U
Tetrachloroethene	1400	14	5 U	5600 U	5600 U	20 J	5 UJ
2-Hexanone		11 UJ	10 UJ	5600 UJ	5600 UJ	10 UJ	11 UJ
Dibromochloromethane		6 UJ	5 UJ	5600 U	5600 U	5 U	5 U
Chlorobenzene	1700	6 U	5 U	5600 U	5600 U	5 U	5 U
Ethylbenzene	5500	2 J	5 U	5600 U	5600 U	0.6 J	2 J
Styrene	NS	6 U	5 U	5600 U	5600 U	5 U	5 U
Bromoform	NS	6 U	5 U	5600 U	5600 U	5 U	5 U
1,1,2,2-Tetrachloroethane	NS	6 U	5 U	5600 U	5600 U	5 U	5 U
Xylenes (total)	1200	7	5 U	5600 U	5600 U	5 J	1 J

Hold Face indicates constituent detection
 Shaded cells indicate detections above NYSEDEC Recommended Soil Cleanup Criteria
 Results in ug/kg
 1 - Limit is for cis-1,2-dichloroethene

Type Date Collected Sample ID	TAGM NYSDEC RSCO	Soil 12/19/2001 SB-17 (4-6)	Soil 12/19/2001 SB-17 (8-10)	Soil 12/19/2001 SB-18 (0-2)	Soil 12/19/2001 SB-18 (4-6)	Soil 12/19/2001 SB-18 (8-10)	Soil 12/19/2001 SB-19 (0-2)	Soil 12/19/2001 SB-19 (4-6)	Soil 12/19/2001 SB-19 (8-10)
Chloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	200	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
Chloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon disulfide		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	200	7 J	14 J	32 J	17 J	14 J	18 J	11 J	11 J
Methylene chloride	400	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
1,1-Dichloroethane	200	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (MEK)	NS	10 UJ	10 UJ	11 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Chloroform	300	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	600	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethene (total)	250 ¹	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	60	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	100	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	700	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	NS	10 U	10 U	11 U	10 U	10 U	10 U	10 U	10 U
Toluene	1,500	2 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	300	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	1400	7 J	5 U	15	5 U	5 U	4 J	5 U	5 U
2-Hexanone		10 UJ	10 UJ	11 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Dibromochloromethane		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	1700	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5500	0.9 J	5 U	1 J	5 U	5 U	5 U	5 U	5 U
Styrene	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	NS	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Xylenes (total)	1200	5	2 J	6	5 U	5 U	5 U	5 U	5 U

Bold Face indicates constituent detection
Shaded cells indicate detections above NYSDEC Recommended
Results in ug/kg
1 - Limit is for cis-1,2-dichloroethene

Type Date Collected Sample ID	TAGM NYSDEC RSCO	Soil		Soil		Soil		Soil	
		12/20/2001 SB-20 (0-2')	12/20/2001 SB-20 (4-6')	12/20/2001 SB-20 (8-10')	12/20/2001 SB-21 (0-2')	12/20/2001 SB-21 (4-6')	12/20/2001 SB-21 (6-8')	12/21/2001 SB-22 (0-2')	12/21/2001 SB-22 (4-6')
Chloromethane	NS	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	NS	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	200	27 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
Chloroethane	NS	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	NS	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon disulfide		27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	200	62 J	10 J	10 J	17 J	10 UJ	10 UJ	10 UJ	7 J
Methylene chloride	400	27 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
1,1-Dichloroethane	200	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (MEK)	NS	54 UJ	10 UJ	10 UJ	11 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Chloroform	300	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	800	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	600	27 U	5 U	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
1,2-Dichloroethene (total)	250 ¹	7 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	60	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	100	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	700	10 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	NS	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	NS	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	NS	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	NS	54 U	10 U	10 U	11 U	10 U	10 U	10 U	10 U
Toluene	1,500	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	300	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	NS	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	1400	380	5 U	5 U	2 J	5 U	5 U	5 U	5 U
2-Hexanone		54 UJ	10 UJ	10 UJ	11 UJ	10 UJ	10 UJ	10 UJ	10 UJ
Dibromochloromethane		27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	1700	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5500	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	NS	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	NS	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	NS	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Xylenes (total)	1200	27 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Bold Face indicates constituent detection

Shaded cells indicate detections above NYSDEC Reconnue:

Results in ug/kg

1 - Limit is for cis-1,2-dichloroethene

Johnson & Hoffman Manufacturing Corp.
Carle Place, NY
Soil Analytical Results (State-Certified Lab)

Type Date Collected Sample ID	TAGM NYSDEC RSCO	Soil		Duplicate 12/21/2001 SB-23 (0-2) (DUP122111)	Soil		Soil		Soil		Soil	
		12/21/2001 SB-22 (6-8)	12/21/2001 SB-23 (0-2)		12/21/2001 SB-23 (4-6)	12/21/2001 SB-23 (6-8)	08/16/2002 SB-24 (1-2)	08/16/2002 SB-24 (10-11)	08/16/2002 SB-25 (1-3)			
Chloromethane	NS	5 UJ	6 UJ	6 UJ	5 UJ	5 UJ	5.7 U	5.3 U	5.5 U			
Vinyl chloride	NS	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
Bromomethane	200	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
Chloroethane	NS	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
1,1-Dichloroethene	NS	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
Carbon disulfide		5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
Acetone	200	34 J	51 J	37 J	10 J	9 J	11 U	11 U	11 U			
Methylene chloride	400	5 UJ	6 UJ	8 UJ	5 UJ	5 UJ	5.7 U	5.3 U	5.5 U			
1,1-Dichloroethane	200	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
2-Butanone (MEK)	NS	6 J	11 UJ	11 UJ	10 UJ	10 UJ	11 U	11 U	11 U			
Chloroform	300	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
1,1,1-Trichloroethane	800	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
Carbon tetrachloride	600	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
1,2-Dichloroethene (total)	250 ¹	5 U	6 U	6 U	5 U	5 U	32.3	5.3 U	5.5 U			
Benzene	60	5 U	6 U	6 U	5 U	5 U	1.1 U	1.1 U	1.1 U			
1,2-Dichloroethane	100	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
Trichloroethene	700	5 U	6 U	6 U	5 U	5 U	129	3 J	5.5 U			
1,2-Dichloropropane	NS	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
Bromodichloromethane	NS	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
cis-1,3-Dichloropropene	NS	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
4-Methyl-2-pentanone (MIBK)	NS	10 UJ	11 UJ	11 UJ	10 UJ	10 UJ	5.7 U	5.3 U	5.5 U			
Toluene	1,500	5 U	1 J	0.8 J	5 U	5 U	1.1 U	1.1 U	1.1 U			
trans-1,3-Dichloropropene	300	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
1,1,2-Trichloroethane	NS	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
Tetrachloroethene	1400	5 U	2 J	1 J	5 U	5 U	5.7 U	5.3 U	5.5 U			
2-Hexanone		10 UJ	11 UJ	11 UJ	10 UJ	10 UJ	20900	149	14.3			
Dibromochloromethane		5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
Chlorobenzene	1700	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
Ethylbenzene	5500	5 U	0.5 J	6 UJ	5 U	5 U	1.1 U	1.1 U	1.1 U			
Styrene	NS	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
Bromoform	NS	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
1,1,2,2-Tetrachloroethane	NS	5 U	6 U	6 U	5 U	5 U	5.7 U	5.3 U	5.5 U			
Xylenes (total)	1200	5 U	2 J	1 J	5 U	5 U	2.3 U	2.1 U	2.2 U			

Bold Face indicates constituent detection
Shaded cells indicate detections above NYSDEC Recommendation
Results in ug/kg
1 - Limit is for cis-1,2-dichloroethene

TAR -3
Johnson & Hoffman Manufacturing Corp.
 Carle Place, NY
 Soil Analytical Results (State-Certified Lab)

Type Date Collected Sample ID	TAGM NYSDEC RSCO	Soil		Duplicate 08/16/2002 SB-26(5-7) (DUP081602)	Soil		Soil	
		08/16/2002 SB-25 (5-7)	08/16/2002 SB-26(1-3)		08/16/2002 SB-26(5-7)	08/16/2002 SB-27(1-3)	08/16/2002 SB-27(5-7)	08/16/2002 SB-28(1-3)
Chloromethane	NS	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Vinyl chloride	NS	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Bromomethane	200	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Chloroethane	NS	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
1,1-Dichloroethene	NS	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Carbon disulfide		5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Acetone	200	10 U	11 U	10 U	11 U	11 U	11 U	12 U
Methylene chloride	400	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
1,1-Dichloroethane	200	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
2-Butanone (MEK)	NS	10 U	11 U	10 U	11 U	11 U	11 U	12 U
Chloroform	300	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
1,1,1-Trichloroethane	800	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Carbon tetrachloride	600	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
1,2-Dichloroethene (total)	250 ¹	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Benzene	60	1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1.2 U
1,2-Dichloroethane	100	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Trichloroethene	700	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
1,2-Dichloropropane	NS	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Bromodichloromethane	NS	5.5 U	5.5 U	5.5 U	5.7 U	5.4 U	5.5 U	5.9 U
cis-1,3-Dichloropropene	NS	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
4-Methyl-2-pentanone (MIBK)	NS	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Toluene	1,500	1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1.2 U
trans-1,3-Dichloropropene	300	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
1,1,2-Trichloroethane	NS	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Tetrachloroethene	1400	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
2-Hexanone		5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Dibromochloromethane		5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Chlorobenzene	1700	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Ethylbenzene	5500	1 U	1.1 U	1 U	1.1 U	1.1 U	1.1 U	1.2 U
Styrene	NS	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Bromoform	NS	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
1,1,2,2-Tetrachloroethane	NS	5.2 U	5.5 U	5.2 U	5.7 U	5.4 U	5.5 U	5.9 U
Xylenes (total)	1200	2.1 U	2.2 U	2.1 U	2.3 U	2.2 U	2.2 U	2.3 U

Bold Face indicates constituent detection
 Shaded cells indicate detections above NYSDEC Recommend
 Results in ug/kg
 1 - Limit is for cis-1,2-dichloroethene

TAL i-3
Johnson & Hoffman Manufacturing Corp.
 Carle Place, NY
 Soil Analytical Results (State-Certified Lab)

Type	Date Collected	TAGM	Soil	Soil	Soil	Soil	Soil	Soil
Sample ID			08/16/2002	08/16/2002	08/16/2002	08/16/2002	08/16/2002	08/16/2002
			SB-29(1-3')	SB-29(5-7')	SB-30(1-3')	SB-30(5-7')	SB-31(1-3')	SB-31(5-7')
Chloromethane		NS	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Vinyl chloride		NS	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Bromomethane		200	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Chloroethane		NS	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
1,1-Dichloroethene		NS	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Carbon disulfide			5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Acetone		200	11 U	11 U	11 U	11 U	9.9 U	10 U
Methylene chloride		400	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
1,1-Dichloroethane		200	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
2-Butanone (MEK)		NS	11 U	11 U	11 U	11 U	9.9 U	10 U
Chloroform		300	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
1,1,1-Trichloroethane		800	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Carbon tetrachloride		600	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
1,2-Dichloroethene (total)		250 ¹	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Benzene		60	1.1 U	1.1 U	1.1 U	1.1 U	0.99 U	1 U
1,2-Dichloroethane		100	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Trichloroethene		700	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
1,2-Dichloropropane		NS	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Bromodichloromethane		NS	5.5 U	5.7 U	5.6 U	5.5 U	5.5 U	5.1 U
cis-1,3-Dichloropropene		NS	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
4-Methyl-2-pentanone (MIBK)		NS	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Toluene		1,500	1.1 U	1.1 U	1.3	1.1 U	0.99 U	1 U
trans-1,3-Dichloropropene		300	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
1,1,2-Trichloroethane		NS	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Tetrachloroethene		1400	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
2-Hexanone			5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Dibromochloromethane			5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Chlorobenzene		1700	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Ethylbenzene		5500	1.1 U	1.1 U	1.1 U	1.1 U	0.99 U	1 U
Styrene		NS	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Bromoform		NS	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
1,1,2,2-Tetrachloroethane		NS	5.5 U	5.7 U	5.6 U	5.5 U	5 U	5.1 U
Xylenes (total)		1200	2.2 U	2.3 U	2.2 U	2.2 U	2 U	2.1 U

Bold Face indicates constituent detection
 Shaded cells indicate detections above NYSDEC Reconnie:
 Results in ug/kg
 1 - Limit is for cis-1,2-dichloroethene

TABLE 3-4

Summary of Vertical Delineation Soil Samples in
 MW-2 Area and Concrete Pad Area
 J&H Manufacturing Corp.
 Carle Place, NY

MW-2 Area

Boring ID	Sample Depth (feet)	PCE (ug/kg)	TCE (ug/kg)	cis-1,2-DCE (ug/kg)
MW-2	45-47	ND	ND	ND
SB-5	12-14	10.1	ND	ND
SB-8	7-8	15.4	1.1	1.7
SB-10	5-6	2,157*	41.9*	110*
SB-11	4-6	14.2	0.6	1.5
SB-13	12-14	62.1*	1.4*	2.2*
RSCO	-	1,400	700	250

* = Highest value of Field GC and State-certified lab results

Concrete Pad Area

Boring ID	Sample Depth (feet)	PCE (ug/kg)	TCE (ug/kg)	1,2-DCE (total) (ug/kg)
SB-9	7-8	817.9	ND	ND
SB-16	8-10	ND	ND	ND
SB-24	10-11	149	3	ND
RSCO	-	1,400	700	250

TABLE 3-5a
 Ground Water Sampling Results (Nov. 2000)
 J&H Manufacturing Corp.
 Carle Place, NY

Sample ID => Date Collected =>	NY TOGS	MW-1 11/21/00	MW-2 11/21/00	MW-3 11/21/00	MW-4 11/21/00	MW-5 11/21/00
<i>VOCs by 624 (ug/l)</i>						
Chloromethane	5	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U
Bromomethane	5	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5			1 U	1 U	67
Chloroform	7	1 U	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1	1 U	1 U	1 U	1 U	1 U
Benzene	1	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	5	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	5	1 U	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	5	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	190	84	1 U	1 U	170
Chlorobenzene	5	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	5	1 U	1 U	1 U	1 U	1 U
Bromoform	50	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	5	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	5	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	5	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U
2,2-Dichloropropane	5	1 U	1 U	1 U	1 U	1 U
Bromochloromethane	5	1 U	1 U	1 U	1 U	1 U
1,1-Dichloropropene	5	1 U	1 U	1 U	1 U	1 U
Trichloroethylene	5	10	15	1 U	1 U	45
Dibromomethane	5	1 U	1 U	1 U	1 U	1 U
1,3-Dichloropropane	5	1 U	1 U	1 U	1 U	1 U
Chlorodibromomethane	NS	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	NS	1 U	1 U	1 U	1 U	1 U
1,1,1,2-Tetrachloroethane	5	1 U	1 U	1 U	1 U	1 U
m + p Xylene	5	2 U	2 U	2 U	2 U	2 U
o Xylene	5	1 U	1 U	1 U	1 U	1 U
Styrene	5	1 U	1 U	1 U	1 U	1 U

U=not detected J=estimated value (below MDL) B=detected in associated method blank D=result from secondary analysis (dilution) NS=No Standard

TABLE 3-5a
 Ground Water Sampling Results (Nov. 2000)
 J&H Manufacturing Corp.
 Carle Place, NY

Sample ID => Date Collected =>	NY TOGS	MW-1 11/21/00	MW-2 11/21/00	MW-3 11/21/00	MW-4 11/21/00	MW-5 11/21/00
VOCs by 624 (ug/l)						
Isopropylbenzene	NS	1 U	1 U	1 U	1 U	1 U
Bromobenzene	NS	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichloropropane	NS	1 U	1 U	1 U	1 U	1 U
n-Propylbenzene	NS	1 U	1 U	1 U	1 U	1 U
2-Chlorotoluene	NS	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	5	1 U	1 U	1 U	1 U	1 U
4-Chlorotoluene	NS	1 U	1 U	1 U	1 U	1 U
tert-Butylbenzene	NS	1 U	1 U	1 U	1 U	1 U
1,2,4-Trimethylbenzene	5	1 U	1 U	1 U	1 U	1 U
sec-Butylbenzene	NS	1 U	1 U	1 U	1 U	1 U
p-Isopropyltoluene	NS	1 U	1 U	1 U	1 U	1 U
n-Butylbenzene	NS	1 U	1 U	1 U	1 U	1 U
Dibromochloropropane	NS	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	5	1 U	1 U	1 U	1 U	1 U
Hexachlorobutadiene	5	1 U	1 U	1 U	1 U	1 U
Naphthalene (v)	10	1 U	1 U	1 U	1 U	1 U
1,2,3-Trichlorobenzene	5	1 U	1 U	1 U	1 U	1 U
ter-ButylMethylEther	50	1 U	1 U	1 U	1 U	1 U
p-Ethyltoluene	NS	1 U	1 U	1 U	1 U	1 U
Freon 113	5	1 U	1 U	1 U	1 U	1 U
1,2,4,5-Tetramethylbenzene	NS	1 U	1 U	1 U	1 U	1 U
Acetone	50	10 U	10 U	10 U	10 U	10 U
Methyl Ethyl Ketone	50	10 U	10 U	10 U	10 U	10 U
Methylisobutylketone	NS	10 U	10 U	10 U	10 U	10 U
Chlorodifluoromethane	NS	1 U	1 U	1 U	1 U	1 U
p-Diethylbenzene	NS	1 U	1 U	1 U	1 U	1 U

U=not detected J=estimated value (below MDL) B=detected in associated method blank D=result from secondary analysis (dilution) NS=No Standard

TABLE 3-5b

Ground Water Sampling Results (May 2002)

J&H Manufacturing Corp.

Carle Place, NY

Sample ID => Date Collected =>	NY TOGS	MW-1 05/16/02	MW-2 05/16/02	MW-3 05/16/02	MW-4 05/16/02	MW-5 05/16/02
<i>VOCs by 8260b (ug/l)</i>						
Chloromethane	5	5 U	5 U	5 U	5 U	5 U
Vinyl Chloride	2	5 U	5 U	5 U	5 U	5 U
Bromomethane	5	5 U	5 U	5 U	5 U	5 U
Chloroethane	5	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U
Carbon Disulfide	NS	5 U	5 U	5 U	5 U	5 U
Methylene Chloride	5	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	5	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	5	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	5	0.5		5 U	5 U	33
Chloroform	7	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	5	5 U	5 U	5 U	5 U	5 U
Carbon Tetrachloride	5	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	1	5 U	5 U	5 U	5 U	5 U
Benzene	1	5 U	5 U	5 U	5 U	5 U
Vinyl Acetate	NS	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	5	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	50	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	5	5 U	5 U	5 U	5 U	5 U
Toluene	5	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	5	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	5	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	5	240 D	55	5 U	5 U	68
Dibromochloromethane	NS	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	5	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	5	5 U	5 U	5 U	5 U	5 U
Bromoform	50	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	5	5 U	5 U	5 U	5 U	5 U
Trichloroethylene	5			5 U	5 U	16
Xylene (total)	5	5 U	5 U	5 U	5 U	5 U
Styrene	5	5 U	5 U	5 U	5 U	5 U
Acetone	50	10 U	10 U	10 U	10 U	10 U
Methyl Ethyl Ketone	50	10 U	10 U	10 U	10 U	10 U
Methylisobutylketone	NS	10 U	10 U	10 U	10 U	10 U
2-Hexnone	50	10 U	10 U	10 U	10 U	10 U

U=not detected J=estimated value (below MDL) B=detected in associated method blank D=result from secondary analysis (dilution) NS=No Standard

**T/1-6
WELL SEALS RESULTS
JOHNSON & HOFFMAN MANUFACTURING CORPORATION
CARLE PLACE, NEW YORK**

Preparer: ERM, Inc.
 Name of Site: Johnson & Hoffman
 Street Address: 40 Voice Road, Carle Place, NY
 Township: Town of Hempstead
 County: Nassau County

WELL OWNER	ADDRESS	PERMIT NUMBER	DISTANCE & DIRECTION FROM THE SITE (feet)	CASING DIAMETER (inches)	SCREEN DIAMETER (inches)	TOTAL DEPTH BELOW SURFACE (feet)	LENGTH OF CASING (feet)	LENGTH OF SCREEN (feet)	Depth to Ground Water From Surface (feet)	Maximum Discharge (gpm)	Use of Well (Notes)
Inc. Village of Mineola	Southside of Westbury Ave & west of former Motor Parkway, Mineola, NY	N-5596	750 N	18	12	463	393	60	32'-7"	1200	Public Supply
Laboratory Furniture Co., Inc.	P.O. Box 590, Mineola, NY	N-3758	950 S	8	8	90'-10"	72	11	38'-9"	240	General (This address is connected to Carle Place WD for potable water service.)
Arnold Bri Hart LTD	Mineola, NY	N-2250	1200 SE	8	6	84'-9"	84'-1"	15	37.5	200	connected to Carle Place-WD for potable water service.)
Consolidated Lithographing Corporation	Guinea Woods Rd, Carle Place, NY	N-3689	1300 E-NE	10	10	88'-8"	62'-10"	21'-5"	23	450	General
Consolidated Lithographing Corporation	Guinea Woods Rd, Carle Place, NY	N-3700	1300 E-NE	10	10	72'-9"	41'-5"	21'-4"	21'1"	520	General
Korvette Westbury, Inc	SW cor Glen Cove Rd & Westbury Ave, Carle Place, NY	N-5664	1700 NE	8	6	67'-7"	53'-5"	15	18	200	ND
Larobe Realty, Inc.	Glen Cove Rd Carle Place, NY	N-5665	1700 NE	6	4	51'-4"	41	11	8	120	Air Conditioning
Long Island Water Corporation	Starfire Ct, Valley Stream, NY, T-#20 Suction	N-8905	1700 NE	8	8	145	123'-8"	20	12'-9"	222	Public Supply
Rosfield, Inc.	s/e cor. Guinea Woods Rd., Carle place, NY	N-8080	2200 E-NE	6	4	36	32	5	20	45	Air Conditioning & Refrigeration
Korvette's Furniture Centre	Glen Cove Rd & Westbury Ave, Carle Place, NY	N-8589	2200 E-NE	6	5	65	60	5	45	45	Cooling
Roosevelt Field Water District	1995 Prospect Ave. E. Meadow, NY	N-5485	2650 SE	30,20,12	10	557	477	80	40'-3"	1404	Public Supply (out of service due to contamination)
US Printing & Lithographing Company	Carle Place, NY	N-2627	2400 E-SE	10	8	58	36	16	14'-6"	300	Cooling & Air Conditioning
Mason Au Magenheimer	150 Old Country Rd., Mineola, NY	N-7186	2400 E-SE	12	8	322	282	40	15	670	Cooling
Robert A. Bernhardt and Donald O. Stein	100 Ring Road West, Garden City, NY	N-8050	2650 SE	8	4	928	263	28	38	180	Air Conditioning (This address is connected to Hempstead WD for potable water service.)
Twentieth Century Plastics Co.	122 East Second St., Mineola, NY	N-8093	2900 W-SW	6	6	90	79'-7"	10'-5"	54	50	Cooling
Village of Mineola	Mineola, NY	N-4082	3800 N	24	10	467	427	40	33	1035	Public Supply

ND= No Data
 Source of Information: State of NY Dept. Of Conservation Div. Of Water Resources
 Highlighted entries located approximately downgradient from the site

HRP ASSOCIATES, INC.

Environmental/Civil Engineering & Hydrogeology

September 24, 1999

Douglas Cohen, Esq.
Brown, Rudnick, Freed and Gesman
City Place I
Hartford, Connecticut 06103-3402

**RE: PROPOSAL TO COMPLETE SUBSURFACE INVESTIGATIONS AT JOHNSON & HOFFMAN
MANUFACTURING CORPORATION, 40 VOICE ROAD, CARLE PLACE, NEW YORK**

Dear Attorney Cohen:

At your request, HRP Associates, Inc. is pleased to submit the following proposal to complete a limited subsurface investigation at the Johnson & Hoffman Manufacturing facility located in Carle Place, New York. This proposal is based on various discussions and correspondences with Messrs. Dana Wagner and David Jerde of Liesch Associates, Inc. and Mr. Denny Duffy of the Superior Group.

Previous subsurface investigations by Liesch Associates determined that halogenated solvents (primarily tetrachloroethylene [PCE]) are present in the soils located outside the building to the south of Finishing Department. In addition, groundwater sampling determined that PCE and associated compounds are present within monitoring wells MW-1 and MW-2, which are located in a presumably downgradient location from the facility's Finishing Room. HRP proposes to utilize a phased site investigation approach to evaluate the extent and degree of this contamination. The first phase will consist of the completion of a soil gas survey. The second phase will include the installation and sampling of two additional, shallow groundwater monitoring wells and collection of soil samples from target areas identified by the soil gas survey. The necessity of additional actions will be determined following completion of this investigation.

Based upon HRP's experience in completing similar projects and knowledge of the Johnson & Hoffman facility the following Scope of Work will be completed.

SCOPE OF SERVICES

Task One: Utility Mark Out

HRP proposes to install two ground water monitoring wells, eight soil borings and install soil gas sampling points on-site. Their preliminary locations are depicted on the Figure 1.

HRP will mark out the sampling locations prior to installation and, as require by law, contact the utility-locating service prior to drilling activities. All available site utility information will also be reviewed.

CohenCARLE PLACEsub

105 Lake Hill Road, P.O. Box 8, Burnt Hills, NY 12027 • (518) 399-1174 • FAX (518) 399-2939

Office Locations: Connecticut • New York • South Carolina

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Task Two: Soil Gas Survey

Previous subsurface investigations identified elevated concentrations of PCE and its associated breakdown products within in the soils located outside the building to the south of the Finishing Room in the vicinity of soil boring SB-5 and monitoring well MW-2. In order to evaluate the source(s) of these contaminants and determine their degree and extent, HRP will conduct a soil gas survey.

The soil gas survey will be initiated in the vicinity of SB-5 and MW-2 where PCE and its associated breakdown products were detected in the soils. The soil gas survey will be conducted by advancing a small diameter hole (i.e. ½") through concrete, bituminous or soil surfaces. Following installation, a pre-cleaned slam bar will be advanced to a depth of approximately 4 feet to complete the probe points. Once the desired depth is achieved, the slam bar will be removed, and a glass thief will be inserted into the hole, the annulus sealed with molding clay, and the glass thief connected to a personal air-sampling pump. Soil gas will be purged from the sampling point and a soil gas sample will be collected into a one liter Tedlar bag. Vacuum readings will be recorded during the sample collection to evaluate the potential for channeling within the soils. Once enough soil gas has been collected to fill the bag, a syringe will be inserted into the bag to extract a soil gas sample for analysis via a field gas chromatograph (GC) for the presence of selected halogenated volatile organics (i.e. PCE, Trichloroethylene, and c-1,2 Dichloroethylene and t-1,2 Dichloroethylene). If PCE or its associated breakdown products are present within the collected soil gas sample, the survey will be expanded in all directions on a 20 foot grid. The survey will continue until less than 150 ppb of each individual contaminant is detected within the collected soil gas sample or the north or west walls of the finishing room and/or addition area are reached. In addition, a minimum of two soil gas points will be completed in the former solvent storage tank location. Figure 1 shows the estimated maximum potential number and locations of sampling points with proposed boundaries.

Following the completion of the survey the collected soil gas concentrations will be plotted to identify the areas of greatest soil gas contamination and evaluate its horizontal extent. Based on this information, HRP will install up to eight soil borings in the locations that exhibited elevated soil gas contaminant concentrations. The borings will penetrate through the lower permeability unit identified by Liesch Associates and at least 0.5 feet into the underlying higher permeability materials (i.e. sands). It is anticipated that eight soil samples will be collected from each soil boring in one-foot vertical increments. The soil samples will be collected by coring a 4" hole through the surface material (e.g. concrete, bituminous asphalt) then advancing a machine driven auger and split spoon or direct push sampler to collect soil samples from the just beneath the concrete floor to a depth of 8 feet below the floor. The collected soil samples will be reviewed in the field for physical evidence of contamination (i.e. odor, staining), cataloged, placed in a sample container, labeled and stored on ice for preservation. In addition, a portion of each sample will be field screened for the presence of

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VOCs via a field GC. Based upon the field screening, HRP will submit one or two samples from each boring (16 samples maximum) to a state certified laboratory for analysis of the presence of halogenated volatile organics via EPA Method 8021B.

Task Three: Ground Water Monitoring

As previously noted, low levels of PCE were detected within groundwater samples collected from MW-2 and MW-1. In addition, TCE and 1,2-Dichloroethylene were detected in a groundwater sample collected from MW-2. Each of these concentrations was detected above the NYSDEC Groundwater Quality Standards. In order to document the site's groundwater flow direction and the horizontal extent of groundwater contamination, HRP proposes to install two additional shallow groundwater monitoring wells as follows (see Figure 1 for well locations):

- MW-4: to be installed in the northeast corner of the site, as close to directly upgradient of the source area as allowed by site conditions, to evaluate the quality of groundwater entering the site.
- MW-5: to be installed to the south of MW-2.

The additional wells will be installed approximately eight feet into groundwater by a truck mounted hollow stem rig. The wells will be constructed of two-inch I.D. schedule 40 PVC casing and ten feet of 0.010" slot well screen. The screened section of the wells will be surrounded with clean filter sand and the wells will be protected with a locking well cap and a bolt-down cast iron hand hole set in concrete and flush with existing grade. One-foot thick bentonite seals will be set above the well screen and immediately below the concrete pad. Based upon a review of the Liesch report, groundwater is expected to be approximately 49 to 50 feet below grade. Therefore, we estimate that wells will be installed at a depth of approximately 57 feet below grade that is consistent with the construction of existing wells MW-1, MW-2 and MW-3.

Ten days after installation the well locations will be surveyed to an assumed bench mark. The depth to groundwater in the new well and the three existing wells will be measured to a relative benchmark to determine the site's groundwater flow direction. After completing the depth measurements, the wells will be purged by removing six well volumes, and then the wells will be sampled with disposal mechanical bailers. The collected groundwater samples will be placed in appropriate containers, labeled, reviewed for physical evidence of contamination, placed on ice for preservation and delivered to a state certified laboratory for analysis of the presence of halogenated volatile organics via EPA Method 8021B.

Drill tailings and purged water will be contained in drums pending sampling for proper disposal.

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Task Four: Report

Upon completion of the laboratory analysis of the soil and groundwater samples, HRP will submit a report that summarizes the site investigation, field and laboratory results, conclusions and recommendations for additional investigations, if required. The report will also include figures depicting site features and location, and other relevant documentation.

PROJECT BUDGET

HRP will complete the tasks noted above on a Time and Materials basis, as described in the attached contract, not to exceed

Please note that the estimated costs represent our best estimate of the appropriate level of effort required to perform the work described in the Scope of Services based typical metal stamping operations, review of the Liesch report and various discussions and correspondence with Liesch Associates and Superior Group. Therefore the Scope of Work is subject to change if unanticipated conditions are encountered during the site work. The total estimated costs would not be exceeded without prior approval from the client. HRP will notify the client of any changes in the proposed Scope of Services and associated costs as soon as they are indicated.

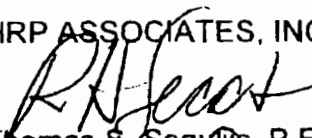
PROJECT SCHEDULE; AUTHORIZATION TO PROCEED


The project will be completed within six to eight weeks of receipt of authorization to proceed.


If you have any questions please do not hesitate to contact me at (518) 399-1174. Thank you for the opportunity to be of service.

Sincerely,

HRP ASSOCIATES, INC.


for Thomas S. Segulic, P.E.
Project Manager


Robert H. Leach, L.E.P.
Associate Vice President

cc: Mr. Thomas Stuges, Harding Group

Dana Wagner and David Jerde, Liesch Associates, Inc.

CohenCARLE PLACEsub

HRP ASSOCIATES, INC. 105 Lake Hill Road, P.O. Box 8, Burnt Hills, NY 12027 • (518) 399-1174 • Fax (518) 399-2939

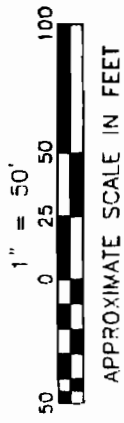
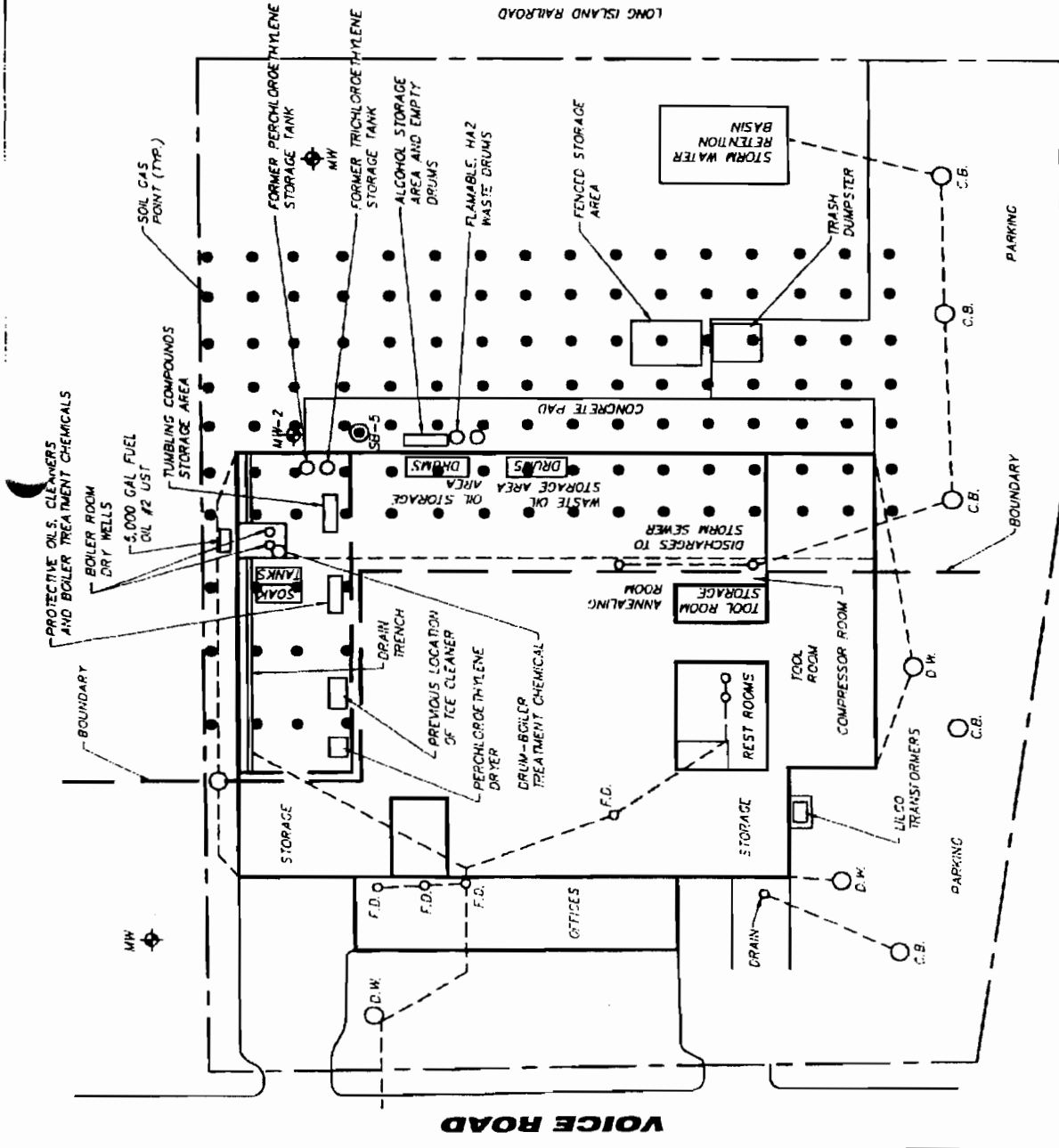


FIGURE 1
ANTICIPATED SOIL GAS
SURVEY POINTS
JOHNSON & HOFFMAN MFG. CORP
40 VOICE ROAD
CARLE PLACE, NEW YORK
HRP # BR04009.P2
APPROX. SCALE 1"=50'

HRP
ASSOCIATES, INC
167 New Britain Avenue
Plainville, CT 06062
(860) 793-6899
FAX: (860) 793-6871

1. \\\net\jhp04009p2\FIGURE1



CLIENT: LIESCH ASSOCIATES
 PROJECT NAME: JOHNSON & HOFFMAN
 MANUFACTURING
 LOCATION: CARLE PLACE, NY

NEW ENGLAND BORING CONTRACTORS OF CT., INC.



129 KRIEGER LANE
 GLASTONBURY, CT 06033
 (860) 633-4649 -- (413) 733-1232
 FAX (860) 657-8046

BORING No. MW-1
 SHEET 1 OF 1

ARCHITECT/
 ENGINEER

DRILLER: M. St. John

INSPECTOR: D. Larson

DATE START: 2-10-99

DATE FINISH: 2-10-99

	Casing	Sampler	Core Barrel
TYPE	HSA	SS	
SIZE I.D.	4-1/4"	1-3/8"	
HAMMER WT.		140	
HAMMER FALL		30"	

FILE NO. LIESCHJO

SURFACE ELEV.

LINE & STATION

OFFSET

No.	DEPTH RANGE IN FEET	SAMPLE				REC.	CASING BLOWS/ CORING TIMES PER FT.	FIELD CLASSIFICATION AND REMARKS	Well Cons.	Installation Details
		BLOWS PER 6" ON SAMPLER								
		0-6	6-12	12-18	18-24					
S1	0'-2'	No Required Blows				20"		Topsoil		Roadway Box 47' of 2" PVC Riser
S2	2'-4'					18"		Brown Fine - Coarse Sand, Some Silt		
S3	4'-6'					14"		Brown Silt, Little Fine Sand		
S4	6'-8'					10"		Brown Fine - Coarse Sand, Some Fine - Coarse Gravel		
S5	8'-10'					14"				
S6	10'-12'					16"				
S7	12'-14'					18"				
S8	14'-16'					20"				
S9	16'-18'					20"				
S10	18'-20'					18"				
S11	25'-27'					15"				
S12	30'-32'					12"				
S13	40'-40'2"					0"				
S14	50'-52'					24"				
								57	2' Bentonite Chip Seal	
								End of Boring @ 57' Water @ 50'	10' of .010 Slot, 2" PVC Screen	
									NJ #2 Sand	
									Bottom of We @ 57'	

NOTES: 1) The stratification lines represent the approximate boundary between soil types. Transitions may be gradual.
 2) Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. Fluctuations in the level of ground-water may occur due to factors other than those present at the time measurements were made.

REMARKS:

CLIENT: LIESCH ASSOCIATES
 PROJECT NAME: JOHNSON & HOFFMAN
 MANUFACTURING
 LOCATION: CARLE PLACE, NY

NEW ENGLAND BORING CONTRACTORS OF CT., INC.



129 KRIEGER LANE
 GLASTONBURY, CT 06033
 (860) 633-4649 - (413) 733-1232
 FAX (860) 657-8046

BORING No. MW-3
 SHEET 1 OF 1
 ARCHITECT/
 ENGINEER

DRILLER: M. St. John
 INSPECTOR: D. Larson
 DATE START: 2-12-98
 DATE FINISH: 2-12-98

	Casing	Sampler	Core Barrel
TYPE	HSA	SS	
SIZE I.D.	4-1/4"	1-3/8"	
HAMMER WT.		140	
HAMMER FALL		30"	

FILE NO. LIESCHJO
 SURFACE ELEV.
 LINE & STATION
 OFFSET

No.	DEPTH RANGE IN FEET	SAMPLE				REC.	CASING BLOWS/ CORING TIMES PER FT.	FIELD CLASSIFICATION AND REMARKS	Well Cons.	Installation Details	
		0-6	6-12	12-18	18-24						
S1	0'-2'	No Required Blows				10"		Asphalt		Roadway B 47' of 2" P Riser	
S2	2'-4'					8"		Brown Fine - Coarse Sand and Fine - Coarse Gravel, Little Silt			
S3	4'-6'					12"					
S4	6'-8'					16"					
S5	8'-10'					18"					
S6	10'-12'					18"					
S7	12'-14'					12"					
S8	14'-16'					10"					
S9	16'-18'					18"					
S10	18'-20'					18"					
S11	25'-27'					20"					
S12	34'-36'					20"					
S13	44'-46'					18"					
S14	50'-52'					24"					
								57	2' Bentonite Chip Seal	10' of .010 Slot, 2" PVC Screen	
								End of Boring @ 57' Water @ 50'		NJ #2 Sand	Bottom of We @ 57'

NOTES: 1) The stratification lines represent the approximate boundary between soil types. Transitions may be gradual.
 2) Water level readings have been made in the drill holes at times and under conditions stated on the boring logs. Fluctuations in the level of ground-water may occur due to factors other than those present at the time measurements were made.

REMARKS:

ERM-Northeast

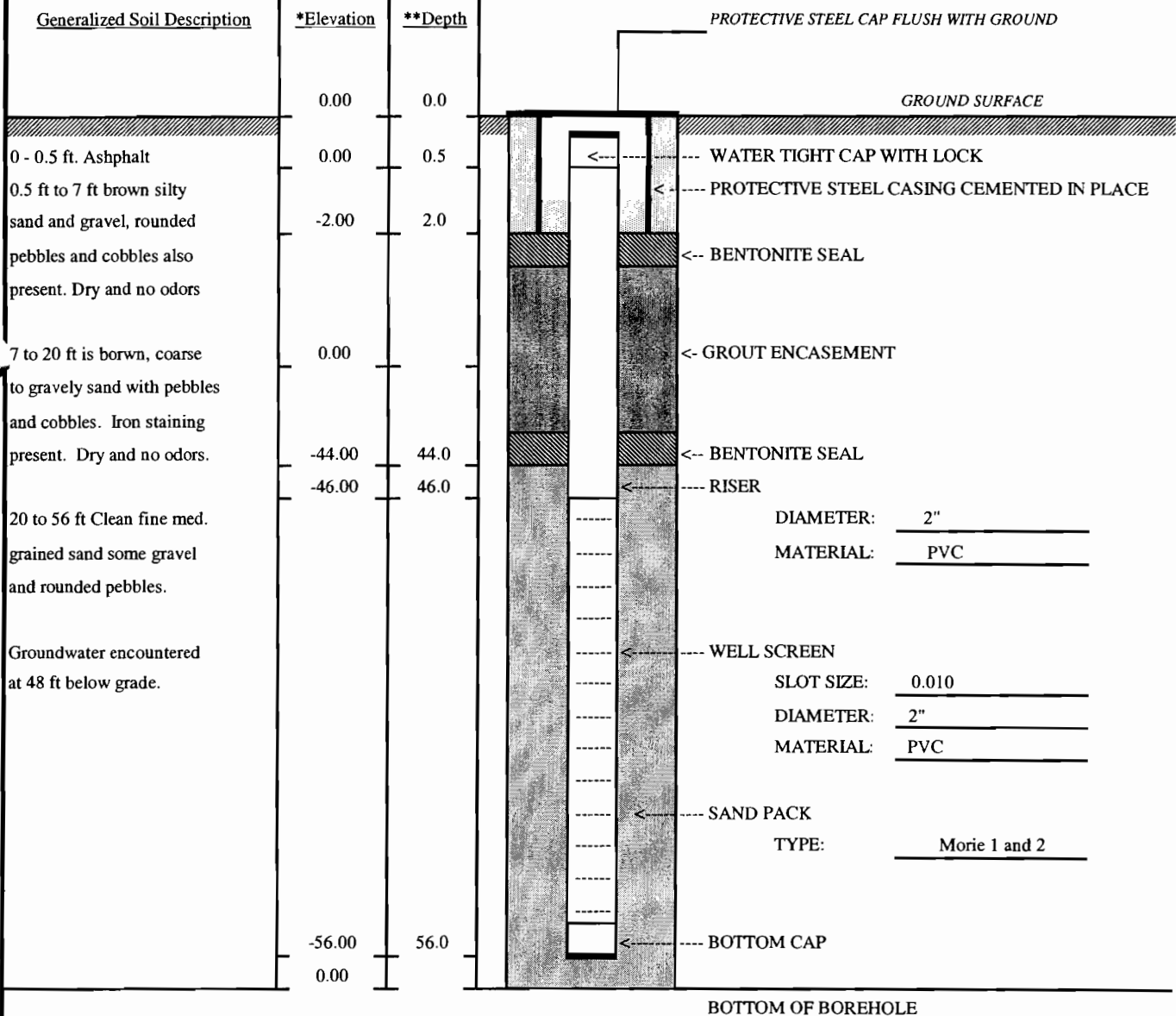
WELL : MW-4

175 Froehlich Farm Blvd., Woodbury, NY 11797

MONITORING WELL CONSTRUCTION LOG

Project Name & Location Johnson & Hoffman		Project No.		Water Level(s) <i>(ft below top of PVC casing)</i>		Site Elevation Datum (feet)
Drilling Company Delta Well and Pump		Foreman Charlie Blumberg		Date	Time	Level Ground Elevation (feet)
Surveyor		10/31/2000		15:30	47.9	Top of Protective Steel Cap Elevation (feet)
Date and Time of Completion 10/31/00 @ 1500		Geologist Mike Mendes		Top of Riser Pipe Elevation (feet)		

CONSTRUCTION DETAILS



REMARKS _____

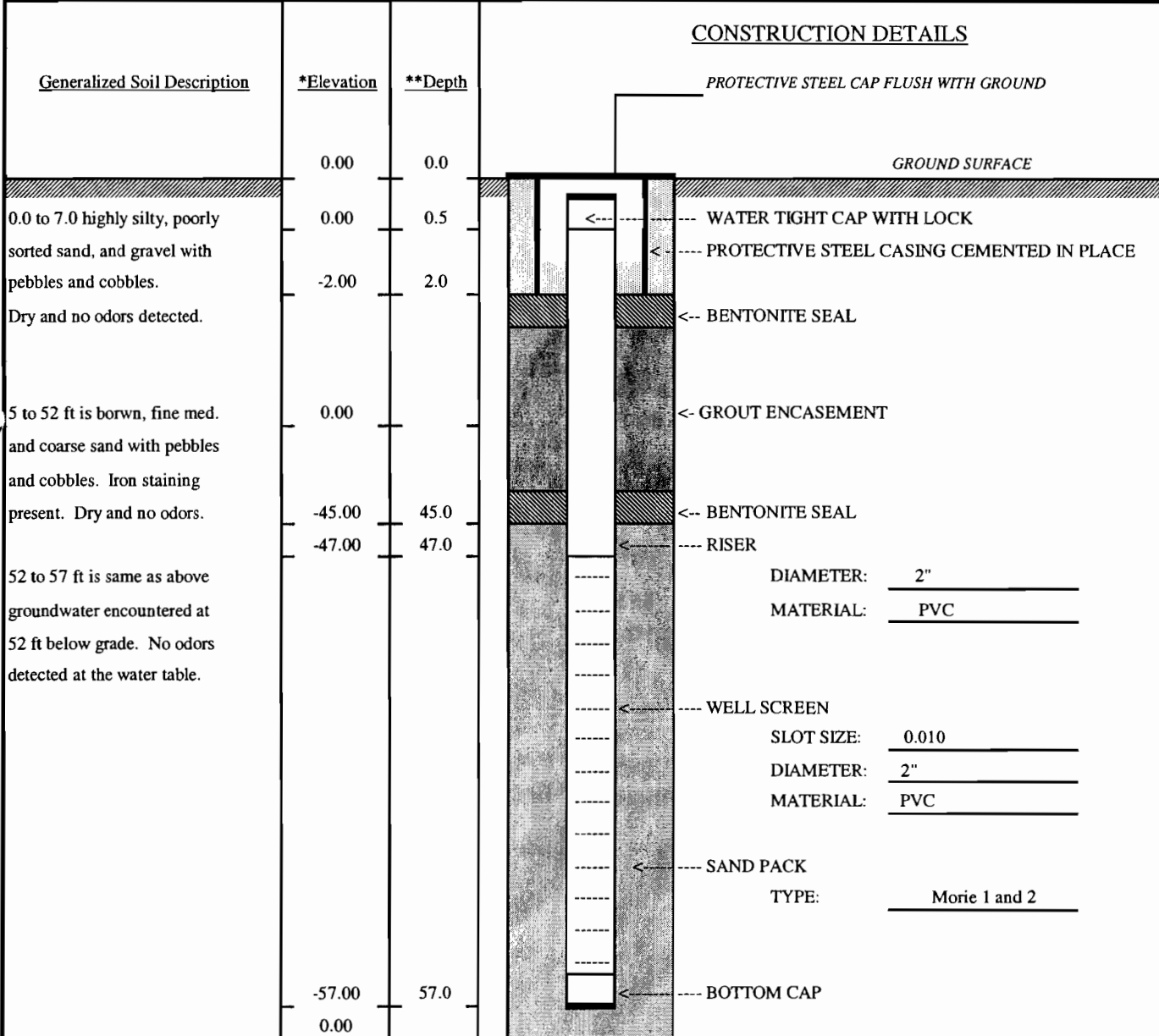
ERM-Northeast

WELL : MW-5

175 Froehlich Farm Blvd., Woodbury, NY 11797

MONITORING WELL CONSTRUCTION LOG

Project Name & Location Johnson & Hoffman		Project No.		Water Level(s) <i>(ft below top of PVC casing)</i>		Site Elevation Datum (feet)
Drilling Company Delta Well and Pump	Foreman Charlie Blumberg	Date	Time	Level (feet)	Ground Elevation (feet)	
Surveyor		10/31/2000	14:00	52.0	Top of Protective Steel Cap Elevation (feet)	
Date and Time of Completion 11/01/00 @ 1500					Geologist Mike Mendes	



REMARKS _____

Liesch Associates, Inc.

Project: GHJM - AEC Acquisition
 Drilling Contractor: New England Boring Contractors
 Logged By: Dan Larson
 Date Start: 2/10/99
 Date Finished: 2/10/99
 E.O.B. (ft.): 57
 Borehole Number: MW-1
 Location: South side of property
 Drilling Equipment: Mobile drill B53
 Driller: Mike St. John & Brian Sullivan
 Surface Elevation:

Depth (Ft.)	Description of Material	USCS	PID	Geologic Origin	Samples	Notes
0-2'	Brown sandy, gravelly silt loam	ML	0.0			
2-4'	Same	ML	0.0			
4-6'	Golden brown gravelly coarse-grained sand	SP	0.0			
6-8'	Same	SP	0.0			
8-10'	Same	SP	0.0			
10-12'	Same	SP	0.0			
12-14'	Same	SP	0.0			
14-16'	Golden brown sandy gravel	SP	2.4			
16-18'	Same	GP	0.0			
18-20'	Golden brown gravelly coarse-grained sand	SP	0.0			

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Liesch Associates, Inc.

Project:	GHJM - AEC Acquisition		
Drilling Contractor:	New England Boring Contractors		
Logged By:	Dan Larson		
Date Start:	2/10/99		
Date Finished:	2/10/99		
E.O.B. (ft.):	57		
Borehole Number:	MW-1		
Location:	South side of property		
Drilling Equipment:	Mobile drill B53		
Driller:	Mike St. John & Brian Sullivan		
Surface Elevation:			

Depth (Ft.)	Description of Material	USCS	PID	Geologic Origin	Samples	Notes
	25-27' Same	SP	0.0			
-30	30-32' Same	SP	0.0			
-35						
-40	40-42' No recovery	--	--			
-45						
-50	50-52' Golden brown sandy gravel	GP	0.0			

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Liesch Associates, Inc.

Project:	GHJM - AEC Acquisition		
Drilling Contractor:	New England Boring Contractors		
Logged By:	Dan Larson		
Date Start:	2/11/99		
Date Finished:	2/11/99		
E.O.B. (ft.):	57		
Borehole Number:	MW-2		
Location:	Near SE Building corner		
Drilling Equipment:	Mobile drill B53		
Driller:	Mike St. John & Brian Sullivan		
Surface Elevation:			

Depth (Ft.)	Description of Material	USCS	PID	Geologic Origin	Samples	Notes
	0-2' Brown sandy gravelly silt loam		1999.0			Chemical odor
	2-4' Same		1999.0			Chemical odor
-5	4-6' Same		1999.0			Moist, chemical odor
	6-8' Same		1763.0			Chemical odor
-10	8-10' Golden brown sandy gravel	GP	200.2			Slight chemical odor
	10-12' Golden brown gravelly sand	SP	108.8			Slight chemical odor
	12-14' Same	SP	42.8			Slight chemical odor
-15	14-16' Same	SP	84.2			Slight chemical odor
	16-18' Same	SP	129.7			Slight chemical odor
-20	18-20' No recovery	--	--			Slight chemical odor
	20-22' Brown medium-grained sand	SW	95.2			Slight chemical odor
-25	22-24' Brown medium-grained gravelly sand	SW	33.5			Slight chemical odor

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Liesch Associates, Inc.

Project:	GHJM - AEC Acquisition
Drilling Contractor:	New England Boring Contractors
Logged By:	Dan Larson
Date Start:	2/11/99
Date Finished:	2/11/99
E.O.B. (ft.):	57
Borehole Number:	MW-2
Location:	Near SE Blvd.
Drilling Equipment:	Mobile drill B53
Driller:	Mike St. John & Brian Sullivan
Surface Elevation:	

Depth (Ft.)	Description of Material	USCS	PID	Geologic Origin	Samples	Notes
	25-27' Brown medium-grained sand	SP	45.1			Slight chemical odor
-30	30-32' Brown medium-grained gravelly sand	SP	8.0			Slight chemical odor
35	35-37' Golden brown sandy gravel	SP	44.2			
-40	40-42' Golden brown medium grained gravelly sand	SP	30.9			
-45	45-47' Same	SP	8.2			
-50	50-52' Same	SP	112.6			Saturated

Monitoring well screen set @ 47-57'.

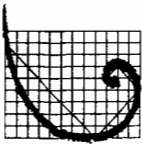
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Liesch Associates, Inc.

Project:	GHJM - AEC Acquisition		
Drilling Contractor:	New England Boring Contractors		
Logged By:	Dan Larson		
Date Start:	2/11/99		
Date Finished:	2/11/99		
E.O.B. (ft.):	57		
Borehole Number:	MW-3		
Location:	Near NW corner of building		
Drilling Equipment:	Mobile drill B53		
Driller:	Mike St. John & Brian Sullivan		
Surface Elevation:			

Depth (Ft.)	Description of Material	USCS	PID	Geologic Origin	Samples	Notes
-30						
-35	34-36' Golden brown medium-grained gravelly sand		0.0			
-40						
-45	44-46' Same		1.6			
-50	50-52' Same		3.0			

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ERM Inc.

520 Broad Hollow Road, Suite 210, Melville, New York 11747

Boring Number

MW-4

ERM

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 10/31/00 @09:00
Drilling Company Delta Well and Pump		Foreman Charlie Blumberg	Date & Time Completed: 10/31/00@12:00
Drilling Equipment F-10 Drill Rig		Method H.S.A.	Sampler(s) 140 lbs
Bit Size(s) H.S.A 4.25 inch		Core Barrel(s) 1-3/8 inch	Sampler Hammer 30inches
		Elevation & Datum	Completion Depth 56 feet
		Geologist(s) Michael Mendes	Rock Depth

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION:				SURFACE DESCRIPTION:	
0	NA	NA	0.0	NA	Brown Silty sand with gravel pebbles and cobbles.	Dry no odors
5			0.0			
10			0.0		10 to 12 ft Poorly sorted sand and gravel some sporadic rounded pebbles and iron staining	Dry no odors
15			0.0			
20			0.0		20 to 22 ft Fine to medium grained sand and gravel poorly sorted trace hematite iron staining present	Dry no odors
25			0.0			
30			0.0		30 to 32 ft Iron stained coarse to gravely sand, with some pebbles present. Trace hematite.	Dry no odors.
35			0.0			
40			0.0		40 to 42 ft Iron stained medium to coarse sand with some fine sands, trace gravels, trace pebbles.	Dry no odors.
45			0.0		45 to 47 ft Dry fine to medium sand some coarse gravel, trace pebbles.	
50					47 to 49 ft Groundwater encountered at 48 ft. fine to medium sand well sorted trace gravel.	Groundwater at 48 ft



ERM

ERM Inc.

520 Broad Hollow Road, Suite 210, Melville, New York 11747

Boring Number

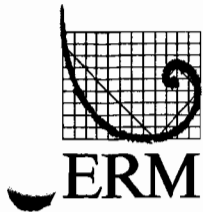
MW-5

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 11/01/00 @ 08:30
Drilling Company Delta Well and Pump		Foreman Charlie Blumberg	Date & Time Completed: 11/01/00 @ 08:30
Drilling Equipment F-10 Drill Rig		Method H.S.A.	Sampler(s) 140 lbs
Bit Size(s) H.S.A 4.25 inch		Core Barrel(s) 1-3/8 inch	Drop 30inches
		Elevation & Datum	Completion Depth 57 feet
		Geologist(s) Michael Mendes	Rock Depth

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION:				SURFACE DESCRIPTION:	
0	NA	NA	0.0	NA	Brown Silty sand with gravel pebbles and cobbles.	Dry no odors
5			0.0			
10			0.0		10 to 12 ft Poorly sorted sand and gravel some sporadic rounded pebbles and iron staining	Dry no odors
15			0.0		15 to 17 ft Brown sand coarse to gravely sands with some fines. Some pebbles rounded up to one inch.	Dry no odors.
20			0.0		20 to 22 ft Fine to medium grained sand and gravel poorly sorted trace hematite iron staining present	Dry no odors
25			0.0			
30			0.0		30 to 32 ft Iron stained coarse to gravely sand, with some pebbles present. Trace hematite.	Dry no odors.
35			0.0			
40			0.0		40 to 42 ft Medium grained sand poorly sorted, with some coarse sand and gravels, some fines and pebbles	Dry no odors.
45			0.0		45 to 47 ft Dry fine to medium sand some coarse gravel, trace pebbles.	
50					47 to 49 ft Brown fine to medium sand, trace gravel trace coarse sand, iron staining present.	Groundwater at 48 ft

Page 1 of 2 Signature: _____ Date: _____



BORING LOG

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/PID (ppm)	Blow Counts		
50	NA	NA	0	0	49 to 51 ft Brown sands poorly sorted, trace gravel and small pebbles. Iron staining present.	
					51 to 53 ft Groundwater encountered, brown fine to medium saturated sand with trace gravel and coarse.	
55			0		55 Poorly sorted sands and gravel. 57 ft is end of Boring.	
60						

rev. 9/96
Boringlogs.xls

Liesch Associates, Inc.

Project:	GHJM - AEC Acquisition		
Drilling Contractor:	New England Boring Contractors		
Logged By:	Dan Larson		
Date Start:	2/11/99		
Date Finished:	2/11/99		
E.O.B. (ft.)	20'		
Borehole Number:	B-1		
Location	3' South of UST near SE buliding corner		
Drilling Equipment:	Mobile drill B53		
Driller:	Mike St. John & Brian Sullivan		
Surface Elevation:			

Depth (FL)	Description of Material	USCS	PID	Geologic Origin	Samples	Notes
	Hand shovel to 4' - no visual or olfactory signs of petroleum impacts					
-5	4-6' Brown gravelly, sandy silt loam		0.0			
	6-8' No recovery	--	--			Rock n' spoon
-10	8-10' Golden brown medium-grained gravelly sand	SP	0.0			
	10-12' Same		9.8			Slight fuel oil odor
	12-14' Same		2.2			
-15	14-16' Same	SP	0.0			
	16-18' Same	SP	0.0			
-20	18-20' Same	SP	0.0			
-25						

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GZA GEOENVIRONMENTAL, INC.

Engineers and Scientists
27 Naack Road
Vernon, Connecticut 06066
(860) 875-7655

40 VOICE ROAD
CARLE PLACE
LONG ISLAND, NEW YORK

Boring No.: SB-1
Page: 1 of 1
File No.: 62625/42197
Checked By:

Boring Co. GZA GeoEnvironmental, Inc.
Foreman A. Augustine Type _____
GZA Rep. J. White I.D./O.D. 2-1/4"
Date Start 2/16/99 Date End 2/16/99 Hammer Wt. _____
Location See plan Hammer Fall _____
G.S. Elevation _____ Datum _____ Other _____

Groundwater Readings				
Date	Time	Depth	Casing	Stabilization Time
2/16/99	1430	NA		

Depth (ft)	Sample Information					Sample Description & Classification	Stratum Description	Remarks	Equipment Installed
	No.	Pen. Rec.	Depth (ft)	Blows/6"	Field Test Data				
5	S-1	24/18	0-2	4-7		S-1: Medium dense, grey brown, fine to medium SAND, trace fine Gravel, trace Silt	FILL	NO EQUIPMENT INSTALLED	
				6-8	ND				
5	S-2	24/16	2-4	14-10		S-2: Medium dense, dark brown, fine SAND, some organic Silt	4.5'		
				10-10	ND				
10	S-3	20/17	4-6	3-3		S-3: Top 6" dark brown, fine SAND, some organic Silt	7.0'		
				4-4	ND				
10	S-4	24/16	6-8	5-7		S-4: Top 12" brown SILT, trace fine Gravel, trace coarse to fine Sand. Bottom brown, fine to medium Sand, trace, fine Gravel, trace Silt	10.0'		
				12-16	ND				
15	S-5	24/16	8-10	6-12		S-5: Medium dense, light brown, fine to medium Sand, trace, fine Gravel, trace Silt	14.0'		
				16-21	ND				
20	S-6	20/13	10-12	11-16		S-6: Dense, light brown, fine to coarse SAND, trace, fine Gravel, trace Silt	END OF EXPLORATION		
				14-14	ND				
25	S-7	24/18	12-14	12-16		S-7: Dense, light brown, fine to coarse SAND, trace, fine Gravel, trace Silt			
				18-20	ND				
30									

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- Soil samples field screened with a 10.6 eV ThermoEnvironmental Instruments Model 580B organic vapor meter (OVM) or HNu Model PI-101 photoionization detector (PID). OVM or PID values represent meter response in parts per million (ppm) relative to a benzene in air and above background readings. "ND" stands for None Detected above background
 - Samples moist below 6 feet below grade.

GZA GEOENVIRONMENTAL, INC.

Engineers and Scientists
27 Naek Road
Vernon, Connecticut 06066
(860) 875-7655

40 VOICE ROAD
CARLE PLACE
LONG ISLAND, NEW YORK

Boring No.: SB-2
Page: 1 of 1
File No.: 62625/42197
Checked By:

Groundwater Readings

Boring Co. GZA GeoEnvironmental, Inc.
Foreman A. Augustine
GZA Rep. J. White
Date Start 2/16/99 Date End 2/16/99
Location See plan
G.S. Elevation Datum
Type HSA
I.D./O.D. 2-1/4"
Hammer Wt. 140 lb.
Hammer Fall 30"
Other

Date	Time	Depth	Casing	Stabilization Time
2/16/99	1555	NA		

Depth	Sample Information					Sample Description & Classification	Stratum Description	Remarks	Equipment Installed
	No.	Pen/ Rec.	Depth (ft)	Flow/s"	Field Test Data				
5	S-1	24/14	0-2	4-3		S-1: Medium dense, grey brown, fine to medium SAND, some fine Gravel, trace Silt S-2: medium dense, brown, fine to medium SAND, some fine Gravel, trace Silt S-3: Medium dense, light brown, fine to coarse SAND, some fine Gravel S-4: Dense, light brown, fine to coarse SAND, some fine Gravel, trace Silt S-5: Dense, light brown, fine to coarse SAND, some fine Gravel, trace Silt S-6: Medium dense, light brown, fine to coarse SAND, some fine Gravel, trace Silt S-7: Medium dense, light brown, fine to coarse SAND, some fine Gravel, trace Silt	SAND	NO EQUIPMENT INSTALLED	
				7-7	ND				
	S-2	24-12	2-4	7-8					
				14-14	ND				
	S-3	24/11	4-6	7-11					
				13-16	ND				
	S-4	24/20	6-8	19-16					
10				17-19	ND				
	S-5	24/16	8-10	6-16					
				17-21	ND				
	S-6	24/18	10-12	10-12					
15				13-13	ND				
	S-7	24/14	12-14	12-12					
				12-14	ND				
20									
25									
30									

REMARKS

- Soil samples field screened with a 10.6 eV ThermoEnvironmental Instruments Model 580B organic vapor meter (OVM) or HNu Model PI-101 photoionization detector (PID). OVM or PID values represent meter response in parts per million (ppm) relative to a benzene in air and above background readings. "ND" stands for None Detected above background.
- Samples moist below 6 feet below grade.

GZA GEOENVIRONMENTAL, INC.

Engineers and Scientists
27 Neck Road
Vernon, Connecticut 06066
(860) 875-7655

40 VOICE ROAD
CARLE PLACE
LONG ISLAND, NEW YORK

Boring No.: SB-3
Page: 1 of 1
File No.: 62625/42197
Checked By:

Boring Co. GZA GeoEnvironmental, Inc.
Foreman A. Augustine Type HSA
GZA Rep. J. White I.D./O.D. 2-1/4"
Date Start 2/16/99 Date End 2/16/99 Hammer Wt. 140 lb.
Location See plan Hammer Fall 30"
G.S. Elevation _____ Datum _____ Other _____

Groundwater Readings

Date	Time	Depth	Casing	Stabilization Time
2/16/99	1720	NA		

Depth	Sample Information					Sample Description & Classification	Stratum Description	Remarks	Equipment Installed
	No.	Pen. Rec.	Depth (ft)	Blows/6"	Field Test Data				
5	S-1	24/10	0-2	5-9		S-1: Medium dense, brown grey, fine to medium SAND,	SAND	NO EQUIPMENT INSTALLED	
				10-13	7	some fine Gravel, little Silt	3.5'		
	S-2	24/18	2-4	6-4	2	S-2: Top 12" medium dense, orange brown, fine to medium,	SILT		
				4-6	7		5.0'		
	S-3	24/16	4-6	4-7		SAND and fine GRAVEL,			
				5-10	0.8	trace Silt. Bottom 6" dark brown,			
	S-4	24/16	6-8	11-14		SILT, little fine Sand			
10	S-5	24-17	8-10	7-12		S-3: Top 12" medium dense, dark brown, SILT, little fine	GRAVEL		
				12-14	ND	to coarse Sand. Bottom 6" light	AND		
	S-6	24/20	10-12	8-14		brown, fine GRAVEL and fine	SAND		
				14-16	ND	to coarse SAND, trace Silt			
15	S-7	24/13	12-14	12-15		S-4: Dense, brown, fine	14.0'		
				18-21	ND	to coarse SAND, some fine	END OF		
						Gravel, trace Silt	EXPLORATION		
20						S-5: Medium dense, light brown, fine to coarse SAND,			
						some fine Gravel, trace Silt			
						S-6: Medium dense, light brown, fine to coarse SAND,			
						some fine Gravel, trace Silt			
25						S-7: Medium dense, light brown, fine to coarse SAND,			
						some fine Gravel, trace Silt			
30									

REMARKS

- Soil samples field screened with a 10.6 eV ThermoEnvironmental Instruments Model 580B organic vapor meter (OVM) or HNu Model PI-101 photoionization detector (PID). OVM or PID values represent meter response in parts per million (ppm) relative to a benzene in air and above background readings. "ND" stands for None Detected above background.
- Samples moist below 6 feet below grade.

GZA GEOENVIRONMENTAL, INC.

Engineers and Scientists
27 Naek Road
Vernon, Connecticut 06066
(860) 875-7655

40 VOICE ROAD
CARLE PLACE
LONG ISLAND, NEW YORK

Boring No.: SB-4
Page: 1 of 1
File No.: 62625/42197
Checked By:

Boring Co. GZA GeoEnvironmental, Inc. Casing HSA Sampler S.S.
Foreman A. Augustine Type I.D./O.D. 2-1/4" 2" O.D.
GZA Rep. J. White Hammer Wt. 140 lb.
Date Start 2/17/99 Date End 2/17/99 Hammer Fall 30"
Location See plan Other _____
G.S. Elevation _____ Datum _____

Groundwater Readings

Date	Time	Depth	Casing	Stabilization Time
2/17/99	800	NA		

Depth (ft)	Sample Information					Sample Description & Classification	Stratum Description	Remarks	Equipment Installed
	No.	Pen./ Rec.	Depth (ft)	Blows/6"	Field Test Data				Equipment Installed
5	S-1	24/15	0-2	4-8		S-1: Top 7" medium dense, grey green, fine to medium SAND, trace fine Gravel, trace Silt. Bottom brown, fine to medium SAND, trace, fine Gravel, trace Silt	FINE TO MEDIUM SAND	NO EQUIPMENT INSTALLED	
				11-11	ND				
	S-2	24/12	2-4	10-11					
				4-3	ND				
	S-3	24/17	4-6	2-3			4.0'		
				9-16	ND				
	S-4	24/15	6-8	11-14			6.0'		
10				19-20	3	S-2: Medium dense, fine to coarse SAND, trace Silt			
	S-5	24/14	8-10	8-17		S-3: Medium dense, light brown SILT, trace fine Sand, trace fine Gravel	FINE TO COARSE SAND		
				17-18	2				
	S-6	24/17	10-12	7-11		S-4: Dark, fine to coarse SAND, little, fine Grave, trace Silt			
15				16-17	1				
	S-7	24/21	12-14	19-18		S-5: Dark, fine to coarse SAND, little, fine Grave, trace Silt	14.0'		
				18-18	ND				
						S-6: Dark, fine to coarse SAND, little, fine Grave, trace Silt	END OF EXPLORATION		
						S-7: Dark, fine to coarse SAND, little, fine Grave, trace Silt			
20									
25									
30									

R E M A R K S

- Soil samples field screened with a 11.8 eV ThermoEnvironmental Instruments Model 580B organic vapor meter (OVM) or HNu Model PI-101 photoionization detector (PID). OVM or PID values represent meter response in parts per million (ppm) relative to a benzene in air and above background readings. "ND" stands for None Detected above background.
- Samples moist below 2 feet below grade.

GZA GEOENVIRONMENTAL, INC.

Engineers and Scientists
27 Naek Road
Vernon, Connecticut 06066
(860) 875-7655

40 VOICE ROAD
CARLE PLACE
LONG ISLAND, NEW YORK

Boring No.: SB-5
Page: 1 of 1
File No.: 62625/42197
Checked By:

Groundwater Readings

Boring Co. GZA GeoEnvironmental, Inc. Casing HSA Sampler S.S.
Foreman A. Augustine Type I.D./O.D. 2-1/4" 2" O.D.
GZA Rep. J. White Hammer Wt. 140 lb.
Date Start 2/17/99 Date End 2/17/99 Hammer Fall 30"
Location See plan Other _____
G.S. Elevation _____ Datum _____

Date	Time	Depth	Casing	Stabilization Time
2/17/99	830	NA		

Depth (ft)	Sample Information					Sample Description & Classification	Stratum Description	Equipment Installed
	No.	Pen./ Rec.	Depth (ft)	Blows/ft	Field Test Data			
5	S-1	18/12	0.5-2.0	5-6		S-1: Medium dense, brown, SILT, little fine Sand, trace fine Gravel	6" CONCRETE	NO EQUIPMENT INSTALLED
	S-2	24/12	2-4	13-7	70			
				10-10	178	S-2: Medium dense, brown, fine to medium SAND, trace fine Gravel, little Silt	4.0' SILT	
	S-3	24/20	4-6	5-3				
10				4-5	153			
	S-4	24/20	6-8	11-22		S-3: Loose, light brown SILT, trace fine Sand	6.0'	
				27-24	14			
	S-5	24/16	8-10	5-17		S-4: Dense, brown, fine to coarse SAND, little, fine Gravel, trace Silt	FINE TO COARSE SAND	
15				16-22	6			
	S-6	24/18	10-12	8-14		S-5: Dense, brown, fine to coarse SAND, some fine Gravel, trace Silt	14.0'	
				18-19	1			
	S-7	24/17	12-14	15-16		S-6: Dense, brown, fine to coarse SAND, some fine Gravel, trace Silt	END OF EXPLORATION	
20								
25								
30								

R E M A R K S

- Soil samples field screened with a 11.8 eV ThermoEnvironmental Instruments Model 580B organic vapor meter (OVM) or HNu Model PI-101 photoionization detector (PID). OVM or PID values represent meter response in parts per million (ppm) relative to a benzene in air and above background readings. "ND" stands for None Detected above background.
- Samples moist below 2 feet below grade.

GZA GEOENVIRONMENTAL, INC.

Engineers and Scientists
27 Neck Road
Vernon, Connecticut 06066
(860) 875-7655

40 VOICE ROAD
CARLE PLACE
LONG ISLAND, NEW YORK

Boring No.: SB-6
Page: 1 of 1
File No.: 62625/42197
Checked By:

Boring Co. GZA GeoEnvironmental, Inc. Casing HSA Sampler S.S.
Foreman A. Augustine Type HSA I.D./O.D. 2-1/4" 2" O.D.
GZA Rep. J. White Hammer Wt. 140 lb.
Date Start 2/17/99 Date End 2/17/99 Hammer Fall 30"
Location See plan Other _____
G.S. Elevation _____ Datum _____

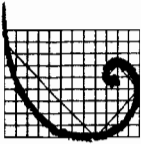
Groundwater Readings

Date	Time	Depth	Casing	Stabilization Time
2/17/99	1040	NA		

Depth	Sample Information					Sample Description & Classification	Stratum Description	Remarks	Equipment Installed
	No.	Pen./ Rec.	Depth (ft)	Blows/6"	Field Test Data				
5	S-1	18/10	0.5-2.0	5-5		S-1: Medium dense, brown, fine to medium SAND, some Silt	6" CONCRETE	NO EQUIPMENT INSTALLED	
				16	1		FILL SAND		
	S-2	24/12	2-4	15-12		S-2: Medium dense, brown, fine to medium SAND, some fine Gravel, trace Silt	4.0'		
				9-8	ND		SILT		
	S-3	24/14	4-6	4-4		S-3: Loose, brown hack SILT, trace fine Sand	6.0'		
				6-8	7		FINE TO COARSE SAND		
	S-4	24/18	8-10	10-11		S-4: Medium, dense, fine to medium SAND, little fine Gravel, trace Silt			
10				17-16	6	S-5: Dense, brown, fine to coarse SAND, little fine Gravel, trace Silt			
	S-5	24/18	8-10	12-12		S-6: Medium dense, brown, fine to coarse SAND, little Gravel, trace Silt	14.0'		
				20-17	4		END OF EXPLORATION		
15				14-19	7	S-7: Medium dense, brown, fine to coarse SAND, little fine Gravel, trace Silt			
	S-6	24/18	10-12	6-12					
				19-16	2				
20									
25									
30									

REMARKS

- Soil samples field screened with a 10.6 eV ThermoEnvironmental Instruments Model 580B organic vapor meter (OVM) or HNu Model PI-101 photoionization detector (PID). OVM or PID values represent meter response in parts per million (ppm) relative to a benzene in air and above background readings. "ND" stands for None Detected above background.
- Samples moist below 2 feet below grade.



ERM Inc.

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Boring Number

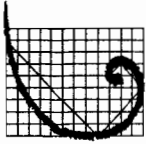
SB-7

ERM

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 11/02/00 @10:10
Drilling Company Delta Well and Pump		Foreman Charlie Blumberg	Date & Time Completed: 11/02/00 @11:30
Drilling Equipment F-10 Drill Rig		Method H.S.A.	Sampler(s) 140 lbs
Bit Size(s) H.S.A 4.25 inch		Core Barrel(s) 1-3/8 inch	Sampler Hammer 30inches
		Elevation & Datum	Drop 8 ft
		Geologist(s) Michael Mendes	Completion Depth Rock Depth

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION: Loading Bay area (asphalt)				SURFACE DESCRIPTION:	GC Results
0			0.8		Brown top soil with stones. Silty sand some gravel (fill material)	SB-7 (0-1) 0.0
1			1.5		Brown top soil with stones and gravel. Silty sand with some gravel.(fill material)	SB-7(1-2) 19.1
2			2.4		Brown top soil with gravelly sand. Some brick frags. (fill material)	SB-7(2-3) 82.8
3			3.6		Brown top soil with gravel sand, with brick fragments. (fill material)	SB-7(3-4) 154.8
4			3.0		Brown clayey silt some sand and gravel, fill material and natural deposits.	SB-7(4-5) 257.7
5			5.4		Brown clayey silt moderate moisture, some sand and gravel present. Fill material and native.	Sb-7(5-6) 144.9
6			4.1		Dark Brown clayey silt, with trace sand and gravel.	SB-7(6-7) 95.0
7			6.6		Brown medium and coarse sand and gravel, poorly sorted, native material.	SB-7(7-8) 7.4
8						



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Boring Number

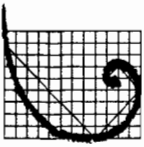
SB-8

ERM

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 11/02/00 @10:10
Drilling Company Delta Well and Pump		Foreman Charlie Blumberg	Date & Time Completed: 10/31/00@12:00
Drilling Equipment F-10 Drill Rig		Method H.S.A.	Sampler(s) 140 lbs
Bit Size(s) H.S.A 4.25 inch		Core Barrel(s) 1-3/8 inch	Drop 30inches
		Elevation & Datum	Completion Depth 8 ft
		Geologist(s) Michael Mendes	Rock Depth

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION:				SURFACE DESCRIPTION:	GC Results
0			0.0		Brown silty sand with gravel, no odors, no staining	SB-8(0-1) 123.3
1						
2			1.1		Brown silty sand some gravel, no staining no odors.	SB-8(2-3) 31.4
3						
4			28.5		Brown Clayey silt some sand and gravel and natural deposits.	SB-8(4-5) 1145.1
5			40.5		Light brown silty fine sand trace gravel. fine sandy silt.	SB-8(5-6) 1225.2
6			19.7		Brown silty sand and gravel, Darker Brown Top soil.	SB-8(6-7) 444.2
7			4.0		Brown coarse to gravelly sand, no odors detected.	SB-8(7-8) 18.5
8						



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Boring Number

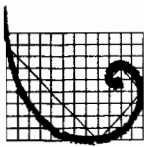
SB-10

ERM

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 11/02/00 @17:10
Drilling Company Delta Well and Pump		Foreman Charlie Blumberg	Date & Time Completed: 11/02/00 @17:40
Drilling Equipment F-10 Drill Rig		Method H.S.A.	Sampler(s) 140 lbs
Bit Size(s) H.S.A 4.25 inch		Core Barrel(s) 1-3/8 inch	Sampler Hammer 30inches
		Elevation & Datum	Completion Depth 6 ft.
		Geologist(s) Michael Mendes	Rock Depth

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION:				SURFACE DESCRIPTION:	GC Results
0			0.0		Brown silty medium to coarse sand fill material, no odors.	SB-10(0-2) 2463.2
1						
2			131.0		Brown silty sand and gravel, no visible staining, slight odor, stones up to one inch in size.	SB-10(2-3) 1552.8
3			1062.0		Brown silty sand and gravel, no visible staining slight solvent odor.	SB-10(3-4) 7477.3
4			2000.0		Fine sandy silt, brown in color, slight solvent odor detected.	SB-10(4-5) 65,126.30
5			219.0		Clayey silt some fine sand, no odors, moisture content is high. Very silty, mostly clayey fines.	SB-10(5-6) 2264.2
6					No Sample	
7						
8						



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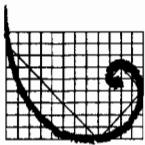
Boring Number

SB-11

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 11/02/00 @18:06
Drilling Company Delta Well and Pump		Foreman Charlie Blumberg	Date & Time Completed: 11/02/00 @19:30
Drilling Equipment F-10 Drill Rig		Method H.S.A.	Sampler(s) 140 lbs
Bit Size(s) H.S.A 4.25 inch		Core Barre(s) 1-3/8 inch	Drop 30inches
		Elevation & Datum	Completion Depth 6 ft.
		Geologist(s) Michael Mendes	Rock Depth

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION:				SURFACE DESCRIPTION:	GC Results
0	Loading Bay area (asphalt)					
			45.9		Coarse gravely sand some fines and silts. No staining appears to be fill material.	SB-11(0-1) 2645.8
1			128.0		Coarse gravely sand, some fines and silts, trace pebble No staining, slight solvent odor.	SB-11(1-2) 953.4
2			33.0		Silty fine to medium sand with some gravel, no staining.	SB-11(2-3) 469.5
3			46.1		Silty soft fine to medium sand trace gravel and trace one inch stones.	SB-11(3-4) 587.3
4			14.1		Medium to coarse sand, some fines, and some gravel No odors detected	SB-11(4-6) 16.3
5						
6					Refusal encountered.	
7						
8						



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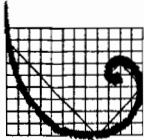
Boring Number

SB-12

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 11/03/00 @09:34
Drilling Company Delta Well and Pump		Foreman Charlie Blumberg	Date & Time Completed: 11/03/00 @10:15
Drilling Equipment F-10 Drill Rig		Method H.S.A.	Sampler(s) 140 lbs
Bit Size(s) H.S.A 4.25 inch		Core Barrel(s) 1-3/8 inch	Drop 30inches
		Elevation & Datum	Completion Depth 8 ft.
		Geologist(s) Michael Mendes	Rock Depth

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION:				SURFACE DESCRIPTION:	GC Results
0	Loading Bay area (asphalt)					
			3.8		Brown silty sand with gravel and top soil.	SB-12(0-1) 2.9
1			4.6		Fine sandy silt, some gravel brown in color.	SB-12(1-2) 6.4
2					No Recovery	SB-12(2-4)
3						
4			5.1		Medium to coarse sand, brown sand some iron staining	SB-12(4-6) 56.8
5						
6			7.1		Loose coarse to gravelly sand with some iron staining.	SB-12(6-8) 4.9
7						
8						



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Boring Number

SB-13

ERM

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 11/03/00 @11:00
Drilling Company Delta Well and Pump		Foreman Charlie Blumberg	Date & Time Completed: 11/03/00 @11:35
Drilling Equipment F-10 Drill Rig		Method H.S.A.	Sampler(s) 140 lbs
Bit Size(s) H.S.A 4.25 inch		Core Barrel(s) 1-3/8 inch	Drop 30inches
		Elevation & Datum	Completion Depth 8 ft.
		Geologist(s) Michael Mendes	Rock Depth

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION:				SURFACE DESCRIPTION:	GC Results
0			113.0		Silty fine medium and coarse sand (top soil) strong odors detected by olfactory.	SB-13(0-1) 1873.9
1			1926.0		Silty sand, with gravel and stones, strong solvent odors detected by olfactory.	SB-13(1-2) 7167.3
2			>2000		Sandy silt/top soil with some gravel and pebbles	SB-13(2-4) 105968.6
3						
4			>2000		Brown sand silt/top soil with some gravel, strong odors detected.	SB-13(4-5) 91129.6
5			>2000		Light brown silts some fine sand. DUP110300 time of 0800, strong odor detected by olfactory	SB-13(5-6) 68,647.40
6			437.0		Coarse gravelly sand and gravel, trace fines. Slight odor detected.	SB-13(6-8) 23,945.80
8					No Recovery	SB-13(8-10)
10					No Sample collected	SB-13(10-12)
12			26.7		Brown coarse to gravelly sand with trace fines.	SB-13(12-14) 65.7
14						



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Boring Number

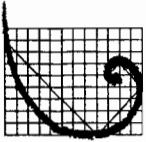
SB-14

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 11/03/00 @13:15
Drilling Company Delta Well and Pump		Foreman Charlie Blumberg	Date & Time Completed: 11/03/00 @14:00
Drilling Equipment F-10 Drill Rig		Method H.S.A.	Sampler(s) 140 lbs
Bit Size(s) H.S.A 4.25 inch		Core Barrel(s) 1-3/8 inch	Sampler Hammer 30inches
		Elevation & Datum	Completion Depth 8 ft.
		Geologist(s) Michael Mendes	Rock Depth

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION:				SURFACE DESCRIPTION:	GC Results
0			2.6		Top soil/Fill material, silty fine sand trace gravel odors detected by olfactory.	SB-14(0-1) 3.9
1			4.1		Top soil/fill material silty sand with some gravel. odors detected by olfactory.	SB-14(1-2) 15.2
2			10.1		Dark brown sand silt, top soil fill material, no odors no visible staining.	SB-14(2-4) 274.8
3						
4			16.5		Top/soil fill material, fine silty sand, with some gravel and pebbles.	SB-14(4-6) 812.2
5						
6			4.1		light brown fine sandy silt, no odors trace gravel.	SB-14(6-8) 57.4
7						
8						

Page 1 of 1 Signature: _____ Date: _____



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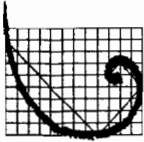
Boring Number

SB-15

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 12/19/01 @09:50
Drilling Company Delta Well and Pump		Foreman Jim Pederson	Date & Time Completed: 12/19/01 @10:40
Drilling Equipment Geoprobe		Method Geoprobe Macro Cores	Sampler(s) Geoprobe
Bit Size(s) NA		Core Barrel(s) 4'X2"	Geologist(s) Michael Mendes
		Elevation & Datum	Completion Depth 10 Ft
			Drop
			Rock Depth

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION:				SURFACE DESCRIPTION:	
0				NA	Brownish Black topsoil with medium sand and pebbles.	Samples sent to STL, CT
			0.0			SB-15(0'-2')@10:07
1				NA	Medium to coarse sand with fines dry sand with some gravel, silt and clays.	
			0.8			
2				NA	Medium to coarse sand with fines dry sand with some gravel, silt and clays.	
3				NA	Medium to coarse sand with fines dry sand with some gravel, silt and clays.	
4				NA	Yellowish Brown fine to medium sand, some coarse sand and gravel, no odors.	SB-15(4'-6')@10:17
5				NA	Brown medium to coarse sand and gravel, trace fines.	
			16.5			
6				NA	Brown medium to coarse sand and gravel, trace fines.	
7				NA	Brown medium to coarse sand and gravel, trace fines.	
8				NA	Reddish brown iron stained med to coarse sand and gravel, no odors	SB-15(8'-10')@10:32
9				NA	Reddish brown iron stained med to coarse sand and gravel, no odors.	
			2.8			
10						



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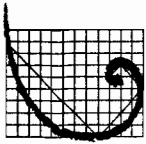
Boring Number

SB-16

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 12/19/01 @10:45
Drilling Company Delta Well and Pump		Foreman Jim Pederson	Date & Time Completed: 12/19/01 @11:15
Drilling Equipment Geoprobe		Method Geoprobe Macro Cores	Sampler(s) Geoprobe
Bit Size(s) NA		Core Barrel(s) 4'X2"	Geologist(s) Michael Mendes
		Elevation & Datum	Sampler Hammer Drop
		Completion Depth 10 Ft	Rock Depth

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION: 15ft west of SB-9				SURFACE DESCRIPTION:	
0				NA	Brown dark brown topsoil with minimal sands and gravel	Samples sent to STL, CT SB-16(0'-2')@10:47 DUP121901@0800
1			703.0	NA	Reddish brown hard clayey silt grading into a fine sand and silt.	
2				NA	Tan brown fine to medium sand, trace coarse sands, trace gravels, some rounded pebbles.	
3				NA	Tan brown fine to medium sand, trace coarse sands, trace gravels, some rounded pebbles.	
4				NA	Tan brown fine to medium sand, trace coarse sands, trace gravels, some rounded pebbles.	SB-16(4'-6')@10:56
5			145.0	NA	Medium to coarse sand and gravels, some fines, and some pebbles.	
6				NA	Brown medium to coarse sand and gravel, trace fines.	
7				NA	Brown medium to coarse sand and gravel, trace fines.	
8				NA	Reddish brown med to coarse sand with gravel trace fines.	SB-16(8'-10')@11:14
9			7.8	NA	Reddish brown med to coarse sand and gravel trace fines.	
10						



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Boring Number

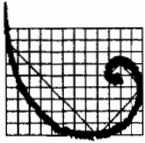
SB-17

ERM

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 12/19/01 @12:00
Drilling Company Delta Well and Pump		Foreman Jim Pederson	Date & Time Completed: 12/19/01 @12:53
Drilling Equipment Geoprobe		Method Geoprobe Macro Cores	Sampler(s) Geoprobe
Bit Size(s) NA		Core Barrel(s) 4'X2"	Sampler Hammer Drop
			Drop
			Completion Depth 10 Ft
			Rock Depth
			Geologist(s) Michael Mendes

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/PID (ppm)	Blow Counts		
	LOCATION:				SURFACE DESCRIPTION:	
0				NA	Brown to dark brown top soil with fine sands.	Samples sent to STL, CT SB-17(0'-2')@12:04
1			3.1	NA	Brown clayey silts with gravels grading into high gravel content with fine sands.	
2				NA	Brown medium to coarse sand and gravel, with some fines and trace pebbles.	
3				NA	Brown medium to coarse sand and gravel, with some fines and trace pebbles.	
4				NA	Brown medium to coarse sand and gravel, with some fines and trace pebbles.	SB-17(4'-6')@12:38 (MS/MSD)
5			1.9	NA	Brown medium to coarse sand and gravel with some fines and trace gravel.	
6				NA	Brown medium to coarse sand and gravel, trace fines.	
7				NA	Brown medium to coarse sand and gravel, trace fines.	
8				NA	Brown fine, medium and coarse grained sand with gravel and no odors.	SB-17(8'-10')@12:53
9			2.5	NA	Brown fine, medium and coarse grained sand with gravel, no odors.	
10						



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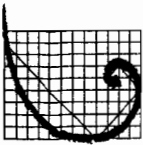
Boring Number

SB-18

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 12/19/01 @13:40
Drilling Company Delta Well and Pump		Foreman Jim Pederson	Date & Time Completed: 12/19/01 @14:07
Drilling Equipment Geoprobe		Method Geoprobe Macro Cores	Sampler(s) Geoprobe
Bit Size(s) NA		Core Barrel(s) 4'X2"	Elevation & Datum Completion Depth 10 Ft
		Geologist(s) Michael Mendes	Sampler Hammer Drop

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION:				SURFACE DESCRIPTION:	
0	15ft north of SB-9					Samples sent to STL, CT
				NA	Brown moist clayey silty fine sand grading into med sand.	SB-18(0'-2')@13:40
1			7.6	NA	Very fine to fine sand and silt gravel content with fine sands.	
2				NA	Brown medium to coarse sand and gravel, with some fines and trace pebbles.	
3				NA	Brown medium to coarse sand and gravel, with some fines and trace pebbles.	
4				NA	Brown to reddish brown, coarse gravely sand, trace fines.	SB-18(4'-6')@13:50
5			2.8	NA	Brown to reddish brown, coarse gravely sand, with angular pebbles.	
6				NA	Brown medium to coarse sand and gravel, trace fines.	
7				NA	Brown medium to coarse sand and gravel, trace fines.	
8				NA	Brown to reddish brown fine to medium sand with some thin iron stained layers, coarse sand and gravel.	SB-18(8'-10')@14:07
9			1.4	NA	Brown to reddish brown fine to medium sand with some thin iron stained layers, coarse sand and gravel.	
10						



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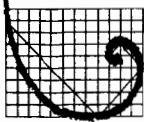
Boring Number

SB-19

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 12/19/01 @15:11
Drilling Company Delta Well and Pump		Foreman Jim Pederson	Date & Time Completed: 12/19/01 @15:25
Drilling Equipment Geoprobe		Method Geoprobe Macro Cores	Sampler(s) Geoprobe
Bit Size(s) NA		Core Barrel(s) 4'X2"	Elevation & Datum 10 Ft
			Drop Geoprobe
			Completion Depth 10 Ft
			Rock Depth
			Geologist(s) Michael Mendes

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION: Indoor soil boring				SURFACE DESCRIPTION:	
0				NA	Brown fine med and coarse sand with pebbles. Very compacted.	Samples sent to STL, CT
1			4.2	NA	Brown fine med and coarse sand with pebbles. Very compacted.	SB-19(0'-2')@15:11
2				NA	Brown medium to coarse sand and gravel, with some fines.	
3				NA	Brown medium to coarse sand and gravel, with some fines.	
4				NA	Brown medium to coarse sand and gravel, dry.	SB-19(4'-6')@15:28
5			0.7	NA	Brown medium to coarse sand and gravel, dry.	
6				NA	Brown medium to coarse sand and gravel, dry.	
7				NA	Brown medium to coarse sand and gravel, trace fines.	
8				NA	Brown medium to coarse sand and gravel and rounded pebbles, very compacted.	SB-19(8'-10')@15:27
9			0.7	NA	Brown medium to coarse sand and gravel and rounded pebbles, very compacted.	
10						



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Boring Number

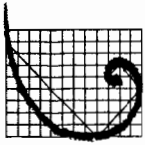
SB-20

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BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 12/20/01 @10:34
Drilling Company Delta Well and Pump		Foreman Mike Palagrino	Date & Time Completed: 12/20/01 @11:42
Drilling Equipment Tripod		Method Tripod with split spoons	Sampler(s) Sampler Hammer Drop 150 lb 20"
Bit Size(s) NA		Core Barrel(s) 2'X2"	Elevation & Datum Completion Depth Rock Depth 10 Ft NA
		Geologist(s) Michael Mendes	

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/PID (ppm)	Blow Counts		
	LOCATION: Indoor soil boring				SURFACE DESCRIPTION:	
	South wall near garage bay door				Samples sent to STL, CT	
0				NA	Very compacted, brown silty soil, with stones and gravelly sand.	SB-20(0'-2')@10:34
1			23.3	NA	Very compacted, brown silty soil, with stones and gravelly sand.	
2				NA	Brown gravelly coarse sand with fines and large rounded stones.	
3			4.7	NA	Brown gravelly coarse sand with fines and large rounded stones.	
4				NA	Brown, dry, coarse sand and gravel, trace fines present.	SB-20(4'-6')@11:03
5			5.2	NA	Brown, dry, coarse sand and gravel, trace fines present.	
6				NA	Coarse gravelly sand, trace fines.	
7			1.0	NA	Coarse gravelly sand, trace fines.	
8				NA	Light tan brown, med to coarse sand and gravel very compacted.	SB-20(8'-10')@11:42
9			3.1	NA	Brown medium to coarse sand and gravel and rounded pebbles, very compacted.	
10						



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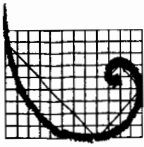
Boring Number

SB-21

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 12/20/01 @ 12:50
Drilling Company Delta Well and Pump		Foreman Mike Palagrino	Date & Time Completed: 12/20/01 @ 12:50
Drilling Equipment: Tripod		Method Tripod with split spoons	Sampler(s) 150 lb
Bit Size(s) NA		Core Barrel(s) 2'X2"	Drop 20"
		Elevation & Datum	Completion Depth 10 Ft
			Rock Depth NA
		Geologist(s) Michael Mendes	

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION: Indoor soil boring				SURFACE DESCRIPTION:	
0				NA	Brown silty fine sand, grading into a coarse gravelly sand.	Samples sent to STL, CT
1			3.4	NA	Brown silty fine sand, grading into a coarse gravelly sand.	SB-21(0'-2')@12:56
2				NA	Brown silty sand, fine to medium sand with gravel.	
3			0.0	NA	Brown silty sand, fine to medium sand with gravel.	
4				NA	Brown fine to medium sand with some to trace coarse sand gravel.	SB-21(4'-6')@13:15 (MS/MSD)
5			2.6	NA	Brown fine to medium sand with some to trace coarse sand gravel.	
6				NA	Brown fine to medium sand very compacted, no odors detected by olfactory.	SB-21(6'-8')@14:06
7			0.7	NA	Brown fine to medium sand very compacted, no odors detected by olfactory. Refusal encountered.	
8						
9						
10						



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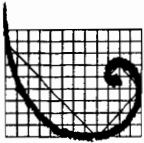
Boring Number

SB-22

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 12/21/01 @08:00
Drilling Company Delta Well and Pump		Foreman Mike Palagrino	Date & Time Completed: 12/21/01 @08:34
Drilling Equipment Tripod		Method Tripod with split spoons	Sampler(s) 150 lb
Bit Size(s) NA		Core Barrel(s) 2'X2"	Drop 20"
		Elevation & Datum	Completion Depth 10 Ft
			Rock Depth NA
		Geologist(s) Michael Mendes	

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION: Indoor soil boring				SURFACE DESCRIPTION:	
0				NA	Brown silty fine sand, with some medium to coarse sand. No odors detected by olfactory.	Samples sent to STL, CT
1			2.6	NA	Brown silty fine sand, with some medium to coarse sand. No odors detected by olfactory.	SB-22(0'-2')@08:05
2				NA	Brown silty fine sand, with some medium to coarse.	
3			0.1	NA	Brown silty fine sand, with some medium to coarse.	
4				NA	Brown fine med and coarse grained sand with stones Very compacted, no odors detected by olfactory.	SB-22(4'-6')@08:21
5			1.2	NA	Brown fine med and coarse grained sand with stones Very compacted, no odors detected by olfactory.	
6				NA	Brown medium to coarse sand and gravel, with some fines and stones. No odors detected by olfactory.	SB-22(6'-18')@08:34
7			1.1	NA	Brown medium to coarse sand and gravel, with some fines and stones. Refusal encountered @ 8 ft	
8						
9						
10						



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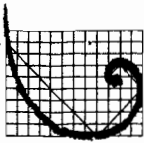
Boring Number

SB-23

BORING LOG

Project Name & Location Johnson and Hoffman		Project Number	Date & Time Started: 12/21/01 @09:35
Drilling Company Delta Well and Pump		Foreman Mike Palagrino	Date & Time Completed: 12/21/01 @10:18
Drilling Equipment Tripod		Method Tripod with split spoons	Sampler(s) Sampler Hammer 150 lb Drop 20"
Bit Size(s) NA		Core Barrel(s) 2'X2"	Elevation & Datum Completion Depth 10 Ft Rock Depth NA
		Geologist(s) Michael Mendes	

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION: Indoor soil boring				SURFACE DESCRIPTION:	
0				NA	Brown silty to clayey soil, fine to medium sand with some gravel.	Samples sent to STL, CT SB-23(0'-2')@09:35 DUP122101 @1200
1			0.0	NA	Brown silty to clayey soil, fine to medium sand with some gravel.	
2				NA	Brown silty fine sand, with traces of coarse sand and gravel.	
3			0.0	NA	Brown silty fine sand, with traces of coarse sand and gravel.	
4				NA	Brown fine to med sand with some coarse sand and gravel, no odors detected by olfactory.	SB-23(4'-6')@09:48
5			0.0	NA	Brown fine to med sand with some coarse sand and gravel, no odors detected by olfactory.	
6				NA	Brown fine to med sand and gravel, with trace silts.	SB-23(6'-18')@10:18
7			0.0	NA	Brown fine to med sand and gravel, with trace silts. Refusal encountered at 8 feet.	
8						
9						
10						



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Boring Number

SB-24

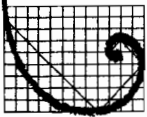
BORING LOG

Project Name & Location Johnson & Hoffman		Project Number R4906.00.01	Date & Time Started: 8/16/02-0845
Drilling Company Zebra Environmental		Foreman	Date & Time Completed: 8/16/02-1215
Drilling Equipment GeoProbe		Method	Sampler(s) Sampler Hammer Drop
Bit Size(s)		Core Barrel(s)	Elevation & Datum Completion Depth Rock Depth
			Geologist(s) Jessica Ferngren

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION: Trailer Storage Area				SURFACE DESCRIPTION: Asphalt	
0					3 inches asphalt	
					medium and coarse sand	
1			0.7		medium and coarse sand	
		4.0			medium and coarse sand	
2			160		grading into medium and coarse sand some gravel	
					medium and coarse sand some gravel	
3			56.8			
					medium and coarse sand some gravel	
4			31.6			
					medium and coarse sand some gravel	
5			29.9			
					rust colored coarse sand and gravel	
6		4.0	4.3			
7			8.2			
8			20.3			
					gravel with some medium and coarse sand	
9			11.4			
10		3.0	4.5		coarse and medium sand	

Signature: Jessica Ferngren

Date: 8/20/02



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Boring Number

SB-24

BORING LOG

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
10					medium and coarse sand	
			0			
11					medium and coarse sand	
			0			
12					END OF BORING	
13						
14						
15						
16						
17						
18						
19						
20						



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Boring Number

SB-25

BORING LOG

Project Name & Location Johnson & Hoffman		Project Number R4906.00.01	Date & Time Started: 8/16/02-0845
Drilling Company Zebra Environmental		Foreman	Date & Time Completed: 8/16/02-1215
Drilling Equipment GeoProbe		Method	Sampler(s) Sampler Hammer Drop
Bit Size(s)		Core Barrel(s)	Elevation & Datum Completion Depth 8 feet Rock Depth
		Geologist(s) Jessica Ferngren	

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (teet)	FID/ PID (ppm)	Blow Counts		
	LOCATION: Trailer Storage Area				SURFACE DESCRIPTION: Asphalt	
0					3 inches of asphalt	
1			0		medium and coarse sand some gravel	
2			0			
3			0		rust colored coarse and medium sand and gravel	
4			0		rust colored coarse and medium sand and gravel	
5			0			
6			0		tan coarse sand some gravel	
7			0			
8					END OF BORING	
9						
10						



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Boring Number

SB-26

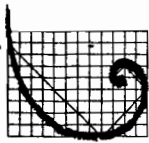
BORING LOG

Project Name & Location Johnson & Hoffman		Project Number R4906.00.01	Date & Time Started: 8/16/02-0845
Drilling Company Zebra Environmental		Foreman	Date & Time Completed: 8/16/02-1215
Drilling Equipment GeoProbe		Method	Sampler(s) Sampler Hammer
Bit Size(s)		Core Barrel(s)	Drop
			Elevation & Datum
			Completion Depth 8 feet
			Rock Depth
			Geologist(s) Jessica Ferngren

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION: Trailer Storage Area				SURFACE DESCRIPTION: Asphalt	
0					3 inches of asphalt	
1			0		medium and coarse sand some gravel	
2		4.0	0			
3			0		coarse and medium sand and gravel	
4			0		rust colored coarse and medium sand and gravel	
5			0			
6		3.0	0		tan coarse sand some gravel	
7			0		coarse sand and gravel	
8					END OF BORING	
9						
10						

Signature: *J. Ferngren*

Date: 8/20/02



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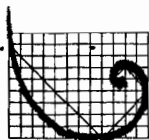
Boring Number

SB-27

BORING LOG

Project Name & Location Johnson & Hoffman		Project Number R4906.00.01	Date & Time Started: 8/16/02-0845
Drilling Company Zebra Environmental		Foreman	Date & Time Completed: 8/16/02-1215
Drilling Equipment GeoProbe		Method	Sampler(s) Sampler Hammer
Bit Size(s)		Core Barrel(s)	Drop
		Elevation & Datum	Completion Depth 8 feet
		Geologist(s) Jessica Ferngren	Rock Depth

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/PID (ppm)	Blow Counts		
	LOCATION: Trailer Storage Area				SURFACE DESCRIPTION: grass	
0					4 inches of topsoil and grass	
			0		medium and coarse sand	
1						
			0			
2						
			0			
3					coarse and medium sand with some gravel	
			0			
4					coarse and medium sand with some gravel	
			0			
5						
			0			
6						
			0			
7					medium and coarse sand with little gravel	
			0			
8					END OF BORING	
9						
10						



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Boring Number

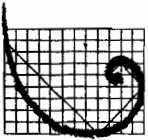
SB-28

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BORING LOG

Project Name & Location Johnson & Hoffman		Project Number R4906.00.01	Date & Time Started: 8/16/02-0845
Drilling Company Zebra Environmental		Foreman	Date & Time Completed: 8/16/02-1215
Drilling Equipment GeoProbe		Method	Sampler(s) Sampler Hammer Drop
Bit Size(s)		Core Barrel(s)	Elevation & Datum Completion Depth 8 feet
		Geologist(s) Jessica Ferngren	

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/PID (ppm)	Blow Counts		
	LOCATION: Trailer Storage Area				SURFACE DESCRIPTION: grass	
0					4 inches topsoil and grass	
1			0		medium and coarse sand some gravel	
2		4.0	0			
3			0			
4			0		coarse sand and gravel with some medium sand	
5			0			
6		4.0	0			
7			0			
8			0		END OF BORING	
9						
10						



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Boring Number

SB-29

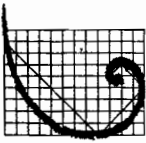
BORING LOG

Project Name & Location Johnson & Hoffman		Project Number R4906.00.01	Date & Time Started: 8/16/02-0845
Drilling Company Zebra Environmental		Foreman	Date & Time Completed: 8/16/02-1215
Drilling Equipment GeoProbe		Method	Sampler(s) Sampler Hammer
Bit Size(s)		Core Barrel(s)	Drop
		Elevation & Datum	Completion Depth 8 feet
		Geologist(s) Jessica Ferngren	Rock Depth

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/PID (ppm)	Blow Counts		
	LOCATION: Trailer Storage Area				SURFACE DESCRIPTION: grass	
0					6 inches of topsoil and grass	
1			0		medium sand with some coarse sand and little gravel	
2		4.0	0			
3			0		medium and coarse sand and gravel	
4			0		coarse sand and gravel with some medium sand	
5			0			
6		4.0	0		medium and coarse sand with some gravel	
7			0			
8			0		END OF BORING	
9						
10						

J. Ferngren

8/20/02



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520 Broad Hollow Road., Melville, New York 11747

Boring Number

SB-30

BORING LOG

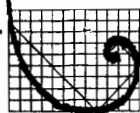
Project Name & Location Johnson & Hoffman		Project Number R4906.00.01	Date & Time Started: 8/16/02-0845
Drilling Company Zebra Environmental		Foreman	Date & Time Completed: 8/16/02-1215
Drilling Equipment GeoProbe		Method	Sampler(s) Sampler Hammer
Bit Size(s)		Core Barrel(s)	Drop
		Elevation & Datum	Completion Depth 8 feet
		Geologist(s) Jessica Ferngren	Rock Depth

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/PID (ppm)	Blow Counts		
	LOCATION: Trailer Storage Area				SURFACE DESCRIPTION: grass	
0					6 inches of topsoil and grass	
			0		medium and coarse sand	
1						
			0			
2						
			0			
3					medium and coarse sand with some gravel	
			0			
4					medium and coarse sand with some gravel	
			0			
5						
			0			
6					coarse sand and gravel with some medium sand	
			0			
7						
			0			
8					END OF BORING	
9						
10						

Signature: J. Ferngren

Date:

8/20/02



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Boring Number

SB-31

BORING LOG

Project Name & Location Johnson & Hoffman		Project Number R4906.00.01	Date & Time Started: 8/16/02-0845
Drilling Company Zebra Environmental		Foreman	Date & Time Completed: 8/16/02-1215
Drilling Equipment GeoProbe		Method	Sampler(s) Sampler Hammer
Bit Size(s)		Core Barrel(s)	Drop Completion Depth 8 feet Rock Depth
		Geologist(s) Jessica Ferngren	

DEPTH (ft below grade)	SAMPLES				SOIL DESCRIPTION	REMARKS
	Sample Number	Recovery (feet)	FID/ PID (ppm)	Blow Counts		
	LOCATION: Trailer Storage Area				SURFACE DESCRIPTION: grass	
0					4 inches of topsoil and grass	
1				0	medium and coarse sand	
2		4.0		0	medium and coarse sand with little gravel	
3				0	medium and coarse sand with some gravel	
4				0	medium and coarse sand with little gravel	
5				0		
6		4.0		0	medium and coarse sand with some gravel	
7				0		
8					END OF BORING	
9						
10						

County.....Nassau.....

1004-2709 ORIGINAL--TO COMMISSION

State of New York
Department of Conservation
Division of Water Power and Control

Well No. No. 5596
(on preliminary report)

LOG
Ground Surf., El.ft. above sea

COMPLETION REPORT--LONG ISLAND WELL

Aft.
V
Top of Well

Owner I.M.C. VILLAGE OF MINERALA (Layne Well #5)
(Their Well #5)

Address.....Mineola, L.I.
South side of Westbury Ave. & west of the former
Location of well E.I. Motor Parkway, Mineola, New York

Depth of well below surface463.....feet
Depth to ground water from surface.....321.7.....feet

CASINGS:

Diameter.....18.....in.12.....in.in.in.
Length.....393.....ft.102.....ft.ft.ft.
SealingCemented.....
Casings removedNone.....

SCREENS: Make.....Layne.....Openings.....Shutter.....
Diameter.....12.....in.in.in.in.
Length.....60.....ft.ft.ft.ft.
Depth to top from top of casing.....403.....ft.

SEE BLUE
PRINT
ATTACHED

PUMPING TEST: Date..... July.....3, 1956.....Test or permanent pump Permanent
Duration of Test.....8.....days.....8.....hours
Maximum Discharge.....1200.....gallons per minute
Static level prior to test.....321.7.....ft.7.....in. below top of casing
Level during Max. Pumping.....72.....ft.6.....in. below top of casing
Maximum Drawdown.....391.5.....ft.
Approx. time of return to normal level after cessation
of pumping.....30.....minutes

PUMP INSTALLED:

AUTH.
1200GPM

Type.....Turbine.....Make.....Layne.....Model No.....RMC.....
Motive power.....Electric.....Make.....U.S.....H.P.....100.....
Capacity.....1225.....g.p.m. against }185.....ft. of discharge head
No. bowls or stages.....7.....}25.7.....ft. of total head

STATE OF NEW YORK
WATER POWER AND

DROP LINE: SUCTION LINE:
Diameter10.....in.10.....in.
Length1081.7.....ft.9.....ft.

JUL 24 1956 ✓

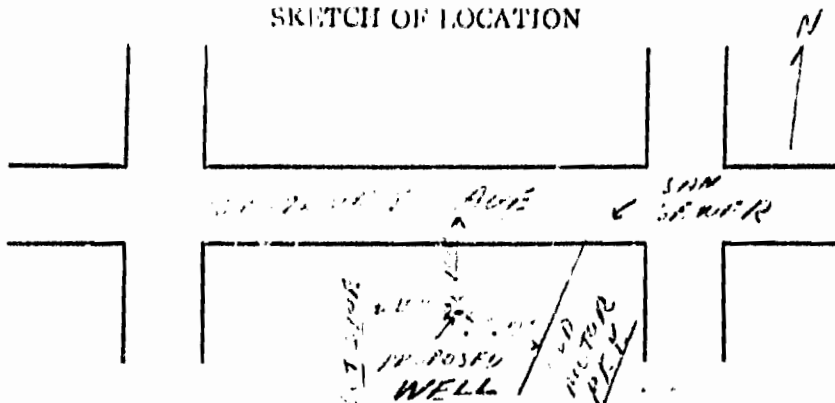
Use of water.....Public Supply.....
Work started.....September 26, 1955..... Completed.....July 3, 1956.....

CONTROL COMMISSION
RECEIVED

Date.....July 25, 1956..... Driller.....Layne New York Co., Inc.,
License No.....5.....

NOTE: Show log of well--materials encountered, with depth below ground surface,
water bearing beds and water levels in each, casings, screens, pump,
additional pumping tests and other matters of interest. Describe repair job.
See Instructions as to Well Drillers' Licenses and Reports--pp. 5-7.

SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

Repair

- 5/10/63 Loyne - Cleaned & repaired well & pumping equipment.
No changes made. Static level at 33'
- 1/29/71 Loyne - Motor & bowls repaired.
Depth to water @ 48'
- 1/17/78 Loyne - Replaced existing RMC bowl assembly to 10" DRMC 7 Stage
Installed liner - See Sketch. Depth to water @ 43.5'

County Nassau

Well Number N-5596

COMPLETION REPORT—LONG ISLAND WELL

1-034-01

RECEIVED
SEP 29 1991

OWNER INC. VILLAGE OF MINEOLA		*LOG Ground Surface
ADDRESS 171 Jericho Tpke., Mineola, NY 11501		EL. _____ ft. above sea
LOCATION OF WELL Well No. 6		$\frac{\Delta}{V}$ _____ ft.
DEPTH OF WELL BELOW SURFACE 463'	DEPTH TO GROUNDWATER FROM SURFACE 34'	TOP OF WELL
CASINGS		
DIAMETER 8" in. 12" in. 18" in. in.		
LENGTH 301' ft. ft. ft. ft.		
SEALING Cement	CASINGS REMOVED	
SCREENS		
MAKE	OPENINGS	
DIAMETER in. in. in. in.		
LENGTH ft. ft. ft. ft.		
DEPTH TO TOP FROM TOP OF CASING		
PUMPING TEST		
DATE	TEST OR PERMANENT PUMP?	
DURATION OF TEST days hours	MAXIMUM DISCHARGE gallons per min.	
STATIC LEVEL PRIOR TO TEST ft. in. below top of casing	LEVEL DURING MAXIMUM PUMPING in. below top of casing	
MAXIMUM DRAWDOWN ft.	Approximate time of return to normal level after cessation of pumping hours min.	
PUMP INSTALLED		
TYPE DRHC	MAKE Layne	MODEL NUMBER 3310AT
MOTIVE POWER Electric	MAKE US	H.P. 100
CAPACITY 1000 g.p.m. against	ft. of discharge head	
NUMBER OF BOWLS OR STAGES 7	ft. of total head	
DROP LINE		SUCTION LINE
DIAMETER in.	DIAMETER in.	
LENGTH ft.	LENGTH ft.	
METHOD OF DRILLING <input type="checkbox"/> rotary <input type="checkbox"/> cable tool <input type="checkbox"/> other _____	USE OF WATER Supply	
WORK STARTED 3-14-91	COMPLETED 4-29-91	
DATE 9-16-91	DRILLER HYDRO GROUP, INC.	LICENSE NUMBER 5

Note: Performed Well & Pump Repairs. See Attached Installer's Report.

County.....Nassau.....

ORIGINAL—TO COMMISSION

Well No. N-4082
(on preliminary report)

State of New York
Department of Conservation
Division of Water Power and Control

115 ft 2251

LOG

Ground Surf., El.....ft. above sea

COMPLETION REPORT—LONG ISLAND WELL

LAYNE WELL #4

OwnerMineola Water District Village of.....

AddressMineola, New York.....

Location of well.....Mineola, New York.....

Depth below surface.....467.....feet

Depth to water: Ground water.....ft.; Finished well.....33.....ft.

CASINGS:

Diameter.....24.....in.18.....in.10.....in.in.

Length.....60.....ft.412.....ft.107.....ft.ft.

SealingCemented.....

Casings removedNone.....

SCREENS: Make.....Layne..... Openings.....Shutter.....

Diameter.....10.....in.in.in.in.

Length.....40.....ft.ft.ft.ft.

Depth to top from top of casing.....222.....ft.

PUMPING TEST: Date.....Jan. 22, 1953..... Test or permanent pump?.....Test

Duration of Test.....days.....8.....hours

Maximum Discharge.....1035.....gallons per minute

Static Level Prior to Test.....33.....ft.....in. below top of casing

Level during Max. Pumping.....70.....ft.....in. below top of casing

Maximum Drawdown.....37.....ft.

Approx. time of return to normal level after cessation

of pumping.....hours.....25.....minutes

PUMP INSTALLED:

Type.....Turbine..... Make.....Layne..... Model No.....DRHC

Motive power.....Elec...... Make.....U.S...... H.P.100

Capacity.....1,000.....g.p.m. against }185.....ft. of discharge head

No. bowls or stages.....5..... }255.....ft. of total head

DROP LINE:

Diameter10.....in.in.10.....in.

Length107.....ft.ft.10.....ft.

SUCTION LINE:

Use of water.....Public Supply.....

Work started.....Dec. 12, 1952..... Completed.....Waiting Final Test

Date.....Sept. 1, 1953..... Driller.....Layne-New York Co. Inc.

License No.....5.....

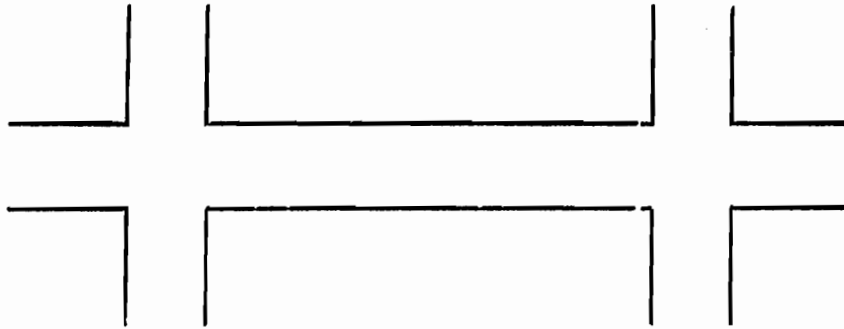
NOTE: Show log of well—materials encountered, with depth below ground surface, water-bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

Blue
Print
Attached

STATE OF NEW YORK
WATER POWER AND
CONTROL COMMISSION
RECEIVED
SEP - 8 1953 ✓

SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

Repair

- 11/10/58 Loyne N.Y. Repaired pump & well. No Changes Made.
- 5/17/66 " " Repair pump - bail well & check for depth - test pump - No changes made. Depth to water noted @ 44' 11"
- 11/7/74 " " Routine overhaul of pump - Depth to water noted @ 44' 2"
- 4/1/80 " " Routine overhaul of pump - Depth to water @ 39'
- 3/20/84 " " Installed partial liner in well - see sketch. Added 10' column and one stage to pump. Depth to water - 41' 10" 3/20/84

County Nassau

ORIGINAL—TO COMMISSION

Well No. N 8093
(on preliminary report)

State of New York
Department of Conservation
Division of Water Resources

LOG
Ground Surf. El.ft. above sea

COMPLETION REPORT—LONG ISLAND WELL

^
.....ft.
v
Top of Well

Owner Twentieth Century Plastics Co.

Address 122 East Second St., Mineola

Location of well Same

Dept of well below surface 90' feet

Depth to ground water from surface 54' feet

CASINGS:

Diameter 6 in. in. in. in.

Length 79'-7" ft. ft. ft. ft.

Sealing

Casings removed

SCREENS: Make Johnson Openings #20 slot

Diameter 6" in. in. in. in.

Length 10' 5" ft. ft. ft. ft.

Depth to top from top of casing 77'-7" ft.

PUMPING TEST: Date 6-13-66 Test or permanent pump? TEST

Duration of Test 4 days hours

Maximum Discharge 50 gallons per minute

Static level prior to test 54 ft. in. below top of casing

Level during Max. Pumping 9 ft. in. below top of casing

Maximum Drawdown 63 ft.

Approx. time of return to normal level after cessation of pumping hours minutes

PUMP INSTALLED:

Type Sub. Make Goulds Model No. UD 64 JM-32

Motive power Elec. Make H.P. 5HP

Capacity 45 g.p.m. against 140 ft. of discharge head

No. bowls or stages 230 ft. of total head

DROP LINE:

Diameter 2" in. in.

Length 70 ft. ft.

SUCTION LINE:

Use of water Cooling

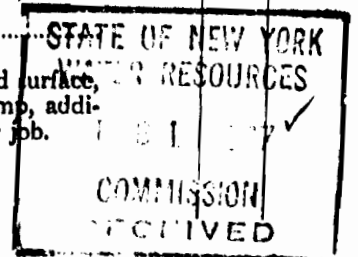
Work started June 2, 1966 Completed June 13, 1966

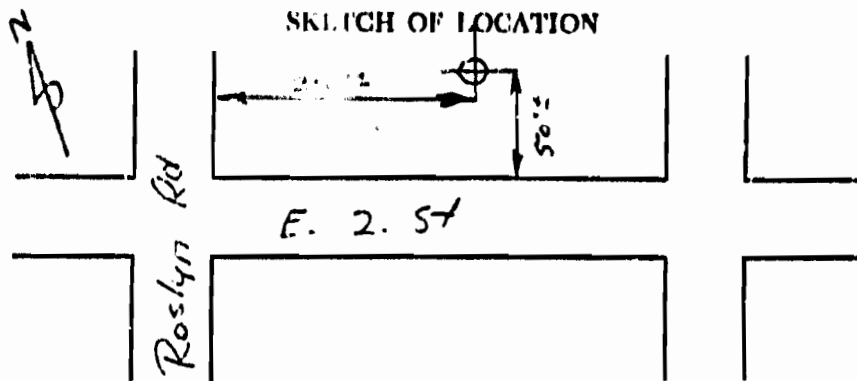
Date February 8, 1967 Driller The Lauman Co., Inc.

License No. 13

NOTE: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.





Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

- 0-3 Fill
- 3-68 Fi-Med brn sd, grit, 1/2 gravel, clay
- 68-90 " " " " " "

W-2451
ORIGINAL-TO COMMISSION

County NASSAU

State of New York
Department of Conservation
Division of Water Resources

Well No. N-8050
(on preliminary report)

LOG
Ground Surf., El.ft. above sea

COMPLETION REPORT—LONG ISLAND WELL

Owner Robert A. Bernhardt & Donald O. Stein
Address 100 Ring Rd W. Garden City, N.Y.
Location of well " " " " " "
Dept of well below surface 328
Depth to ground water from surface 38

STATE OF NEW YORK
WATER RESOURCES
MAY 19 1966
COMMISSION
RECEIVED

* CASINGS:

Diameter 8 in. 4 in.in.in.
Length 253 ft. 1007 ft.ft.ft.
Sealing
Casings removed 4" x 20' 2-28'

No 72-
4" casing
starts at
200 feet
information
from Driller
5/20/66 OK

SCREENS: Make Johanson Openings #14
Diameterin.in.in.in.
Length 28 ft.ft.ft.ft.
Depth to top from top of casing 300 ft.

PUMPING TEST: Date 5/2/66 Test or permanent pump? Perm
Duration of Testdays 2 hours
Maximum Discharge 180 gallons per minute
Static level prior to testft.in. below top of casing
Level during Max. Pumpingft.in. below top of casing
Maximum Drawdownft.
Approx. time of return to normal level after cessation
of pumpinghoursminutes

PUMP INSTALLED:

Type Submers Make Jocuzzi Model No. 105644
Motive power Elec Make Franklin H.P. 10
Capacity 175 g.p.m. against 95 ft. of discharge head
No. bowls or stages 4 } 100 ft. of total head

DROP LINE:

SUCTION LINE:

Diameter 3 in.in.in.
Length 84 ft. 100 ft.ft.

Use of water Air conditioning

Work started 3/4/66 Completed 5/3/66

Date 5/5/66 Driller United Water Pump Corp

License No. 666

NOTE: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

5150

County... Nassau

ORIGINAL—TO COMMISSION

Well No. N-7186
(on preliminary report)

State of New York
Department of Conservation
Division of Water Power and Control

LOG
Ground Surf., El.ft. above sea

COMPLETION REPORT—LONG ISLAND WELL

ft.
Top of Well

Owner Mason Au ~~Na~~ Magenheimer

Address 150 Old Country Road, Mineola, N. Y.

Location of well same

Depth of well below surface 322 feet

Depth to ground water from surface 15 feet

CASINGS:

Diameter 12 in.

Length 282 ft.

Sealing welded joint

Casings removed none

SCREENS: Make Johnson SS Openings 50

Diameter 8 in.

Length 40 ft.

Depth to top from top of casing 282 ft.

PUMPING TEST: Date 2/6/62 Test or permanent pump? P

Duration of Test 4 days

Maximum Discharge 670 gallons per minute

Static level prior to test 15 ft. in. below top of casing

Level during Max. Pumping 35 ft. 8 in. below top of casing

Maximum Drawdown 208 ft.

Approx. time of return to normal level after cessation

of pumping hours minutes

STATE OF NEW YORK
DEPARTMENT OF CONSERVATION
MAR 2 1962
COMMISSION

PUMP INSTALLED:

Type DWT Make Worthington Model No. 10M-50

Motive power Elec. Make US H.P. 40

Capacity 600 g.p.m. against 140 ft. of discharge head

No. bowls or stages 5 170 ft. of total head

TEMP.
53°F

DROP LINE:

Diameter 6 in.

Length 51 ft.

Use of water cooling

Work started 10/9/61 Completed 2/2/62

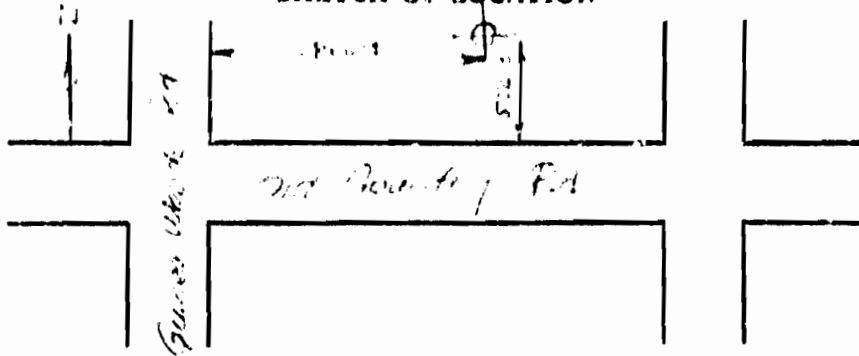
Date 2/28/62 Driller C. W. LAUMAN & CO., INC.

License No. 13

NOTE: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

- 0-7 Fill topsoil, gray cl
- 7-14 Use sd. grite, gravel
- 14-47 Sdy & sid yellow cl
- 47-62 Brn cl
- 62-71 Fi brn sd
- 71-86 Fi brn sd, some cl
- 86-93 Yellow sdy cl
- 93-105 Fi brn sd
- 105-114 Fi brn sd & yellow cl
- 114-119 Multi col cl
- 119-123 Fi brn sd
- 123-150 Sdy & sid multi col cl
- 150-150 Str sd. cl, bdpn
- 150-158 Gray cl
- 158-192 Fi brn sd & bdpn, some cl
- 192-198 Gray cl
- 198-200 Fi brn sd, some cl
- 200-205 Gray cl
- 200-210 Fi brn sd
- 210-215 Fi gray sd, some cl
- 215-225 Gray cl, some bdpn
- 225-242 white sdy cl
- 242-244 Brn cl
- 244-257 white sdy cl
- 257-258 Gray cl
- 258-260 white sdy cl
- 260-274 Brn + gray sdy cl
- 274-278 One white sd some cl
- 278-282 Mec sd some cl
- 282-282 S white sd

County... Nassau

ORIGINAL—TO COMMISSION

W-957

Well #2

State of New York
Department of Conservation
Division of Water Power and Control

Well No. N-2627
(on preliminary report)

LOG

Ground Surf., El. 89 ft. above sea

COMPLETION REPORT—LONG ISLAND WELLS

8 ft. Pit
Top of Well

Owner U. S. Printing & Lithographing Company

Address Cincinnati, Ohio

Location of well Carle Place, L. I.

Depth below surface 50' + 8' - 58' feet

Depth to water: Ground water 14'-6" ft.; Finished well 14'-6" ft.

CASINGS:

Diameter 10 in. in. in. in.

Length 36 ft. ft. ft. ft.

Sealing Packer 10" x 8" Screw Packer

Casings removed None

SCREENS: Make Johnson Silicon Red Openings #30 Slot

Diameter 8 in. Brass in. in. in.

Length 16 ft. ft. ft. ft.

Depth to top from top of casing 34'-6" ft.

PUMPING TEST: Date 1/20/49 Test or permanent pump? Perm.

Duration of Test -- days 2 hours

Maximum Discharge 300 gallons per minute

Static Level Prior to Test 14 ft. 6 in. below top of casing

Level during Max. Pumping -- ft. in. below top of casing

Maximum Drawdown -- ft.

Approx. time of return to normal level after cessation

of pumping -- hours -- minutes

PUMP INSTALLED:

Type D.W.T. Make F.M. Pomona Model No. SLC

Motive power Elec. Make U.S. H.P. 20

Capacity 300 g.p.m. against } 138 ft. of discharge head

No. bowls or stages 11 } 205 ft. of total head

DROP LINE:

Diameter 5" in.

Length 20 ft.

SUCTION LINE:

Diameter 5 in.

Length 10 ft.

Use of water Cooling & Air Conditioning

Work starts 7/30/48 Completed 1/20/49

Date 1/22/49 Driller C.W. Lauman & Co., Inc.

License No. 13

NOTE: Show log of well—materials encountered, with depth below ground surface, water-bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 3-7.

3 LOAM & CLAY
25 COARSE BROWN SAND & GRAVEL
40 MED. BROWN SAND FEW GRITS
50 COARSE BROWN SAND & GRAVEL
BROWN & GRAY SANDY CLAY

County Nassau

ORIGINAL TO COMMISSION
WSA-5108

State of New York
Department of Conservation
Division of Water Resources

Well No. N-5485
(on preliminary report)

LOG
Ground Surf., El.ft. above sea

COMPLETION REPORT—LONG ISLAND WELL

^
.....ft.
v
Top of Well

Owner ROOSEVELT FIELD WATER DISTRICT
Address 1995 Prospect Ave. E. Meadow, N.Y.
Location of well T-#2 Theatre Site
Depth of well below surface 557' feet
Depth to ground water from surface 40' 3" feet

CASINGS:
Diameter 30" in. 20" in. 12" in. in.
Length 90' ft. 467' ft. 81'-10 1/2" ft. ft.
Sealing cement
Casings removed none

Log attached

Will print to follow

SCREENS: Make Johnson WW
Diameter 10" ID in. in. in. in.
Length 80' ft. ft. ft. ft.
Depth to top from top of casing 472'-7-3/4" ft.

PUMPING TEST: Date 10/4/72 Test or permanent pump? Test
Duration of Test 7 1/2 days hours
Maximum Discharge 1404 gallons per minute
Static level prior to test 40' ft. 3" in. below top of casing
Level during Max. Pumping 145' ft. 5" in. below top of casing
Maximum Drawdown 105' 2" ft.
Approx. time of return to normal level after cessation of pumping 30 minutes

E. C. REYNOLDS
SEP 18 1973
WATER SUPPLY
MGMT. UNIT
RECEIVED

PUMP INSTALLED: Worthington Head
Type DWT Make Layne Bowl Model No. DRHC
Motive power Electric Make U.S. H.P. 150
Capacity 1400 g.p.m. against } ft. of discharge head
No. bowls or stages 4 } ft. of total head

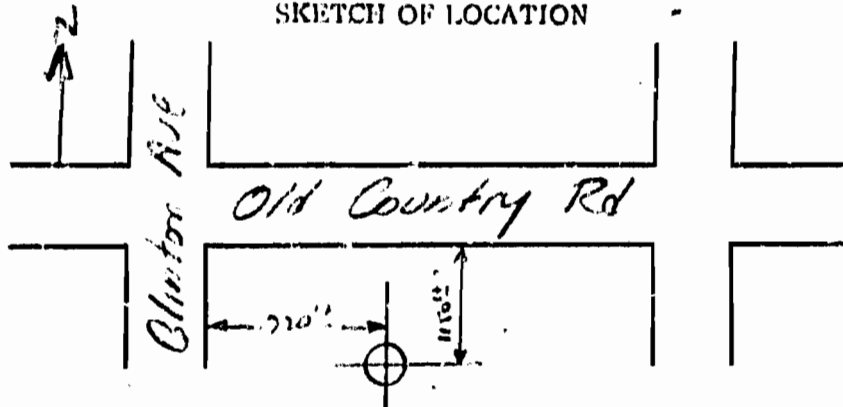
DROP LINE: SUCTION LINE:
Diameter 10" in. 10" in.
Length 180'-1" ft. 9'-11" ft.

Method of Drilling (Rotary, cable tool, etc.) Rev. Rotary
Use of Water Public Supply
Work started 8/14/72 Completed 1/5/73
Date 9/17/73 Driller LAYNE-NEW YORK CO. INC.
License No. 5

NOTE: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

91' 12"
172' 7 3/4"

341'

County.....

W-1449
ORIGINAL TO COMM.

State of New York
Department of Conservation
Division of Water Power and Control

Well No. 11-5135-9
(on preliminary report)

LOG
Ground Surf., El.ft. above sea

COMPLETION REPORT—LONG ISLAND WELL

.....ft.
Top of Well

Owner.....Rosenzweig Field Inc.
Address.....303 Madison Ave., New York, N.Y.
Location of well.....Old Country Rd., Hempstead, N.Y.
Depth of well below surface.....323.....feet
Depth to ground water from surface.....24.....feet

CASINGS:
Diameter.....in.in.in.in.
Length.....ft.ft.ft.ft.
Sealing

SCREENS: Make.....Openings.....
Diameter.....in.in.in.in.
Length.....ft.ft.ft.ft.
Depth to top from top of casing.....ft.

PUMPING TEST: Date.....Test or permanent pump?.....
Duration of Test.....days.....hours
Maximum Discharge.....gallons per minute
Static level prior to test.....ft.....in. below top of casing
Level during Max. Pumping.....ft.....in. below top of casing
Maximum Drawdown.....ft.
Approx. time of return to normal level after cessation
of pumping.....hours.....minutes

PUMP INSTALLED:
Type.....Make.....Model No.....
Motive power.....Make.....H.P.....
Capacity.....g.p.m. against }ft. of discharge head
No. bowls or stages..... }ft. of total head

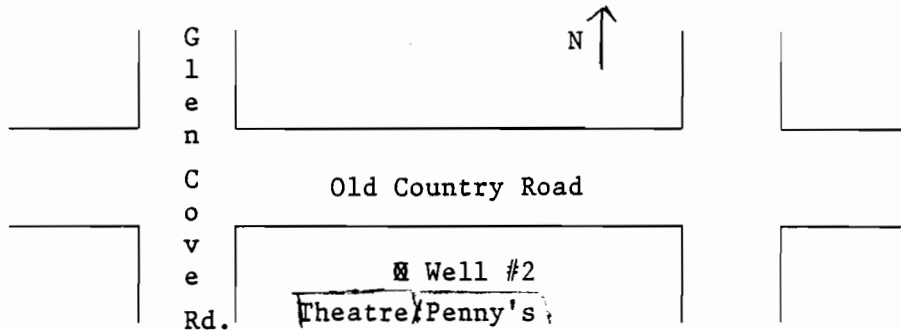
STATE OF NEW YORK
WATER
COMMISSION

DROP LINE: SUCTION LINE:
Diameter.....in.in.
Length.....ft.ft.

Use of water.....
Work started.....7-5-55.....Completed.....7-2-55.....
Date.....July 23, 1955.....W. Lauman & Co. Inc.
License.....3.....

NOTE: Show log of well—materials encountered, depth below ground surface,
water bearing beds and water levels in each, casings, screens, pump,
additional pumping tests and other matters of interest. Describe repair job.
See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

SKETCH OF LOCATION



Roosevelt Field Shopping Center

Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

CHECK THE TOWN IN WHICH THE PROJECT IS LOCATED:

Nassau County:

- Hempstead North Hempstead Oyster Bay

Suffolk County:

- Babylon Brookhaven East Hampton
 Huntington Islip Riverhead
 Shelter Island Smithtown Southampton
 Southold

County Nassau

ORIGINAL--TO COMMISSION

State of New York
Department of Conservation
Division of Water Resources

Well No. N-8539
(on preliminary report)

LOG

Ground Surf., El.ft. above sea

^
.....ft.
v

Top of Well

Owner Korvette's Furniture Centre

Address 1180 Avenue Of Americas, New York, N.Y. 10036

Location of well Glen Cove Rd., & Westbury Av., Carle Place, N.Y.

Depth of well below surface 65 feet

Depth to ground water from surface 45.1 feet

CASINGS:

Diameter 6 in.

Length 60 ft.

Sealing

Casings removed

SCREENS: Make Johnson Openings 20 slot

Diameter 5 in.

Length 5 ft.

Depth to top from top of casing 60

PUMPING TEST: Date Test or permanent pump?

Duration of Test days hours

Maximum Discharge 45 G.P.M. gallons per minute

Static level prior to test 45 ft. in. below top of casing

Level during Max. Pumping 58 ft. in. below top of casing

Maximum Drawdown 12

Approx. time of return to normal level after cessation of pumping hours minutes

PUMP INSTALLED:

Type Sub. Make Sta-Rite Model No.

Motive power electric Make H.P. 7 1/2

Capacity 20 g.p.m. against ft. of discharge head

No. bowls or stages ft. of total head

DROP LINE:

Diameter 3 in.

Length 50 ft.

SUCTION LINE:

Method of Drilling (Rotary, cable tool, etc.) cable tool

Use of Water cooling

Work started June 1969 Completed April 1970

Date June 1973 Driller Diamond Wells

License No. 484

NOTE: Show log of well--materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair jobs.

See Instructions as to Well Drillers' Licenses and Reports--pp. 5-7.

D. E. C. REGION 1
JUN 29 1973
WATER SUPPLY
MONT. MINN.
REG. OFF.

sand & gravel

45'

fine sand

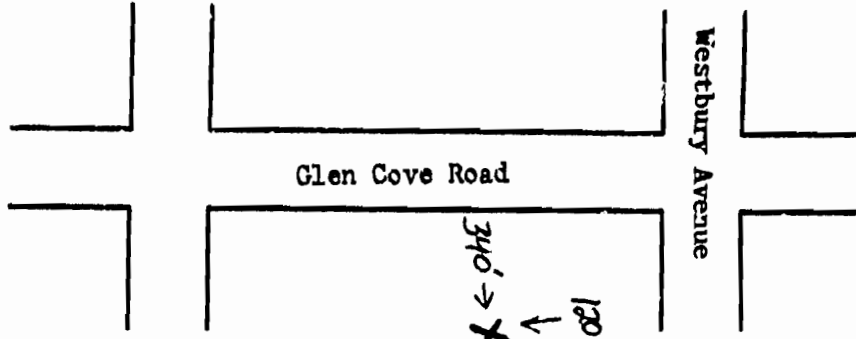
65'

very fine sand

sandy clay

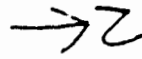
clay balls

SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point



County Nassau

ORIGINAL--TO COMMISSION

Well No. N-6080 (on preliminary report) LOG Ground Surf., El.ft. above sea: 0'

COMPLETION REPORT--LONG ISLAND WELL.

Owner Rossfeld Inc., Address S/e cor. Guineawoods Rd. Carle Place, L.I., N.Y. Location of well same Depth of well below surface 36 feet Depth to ground water from surface 9' cellar/ 20' grade feet

CASINGS:

Diameter 6 in. Length 32 ft. Sealing Casings removed

SCREENS: Make Cook W.W. Openings 20 slot Diameter 4 in. Length 5 ft. Depth to top from top of casing 31 ft.

PUMPING TEST: Date Apr. 5, 1957 Duration of Test 3 hours Maximum Discharge 45 gallons per minute Static level prior to test 9 ft. below top of casing Level during Max. Pumping 15 ft. below top of casing Maximum Drawdown 6 ft. Approx. time of return to normal level after cessation of pumping at once hours minutes

PUMP INSTALLED:

Type D.W. Turb. Make A.O. Smith Model No. 4 HOL Motive power Elec. Make A.O. Smith H.P. 3 Capacity 45 g.p.m. against 15 ft. of discharge head No. 6 or stages 107.4 ft. of total head

DROP LINE: Diameter 2-1/2 in. Length 25 ft. SUCTION LINE: Diameter in. Length ft.

Use of water air conditioning and refrigeration Work started Dec. 6, 1956 Completed Apr. 5, 1957

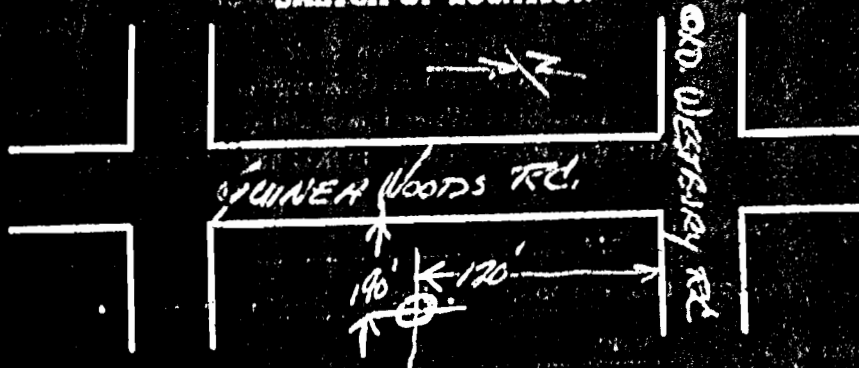
Date Nov. 17, 1958 Driller Eastern Well & Pump Co. License No. 251

NOTE: Show log of well--materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job. See Instructions as to Well Drillers' Licenses and Report--pp. 5-7.

Well log table with 3 sections: 5' LT BRN SANDY clay, 6' SAND / GRAVEL + LUMPS OF CLAY, 36' COARSE LT BRN SAND + GRAVEL

STATE OF NEW YORK WATER POWER AND CONTROL COMMISSION RECEIVED NOV 20 1958

SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

County Nassau

ORIGINAL TO COMMISSION WSA-6211

State of New York Department of Conservation Division of Water Resources

Well No. N-8905 (on preliminary report)

LOG Ground Surf. El. ft. above sea

COMPLETION REPORT—LONG ISLAND WELL

^ ft. v Top of Well

Owner LONG ISLAND WATER CORP.

Address 733 Sunrise Highway, Lynbrook, N.Y.

Location of well Starfire Ct. Valley Stream - T-#20 Suction

Depth of well below surface 145' feet

Depth to ground water from surface 12' 9" feet

CASINGS: Diameter 8" in. Length 123' 8" ft. Sealing Impervious fill Casings removed none

SCREENS: Make Layne Openings #7 slot Diameter 8" in. Length 20' ft. Depth to top from top of casing 123' 8" ft.

PUMPING TEST: Date 11/1/73 Test or permanent pump? Test Duration of Test 1 days Maximum Discharge 222 gallons per minute Static level prior to test 2' 9" ft. in. below top of casing Level during Max. Pumping 18' 11" ft. in. below top of casing Maximum Drawdown 6' - 2" ft. Approx. time of return to normal level after cessation of pumping 30 minutes

PUMP INSTALLED: None Type Make Model No. Motive power Make H.P. Capacity g.p.m. against ft. of discharge head No. bowls or stages ft. of total head

DROP LINE: Diameter in. Length ft. SUCTION LINE: Diameter in. Length ft.

Method of Drilling (Rotary, cable tool, etc.) Rotary Use of Water Public Supply

Work started 6/5/73 Completed 11/1/73

Date 12/5/73 Driller LAYNE-NEW YORK CO. INC.

License No. 5

NOTE: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job. See Instructions as to Well Drillers' Licenses and Reports pp. 5-7.

ENVIRONMENTAL

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County.....

ORIGINAL--TO COMMISSION

Well No.....
(on preliminary report)
LOG
Ground Surf., El.....ft. above sea

N-5666
N-5678D

State of New York
Department of Conservation
Division of Water Power and Control
COMPLETION REPORT--LONG ISLAND WELL

A.....ft.
V.....ft.
Top of Well

Owner
Address.....
Location of well
Depth of well below surfaceft
Depth to ground water from surface.....ft

CASINGS:

Diameter.....in.in.in.in.
Length.....ft.ft.ft.ft.
Sealing
Casings removed

SCREENS: Make.....Openings.....
Diameter.....in.in.in.in.
Length.....ft.ft.ft.ft.
Depth to top from top of casing.....ft.

PUMPING TEST: Date.....1955.....Test or permanent pump?.....
Duration of Test.....days.....hours
Maximum Discharge.....gallons per minute
Static level prior to test.....ft.....in. below top of casing
Level during Max. Pumping.....ft.....in. below top of casing
Maximum Drawdown.....ft.
Approx. time of return to normal level after cessation
of pumping.....hours.....minutes

PUMP INSTALLED:

Type Turbine.....Make.....Model No.....
Motive power.....Make.....H.P.....
Capacity.....g.p.m. against }ft. of discharge head
No. bowls or stages.....}ft. of total head

DROP LINE:

SUCTION LINE:

Diameterin.in.
Lengthft.ft.

Use of water.....

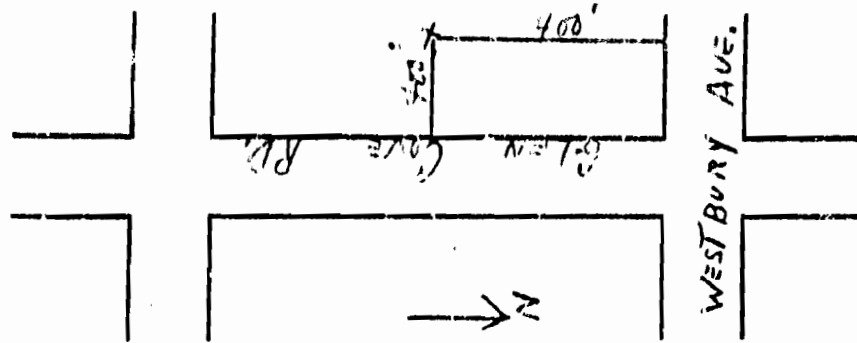
Work started.....1955..... Completed.....1955.....

Date.....1955..... Driller.....Inc.

License No.....

NOTE: Show log of well--materials encountered, with depth below ground surface,
water bearing beds and water levels in each, casings, screens, pump,
additional pumping tests and other matters of interest. Describe repair job.
See Instructions as to Well Drillers' Licenses and Reports--pp. 5-7.

SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

County of

W-1504 ORIGINAL TO COMMISSION

Well No. N-5468
(on preliminary top)

N-5468

State of New York
Department of Conservation
Division of Water Power and Control

LOG
Ground Surf., El.ft. above sea

COMPLETION REPORT—LONG ISLAND WELL

Aft.
Vft. 0.115
Top of Well

Owner

Address

Location of well

Depth of well below surface 17'-7" feet

Depth to ground water from surface 18' feet

CASINGS:

Diameter.....in.in.in.in.
Length 3'-5" ft.ft.ft.ft.
Sealing
Casings removed

SCREENS: Make Openings 10" - 30 SLOT

Diameter.....in.in.in.in.
Length 15' ft.ft.ft.ft.
Depth to top from top of casing 52'-1" ft.

PUMPING TEST: Date Nov. 15-55 Test or permanent pump? TEST

Duration of Test.....days 2 hours
Maximum Discharge 2.66 gallons per minute
Static level prior to test.....ft. 18' in. below top of casing
Level during Max. Pumping 34' ft. 6" in. below top of casing 9/S
Maximum Drawdown 16'-6" ft.
Approx. time of return to normal level after cessation
of pumping at once hours.....minutes

PUMP INSTALLED: not installed this date

Type.....Make.....Model No.....
Motive power.....Make.....H.P.....
Capacity.....g.p.m. against }ft. of discharge head
No. bowls or stages..... }ft. of total head

DROP LINE: SUCTION LINE:
Diameter.....in.in.
Length.....ft.ft.

Work started Nov. 11-55 Completed Nov. 14-55

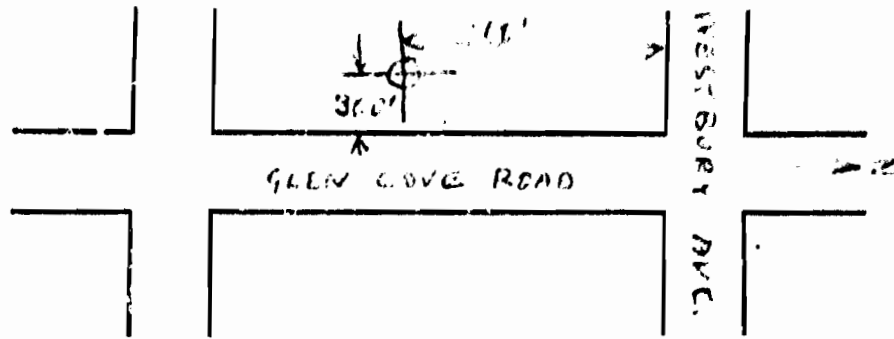
Date March 21-56 Driller E.W. & P. Co.
License No. 251

NOTE: Show log of well—materials encountered, with depth below ground surface, water bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.
See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

LOG
10'
MED. TO
COARSE
SAND
GRIT & GRAV.
17'
MED. TO
COARSE
SAND
GRIT & GRAV.
41'
SHAPE AS
17' TO 41'
FLIER
GRIT & GRAV.
67'
BROWN SILTY
SAND &
HARD PAN
70'

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SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

10-22-00 Eastern Well & Equip. Co.
extended young tubing
37' 4" column S.S. tubing
15' 3/4" section 57.5' total

County... *Suffolk*

ORIGINAL--TO COMMISSION

Well No. *1-3101*
(on preliminary report)

State of New York
Department of Conservation
Division of Water Power and Control

LOG
#2 Ground Surf., El.ft. above
0
11'-8"
Top of Well 11'-8"

COMPLETION REPORT--LONG ISLAND WELLS

Owner *Consolidated Lithography Corp.*
Address *Southon Woods Rd Carle Place LI*
Location of well *same*
Depth below surface *22'-9"* feet
Depth to water: Ground water *21'-1"* ft.; Finished well *21'-1"* ft.

CASINGS:
Diameter *10"* in. in. in.
Length *41'-5"* ft. ft. ft.
Sealing *Packer*
Casings removed

SCREENS: Make *Johnson Erardur* Openings *#50 slot*
Diameter *10"* in. in. in.
Length *21'-4"* ft. ft. ft.
Depth to top from top of casing *39'-9"* ft.

PUMPING TEST: Date *8/14/51* Test or permanent pump? *Test*
Duration of Test *-* days *4* hours
Maximum Discharge *520* gallons per minute
Static Level Prior to Test *10* ft. in. below top of casing
Level during Max. Pumping *37* ft. in. below top of casing
Maximum Drawdown *27* ft.
Approx. time of return to normal level after cessation of pumping *-* hours *-* minutes

PUMP INSTALLED:
Type *DWT* Make *Johnston* Model No. *8" CS #1*
Motive power *El. Motor* Make *U.S. El.* H.P. *30*
Capacity *400* g.p.m. against *138* ft. of discharge head
No. bowls or stages *11* } *200* ft. of total head

DROP LINE: DIAMETER *6"* SUCTION LINE: DIAMETER *6"*
Length *20* ft. Length *10'* ft.

Use of water *General*
Work started *8/1/51* Completed *10/31/51*
Date *11/1/51* Driller *C.W. Gault*
License No. *13*

NOTE: Show log of well--materials encountered, with depth below ground surface, water-bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.
See Instructions as to Well Drillers' Licenses and Reports--pp. 5-7.

22'
reddish
brn Sand
& Grl
34'
light brn
Sand & Grl
40'
dark brn S.
Grits, some G.
51
brn Sand
& Grl
65'
brn csa S.
lumps of Cl.
68'
layer of 11dps
lumps Clay,
f, clayey S.
70'
brn clayey
Sand
85'
black
solid Cl.

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County

ORIGINAL—TO COMMISSION

Well No. N-3697
(on preliminary report)

State of New York
Department of Conservation
Division of Water Power and Control

LOG

Ground Surf., El.ft. above sea:

COMPLETION REPORT—LONG ISLAND WELLS

8 ft. 2 ft.
Top of Well 8 ft.

Owner General Land Photographic Corp.
Address 500 Wood Rd. Carle Place L.I.N.Y.
Location of well Same
Depth below surface 88'-8" feet
Depth to water: Ground water 23 ft.; Finished well 23 ft.

CASINGS:
Diameter 10" in. in. in. in.
Length 62'-10" ft. ft. ft. ft.
Sealing Tacker
Casings removed -

SCREENS: Make Johnson Everdur Openings # 30 slot
Diameter 12" in. in. in. in.
Length 2'-5" ft. ft. ft. ft.
Depth to top from top of casing 59'-3" ft.

PUMPING TEST: Date 7/12/51 Test or permanent pump? Test
Duration of Test - days 4 hours
Maximum Discharge 250 gallons per minute
Static Level Prior to Test 15 ft. in. below top of casing
Level during Max. Pumping - ft. in. below top of casing
Maximum Drawdown not observed - hydr seal ft.
Approx. time of return to normal level after cessation of pumping - hours - minutes

PUMP INSTALLED:
Type DWT Make Johnston Model No. 8'CS #1
Motive power El. Motor Make U.S. El. H.P. 30
Capacity 400 g.p.m. against 138 ft. of discharge head
No. bowls or stages 11 } 200 ft. of total head

DROP LINE: Diameter 6" in. SUCTON LINE: Diameter 6" in.
Length 50' ft. Length 10' ft.

Use of water General
Work started 6/9/51 Completed 10/31/51
Date 11/1/51 Driller Ch. Laurina

License No. 13

NOTE: Show log of well—materials encountered, with depth below ground surface, water-bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.
See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7

Sand & Gravel & fine Grl
25'
Sand & Gravel
37'
Sand & Gravel, more Sand
53'
Sand & Gravel, more Grl
65'
brn fine clayey S.
85'
dark brn fine clayey Sand
88'
brn Clay & Sand
94'
Blacksdid Clay
?

STATE OF NEW YORK
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Coulay

State of New York
Department of Conservation
Division of Water Power and Control

Well No. N-2230
(on preliminary report)
Diff. " " N-2229D
ALL MEASUREMENTS

LOG
Ground Surf., El. _____ ft.

0 ft. _____

COMPLETION REPORT—LONG ISLAND WELLS

FROM LOG GRADE

Owner MANHATTAN TRUST CO.
Address MANHATTAN TRUST CO.
Location of well SAME
Depth below surface 84.8 feet
Depth to water: First _____ ft.; Final 37.5 feet

PUMP VAULT 1' 0"
APP 7' DEEP
CASING CUT OFF
APP 1' 6" FILL
ABOVE FLOOR
FLOOR — — —
8'

CASINGS:

Diameter 8 —in. —in. —in. —in.
Length 64' 1" ft. ft. ft. ft.
Sealing 8" x 6" PACKED

SCREENS: Make Johnson Everdure Openings #25 SLOT

Diameter 6 —in. —in. —in. —in.
Length 1.5 ft. ft. ft. ft.
Depth to top from top of casing 64' 8" ft.
7 1/2" BLANK ON TOP OF SCREEN

SAND

GRAVEL

PUMPING TEST: Date _____ Test or permanent pump? _____
Duration of Test _____ days _____ hours
Maximum Discharge _____ gallons per minute
Static Level Prior to Test _____ feet _____ inches
Level during Max. Pumping _____ feet _____ inches
Maximum Drawdown _____ feet _____ inches
Approx. time of return to normal level after cessation
of pumping _____ hours _____ minutes

40'

PUMP INSTALLED:

Type D.W.T. Make JOHNSON Model No. 8 F.M.I.
Motive power None Make U.S.E. H.P. 15
Capacity _____ g.p.m. against _____ ft. of head
No. bowls or stages 10

SAND
FEW
GRAVEL

DROP LINE:

SUCTION LINE:

Diameter _____ —in. —in. —in. —in.
Length _____ ft. ft. ft. ft.

Use of water _____

Work started 8-27-47 Completed 8-26-47

85'

Date 8-27-47 Driller J.H. ...
License No. 13

STATE OF NEW YORK
REGISTERED ENGINEER AND
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NOTE: Show log of well—materials encountered, with depths below ground surface, water-bearing beds, casings, screens, pump, additional pumping tests and other matters of interest.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

County. Nassau

ORIGINAL—TO COMMISSION

W-1179

Well No. N-3758 (on preliminary report)

State of New York
Department of Conservation
Division of Water Power and Control

LOG

Ground Surf., El.ft. above sea

COMPLETION REPORT—LONG ISLAND WELLS

A
.....ft.
v
Top of Well

Owner Laboratory Furniture Co., Inc.

Address P.O. Box 590, Mineola, L.I., N.Y.

Location of well. Old Country Rd., Mineola, L.I.

For log see reverse side.

Depth below surface. 90'-10" feet

Depth to water: Ground water. 38'-9" ft.; Finished well. 38'-9" ft.

CASINGS:

Diameter. 8 in. in. in. in.

Length. 72'-0" ft. ft. ft. ft.

Sealing Packer

Casings removed

SCREENS: Make Johnson Everdur Openings #30 slot

Diameter. 8 in. in. in. in.

Length. 11 ft. ft. ft. ft.

Depth to top from top of casing. 70'-7" ft.

PUMPING TEST: Date 10/1/51 Test or permanent pump? Perm.

Duration of Test. - days. 2 hours

Maximum Discharge. 240 gallons per minute

Static Level Prior to Test. 29' ft. 6 in. below top of casing

Level during Max. Pumping. 51 ft. in. below top of casing

Maximum Drawdown. 21'-6" ft.

Approx. time of return to normal level after cessation

of pumping. - hours - minutes

PUMP INSTALLED:

Type DWT Make Johnston Model No 8" BS #1

Motive power. El. Motor Make U.S. Electr. H.P. 15

Capacity. 200 g.p.m. against } 140 ft. of discharge head

No. bowls or stages. 7 } 190 ft. of total head

DROP LINE:

Diameter 4 in. in. 4 in.

Length 50' 6.5 ft. 10' ft.

SUCTION LINE:

Use of water. General

Work started. 6/28/51 Completed. 10/4/51

Date. 11/7/51 Driller C.W. Lauman & Co., Inc.

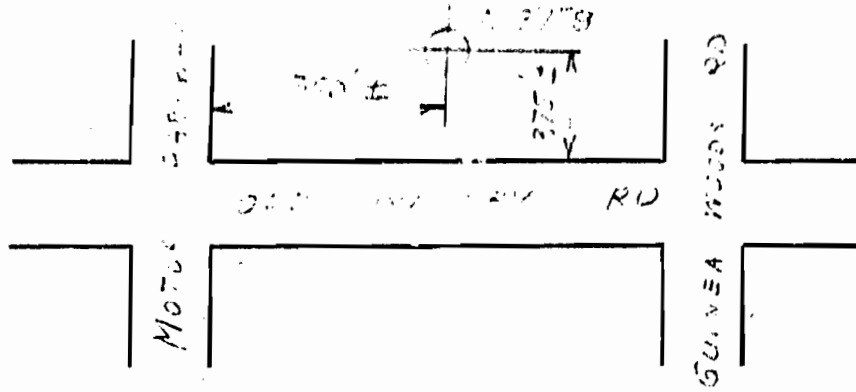
License No. 13

NOTE: Show log of well—materials encountered, with depth below ground surface, water-bearing beds and water levels in each, casings, screens, pump, additional pumping tests and other matters of interest. Describe repair job.

See Instructions as to Well Drillers' Licenses and Reports—pp. 5-7.

STATE OF NEW YORK
WELL DRILLERS' LICENSE NO. 13
C.W. LAUMAN & CO., INC.
11/7/51

SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

WELL LOG

- 0'-9'-3" - Pump pit
- 9'-3" - 55' - Coarse sand and large gravel
- 55'- 64' .. Coarse sand and gravel
- 64'- 77' .. Clean med. sand
- 77'- 82' - Fine brown sand
- 82'- 85' - Med. fine sand
- 85'- 91' - Coarse sand and gravel
- 91'- 92' - Very fine gray sand
- 92' - 100' - Fine sand and gray clay

~~REPAIR~~
 6/10/66 - DRILLER #13

100
 90
 80
 70
 60
 50
 40
 30
 20
 10
 0
 10
 20
 30
 40
 50
 60
 70
 80
 90
 100

County: ... Rensselaer

State of New York
Department of Conservation
Division of Water Power and Control
COMPLETION REPORT--LONG ISLAND WELL

Well No. 1-596
(on preliminary report)
LOG
Ground Surf., El.ft. above sea

A
.....ft.
V
Top of Well

Owner ... (Layne Well #5)
Address ...
Location of well ...
Depth of well below surface ... 163 ... feet
Depth to ground water from surface ... 321.7" ... feet

CASINGS:

Diameter ... 18 ... in. ... 12 ... in. ...
Length ... 393 ... ft. ... 102 ... ft. ...
Sealing ... Cemented ...
Casings removed ... None ...

SCREENS: Make ... Layne ... Openings ... Shutter ...
Diameter ... 12 ... in. ...
Length ... 60 ... ft. ...
Depth to top from top of casing ... 103 ... ft.

PUMPING TEST: Date ... July 3, 1956 ... Test or permanent pump Permanent
Duration of Test ... 8 ... hours
Maximum Discharge ... 1200 ... gallons per minute
Static level prior to test ... 321.7" ... ft. ... 7 ... in. below top of casing
Level during Max. Pumping ... 72 ... ft. ... 6 ... in. below top of casing
Maximum Drawdown ... 391.9" ... ft.
Approx. time of return to normal level after cessation
of pumping ... 30 ... minutes

PUMP INSTALLED:

Type ... Turbine ... Make ... Layne ... Model No. ... RMC ...
Motive power ... Electric ... Make ... U.S. ... H.P. ... 100 ...
Capacity ... 1225 ... g.p.m. against } ... 185 ... ft. of discharge head
No. bowls or stages ... 7 ... } ... 257 ... ft. of total head

DROP LINE:

Diameter ... 10 ... in. ...
Length ... 1081.7" ... ft. ...

SUCTION LINE:

Use of water ... Public Supply ...

Work started ... September 26, 1955 ... Completed ... July 3, 1956

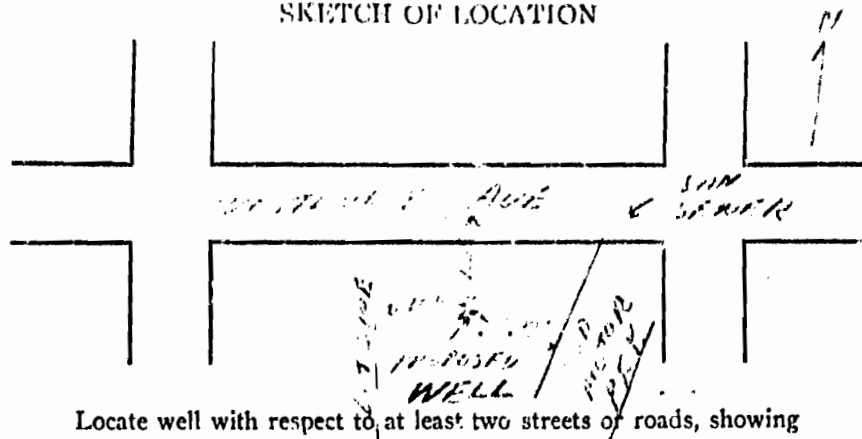
Date ... July 25, 1956 ... Driller ... Layne New York Co., Inc.,
License No. ... 5 ...

NOTE: Show log of well--materials encountered, with depth below ground surface,
water bearing beds and water levels in each, casings, screens, pump,
additional pumping tests and other matters of interest. Done by repair job.
See Instructions as to Well Drillers' Licenses and Reports pp. 5-7.

SEE BLUE
PRINT
ATTACHED

STATE OF NEW YORK
WATER POWER AND
CONTROL COMMISSION
RECEIVED
JUL 24 1956

SKETCH OF LOCATION



Locate well with respect to at least two streets or roads, showing distance from corner and front of lot.

Show North Point

Repair

- 5/10/63 Layne - Cleaned & repaired wells pumping equipment. No changes made. Static level at 33'
- 1/29/71 Layne - Motor & bowls repaired. Depth to water @ 48'
- 1/17/78 Layne - Replaced existing RMC bowl assembly to 10" DRMC 7 Stage installed liner - See Sketch. Depth to water @ 43'5"

**DATA USABILITY SUMMARY REPORT (DUSR)
SUPERIOR GROUP, INC.
J&H SITE, CARLE PLACE, NEW YORK
GROUND WATER SAMPLE ANALYSIS
ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)
PROJECT NUMBER R4908.00.01
SEVERN TRENT LABORATORIES (STL) SHELTON, CT
JOB NUMBER 201080**

Deliverables:

The above referenced summary data package and analytical data package for five (5) ground water samples, one (1) blind field duplicate sample, one (1) field blank, one (1) trip blank and one (1) set of matrix spike/matrix spike duplicate (MS/MSD) samples contain all required deliverables as stipulated under the 1995 New York State Analytical Services Protocols (ASP) for Category B deliverables for Non-United States Environmental Protection Agency (USEPA) Contract Laboratory Protocol (CLP) methods. The sample specific analysis performed included Target Compound List (TCL) Volatile Organic Compounds (VOC) analyzed by USEPA SW-846 Method 8260B. All samples were analyzed in accordance with "Test Methods for Evaluation Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions." The data have been evaluated according to the protocols and quality control (QC) requirements of the analytical methods, the ASP, the USEPA CLP National Functional Guidelines for Organic Data Review (October 1999), the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-24, Revision 1, June 1999: Validating Volatile Organic Compounds by SW-846 Method 8260B and the reviewer's professional judgment.

This report pertains to the following samples:

Samples

MW-01
MW-02
MW-03
MW-04
MW-05

QC Samples

DUP051602 (blind field duplicate of MW-01)
MW-01 MS/MSD
FB051602 (field blank)
TB051602 (trip blank)

Organics

The following items/criteria were reviewed for this report:

- Case narrative and deliverables compliance
- Holding times both technical and procedural and sample preservation
- Surrogate Compound recoveries, summary and data
- MS/MSD results, recoveries, summary and data
- Laboratory Control Sample (LCS) recoveries, summary and data
- Method blank summary and data
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning and performance
- Initial and continuing calibration summaries and data
- Internal standard areas, retention times, summary and data
- Blind Field Duplicate results
- Field Blank results
- Trip Blank results
- Organic analysis data sheets (Form I)
- GC/MS chromatograms, mass spectra and quantitation reports
- Quantitation/detection limits
- Qualitative and quantitative compound identification

The items listed above have been judged to be in compliance with the analytical methods and with the ASP and USEPA criteria with the exceptions discussed in the text below. The data have been evaluated according to the procedures outlined above and qualified accordingly.

Volatiles

- The percent recovery (%R) of carbon disulfide (76%; QC limits 81-120%) was below QC limits in the MS analysis of sample MW-01 while the %R of vinyl chloride (72%; QC limits 74-125%), 1,1-dichloroethene (73%; QC limits 81-117%) and carbon disulfide (65%; QC limit 81-120%) were below QC limits in the MSD analysis. Qualification of sample data is not performed based on MS/MSD results alone. Results for carbon disulfide, vinyl chloride and 1,1-dichloroethene in the unspiked portion of the sample only are possibly biased low. Positive detects are therefore flagged "J" and non-detects are flagged "UJ".

- The %R of carbon disulfide (72%; QC limits 81-120%) was below QC limits in the blank spike analysis applicable to all samples. Results for carbon disulfide, in all samples are possibly biased low. Positive detects are therefore flagged "J" and non-detects are flagged "UJ".
- The following table lists blanks (method, trip and field blanks), blank contaminants with concentrations and the samples associated with the blanks. Detected sample concentrations of methylene chloride, acetone, toluene or 2-butanone (common laboratory contaminants) less than ten times (10x) the highest associated blank (after taking sample dilution levels into account) are negated and qualified as a non-detect. For all other compounds, an action level of five times (5x) the highest associated blank concentration is used.

Blank	Contaminant	Concentration (Action Level)	Associated Samples
TB051602	chloroform	0.2 J (1.0 µg/l)	All samples

- The following table lists compounds that exceeded 15 percent relative standard deviation (%RSD) for relative response factors (RRF) in the initial calibration (ICAL) or 20 percent difference (%D) between the initial calibration average response factor and the continuing calibration verification (CCV) response factor. Associated field samples are also listed. Positive results for these compounds in associated samples are considered estimated and flagged "J". All non-detect results for the compound of interest in the appropriate samples are flagged "UJ".

Calibration	Compound	Deficiency	Associated Samples
ICAL 05/16/02 09:29-12:36	bromomethane	%RSD=18.6	All samples
	chloroethane	%RSD=15.9	
	acetone	%RSD=24.8	
	2-butanone	%RSD=17.3	
	4-methyl-2-pentanone	%RSD=16.0	
	2-hexanone	%RSD=19.0	
CCV 05/20/02 @ 09:59	bromomethane	%D=42.0	MW-01, MW-02, MW-03, MW-04, MW-05, DUP051602
	chloroethane	%D=26.8	
CCV 05/21/02 @ 08:35	chloromethane	%D=22.8	MW-01DL, DUP051602DL
	bromomethane	%D=28.0	
	acetone	%D=39.0	
	1,1,2-trichloroethane	%D=21.0	

- The following table lists samples that were reanalyzed at dilutions (indicated by a "DL" suffix) due to target compounds concentrations exceeding the linear calibration range of the instrument in the initial analysis. The laboratory has indicated those compounds with an "E" qualifier on the analysis data sheets (Form I). The dilution analysis results should be used only for those compounds flagged with an "E" qualifier on the initial analysis Form I. All other results should be used from the initial analyses.

Sample	Dilution Factor
MW-01DL	2x
DUP051602DL	2x

- Cis-1,2-dichloroethene was detected in sample MW-01, but not in the associated blind field duplicate DUP051602. Chlorobenzene was not detected in sample MW-01, but was in the associated blind field duplicate DUP051602. As a result, the concentration of cis-1,2-dichloroethene and chlorobenzene in each sample is considered estimated and flagged "J" or "UJ" respectively.

Package Summary:

All data are valid and usable with qualifications as noted in this review.

Signed:



Andrew J. Coenen
Project Scientist

Dated: 24 July 2002

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. _____

MW-01

Lab Name: STL/CT Contract: _____

Lab Code: STLCT Case No.: 201080 SAS No.: _____ SDG No.: 201080

Matrix: (soil/water) WATER Lab Sample ID: 201080-1

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M8794

Level: (low/med) LOW Date Received: 05/16/02

% Moisture: not dec. _____ Date Analyzed: 05/20/02

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND	UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	0.5	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
108-05-4	Vinyl Acetate	5	U
79-01-6	Trichloroethene	12	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	250	E
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U

use result for listed compound from diked analysis

3A

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-01DL

Lab Name: STL/CT

Contract:

Lab Code: STLCT

Case No.: 201080 SAS No.:

SDG No.: 201080

Matrix: (soil/water) WATER

Lab Sample ID: 201080-1DL

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: M8814

Level: (low/med) LOW

Date Received: 05/16/02

% Moisture: not dec. _____

Date Analyzed: 05/21/02

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 2.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	-----Chloromethane	10	UJ
75-01-4	-----Vinyl Chloride	10	UJ
74-83-9	-----Bromomethane	10	UJ
75-00-3	-----Chloroethane	10	UJ
75-35-4	-----1,1-Dichloroethene	10	UJ
67-64-1	-----Acetone	20	UJ
75-15-0	-----Carbon Disulfide	10	UJ
75-09-2	-----Methylene Chloride	0.7	DJ
156-60-5	-----trans-1,2-Dichloroethene	10	U
75-34-3	-----1,1-Dichloroethane	10	U
156-59-2	-----cis-1,2-Dichloroethene	10	U
78-93-3	-----2-Butanone	20	UJ
67-66-3	-----Chloroform	10	U
71-55-6	-----1,1,1-Trichloroethane	10	U
56-23-5	-----Carbon Tetrachloride	10	U
71-43-2	-----Benzene	10	U
107-06-2	-----1,2-Dichloroethane	10	U
108-05-4	-----Vinyl Acetate	10	U
79-01-6	-----Trichloroethene	13	D
78-87-5	-----1,2-Dichloropropane	10	U
75-27-4	-----Bromodichloromethane	10	U
10061-01-5	-----cis-1,3-Dichloropropene	10	U
10061-02-6	-----trans-1,3-Dichloropropene	10	U
79-00-5	-----1,1,2-Trichloroethane	10	UJ
108-10-1	-----4-Methyl-2-Pentanone	20	UJ
108-88-3	-----Toluene	10	U
127-18-4	-----Tetrachloroethene	240	D
591-78-6	-----2-Hexanone	20	UJ
124-48-1	-----Dibromochloromethane	10	U
108-90-7	-----Chlorobenzene	10	U
100-41-4	-----Ethylbenzene	10	U
100-42-5	-----Styrene	10	U
75-25-2	-----Bromoform	10	U

use circled result only

FORM I VOA

OLM03.0

4

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-01DL

Lab Name: STL/CT

Contract:

Lab Code: STLCT

Case No.: 201080

SAS No.:

SDG No.: 201080

Matrix: (soil/water) WATER

Lab Sample ID: 201080-1DL

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: M8814

Level: (low/med) LOW

Date Received: 05/16/02

% Moisture: not dec. _____

Date Analyzed: 05/21/02

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 2.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
-----	Xylene (total)	10	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-02

Lab Name: STL/CT

Contract:

Lab Code: STLCT

Case No.: 201080

SAS No.:

SDG No.: 201080

Matrix: (soil/water) WATER

Lab Sample ID: 201080-2

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: M8795

Level: (low/med) LOW

Date Received: 05/16/02

% Moisture: not dec. _____

Date Analyzed: 05/20/02

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U
75-00-3	Chloroethane	5	U
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-09-2	Methylene Chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	19	U
78-93-3	2-Butanone	10	U
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
108-05-4	Vinyl Acetate	5	U
79-01-6	Trichloroethene	9	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	55	U
591-78-6	2-Hexanone	10	U
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-02

Lab Name: STL/CT

Contract:

Lab Code: STLCT

Case No.: 201080

SAS No.:

SDG No.: 201080

Matrix: (soil/water) WATER

Lab Sample ID: 201080-2

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: M8795

Level: (low/med) LOW

Date Received: 05/16/02

% Moisture: not dec. _____

Date Analyzed: 05/20/02

GC Column: DB-624 ID: 0.53 (mm) -

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-34-5-----	1,1,2,2-Tetrachloroethane_____		5 U
-----	Xylene (total)_____		5 U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-03

Lab Name: STL/CT

Contract:

Lab Code: STLCT

Case No.: 201080

SAS No.:

SDG No.: 201080

Matrix: (soil/water) WATER

Lab Sample ID: 201080-3

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: M8796

Level: (low/med) LOW

Date Received: 05/16/02

% Moisture: not dec. _____

Date Analyzed: 05/20/02

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	-----Chloromethane	5	U
75-01-4	-----Vinyl Chloride	5	U
74-83-9	-----Bromomethane	5	U
75-00-3	-----Chloroethane	5	U
75-35-4	-----1,1-Dichloroethene	5	U
67-64-1	-----Acetone	10	U
75-15-0	-----Carbon Disulfide	5	U
75-09-2	-----Methylene Chloride	5	U
156-60-5	-----trans-1,2-Dichloroethene	5	U
75-34-3	-----1,1-Dichloroethane	5	U
156-59-2	-----cis-1,2-Dichloroethene	5	U
78-93-3	-----2-Butanone	10	U
67-66-3	-----Chloroform	5	U
71-55-6	-----1,1,1-Trichloroethane	5	U
56-23-5	-----Carbon Tetrachloride	5	U
71-43-2	-----Benzene	5	U
107-06-2	-----1,2-Dichloroethane	5	U
108-05-4	-----Vinyl Acetate	5	U
79-01-6	-----Trichloroethene	5	U
78-87-5	-----1,2-Dichloropropane	5	U
75-27-4	-----Bromodichloromethane	5	U
10061-01-5	-----cis-1,3-Dichloropropene	5	U
10061-02-6	-----trans-1,3-Dichloropropene	5	U
79-00-5	-----1,1,2-Trichloroethane	5	U
108-10-1	-----4-Methyl-2-Pentanone	10	U
108-88-3	-----Toluene	5	U
127-18-4	-----Tetrachloroethene	5	U
591-78-6	-----2-Hexanone	10	U
124-48-1	-----Dibromochloromethane	5	U
108-90-7	-----Chlorobenzene	5	U
100-41-4	-----Ethylbenzene	5	U
100-42-5	-----Styrene	5	U
75-25-2	-----Bromoform	5	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-03

Lab Name: STL/CT

Contract:

Lab Code: STLCT

Case No.: 201080

SAS No.:

SDG No.: 201080

Matrix: (soil/water) WATER

Lab Sample ID: 201080-3

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: M8796

Level: (low/med) LOW

Date Received: 05/16/02

% Moisture: not dec. _____

Date Analyzed: 05/20/02

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-34-5-----	1,1,2,2-Tetrachloroethane	5	U
-----	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-04

Lab Name: STL/CT

Contract:

Lab Code: STLCT

Case No.: 201080

SAS No.:

SDG No.: 201080

Matrix: (soil/water) WATER

Lab Sample ID: 201080-4

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: M8799

Level: (low/med) LOW

Date Received: 05/16/02

% Moisture: not dec. _____

Date Analyzed: 05/20/02

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
74-87-3	Chloromethane	5	U	
75-01-4	Vinyl Chloride	5	U	
74-83-9	Bromomethane	5	U	J
75-00-3	Chloroethane	5	U	J
75-35-4	1,1-Dichloroethene	5	U	
67-64-1	Acetone	10	U	J
75-15-0	Carbon Disulfide	5	U	J
75-09-2	Methylene Chloride	5	U	
156-60-5	trans-1,2-Dichloroethene	5	U	
75-34-3	1,1-Dichloroethane	5	U	
156-59-2	cis-1,2-Dichloroethene	5	U	
78-93-3	2-Butanone	10	U	J
67-66-3	Chloroform	5	U	
71-55-6	1,1,1-Trichloroethane	5	U	
56-23-5	Carbon Tetrachloride	5	U	
71-43-2	Benzene	5	U	
107-06-2	1,2-Dichloroethane	5	U	
108-05-4	Vinyl Acetate	5	U	
79-01-6	Trichloroethene	5	U	
78-87-5	1,2-Dichloropropane	5	U	
75-27-4	Bromodichloromethane	5	U	
10061-01-5	cis-1,3-Dichloropropene	5	U	
10061-02-6	trans-1,3-Dichloropropene	5	U	
79-00-5	1,1,2-Trichloroethane	5	U	
108-10-1	4-Methyl-2-Pentanone	10	U	J
108-88-3	Toluene	5	U	
127-18-4	Tetrachloroethene	5	U	
591-78-6	2-Hexanone	10	U	J
124-48-1	Dibromochloromethane	5	U	
108-90-7	Chlorobenzene	5	U	
100-41-4	Ethylbenzene	5	U	
100-42-5	Styrene	5	U	
75-25-2	Bromoform	5	U	

AB

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-05

Lab Name: STL/CT

Contract:

Lab Code: STLCT

Case No.: 201080

SAS No.:

SDG No.: 201080

Matrix: (soil/water) WATER

Lab Sample ID: 201080-5

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: M8800

Level: (low/med) LOW

Date Received: 05/16/02

% Moisture: not dec. _____

Date Analyzed: 05/20/02

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	-----Chloromethane	5	U
75-01-4	-----Vinyl Chloride	5	U
74-83-9	-----Bromomethane	5	U
75-00-3	-----Chloroethane	5	U
75-35-4	-----1,1-Dichloroethene	5	U
67-64-1	-----Acetone	10	U
75-15-0	-----Carbon Disulfide	5	U
75-09-2	-----Methylene Chloride	5	U
156-60-5	-----trans-1,2-Dichloroethene	5	U
75-34-3	-----1,1-Dichloroethane	5	U
156-59-2	-----cis-1,2-Dichloroethene	33	U
78-93-3	-----2-Butanone	10	U
67-66-3	-----Chloroform	5	U
71-55-6	-----1,1,1-Trichloroethane	5	U
56-23-5	-----Carbon Tetrachloride	5	U
71-43-2	-----Benzene	5	U
107-06-2	-----1,2-Dichloroethane	5	U
108-05-4	-----Vinyl Acetate	5	U
79-01-6	-----Trichloroethene	16	U
78-87-5	-----1,2-Dichloropropane	5	U
75-27-4	-----Bromodichloromethane	5	U
10061-01-5	-----cis-1,3-Dichloropropene	5	U
10061-02-6	-----trans-1,3-Dichloropropene	5	U
79-00-5	-----1,1,2-Trichloroethane	5	U
108-10-1	-----4-Methyl-2-Pentanone	10	U
108-88-3	-----Toluene	5	U
127-18-4	-----Tetrachloroethene	68	U
591-78-6	-----2-Hexanone	10	U
124-48-1	-----Dibromochloromethane	5	U
108-90-7	-----Chlorobenzene	5	U
100-41-4	-----Ethylbenzene	5	U
100-42-5	-----Styrene	5	U
75-25-2	-----Bromoform	5	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB051602

Lab Name: STL/CT

Contract:

Lab Code: STLCT

Case No.: 201080

SAS No.:

SDG No.: 201080

Matrix: (soil/water) WATER

Lab Sample ID: 201080-6

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: M8801

Level: (low/med) LOW

Date Received: 05/16/02

% Moisture: not dec. _____

Date Analyzed: 05/20/02

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	-----Chloromethane	5	U
75-01-4	-----Vinyl Chloride	5	U
74-83-9	-----Bromomethane	5	U J
75-00-3	-----Chloroethane	5	U J
75-35-4	-----1,1-Dichloroethene	5	U
67-64-1	-----Acetone	10	U J
75-15-0	-----Carbon Disulfide	5	U J
75-09-2	-----Methylene Chloride	5	U
156-60-5	-----trans-1,2-Dichloroethene	5	U
75-34-3	-----1,1-Dichloroethane	5	U
156-59-2	-----cis-1,2-Dichloroethene	5	U
78-93-3	-----2-Butanone	10	U J
67-66-3	-----Chloroform	0.2	J
71-55-6	-----1,1,1-Trichloroethane	5	U
56-23-5	-----Carbon Tetrachloride	5	U
71-43-2	-----Benzene	5	U
107-06-2	-----1,2-Dichloroethane	5	U
108-05-4	-----Vinyl Acetate	5	U
79-01-6	-----Trichloroethene	5	U
78-87-5	-----1,2-Dichloropropane	5	U
75-27-4	-----Bromodichloromethane	5	U
10061-01-5	-----cis-1,3-Dichloropropene	5	U
10061-02-6	-----trans-1,3-Dichloropropene	5	U
79-00-5	-----1,1,2-Trichloroethane	5	U
108-10-1	-----4-Methyl-2-Pentanone	10	U J
108-88-3	-----Toluene	5	U
127-18-4	-----Tetrachloroethene	5	U
591-78-6	-----2-Hexanone	10	U J
124-48-1	-----Dibromochloromethane	5	U
108-90-7	-----Chlorobenzene	5	U
100-41-4	-----Ethylbenzene	5	U
100-42-5	-----Styrene	5	U
75-25-2	-----Bromoform	5	U

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB051602

Lab Name: STL/CT

Contract:

Lab Code: STLCT

Case No.: 201080

SAS No.:

SDG No.: 201080

Matrix: (soil/water) WATER

Lab Sample ID: 201080-6

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: M8801

Level: (low/med) LOW

Date Received: 05/16/02

% Moisture: not dec. _____

Date Analyzed: 05/20/02

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-34-5-----	1,1,2,2-Tetrachloroethane_____	5	U
-----	Xylene (total)_____	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB051602

Lab Name: STL/CT

Contract:

Lab Code: STLCT

Case No.: 201080

SAS No.:

SDG No.: 201080

Matrix: (soil/water) WATER

Lab Sample ID: 201080-7

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: M8802

Level: (low/med) LOW

Date Received: 05/16/02

% Moisture: not dec. _____

Date Analyzed: 05/20/02

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

74-87-3	Chloromethane	5	U
75-01-4	Vinyl Chloride	5	U
74-83-9	Bromomethane	5	U J
75-00-3	Chloroethane	5	U J
75-35-4	1,1-Dichloroethene	5	U
67-64-1	Acetone	10	U J
75-15-0	Carbon Disulfide	5	U J
75-09-2	Methylene Chloride	5	U
156-60-5	trans-1,2-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
156-59-2	cis-1,2-Dichloroethene	5	U
78-93-3	2-Butanone	10	U J
67-66-3	Chloroform	5	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
71-43-2	Benzene	5	U
107-06-2	1,2-Dichloroethane	5	U
108-05-4	Vinyl Acetate	5	U
79-01-6	Trichloroethene	5	U
78-87-5	1,2-Dichloropropane	5	U
75-27-4	Bromodichloromethane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
79-00-5	1,1,2-Trichloroethane	5	U
108-10-1	4-Methyl-2-Pentanone	10	U J
108-88-3	Toluene	5	U
127-18-4	Tetrachloroethene	5	U
591-78-6	2-Hexanone	10	U J
124-48-1	Dibromochloromethane	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
75-25-2	Bromoform	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB051602

Lab Name: STL/CT

Contract:

Lab Code: STLCT

Case No.: 201080

SAS No.:

SDG No.: 201080

Matrix: (soil/water) WATER

Lab Sample ID: 201080-7

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: M8802

Level: (low/med) LOW

Date Received: 05/16/02

% Moisture: not dec. _____

Date Analyzed: 05/20/02

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

79-34-5-----	1,1,2,2-Tetrachloroethane	5	U
-----	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP051602

Lab Name: STL/CT

Contract:

Lab Code: STLCT

Case No.: 201080

SAS No.:

SDG No.: 201080

Matrix: (soil/water) WATER

Lab Sample ID: 201080-8

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: M8803

Level: (low/med) LOW

Date Received: 05/16/02

% Moisture: not dec. _____

Date Analyzed: 05/20/02

GC Column:-DB-624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

74-87-3	-----Chloromethane	5	U
75-01-4	-----Vinyl Chloride	5	U
74-83-9	-----Bromomethane	5	UJ
75-00-3	-----Chloroethane	5	UJ
75-35-4	-----1,1-Dichloroethene	5	U
67-64-1	-----Acetone	10	UJ
75-15-0	-----Carbon Disulfide	5	UJ
75-09-2	-----Methylene Chloride	5	U
156-60-5	-----trans-1,2-Dichloroethene	5	U
75-34-3	-----1,1-Dichloroethane	5	U
156-59-2	-----cis-1,2-Dichloroethene	5	UJ
78-93-3	-----2-Butanone	10	UJ
67-66-3	-----Chloroform	5	U
71-55-6	-----1,1,1-Trichloroethane	5	U
56-23-5	-----Carbon Tetrachloride	5	U
71-43-2	-----Benzene	5	U
107-06-2	-----1,2-Dichloroethane	5	U
108-05-4	-----Vinyl Acetate	5	U
79-01-6	-----Trichloroethene	13	
78-87-5	-----1,2-Dichloropropane	5	U
75-27-4	-----Bromodichloromethane	5	U
10061-01-5	-----cis-1,3-Dichloropropene	5	U
10061-02-6	-----trans-1,3-Dichloropropene	5	U
79-00-5	-----1,1,2-Trichloroethane	5	U
108-10-1	-----4-Methyl-2-Pentanone	10	UJ
108-88-3	-----Toluene	5	U
127-18-4	-----Tetrachloroethene	250	E
591-78-6	-----2-Hexanone	10	UJ
124-48-1	-----Dibromochloromethane	5	U
108-90-7	-----Chlorobenzene	1	U
100-41-4	-----Ethylbenzene	5	U
100-42-5	-----Styrene	5	U
75-25-2	-----Bromoform	5	U

USE result for circled compound from diluted analysis

FORM I VOA

OLM03.0

17A

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP051602DL

Lab Name: STL/CT Contract:
 Lab Code: STLCT Case No.: 201080 SAS No.: SDG No.: 201080
 Matrix: (soil/water) WATER Lab Sample ID: 201080-8DL
 Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M8816
 Level: (low/med) LOW Date Received: 05/16/02
 % Moisture: not dec. _____ Date Analyzed: 05/21/02
 GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 2.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	-----Chloromethane	10	UJ
75-01-4	-----Vinyl Chloride	10	U
74-83-9	-----Bromomethane	10	UJ
75-00-3	-----Chloroethane	10	UJ
75-35-4	-----1,1-Dichloroethene	10	U
67-64-1	-----Acetone	20	UJ
75-15-0	-----Carbon Disulfide	10	UJ
75-09-2	-----Methylene Chloride	0.7	DJ
156-60-5	-----trans-1,2-Dichloroethene	10	U
75-34-3	-----1,1-Dichloroethane	10	U
156-59-2	-----cis-1,2-Dichloroethene	10	U
78-93-3	-----2-Butanone	20	UJ
67-66-3	-----Chloroform	10	U
71-55-6	-----1,1,1-Trichloroethane	10	U
56-23-5	-----Carbon Tetrachloride	10	U
71-43-2	-----Benzene	10	U
107-06-2	-----1,2-Dichloroethane	10	U
108-05-4	-----Vinyl Acetate	10	U
79-01-6	-----Trichloroethene	13	D
78-87-5	-----1,2-Dichloropropane	10	U
75-27-4	-----Bromodichloromethane	10	U
10061-01-5	-----cis-1,3-Dichloropropene	10	U
10061-02-6	-----trans-1,3-Dichloropropene	10	U
79-00-5	-----1,1,2-Trichloroethane	10	U
108-10-1	-----4-Methyl-2-Pentanone	20	U
108-88-3	-----Toluene	10	U
127-18-4	-----Tetrachloroethene	240	U
591-78-6	-----2-Hexanone	20	U
124-48-1	-----Dibromochloromethane	10	U
108-90-7	-----Chlorobenzene	10	U
100-41-4	-----Ethylbenzene	10	U
100-42-5	-----Styrene	10	U
75-25-2	-----Bromoform	10	U

Use circled result only

A

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DUP051602DL

Lab Name: STL/CT

Contract:

Lab Code: STLCT

Case No.: 201080

SAS No.:

SDG No.: 201080

Matrix: (soil/water) WATER

Lab Sample ID: 201080-8DL

Sample wt/vol: 5.000 (g/mL) ML

Lab File ID: M8816

Level: (low/med) LOW

Date Received: 05/16/02

% Moisture: not dec. _____

Date Analyzed: 05/21/02

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 2.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
-----	Xylene (total)	10	U

**DATA USABILITY SUMMARY REPORT (DUSR)
SUPERIOR GROUP, INC.
J&H SITE, CARLE PLACE, NEW YORK
SOIL SAMPLE ANALYSIS
ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)
PROJECT NUMBER R4906.00.01
ACCUTEST LABORATORIES JOB NUMBER N20424**

Deliverables:

The above referenced summary data package and analytical data package for sixteen (16) soil samples, one (1) blind field duplicate sample, one (1) field blank, one (1) trip blank and one (1) set of matrix spike/matrix spike duplicate (MS/MSD) samples contain all required deliverables as stipulated under the most current New York State Analytical Services Protocol (ASP) for Category B deliverables for Non-United States Environmental Protection Agency (USEPA) Contract Laboratory Protocol (CLP) methods. The sample specific analysis performed included Target Compound List (TCL) Volatile Organic Compounds (VOC) analyzed by USEPA SW-846 Method 8260B. All samples were analyzed in accordance with "Test Methods for Evaluation Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions." The data have been evaluated according to the protocols and quality control (QC) requirements of the analytical methods, the ASP, the USEPA CLP National Functional Guidelines for Organic Data Review (October 1999), the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-24, Revision 1, June 1999: Validating Volatile Organic Compounds by SW-846 Method 8260B and the reviewer's professional judgment.

This report pertains to the following samples:

<u>Samples</u>		<u>QC Samples</u>
SB-24 (1-2)	SB-28 (1-3)	DUP081602 (blind field duplicate of SB-26 (5-7))
SB-24 (10-11)	SB-28 (5-7)	SB-26 (5-7) MS /MSD
SB-25 (1-3)	SB-29 (1-3)	FB081602 (field blank)
SB-25 (5-7)	SB-29 (5-7)	TB081602 (trip blank)
SB-26 (1-3)	SB-30 (1-3)	
SB-26 (5-7)	SB-30 (5-7)	
SB-27 (1-3)	SB-31 (1-3)	
SB-27 (5-7)	SB-31 (5-7)	

Organics

The following items/criteria were reviewed for this report:

- Case narrative and deliverables compliance
- Holding times both technical and procedural and sample preservation
- Surrogate Compound recoveries, summary and data
- MS/MSD results, recoveries, summary and data
- Laboratory Control Sample (LCS) recoveries, summary and data
- Method blank summary and data
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning and performance
- Initial and continuing calibration summaries and data
- Internal standard areas, retention times, summary and data
- Blind Field Duplicate results
- Field Blank results
- Trip Blank results
- Organic analysis data sheets (Form I)
- GC/MS chromatograms, mass spectra and quantitation reports
- Quantitation/detection limits
- Qualitative and quantitative compound identification

The items listed above have been judged to be in compliance with the analytical methods and with the ASP and USEPA criteria with the exceptions discussed in the text below. The data have been evaluated according to the procedures outlined above and qualified accordingly.

Volatiles

- The percent recovery (%R) of several surrogate compounds were outside QC limits for the batch QC applicable to samples contained in this Job Number. No qualification of the sample data is required as the batch QC has no bearing on the sample contained in this Job Number. Due to internal standard deficiencies the trip blank and field blank were reanalyzed. These reanalyses contained deficient surrogate recoveries. Again, no qualification of the sample data is required as all %R were within QC limit for all soil samples.
- The following table lists blanks (method, trip and field blanks), blank contaminants with concentrations and the samples associated with the blanks. Detected sample concentrations of

methylene chloride, acetone, toluene or 2-butanone (common laboratory contaminants) less than ten times (10x) the highest associated blank (after taking sample dilution levels into account) are negated and qualified as a non-detect. For all other compounds, an action level of five times (5x) the highest associated blank concentration is used.

Blank	Contaminant	Concentration (Action Level)	Associated Samples
VG2198-MB1	methylene chloride	1.9 (19 µg/kg)	SB-26 (5-7)

- The following table lists compounds that exceeded 15 percent relative standard deviation (%RSD) for relative response factors (RRF) in the initial calibration (ICAL) or 20 percent difference (%D) between the initial calibration average response factor and the continuing calibration verification (CCV) response factor. Associated field samples are also listed. Positive results for these compounds in associated samples are considered estimated and flagged "J". All non-detect results for the compound of interest in the appropriate samples are flagged "UJ". Calibrations applicable to quality control samples only have not been listed.

Calibration	Compound	Deficiency	Associated Samples
ICAL 08/21/02 10:09-14:58	acetone 2-butanone	%RSD=19.19 %RSD=24.53	All soil samples except SB-24 (1-2), SB-24 (10-11) and SB-24 (1-2)DL
CCV 08/23/02 @ 17:44	4-methyl-2-pentanone	%D=20.7	SB-26 (1-3), SB-29 (1-3)
ICAL 08/19/02 19:36-23:08	acetone 2-hexanone	%RSD=32.48 %RSD=18.19	SB-24 (1-2), SB-24 (10-11)
ICAL 08/24/02 17:46-21:47	4-methyl-2-pentanone 2-hexanone styrene	%RSD=16.13 %RSD=22.92 %RSD=16.19	FB081602, TB081602
CCV 09/05/02 @ 01:23	carbon tetrachloride 1,2-dichloroethane	%D=28.6 %D=25.4	FB081602 RE, TB081602 RE
ICAL 08/15/02 12:58-19:06	bromoform	%RSD=15.32	SB-24 (1-2)DL

- Sample SB-24 (1-2) was reanalyzed at a 100-fold (100x) dilution due to target compound concentrations of tetrachloroethene exceeding the linear calibration range of the instrument in the initial analysis. The laboratory has reported all final on one analysis data sheets (Form I). No qualification of the sample data is required.
- The area response for the internal standard 1,4-dichlorobenzene-d4 (DCB) was below QC limits FB081602 and TB081602. These samples were reanalyzed outside holding time and acceptable, but still slightly low responses were observed. The initial analysis results should be utilized for both samples. Results for compounds using DCB for quantitation are considered estimated and flagged "J" for a positive detect while non-detects are flagged "UJ". No qualification is required to the soil samples.
- Tetrachloroethene was not detected in sample SB-26 (5-7), but was positively identified in the associated blind field duplicate DUP081602 (1.8 $\mu\text{g}/\text{kg}$). As a result, the concentration of tetrachloroethene in each sample is considered estimated and flagged "UJ" and "J" respectively.

Package Summary:

All data are valid and usable with qualifications as noted in this review.

Signed:


Andrew J. Coenen
Project Scientist

Dated: 24 September 2002

Report of Analysis

Client Sample ID:	DUP081602	Date Sampled:	08/16/02
Lab Sample ID:	N20424-1	Date Received:	08/17/02
Matrix:	SO - Soil	Percent Solids:	96.8
Method:	SW846 8260B		
Project:	Johnson & Hoffman, Carle Place, NY		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G51266.D	1	08/22/02	SJM	n/a	n/a	VG2199
Run #2							

Run #	Initial Weight
Run #1	5.0 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/kg	J
71-43-2	Benzene	ND	1.0	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	ug/kg	
75-25-2	Bromoform	ND	5.2	ug/kg	
74-83-9	Bromomethane	ND	5.2	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	ug/kg	J
75-15-0	Carbon disulfide	ND	5.2	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.2	ug/kg	
75-00-3	Chloroethane	ND	5.2	ug/kg	
67-66-3	Chloroform	ND	5.2	ug/kg	
74-87-3	Chloromethane	ND	5.2	ug/kg	
124-48-1	Dibromochloromethane	ND	5.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.2	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.2	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.2	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	ug/kg	
591-78-6	2-Hexanone	ND	5.2	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	ug/kg	
75-09-2	Methylene chloride	ND	5.2	ug/kg	
100-42-5	Styrene	ND	5.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	ug/kg	
127-18-4	Tetrachloroethene	1.8	5.2	ug/kg	J
108-88-3	Toluene	ND	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.2	ug/kg	
79-01-6	Trichloroethene	ND	5.2	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DUP081602	Date Sampled: 08/16/02
Lab Sample ID: N20424-1	Date Received: 08/17/02
Matrix: SO - Soil	Percent Solids: 96.8
Method: SW846 8260B	
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.2	ug/kg	
1330-20-7	Xylene (total)	ND	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		70-124%
17060-07-0	1,2-Dichloroethane-D4	84%		62-130%
2037-26-5	Toluene-D8	91%		75-125%
460-00-4	4-Bromofluorobenzene	115%		67-141%

Report of Analysis

Client Sample ID: SB-24 (1-2)	
Lab Sample ID: N20424-2	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 88.0
Project: Johnson & Hoffman, Carle Place, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S37072.D	1	08/20/02	KNV	n/a	n/a	VS1273
Run #2	T37736.D	1	08/21/02	GTT	n/a	n/a	VT1238

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g		
Run #2	5.0 g	5.0 ml	50.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	11	ug/kg	J
71-43-2	Benzene	ND	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.7	ug/kg	
75-25-2	Bromoform	ND	5.7	ug/kg	
74-83-9	Bromomethane	ND	5.7	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	
75-15-0	Carbon disulfide	ND	5.7	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.7	ug/kg	
108-90-7	Chlorobenzene	ND	5.7	ug/kg	
75-00-3	Chloroethane	ND	5.7	ug/kg	
67-66-3	Chloroform	ND	5.7	ug/kg	
74-87-3	Chloromethane	ND	5.7	ug/kg	
124-48-1	Dibromochloromethane	ND	5.7	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.7	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.7	ug/kg	
156-59-2	cis-1,2-Dichloroethene	32.3	5.7	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.7	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.7	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.7	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.7	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	ug/kg	
591-78-6	2-Hexanone	ND	5.7	ug/kg	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.7	ug/kg	
75-09-2	Methylene chloride	ND	5.7	ug/kg	
100-42-5	Styrene	ND	5.7	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.7	ug/kg	
127-18-4	Tetrachloroethene	20900 ^a	570	ug/kg	
108-88-3	Toluene	ND	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.7	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.7	ug/kg	
79-01-6	Trichloroethene	129	5.7	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-24 (1-2)	
Lab Sample ID: N20424-2	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 88.0
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.7	ug/kg	
1330-20-7	Xylene (total)	ND	2.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%	91%	70-124 %
17060-07-0	1,2-Dichloroethane-D4	81%	102%	62-130 %
2037-26-5	Toluene-D8	94%	95%	75-125 %
460-00-4	4-Bromofluorobenzene	91%	106%	67-141 %

(a) Result is from Run# 2

Report of Analysis

Client Sample ID: SB-24 (10-11)	
Lab Sample ID: N20424-3	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 95.7
Project: Johnson & Hoffman, Carle Place, NY	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #2	S37075.D	1	08/20/02	KNV	n/a	n/a	VS1273

Run #1	Initial Weight
Run #2	4.9 g

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	11	ug/kg	J
71-43-2	Benzene	ND	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.3	ug/kg	
75-25-2	Bromoform	ND	5.3	ug/kg	
74-83-9	Bromomethane	ND	5.3	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	
75-15-0	Carbon disulfide	ND	5.3	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.3	ug/kg	
108-90-7	Chlorobenzene	ND	5.3	ug/kg	
75-00-3	Chloroethane	ND	5.3	ug/kg	
67-66-3	Chloroform	ND	5.3	ug/kg	
74-87-3	Chloromethane	ND	5.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.3	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.3	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.3	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.3	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.3	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.3	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.3	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.3	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	ug/kg	
591-78-6	2-Hexanone	ND	5.3	ug/kg	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.3	ug/kg	
75-09-2	Methylene chloride	ND	5.3	ug/kg	
100-42-5	Styrene	ND	5.3	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.3	ug/kg	
127-18-4	Tetrachloroethene	149	5.3	ug/kg	
108-88-3	Toluene	ND	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.3	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.3	ug/kg	
79-01-6	Trichloroethene	3.0	5.3	ug/kg	J

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-24 (10-11)	
Lab Sample ID: N20424-3	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 95.7
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.3	ug/kg	
1330-20-7	Xylene (total)	ND	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		70-124%
17060-07-0	1,2-Dichloroethane-D4	88%		62-130%
2037-26-5	Toluene-D8	87%		75-125%
460-00-4	4-Bromofluorobenzene	85%		67-141%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-25 (1-3)	
Lab Sample ID: N20424-4	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 91.3
Project: Johnson & Hoffman, Carle Place, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G51267.D	1	08/22/02	SJM	n/a	n/a	VG2199
Run #2							

Run #	Initial Weight
Run #1	5.0 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	11	ug/kg	J
71-43-2	Benzene	ND	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.5	ug/kg	
75-25-2	Bromoform	ND	5.5	ug/kg	
74-83-9	Bromomethane	ND	5.5	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	J
75-15-0	Carbon disulfide	ND	5.5	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.5	ug/kg	
108-90-7	Chlorobenzene	ND	5.5	ug/kg	
75-00-3	Chloroethane	ND	5.5	ug/kg	
67-66-3	Chloroform	ND	5.5	ug/kg	
74-87-3	Chloromethane	ND	5.5	ug/kg	
124-48-1	Dibromochloromethane	ND	5.5	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.5	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.5	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.5	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.5	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.5	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	ug/kg	
591-78-6	2-Hexanone	ND	5.5	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.5	ug/kg	
75-09-2	Methylene chloride	ND	5.5	ug/kg	
100-42-5	Styrene	ND	5.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.5	ug/kg	
127-18-4	Tetrachloroethene	14.3	5.5	ug/kg	
108-88-3	Toluene	ND	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.5	ug/kg	
79-01-6	Trichloroethene	ND	5.5	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-25 (1-3)	
Lab Sample ID: N20424-4	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 91.3
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.5	ug/kg	
1330-20-7	Xylene (total)	ND	2.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		70-124%
17060-07-0	1,2-Dichloroethane-D4	76%		62-130%
2037-26-5	Toluene-D8	92%		75-125%
460-00-4	4-Bromofluorobenzene	114%		67-141%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-25 (5-7)	Date Sampled: 08/16/02
Lab Sample ID: N20424-5	Date Received: 08/17/02
Matrix: SO - Soil	Percent Solids: 97.4
Method: SW846 8260B	
Project: Johnson & Hoffman, Carle Place, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G51268.D	1	08/22/02	SJM	n/a	n/a	VG2199
Run #2							

Run #	Initial Weight
Run #1	4.9 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/kg	J
71-43-2	Benzene	ND	1.0	ug/kg	
75-27-4	Bromodichloromethane	ND	5.2	ug/kg	
75-25-2	Bromoform	ND	5.2	ug/kg	
74-83-9	Bromomethane	ND	5.2	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	ug/kg	J
75-15-0	Carbon disulfide	ND	5.2	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.2	ug/kg	
108-90-7	Chlorobenzene	ND	5.2	ug/kg	
75-00-3	Chloroethane	ND	5.2	ug/kg	
67-66-3	Chloroform	ND	5.2	ug/kg	
74-87-3	Chloromethane	ND	5.2	ug/kg	
124-48-1	Dibromochloromethane	ND	5.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.2	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.2	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.2	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.2	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	ug/kg	
591-78-6	2-Hexanone	ND	5.2	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.2	ug/kg	
75-09-2	Methylene chloride	ND	5.2	ug/kg	
100-42-5	Styrene	ND	5.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.2	ug/kg	
127-18-4	Tetrachloroethene	ND	5.2	ug/kg	
108-88-3	Toluene	ND	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.2	ug/kg	
79-01-6	Trichloroethene	ND	5.2	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-25 (5-7)	
Lab Sample ID: N20424-5	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 97.4
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.2	ug/kg	
1330-20-7	Xylene (total)	ND	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	83%		70-124%
17060-07-0	1,2-Dichloroethane-D4	73%		62-130%
2037-26-5	Toluene-D8	93%		75-125%
460-00-4	4-Bromofluorobenzene	113%		67-141%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-26 (1-3)	
Lab Sample ID: N20424-6	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 94.5
Project: Johnson & Hoffman, Carle Place, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G51330.D	1	08/24/02	SJM	n/a	n/a	VG2201
Run #2							

Run #	Initial Weight
Run #1	4.8 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	11	ug/kg	J
71-43-2	Benzene	ND	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.5	ug/kg	
75-25-2	Bromoform	ND	5.5	ug/kg	
74-83-9	Bromomethane	ND	5.5	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	J
75-15-0	Carbon disulfide	ND	5.5	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.5	ug/kg	
108-90-7	Chlorobenzene	ND	5.5	ug/kg	
75-00-3	Chloroethane	ND	5.5	ug/kg	
67-66-3	Chloroform	ND	5.5	ug/kg	
74-87-3	Chloromethane	ND	5.5	ug/kg	
124-48-1	Dibromochloromethane	ND	5.5	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.5	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.5	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.5	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.5	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.5	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	ug/kg	
591-78-6	2-Hexanone	ND	5.5	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.5	ug/kg	J
75-09-2	Methylene chloride	ND	5.5	ug/kg	
100-42-5	Styrene	ND	5.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.5	ug/kg	
127-18-4	Tetrachloroethene	9.4	5.5	ug/kg	
108-88-3	Toluene	ND	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.5	ug/kg	
79-01-6	Trichloroethene	ND	5.5	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-26 (1-3)	
Lab Sample ID: N20424-6	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 94.5
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.5	ug/kg	
1330-20-7	Xylene (total)	ND	2.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		70-124%
17060-07-0	1,2-Dichloroethane-D4	79%		62-130%
2037-26-5	Toluene-D8	94%		75-125%
460-00-4	4-Bromofluorobenzene	115%		67-141%

Report of Analysis

Client Sample ID: SB-26 (5-7)	
Lab Sample ID: N20424-7	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 95.9
Project: Johnson & Hoffman, Carle Place, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G51240.D	1	08/21/02	SJM	n/a	n/a	VG2198
Run #2							

Run #	Initial Weight
Run #1	4.9 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	11	ug/kg	J
71-43-2	Benzene	ND	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.3	ug/kg	
75-25-2	Bromoform	ND	5.3	ug/kg	
74-83-9	Bromomethane	ND	5.3	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	J
75-15-0	Carbon disulfide	ND	5.3	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.3	ug/kg	
108-90-7	Chlorobenzene	ND	5.3	ug/kg	
75-00-3	Chloroethane	ND	5.3	ug/kg	
67-66-3	Chloroform	ND	5.3	ug/kg	
74-87-3	Chloromethane	ND	5.3	ug/kg	
124-48-1	Dibromochloromethane	ND	5.3	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.3	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.3	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.3	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.3	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.3	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.3	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.3	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	ug/kg	
591-78-6	2-Hexanone	ND	5.3	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.3	ug/kg	
75-09-2	Methylene chloride	ND	5.3	ug/kg	
100-42-5	Styrene	ND	5.3	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.3	ug/kg	
127-18-4	Tetrachloroethene	ND	5.3	ug/kg	J
108-88-3	Toluene	ND	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.3	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.3	ug/kg	
79-01-6	Trichloroethene	ND	5.3	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

A

Report of Analysis

Client Sample ID: SB-26 (5-7)	Date Sampled: 08/16/02
Lab Sample ID: N20424-7	Date Received: 08/17/02
Matrix: SO - Soil	Percent Solids: 95.9
Method: SW846 8260B	
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.3	ug/kg	
1330-20-7	Xylene (total)	ND	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	82%		70-124%
17060-07-0	1,2-Dichloroethane-D4	71%		62-130%
2037-26-5	Toluene-D8	91%		75-125%
460-00-4	4-Bromofluorobenzene	113%		67-141%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-27 (1-3)	Date Sampled: 08/16/02
Lab Sample ID: N20424-8	Date Received: 08/17/02
Matrix: SO - Soil	Percent Solids: 92.9
Method: SW846 8260B	
Project: Johnson & Hoffman, Carle Place, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G51274.D	1	08/22/02	SJM	n/a	n/a	VG2199
Run #2							

Run #	Initial Weight
Run #1	4.7 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	11	ug/kg	J
71-43-2	Benzene	ND	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.7	ug/kg	
75-25-2	Bromoform	ND	5.7	ug/kg	
74-83-9	Bromomethane	ND	5.7	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	J
75-15-0	Carbon disulfide	ND	5.7	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.7	ug/kg	
108-90-7	Chlorobenzene	ND	5.7	ug/kg	
75-00-3	Chloroethane	ND	5.7	ug/kg	
67-66-3	Chloroform	ND	5.7	ug/kg	
74-87-3	Chloromethane	ND	5.7	ug/kg	
124-48-1	Dibromochloromethane	ND	5.7	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.7	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.7	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.7	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.7	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.7	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.7	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.7	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	ug/kg	
591-78-6	2-Hexanone	ND	5.7	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.7	ug/kg	
75-09-2	Methylene chloride	ND	5.7	ug/kg	
100-42-5	Styrene	ND	5.7	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.7	ug/kg	
127-18-4	Tetrachloroethene	9.8	5.7	ug/kg	
108-88-3	Toluene	ND	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.7	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.7	ug/kg	
79-01-6	Trichloroethene	ND	5.7	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-27 (1-3)	
Lab Sample ID: N20424-8	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 92.9
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.7	ug/kg	
1330-20-7	Xylene (total)	ND	2.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		70-124%
17060-07-0	1,2-Dichloroethane-D4	75%		62-130%
2037-26-5	Toluene-D8	92%		75-125%
460-00-4	4-Bromofluorobenzene	121%		67-141%

Report of Analysis

Client Sample ID: SB-27 (5-7)	
Lab Sample ID: N20424-9	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 98.0
Project: Johnson & Hoffman, Carle Place, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G51275.D	1	08/22/02	SJM	n/a	n/a	VG2199
Run #2							

Run #	Initial Weight
Run #1	4.7 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	11	ug/kg	J
71-43-2	Benzene	ND	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.4	ug/kg	
75-25-2	Bromoform	ND	5.4	ug/kg	
74-83-9	Bromomethane	ND	5.4	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	J
75-15-0	Carbon disulfide	ND	5.4	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.4	ug/kg	
108-90-7	Chlorobenzene	ND	5.4	ug/kg	
75-00-3	Chloroethane	ND	5.4	ug/kg	
67-66-3	Chloroform	ND	5.4	ug/kg	
74-87-3	Chloromethane	ND	5.4	ug/kg	
124-48-1	Dibromochloromethane	ND	5.4	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.4	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.4	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.4	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.4	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.4	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.4	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.4	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	ug/kg	
591-78-6	2-Hexanone	ND	5.4	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.4	ug/kg	
75-09-2	Methylene chloride	ND	5.4	ug/kg	
100-42-5	Styrene	ND	5.4	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.4	ug/kg	
127-18-4	Tetrachloroethene	ND	5.4	ug/kg	
108-88-3	Toluene	ND	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.4	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.4	ug/kg	
79-01-6	Trichloroethene	ND	5.4	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-27 (5-7)	
Lab Sample ID: N20424-9	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 98.0
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.4	ug/kg	
1330-20-7	Xylene (total)	ND	2.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	83%		70-124%
17060-07-0	1,2-Dichloroethane-D4	73%		62-130%
2037-26-5	Toluene-D8	93%		75-125%
460-00-4	4-Bromofluorobenzene	114%		67-141%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-28 (1-3)	
Lab Sample ID: N20424-10	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 96.6
Project: Johnson & Hoffman, Carle Place, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G51278.D	1	08/22/02	SJM	n/a	n/a	VG2199
Run #2							

Run #	Initial Weight
Run #1	4.7 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	11	ug/kg	J
71-43-2	Benzene	ND	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.5	ug/kg	
75-25-2	Bromoform	ND	5.5	ug/kg	
74-83-9	Bromomethane	ND	5.5	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	J
75-15-0	Carbon disulfide	ND	5.5	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.5	ug/kg	
108-90-7	Chlorobenzene	ND	5.5	ug/kg	
75-00-3	Chloroethane	ND	5.5	ug/kg	
67-66-3	Chloroform	ND	5.5	ug/kg	
74-87-3	Chloromethane	ND	5.5	ug/kg	
124-48-1	Dibromochloromethane	ND	5.5	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.5	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.5	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.5	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.5	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.5	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	ug/kg	
591-78-6	2-Hexanone	ND	5.5	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.5	ug/kg	
75-09-2	Methylene chloride	ND	5.5	ug/kg	
100-42-5	Styrene	ND	5.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.5	ug/kg	
127-18-4	Tetrachloroethene	ND	5.5	ug/kg	
108-88-3	Toluene	ND	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.5	ug/kg	
79-01-6	Trichloroethene	ND	5.5	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-28 (1-3)	
Lab Sample ID: N20424-10	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 96.6
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.5	ug/kg	
1330-20-7	Xylene (total)	ND	2.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		70-124%
17060-07-0	1,2-Dichloroethane-D4	80%		62-130%
2037-26-5	Toluene-D8	93%		75-125%
460-00-4	4-Bromofluorobenzene	117%		67-141%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-28 (5-7)	Date Sampled: 08/16/02
Lab Sample ID: N20424-11	Date Received: 08/17/02
Matrix: SO - Soil	Percent Solids: 94.7
Method: SW846 8260B	
Project: Johnson & Hoffman, Carle Place, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G51279.D	1	08/22/02	SJM	n/a	n/a	VG2199
Run #2							

Run #	Initial Weight
Run #1	4.5 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	12	ug/kg	J
71-43-2	Benzene	ND	1.2	ug/kg	
75-27-4	Bromodichloromethane	ND	5.9	ug/kg	
75-25-2	Bromoform	ND	5.9	ug/kg	
74-83-9	Bromomethane	ND	5.9	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	ug/kg	J
75-15-0	Carbon disulfide	ND	5.9	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.9	ug/kg	
108-90-7	Chlorobenzene	ND	5.9	ug/kg	
75-00-3	Chloroethane	ND	5.9	ug/kg	
67-66-3	Chloroform	ND	5.9	ug/kg	
74-87-3	Chloromethane	ND	5.9	ug/kg	
124-48-1	Dibromochloromethane	ND	5.9	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.9	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.9	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.9	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.9	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.9	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.9	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.9	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.9	ug/kg	
100-41-4	Ethylbenzene	ND	1.2	ug/kg	
591-78-6	2-Hexanone	ND	5.9	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.9	ug/kg	
75-09-2	Methylene chloride	ND	5.9	ug/kg	
100-42-5	Styrene	ND	5.9	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.9	ug/kg	
127-18-4	Tetrachloroethene	ND	5.9	ug/kg	
108-88-3	Toluene	ND	1.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.9	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.9	ug/kg	
79-01-6	Trichloroethene	ND	5.9	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-28 (5-7)	
Lab Sample ID: N20424-11	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 94.7
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.9	ug/kg	
1330-20-7	Xylene (total)	ND	2.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		70-124%
17060-07-0	1,2-Dichloroethane-D4	77%		62-130%
2037-26-5	Toluene-D8	93%		75-125%
460-00-4	4-Bromofluorobenzene	117%		67-141%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-29 (1-3)	
Lab Sample ID: N20424-12	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 94.6
Project: Johnson & Hoffman, Carle Place, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G51331.D	1	08/24/02	SJM	n/a	n/a	VG2201
Run #2							

	Initial Weight
Run #1	4.8 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	11	ug/kg	J
71-43-2	Benzene	ND	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.5	ug/kg	
75-25-2	Bromoform	ND	5.5	ug/kg	
74-83-9	Bromomethane	ND	5.5	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	J
75-15-0	Carbon disulfide	ND	5.5	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.5	ug/kg	
108-90-7	Chlorobenzene	ND	5.5	ug/kg	
75-00-3	Chloroethane	ND	5.5	ug/kg	
67-66-3	Chloroform	ND	5.5	ug/kg	
74-87-3	Chloromethane	ND	5.5	ug/kg	
124-48-1	Dibromochloromethane	ND	5.5	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.5	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.5	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.5	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.5	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.5	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	ug/kg	
591-78-6	2-Hexanone	ND	5.5	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.5	ug/kg	J
75-09-2	Methylene chloride	ND	5.5	ug/kg	
100-42-5	Styrene	ND	5.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.5	ug/kg	
127-18-4	Tetrachloroethene	ND	5.5	ug/kg	
108-88-3	Toluene	ND	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.5	ug/kg	
79-01-6	Trichloroethene	ND	5.5	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-29 (1-3)	
Lab Sample ID: N20424-12	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 94.6
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.5	ug/kg	
1330-20-7	Xylene (total)	ND	2.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		70-124%
17060-07-0	1,2-Dichloroethane-D4	83%		62-130%
2037-26-5	Toluene-D8	93%		75-125%
460-00-4	4-Bromofluorobenzene	114%		67-141%

Report of Analysis

Client Sample ID: SB-29 (5-7)	
Lab Sample ID: N20424-13	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 97.8
Project: Johnson & Hoffman, Carle Place, NY	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G51281.D	1	08/22/02	SJM	n/a	n/a	VG2199
Run #2							

	Initial Weight
Run #1	4.5 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	11	ug/kg	J
71-43-2	Benzene	ND	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.7	ug/kg	
75-25-2	Bromoform	ND	5.7	ug/kg	
74-83-9	Bromomethane	ND	5.7	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	J
75-15-0	Carbon disulfide	ND	5.7	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.7	ug/kg	
108-90-7	Chlorobenzene	ND	5.7	ug/kg	
75-00-3	Chloroethane	ND	5.7	ug/kg	
67-66-3	Chloroform	ND	5.7	ug/kg	
74-87-3	Chloromethane	ND	5.7	ug/kg	
124-48-1	Dibromochloromethane	ND	5.7	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.7	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.7	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.7	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.7	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.7	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.7	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.7	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	ug/kg	
591-78-6	2-Hexanone	ND	5.7	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.7	ug/kg	
75-09-2	Methylene chloride	ND	5.7	ug/kg	
100-42-5	Styrene	ND	5.7	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.7	ug/kg	
127-18-4	Tetrachloroethene	ND	5.7	ug/kg	
108-88-3	Toluene	ND	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.7	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.7	ug/kg	
79-01-6	Trichloroethene	ND	5.7	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-29 (5-7)	
Lab Sample ID: N20424-13	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 97.8
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.7	ug/kg	
1330-20-7	Xylene (total)	ND	2.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%		70-124%
17060-07-0	1,2-Dichloroethane-D4	78%		62-130%
2037-26-5	Toluene-D8	92%		75-125%
460-00-4	4-Bromofluorobenzene	118%		67-141%

Report of Analysis

Client Sample ID: SB-30 (1-3)	
Lab Sample ID: N20424-14	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 93.6
Project: Johnson & Hoffman, Carle Place, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G51392.D	1	08/26/02	SJM	n/a	n/a	VG2202
Run #2							

Run #	Initial Weight
Run #1	4.8 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	11	ug/kg	J
71-43-2	Benzene	ND	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.6	ug/kg	
75-25-2	Bromoform	ND	5.6	ug/kg	
74-83-9	Bromomethane	ND	5.6	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	J
75-15-0	Carbon disulfide	ND	5.6	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.6	ug/kg	
108-90-7	Chlorobenzene	ND	5.6	ug/kg	
75-00-3	Chloroethane	ND	5.6	ug/kg	
67-66-3	Chloroform	ND	5.6	ug/kg	
74-87-3	Chloromethane	ND	5.6	ug/kg	
124-48-1	Dibromochloromethane	ND	5.6	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.6	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.6	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.6	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.6	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.6	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	ug/kg	
591-78-6	2-Hexanone	ND	5.6	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.6	ug/kg	
75-09-2	Methylene chloride	ND	5.6	ug/kg	
100-42-5	Styrene	ND	5.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.6	ug/kg	
127-18-4	Tetrachloroethene	ND	5.6	ug/kg	
108-88-3	Toluene	1.3	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.6	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.6	ug/kg	
79-01-6	Trichloroethene	ND	5.6	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-30 (1-3)	Date Sampled: 08/16/02
Lab Sample ID: N20424-14	Date Received: 08/17/02
Matrix: SO - Soil	Percent Solids: 93.6
Method: SW846 8260B	
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.6	ug/kg	
1330-20-7	Xylene (total)	ND	2.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	81%		70-124%
17060-07-0	1,2-Dichloroethane-D4	75%		62-130%
2037-26-5	Toluene-D8	92%		75-125%
460-00-4	4-Bromofluorobenzene	111%		67-141%

Report of Analysis

Client Sample ID: SB-30 (5-7)	
Lab Sample ID: N20424-15	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 97.5
Project: Johnson & Hoffman, Carle Place, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G51283.D	1	08/22/02	SJM	n/a	n/a	VG2199
Run #2							

Run #	Initial Weight
Run #1	4.7 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	11	ug/kg	J
71-43-2	Benzene	ND	1.1	ug/kg	
75-27-4	Bromodichloromethane	ND	5.5	ug/kg	
75-25-2	Bromoform	ND	5.5	ug/kg	
74-83-9	Bromomethane	ND	5.5	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	J
75-15-0	Carbon disulfide	ND	5.5	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.5	ug/kg	
108-90-7	Chlorobenzene	ND	5.5	ug/kg	
75-00-3	Chloroethane	ND	5.5	ug/kg	
67-66-3	Chloroform	ND	5.5	ug/kg	
74-87-3	Chloromethane	ND	5.5	ug/kg	
124-48-1	Dibromochloromethane	ND	5.5	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.5	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.5	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.5	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.5	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.5	ug/kg	
100-41-4	Ethylbenzene	ND	1.1	ug/kg	
591-78-6	2-Hexanone	ND	5.5	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.5	ug/kg	
75-09-2	Methylene chloride	ND	5.5	ug/kg	
100-42-5	Styrene	ND	5.5	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.5	ug/kg	
127-18-4	Tetrachloroethene	ND	5.5	ug/kg	
108-88-3	Toluene	ND	1.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.5	ug/kg	
79-01-6	Trichloroethene	ND	5.5	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-30 (5-7)	Date Sampled: 08/16/02
Lab Sample ID: N20424-15	Date Received: 08/17/02
Matrix: SO - Soil	Percent Solids: 97.5
Method: SW846 8260B	
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.5	ug/kg	
1330-20-7	Xylene (total)	ND	2.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	84%		70-124%
17060-07-0	1,2-Dichloroethane-D4	78%		62-130%
2037-26-5	Toluene-D8	92%		75-125%
460-00-4	4-Bromofluorobenzene	117%		67-141%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-31 (1-3)		
Lab Sample ID: N20424-16		Date Sampled: 08/16/02
Matrix: SO - Soil		Date Received: 08/17/02
Method: SW846 8260B		Percent Solids: 98.8
Project: Johnson & Hoffman, Carle Place, NY		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G51391.D	1	08/26/02	SJM	n/a	n/a	VG2202
Run #2							

Run #1	Initial Weight
Run #1	5.1 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	9.9	ug/kg	J
71-43-2	Benzene	ND	0.99	ug/kg	
75-27-4	Bromodichloromethane	ND	5.0	ug/kg	
75-25-2	Bromoform	ND	5.0	ug/kg	
74-83-9	Bromomethane	ND	5.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.9	ug/kg	J
75-15-0	Carbon disulfide	ND	5.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.0	ug/kg	
108-90-7	Chlorobenzene	ND	5.0	ug/kg	
75-00-3	Chloroethane	ND	5.0	ug/kg	
67-66-3	Chloroform	ND	5.0	ug/kg	
74-87-3	Chloromethane	ND	5.0	ug/kg	
124-48-1	Dibromochloromethane	ND	5.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.0	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	ug/kg	
100-41-4	Ethylbenzene	ND	0.99	ug/kg	
591-78-6	2-Hexanone	ND	5.0	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/kg	
75-09-2	Methylene chloride	ND	5.0	ug/kg	
100-42-5	Styrene	ND	5.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	ug/kg	
127-18-4	Tetrachloroethene	ND	5.0	ug/kg	
108-88-3	Toluene	ND	0.99	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	ug/kg	
79-01-6	Trichloroethene	ND	5.0	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-31 (1-3)	
Lab Sample ID: N20424-16	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 98.8
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.0	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	80%		70-124%
17060-07-0	1,2-Dichloroethane-D4	73%		62-130%
2037-26-5	Toluene-D8	91%		75-125%
460-00-4	4-Bromofluorobenzene	110%		67-141%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-31 (5-7)	
Lab Sample ID: N20424-17	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 97.2
Project: Johnson & Hoffman, Carle Place, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	G51285.D	1	08/23/02	SJM	n/a	n/a	VG2199
Run #2							

Run #	Initial Weight
Run #1	5.0 g
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/kg	J
71-43-2	Benzene	ND	1.0	ug/kg	
75-27-4	Bromodichloromethane	ND	5.1	ug/kg	
75-25-2	Bromoform	ND	5.1	ug/kg	
74-83-9	Bromomethane	ND	5.1	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	ug/kg	J
75-15-0	Carbon disulfide	ND	5.1	ug/kg	
56-23-5	Carbon tetrachloride	ND	5.1	ug/kg	
108-90-7	Chlorobenzene	ND	5.1	ug/kg	
75-00-3	Chloroethane	ND	5.1	ug/kg	
67-66-3	Chloroform	ND	5.1	ug/kg	
74-87-3	Chloromethane	ND	5.1	ug/kg	
124-48-1	Dibromochloromethane	ND	5.1	ug/kg	
75-34-3	1,1-Dichloroethane	ND	5.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	5.1	ug/kg	
75-35-4	1,1-Dichloroethene	ND	5.1	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.1	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.1	ug/kg	
78-87-5	1,2-Dichloropropane	ND	5.1	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.1	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.1	ug/kg	
100-41-4	Ethylbenzene	ND	1.0	ug/kg	
591-78-6	2-Hexanone	ND	5.1	ug/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.1	ug/kg	
75-09-2	Methylene chloride	ND	5.1	ug/kg	
100-42-5	Styrene	ND	5.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.1	ug/kg	
127-18-4	Tetrachloroethene	ND	5.1	ug/kg	
108-88-3	Toluene	ND	1.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.1	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.1	ug/kg	
79-01-6	Trichloroethene	ND	5.1	ug/kg	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-31 (5-7)	
Lab Sample ID: N20424-17	Date Sampled: 08/16/02
Matrix: SO - Soil	Date Received: 08/17/02
Method: SW846 8260B	Percent Solids: 97.2
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	5.1	ug/kg	
1330-20-7	Xylene (total)	ND	2.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%		70-124%
17060-07-0	1,2-Dichloroethane-D4	81%		62-130%
2037-26-5	Toluene-D8	93%		75-125%
460-00-4	4-Bromofluorobenzene	116%		67-141%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: FB081602	Date Sampled: 08/16/02
Lab Sample ID: N20424-18	Date Received: 08/17/02
Matrix: AQ - Field Blank Soil	Percent Solids: n/a
Method: SW846 8260B	
Project: Johnson & Hoffman, Carle Place, NY	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S37312.D	1	08/26/02	KNV	n/a	n/a	VS1280
Run #2 ^a	S37739.D	1	09/05/02	KNV	n/a	n/a	VS1294

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	4.0	ug/l	
74-83-9	Bromomethane	ND	5.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	J
108-90-7	Chlorobenzene	ND	2.0	ug/l	
75-00-3	Chloroethane	ND	5.0	ug/l	
67-66-3	Chloroform	ND	5.0	ug/l	
74-87-3	Chloromethane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l	J
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l	J
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l	J
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	

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ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: FB081602	Date Sampled: 08/16/02
Lab Sample ID: N20424-18	Date Received: 08/17/02
Matrix: AQ - Field Blank Soil	Percent Solids: n/a
Method: SW846 8260B	
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%	114%	83-118%
17060-07-0	1,2-Dichloroethane-D4	115%	134% ^b	69-127%
2037-26-5	Toluene-D8	100%	101%	82-119%
460-00-4	4-Bromofluorobenzene	115%	102%	81-121%

(a) Confirmation run.

(b) Outside control limits.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TB081602	Date Sampled: 08/16/02
Lab Sample ID: N20424-19	Date Received: 08/17/02
Matrix: AQ - Trip Blank Soil	Percent Solids: n/a
Method: SW846 8260B	
Project: Johnson & Hoffman, Carle Place, NY	

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	S37313.D	1	08/26/02	KNV	n/a	n/a	VS1280
Run #2 ^a	S37740.D	1	09/05/02	KNV	n/a	n/a	VS1294

Run #1	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	1.0	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	4.0	ug/l	
74-83-9	Bromomethane	ND	5.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	J
108-90-7	Chlorobenzene	ND	2.0	ug/l	
75-00-3	Chloroethane	ND	5.0	ug/l	
67-66-3	Chloroform	ND	5.0	ug/l	
74-87-3	Chloromethane	ND	5.0	ug/l	
124-48-1	Dibromochloromethane	ND	5.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/l	J
75-35-4	1,1-Dichloroethene	ND	2.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	5.0	ug/l	J
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	ug/l	J
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/l	J
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	3.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	

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ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TB081602	Date Sampled: 08/16/02
Lab Sample ID: N20424-19	Date Received: 08/17/02
Matrix: AQ - Trip Blank Soil	Percent Solids: n/a
Method: SW846 8260B	
Project: Johnson & Hoffman, Carle Place, NY	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%	113%	83-118%
17060-07-0	1,2-Dichloroethane-D4	119%	133% ^b	69-127%
2037-26-5	Toluene-D8	101%	101%	82-119%
460-00-4	4-Bromofluorobenzene	114%	103%	81-121%

(a) Confirmation run.

(b) Outside control limits.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound