REMEDIAL INVESTIGATION REPORT
VOLUNTARY CLEANUP PROGRAM
INDEX NUMBER D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK
VOLUME I OF II

Prepared For

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1.0 INTRODUCTION

The premises located at 21-16 44th Road, Long Island City, New York ("the Site") is the subject of a Voluntary Cleanup Program (VCP), Index Number D2-0023-00-08 by Virginia S. Peterson, as Trustee, Wendy Peterson Smithson, Judy Ann Sarkisian, Arthur Corey Sarkisian, David P. Close, as Successor Executor/Trustee, Gabrielle V. Sarkisian as Successor Executor/Trustee and Frederick Hanssen, as Successor Executor/Trustee pursuant to the New York State Department of Environmental Conservation (NYSDEC) VCP. Figure 1 shows the location of the Site in the Long Island City area. The Site consists of approximately 30,000 sq. ft. (square feet) building with a basement area of 10,000 sq. ft. and approximately 5,000 sq. ft. parking lot.

Previous uses of the Site included metal cleaning, painting, degreasing, plating and finishing. Advanced Cleanup Technologies, Inc. (ACT), 115 Rome Street, Farmingdale, New York conducted a Phase I and Phase II investigation and completed an IRM between January 2000 and January 2002. Leggette, Brashears & Graham, Inc. (LBG), 110 Corporate Park Drive, Suite 112, White Plains, New York completed additional IRM and an investigation program for determination of soil and ground-water conditions beneath the site and to obtain data for preparation of a RWP.

The remedial investigation includes the following field activities:

1. Investigation of the first floor and basement area.
   - collection of soil and ground-water samples from geoprobe borings for laboratory analysis;
   - installation of vapor points in the unsaturated zone and collection of vapor samples for laboratory analysis; and,
   - analysis of soil, ground-water and vapor samples.

2. Investigation of the parking lot.
   - collection of soil samples from geoprobe borings; and,
   - analysis of soil for lead.

3. Additional investigation of the former drum storage area.
   - collection of soil samples from geoprobe borings; and,
   - installation of permanent ground-water monitor wells to define the vertical extent of dissolved solvents (cluster wells).

4. Investigation for additional ground-water quality data.
   - installation of an upgradient monitor well; and,
   - installation of monitor wells in the former storage drum area (for additional delineation).

5. Ground-water monitoring program.
   - top of casing elevation survey of all monitor wells;
   - collection and analysis of ground-water samples from onsite and offsite monitor wells; and,
   - ground-water level measurements.

6. Surficial soil sampling, laboratory analysis and disposal (first floor and basement) of fill/ash material from basement and first floor area.

7. Data evaluation and preparation of Remedial Investigation Report (RIR). The report will include the following:
   - description of field activities;
   - site maps showing geoprobe borings, well location;
   - data summary tables;
   - soil borings logs;
   - sampling logs;

- laboratory data;
- field notes; and,
- results of investigation.

2.0 SITE LOCATION AND DESCRIPTION

The Site, 21-16 44th Road, is located in an industrial area in the northwest portion of the Borough of Queens in New York City. The Site is located on the southeast corner of the intersection of 44th Road and 21st Street. The East River is located approximately 2,000 feet to the west of the Site. A site map and its immediate vicinity is presented in figure 2.

The Site consists of a four-story masonry and stucco structure. The footprint of the building is approximately 30,000 square feet in area. A parking lot, approximately 5,000 square feet in area, is also present in the southwest corner of the Site. The ground surface of the parking lot is covered with asphalt. A small area to the immediate south of the building, formerly used for drum storage, remains unpaved.

Natural gas and water services enter the building underground along the western property boundary. The gas and water meters for the building are located in the western portion of the first floor. The electrical service enters the building along the northern property boundary. Electric meters are located in the northern portion of the basement and the southern portion of the ground floor. The Site is connected to the New York City municipal sewer system with the connection located to the north of the property along 44th Road.

The Site is a former drapery hardware manufacturer and distributor. The eastern portion of the factory was dedicated to cleaning, de-greasing, oil-extraction, powder coating and painting of metal drapery hardware. Prior to this usage, the Site is believed to have contained a metal plating and finishing facility. The Site is presently under reconstruction.

3.0 BACKGROUND

3.1 ACT Phase I Environmental Site Assessment

ACT completed a report titled: "Phase I Environmental Site Assessment" for the Site which is dated May 14, 1997. The Phase I Environmental Site Assessment of the Site has revealed numerous Recognized Environmental Conditions (REC). A summary of this report is presented in the LBG Interim Remedial Measures (IRM) report submitted on June 12, 2002. The IRM report is included as Appendix I.

3.2 ACT Phase II Environmental Site Assessment

ACT conducted a subsurface investigation and completed a report titled: "Phase II Environmental Site Assessment" for the Site dated July 14, 1997 which was submitted to NYSDEC. This investigation includes drilling of soil borings and collection of soil samples from the metal plating and degreasing tank area, exterior drum storage area, 5,000-gallon fuel oil and underground storage tank (UST) and oil pump. Soil samples were analyzed for volatile organic compounds (VOCs) and metals. A summary of this report is presented in the June 12, 2002 IRM report (Appendix I).

3.3 ACT Revised Supplemental Investigation Report

ACT completed a report titled: "Revised Supplemental Investigation Report" for the Site dated August 23, 2001 which was also submitted to NYSDEC. A summary of this report is presented in the June 12, 2002 IRM report (Appendix I).

During this phase, twelve soil borings were drilled at the site, both inside and outside of the building. Soil samples were collected from the borings and submitted to a laboratory for analysis. Summary information regarding the supplemental investigation is also included in the IRM report as a part of the supplemental investigation.

ACT supervised the installation of four PVC monitor wells along the exterior of the building and one PVC piezometer inside the building. Ground-water samples were collected from the wells and submitted to a laboratory for analysis. Due to Site constraints, the piezometer could not be constructed with a suitable sand pack surrounding the screened area. As a result, excessive sediment was allowed into the well.

ACT personnel collected one sediment sample from each of the sumps (SD-01 and SD-03) and drain (SD-02) at the Site. Two sumps are located within the building and one drain is located outside of the building. Each sample was submitted to a laboratory for analysis (Appendix I). Following NYSDEC approval, the piezometer (also identified as MW-4) was removed by LBG on February 12, 2002.

3.4 ACT Interim Remedial Measures

During the IRM, ACT supervised the excavation of approximately 15 cubic yards of soil from beneath the former drum storage area. Endpoint soil samples were collected from the east wall, south wall and north wall of the excavation; however, no endpoint soil samples were collected from the west wall or the bottom of the excavation.

ACT supervised the excavation of the sediments within two sumps (SD-01 and SD-03) inside the building and from the drain (SD–02) located outside of the building.

ACT supervised the removal of all of the sediment within SD-01 and SD-02. As reported by ACT, SD–01 was constructed with a concrete bottom and brick sidewalls and SD-02 was constructed of concrete. Due to the reported solid construction of SD-01 and SD-02, there were no endpoint sediment samples collected. Following the IRM, ACT completed a report entitled: "Closure Report" dated January 30, 2002 submitted to NYSDEC.

3.5 LBG Interim Remedial Measures

LBG was retained to supervise the re-excavation of backfill to the depth of the former excavation performed by ACT and to excavate remaining contaminated soils in the former drum storage area. Additionally, LBG supervised the enlargement of the sump (SD-03) excavation and the re-excavation of sediments beneath the sump until no staining was evident. The purpose of this work was to remove all the contaminated soil and sediment above the groundwater table in these areas of the Site, where feasible. The field activities were conducted to supplement excavation activities performed by ACT on December 17, 2001. The activities performed by LBG consisted of:

- excavation of contaminated soil from the former drum storage area;
- excavation of contaminated soil from the sump (SD-03) located in the northeast

corner of the basement;

- collection for analysis of soil samples from the above-referenced excavations, the sump, the excavation soil stockpiles, and the three drums of sediment generated from the sump;
- disposal of the contaminated soil stockpile generated from the drum storage area excavation, and the three drums of sediment generated from the sump;
- removal and backfilling with sand of the piezometer located in the basement; and
- conducting community air monitoring for the work area.

A copy of this report is included in Appendix I.

4.0 GEOLOGY AND HYDROGEOLOGY

4.1 Regional Geology and Hydrogeology

The Site is located in the Atlantic Coastal Plain physiographic province. The geology of this province is comprised of interbedded layers of sand, clay and marl. In Long Island the marine deposits are overlain by drift. The marine deposits are Cretaceous and Quaternary. The drift deposits are derived from glacial activity that occurred during the Pleistocene. The total thickness of the marine and glacial deposits in Queens County ranges from 0 foot in northwestern Queens (Long Island City) to 1,100 feet thick in southeastern Queens.

The ground-water resources that underlie western Long Island is composed of a series of unconsolidated deposits of sand, gravel and clay of late Cretaceous and Pleistocene age. The principal water-bearing units that provide usable quantities of water are the Upper Glacial Aquifer, the Jameco Aquifer, the Magothy Aquifer and the Lloyd Aquifer. Except for the Upper Glacial Aquifer and Jameco Aquifer, these units are vertically separated from each other by confining clay units.

4.2 Site Specific Geology and Hydrogeology

The topography of the site area is generally level. Ground surface elevations at the site are approximately 15 feet above msl (mean sea level). Geologic logs for the monitor wells and

geoprobe borings are attached in Appendix II. As described in the logs, the shallow sediments beneath the Site consist primarily of silt, and fill/ash material, underlain by fine to medium sand. A layer of ash material, approximately 0.5 to 1.0 foot thick was present beneath the concrete slabs for the first floor and basement. The upper silt layer is between 4 and 16 feet thick and it exists across most of the site. The exception is beneath the basement on the east side of the building, which is approximately 11 feet lower in elevation relative to the first floor. The silt in this area was most likely removed during construction. In the parking lot area the silt is mixed with fill material, which included bricks, wood, ash and sand and gravel. Beneath the silt is a layer of fine to medium sand, which was encountered in all areas of the site. The sand extends down to the bedrock surface, which at this site was encountered between 17 and 27 ft bg (feet below grade).

During drilling activities, ground water was encountered in the sand layer, approximately 4 ft bg beneath the basement and 13 ft bg across the remainder of the site. Water-level measurements were collected from the monitor wells on September 12, 2002 and are presented on table 1. Based on these measurements, the water-table elevation is approximately 2 feet above msl and the general direction of flow is towards the southwest.

5.0 FIELD ACTIVITIES

All field activities were completed in accordance with the following documents:

- Remedial Work Plan submitted on June 12, 2002;
- NYSDEC letter dated July 30, 2002;
- Interim Remedial Work Plan (Addendum) submitted on July 30, 2002;
- Additional Investigation Work Plan submitted on August 20, 2002; and,
- Interim Remedial Work Plan (Addendum No. 2) submitted September 20, 2002.

The interim remedial measures and subsurface investigation were also conducted based on site visits or meetings with the Project Manager from NYSDEC Region II and meetings onsite or at the NYSDEC Region II office with Project Manager and the Chief of Hazardous Waste Remediation and representatives of the Department of Health, Department of Education and Environmental Consultants for previous and existing owners of the site.

The following is a summary of these meetings and site visits:

07/17/02	Site visit by Ms. Ioana Munteanu, Environmental Engineer, Project Manager from NYSDEC Region II.
07/23/02	Onsite meeting with Mr. Dennis Wolterding, Chief, Hazardous Waste Remediation, NYSDEC Region II; Ms. Ioana Munteanu, Environmental Engineer, Project Manager NYSDEC, Region II; Mr. Dan Buzea, Consultant, LBG; and, Mr. Arnold Fleming, Consultant, Fleming-Lee Shue, Inc., regarding subsurface investigation.
08/01/02	Site visit by Ms. Ioana Munteanu, Project Manager, for geoprobe investigation.
08/07/02	Site visit by Ms. Ioana Munteanu, Project Manager, during vapor sampling.
08/13/02	Site visit by Ms. Ioana Munteanu, Project Manager, during soil sampling.
08/14/02	Meeting at NYSDEC, Region II office among Mr. Dennis Wolterding, Chief, Hazardous Waste Remediation; Ms. Ioana Munteanu, Environmental Engineer, Project Manager; Mr. Dan Buzea of LBG; and Mr. Arnold Fleming of Fleming-Lee Shue, Inc. regarding additional investigation.
08/22/02	Site visit by Ms. Ioana Munteanu, Project Manager, and Mr. Vadim Brevdo, Environmental Engineers from NYSDEC Region II.
09/03/02 and 09/04/02	Onsite visit by Ms. Ioana Munteanu, Project Manager, and Vadim Brevdo, Environmental Engineer from NYSDEC Region II during ground-water sampling.
09/12/02	Meeting at NYSDEC, Region II office with Ms. Ioana Munteanu, NYSDEC; Ms. Catherine Miceli, LBG; Mr. Dan Buzea, LBG; Mr. Sean Groszkowski, LBG; Mr. Arnold

Fleming; Fleming-Lee Shue, Inc.; Ms. Sue Saunders, New York City Department of Education; Mr. Paul Stewart, Advanced Cleanup Technologies; Ms. Bridget Callaghan, NYSDOH; Ms. Dawn Hettrick, NYSDOH; and, Mr. Dennis Wolterding, NYSDEC.

09/19/02 Meeting at NYSDEC, Region II office with Ms. Ioana Munteanu, Project Manager; Mr. Dan Buzea of LBG; Mr. Arnold Fleming of Fleming-Lee Shue, Inc.; and, Mr. Sean Groszkowski of LBG.

In addition, laboratory data, summary tables and maps were submitted periodically to the NYSDEC.

5.1 Investigation Of First Floor Area

On August 1 and 2, 2002 and August 5, 2002, 9 geoprobe borings were drilled through the first floor of the onsite building. The drilling of geoprobe borings were conducted prior to the removal of the concrete floor slab.

5.1.1 Soil Sampling

On August 1, 2 and 5, 2002, nine geoprobe borings were drilled to depths ranging between 16 and 20 ft bg. The locations of the geoprobe borings are shown on figure 3. During the drilling continuous soil samples were collected using a 4-foot macrocore sampling device. The geologic logs of each geoprobe boring are in Appendix II. Two soil samples per boring were selected for laboratory analysis. The first soil sample selected for laboratory analysis was from 0-1 foot below the floor grade, while the second soil sample was selected based on the highest PID reading or, from the soil sample collected from above or at the ground-water level. The soil sampling was observed on August 1, 2002 by Ms. Ioana Munteanu, Project Manager of NYSDEC Region II.

The soil samples were submitted to the laboratory for analysis of VOCs (EPA Method 8260), semivolatile organic compounds (SVOCs) (EPA Method 8270), total metals, Toxicity Characteristic Leaching Procedure (TCLP) metals and pesticides and PCBs.

5.1.2 Ground-Water Sampling

On August 1, 2 and 5, 2002, ground-water samples were collected from the geoprobe borings using a 4 foot, 1-inch stainless steel screen which was installed inside of the boring from approximately 16 to 20 feet below the concrete floor. Dedicated polyethylene tubing was inserted inside of the stainless steel screen at approximately 2 to 4 feet below the static ground-water level. The ground-water samples were collected using a peristaltic pump.

During pumping, the ground-water turbidity was measured using a portable water-quality meter. A ground-water sample was collected when the turbidity measurement was below 50 nephelometric turbidity units. Ground-water sampling was observed by Ms. Ioana Munteanu, Environmental Engineer of the NYSDEC. Ground-water samples were sent to laboratory for analysis of VOCs (EPA Method 8260), SVOCs (EPA Method 8270), metals, pesticides and PCBs.

5.1.3 Soil Vapor Sampling

On August 1, 2 and 5, 2002, nine temporary soil vapor collection points were installed in the unsaturated zone of each geoprobe boring (figure 3). The vapor collection point consisted of a 1-inch diameter PVC pipe, screened from 0 to 5 feet and 11 to 16 feet below the first floor and extending approximately 1 foot above grade. The ground level/grade area around each vapor point was sealed with bentonite and a cap was placed on each vapor point piping.

Vapor samples were collected on August 7 and August 15, 2002 from each vapor point using dedicated tubing and a peristaltic pump. At approximately 30 seconds to 1 minute after the pump was put in operation, a photoionization detector (PID) reading was collected from the sampling tube. The tubing was then connected to

a Tedlar (3 liter) bag and a vapor sample was collected in the bag for approximately 15 minutes. Each sampling bag was delivered to laboratory for analysis of VOCs by Method USEPA TO-14. The collection of vapor sampling on August 7, 2002 was also observed by Ms. Ioana Munteanu, Project Manager for NYSDEC Region II.

5.2 Investigation of Basement Area

Between July 16 and 18, 2002 the concrete slab was removed from the basement area, exposing the soil beneath. The concrete was broken in pieces using air powered jackhammers and transported out. During this operation the work area was consistently wetted down with water mist from pressure washers. In addition, an air monitoring program was implemented using a PID both in the work area and down wind. After the soil was exposed, it was visually inspected for staining and screened for VOCs using a PID. It was determined that directly beneath the concrete slab a layer of approximately 0.5 to 1 foot of fill and ash was present. It was determined that the fill/ash layer had to be removed in order to evaluate the underlying soil. Prior to removal, four composite samples of the fill/ash layer were collected from the basement area and analyzed in laboratory.

5.2.1. Soil Sampling

Following the removal of fill/ash material on August 6, 2002, nine geoprobe borings were drilled to approximately 8 feet below the basement grade. The location of the geoprobe borings are shown on figure 3. During the drilling, continuous soil samples were collected using a 4-foot macrocore sampling device. The geologic logs for each geoprobe boring are presented in Appendix II.

Two soil samples per geoprobe boring were selected for laboratory analysis. Because of the limited unsaturated zone in the basement area, the first sample submitted for laboratory analysis was collected from 0-1 ft bg (feet below basement grade) and the second sample was taken from 4-6 ft bg. Each soil sample was analyzed for VOCs (EPA Method 8260), SVOCs (EPA Method 8270), CLP metals (totals), TCLP metals, pesticide and PCBs.

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elevator shaft pits and a surface-water drain located outside the building adjacent to the south-central section of the first floor. Not composite

Composite soil samples were collected from the east and west sides of the elevator shaft pit located in the eastern section of the first floor. Composite soil samples were collected from the east and west sides of the elevator shaft pit, located in the southwestern section of the first floor. A composite sample was collected from a stockpile of soil removed from the work elevator located in the north-central section of the first floor. A composite sample was collected from the soil at the bottom of a surface-water drain located outside the building adjacent to the south-central section of the first floor.

All samples were sent to the laboratory and analyzed by USEPA Methods 8260 and 8270. All samples were also analyzed for TCLP metals, PCBs and pesticides. Each soil sample was composited in a stainless steel bowl and mixed with a stainless steel spoon and then sampled. The bowl and spoon were decontaminated with Alconox detergent between each sampling event.

Summary tables of laboratory analyses of the soil samples collected from the elevator shafts and drainage are included in Appendix III.

6.0 PARKING LOT INVESTIGATION

The sampling performed by ACT indicated that samples from soil boring SB-03 contained 345 ug/l (micrograms per liter) TCLP lead from 0-2 ft bg. In order to better characterize the subsurface soil and to further delineate the horizontal and vertical extent of lead impacted fill, additional geoprobe borings were drilled on April 12, 2002. Eight borings were positioned in a grid around SB-03 and advanced to 8 ft bg. A boring location map is shown on figure 3. (The location of these borings were presented on figure 2 in the Remedial Work Plan report dated June 12, 2002.) Samples were collected in 2-foot increments and analyzed for total lead. Of these 32 samples, 7 were reanalyzed for TCLP lead, one of which was classified as hazardous PGP-4 (4-6 ft bg). The geoprobe borings drilled in April 12, 2002 are listed on figure 3 as PGP-1 to PGP-8.

On August 16, 2002, 6 soil borings were drilled by the geoprobe drilling method in the parking lot area (PGP-9 to PGP-14). The purpose of the borings was to delineate the vertical and horizontal extent of lead in the parking lot soil. All of the boring locations are shown on figure 3. During the drilling, soil samples were collected continuously from grade to 16 to 20 ft bg at 4 foot increments. Each soil sample was visually examined by an LBG hydrogeologist, described on a geologic log and screened for the presence of petroleum components using a PID. The geologic logs are included in Appendix II.

Each sample submitted to the laboratory was a composite of 4 foot soil samples recovered in the geoprobe macrocore. The laboratory samples were stored on ice in a cooler to maintain a constant temperature until delivery to the laboratory. All soil samples submitted to the laboratory were analyzed for total lead in soil. The soil samples collected on August 16, 2002 were also analyzed by TCLP for lead.

7.0 GROUND-WATER INVESTIGATION

On August 22, 23 and 27, 2002, five (5) ground-water monitor wells (MW-6 through MW-10) were installed at the locations shown on figure 3.

Monitor Wells MW-6, MW-7, MW-8 and MW-9 were installed along the south wall of the building in the vicinity of the former drum storage area. The wells were drilled and installed by the hollow-stem drilling method. Soil samples were collected continuously in MW-7 and MW-8 using a stainless steel split-spoon sampling tool which was decontaminated between each sampling depth. Each soil sample was visually examined by an LBG hydrogeologist, described on a geologic log and screened for the presence of VOCs using a PID.

All monitor wells were constructed of 4-inch diameter PVC screen and riser pipe. MW-7 and MW-8 were constructed with the screen setting from approximately 5 feet above to 5 feet below the static water level. MW-6 and MW-9 (cluster wells) were constructed with 5 feet of screen set on the top of bedrock. MW-10 was installed on the northeast corner of the property on the sidewalk, along 44th Road. Monitor Well MW-10 was constructed with ten feet of screen set from the top of bedrock to approximately 6 ft bg.

The annular space surrounding the screen for each monitor well was filled with No. 2 grade filter sand to form a sand pack from the bottom of the well screen to one foot above the top of the well screen. A 1-foot thick bentonite seal was placed on top of the sand pack and the remaining annular space was filled with drill cuttings. Each well was completed at grade with a manhole cover set in soil, and the well is fitted with a watertight plug/churney. The geologic logs and construction details for Monitor Wells MW-6 through MW-10 are included in Appendix II.

8.0 GROUND-WATER MONITORING PROGRAM

8.1 Monitor Well Survey

On September 1, 2002, the existing and new monitor well locations and top of casing elevations were surveyed by John P. Ferrantello, P.C., a licensed land surveyor, (NYS License No. 45017) of Garden City Park, New York. The top of casing elevations for all monitor wells are listed on table 1.

8.2 Ground-Water Sampling and Analysis

On September 3 and 4, 2002, ground-water samples were collected from the five onsite and 4 offsite monitor wells. Prior to sampling, depth to ground water was measured using an electric probe. Well locations are shown on figure 3.

After water-level measurements were recorded, ground-water samples were collected using the low-flow sampling method (EPA Low-Flow Ground-Water Sampling Procedures, April 1996, Appendix IV). The ground water was evacuated using a peristaltic pump fitted with dedicated polyethylene tubing. The tubing intake was set just above the bottom of each monitor well. For each well, ground water was purged for approximately 15 minutes, prior to measuring any parameters, in an attempt to minimize turbidity.

Onsite field parameters were continually monitored by a Horiba U-22XD multiparameter water-quality monitoring system. Measurements for pH, conductivity, turbidity, dissolved oxygen (DO), temperature, and oxygen reduction potential (ORP) were obtained simultaneously as the ground water was pumped through a flow-through cell at a rate of 100-500 ml/minute. All field parameters were recorded at three minute intervals until all

parameters reached stabilization for three consecutive intervals. Additionally, as per NYSDEC requirements, turbidity was required to be below 50 nephelometric turbidity units prior to sampling. Stabilization requirements are shown on the low-flow sampling logs (Appendix IV).

Upon reaching stabilization of all parameters, the effluent end of the polyethylene tubing was disconnected from the flow-through cell and the ground-water sample was collected in laboratory prepared sample containers. The samples were stored on ice in a cooler to maintain a constant temperature until delivery to the laboratory. The ground-water sampling was observed by NYSDEC Environmental Engineers Ms. Ioana Munteanu and Mr. Vadim Brevdo.

Quality Assurance and Quality Control (QA/QC) samples, including a field blank for each day of sampling and a trip blank, accompanied the sample shipment. The trip blank, consisting of a laboratory prepared sample, was included to document the quality of the samples during shipment. The field blanks were prepared to document the quality of sampling equipment and procedures. As additional QA/QC, the NYSDEC split samples at MW-2 on September 3, 2002 and at MW-6 on September 4, 2002.

The ground-water samples were then delivered to York Analytical Laboratories, Inc. (York), a New York State certified laboratory located in Stamford, Connecticut under chain-of-custody procedures. All monitor well ground-water samples were analyzed for VOCs by EPA Method 8260, SVOCs by EPA Method 8270 and for total metals. All of the laboratory analysis was performed as NYSDEC ASP Category B deliverables. The results of laboratory analysis are presented in Results of Investigation.

8.3 Ground-Water Level Measurements

On September 12, 2002, depth to ground water was measured in the 5 onsite and 4 offsite (sidewalk) monitor wells using a steel tape. Table 1 lists the total depth of each monitor well, depth to ground water, top of casing elevation and ground-water elevation in monitor wells.

9.0 DISPOSAL OF FILL/ASH FROM BASEMENT AND FIRST FLOOR

9.1 Basement Area

On August 1, 2002, four (4) fill/ash samples were collected from the approximately 1-foot thick top layer of the basement grade. The samples were sent to Toxikon of Bedford, Massachusetts for analysis of VOCs by EPA Method 8260, SVOCs by EPA Method 8270, total metals and TCLP metals.

On August 12, 2002, four additional fill/ash samples were collected from the basement area. These samples were sent to York for waste characterization analysis as requested by the disposal facility. Analysis included VOCs, SVOCs, total metals, TCLP metals, pH, gasoline range organics (GRO), diesel range organics (DRO), flash point and reactivity (Appendix IV).

The fill/ash layer was then removed from the basement and stockpiled in the onsite parking lot. The stockpile was lined underneath by a 40 mil polyethylene liner. Approximately 400 yards of soil/ash was removed from the basement and placed on the stockpile.

From August 20-22, 2002, the basement fill/ash stockpile was loaded on trucks as non-hazardous soil. The trucks hauling the fill/ash material were from various trucking companies and were coordinated by Allied Waste Services, Inc. of Merrick, New York. All of the soil was taken to Clean Earth of Philadelphia for disposal/recycling. Summary tables of analytical data for disposal and all disposal manifests and bills of lading are included in Appendix III.

9.2 First Floor Area

On September 4, 2002, two composite fill/ash samples were collected from the first floor. These samples were sent to York for waste characterization analysis as described for basement fill/ash samples.

The fill/ash layer was then removed from inside the building and stockpiled in the onsite parking lot. The stockpile was lined underneath by a 40 mil polyethylene liner. Approximately 500 yards of soil/ash was removed from the first floor and placed on the stockpile.

From September 16 to 23, 2002, the first floor fill/ash stockpile was loaded onto trucks as non-hazardous material for recycling. The trucks hauling the soil were from various

trucking companies and were all coordinated by Allied Waste Services, Inc. of Merrick, New York. All of the soil was taken to Clean Earth of Philadelphia for disposal/recycling. All disposal manifests and bills of lading are included in the Appendix III.

9.3 Health and Safety Plan

The Health and Safety Plan implemented during the subsurface investigations and interim remedial measures is included in Appendix V.

9.3.1 Community Air Monitoring Plan

During the subsurface investigation a Community Air Monitoring Plan was implemented at the site. The community air monitoring data consisted of PID readings and dust concentrations and are included in Appendix V.

10.0 RESULTS OF INVESTIGATION

Vapor, soil and ground-water samples collected during the subsurface investigation were analyzed in accordance with the QA/QC Plan.

10.1 Soil Vapor Sampling and Analysis

Soil vapor samples collected from vapor points installed on the first floor and basement were analyzed for VOCs by USEPA Method TO-14. The location of vapor points are shown on figure 3. The laboratory results of soil vapor samples for the first floor and basement areas are summarized below:

10.1.1 First Floor Area

Vapor samples were collected from 9 geoprobe points installed in the first floor area on August 7 and 15, 2002. Laboratory analysis of two vapor samples collected on August 7, 2002 at discrete intervals (2.5 feet and 13.5 feet) from each point are presented on table 2. It should be noted that the August 7 samples were collected from geoprobe vapor points drilled through the first floor concrete slab. The data show concentrations of VOCs in both vapor sample intervals, in an area encompassed by

GP-4, GP-6, GP-7, GP-8 and GP-9. The highest vapor concentrations were of tetrachloroethene (PCE) detected in the area of GP-8, which is located to the north of the south wall of the building, and in the vicinity of the former drum storage area. The August 7, 2002 vapor sampling results for PCE are shown on figure 4.

A second round of vapor samples were collected on August 15, 2002, after a portion of the concrete floor was removed from the GP-8 and GP-9 area, table 3. The laboratory analysis showed a significant decrease of PCE vapor concentrations in samples collected from both vapor points (GP-8 and GP-9). The decrease in vapor concentration (GP-8 from 16,200 ppbv [parts per billion per volume] at 2.5 feet to 743 ppbv and from 80,000 ppbv at 13.5 feet to 599 ppbv) is attributed to the release of accumulated and trapped vapors following the removal of the concrete floor. In addition, a portion of the concrete floor may have been a harbor for low level VOCs. The August 15, 2002 vapor sampling results for PCE are shown on figure 4. However, the data continue to indicate that the vapors are present in the subsurface environment and a remedial action is required for enhanced vapor removal.

In order to better evaluate the concentration of vapors in the area of GP-4, GP-6 through GP-9, additional vapor points (VP-1 through VP-10) were installed on September 21, 2002 in this area after the concrete floor was removed. The location of the geoprobe vapor points is shown on figure 5 and a summary of the laboratory results based on September 23, 2002 vapor sampling are listed on table 4.

The data presented on table 4 and figure 5 show a general decrease of vapor concentrations in the September 23, 2002 vapor samples after the concrete floor was removed. This indicates that the high concentration of vapor prior to the removal of the concrete floor is the result of upward migration of PCE vapor and other VOCs from soil and ground water and accumulation of vapors beneath the floor for a long period of time.

10.1.2 Basement Area

Laboratory analysis of vapor samples from the points installed in the basement for both sampling events (August 8 and 15, 2002) show the presence of VOCs. PCE concentrations range between 1.8 and 16.4 ppbv (tables 5 and 6 and figure 4).

The VOC concentrations in the basement area are several orders of magnitude lower than those for the first floor. The difference in concentration may be attributed to the removal of the concrete floor prior to sampling and to a smaller unsaturated zone which facilitated the release of vapor from beneath the former concrete slab.

In conclusion, the soil vapor survey should only be considered a screening process which identifies the presence of VOCs beneath the surface.

10.2 Soil Quality

Soil samples collected from geoprobe borings drilled in the first floor and basement area were analyzed in laboratory for VOCs, SVOCs, total metals, TCLP metals, PCB and pesticides.

10.2.1 First Floor

The laboratory analysis of soil samples collected from the first floor geoprobe borings are summarized on table 7. Pesticides and PCBs were not detected in any of the soil samples. VOCs were detected in some samples, however all of the detections were well below the Recommended Soil Cleanup Objectives presented in the NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) 4046, dated January 24, 1994 (table 7). The detected concentrations ranged between 1 and 110 ug/kg. Two compounds were detected in a majority of the samples (methylene chloride and acetone) however, they were also detected in the laboratory method blank samples indicating cross contamination from the laboratory. PCE was detected in five samples from Borings GP-6, GP-7, GP-8 and GP-9 between 1 and 40 ug/kg. As previously stated, all of these detections are below the TAGM soil cleanup guidelines.

In addition to VOCs, several SVOCs were detected in the soil samples. Sixteen samples from nine different locations contained semivolatiles above the TAGM

guidelines (table 8, figure 6). The exceedences occurred in samples collected from different depths. The highest concentrations were detected in samples from Borings GP-3 and GP-7 (table 8, figure 6).

The metals results are summarized on tables 9 and 10. The soil samples were analyzed for total metals and the leachable fraction by the TCLP. Metals were not detectable by TCLP in any of the samples collected from the first floor. Based on the total metals analysis, 20 metals were detected in the soil samples of which seven were detected above TAGM guidelines including beryllium, cadmium, chromium, copper, iron, nickel and zinc (table 9). Beryllium concentrations exceeded the TAGM guideline of 0.16 mg/kg in all of the samples in which it was detected, ranging between 0.29 and 0.37 mg/kg. Cadmium was detected just above the TAGM guideline of 1 mg/kg in two shallow samples from the first floor at 1.1 and 1.2 mg/kg respectively. Copper exceeded the TAGM guideline in three samples from GP-8 and GP-9. The detected concentrations ranged from 40 to 1,220 mg/kg and the cleanup guideline for copper is 25 mg/kg. Chromium exceedences occurred in all but three samples collected from the first floor. The concentrations in these samples ranged from 10.4 to 20 mg/kg. The cleanup guideline for chromium is 10 mg/kg. Iron concentrations exceeded the TAGM guideline of 2,000 mg/kg in all of the first floor samples ranging between 6,300 and 16,700 mg/kg. Similar to iron, zinc was detected above the TAGM guideline of 20 mg/kg in almost all of the samples, ranging primarily between 21.2 and 98.5 mg/kg with one sample at 2,520 mg/kg.

The SVOCs and metals detected in the soil samples are the same compounds that were detected in the fill/ash material which previously overlaid the soil in this area.

10.2.2 Basement

The soil quality results for the basement are summarized on tables 11, 12, 13 and 14. Pesticides and PCBs were not detected in any of the basement soil samples. Low levels of VOCs were detected in several samples at concentrations ranging between 1 and 8 ug/kg. None of the detected concentrations exceeded TAGM guidelines. Two compounds, acetone and methylene chloride, were also detected in the

laboratory method blank. PCE was detected in three samples from two locations between 2 and 4 ug/kg.

Several SVOCs were detected in the basement soil samples. Twelve samples from six different locations contained semivolatiles above the TAGM guidelines (table 12, figure 6). Four samples from two other locations contained semivolatiles below the TAGM guidelines. The exceedences occurred in samples collected from different depths. The highest concentrations were detected in samples from Borings GP-15 and GP-17 (table 12, figure 6).

Based on the total metals analysis, 19 metals were detected in the basement soil samples of which four were detected above TAGM guidelines, beryllium, chromium, iron and zinc (table 13). Beryllium was detected in all of the basement samples above the TAGM guideline of 0.16 mg/kg. The detected concentrations ranged between 0.24 and 0.45 mg/kg. Chromium was detected at or above the TAGM guideline of 10 mg/kg in six samples, with concentrations ranging from 10 to 13.4 mg/kg. Consistent with the first floor samples, iron concentrations exceeded the TAGM guideline of 2,000 mg/kg in all of the basement samples. The detected concentrations ranged between 6,540 and 11,300 mg/kg. The results for zinc were also consistent with the first floor as it was detected above the TAGM guideline of 20 mg/kg in almost all of the basement samples, ranging between 20 and 57.5 mg/kg.

Similar to the first floor, metals were not detectable by TCLP in any of the samples collected from the basement and the SVOC and total metals detections were consistent with the fill/ash material (table 14).

10.2.3 Parking Lot

Soil samples collected from the parking lot were analyzed for total lead and leachable lead by TCLP. The results are presented on tables 15 and 16 and graphically represented on figures 7 and 8. The total lead results for the parking lot samples were elevated in comparison to those for samples from the first floor and basement (tables 9 and 13). The concentrations in the parking lot samples ranged between 12 and 6,300 mg/kg with an average of 975 mg/kg. The concentrations in the first floor and

basement samples ranged between 2.9 and 955 mg/kg with an average of 49.5 mg/kg. The TAGM does not have a numerical guideline for lead but recommends site background as the clean up goal for lead.

Leachable lead was detected in 12 samples by TCLP (tables 15 and 16). The detected concentrations in two of those samples exceeded the regulatory level of 5 mg/l (milligrams per liter) used for the characterization of hazardous waste. In the 4 to 6 foot sample from PGP-4, lead was leached out at a concentration of 10.4 mg/l and in the 10 to 14 foot sample from PGP-1, the concentration was 12 mg/l.

10.3 Ground-Water Quality

Ground-water samples were collected from the geoprobe borings and monitor wells located throughout the site. The ground-water quality results are summarized on tables 17 through 21 and the sampling locations are presented on figure 3.

VOCs are the primary concern at the site and they were detected in several samples above ground-water quality standards per 6NYCRR Part 703.5 and the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) (1.1.1). PCE was the most prevalent compound, being detected at or above the water-quality standard of 5 ug/l in all 18 samples in which it was detected; a total of 27 samples were analyzed. The detected concentrations ranged from 5 to 290 ug/l (tables 17 and 18). As shown on figure 9, PCE was detected in all of the ground-water samples collected from beneath the eastern two-thirds of the building, with the exception of upgradient well MW-10. The highest concentrations were detected in samples from MW-6, GP-8, GP-10, GP-11 and GP-12 which are located along the southeastern side of the building, near the former drum storage area (figure 9). PCE was not detected in any of the samples collected from beneath the western side of the building or the parking lot (figure 9).

In addition to PCE eight other VOCs were detected, of which six were detected at or slightly above ground-water quality standards with concentrations ranging between 5 and 54 ug/l (tables 17 and 18).

Metals were detected in all of the ground-water samples. In general, the same metals detected in the soil and fill/ash samples were detected in the ground water. A total of 21

metals were detected, of which 10 were detected above ground--water quality standards (tables 19, 20 and 21). Iron, manganese and sodium exceeded the standards in a majority of the samples. Lead was not detected in the ground-water sample from MW-3 which is located in the parking lot where elevated concentrations of lead were detected in the soil.

Pesticides, PCBs and SVOCs were not detected in any of the geoprobe ground-water samples. SVOCs were also not detected in the monitor well samples. The monitor well samples were not analyzed for pesticides or PCBs.

11.0 GROUND-WATER ELEVATION AND DIRECTION OF FLOW

The ground-water elevation calculated based on September 12, 2002 measurements were used to construct a ground-water elevation contour map and to determine the direction of ground-water flow and the hydraulic gradient beneath the site.

Figure 10 shows that the ground-water flow direction beneath the site is to the west beneath the building and to the southwest in the parking lot area. The hydraulic gradient ranges between 0.0005 ft/ft beneath the building and 0.0017 ft/ft in the parking lot area.

12.0 QUALITY ASSURANCE AND QUALITY CONTROL PLAN

QA/QC procedures were utilized throughout the project to ensure reliable data. Toxikon Laboratories, Inc. (Toxikon), a New York State Department of Health - Environmental Laboratory Approval Program (NYSDOH - ELAP, No. 10778) certified laboratory and York, also a NYSDOH – ELAP, No. 10854 certified laboratory, performed all analyses. Analytical methods used included Contract Laboratory Protocol methodologies. All analytical results are reported with Category B deliverables. Data Usability Summary Reports (DUSRs) were prepared for all the Category B deliverables analytical results by Lori A. Beyer of L.A.B. Validation Corporation located in East Northpoint, New York. A copy of the Category B deliverables packages and DUSRs are included with this report.

Sampling methods, sample preservation requirements, sampling handling times and decontamination procedures for field equipment were conducted in accordance with NYSDEC and USEPA standard operating procedures and industry standards. The table below summarizes these standards.

SUMMARY OF SAMPLE HANDLING AND PRESERVATION

Sample Collection Area	Media	Analytical Method(s)	Holding Time	Preservation
Soil borings and monitor well installation in first floor, basement and near former drum storage area	Soil	EPA Method 8260 EPA Method 8270 Total TAL Metals TCLP RCRA 8 Metals Pesticides PCBs	< 2 Weeks < 2 Weeks < 6 Months < 6 Months <7 Days <7 Days	ICE ICE ICE ICE ICE ICE
Soil borings and monitor well installation in first floor, basement and near former drum storage area	Ground Water	EPA Method 8260 EPA Method 8270 Total TAL Metals Pesticides PCBs	< 2 Weeks < 2 Weeks < 6 Months < 7 Days <7 Days	ICE ICE HNO_3 ICE ICE
Soil borings in parking lot	Soil	Total Lead TCLP Lead	<6 Months <6 Months	ICE ICE
Soil gas samples from basement and first floor	Air	EPA Method TO-14	< 24 Hours	Keep in the dark

13.0 CONCLUSIONS

1. Preliminary subsurface investigation conducted by ACT at the site revealed several recognized environmental conditions consisting of VOCs and metals in soil in the former storage drum area and sumps located in the basement area.
2. Additional subsurface investigations and subsequent interim remedial measures by ACT resulted in removal and disposal of soil/sediments from sumps inside of the building and a drain from outside of the building.
3. Interim remedial measures conducted under LBG supervision resulted in removal and disposal of additional soil from the former drum storage area and from the sump located in the northeast corner of the building.
4. Analysis of the 0.5 to 1.0 foot of fill/ash material removed from beneath the first floor and basement indicated that the material can be disposed as contaminated soil and not as hazardous material.

5. Samples collected from the temporary vapor points indicated the presence of VOCs beneath the first floor slab and basement slab. The highest vapor concentrations were detected in the vicinity of the former drum storage area.
6. Vapor sampling conducted after the removal of the concrete floors suggested that the high vapor concentrations detected prior to the floor removal, were the result of migration of vapor from soil and ground water and accumulation beneath the floors for a long period of time.
7. Soil samples collected from the parking lot area and analyzed for TCLP lead, showed at two locations an exceedance of the regulatory level of 5 ug/l used for the characterization of hazardous waste.
8. The ground-water flow direction beneath the site is to the west with a small component to the southwest. The hydraulic gradient between 0.0005 ft/ft and 0.0017 ft/ft indicate a slow ground-water movement beneath the area.
9. SVOCs and metals were the only compounds detected in the soil above TAGM recommended clean up guidelines. The same compounds detected in the soil were also detected in the ash material that was removed from the basement and first floor. Soil has been impacted by the historical use of fill material containing ash to at least 16 feet below the first floor and 6 feet below the basement, however, VOCs were not detected above TAGM cleanup guidelines in the soil, confirming that the IRMs were effective in removal of the source from the area.
10. VOCs and metals were detected in the ground-water above water-quality standards. PCE was the primary VOC compound detected above standards. The highest concentrations were detected in the vicinity of the former drum storage area, which is the most likely source. The plume extends beneath the eastern half of the first floor and the basement and the concentrations decrease with distance from the former drum storage area. The source of metals in the ground water appears to be the soil which contained elevated metals concentrations. The metals detections were fairly evenly distributed across the site, consistent with the distribution in the soil.

11. The contamination beneath the site which requires remediation consists primarily of VOCs (PCE and other solvents) in the soil and ground water.

14.0 RECOMMENDATIONS

The subsurface investigation indicated the presence of vapors in the unsaturated zone soils, and dissolved phase volatile organics in ground water. In order to remediate the site, vapor removal and ground-water remediation would be required in the first floor and basement areas.

In order to accomplish the vapor removal, implementation of the following remediation should be considered:

1. Installation of a vapor barrier beneath the new concrete floors (first floor and basement). The vapor barrier would consist of a 40 mil polyethylene liner which will completely seal the soil beneath the liner.
2. Installation of a network of horizontal vapor extraction piping below the vapor barrier for the first floor area. The vapor extraction piping would be connected to a high capacity blower located outside of the building in a completely secured area. Vapors collected by the soil vapor extraction system would be treated, if necessary, using granular activated carbon.
3. Installation of similar vapor extraction system in the basement area.
4. Installation of vertical vapor extraction wells in the former drum storage area.
5. Installation of a drainage-collection system below the vapor extraction piping in the basement area. The drainage-collection piping would be connected to a sump located outside of the building. The ground water from the sump would be pumped and treated using granular activated carbon.
6. Removal of additional soil from the parking lot area would be implemented based on laboratory analysis for total lead and TCLP lead.
7. Conduct a Risk Assessment to assess post-remedial exposure scenarios for the constituents of concern and the effectiveness of the proposed remedial measures including the vapor barrier and vapor extraction system.

8. A remedial work plan should be prepared in order to implement the above recommendations.

LEGGETTE, BRASHEARS & GRAHAM, INC.

Sean Groszkowski
Hydrogeologist

Reviewed By:

Dan C. Buzea, CPG
Vice President

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November 29, 2002
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TABLES

TABLE 1

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

MONITOR WELLS
Water Level Measurements
September 12, 2002

Well ID	Total Depth (feet)	Screen		TOC [2] Elevation (ft msl) [3]	Depth to Water (ft btoc) [4]	Corrected Ground Water Elevation
		Diameter (inch)	Setting (ft bg)[1]			
MW-1	19.35	2.00	10.00 to 20.00*	16.68	14.49	2.19
MW-2	18.75	2.00	9.00 to 19.00*	15.59	13.50	2.09
MW-3	18.69	2.00	9.00 to 19.00*	15.82	13.86	1.96
MW-5	18.58	2.00	9.00 to 19.00*	15.62	13.59	2.03
MW-6 (Cluster Well)	25.05	4.00	20.00 to 25.00	16.51	14.36	2.15
MW-7	20.25	4.00	10.00 to 20.25	15.63	13.46	2.17
MW-8	15.00	4.00	5.00 to 15.00	8.91	6.72	2.19
MW-9 (Cluster Well)	17.00	4.00	12.00 to 17.00	9.38	7.22	2.16
MW-10	16.50	4.00	11.50 to 16.50	15.91	13.70	2.21

1) - Feet below grade
2) - Top of Casing
3) - Feet above mean sea level
4) - Feet below top of casing
* - Note: MW-1, MW-2, MW-3 & MW-5 Screen settings are taken from ACT well construction logs

TABLE 2

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

FIRST FLOOR
Summary of Volatile Organic Compounds Detected in Soil Gas
August 7, 2002

Parameter	Concentration (ppbv) [1]																	
	GP-1		GP-2		GP-3		GP-4		GP-5		GP-6		GP-7		GP-8		GP-9	
	2.5 ft bg [2]	13.5 ft bg	2.5 ft bg	13.5 ft bg	2.5 ft bg	13.5 ft bg	2.5 ft bg	13.5 ft bg	2.5 ft bg	13.5 ft bg	2.5 ft bg	13.5 ft bg	2.5 ft bg	13.5 ft bg	2.5 ft bg	13.5 ft bg	2.5 ft bg	13.5 ft bg
1,1,1-Trichloroethane	3.6	10.0	22.1	29.9	7.9	10.1	189	225	12.1	11.0	483	311	1,320	184	1,920	3,600	1,350	1,130
1,1-Dichloroethane	ND [3]	ND	ND	ND	ND	ND	ND	ND	1.7	5.1	23.8	13.8	62.8	ND	ND	ND	48.3	ND
1,1-Dichloroethylene	ND	0.8	ND	ND	ND	ND	16.7	32.2	ND	ND	89.3	73.2	366	35.5	412	ND	230	176
1,2,4 Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.2	ND	ND	ND	ND	ND	96
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	1.6	8.7	8.2	8.9	3.2	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	2.6	1.8	3.0	2.1	2.4	38.4	47.4	ND	ND	18.8	16.2	27.2	ND	ND	ND	38.4	ND
Chloromethane	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	9.9	27.1	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	0.4	ND	ND	0.5	0.6	ND	ND	ND	ND	8.0	5.4	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	1.2	1.0	1.1	2.5	0.8	ND	ND	ND	1.5	ND	7.5	ND	ND	ND	ND	ND	ND
Freon-113	ND	ND	ND	ND	0.4	0.3	16.0 J	ND J	ND	ND	37	27.1	ND	ND	165	ND	ND	ND
Hexachloro-1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND J	ND J	ND	ND	1,100	933	ND	ND	3,660	6,000	ND	ND
Total Xylenes	ND	2.0	1.7	1.8	4.0	1.1	ND	ND	1.3	2.7	5.9	13.3	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	0.8	0.3	ND	ND	ND	ND	ND	5.0	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	16.1	2.2	3.3	2.5	1.7	851	481	3.6	7.5	100	183	151.0	59.0	16,200	80,000	249	1,120
Toluene	ND	ND	ND	ND	43.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,700	ND	ND
Trichloroethylene	ND	7.8	1.6	2.9	7.3	5.2	88.3	70.2	1.9	2.9	103	132	67.8	23.6	977	3,100	188	198
Trichlorofluoromethane	ND	0.6	ND	ND	0.7	0.4	ND	ND	ND	ND	5.1	ND	ND	ND	ND	ND	ND	ND

1) - Parts per billion per volume
2) - Feet below grade
3) - Not detected
J - Associated numerical value is the approximate concentration of the analyte in the sample
ND J - The analyte was not detected. However, the reported quantitation limit is approximate.
Note - Samples analyzed by EPA Method TO-14 NYSDEC ASP category B deliverables

TABLE 3

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

FIRST FLOOR
Summary of Volatile Organic Compounds Detected in Soil Gas
August 15, 2002

Parameter	Concentration (ppbv) [1]																	
	GP-1		GP-2		GP-3		GP-4		GP-5		GP-6		GP-7		GP-8		GP-9	
	2.5 ft bg [2]	13.5 ft bg	2.5 ft bg	13.5 ft bg	2.5 ft bg	13.5 ft bg	2.5 ft bg	13.5 ft bg	2.5 ft bg	13.5 ft bg	2.5 ft bg	13.5 ft bg	2.5 ft bg	13.5 ft bg	2.5 ft bg	13.5 ft bg	2.5 ft bg	13.5 ft bg
1,1,1-Trichloroethane	1.1	1.8	22.3	31.7	23.5	22.7	84.6	148	2.1	6.1	2,040	1,470	491	1,180	117	196	605	837
1,1-Dichloroethane	ND [3]	ND	ND	ND	ND	ND	1.2	3.9	ND	1.3	97.9	70.7	28.0	53.0	7.0	10.8	22.8	29.6
1,1-Dichloroethylene	ND	ND	ND	0.6	ND	ND	2.3	13.5	ND	ND	490	348	159	337	24.7	46.8	112	149
1,2,4 Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.7	4.1	4.4	3.1	3.9	4.2	4.6	5.0	3.8	4.7	50.6	153	45.7	48.2	6.3	6.9	5.2	5.5
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.5	1.5	1.7	1.1	1.6	1.5	1.7	2.5	1.5	1.7	20.1	56.5	19.4	19.4	ND	ND	ND	ND
1,4-Dichlorobenzene	2.5	2.8	2.9	2.1	2.6	3.0	3.1	4.7	2.7	3.3	37.9	116	34.7	37.9	4.6	5.2	4.3	4.7
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	1.3	3.8	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	2.9	2.4	6.6	8.8	9.7	4.9	1.5	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	0.9	1.5	3.3	4.5	4.8	38.8	52.1	0.5	0.9	94.7	82.5	16.2	26.8	7.5	9.9	18.1	25.9
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethylene	ND	ND	ND	ND	ND	ND	1.9	9.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	0.7	0.6	0.7	0.7	0.8	0.9	0.7	ND	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.6	0.6	ND	0.6	ND	ND	ND	ND	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Freon-113	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25.0	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1.8	1.9	1.7	1.9	1.7	1.5	1.7	ND	1.7	1.8	10.9	28.0	10.4	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.8	7.5	2.0	2.7	3.0	9.4	37.7	89.3	3.8	14.0	602	1,180	74.6	225	743	599.0	ND	172
Toluene	6.7	9.9	5.2	7.1	4.8	5.1	4.7	5.5	4.7	5.3	24.1	67.7	19.6	21.6	11.4	8.9	ND	4.6
Trichloroethene	0.6	ND	0.7	2.4	11.7	8.0	38.6	57.2	1.5	2.8	769	690	32.8	63.9	91.1	96.4	72.8	123
Trichlorofluoromethane	0.5	0.7	ND	ND	0.7	0.5	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

1) - Parts per billion per volume
2) - Feet below grade
3) - Not detected
Note - Samples analyzed by EPA Method TO-14 NYSDEC ASP category B deliverables

TABLE 4

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

FIRST FLOOR
Summary of Volatile Organic Compounds Detected in Soil Gas
September 23, 2002

OCT. 02

Parameter	Concentration (ppbv) [1]																			
	VP-1		VP-2		VP-3		VP-4		VP-5		VP-6		VP-7		VP-8		VP-9		VP-10	
	2.5 ft bg [2]	12.5 ft bg	2.5 ft bg	12.5 ft bg	2.5 ft bg	12.5 ft bg	2.5 ft bg	12.5 ft bg	2.5 ft bg	12.5 ft bg	2.5 ft bg	12.5 ft bg	2.5 ft bg	12.5 ft bg	2.5 ft bg	12.5 ft bg	2.5 ft bg	12.5 ft bg	2.5 ft bg	12.5 ft bg
1,1,1-Trichloroethane	14	28	45	150	19	110	28	230	27	81	6.3	32	120	230	270	620	18	130	4.9	6.0
1,1-Dichloroethane	ND [3]	ND	1.6	6.2	1.0	7.3	1.9	13	ND	ND	ND	ND	2.8	5.4	7.3	14	0.7	5.5	ND	ND
1,1-Dichloroethylene	0.9	1.6	4.5	22	3.9	32	6.8	55	ND	ND	0.8	6.5	15	35	55	110	3.2	26	ND	ND
1,2,4 Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	1.1	1.1	2.1	ND	0.9	ND	1.1	5.6	ND	ND	1.0	ND	1.7	ND	ND	ND	1.9	ND	1.9	1.3
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9	ND	1.0	0.7
1,4-Dichlorobenzene	2.6	2.7	2.5	2.6	2.3	3.8	2.5	9.7	2.4	23	2.2	1.9	2.5	2.8	ND	21	2.0	2.4	1.9	2.1
Benzene	ND	ND	0.6	ND	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7	ND	2.7	1.8
Carbon Tetrachloride	1.5	3.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	3.0	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	2.9	7.8	2.4	8.3	1.1	5.8	1.9	13	ND	ND	ND	2.3	2.9	4.4	9.6	12	1.1	5.6	0.8	1.0
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethylene	ND	ND	4.4	18.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	1.2	ND	0.6	ND	ND	ND	ND	ND	0.5	ND	ND	ND	ND	ND	0.9	ND	1.7	1.0
Freon-113	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	1.2	0.7	3.8	ND	1.8	ND	1.3	ND	ND	ND	1.5	ND	2.4	ND	ND	ND	3.3	ND	6.2	3.6
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	49	26	93	150	83	250	62	590	380	290	61	130	36	26	19	150	20	25	33	22
Toluene	3.3	3.0	5.3	3.2	4.5	4.0	4.0	11	4.2	48	4.3	2.9	3.4	3.3	2.9	21	5.7	3.4	12	8.6
Trichloroethylene	5.8	6.5	27	62	13	53	15	95	23	35	6.1	21	14	16	13	37	7.9	24	3.2	3.2
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

1) - Parts per billion per volume
2) - Feet below grade
3) - Not detected
Note - Samples analyzed by EPA Method TO-14 NYSDEC ASP category B deliverables

TABLE 5

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

BASEMENT
Summary of Volatile Organic Compounds Detected in Soil Gas
August 8, 2002

Parameter	Concentration (ppbv) [1]									
	GP-10	GP-11	GP-12	GP-13	GP-14	GP-15	GP-16	GP-17	GP-18	Trip Blank
1,1,1-Trichloroethane	0.6	1.3	1.4	2.0	ND	2.0	1.2	1.3	0.6	ND
1,1-Dichloroethane	ND [2]	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4 Trichlorobenzene	ND	ND	ND	ND	0.9	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3
1,2-Dichloroethane	ND	ND	ND	ND	0.5	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	1.0	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	0.5	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	0.8	0.7	0.8	0.6	0.7	ND
Ethylbenzene	0.8	1.7	ND	ND	1.2	ND	0.6	0.6	0.7	ND
Freon-113	ND	ND	ND	ND	ND	ND	1.5	ND	1.5	ND
Hexachloro-1,3-Butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	26.4 B
Total Xylenes	1.3	2.9	1.0	ND	2.0	1.1	1.0	1.0	1.0	0.5
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.8	4.2	ND	ND	2.0	2.5	3.2	11.6	1.0	ND
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4
Trichloroethylene	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	0.5	ND

1) - Parts per billion per volume
2) - Not detected
B - Indicates that the analyte was also found in the associated batch method blank
Note - Samples analyzed by EPA Method TO-14 NYSDEC ASP category B deliverables

TABLE 6

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

BASEMENT
Summary of Volatile Organic Compounds Detected in Soil Gas
August 15, 2002

Parameter	Concentration (ppbv) [1]								
	GP-10	GP-11	GP-12	GP-13	GP-14	GP-15	GP-16	GP-17	GP-18
1,1,1-Trichloroethane	5.2	14.8	9.8	2.4	4.0	13.3	7.4	2.2	2.6
1,1-Dichloroethane	ND [2]	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	ND	1.3	1.2	ND	ND	ND	ND	ND	ND
1,2,4 Trichlorobenzene	2.1	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	4.0	3.8	4.7	3.9	3.4	4.3	4.2	4.0	3.0
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	1.8	1.8	1.9	1.7	1.4	1.8	1.8	1.7	1.3
1,4-Dichlorobenzene	3.8	3.2	3.9	3.5	2.8	3.9	3.8	3.3	2.6
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1.0	ND	1.2	ND	ND	1.4	1.4	ND	ND
Freon-113	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-Butadiene	ND J	ND J	ND J	ND J	ND J	ND J	ND J	ND J	ND J
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	2.8 J	1.0 J	1.1 J	1.1 J	1.0 J	3.8 J	ND J	1.1 J	2.1 J
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	6.9	9.6	16.4	8.3	4.6	8.5	10.1	7.5	4.2
Toluene	8.3	4.8	5.1	4.9	6.0	5.1	4.4	5.3	5.3
Trichloroethylene	3.1	5.3	1.9	1.4	1.5	5.3	1.5	1.4	1.8
1,1,2,2-Tetrachloroethane	ND J	ND J	ND J	ND J	ND J	ND J	ND J	ND J	ND J
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND

1) - Parts per billion per volume
2) - Not detected
J - Associated numerical value is the approximate concentration of the analyte in the sample
ND J - The analyte was not detected. However, the reported quantitation limit is approximate.
Note - Samples analyzed by EPA Method TO-14 NYSDEC ASP category B deliverables

TABLE 7

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

FIRST FLOOR
Summary of Volatile Organic Compounds Detected in Soil
August 1, 2 and 5, 2002

Sample Location	Sample Depth (ft bg) [1]	Concentration (ug/kg) [2]												
		Methylene Chloride	Acetone	Tetra-hydrofuran	Chloroform	Tri-chloroethene	Ethylbenzene	Total Xylenes	Tetra-chloroethene	1,2,4-Tri methylbenzene	2-Butanone	Naphthalene	1,1,1-Tri chloroethane	Trichloro-fluoromethane
GP-1	(0-1)	ND [3]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(16-20)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-2	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9 J	ND	ND
	(8-12)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND
GP-3	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(12-16)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-4	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(4-8)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-5	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(16-20)	ND	ND	ND	ND	ND	1 J	2 J	ND	ND	ND	ND	ND	ND
GP-6	(0-1)	ND	ND J	ND	ND	ND	ND	ND	8 J	ND	ND	14	ND	ND
	(8-12)	ND	ND J	ND	ND	ND	ND	ND	ND	ND	4 J	ND	ND	ND
GP-7	(0-1)	ND	12 J	ND	ND	ND	ND	ND	ND	ND	ND	14	3 J	ND
	(12-16)	ND	16 J	ND	ND	ND	ND	ND	6 J	2 J	ND	110	9 J	ND
GP-8	(0-1)	ND	ND J	ND	ND	ND	ND	ND	21	ND	ND	ND	ND	ND
	(12-16)	1 J	ND J	ND	ND	ND	ND	ND	40	ND	ND	1 J	ND	ND
GP-9	(0-1)	ND	8 J	ND	ND	ND	ND	ND	ND	ND	ND	3 J	ND	ND
	(12-16)	ND	ND	ND	ND	ND	ND	ND	1 J	ND	ND	ND	ND	ND
NYSDEC [4] TAGM [5] Recommended Soil Cleanup Objective		100	200	N/A [6]	300	700	5,500	1,200	1,400	10,000	N/A	13,000	800	N/A

1) - Feet below grade
2) - Micrograms per kilogram
3) - Not Detected
4) - New York State Department of Environmental Conservation
5) - Technical and Administrative Guidance Memorandum (HWR-94-4046, January 24, 1994)
6) - Not available
J - Associated numerical value is the approximate concentration of the analyte in the sample
ND J - The analyte was not detected. However, the reported quantitation limit is approximate.
Note - Samples analyzed by EPA Method 8260 NYSDEC ASP category B deliverables

TABLE 8

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

FIRST FLOOR
Summary of Semivolatile Organic Compounds Detected in Soil
August 1, 2 & 5, 2002

Sample Location	Sample Depth (ft bg) [1]	Concentration (ug/kg) [2]																							
		Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	N-Nitroso-di-n-propylamine	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) pthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,I) perylene	3,3'-Dichlorobenzidine	Di-n-octylphthalate	Acenaphthylene	2,4-Dinitrotoluene
GP-1	(0-1)	ND [3]	ND	ND	ND	ND	ND	ND	ND	ND	120 J	ND	ND	220 J	250 J	150 J	160 J	120 J	83 J	110 J	40 J	ND	47 J	ND	ND	ND	ND
	(16-20)	ND	ND	ND	240 J	ND	ND	ND	ND	1000 J	170 J	ND	ND	230 J	220 J	110 J	130 J	93 J	63 J	78 J	ND	ND	ND	ND	ND	ND	ND
GP-2	(0-1)	ND	ND	ND	170 J	41 J	ND	ND	ND	ND	470	81 J	ND	410	460	220 J	230 J	140 J	130 J	140 J	49 J	ND	53 J	ND	ND	ND	ND
	(8-12)	110 J	200 J	110 J	220 J	330 J	140 J	150 J	270 J	ND	4,100	700	200 J	3,400	3,600	1,900	1,600	1,300	1,400	1,300	300 J	180 J	290 J	ND	ND	ND	ND
GP-3	(0-1)	2,200	1,900	1,200	240 J	2,400	790 J	860	1,600	ND J	25,000	2,900	850 J	16,000	19,000	7,900	9,300	5,400	2,900	4,900	1500 J	890 J	1,800 J	96 J	ND J	46 J	150 J
	(12-16)	ND	61 J	ND	200 J	190 J	82 J	89 J	180 J	ND J	3,100	530	ND	4,600	6,200	3300 J	2900 J	2700 J	3300 J	2,300 J	600 J	360 J	640 J	ND J	ND J	ND	ND
GP-4	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	5,100	650 J	ND	3,600 J	4,200	1,900 J	1,900 J	1,300 J	720 J	1,200 J	ND	ND	ND	ND	ND	ND	ND
	(4-8)	ND	ND	ND	200 J	53 J	ND	ND	40 J	ND J	910	130 J	38 J	820	910	430	470	340 J	180 J	290 J	110 J	71 J	100 J	ND	ND	ND	ND
GP-5	(0-1)	ND	ND	ND	210 J	ND	ND	ND	ND	ND	330 J	59 J	ND	240 J	260 J	130 J	140 J	100 J	58 J	88 J	37 J	ND	42 J	ND	ND	ND	ND
	(12-16)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-6	(0-1)	160 J	760	460	ND	990	520 J	510	720	ND	7,000	1,700	ND	6,200	7,000	3,200	2,900	2400 J	2900 J	2400 J	750 J	410 J	770 J	ND	ND J	ND	ND
	(8-12)	74 J	290 J	180 J	ND	520	240 J	240 J	350	ND	5,100	1,100	180 J	4,700	5,300	2,700	2,500	2600 J	1400 J	1900 J	570 J	240 J	600 J	ND	ND J	ND	ND
GP-7	(0-1)	610	1,000	990	ND	1,700	970	990	2,100	ND	18,000	3,900	ND	17,000	20,000	11,000	12,000	9,600	5,500	8,200	2,300	1,900	2,100	ND	ND	71 J	160 J
	(12-16)	320 J	550	490	ND	1,000	540 J	540	1,100	ND	13,000	2,300	ND	12,000	14,000	7,200	7,300	5,200	4,500	5,100	2,100	1,200	2,300	ND	ND	43 J	ND
GP-8	(0-1)	ND	ND	ND	ND	42 J	ND	ND	ND	ND	680	110 J	ND	780	880	430	460	310 J	230 J	310 J	140 J	ND	150 J	ND	ND	ND	ND
	(12-16)	ND	ND	ND	ND	55 J	ND	ND	36 J	ND	830	140 J	ND	930	1,000	500	520	360	270 J	350	140 J	ND	150 J	ND	ND	ND	ND
GP-9	(0-1)	75 J	ND	ND	ND	ND	ND	ND	ND	ND	160 J	ND	ND	200 J	740	130 J	230 J	140 J	190 J	98 J	93 J	ND J	ND J	ND	55 J	ND	ND
	(12-16)	ND	ND	ND	ND	ND	ND	ND	ND	ND	59 J	ND	ND	52 J	86 J	ND	ND	ND J	ND J	ND J	ND J	ND J	ND J	ND	ND J	ND	ND
NYSDEC [4] TAGM [5] Recommended Soil Cleanup Objective		13,000	N/A [6]	36,400	N/A	50,000	100	6,200	50,000	50,000	50,000	50,000	N/A	50,000	50,000	224	400	1,100	1,100	61	3,200	14	50,000	N/A	50,000	41,000	1,000

1) - Feet below grade
2) - Micrograms per kilogram
3) - Not Detected
4) - New York State Department of Environmental Conservation
5) - Technical and Administrative Guidance Memorandum (HWR-94-4046, January 24, 1994)
6) - Not available
J - Associated numerical value is the approximate concentration of the analyte in the sample
ND J - The analyte was not detected. However, the reported quantitation limit is approximate.
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables

Metals I Fl.

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

FIRST FLOOR
Summary of Total Metals in Soil
August 1, 2 and 5, 2002

Sample Location	Sample Depth (ft bg) [1]	Concentration (mg/kg) [2]											
		Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
GP-1	0 to 1	6,420	ND J	3.6 J	30.6	ND	0.94	2,270	10.4	5.7 J	13.6	13,000	9.2 J
	16 to 20	4,660	ND J	0.7 J	40.4	ND	0.57	3,040	17.4	4.0 J	13.2	9,110	4.9 J
GP-2	0 to 1	6,830	ND J	3.9 J	27.6	ND	0.98	2,480	13.2	6.1 J	14.8	14,000	12.7 J
	8 to 12	4,260	ND J	0.62 J	35.6	ND	0.39 J	3,280	7.4	3.2 J	9.9	6,300	7.5 J
GP-3	0 to 1	9,900	ND J	4.5 J	34.7	ND	1.2	1,190	13.2	7.4 J	14.6	16,700	21.3 J
	12 to 16	5,110	ND J	0.7 J	38.3	ND	0.59	2,890	10.8	3.9 J	11.2	8,900	4.9 J
GP-4	0 to 1	7,830	ND J	4.4 J	50.5	ND	1.1	2,780	15.5	6.2 J	22.6	15,900	45.5 J
	4 to 8	8,200	ND J	2.0 J	69.1	ND	0.88	1,090	11.7	5.9 J	17.1	12,200	8.5 J
GP-5	0 to 1	6,640	ND J	1.9 J	71.9	ND	0.58	21,200	9.7	5.1 J	24.9	9,590	19.7 J
	16 to 20	3,000	ND J	0.66 J	24.6	ND	0.44 J	1,130	6.7	3.5 J	7.4	7,060	3.2 J
GP-6	0 to 1	6,790	ND J	3.2	49.6	0.37 J	0.73	17,400 J	10.8	5.2 J	19.6	9,980 J	28.8 J
	8 to 12	5,510	ND J	ND	34.8	0.36 J	0.68	8,490 J	17.7	4.4 J	11.6	9,860 J	5.8 J
GP-7	0 to 1	5,620	ND J	2.3	47.4	0.31 J	0.70	5,330 J	11.5	5.0 J	18.1	9,610 J	16.1 J
	12 to 16	5,850	ND J	ND	36.2	0.36 J	0.65	6,220 J	14.4	4.9 J	13.5	9,550 J	7.8 J
GP-8	0 to 1	6,490	ND J	4.3	50.6	0.37 J	0.89	6,780 J	12.1	5.5 J	24.6	11,600 J	37.1 J
	12 to 16	4,810	ND J	ND	35.1	0.31 J	0.75	7,000 J	20.0	4.8 J	40.4	10,200 J	10.2 J
GP-9	0 to 1	6,060	ND J	ND	45.6	0.29 J	0.92	31,400 J	11.1	4.1 J	1,220	8,500 J	418 J
	12 to 16	4,400	ND J	ND	26.3	0.30 J	0.82	1,990 J	14.1	4.8 J	132	9,580 J	9.2 J
NYSDEC [4] TAGM [5] Recommended Soil Cleanup Objective		SB [6]	SB	7.5	300	0.16	1	SB	10	30	25	2,000	SB

1) - Feet below grade
2) - Milligrams per kilogram
3) - Not detected
4) - New York State Department of Environmental Conservation
5) - Technical and Administrative Guidance Memorandum (HWR-94-4046, January 24, 1994)
6) - Site Background
J - Associated numerical value is the approximate concentration of the analyte in the sample
ND J - The analyte was not detected. However, the reported quantitation limit is approximate.

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

FIRST FLOOR
Summary of Total Metals in Soil
August 1, 2 and 5, 2002

Sample Location	Sample Depth (ft bg) [1]	Concentration (mg/kg) [2]										
		Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
GP-1	0 to 1	2,020	276	ND [3]	12.1 J	562	ND	ND J	ND J	ND J	16.8	42.8 J
	16 to 20	1,950	233	ND	9.8 J	699	ND	ND J	233 J	ND J	13.7	25 J
GP-2	0 to 1	1,940	297	ND	12 J	546	ND	ND J	ND J	ND J	19.8	40.5 J
	8 to 12	1,610	196	ND	7.6 J	489 J	ND	ND J	119 J	ND J	8.5	32.7 J
GP-3	0 to 1	2,330	281	0.05	12.8 J	676	ND	ND	ND J	ND J	20.9	63.2 J
	12 to 16	1,970	237	ND	9.5 J	733	ND	ND J	182 J	ND J	13.3	27.7 J
GP-4	0 to 1	2,540	285	0.05	13.6 J	767	ND	ND J	ND J	ND J	21.9	98.5 J
	4 to 8	2,270	320	ND	12.2 J	927	ND	ND J	ND J	0.39 J	19	39.8 J
GP-5	0 to 1	2,320	225	ND	12.0 J	1,050	ND	ND J	232 J	ND J	17.6	31.7 J
	16 to 20	1,770	211	ND	7.7 J	493 J	ND	ND J	162 J	ND J	9.4	21.2 J
GP-6	0 to 1	2,470	268	ND	12.0	985	ND	ND	388 J	ND	15.9	31.5 J
	8 to 12	2,250	253	ND	11.5	855	ND	ND	315 J	ND	14.4	19.9 J
GP-7	0 to 1	2,030	273	ND	10.7	948	ND	ND	152 J	ND	16.4	27.4 J
	12 to 16	2,970	255	ND	11.0	1,050	ND	ND	344 J	ND	15.2	21.5 J
GP-8	0 to 1	3,620	295	0.06	12.0	974	ND	ND	105 J	ND	17.4	48.5 J
	12 to 16	2,580	250	ND	9.1	857	ND	ND	257 J	ND	16.2	24.6 J
GP-9	0 to 1	2,720	178	ND	13.1	1,080	ND	ND	ND J	ND	10.8	2,520 J
	12 to 16	2,370	250	ND	10.4	685	ND	ND	392 J	ND	13.2	70.1 J
NYSDEC [4] TAGM [5] Recommended Soil Cleanup Objective		SB [6]	SB	0.1	13	SB	2	SB	SB	SB	150	20

1) - Feet below grade
2) - Milligrams per kilogram
3) - Not detected
4) - New York State Department of Environmental Conservation
5) - Technical and Administrative Guidance Memorandum (HWR-94-4046, January 24, 1994)
6) - Site Background
J - Associated numerical value is the approximate concentration of the analyte in the sample
ND J - The analyte was not detected. However, the reported quantitation limit is approximate.

TABLE 10

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

FIRST FLOOR

Summary of Metals in Soil by TCLP[1)]
August 1, 2 & 5, 2002

Sample Location	Sample Depth (ft bg) [2)]	Concentration (mg/l) [3)]							
		Arsenic	Barium	Cadmium	Chromium	Lead	Selenium	Silver	Mercury
GP-1	(0-1)	ND [4)]	ND	ND	ND	ND	ND	ND	ND
	(16-20)	ND	ND	ND	ND	ND	ND	ND	ND
GP-2	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(8-12)	ND	ND	ND	ND	ND	ND	ND	ND
GP-3	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(12-16)	ND	ND	ND	ND	ND	ND	ND	ND
GP-4	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(4-8)	ND	ND	ND	ND	ND	ND	ND	ND
GP-5	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(16-20)	ND	ND	ND	ND	ND	ND	ND	ND
GP-6	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(8-12)	ND	ND	ND	ND	ND	ND	ND	ND
GP-7	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(12-16)	ND	ND	ND	ND	ND	ND	ND	ND
GP-8	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(12-16)	ND	ND	ND	ND	ND	ND	ND	ND
GP-9	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(12-16)	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC Standard*		5.0	100.0	1.0	5.0	5.0	1.0	5.0	0.2

1) - Toxicity Characteristic Leaching Procedure
2) - Feet below grade
3) - Milligrams per liter
4) - Not Detected
* New York State Department of Environmental Conservation 6NYCRR Part 371, November 28, 1998

TABLE 11

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

BASEMENT
Summary of Volatile Organic Compounds Detected in Soil
August 6, 2002

Sample Location	Sample Depth (ft bg) [1]	Concentration (ug/kg) [2]											
		Methylene Chloride	Acetone	Tetra-hydrofuran	Chloroform	Tri-chloroethene	Ethylbenzene	Total Xylenes	Tetra-chloroethene	1,2,4-Tri methylbenzene	2-Butanone	Naphthalene	1,1,1-Tri chloroethane	Trichloro-fluoromethane
GP-10	(0-1)	3 J	R	6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	ND [3] J	R	7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	1 J
GP-11	(0-1)	ND J	R	6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	ND J	R	6 J	ND	ND	ND	ND	3 J	ND	ND	ND	ND	ND
GP-12	(0-1)	ND J	R	6 J	ND	ND	ND	ND	2 J	ND	ND	ND	ND	ND
	(4-6)	3 J	R	7 J	ND	ND	ND	ND	4 J	ND	ND	ND	ND	ND
GP-13	(0-1)	ND J	R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	4 J	R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-14	(0-1)	1 J	R	ND	5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	3 J	R	7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-15	(0-1)	3 J	R	6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	3 J	R	7 J	ND	1 J	ND	ND	ND	ND	ND	ND	ND	ND
GP-16	(0-1)	3 J	R	6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	4 J	R	7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-17	(0-1)	4 J	R	7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	3 J	R	6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-18	(0-1)	3 J	R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	ND J	8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC [4] TAGM [5] Recommended Soil Cleanup Objective		100	200	N/A [6]	300	700	5,500	1,200	1,400	10,000	N/A	13,000	800	N/A

1) - Feet below grade
2) - Micrograms per kilogram
3) - Not Detected
4) - New York State Department of Environmental Conservation
5) - Technical and Administrative Guidance Memorandum (HWR-94-4046, January 24, 1994)
6) - Not available
J - Associated numerical value is the approximate concentration of the analyte in the sample
R - The presence or absence of the analyte cannot be verified. The sample results are rejected due to deficiencies in the laboratory quality control criteria.
ND J - The analyte was not detected. However, the reported quantitation limit is approximate.
Note - Samples analyzed by EPA Method 8260 NYSDEC ASP category B deliverables

B.

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TABLE 12

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

BASEMENT
Summary of Semivolatile Organic Compounds Detected in Soil
August 6, 2002

Sample Location	Sample Depth (ft bg) [1]	Concentration (ug/kg) [2]																				
		Naphthalene	1-Methylnaphthalene	2-Methylnaphthalene	Acenaphthene	4-Nitrophenol	Dibenzofuran	Fluorene	Bis (2-ethylhexyl) pthalate	Phenanthrene	Anthracene	Carbazole	Fluoranthene	Pyrene	Benz (a) anthracene	Chrysene	Benzo (b) fluoranthene	Benzo (k) fluoranthene	Benzo (a) pyrene	Indeno (1,2,3-cd) pyrene	Dibenz (a,h) anthracene	Benzo (g,h,I) perylene	Acenaphthylene
GP-10	(0-1)	ND [3]	84 J	51 J	190 J	57 J	71 J	150 J	ND	2,700	510	140 J	2,800	3,100	1,600	1,500	970	1,000	1,200	500	280 J	500 J	ND
	(4-6)	ND	ND	ND	53 J	ND	ND	ND	ND	940	180 J	ND	1,300	1,600	900	830	710	330 J	620	280 J	120 J	280 J	ND
GP-11	(0-1)	ND	ND	ND	ND	ND	ND	ND	840	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
	(4-6)	ND	ND	ND	ND	ND	ND	ND	1,600	ND	ND	ND	56 J	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
GP-12	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
	(4-6)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND J	ND
GP-13	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND	3,100 DJ	530 DJ	ND	3,000 DJ	3,600 D	1,800 DJ	1,800 DJ	1,300 DJ	860 DJ	1,200 DJ	430 DJ	ND	560 J	ND
	(4-6) *	ND	ND	ND	48 J	ND	ND	ND	620	820	100 J	ND	620	860	380 J	400	300 J	220 J	240 J	93 J	ND	110 J	ND
GP-14	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-15	(0-1)	94 J	260 J	150 J	900	260 J	300 J	630	ND	13,000 D	2,000	ND	16,000	19,000	9,700	9,100	7,800	4,500	6,900	2700 J	1500 J	3000 J	41 J
	(4-6)	ND	ND	ND	ND	ND	ND	ND	ND	820	140 J	ND	1,100	1,400	690	730	570	430	520	160 J	ND	170 J	ND
GP-16	(0-1)	ND	74 J	45 J	170 J	47 J	63 J	140 J	ND	2,900	450	90 J	2,800	3,200	1,800	1,500	1500 J	1500 J	1200 J	360 J	ND J	410 J	ND
	(4-6)	110 J	180 J	130 J	240 J	60 J	83 J	180 J	ND	2,300	430	110 J	1,800	2,000	940	920	780	360 J	620	180 J	ND	180 J	ND
GP-17	(0-1)	ND	ND	ND	ND	ND	ND	ND	680 J	3,700	890 J	ND	7,300	8,200	4,300	4,100	3,300 J	2,300 J	3,000 J	720 J	ND	820 J	ND
	(4-6)	ND	ND	ND	58 J	ND	ND	44 J	430	1,100	200 J	ND	1,500	1,800	940	920	640	470	670	430	240 J	460 J	ND
GP-18	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND	470	90 J	ND	990	1,100	810	780	640	340 J	520	250 J	ND	240 J	ND
	(4-6)	ND	ND	ND	ND	ND	ND	ND	ND	280 J	56 J	ND	290 J	330 J	160 J	170 J	140 J	68 J	110 J	48 J	ND	ND J	ND
NYSDEC [4] TAGM [5] Recommended Soil Cleanup Objective		13,000	N/A [6]	36,400	50,000	100	6,200	50,000	50,000	50,000	50,000	N/A	50,000	50,000	224	400	1,100	1,100	61	3,200	14	50,000	41,000

1) - Feet below grade
2) - Micrograms per kilogram
3) - Not Detected
4) - New York State Department of Environmental Conservation
5) - Technical and Administrative Guidance Memorandum (HWR-94-4046, January 24, 1994)
6) - Not available

J - Associated numerical value is the approximate concentration of the analyte in the sample
ND J - The analyte was not detected. However, the reported quantitation limit is approximate.
D - Compound identified in an analysis at a secondary dilution factor
Note - Samples analyzed by EPA Method 8270 NYSDEC ASP category B deliverables
* - GP-13 (4-6) is not listed correctly in the laboratory report. The report lists it as GP-13

Metals
Soil
B

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

BASEMENT
Summary of Total Metals in Soil
August 6, 2002

Sample Location	Sample Depth (ft bg) [1]	Concentration (mg/kg) [2]											
		Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
GP-10	0 to 1	3,500	ND[3] J	ND	300	0.27 J	0.72	3,660 J	8.5 J	3.7 J	7.8	7,730 J	955 J
	4 to 6	3,160	ND J	ND J	23.4 J	0.24 J	0.50 J	1,460 J	8.2 J	3.6 J	6.4	6,540 J	6.7 J
GP-11	0 to 1	3,660	ND J	ND	24.4	0.27 J	0.62	832 J	9.6 J	3.8 J	8.4	8,210 J	5.2 J
	4 to 6	3,110	ND J	ND	20.2 J	0.24 J	0.61	1,130 J	8.0 J	3.3 J	8.0	7,360 J	2.9 J
GP-12	0 to 1	6,360	ND J	2.3	44.4	0.45 J	0.86	1,200 J	13.4 J	5.8	14.6	11,300 J	14.1 J
	4 to 6	3,490	ND J	ND J	21.5 J	0.29 J	0.61	1,310 J	7.6 J	3.7 J	7.4	8,130 J	2.9 J
GP-13	0 to 1	4,490	ND J	2.9	33.7	0.31 J	0.63	1,850 J	9.4 J	3.7 J	20.8	8,200 J	26.2 J
	4 to 6	4,220	ND J	ND	31.1	0.31 J	0.68	1,750 J	8.6 J	4.0 J	8.3	9,000 J	4.8 J
GP-14	0 to 1	5,100	ND J	2.0	28.6	0.32 J	0.92	1,560 J	10.4 J	5.1 J	10.7	10,700 J	8.9 J
	4 to 6	3,420	ND J	ND	22.7 J	0.27 J	0.76	1,250 J	9.2 J	4.4 J	8.9	9,590 J	3.8 J
GP-15	0 to 1	4,470	ND J	ND	32.5	0.33 J	0.74	5,620 J	9.9 J	4.2 J	13.4	8,980 J	10.7 J
	4 to 6	3,690	ND J	1.6	27.7	0.28 J	0.80	1,560 J	10.1 J	4.3 J	7.6	9,440 J	3.8 J
GP-16	0 to 1	3,850	ND J	ND	24.5	0.27 J	0.68	1,490 J	7.9 J	3.7 J	7.8	8,410 J	3.3 J
	4 to 6	3,890	ND J	ND	25.0	0.32 J	0.72	1,630 J	9.6 J	3.8 J	7.4	8,730 J	3.6 J
GP-17	0 to 1	5,270	ND J	ND	36.5	0.38 J	0.74	4,450 J	10.3 J	4.4 J	10.7	9,660 J	49.5 J
	4 to 6	4,050	ND J	ND	23.6	0.30 J	0.61	1,700 J	9.3 J	3.7 J	7.8	7,940 J	3.5 J
GP-18	0 to 1	4,760	ND J	ND	27.7	0.34 J	0.75	1,570 J	10.3 J	4.6 J	8.4	9,720 J	3.7 J
	4 to 6	3,790	ND J	ND	26.1	0.25 J	0.65	1,330 J	10.0	4.2 J	8.0	8,590 J	3.0 J
NYSDEC [4] TAGM [5] Recommended Soil Cleanup Objective		SB [6]	SB	7.5	300	0.16	1	SB	10	30	25	2,000	SB

1) - Feet below grade
2) - Milligrams per kilogram
3) - Not detected
4) - New York State Department of Environmental Conservation
5) - Technical and Administrative Guidance Memorandum (HWR-94-4046, January 24, 1994)
6) - Site Background
J - Associated numerical value is the approximate concentration of the analyte in the sample
ND J - The analyte was not detected. However, the reported quantitation limit is approximate.

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

BASEMENT
Summary of Total Metals in Soil
August 6, 2002

Sample Location	Sample Depth (ft bg) [1]	Concentration (mg/kg) [2]										
		Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
GP-10	0 to 1	1,880 J	230	ND [3]	7.6 J	538	ND	ND	25.7 J	ND J	13.9	57.5 J
	4 to 6	1,610 J	217	ND	7.1 J	453 J	ND	ND	105 J	ND	7.2	20.0 J
GP-11	0 to 1	1,820 J	217	ND	8.0 J	519 J	ND	ND	99.4 J	ND	10.9	18.3 J
	4 to 6	1,590 J	238	ND	7.9 J	413 J	ND	ND	104 J	ND	9.0	18.8 J
GP-12	0 to 1	2,870 J	342	ND	11.6 J	983	ND	ND	158 J	ND J	15.5	32.6 J
	4 to 6	2,070 J	288	ND	8.3 J	545 J	ND J	ND	111 J	ND	10	24.3 J
GP-13	0 to 1	1,820 J	207	ND	8.1 J	732	ND J	ND	122 J	ND	12.2	31.8 J
	4 to 6	2,180 J	360	ND	9.1 J	686	ND	ND	137 J	0.87 J	11.7	25.6 J
GP-14	0 to 1	2,470 J	284	ND	10.4 J	734	ND J	ND	93.3 J	2.5	14.6	30.9 J
	4 to 6	1,870 J	292	ND	10.7 J	456 J	ND J	ND	49.6 J	ND J	13.4	47.5 J
GP-15	0 to 1	2,370 J	266	ND	9.8 J	830	ND	ND	149 J	ND	12.7	37.5 J
	4 to 6	1,810 J	290	ND	8.4 J	523 J	ND	ND	130 J	ND	14.3	23.7 J
GP-16	0 to 1	2,110 J	244	ND	8.3 J	604	ND	ND	85.6 J	ND	10.8	22.2 J
	4 to 6	2,020 J	243	ND	7.9 J	693	ND J	ND	174 J	ND	12.0	20.3 J
GP-17	0 to 1	2,030 J	239	ND	8.9 J	881	ND	ND	142 J	ND J	15.6	22.2 J
	4 to 6	2,310 J	249	ND	8.8 J	630	ND	ND	177 J	ND J	17.3	26.0 J
GP-18	0 to 1	2,380 J	285	ND	9.4 J	846	ND	ND	140 J	ND J	13.2	24.5 J
	4 to 6	2,110	297	ND	9.6	617	ND	ND	187 J	ND	12.7	18.6 J
NYSDEC [4] TAGM [5] Recommended Soil Cleanup Objective		SB [6]	SB	0.1	13	SB	2	SB	SB	SB	150	20

1) - Feet below grade
2) - Milligrams per kilogram
3) - Not detected
4) - New York State Department of Environmental Conservation
5) - Technical and Administrative Guidance Memorandum (HWR-94-4046, January 24, 1994)
6) - Site Background
J - Associated numerical value is the approximate concentration of the analyte in the sample
ND J - The analyte was not detected. However, the reported quantitation limit is approximate.

TABLE 14

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

BASEMENT

Summary of Metals in Soil by TCLP[1)]
August 6, 2002

Sample Location	Sample Depth (ft bg) [2)]	Concentration (mg/l) [3)]							
		Arsenic	Barium	Cadmium	Chromium	Lead	Selenium	Silver	Mercury
GP-10	(0-1)	ND [4)]	ND	ND	ND	ND	ND	ND	ND
	(4-6)	ND	ND	ND	ND	ND	ND	ND	ND
GP-11	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	ND	ND	ND	ND	ND	ND	ND	ND
GP-12	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	ND	ND	ND	ND	ND	ND	ND	ND
GP-13	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	ND	ND	ND	ND	ND	ND	ND	ND
GP-14	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	ND	ND	ND	ND	ND	ND	ND	ND
GP-15	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	ND	ND	ND	ND	ND	ND	ND	ND
GP-16	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	ND	ND	ND	ND	ND	ND	ND	ND
GP-17	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	ND	ND	ND	ND	ND	ND	ND	ND
GP-18	(0-1)	ND	ND	ND	ND	ND	ND	ND	ND
	(4-6)	ND	ND	ND	ND	ND	ND	ND	ND
NYSDEC Standard*		5.0	100.0	1.0	5.0	5.0	1.0	5.0	0.2

1) - Toxicity Characteristic Leaching Procedure
2) - Feet below grade
3) - Milligrams per liter
4) - Not Detected
* New York State Department of Environmental Conservation 6NYCRR Part 371, November 28, 1998

TABLE 15

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

PARKING LOT
Summary of Lead Concentrations in Soil
April 12, 2002

Sample Location	Sample Depth (ft bg) [1]	Concentration	
		Total Lead (mg/kg) [2]	TCLP [3] Lead (mg/l) [4]
PGP-1	0 to 2	4,250	1.10
	2 to 4	480	NA [5]
	4 to 6	1,010	0.378
	6 to 8	124	NA
PGP-2	0 to 2	772	NA
	2 to 4	815	NA
	4 to 6	754	NA
	6 to 8	1,340	NA
PGP-3	0 to 2	1,760	NA
	2 to 4	884	NA
	4 to 6	1,780	2.34
	6 to 8	152	NA
PGP-4	0 to 2	1,180	NA
	2 to 4	4,380	NA
	4 to 6	6,300	10.4
	6 to 8	740	NA
PGP-5	0 to 2	889	NA
	2 to 4	141	NA
	4 to 6	1,420	NA
	6 to 8	17.3	NA
PGP-6	0 to 2	540	0.232
	2 to 4	180	0.231
	4 to 6	420	NA
	6 to 8	39.9	NA
PGP-7	0 to 2	1,070	NA
	2 to 4	171	NA
	4 to 6	5,260	NA
	6 to 8	147	NA
PGP-8	0 to 2	577	NA
	2 to 4	346	0.996
	4 to 6	158	NA
	6 to 8	114	NA
NYSDEC [6] TAGM [7] Recommended Soil Cleanup Objective		SB [8]	
NYSDEC Standard*			5.0

1) - Feet below grade
2) - Milligrams per kilogram
3) - Toxicity Characteristic Leaching Procedure
4) - Milligrams per liter
5) - Not Analyzed
6) - New York State Department of Environmental Conservation
7) - Technical and Administrative Guidance Memorandum (HWR-94-4046, January 24, 1994)
8) - Site Background
* New York State Department of Environmental Conservation 6NYCRR Part 371, November 28, 1998

continue next page

TABLE 16

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

PARKING LOT
Summary of Lead Concentrations in Soil
August 16, 2002

Sample Location	Sample Depth (ft bg) [1]	Concentration	
		Total Lead (mg/kg) [2]	TCLP [3] Lead (mg/l) [4]
PGP-9	0 to 4	320	ND [5]
	8 to 12	160	1.1
PGP-10	4 to 8	880	2.4
	10 to 14	510	12
PGP-11	2 to 6	28	ND
	6 to 10	12	ND
PGP-12	0 to 4	300	ND
	12 to 16	45	ND
PGP-13	2 to 6	170	ND
	6 to 10	45	ND
PGP-14	0 to 4	840	4.3
	6 to 10	1,400	4.0
NYSDEC [6] TAGM [7] Recommended Soil Cleanup Objective		SB [8]	
NYSDEC Standard*			5.0

1) - Feet below grade
2) - Milligrams per kilogram
3) - Toxicity Characteristic Leaching Procedure
4) - Milligrams per liter
5) - Not detected
6) - New York State Department of Environmental Conservation
7) - Technical and Administrative Guidance Memorandum (HWR-94-4046, January 24, 1994)
8) - Site Background
* New York State Department of Environmental Conservation 6NYCRR Part 371, November 28, 1998

TABLE 17

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

FIRST FLOOR AND BASEMENT
Summary of Volatile Organic Compounds Detected in Ground-Water
August 1,2, 5 and 6, 2002

Sample Location		Concentration (ug/l) [1]								
		Acetone	Tetra-chloroethene	1,1,1-Tri-chloroethane	1,1-Di-chloroethene	Tri-chloroethene	cis-1,2-Di-chloroethene	Chloroform	Total Xylenes	MTBE
First Floor	GP-1	7 J	ND [2]	ND	ND	ND	ND	ND	ND	ND
	GP-2	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-3	ND	ND	ND	ND	ND	ND	ND	ND	2 J
	GP-4	ND	ND	ND	ND	ND	ND	ND	ND	ND
	GP-5	ND	ND	ND	ND	ND	ND	ND	54	5 J
	GP-6	ND	24	ND	ND	4 J	3 J	ND	ND	1 J
	GP-7	ND	74	ND	ND	3 J	ND	ND	ND	ND
	GP-8	ND	210 J	5 J	1 J	7 J	ND	ND	ND	ND
	GP-9	ND	36 J	ND	ND	2 J	ND	ND	ND	ND
Basement	GP-10	ND	170	ND	ND	9 J	1 J	ND	ND	3 J
	GP-11	ND	120	ND	ND	4 J	ND	ND	ND	ND
	GP-12	ND	160	ND	ND	11	5 J	ND	ND	ND
	GP-13	ND	24	ND	ND	2 J	ND	ND	ND	ND
	GP-14	ND	86	ND	ND	2 J	ND	ND	ND	ND
	GP-15	ND	54	ND	ND	2 J	ND	ND	ND	ND
	GP-16	ND	11	ND	ND	ND	ND	ND	ND	6 J
	GP-17	ND	35	ND	ND	ND	ND	ND	ND	ND
	GP-18	ND	5 J	ND	ND	ND	ND	ND	ND	ND
TOGS GWQS [3]		5	5	5	5	5	5	7	5	10

1) - Micrograms per liter
2) - Not detected
3) - Technical & Operational Guidance Series Ground Water Quality Standards
J - Associated numerical value is the approximate concentration of the analyte in the sample
Note - Samples analyzed by EPA Method 8260 NYSDEC ASP category B deliverables

TABLE 18

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

MONITOR WELLS
Summary of Volatile Organic Compounds Detected in Ground-Water
September 3 and 4, 2002

Well Identification	Concentration (ug/l) [1]			
	Chloroform	Tetrachloroethene	1,1,1-Trichloroethane	Trichloroethylene
MW-1	ND [2]	14	ND	ND
MW-2	ND	ND	ND	ND
MW-3	ND	ND	ND	ND
MW-5	2	ND	ND	ND
MW-6 (Cluster Well)	9	260	3	13
MW-7	ND	73	1	2
MW-8	ND	7	ND	1
MW-9 (Cluster Well)	2	17	ND	5
MW-10	ND	ND	ND	ND
Trip Blank	ND	ND	ND	ND
Field Blank 9-3-02	ND	ND	ND	ND
Field Blank 9-4-02	ND	ND	ND	ND
TOGS GWQS [3]	7	5	5	5

1) - Micrograms per liter
2) - Not detected
3) - Technical & Operational Guidance Series Ground Water Quality Standards
Notes : Samples analyzed by EPA Method 8260 NYSDEC ASP category B deliverables
Cluster Wells have the screen set from 5 feet above bedrock to the top of bedrock

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

FIRST FLOOR
Summary of Total Metals in Ground-Water
August 1, 2 and 5, 2002

Sample Location	Concentration (ug/l) [1]											
	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
GP-1	38,500	ND	ND	461	ND	5.9	118,000	95.5	38.4 J	103	75,800	41.8
GP-2	ND [2]	ND	ND	85.7 J	ND	ND	67,500	ND	ND	ND	956	ND
GP-3	2,070	ND	ND	83.8 J	ND	ND	68,200	4.9 J	ND	3.2 J	3,220	ND
GP-4	ND	ND	ND	75.3 J	ND	ND	63,000	ND	ND	ND	952	ND
GP-5	ND	ND	ND	291	ND	2.4 J	103,000	ND	ND	ND	33,000	ND
GP-6	4,540 J	ND	3.5 J	81.1 J	ND	0.68 J	44,300	24.4	5.9 J	9.8 J	7,740	ND
GP-7	2,400 J	ND	ND	97.5 J	ND	ND	114,000	62.0	4.3 J	3.3 J	3,470	ND
GP-8	ND	ND	ND	51.4 J	ND	0.71 J	67,400	92.5	2.9 J	1.3 J	298	ND
GP-9	968 J	ND	ND	35.4 J	ND	1.7 J	28,500	11.5	3.6 J	76.8	1,120	ND
TOGS GWQS [3]	N/A [4]	3	25	1,000	3	5	N/A	50	N/A	200	300	25

1) - Micrograms per liter
2) - Not detected
3) - Technical & Operational Guidance Series Ground Water Quality Standards
4) - Not available
J - Associated numerical value is the approximate concentration of the analyte in the sample

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

FIRST FLOOR
Summary of Total Metals in Groundwater
August 1, 2 and 5, 2002

Sample Location	Concentration (ug/l) [1]										
	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
GP-1	42,700	14000 J	0.32	89.4	13300 J	ND	ND	265,000	ND	85.2	263
GP-2	22,100	4980 J	ND [2]	8.2 J	3,850 J	ND	ND	27,700	ND	ND	23.4
GP-3	29,600	1480 J	ND	14.7 J	4,460 J	ND	ND	237,000	ND	1.6 J	22.8
GP-4	23,800	5010 J	ND	4.1 J	2,900 J	ND	ND	186,000	ND	ND	22.2
GP-5	34,300	9240 J	ND	ND	5,200 J	ND	ND	227,000	18.9 J	ND	54.8
GP-6	17,600	1,960	ND	15.9 J	3,420 J	ND	ND	171,000	ND	7.8 J	24.5
GP-7	23,800	471	ND	7.5 J	10,200	ND	ND	184,000	ND	2.0 J	ND
GP-8	23,600	529	ND	2.0 J	5,440	ND	ND	172,000	ND	ND	ND
GP-9	9,760	375	ND	5.2 J	2,860 J	ND	ND	155,000	ND	ND	47.7
TOGS GWQS [3]	35,000	300	0.7	100	N/A [4]	10	50	20,000	N/A	N/A	2,000

1) - Micrograms per liter
2) - Not detected
3) - Technical & Operational Guidance Series Ground Water Quality Standards
4) - Not available
J - Associated numerical value is the approximate concentration of the analyte in the sample

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

GW metals

BASEMENT
Summary of Total Metals in Ground-Water
August 6, 2002

Sample Location	Concentration (ug/l) [1]											
	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
GP-10	ND [2]	ND	ND	53.0 J	ND	ND	92,400	33.1	1.5 J	ND	1,060	ND
GP-11	1,100 J	ND	ND	44.2 J	ND	ND	69,000	8.1 J	2.5 J	2.6 J	2,460	ND
GP-12	ND	ND J	ND	40.6 J	ND	0.41 J	89,100	ND	2.5 J	ND	981	ND
GP-13	ND	ND	ND	38.2 J	ND	ND	57,200	ND	1.3 J	ND	463	ND
GP-14	714	ND	ND	45.8 J	ND	ND	69,300	2.9 J	1.8 J	ND	1,170	ND
GP-15	ND	ND	ND	39.4 J	ND	ND	59,700	6.2 J	1.6 J	ND	1,010	ND
GP-16	ND	ND	ND	55.0 J	ND	ND	80,600	1.8 J	1.5 J	ND	591	ND
GP-17	1,020 J	ND	ND	48.9 J	ND	ND	52,600	1.6 J	2.3 J	1.6 J	1,790	ND
GP-18	2,380 J	ND	ND	133 J	ND	0.81 J	106,000	1.1 J	8.2 J	12.1 J	4,550	4.6
TOGS GWQS [3]	N/A [4]	3	25	1,000	3	5	N/A	50	N/A	200	300	25

1) - Micrograms per liter
2) - Not detected
3) - Technical & Operational Guidance Series Ground Water Quality Standards
4) - Not available
J - Associated numerical value is the approximate concentration of the analyte in the sample
ND J - The analyte was not detected. However, the reported quantitation limit is approximate.

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

BASEMENT
Summary of Total Metals in Ground-Water
August 6, 2002

Sample Location	Concentration (ug/l) [1]										
	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
GP-10	39,000	237	ND [2]	2.9 J	2,760 J	ND	ND	146,000	ND	ND	15.2 J
GP-11	23,000	576	ND	7.0 J	2,710 J	ND	ND	146,000	ND	ND	30.2
GP-12	21,400	3,450	ND	5.5 J	3,930 J	ND	ND	129,000	ND	ND	29.7
GP-13	14,400	389	ND	3.8 J	2,770 J	ND	ND	102,000	ND	ND	30.4
GP-14	27,000	240	ND	3.3 J	2,330 J	7.4	ND	142,000	ND	ND	19.4 J
GP-15	15,700	163	ND	2.4 J	2,840 J	ND	ND	141,000	ND	ND	14.5 J
GP-16	6,700	328	ND	3.6 J	7,860	ND	ND	258,000	ND	ND	17.2 J
GP-17	17,300	289	ND	5.0 J	3,000 J	ND	ND	194,000	ND	ND	23.6
GP-18	13,100	15,400	0.22	16.0 J	5,290	10.2	ND	208,000	ND	2.8 J	26.0
TOGS GWQS [3]	35,000	300	0.7	100	N/A [4]	10	50	20,000	N/A	N/A	2,000

1) - Micrograms per liter
2) - Not detected
3) - Technical & Operational Guidance Series Ground Water Quality Standards
4) - Not available
J - Associated numerical value is the approximate concentration of the analyte in the sample

VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

MONITOR WELLS
Summary of Total Metals in Groundwater
September 3 and 4, 2002

Well Identification	Concentration (ug/l) [1]											
	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead
MW-1	ND [2]	ND	ND	29.5	ND	ND	43,200	26.8	ND	ND	208	ND
MW-2	ND	ND	ND	235	ND	ND	60,800	ND	ND	6.0	20,800	3.0
MW-3	ND	ND	ND	23.5	ND	ND	30,600	ND	ND	5.9	247	ND
MW-5	ND	ND	ND	72.7	ND	ND	62,600	ND	ND	ND	519	ND
MW-6 (Cluster Well)	ND	ND	ND	47.8	ND	ND	81,900	20.9	ND	12.0	263	ND
MW-7	ND	ND	ND	52.3	ND	ND	50,000	8.3	ND	9.3	240	ND
MW-8	626	5.8	30.1	ND	ND	ND	8,940	24.3	ND	15.3	278	ND
MW-9 (Cluster Well)	522	ND	ND	28.7	ND	ND	25,700	20.5	ND	42.1	541	18.2
MW-10	81.5	ND	ND	237	ND	ND	191,000	ND	ND	5.8	ND	3.1
TOGS GWQS [3]	N/A [4]	3	25	1,000	3	5	N/A	50	N/A	200	300	25

1) - Micrograms per liter
2) - Not detected
3) - Technical & Operational Guidance Series Ground Water Quality Standards
4) - Not available
Note - Cluster Wells have the screen set from 5 feet above bedrock to the top of bedrock

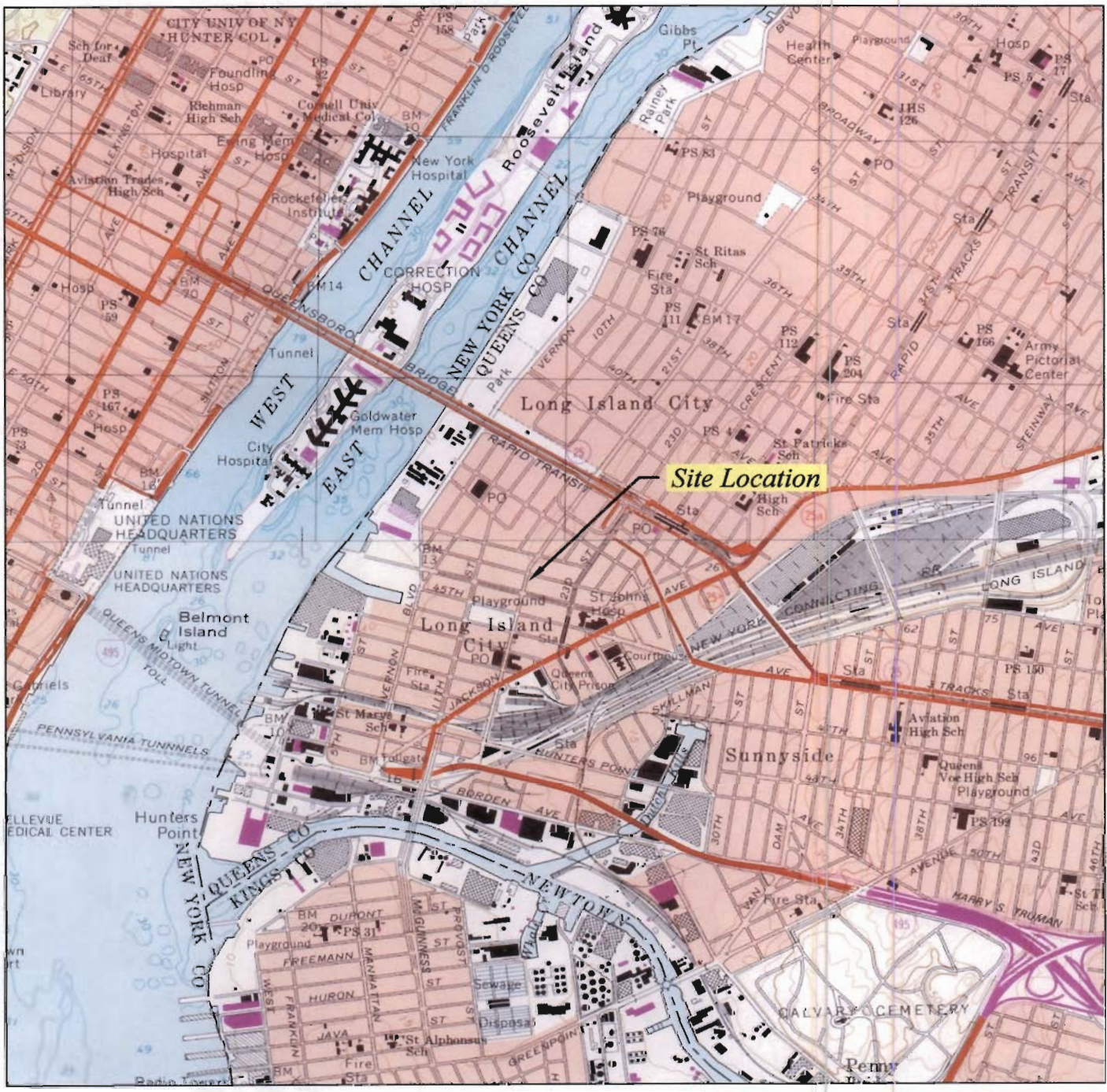
VOLUNTARY CLEANUP PROGRAM INDEX # D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

MONITOR WELLS
Summary of Total Metals in Groundwater
September 3 and 4, 2002

Well Identification	Concentration (ug/l) [1]										
	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
MW-1	3,480	167	ND [2]	10.2	3,770	ND	ND	13,600	ND	ND	35.8
MW-2	10,900	5,000	ND	ND	9,200	10.3	ND	245,000	ND	ND	ND
MW-3	3,620	13.0	ND	ND	1,690	ND	ND	2,390	ND	ND	ND
MW-5	10,700	7,010	ND	5.2	3,460	11.8	ND	56,400	ND	ND	ND
MW-6 (Cluster Well)	20,900	904	ND	ND	5,690	ND	ND	90,000	ND	ND	ND
MW-7	5,050	129	ND	ND	7,650	ND	ND	22,400	ND	ND	ND
MW-8	366	12	ND	ND	3,080	ND	ND	78,600	ND	30.0	ND
MW-9 (Cluster Well)	2,580	55.4	ND	ND	5,580	ND	ND	43,500	ND	ND	54.3
MW-10	31,200	2,010	ND	9.7	19,200	11.2	ND	259,000	ND	ND	ND
TOGS GWQS [3]	35,000	300	0.7	100	N/A [4]	10	50	20,000	N/A	N/A	2,000

1) - Micrograms per liter
2) - Not detected
3) - Technical & Operational Guidance Series Ground Water Quality Standards
4) - Not available
Note - Cluster Wells have the screen set from 5 feet above bedrock to the top of bedrock

FIGURES



SOURCE: USGS TOPOGRAPHIC QUADRANGLES BROOKLYN, NEW YORK (PHOTOREVISED 1979) AND CENTRAL PARK, NEW YORK (1995).

QUADRANGLE LOCATION

N

0 2000

SCALE IN FEET

VOLUNTARY CLEANUP PROGRAM INDEX #D2-0023-00-0
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

TOPOGRAPHIC / SITE LOCATION MAP

DATE	REVISED

PREPARED BY:

LEGGETTE, BRASHEARS & GRAHAM, INC.
Professional Ground-Water and Environmental Engineering Services
110 Corporate Park Drive
Suite 112
White Plains, NY 10604
(914) 694-5711

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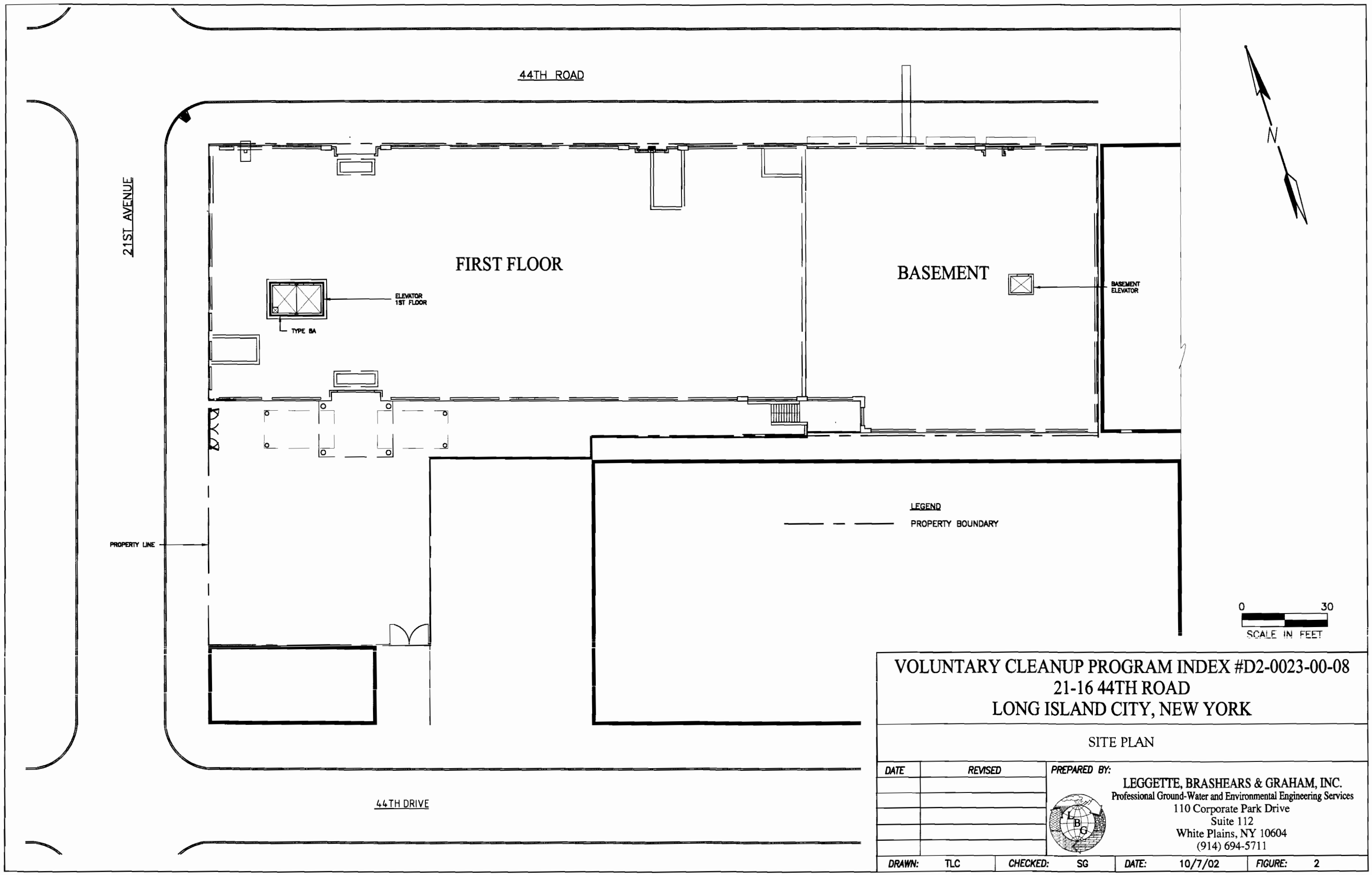

VOLUNTARY CLEANUP PROGRAM INDEX #D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

SITE PLAN

DATE	REVISED

PREPARED BY:

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44TH ROAD

21ST AVENUE

44TH DRIVE

PROPERTY LINE

MW-1 MW-2 MW-3 MW-5 MW-6 MW-7 MW-8 MW-9 MW-10

GP-1 GP-2 GP-3 GP-4 GP-5 GP-6 GP-7 GP-8 GP-9 GP-10 GP-11 GP-12 GP-13 GP-14 GP-15 GP-16 GP-17 GP-18 GP-19 GP-20 GP-21 GP-22

VP-1 VP-2 VP-3 VP-4 VP-5 VP-6 VP-7 VP-8 VP-9 VP-10

VE-1 VE-2 VE-3 VE-4

PGP-1 PGP-2 PGP-3 PGP-4 PGP-5 PGP-6 PGP-7 PGP-8 PGP-9 PGP-10 PGP-11 PGP-12 PGP-13 PGP-14

ELEVATOR 1ST FLOOR

TYPE 8A

BASEMENT ELEVATOR

N

LEGEND

- PROPERTY BOUNDARY
- MW-6 MONITOR WELL LOCATION
- MW-10 SHALLOW MONITOR WELL LOCATION
- MW-9 CLUSTER WELL LOCATION
- GP-9 GEOPROBE BORING LOCATION (FIRST FLOOR AND BASEMENT)
- PGP-11 GEOPROBE BORING LOCATION (PARKING LOT)
- VP-1 SOIL VAPOR SAMPLE LOCATION
- VE-1 VAPOR EXTRACTION WELL LOCATION

0 30

SCALE IN FEET

VOLUNTARY CLEANUP PROGRAM INDEX #D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

SITE PLAN - GEOPROBE, MONITOR WELL AND VAPOR POINT LOCATION MAP

DATE	REVISED

PREPARED BY:

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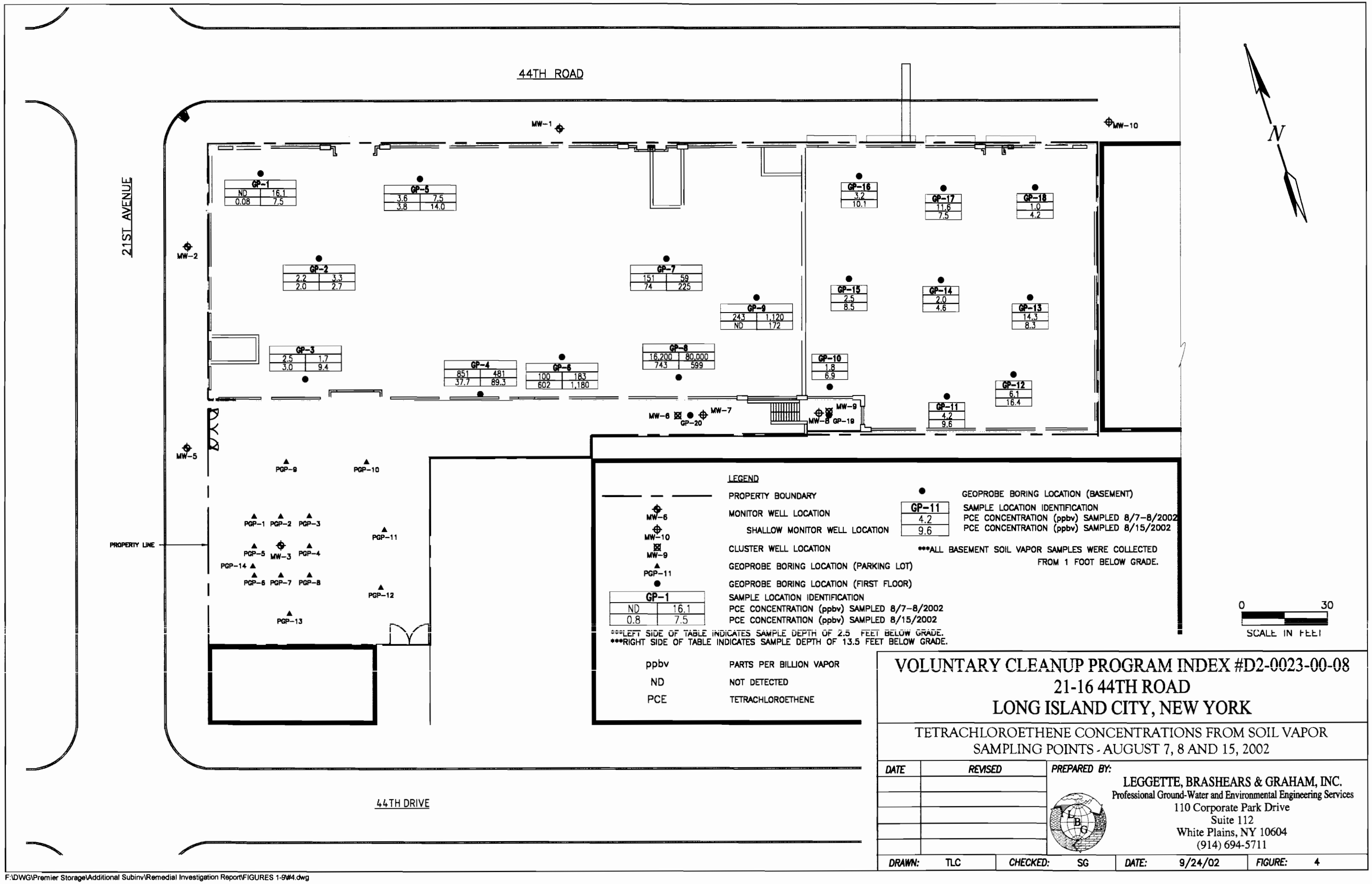

VOLUNTARY CLEANUP PROGRAM INDEX #D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

TETRACHLOROETHENE CONCENTRATIONS FROM SOIL VAPOR SAMPLING POINTS - AUGUST 7, 8 AND 15, 2002

DATE	REVISED

PREPARED BY:
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44TH ROAD

21ST AVENUE

Ur 95/50 in 120

MW-1 MW-2 MW-3 MW-5 MW-6 MW-7 MW-8 MW-9 MW-10

GP-1 GP-2 GP-3 GP-4 GP-5 GP-6 GP-7 GP-8 GP-9 GP-10 GP-11 GP-12 GP-13 GP-14 GP-15 GP-16 GP-17 GP-18 GP-19 GP-20

VP-1	49.0	26.0
VP-2	93.0	150.0
VP-3	83.0	250.0
VP-4	62.0	590.0
VP-5	380.0	290.0
VP-6	61.0	130.0
VP-7	36.0	26.0
VP-8	19.0	150.0
VP-9	20.0	25.0
VP-10	33.0	22.0

ELEVATOR 1ST FLOOR

TYPE 8A

BASEMENT ELEVATOR

PROPERTY LINE

PGP-1 PGP-2 PGP-3 PGP-4 PGP-5 PGP-6 PGP-7 PGP-8 PGP-9 PGP-10 PGP-11 PGP-12 PGP-13 PGP-14

44TH DRIVE

N

LEGEND

- PROPERTY BOUNDARY
- MW-6 MONITOR WELL LOCATION
- MW-10 SHALLOW MONITOR WELL LOCATION
- MW-9 CLUSTER WELL LOCATION
- GP-9 GEOPROBE BORING LOCATION (FIRST FLOOR AND BASEMENT)
- PGP-11 GEOPROBE BORING LOCATION (PARKING LOT)
- SOIL VAPOR SAMPLE LOCATION
- VP-1 / 49.0 / 26.0 SAMPLE LOCATION IDENTIFICATION, PCE CONCENTRATION (ppbv), PCE CONCENTRATION (ppbv)

***TOP VALUE COLLECTED FROM 2.5 FTBG

***BOTTOM VALUE COLLECTED FROM 12.5 FTBG

FT.BG. FEET BELOW GRADE

ppbv PARTS PER BILLION VAPOR

PCE TETRACHLOROETHENE

0 30

SCALE IN FEET

VOLUNTARY CLEANUP PROGRAM INDEX #D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

TETRACHLOROETHENE CONCENTRATIONS FROM SOIL VAPOR SAMPLING POINTS- SEPTEMBER 23, 2002

DATE	REVISED

PREPARED BY:

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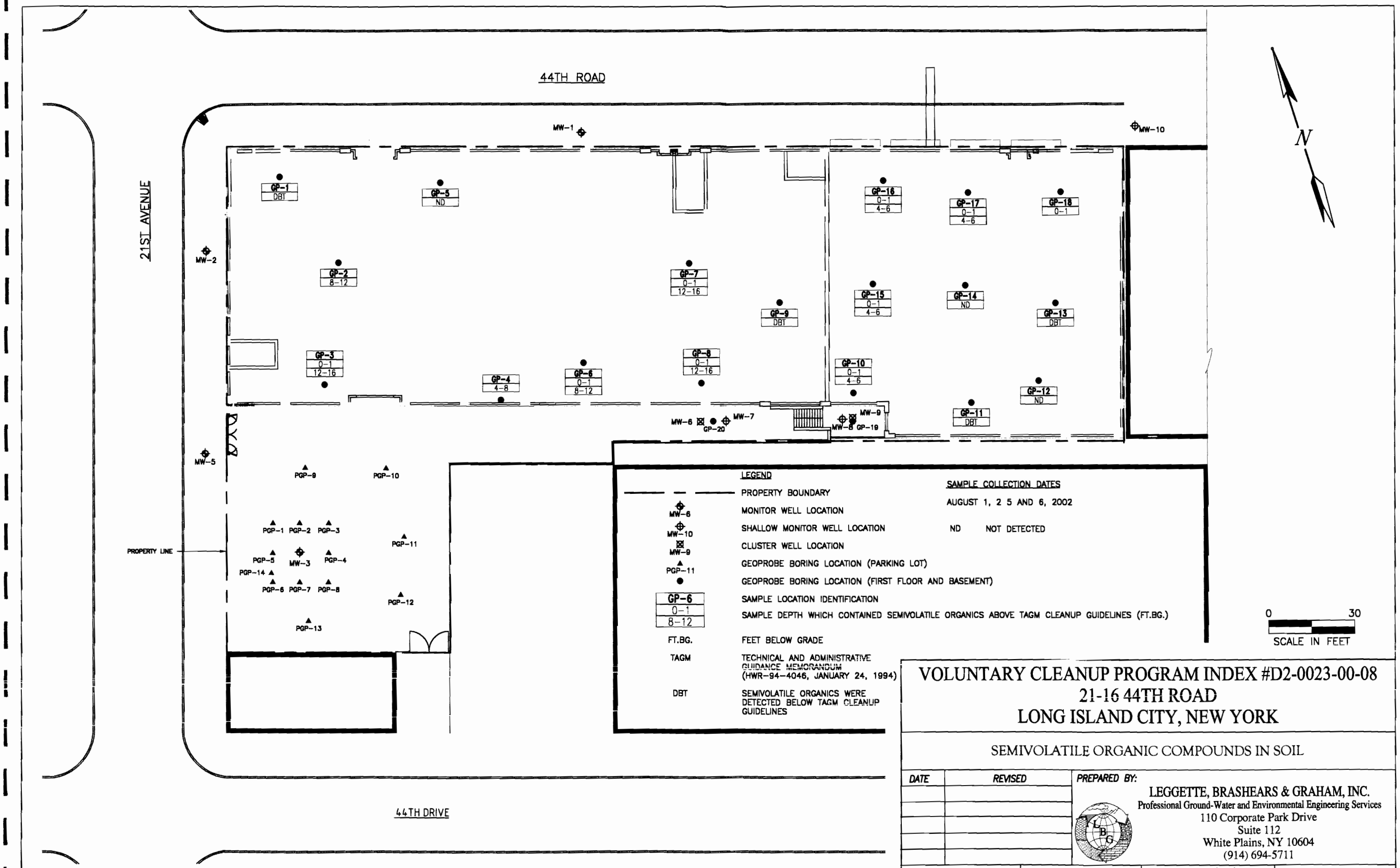

VOLUNTARY CLEANUP PROGRAM INDEX #D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL

DATE	REVISED

PREPARED BY:
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DRAWN:	TLC	CHECKED:	SG	DATE:	9/26/02	FIGURE:	6

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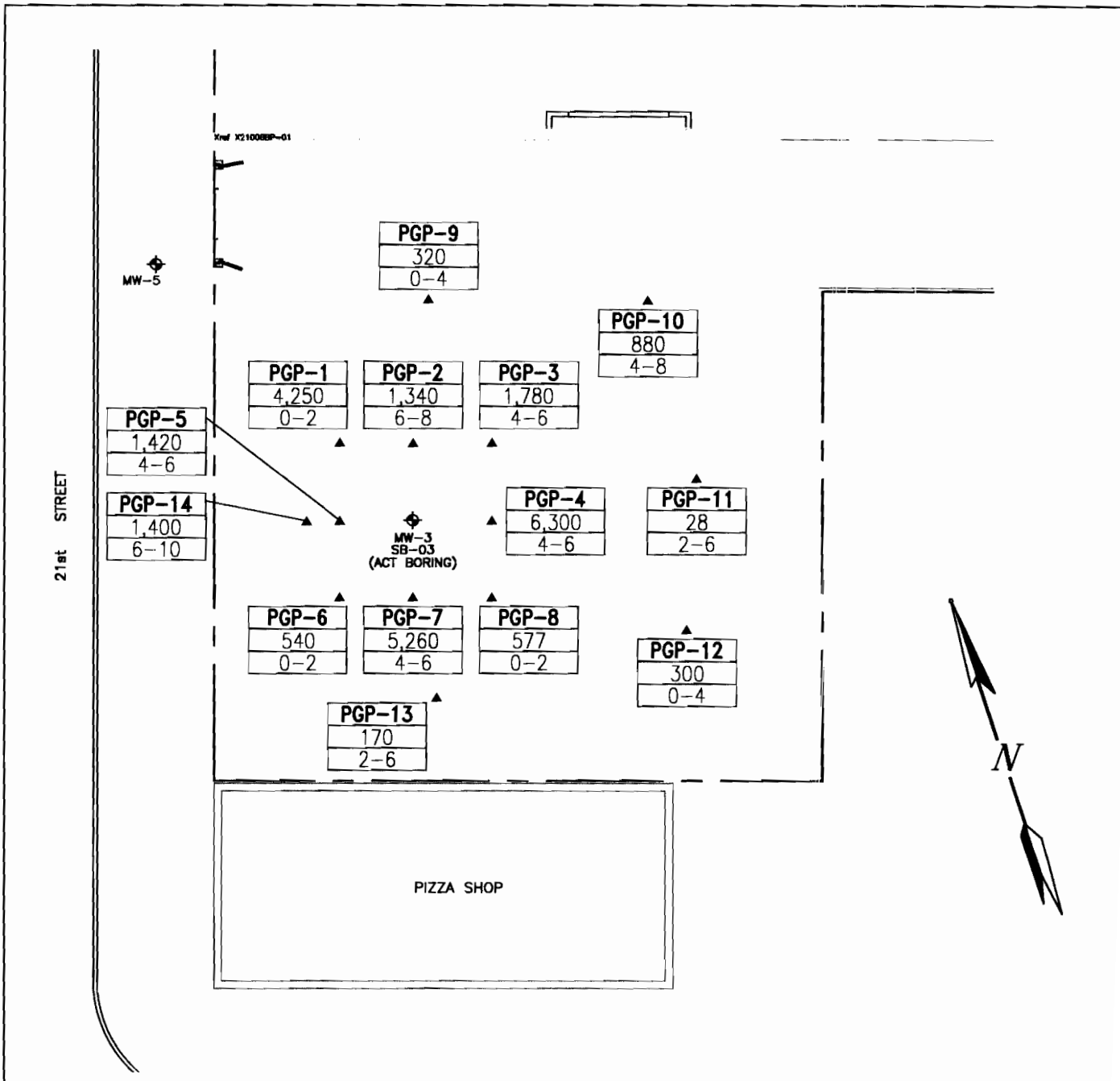


LEGEND

	PROPERTY BOUNDARY
MW-6	MONITOR WELL LOCATION
PGP-11	GEOPROBE BORING LOCATION (PARKING LOT)
PGP-10 / 880 / 4-8	GEOPROBE BORING IDENTIFICATION / LEAD CONCENTRATION (mg/kg) / SAMPLE DEPTH (FT.BG.)
FT.BG.	FEET BELOW GRADE

NOTE:
SAMPLES COLLECTED APRIL 12, 2002 AND AUGUST 16, 2002.

0
SCALE IN FE

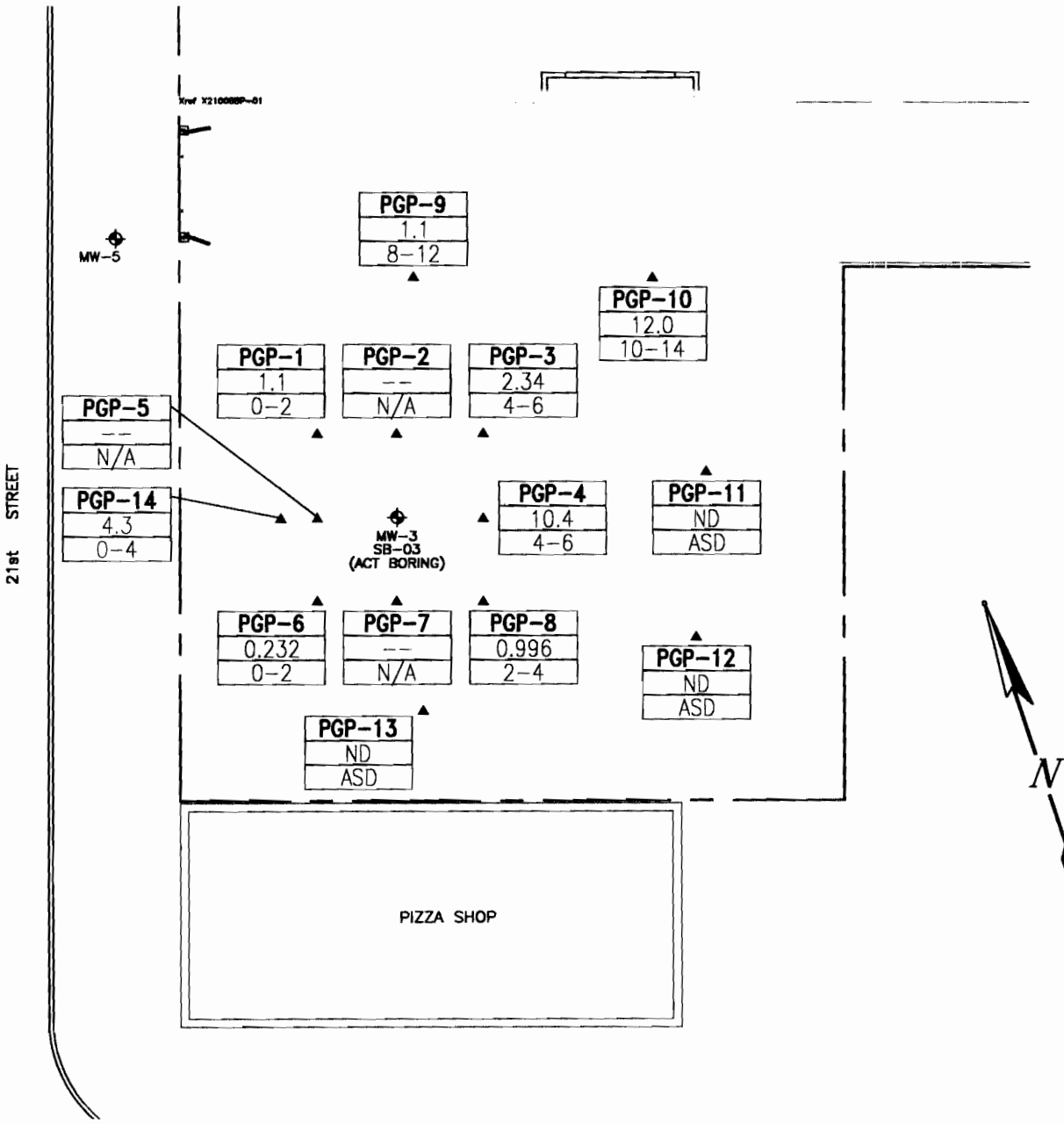
VOLUNTARY CLEANUP PROGRAM INDEX #D2-0023-0
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

TOTAL LEAD CONCENTRATIONS IN PARKING LOT

DATE	REVISED

PREPARED BY:
LEGGETTE, BRASHEARS & GRAHAM,
Professional Ground-Water and Environmental Engineerin
110 Corporate Park Drive
Suite 112
White Plains, NY 10604
(914) 694-5711

DRAWN:	TLC	CHECKED:	SG	DATE:	9/26/02	FIGURE:



LEGEND

——— — ———	PROPERTY BOUNDARY
MW-6	MONITOR WELL LOCATION
PGP-11	GEOPROBE BORING LOCATION (PARKING LOT)
PGP-10 / 12.0 / 10-14	GEOPROBE BORING IDENTIFICATION / LEAD CONCENTRATION (mg/l) / SAMPLE DEPTH (FT.BG.)
FT.BG.	FEET BELOW GRADE
ASD	ALL SAMPLE DEPTHS
ND	NOT DETECTED
N/A	NOT ANALYZED

NOTE:
SAMPLES COLLECTED APRIL 12, 2002 AND AUGUST 16, 2002.

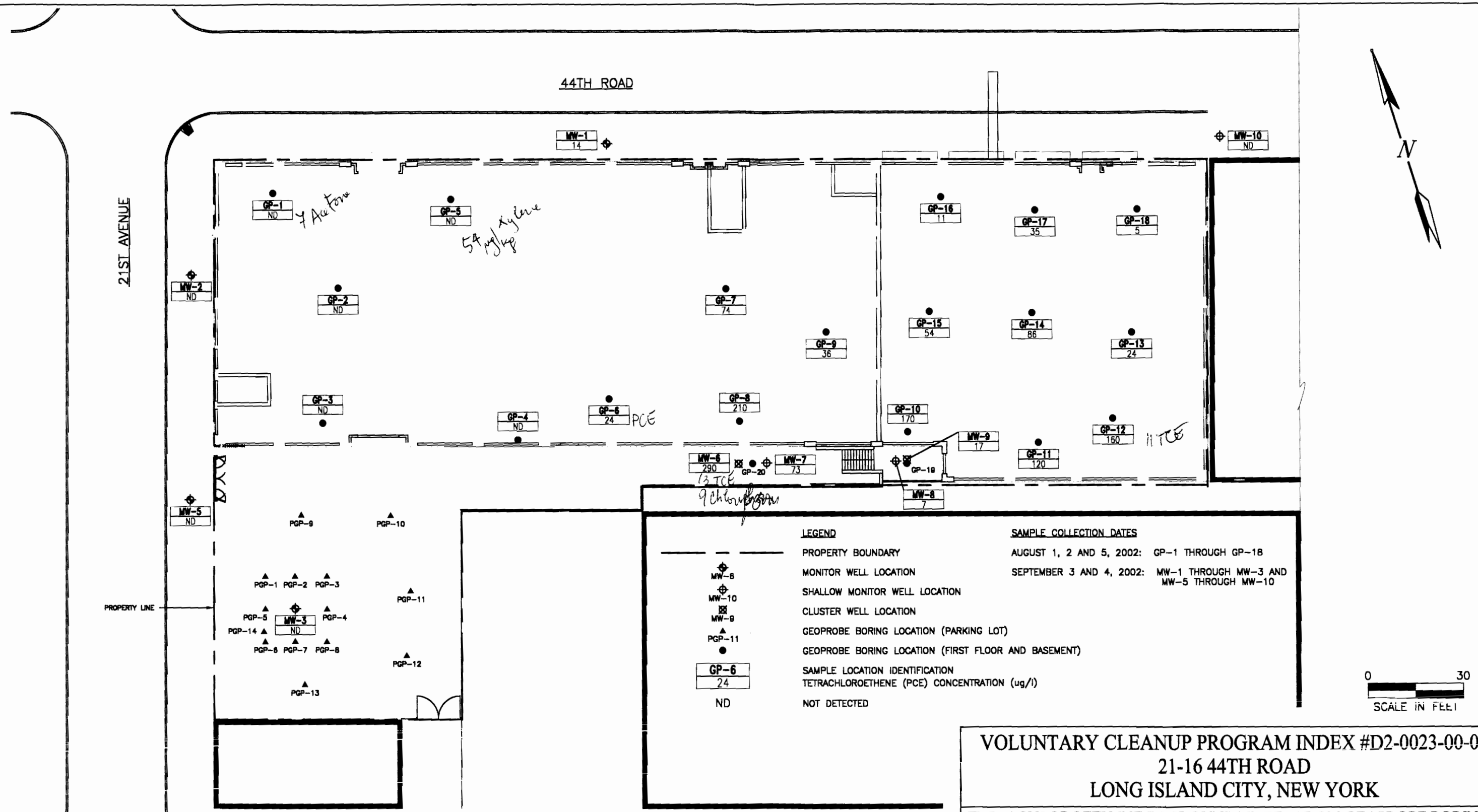
0
SCALE IN FEE

VOLUNTARY CLEANUP PROGRAM INDEX #D2-0023-00
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

TCLP LEAD CONCENTRATIONS IN PARKING LOT

DATE	REVISED	PREPARED BY:
		LEGGETTE, BRASHEARS & GRAHAM, I
		Professional Ground-Water and Environmental Engineering
		110 Corporate Park Drive
		Suite 112
		White Plains, NY 10604
		(914) 694-5711

DRAWN:	TLC	CHECKED:	SG	DATE:	9/26/02	FIGURE:



VOLUNTARY CLEANUP PROGRAM INDEX #D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

TETRACHLOROETHENE IN GROUND-WATER FROM GEOPROBE BORINGS AND MONITOR WELLS

DATE	REVISED

PREPARED BY:

LEGGETTE, BRASHEARS & GRAHAM, INC.
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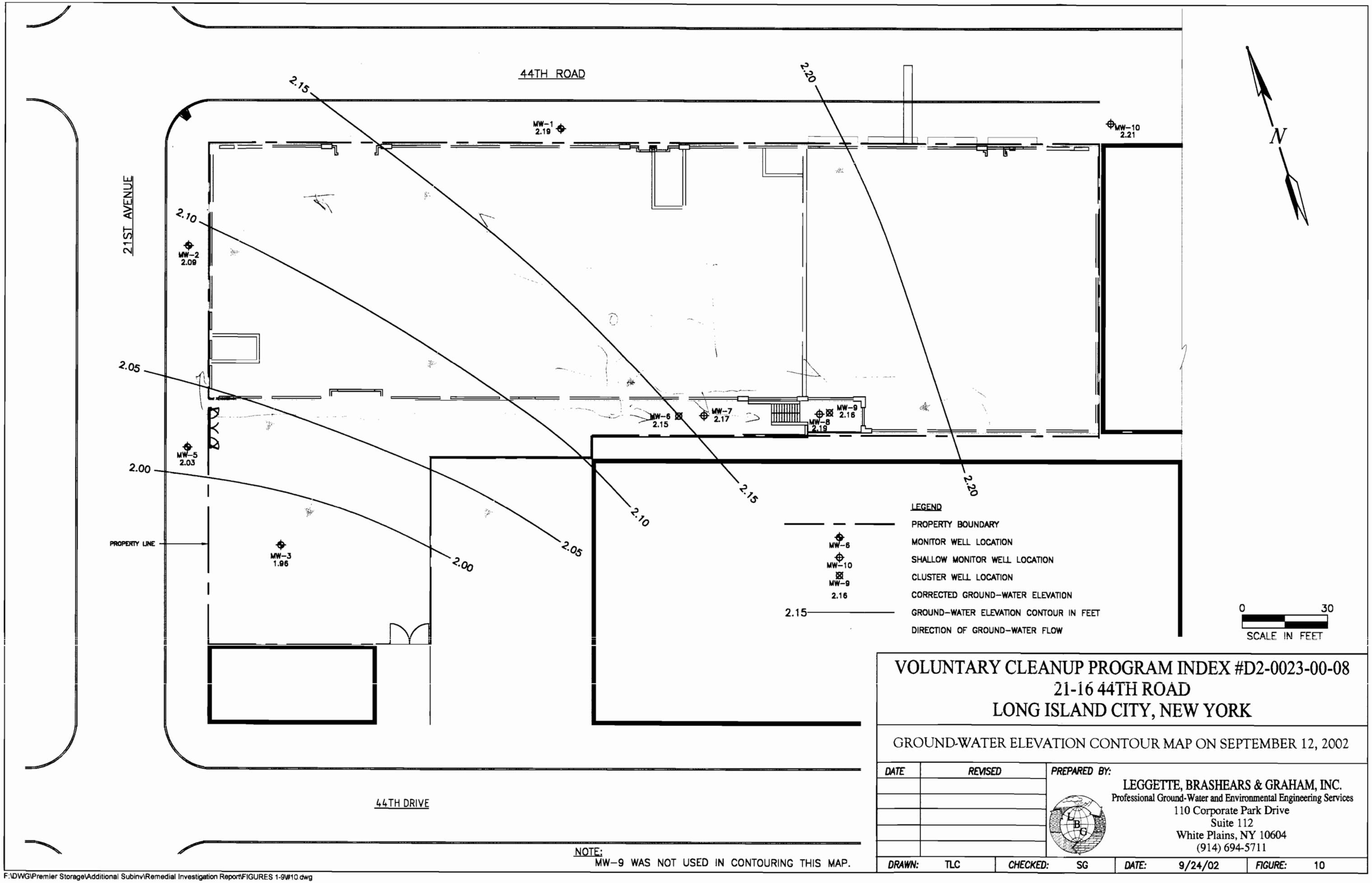
DRAWN:	TLC	CHECKED:	SG	DATE:	9/25/02	FIGURE:	9

F:\DWG\Premier Storage\Additional Subinv\Remedial Investigation Report\FIGURES 1-9\#9.dwg



NOTE:
MW-9 WAS NOT USED IN CONTOURING THIS MAP.

VOLUNTARY CLEANUP PROGRAM INDEX #D2-0023-00-08
21-16 44TH ROAD
LONG ISLAND CITY, NEW YORK

GROUND-WATER ELEVATION CONTOUR MAP ON SEPTEMBER 12, 2002

DATE	REVISED

PREPARED BY:

LEGGETTE, BRASHEARS & GRAHAM, INC.
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DRAWN:	TLC	CHECKED:	SG	DATE:	9/24/02	FIGURE:	10

F:\DWG\Premier Storage\Additional Subinv\Remedial Investigation Report\FIGURES 1-9\#10.dwg