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REMEDIAL ACTION REPORT
SOIL EXCAVATION, DISPOSAL, AND INSTALLATION OF GROUNDWATER REMEDIATION SYSTEM

PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

Voluntary Cleanup Agreement: V-00370-0
GEFF Property Number: 4936-0611

Prepared by:
Conestoga-Rovers
& Associates

2055 Niagara Falls Blvd.
Suite Three
Niagara Falls, NY 14304

Office: 716·297·6150
Fax: 716·297·2265

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Worldwide Engineering, Environmental, Construction, and IT Services

CERTIFICATION

I, Bryan Smith, a Professional Engineer in the State of New York, certify, under penalty of law that I have reviewed this document and all attachments and to the best of my knowledge and belief, it is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Bryan Smith, P.E.

7/26/06
Date

BRYAN T. SMITH
LICENSE NO. 61480-1

TABLE OF CONTENTS

Page

1.0 INTRODUCTION 1

2.0 DESCRIPTION OF REMEDIAL ACTION 2
  2.1 SUMMARY OF THE SELECTED REMEDY 2
  2.1.1 EXCAVATION AND OFF-SITE DISPOSAL OF IMPACTED SOILS 2
  2.1.2 IN SITU CHEMICAL OXIDATION OF VOCs IN GROUNDWATER 3
  2.2 SUMMARY OF REMEDIAL ACTION CONSTRUCTION WORK 3
  2.2.1 PRE-EXCAVATION ACTIVITIES 3
  2.2.1.1 DELINEATION OF AREAS OF IMPACT 4
  2.2.1.2 WASTE CHARACTERIZATION 4
  2.2.1.3 MOBILIZATION AND SITE PREPARATION 4
  2.2.2 SOIL EXCAVATION AND DISPOSAL 5
  2.2.3 COMMUNITY AIR MONITORING PROGRAM 6
  2.2.4 BACKFILLING 6
  2.2.5 IN SITU GROUNDWATER TREATMENT SYSTEM 7
  2.3 REMEDIATION STANDARDS 7
  2.4 PRE- AND POST-REMEDIATION ANALYTICAL DATA 7
  2.5 SITE RESTORATION 9
  2.6 FILL MATERIAL 10
  2.7 COST INFORMATION 10
  2.8 AS-BUILT DRAWINGS 10
  2.9 WASTE MANIFESTS 10
  2.10 INSTITUTIONAL CONTROLS 11
  2.11 IN SITU GROUNDWATER TREATMENT 11
  2.12 SOIL GAS AND INDOOR AIR ASSESSMENT 15
  2.13 OPERATION AND MAINTENANCE GROUNDWATER MONITORING PROGRAM 16

3.0 CONCLUSIONS 17

4.0 REFERENCES 18

LIST OF FIGURES
(Following Text)

FIGURE 1.1	SITE LOCATION PLAN
FIGURE 1.2	SITE PLAN – SURFACE CHARACTERISTICS AND UNDERGROUND UTILITIES
FIGURE 2.1	INITIAL ESTIMATED LIMITS OF EXCAVATION
FIGURE 2.2	EXCAVATION LIMITS AND SAMPLE LOCATIONS
FIGURE 2.3	INJECTION NETWORK
FIGURE 2.4	SINGLE INJECTION WELL DETAIL
FIGURE 2.5	DOUBLE INJECTION WELL DETAIL
FIGURE 2.6	SERVICE BOX AND PIPING DETAIL
FIGURE 2.7	FINAL SURVEY
FIGURE 2.8	CROSS-SECTION ALIGNMENTS
FIGURE 2.9	CROSS-SECTION A-A'
FIGURE 2.10	CROSS-SECTION B-B'

LIST OF TABLES
(Following Text)

TABLE 2.1 INJECTION WELL INSTALLATION SUMMARY

TABLE 2.2 PRE-EXCAVATION SOIL SAMPLE COLLECTION AND ANALYSIS SUMMARY

TABLE 2.3 CONFIRMATORY AND POST-EXCAVATION SOIL SAMPLE COLLECTION AND ANALYSIS SUMMARY

TABLE 2.4 SUMMARY OF VOC AND SVOC RESULTS FOR PRE-EXCAVATION SOIL SAMPLES

TABLE 2.5 SUMMARY OF VOC AND SVOC RESULTS FOR POST-EXCAVATION SOIL SAMPLES

TABLE 2.6 GROUNDWATER MONITORING NETWORK

TABLE 2.7 MONITORING WELL INSTALLATION DETAILS

LIST OF APPENDICES

APPENDIX A PRE-EXCAVATION ANALYTICAL DATA AND SOIL BORING LOGS
APPENDIX B WASTE CHARACTERIZATION PLAN AND RESULTS
APPENDIX C CONFIRMATORY AND POST-EXCAVATION ANALYTICAL DATA
APPENDIX D COMMUNITY AIR MONITORING RESULTS SUMMARY
APPENDIX E BACKFILL INFORMATION AND TESTING RESULTS
APPENDIX F TAGM 4046 CRITERIA
APPENDIX G WASTE DISPOSAL INFORMATION
APPENDIX H TREATABILITY STUDY REPORT
APPENDIX I MONITORING WELL LOGS
APPENDIX J QUALITY ASSURANCE PROJECT PLAN
APPENDIX K FIELD SAMPLING PROCEDURES
APPENDIX L CRA LETTERS REGARDING SOIL GAS AND INDOOR AIR SAMPLING

1.0 INTRODUCTION

This report documents the Remedial Action (RA) activities completed for the property referred to as "Parcel 2", 2137 Seneca Street, Buffalo, New York (the "Site"). The Site location and layout are shown on Figures 1.1 and 1.2, respectively.

Franchise Finance Corporation of America, now GE Capital Franchise Finance Corporation ("GEFF") entered into a Voluntary Cleanup Agreement (V00370-0) with the New York State Department of Environmental Conservation (NYSDEC) for remediation of the Site. GEFF completed a Site Investigation (SI) and Feasibility Study (FS) and submitted the Final SI/FS Report to NYSDEC in March 2003 (CRA 2003a). A Remedial Action Work Plan (RAWP) was subsequently developed and submitted in final form to the NYSDEC in May 2003 (CRA 2003b). The RAWP included specific activities to address soil and groundwater conditions identified in the SI.

The RA work, completed from October through December 2003, included the removal and disposal of impacted soil from the Site and the construction of a groundwater remediation system. Groundwater remediation includes in situ chemical oxidation using a network of injection wells and a horizontal injection piping gallery. The scheduled in situ groundwater treatment work is substantially complete. Progress reports presenting summaries of the activities conducted and monitoring results from the first three treatment events were submitted to New York State Department of Environmental Conservation (NYSDEC) August 3, 2004, October 25, 2004, and January 10, 2005. Results of the fourth treatment event will be reported separately after the results of the groundwater monitoring conducted in May 2005 are received and reviewed for quality assurance.

This report was prepared on behalf of GEFF by Conestoga-Rovers & Associates (CRA).

2.0 DESCRIPTION OF REMEDIAL ACTION

This section presents information regarding the RA activities completed from October through December 2003, presented in the format required in the NYSDEC "Draft DER-10 Technical Guidance for Site Investigation and Remediation" (DER-10), December 2002. This section also presents information regarding other remedial and post-remedial activities including in situ groundwater treatment, soil gas/indoor air sampling, plans associated with building sub-lab depressurization, institutional controls, and groundwater monitoring.

2.1 SUMMARY OF THE SELECTED REMEDY

The approved RA for the Site is a combination of the following remedial elements:

i) excavation and off Site disposal of soil containing volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) in the northeast quadrant of the Site; and

ii) in situ chemical oxidation of VOCs in on-Site groundwater.

The following subsections describe the components of the approved RA.

2.1.1 EXCAVATION AND OFF-SITE DISPOSAL OF IMPACTED SOILS

The soils RA included excavation of Site soils above the water table in the northeast quadrant of the Site that contained VOCs and SVOCs at concentrations exceeding the NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 recommended soil cleanup objectives (TAGM 4046 objectives). All excavated soils were disposed of off Site at permitted disposal facilities. To the extent possible, excavated soil was removed from the Site concurrently with the excavation activities.

All excavation activities were conducted in compliance with applicable Occupational Safety and Health Administration (OSHA) standards.

Following completion of excavation activities, the excavation was backfilled with compacted imported structural fill and then re-surfaced with asphalt pavement.

2.1.2 IN SITU CHEMICAL OXIDATION OF VOCs IN GROUNDWATER

The groundwater RA includes:

i) institutional controls;
ii) in situ groundwater treatment by chemical oxidation; and
iii) monitoring to verify the effectiveness of the treatment.

In situ chemical oxidation of the COCs in groundwater has been conducted by injecting potassium permanganate ($KMnO_4$) into the overburden groundwater through well points and a perforated horizontal piping gallery. An injection network was installed to allow coverage of the northeast quadrant of the Site with the greatest number of injection points in the area of highest tetrachloroethene (PCE) concentration.

The RAWP provided for four treatment events over a 1- to 2-year period. Groundwater monitoring was conducted prior to beginning treatment and between events. The scheduled in situ treatment and monitoring events were completed during the period from March 2004 through May 2005. The monitoring data were collected to estimate the remaining chemical mass, re-evaluate the estimates of oxidizer required to achieve optimal chemical oxidation, and modify the injection scenario, if necessary.

The details for the in situ groundwater treatment are presented in Section 2.11

2.2 SUMMARY OF REMEDIAL ACTION CONSTRUCTION WORK

2.2.1 PRE-EXCAVATION ACTIVITIES

Work conducted for the RA prior to beginning active excavation included:

i) further delineation of the areas of impacted soil;
ii) waste characterization; and
iii) contractor mobilization and Site preparation.

Each of these activities is discussed in the following subsections.

2.2.1.1 DELINEATION OF AREAS OF IMPACT

Prior to soil excavation, sampling was conducted by CRA (in May 2003) to assist in delineating the extent of soil impacted above TAGM 4046 objectives. This included advancement of 26 soil borings and collection of 85 soil samples for chemical analysis. The resulting data were used to delineate the proposed limits of excavation, as shown on Figure 2.1. The sampling and analysis results from the SI and the May 2003 sampling event are discussed in Section 2.4. Supporting information consisting of soils analytical data collected during the Site Investigation and pre-excavation sampling programs and stratigraphic logs of the pre-excavation soil borings (BH-1 through BH-26) sampled at the Site in May 2003 is provided in Appendix A.

2.2.1.2 WASTE CHARACTERIZATION

Information from the sampling and analysis program was used to develop a "Plan for Characterization and Disposal of Excavated Soils" (WCP), dated July 14, 2003. This plan included sampling and analyses of soils for pre-characterization of waste category to allow the excavated material to be loaded directly into haulage vehicles for removal from the Site. A copy of the WCP is provided in Appendix B. The analytical laboratory data report from analyses of the WCP samples is also presented in Appendix B.

Waste characterization sampling was conducted by the remedial contractor (SLC Environmental Services [SLC], Lockport, New York) on September 5, 2003, prior to full-scale mobilization. The results from the waste characterization sampling are provided in Appendix B. On the basis of these results, arrangements were made for disposal of soil under two categories, either hazardous or non-hazardous. Soil disposal is described further in Subsection 2.2.2.

2.2.1.3 MOBILIZATION AND SITE PREPARATION

Prior to beginning excavation, SLC installed steel supports in boreholes along the edge of the sidewalk on Seneca Street. These supports were needed for shoring the excavation area, which was accomplished using steel plates positioned vertically adjacent to the sidewalk.

Soil excavation was also preceded by the removal of asphalt pavement, and concrete curbs and walkways. These materials were removed from the Site to a local recycling facility.

SLC mobilized to the Site during the week of October 13, 2003. The mobilization included staging of excavation equipment and setup of temporary facilities, support equipment, and fencing.

2.2.2 SOIL EXCAVATION AND DISPOSAL

Soil excavation was conducted in two stages. The initial soil excavation stage (conducted from October 20 to 23, 2003) included excavation of soil to the estimated limits of excavation shown on Figure 2.1. Soil excavation commenced in Areas "A" and "B", and generally proceeded toward the rear (southwest) of the property. Confirmatory soil samples were collected between October 21 and 23, 2003 and analyzed to determine whether excavation in particular areas was complete. The confirmatory sampling was conducted in accordance with the guidelines presented in the DER-10. The analytical results from the confirmatory samples indicated that expansion of the limits of the excavation was required in order to meet the TAGM 4046 objectives. The second stage of soil excavation, undertaken from October 27 to November 3, 2003, consisted of expanding the excavation limits in both the horizontal and vertical planes until compliance with the TAGM 4046 objectives was met to the extent practicable. Physical limits to excavation sometimes prevented the complete removal of soils with concentrations of VOCs or SVOCs exceeding the TAGM 4046 objectives. These physical limits consisted of the property boundary or structures in the horizontal plane and the top of the water table vertically. Post-excavation samples were collected on October 28 and November 3, 2003. The analytical results indicated that all results were below the TAGM 4046 objectives, with minor exceptions as indicated in Section 2.4. The intermediate and final limits of the excavation as well as all sample locations are shown on Figure 2.2. All confirmatory and post-excavation analytical data are presented in Appendix C. A Data Usability Summary Report evaluating these data is also presented in Appendix C. The analytical results from the post-excavation sampling are discussed in Section 2.4.

The excavated soil was divided into two categories for disposal purposes. Soil that was categorized as hazardous included material from Areas "A" and "B" (from 6 to 10 feet below ground surface) and material from Areas "C" through "K" as generally indicated on Figure 2.2. It is noted that within Areas "C" through "K", materials were segregated for disposal based on field assessment during excavation. The total quantity of hazardous waste generated was 285.20 tons. This material was removed to the Environmental Quality disposal facility in Belleville, Michigan. All remaining excavated soil, totaling 1,523.75 tons, was disposed of as non-hazardous waste at the Waste

Management Inc. facility located in Chaffee, New York. Documentation of waste disposal is discussed in Section 2.9.

2.2.3 COMMUNITY AIR MONITORING PROGRAM

A Community Air Monitoring Program (CAMP) was implemented during the excavation activities. The CAMP was conducted during removal of hazardous and non-hazardous material from the Site. The CAMP commenced on October 17, 2003 and ended on November 3, 2003. The CAMP was implemented to monitor the air quality in the vicinity of the surrounding businesses and residences during waste removal activities at the Site.

The CAMP was performed using instruments that measured VOCs and particulate in the atmosphere. A photoionization detector (PID) was used to measure VOCs while a Data RAM personal dust monitor was used to measure particulate (dust). Both instruments were calibrated daily before construction activities commenced using manufacturers' recommended protocols. CRA collected measurements at least hourly during active excavation. Monitoring was conducted more frequently when specific activities with higher potential for release were being conducted, e.g., during the loading of the hazardous waste trailers. Measurements were taken at upwind and downwind locations and at locations directly across Seneca Street from the work area.

No exceedances of the specified action levels were observed during the CAMP. The data and calibration records for the CAMP were recorded in a log book daily. The CAMP results are summarized in Appendix D.

2.2.4 BACKFILLING

Backfill was placed within the excavation in lifts not exceeding approximately 12 inches. Each lift was compacted with a vibratory compactor, with one exception. The area of the injection piping gallery was provided with a uniform stone surround, and was compacted with a light plate compactor. The structural fill material was tested to determine relative density to ensure that a minimum 95 percent standard maximum dry density (SMDD) was attained. Supplier information and compaction testing records are provided in Appendix E.

During the backfilling operation it was necessary to add water to the backfill material to achieve compaction criteria. Between November 4 and November 7, 2003, Site personnel utilized water that had accumulated at the base of the excavation for this purpose. On November 7, 2003, due to concerns about the potential for the water to be contaminated with VOCs, the Contractor was directed by CRA to stop using water from the excavation. On November 11, 2003, CRA collected seven samples; six of the compacted backfill material and one of stockpiled backfill for VOC analysis. The sample results are summarized in Appendix E, Table E-1. Comparison to the TAGM 4046 objectives indicated that the VOC concentrations in the backfill material were well below the corresponding criteria, where available. On this basis it was concluded that the residual VOC concentrations were not significant, and the backfilling was completed. The remaining backfill was wetted with potable water.

2.2.5 IN SITU GROUNDWATER TREATMENT SYSTEM

The groundwater remediation system includes a series of injection wells and injection gallery piping. The design included an injection gallery piping network over Area "A" and 14 injection wells. During the excavation activities, it was decided to expand coverage over the area of additional excavation, using eight additional injection wells. The layout and details of the injection gallery and injection well system are shown on Figures 2.3 through 2.6. Injection well installation details are presented in Table 2.1.

2.3 REMEDIATION STANDARDS

The remediation standards for the soils RA were the Recommended Soil Cleanup Objectives for VOC and SVOC compounds presented in the NYSDEC TAGM 4046. A copy of TAGM 4046 is presented in Appendix F.

2.4 PRE- AND POST-REMEDIATION ANALYTICAL DATA

Samples of soil were collected and analyzed prior to the RA, during the SI, during the soil excavation, and following the completion of the soil excavation. The data collected prior to the commencement of the soils excavation ("pre-excavation data") were used to define the approximate limits of the areas requiring removal. Soil samples from the excavation sidewalls and bottom, ("confirmatory data"), were collected as the excavation proceeded, and these data were utilized to redefine the excavation limits. The analytical data collected following the completion of the excavation, ("post-excavation data"), were used to document the quality of soils remaining in place. Sample collection and analyses summaries for the pre-excavation and confirmatory post-excavation samples are presented in Tables 2.2 and 2.3, respectively.

A summary of the VOC and SVOC compounds detected in the pre-excavation soil samples at concentrations exceeding the TAGM 4046 objectives is presented in Table 2.4. The initial limits of excavation were estimated based upon the pre-excavation analytical results. Those limits and the locations of the pre-excavation soil borings are shown on Figure 2.1. (A complete analytical database of pre-excavation soil analytical results is presented in Appendix A.)

Soil containing VOCs or SVOCs at concentrations exceeding the TAGM 4046 objectives were removed until one of the following limits was reached:

i) compliance with TAGM 4046 objectives;
ii) the top of the water table;
iii) the property boundary; or
iv) a physical barrier such as a sidewalk or building foundation.

The interim and final limits of the excavation are shown on Figure 2.2.

Upon the completion of excavation, samples of soils left in place (post-excavation samples) were collected and analyzed for VOCs and SVOCs to provide a record of the quality of soil remaining at the Site. The requirements of DER-10 for documentation of a soil removal of the type conducted at the Site (subsurface soils with an excavation perimeter of 20 to 300 feet) are:

i) one sample from the bottom of each sidewall for every 30 linear feet of sidewall; and
ii) one sample from the excavation bottom for every 900 square feet of bottom area.

The completed excavation at the Site had a perimeter of approximately 270 feet and a base area of approximately 3,774 square feet. A total of 31 post-excavation samples, 25 sidewall samples and 6 bottom samples, were collected from the completed excavation. Nine sidewall samples were required to meet the criteria presented in DER-10. Of the area excavated, approximately 2,888 square feet extended to the top of the water table. Analyte concentrations in samples collected where the water table surface was reached would reflect the combined influence of chemical presence in soil and groundwater, and would not necessarily be representative of the quality of soil. Therefore, post-excavation samples at the bottom of the excavation in areas where the water table was contacted were generally not collected. The area of excavation completed above the water table surface was approximately 886 square feet (Areas B2, E, F, G, and K1 on Figure 2.2). Therefore, in accordance with the requirements of DER-10, one bottom sample was collected from the excavated area. A summary of the post-excavation analytical data is presented in Table 2.5. The detected concentrations of analytes in the post-excavation samples have been compared to the TAGM 4046 objectives. Concentrations that exceed the objectives are highlighted in Table 2.5. Review of the data in Table 2.5 shows concentrations of PCE in three samples: Area D, bottom; Area H1, bottom; and Area I, bottom. Each of these samples consisted of moist native clay at the top of the water table. The presence of PCE at concentrations exceeding the TAGM 4046 objectives in these three samples is most likely due to the influence of groundwater in the sample. Exceedances of the TAGM 4046 objectives for SVOCs are present in four samples: Area B/B2, fill along the south sidewall; Area C, fill along the north sidewall; Area H1, fill along the east sidewall; and Area H2, fill along the northeast sidewall. In each of these areas, the excavation extended to a physical boundary that prevented additional soil removal. The data presented are representative of the quality of soil remaining beyond the limit of the excavation.

2.5 SITE RESTORATION

Site restoration involved backfilling the excavated area and restoring the parking lot. Backfilling activities are described in Section 2.2. Site restoration activities are described below.

Site restoration primarily consisted of replacing the asphalt pavement and concrete curbs and walkways. The limits of the restoration are shown on Figure 2.7. In addition, it was necessary to replace the water service to the Site, and to install two electrical conduits beneath the pavement. The locations of the new water service and the electrical conduit are also shown on Figure 2.7. The electrical conduit was installed for possible future connection of the light standard and sign located adjacent to Kingston Place. The final connection of the water service to the City main was not completed under this project. Similarly, the electrical connection to the light standard and sign was not completed under this project.

Site restoration activities outlined above were substantially completed on December 5, 2003.

2.6 FILL MATERIAL

The fill material used to backfill the excavation was imported structural fill. The types of material and sources are listed below.

- Injection Piping Surround: Genesee No. 1 Gravel; LaFarge.
- Structural Fill: ~2-inch Crusher Run Stone; Buffalo Crushed Stone, Inc.
- Pipe Bedding: Lockport Dry Screenings; LaFarge.

Supplier information is provided in Appendix E.

2.7 COST INFORMATION

Cost information is not included in this report. The project did not involve any State funding.

2.8 AS-BUILT DRAWINGS

As-built drawings for the work described herein are illustrated on the following figures:

i) Figure 2.2 shows final excavation limits and post-excavation sample locations;

ii) Figure 2.3 shows the layout of the injection well and injection gallery piping system;

iii) Figure 2.4 shows single injection well details;

iv) Figure 2.5 shows paired injection well details;

v) Figure 2.6 shows subsurface piping and service box details; and

vi) Figure 2.7 shows the limits of Site restoration, finished grades and the location of the subsurface water service and electrical conduit.

2.9 WASTE MANIFESTS

Manifests for the disposal of hazardous waste material are included in Appendix G. Weigh ticket information is summarized in Appendix G, Table G-1.

2.10 INSTITUTIONAL CONTROLS

The implementation of institutional controls is intended to reduce the potential for human and wildlife exposure to residual chemical presence at the Site. The institutional controls placed on the Site property include the restriction of property use to commercial/industrial purposes and prohibition of groundwater use until such time that the groundwater is restored to acceptable quality as determined by NYSDEC.

2.11 IN SITU GROUNDWATER TREATMENT

Remedial action for groundwater at the Site involved the implementation and monitoring of in situ groundwater treatment conducted within the on-Site groundwater VOC plume.

The in situ groundwater treatment consisted of:

i) full-scale treatment through injection of $KMnO_4$ solution for chemical oxidation of VOCs in on-Site groundwater; and

ii) treatment monitoring.

A laboratory treatability study was conducted in May and June 2003. The treatability study was designed to gather the data necessary to:

i) confirm the suitability of the oxidant chosen ($KMnO_4$) for the in situ groundwater treatment; and

ii) determine the dosage of oxidant required to complete treatment as expeditiously as possible.

The results of the treatability study were reported to NYSDEC in the submission from C. Barron (CRA) to D. Locey (NYSDEC) dated July 14, 2003. For reference purposes, a copy of the treatability study report is contained in Appendix H.

Full-scale in situ chemical oxidation has been conducted as described below. To optimize the treatment results, modifications of the in situ groundwater treatment were undertaken as necessary based on monitoring data. The results of the in situ treatment and any modifications were reported to NYSDEC separately.

Injection Network: The injection network for the oxidant solution consists of a combination of a horizontal perforated pipe gallery and vertical well points. A horizontal piping gallery was installed in the base of the open excavation in the area in which the former dry cleaning establishment had been located. The application of oxidant through this system placed at the top of the water table addressed VOCs potentially absorbed to soils in the shallow water table below the excavation. Well points screened in the sand and gravel below the clay were installed within this area[1]. Outside this area, paired shallow and deep well points for the application of oxidant solution were installed in the sand and gravel above and below the clay. The injection network is shown on Figure 2.3. Cross-sections showing the placement of the injection well screens relative to the clay layer are presented on Figures 2.9 and 2.10. The cross-section alignments are shown on Figure 2.8. Installation details for the injection wells are presented in Table 2.1.

The horizontal perforated pipe gallery system and the well points are connected via buried horizontal piping to three service boxes located along the northwest edge of the parking lot, such that the oxidant solution could be applied without interference with routine Site activities.

Application of Solution: The oxidant solution utilized for in situ groundwater treatment consisted of bulk solid $KMnO_4$ mixed with potable water. The solubility of $KMnO_4$ in water at room temperature is 7 percent. Field experience has demonstrated that preparation of solutions of greater than 3 percent $KMnO_4$ is not practical. Under cool seasonal temperatures, even 3 percent solutions are difficult to prepare and distribute. Above 3 percent, dissolution of the $KMnO_4$ crystals may occur and clogging of distribution systems is not uncommon. Based on the results of the treatability study, it was estimated that 1,600 pounds of $KMnO_4$ in a 1 percent to 3 percent solution would be required to complete the treatment.

Secure on-Site storage for bulk $KMnO_4$ was not available. Therefore, $KMnO_4$ was purchased on an as-needed basis. Approximately 400 pounds of $KMnO_4$ was applied during each of the first two treatment events and approximately 550 pounds of $KMnO_4$ was applied during both the third and fourth treatment events. (A 1 percent solution is 415 pounds in 5,000 gallons of water.) The solution was prepared on Site in a polyethylene tank immediately prior to use by gradually adding the $KMnO_4$ to water

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[1] The overburden at the Site is described in the Final SI/FS report - section 5.1. It consists of fill material overlying native soil and bedrock. The fill material is re-worked soil, primarily silt and clay with sand and gravel. The native soil underlying the fill generally consists of sand overlying silt and/or clay, however the stratigraphy is highly variable. In the area of the injection system, a clay layer is present extending from approximately 16 feet to 22 feet below ground surface. The clay is underlain by sand, which overlies the bedrock. The bedrock is found at a depth of approximately 30 feet below ground surface.

with continuous mixing. Treatment during periods of cold weather was avoided to the extent possible.

The $KMnO_4$ solution was applied to the groundwater through injection by pumping or gravity feed into the distribution system described previously. Initially, $KMnO_4$ solution was introduced into all points during each treatment event. The application of the solution proceeded from the perimeter and deeper points inward and upward to the areas of highest concentration. Approximately 50 percent of the solution injected during each event was injected in equal volumes into the perimeter and deep injection points. The remaining solution was targeted into the immediate vicinity of highest VOC concentration, MW-4 and MW-11. For example, if a total of 5,000 gallons was injected, 2,500 gallons was injected in equal aliquots into each of the perimeter and deep injection points. Once the injection of this volume was complete, the remaining 2,500 gallons was injected into injection well pairs IW-2, IW-3, IW-5, and IW-6. The injection scenario and volume were adjusted as necessary to ensure the greatest effectiveness as in situ groundwater treatment proceeded.

At the end of each day of injection, and/or at the end of an injection event, the mixing tank was thoroughly rinsed and the rinsate pumped into the distribution system. The addition of the rinsate to the distribution system aided in the dispersion of the solution and in the prevention of accumulation of $KMnO_4$ in the well points and piping system with resultant clogging. A minimum of 10 gallons of potable water was injected into each injection point at the conclusion of each treatment event.

Frequency of Treatment: Four treatments over a 1- to 2-year period were scheduled to be performed to complete the treatment of VOCs in on-Site groundwater. Treatments were made at 3- to 6-month intervals as follows:

i) April 2004;
ii) August 2004;
iii) October 2004; and
iv) May 2005.

As part of the in situ groundwater treatment, groundwater monitoring was conducted to collect the data necessary to verify the remaining chemical mass, reevaluate the estimates of $KMnO_4$ required to achieve optimal chemical oxidation of the groundwater, and to modify the injection scenario, if necessary. Whenever possible, the monitoring events were scheduled 6 weeks prior to each injection to ensure that there was sufficient time to analyze the samples, interpret the data, and determine the $KMnO_4$ injection requirements prior to the injection event.

Groundwater monitoring of the in situ treatment consisted of the sampling and analyses of groundwater samples from on-Site and off-Site wells for general parameters (pH and chloride), residual $KMnO_4$, and VOCs. Additional analyses for parameters such as dissolved oxygen and redox were considered if it was found that these data are required to fully evaluate the effectiveness of the treatment. The wells monitored during in situ groundwater treatment are listed in Table 2.6.

To supplement the original monitoring network, six monitoring wells in three pairs (MW-13/13A, MW-14/14A, and MW-15/15A) were installed in May 2003. Each monitoring well pair consists of a shallow and deep well; one completed in the sand and gravel above the native clay and one completed in the sand and gravel below the clay. The locations of the monitoring wells are shown on Figure 2.8. Stratigraphic and instrumentation logs for the new monitoring wells are presented in Appendix I. The installation details of all site monitoring wells are summarized in Table 2.7. The new monitoring wells were sampled on one occasion prior to beginning in situ groundwater treatment.

The treatability study data and existing groundwater analytical database (with the addition of the analytical data from the new monitoring wells) provided the characterization of baseline conditions against which future data were compared to evaluate treatment effectiveness. Treatment effectiveness monitoring commenced immediately prior to beginning the second treatment event, was conducted prior to each subsequent treatment event, and was conducted following the final treatment event.

Measurements of pH were made in the field at the completion of well purging. All other sample analyses were performed at a licensed, accredited laboratory in accordance with the procedures described in the Quality Assurance Project Plan (QAPP) presented in Appendix J. (The method for $KMnO_4$ determination is also presented in the QAPP.) Well purging and sample collection was conducted as described in the field sampling procedures presented in Appendix K.

Groundwater monitoring during the in situ groundwater treatment included measurement of water levels in all on-Site and off-Site monitoring wells and evaluation of the water level elevations to track groundwater flow patterns.

Assessment of Remedy: During the implementation of the in situ chemical oxidation, the progress with respect to reduction of VOC concentrations was assessed. At the completion of the four scheduled treatment events, a report will be prepared assessing the effectiveness of the treatments.

System Decommissioning: When the on-Site in situ groundwater treatment is complete, the treatment distribution system will be decommissioned to eliminate potential pathways for the introduction or transport of contaminants into the groundwater. NYSDEC will be notified prior to decommissioning. Decommissioning of injection points will be consistent with the NYSDEC procedures for abandonment of monitoring wells by grouting in place. These procedures are presented with the field sampling procedures in Appendix K. Piping distribution systems will be decommissioned by filling the pipe(s) with grout using a tremie method. All curb boxes and below grade vaults will be removed at the time of decommissioning and the areas will be restored to be consistent with the surrounding area and anticipated area use.

2.12 SOIL GAS AND INDOOR AIR ASSESSMENT

In accordance with the RAWP, soil gas samples were collected on November 17, 2003 from three locations beneath the building. Based on the analytical results, indoor air samples were collected on January 13, 2004 at three locations within the building corresponding to the soil gas sampling locations. The procedures and results from the soil gas and indoor air testing were provided to the state in CRA letters dated January 7, 2004 and February 13, 2004. Copies of these letters are provided in Appendix L.

Although the building was not in use at the time of the remedial work and sampling activities, the building will be reconditioned for future commercial use. NYSDEC and New York State Department of Health (NYSDOH) have requested additional sampling and analyses, or alternatively, installation of a sub-slab depressurization system, to address potential vapor intrusion under building occupancy conditions. GEFF has decided to install a sub-slab depressurization system. In concept, this will include a pipe, or series of pipes, installed through the concrete floor slab (inside building) or concrete footer (outside building) into the granular bedding beneath the existing floor slab. An in-line electric blower will be connected to these pipes to induce negative pressure within the granular bedding layer. The exhaust air from the system will be routed to a vent located outside the building.

GEFF is in negotiation with a potential tenant for the onsite building. The proposed tenant plans to construct an addition to the existing building. The sub-slab depressurization system will be installed during the construction activities associated with the building addition. The tenant is anticipated to construct the addition and occupy the building within the next 6 months. GEFF will notify NYSDEC and NYSDOH prior to the installation of the sub-slab depressurization system, and upon completion.

2.13 OPERATION AND MAINTENANCE GROUNDWATER MONITORING PROGRAM

Groundwater monitoring will be performed on a semi-annual basis following completion of in situ groundwater treatment. The monitoring program will consist of the semi-annual collection of samples from the on-Site groundwater monitoring wells listed in Table 2.6. The samples will be analyzed for general parameters (pH and chloride), residual $KMnO_4$ and VOCs following the procedures described in the QAPP (Appendix J). The monitoring will be performed to evaluate the effectiveness of the treatment and confirm that the quality of the groundwater has stabilized at an acceptable level. Additional analyses for parameters such as dissolved oxygen and redox will be considered if it is found that these data are required to fully evaluate the effectiveness of the treatment. Groundwater monitoring will also include measurement and evaluation of water table elevations to track groundwater flow patterns. Monitoring well purging and sample collection will be conducted as described in the field sampling procedures presented in Appendix K.

Groundwater monitoring for VOCs will continue on a semi-annual frequency until such time as the NYSDEC concurs with GEFF that the condition of the groundwater has stabilized at an acceptable quality level for the use and location of the Site, taking into consideration the source and nature of the contaminants and the institutional controls imposed.

3.0 CONCLUSIONS

In summary, the proposed remediation activities have been completed except for the following items:

i) evaluation of the in situ groundwater treatment;

ii) installation of the sub-slab depressurization system;

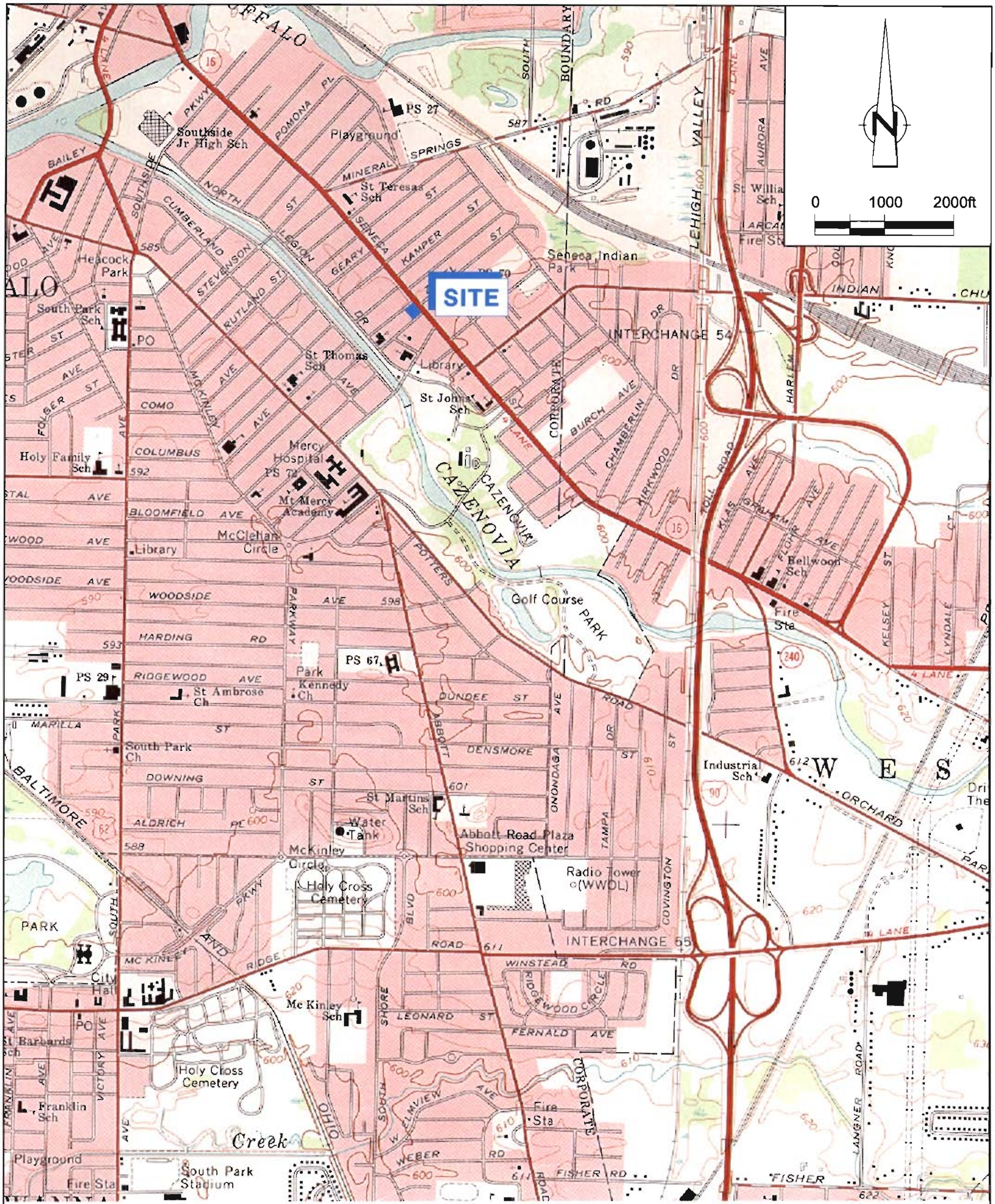
iii) filing of the Institutional Control (deed restriction for commercial/industrial use); and

iv) public comment period for the project.

Once the above mentioned items have been completed, the property will enter into the operation and maintenance (O&M) phase of the project, which will be the final remedial step. The O&M phase of the project will include groundwater monitoring activities as described in Section 2.13. Upon completion of the items enumerated above, GEFF will commence the O&M groundwater monitoring phase, and request that the State find that no further action is necessary and issue its release of liability.

4.0 REFERENCES

- CRA, 2003a. Final Site Investigation Report and Feasibility Study, Parcel 2 - Seneca Street, Buffalo, New York, March.
- CRA, 2003b. Remedial Action Work Plan, Parcel 2 - Seneca Street, Buffalo, New York, May.

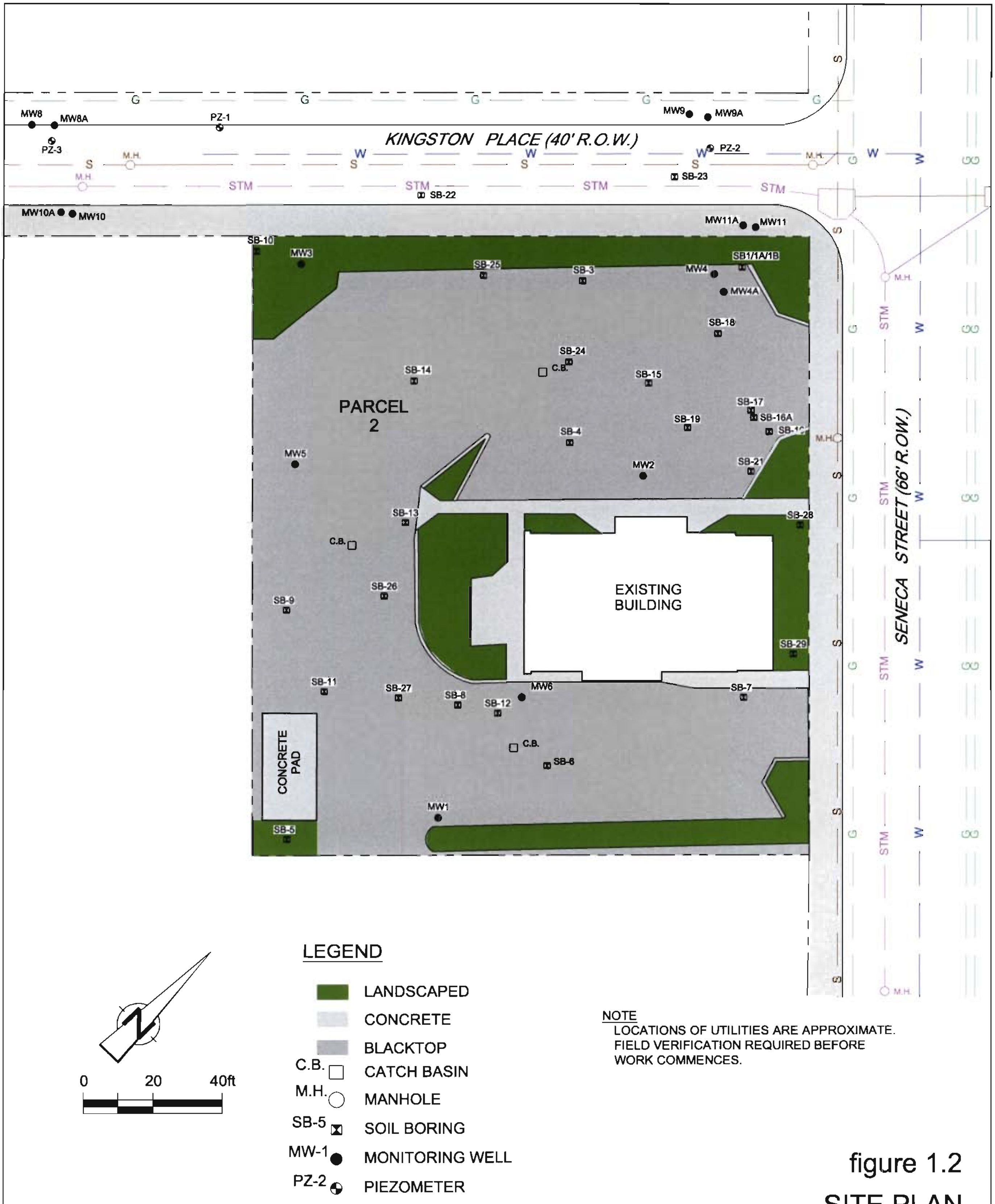


SOURCE:

USGS BUFFALO SE, NY
QUADRANGLE, 1965.

figure 1.1

SITE LOCATION PLAN
PARCEL 2, SENECA STREET
Buffalo, New York

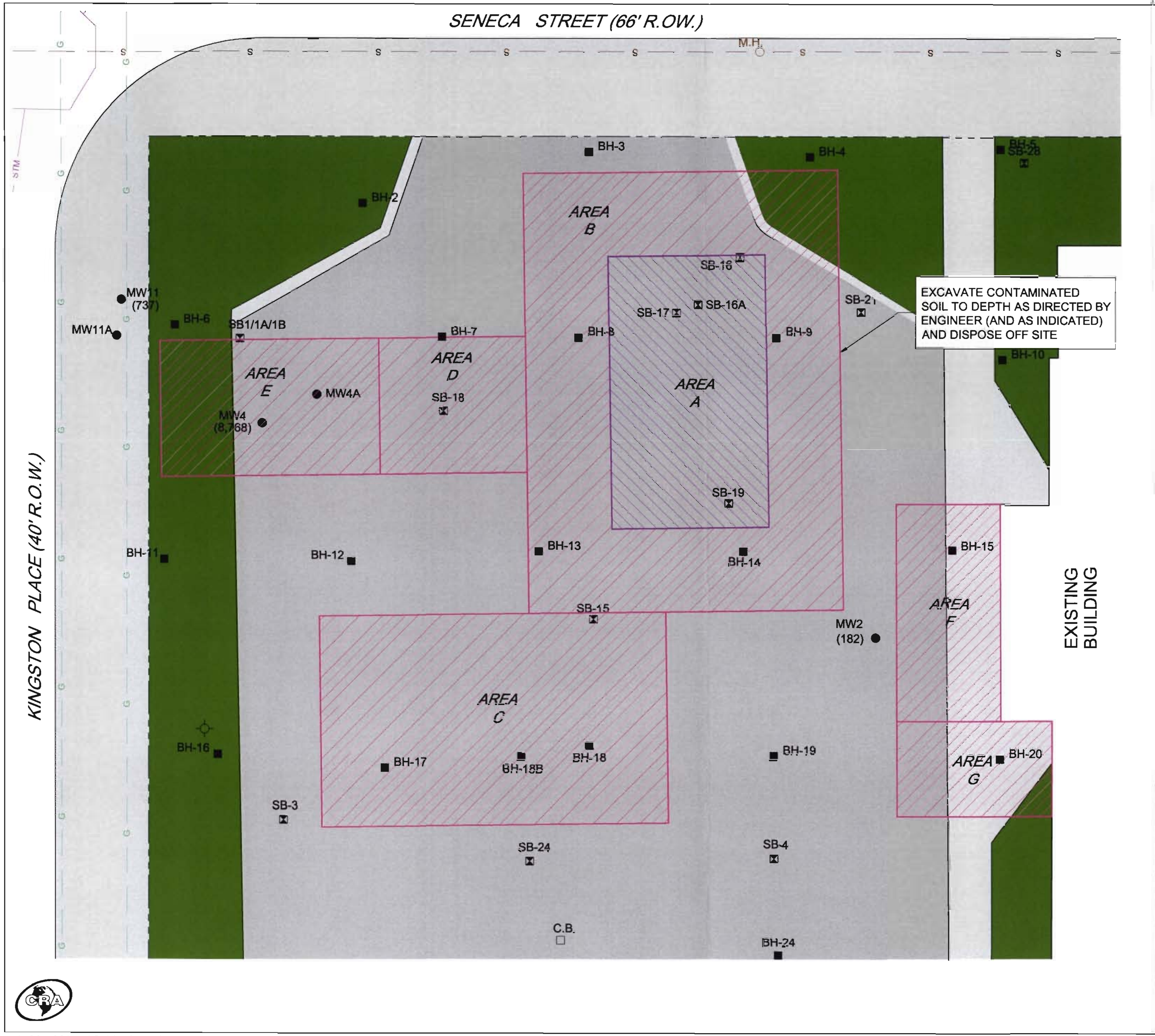


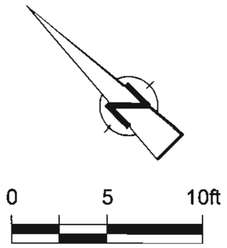
NOTE
LOCATIONS OF UTILITIES ARE APPROXIMATE.
FIELD VERIFICATION REQUIRED BEFORE
WORK COMMENCES.

figure 1.2

SITE PLAN
SURFACE CHARACTERISTICS & UNDERGROUND UTILITIES
PARCEL 2 - SENECA STREET
Buffalo, New York

CRA





LEGEND

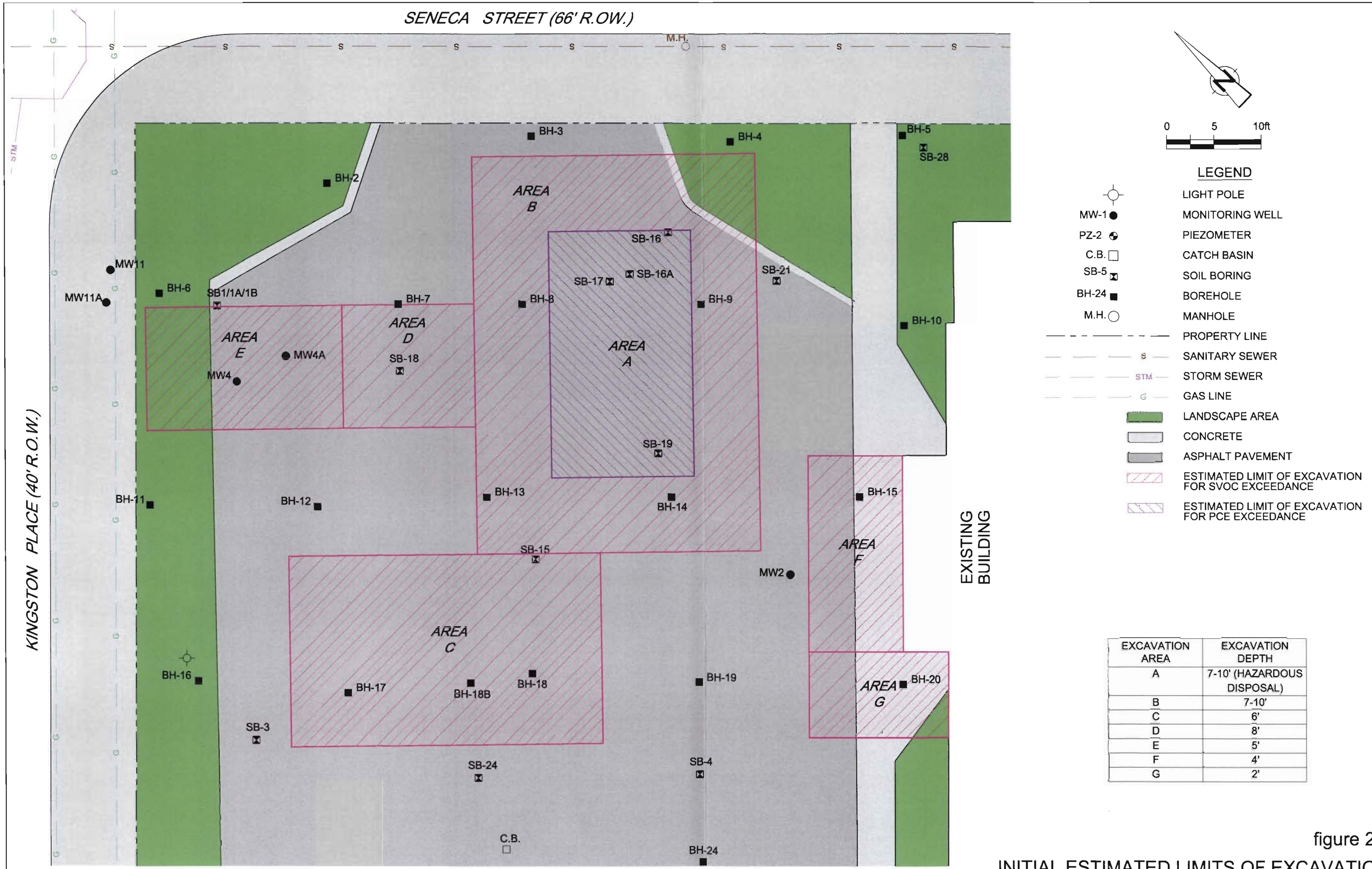
(120)	AVERAGE PCE CONCENTRATION IN SHALLOW GROUNDWATER (ug/L)
-○-	LIGHT POLE
MW-1 ●	MONITORING WELL
PZ-2 ◐	PIEZOMETER
C.B. ☐	CATCH BASIN
SB-5 ☒	SOIL BORING
BH-24 ■	BOREHOLE
M.H. ○	MANHOLE
— - - — - -	PROPERTY LINE
— — S —	SANITARY SEWER
— — STM —	STORM SEWER
— — G —	GAS LINE
🟩	LANDSCAPE AREA
☐	CONCRETE
▨	ASPHALT PAVEMENT
▨	ESTIMATED LIMIT OF EXCAVATION FOR SVOC EXCEEDANCE
▨	ESTIMATED LIMIT OF EXCAVATION FOR PCE EXCEEDANCE

EXCAVATION AREA	EXCAVATION DEPTH
A	7-10' (HAZARDOUS DISPOSAL)
B	7-10'
C	6'
D	8'
E	5'
F	4'
G	2'

figure 2

ESTIMATED EXCAVATION AREAS
SITE REMEDIATION PROGRAM
PARCEL 2 - SENECA STREET
Buffalo, New York

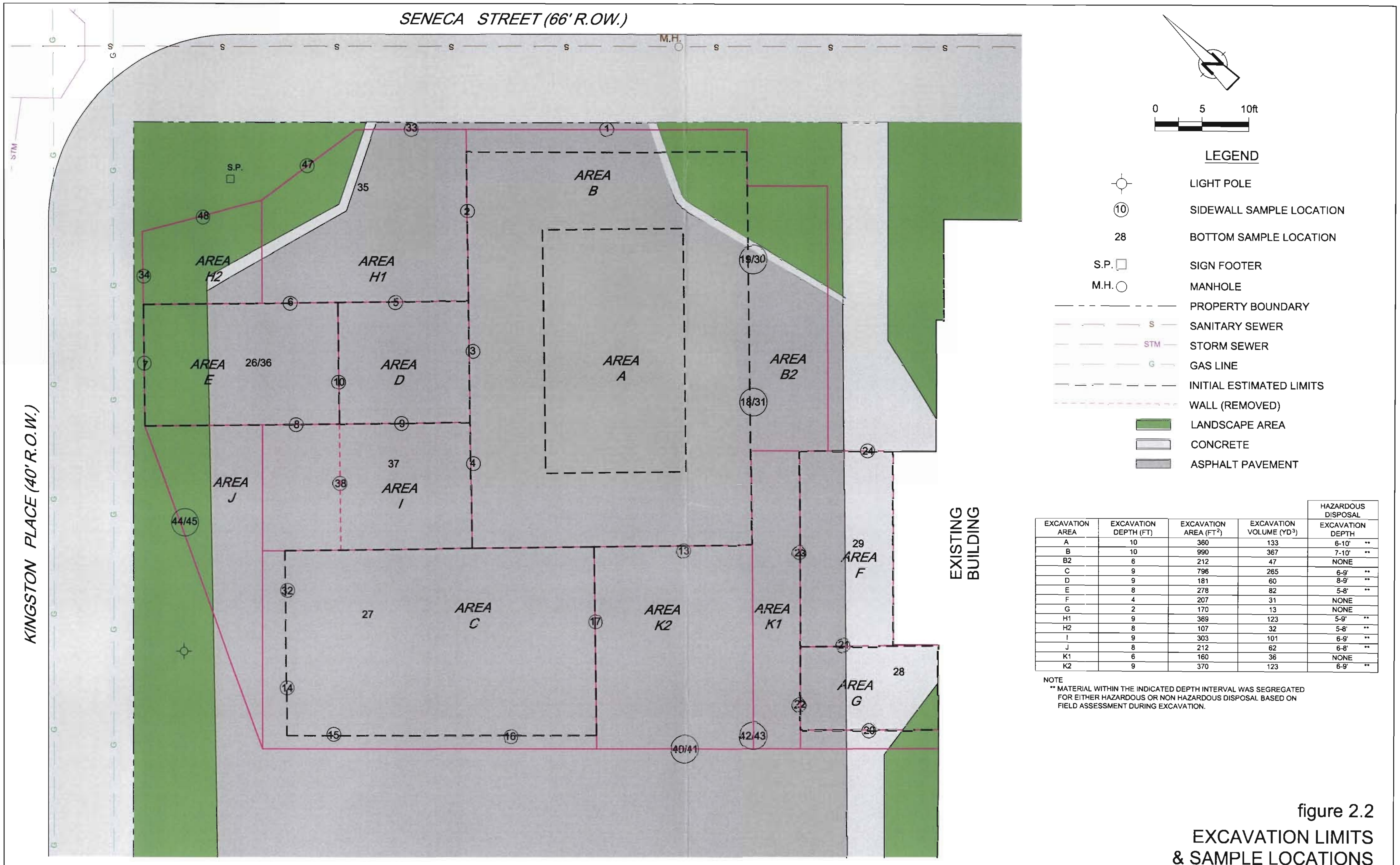
15867-00(005)GN-NF017 APR 01/2004



EXCAVATION AREA	EXCAVATION DEPTH
A	7-10' (HAZARDOUS DISPOSAL)
B	7-10'
C	6'
D	8'
E	5'
F	4'
G	2'

figure 2.1

INITIAL ESTIMATED LIMITS OF EXCAVATION
PARCEL 2 - SENECA STREET
Buffalo, New York



				HAZARDOUS DISPOSAL
EXCAVATION AREA	EXCAVATION DEPTH (FT)	EXCAVATION AREA (FT^2)	EXCAVATION VOLUME (YD^3)	EXCAVATION DEPTH
A	10	360	133	6-10' **
B	10	990	367	7-10' **
B2	6	212	47	NONE
C	9	796	265	6-9' **
D	9	181	60	8-9' **
E	8	278	82	5-8' **
F	4	207	31	NONE
G	2	170	13	NONE
H1	9	369	123	5-9' **
H2	8	107	32	5-8' **
I	9	303	101	6-9' **
J	8	212	62	6-8' **
K1	6	160	36	NONE
K2	9	370	123	6-9' **

NOTE
** MATERIAL WITHIN THE INDICATED DEPTH INTERVAL WAS SEGREGATED FOR EITHER HAZARDOUS OR NON HAZARDOUS DISPOSAL BASED ON FIELD ASSESSMENT DURING EXCAVATION.

figure 2.2

EXCAVATION LIMITS
& SAMPLE LOCATIONS
PARCEL 2 - SENECA STREET
Buffalo, New York

CRA

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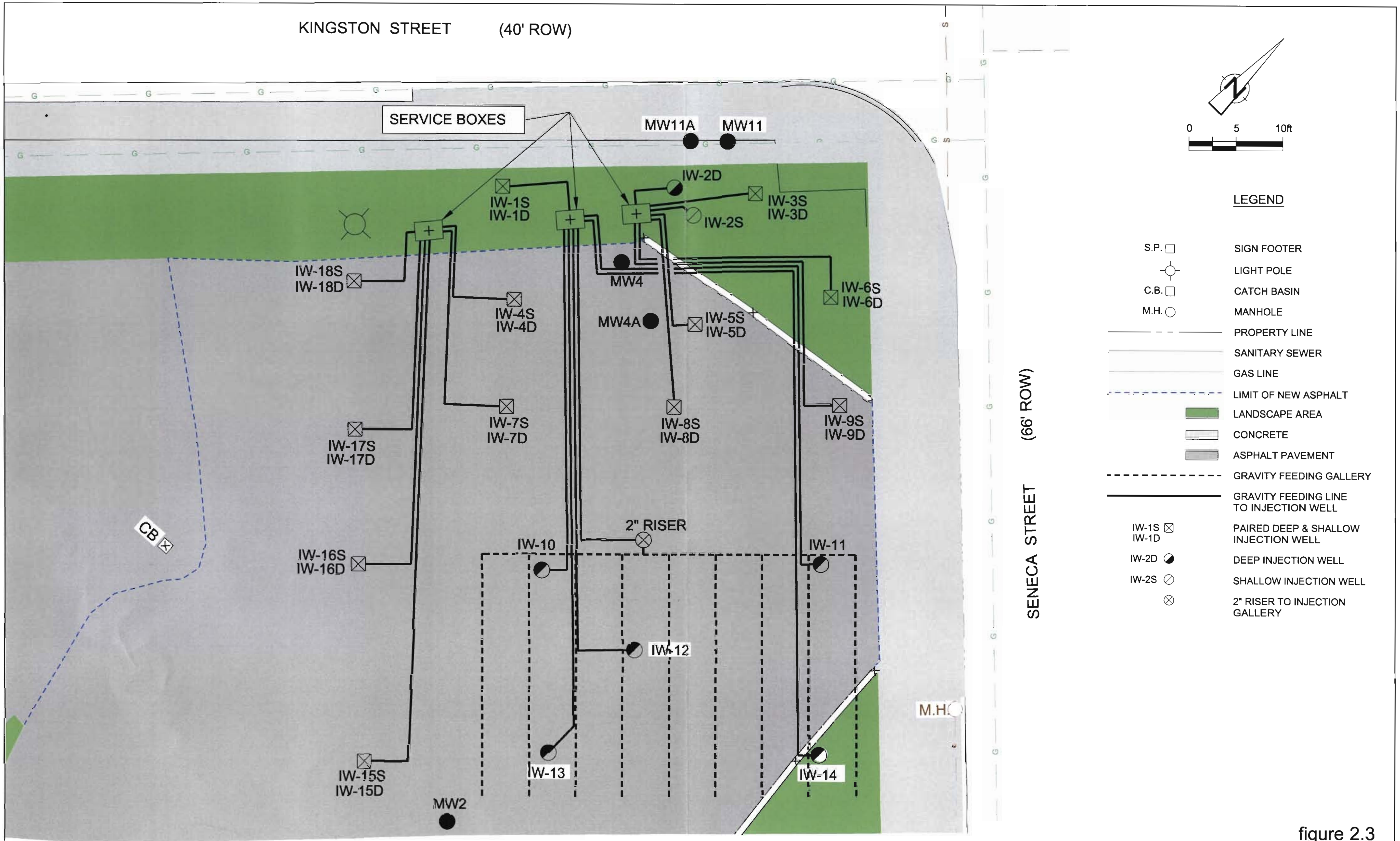
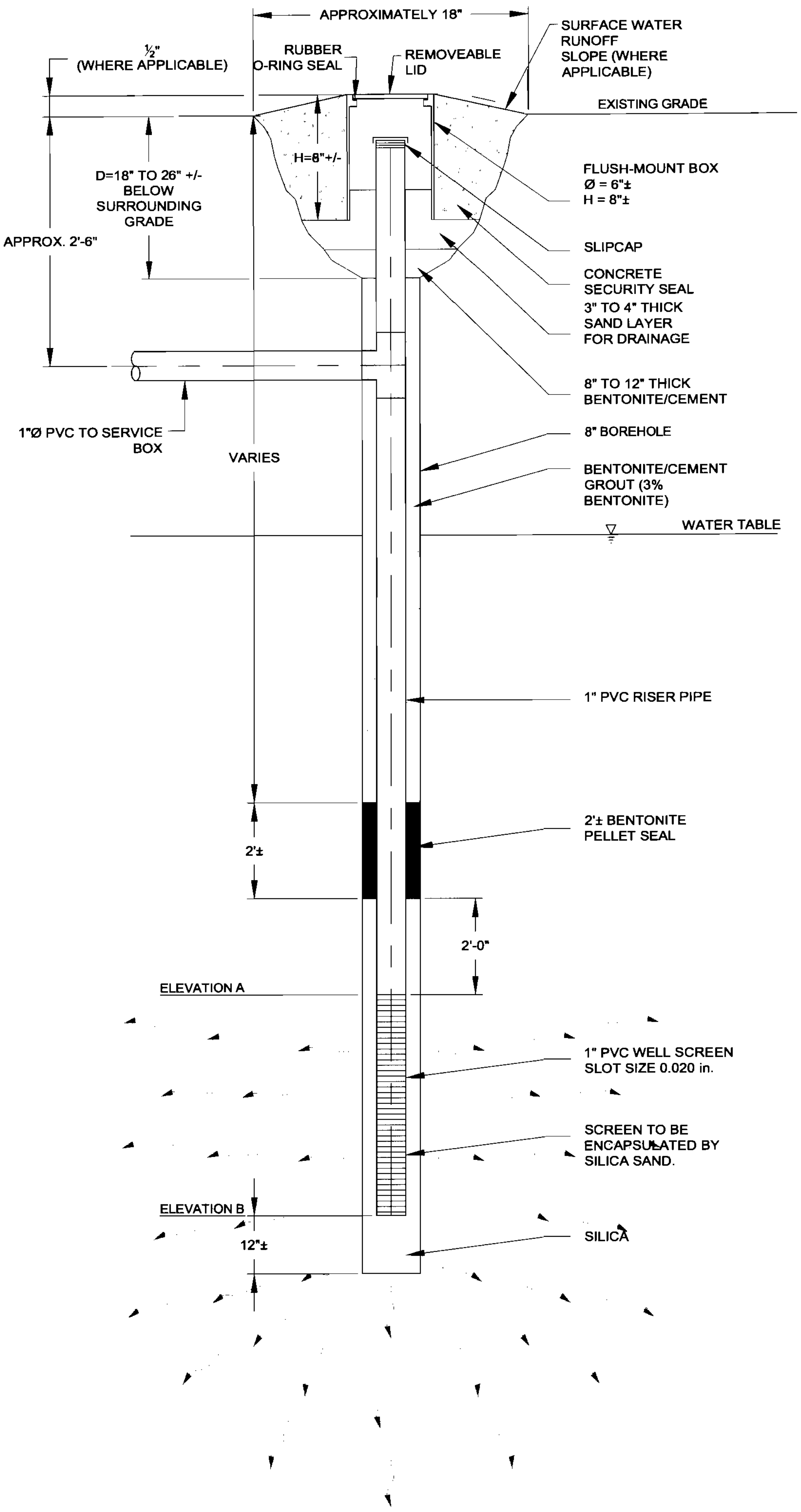


figure 2.3

INJECTION NETWORK
PARCEL 2 - SENECA STREET
Buffalo, New York

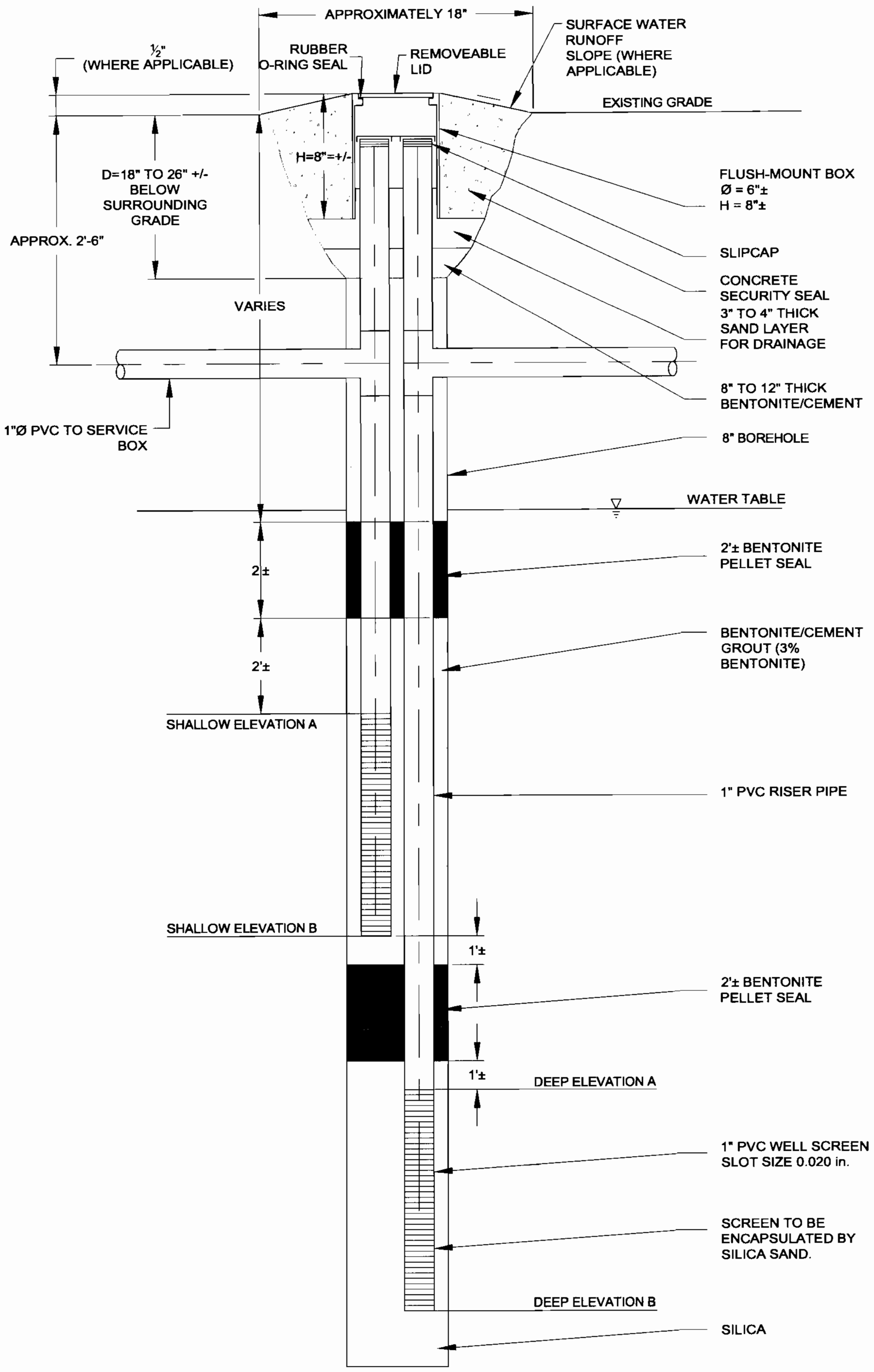
15867-00(005)GN-NF003 APR 01/2004



CHEMICAL INJECTION WELL NO	ELEVATION (SEE NOTE)	
	A	B
IW-10	565.4	560.4
IW-11	565.4	560.4
IW-12	565.9	560.9
IW-13	567.1	562.1
IW-14	566.1	561.1
IW-2S	576.8	574.8
IW-2D	572.3	567.3

figure 2.4

SINGLE INJECTION WELL DETAIL
PARCEL 2 - SENECA STREET
Buffalo, New York

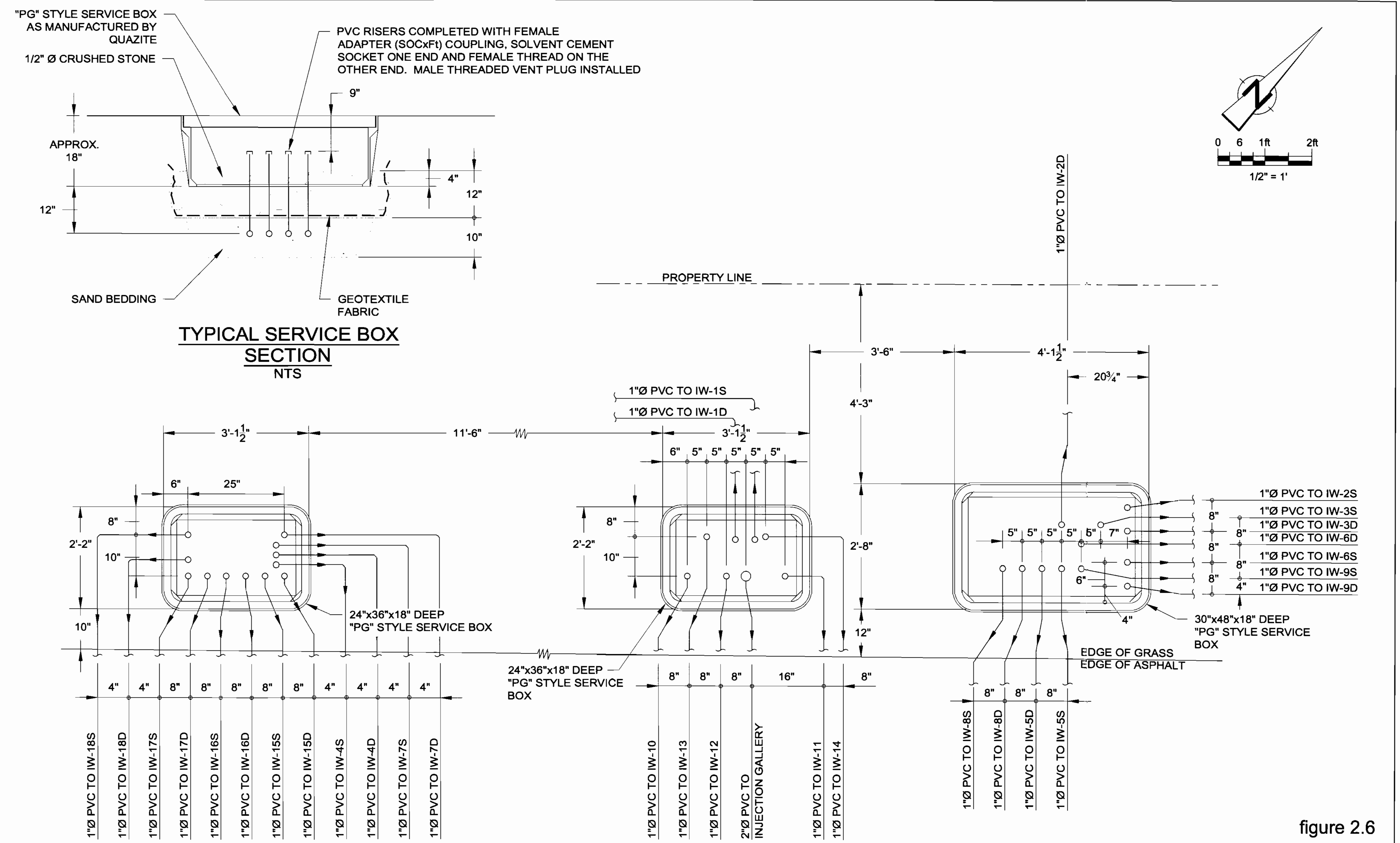


CHEMICAL INJECTION WELL NO	ELEVATION (SEE NOTE) A	B
IW-1S	575.6	573.6
IW-1D	565.6	560.6
IW-3S	577.8	575.8
IW-3D	566.8	561.8
IW-4S	575.3	573.3
IW-4D	565.3	560.3
IW-5S	576.5	574.5
IW-5D	567.0	562.0
IW-6S	573.5	571.5
IW-6D	566.0	561.0
IW-7S	577.3	575.3
IW-7D	565.3	560.3
IW-8S	576.5	574.5
IW-8D	565.5	560.5
IW-9S	576.9	574.9
IW-9D	565.8	560.8

CHEMICAL INJECTION WELL NO	ELEVATION (SEE NOTE) A	B
IW-15S	576.5	574.5
IW-15D	565.9	560.9
IW-16S	576.9	574.9
IW-16D	565.4	560.9
IW-17S	575.4	573.4
IW-17D	565.9	560.9
IW-18S	575.5	573.5
IW-18D	566.0	561.0

figure 2.5

DOUBLE INJECTION WELL DETAIL
PARCEL 2 - SENECA STREET
Buffalo, New York



TYPICAL SERVICE BOX SECTION
NTS

PLAN

figure 2.6

SERVICE BOX AND PIPING DETAILS
PARCEL 2 - SENECA STREET
Buffalo, New york

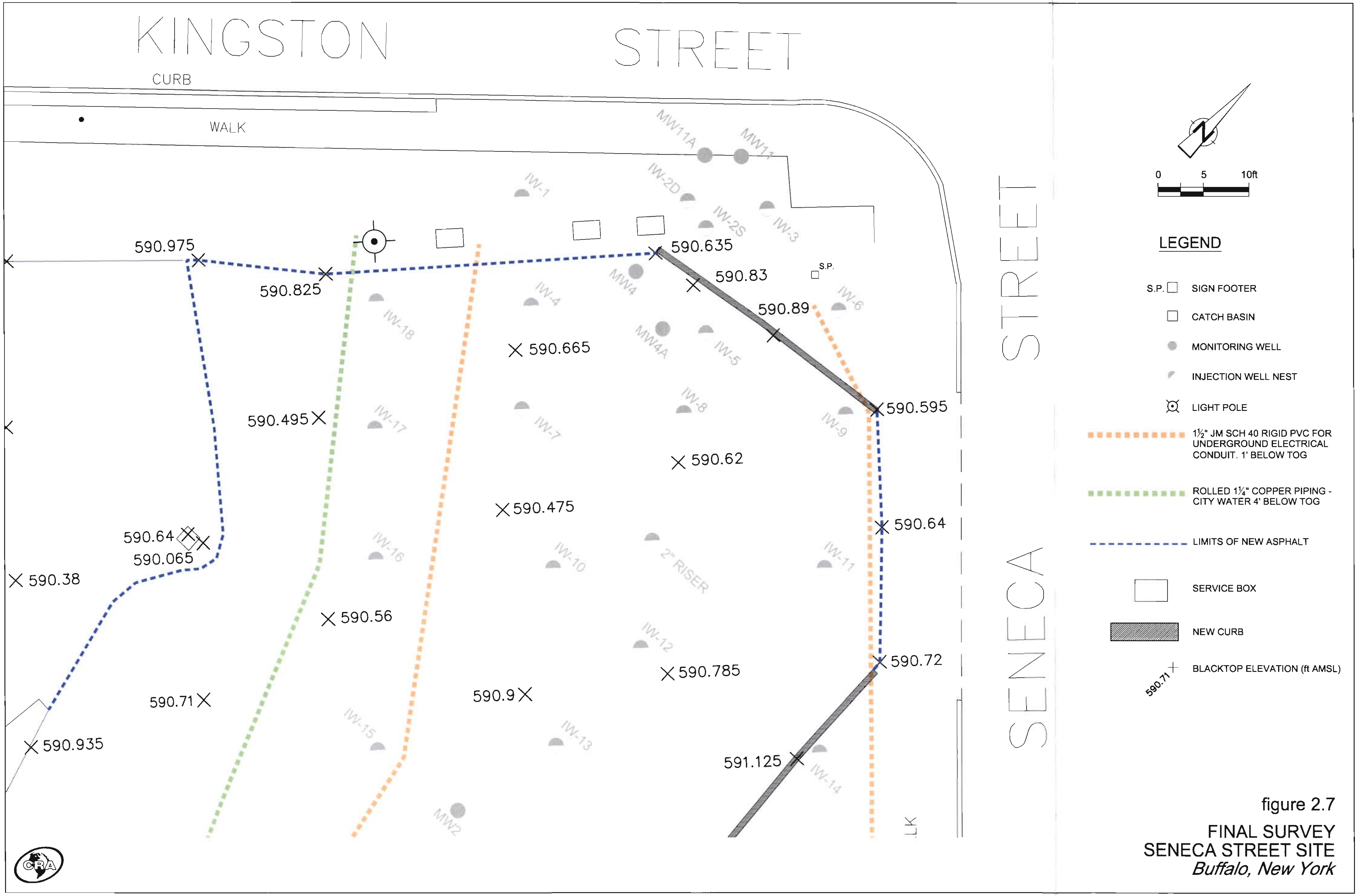


figure 2.7

FINAL SURVEY
SENECA STREET SITE
Buffalo, New York

15867-00(005)GN-NF010 APR 01/2004

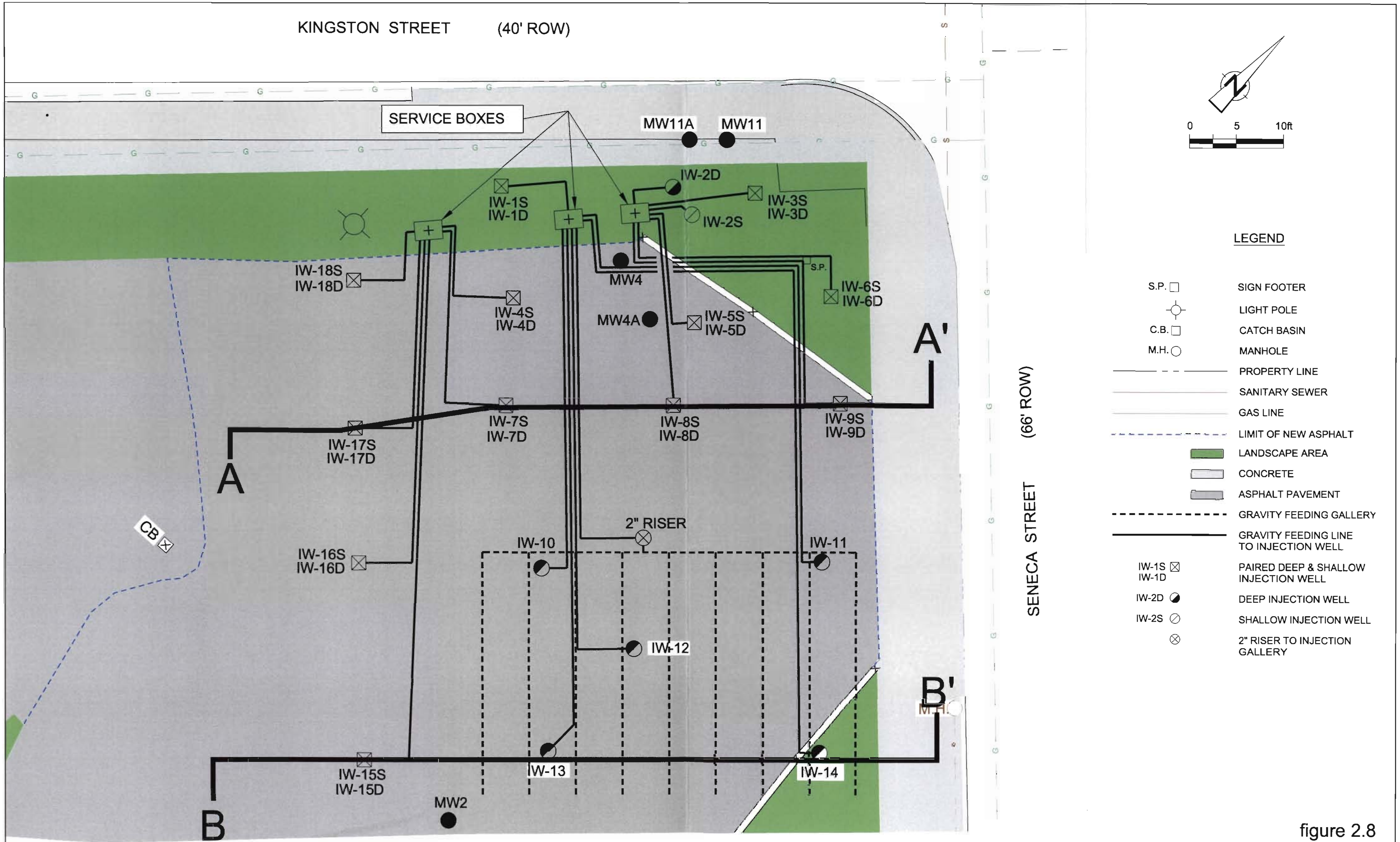


figure 2.8

CROSS - SECTION ALIGNMENTS
PARCEL 2 - SENECA STREET
Buffalo, New York

15867-00(005)GN-NF006 APR 01/2004

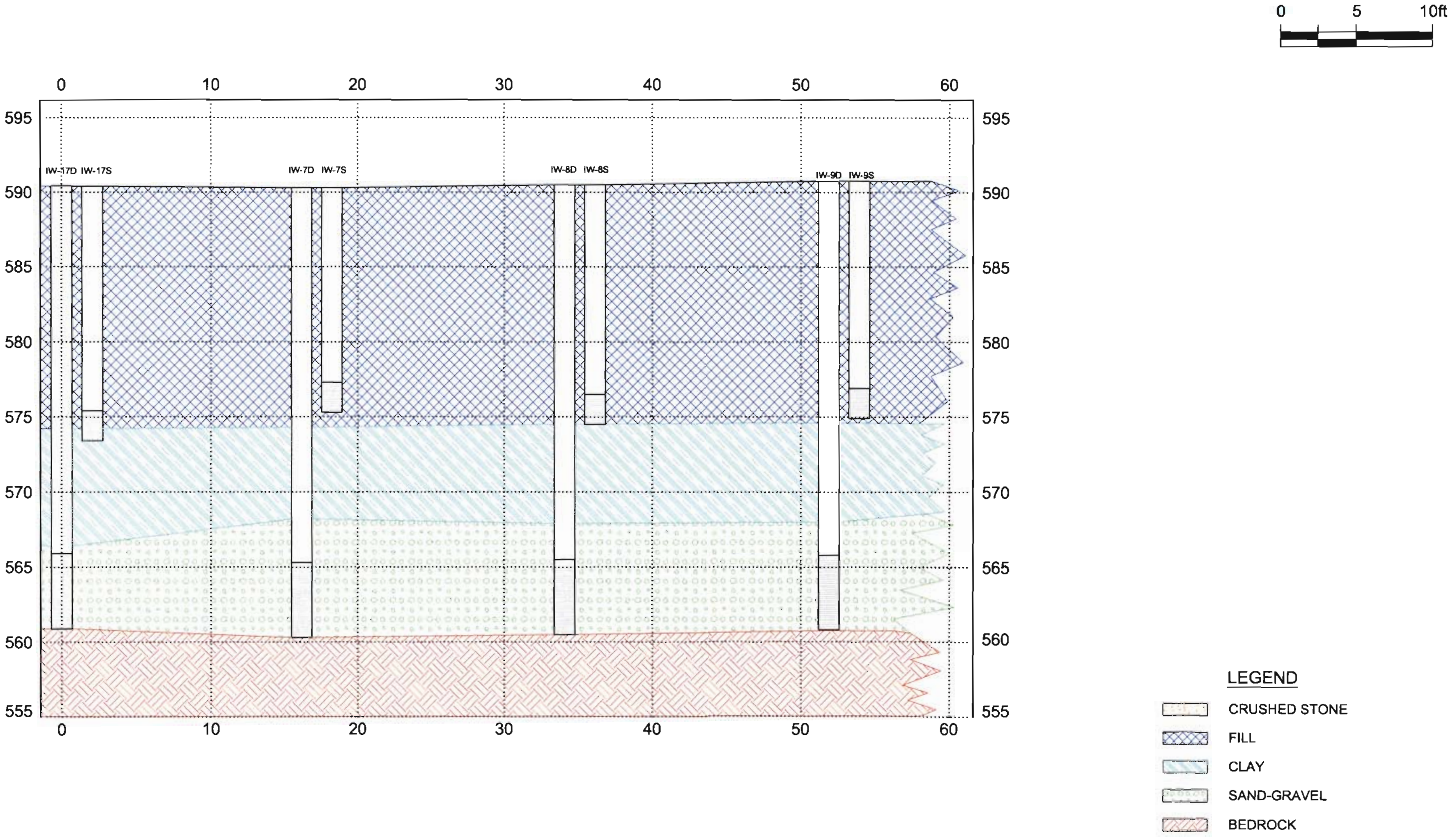


figure 2.9

CROSS SECTION A-A'
PARCEL 2 - SENECA STREET
Buffalo, New York

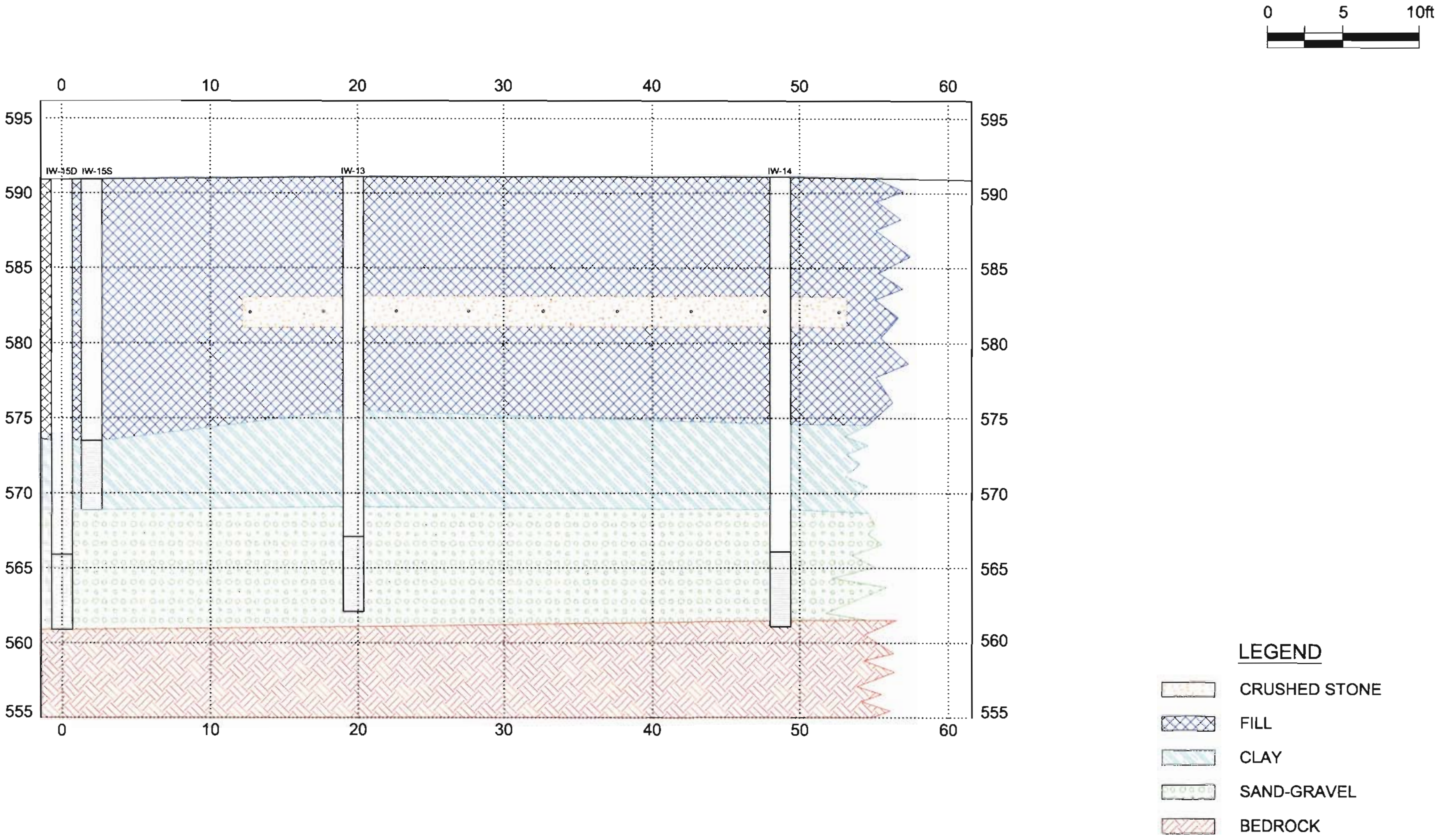


figure 2.10

CROSS SECTION B-B'
PARCEL 2 - SENECA STREET
Buffalo, New York

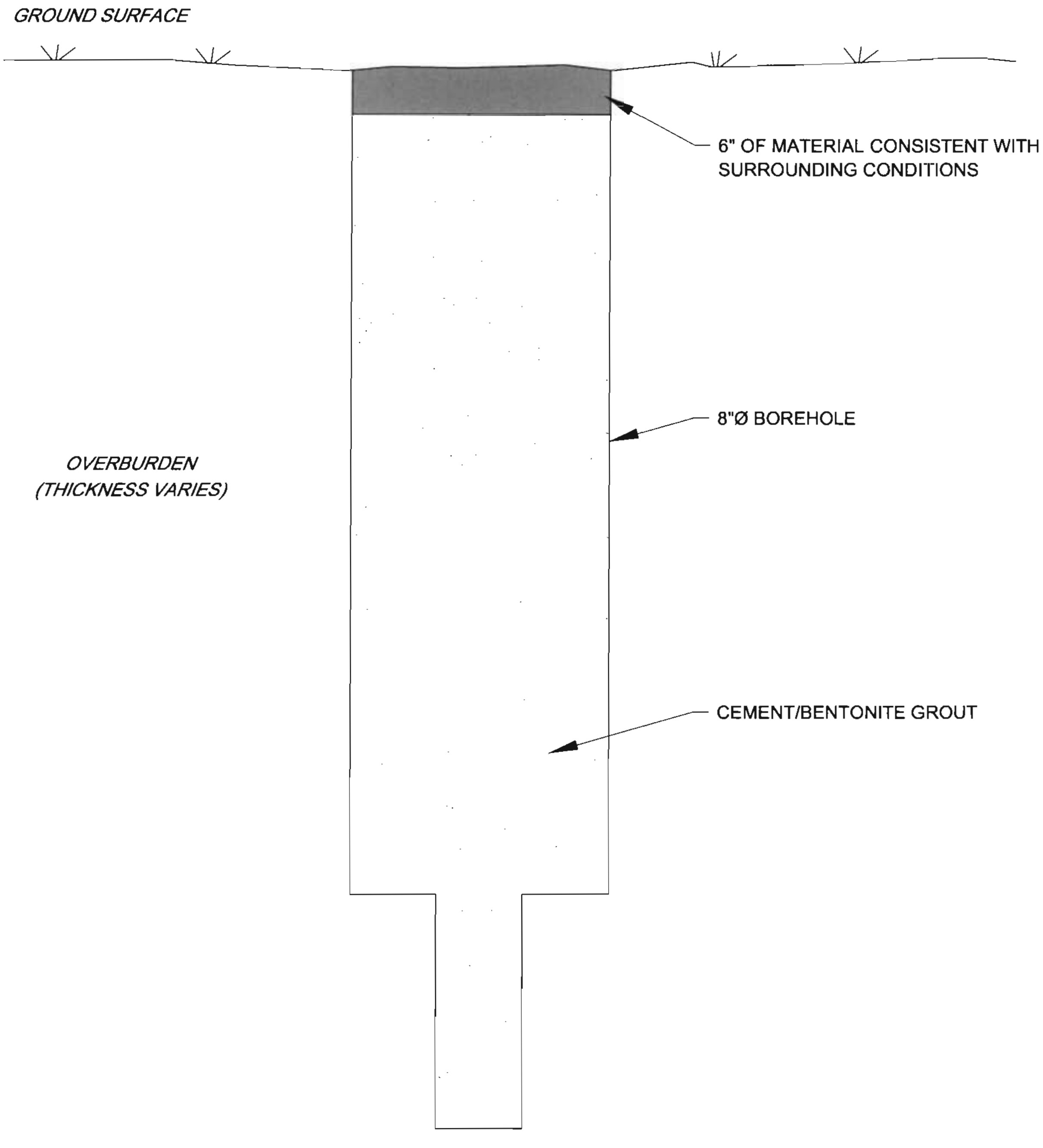
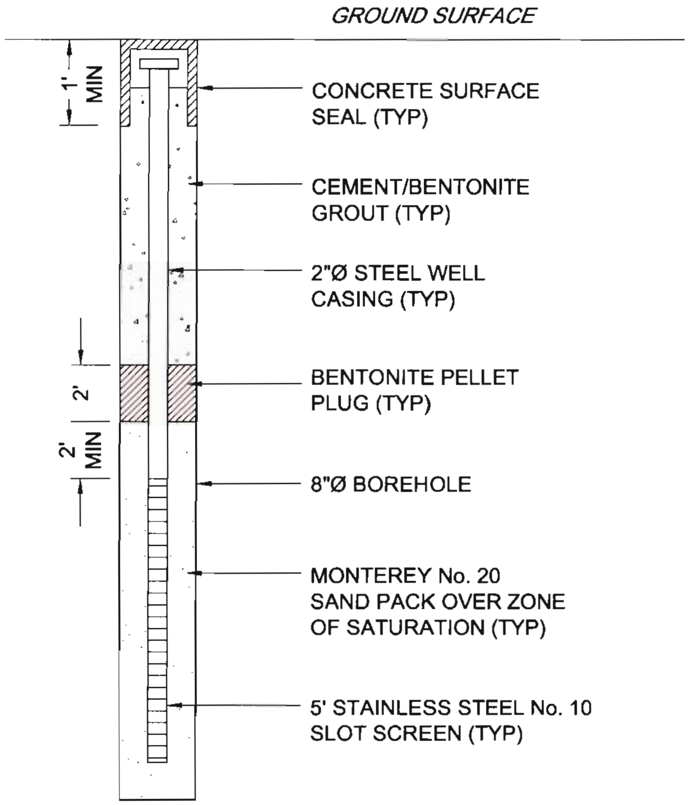
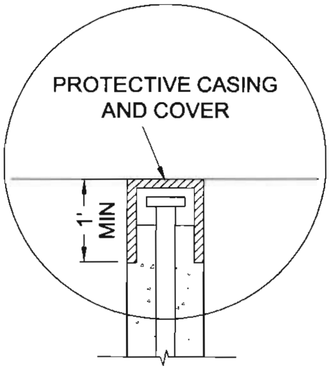


figure K1.1

TYPICAL BOREHOLE
PARCEL 2, SENECA STREET
Buffalo, New York

CRA





<u>FLUSH WITH GROUND WELL INSTALLATION</u>

figure K1.2

TYPICAL MONITORING WELL INSTALLATION
PARCEL 2, SENECA STREET
Buffalo, New York

TABLE 2.1

INJECTION WELL INSTALLATION SUMMARY
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

Location I.D.	*Approx. Ground Elevation (feet NGVD)*	*Screened Interval*		*Clay Interval*	
		(feet BGS)	*(feet NGVD)*	*(feet BGS)*	*(feet NGVD)*
IW-1S	590.6	15.0 to 17.0	575.6 to 573.6	18.0 to 24.0	572.6 to 566.6
IW-1D	590.6	25.0 to 30.0	565.6 to 560.6	18.0 to 24.0	572.6 to 566.6
IW-2S	590.8	14.0 to 16.0	576.8 to 574.8	NA to > 23.5	to <567.3
IW-2D	590.8	18.5 to 23.5	572.3 to 567.3	NA to > 23.5	to <567.3
IW-3S	590.8	13.0 to 15.0	577.8 to 575.8	16.0 to 23.0	574.8 to 567.8
IW-3D	590.8	24.0 to 29.0	566.8 to 561.8	16.0 to 23.0	574.8 to 567.8
IW-4S	590.3	15.0 to 17.0	575.3 to 573.3	18.0 to < 24	572.3 to >566.3
IW-4D	590.3	25.0 to 30.0	565.3 to 560.3	18.0 to < 24	572.3 to >566.3
IW-5S	590.5	14.0 to 16.0	576.5 to 574.5	16.0 to 22.5	574.5 to 568.0
IW-5D	590.5	23.5 to 28.5	567.0 to 562.0	16.0 to 22.5	574.5 to 568.0
IW-6S	590.5	17.0 to 19.0	573.5 to 571.5	18.7 to 24.0	571.8 to 566.5
IW-6D	590.5	24.5 to 29.5	566.0 to 561.0	18.7 to 24.0	571.8 to 566.5
IW-7S	590.3	13.0 to 15.0	577.3 to 575.3	16.0 to 22.1	574.3 to 568.2
IW-7D	590.3	25.0 to 30.0	565.3 to 560.3	16.0 to 22.1	574.3 to 568.2
IW-8S	590.5	14.0 to 16.0	576.5 to 574.5	16.0 to 22.6	574.5 to 567.9
IW-8D	590.5	25.0 to 30.0	565.5 to 560.5	16.0 to 22.6	574.5 to 567.9
IW-9S	590.8	13.9 to 15.9	576.9 to 574.9	16.2 to 22.8	574.6 to 568.0
IW-9D	590.8	25.0 to 30.0	565.8 to 560.8	16.2 to 22.8	574.6 to 568.0
IW-10	590.4	25.0 to 30.0	565.4 to 560.4	NA to < 22	to >568.4
IW-11	590.4	25.0 to 30.0	565.4 to 560.4	NA to 22.4	to 568.0
IW-12	590.4	24.5 to 29.5	565.9 to 560.9	NA to 22.4	to 568.0
IW-13	591.1	24.0 to 29.0	567.1 to 562.1	NA to < 22	to >569.1
IW-14	591.1	25.0 to 30.0	566.1 to 561.1	NA to 22.2	to 568.9
IW-15S	590.9	14.4 to 16.4	576.5 to 574.5	17.4 to < 22	573.5 to >568.9
IW-15D	590.9	25.0 to 30.0	565.9 to 560.9	17.4 to < 22	573.5 to >568.9
IW-16S	590.4	13.5 to 15.5	576.9 to 574.9	16.5 to < 22	573.9 to >568.4
IW-16D	590.4	25.0 to 30.0	565.4 to 560.4	16.5 to < 22	573.9 to >568.4
IW-17S	590.4	15.0 to 17.0	575.4 to 573.4	16.2 to < 24	574.2 to >566.4
IW-17D	590.4	24.5 to 29.5	565.9 to 560.9	16.2 to < 24	574.2 to >566.4
IW-18S	590.5	15.0 to 17.0	575.5 to 573.5	16.5 to < 24	574.0 to >566.5
IW-18D	590.5	24.5 to 29.5	566.0 to 561.0	16.5 to < 24	574.0 to >566.5

Notes:

BGS	Below Ground Surface.
NGVD	National Geodetic Vertical Datum.
NA	Interface not defined by sampling.

TABLE 2.2

PRE-EXCAVATION SOIL SAMPLE COLLECTION AND ANALYSIS SUMMARY
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Analysis/Parameters								
Location	*Sample Date*	*TCL VOCs*	*TCL SVOCs*	*STARS VOCs*	*STARS SVOCs*	*Metals (Filtered)*	*Metals (Unfiltered)*	*CN*	*Lead Only*	*Comment*
SB-1	07/21/99	X								8.0 - 12.0 feet
SB-3	07/21/99	X								12.0 - 16.0 feet
SB-4	07/21/99	X								12.0 - 16.0 feet
SB-5	07/21/99			X	X				X	12.0 - 16.0 feet
SB-6	07/21/99			X	X				X	8.0 - 12.0 feet
SB-7	07/21/99			X	X				X	8.0 - 12.0 feet
SB-8	07/21/99			X	X				X	4.0 - 8.0 feet
SB-9	07/21/99			X	X				X	0 - 4.0 feet
SB-10	07/21/99			X	X				X	8.0 - 12.0 feet
SB-11	09/13/00				X		X	X		7.0 - 9.0 feet
SB-12	09/13/00				X		X	X		7.0 - 9.0 feet
SB-13	09/13/00				X		X	X		7.0 - 9.0 feet
SB-14	09/13/00	X			X		X	X		5.0 - 7.0 feet
SB-15	09/13/00	X			X		X	X		5.0 - 7.0 feet
MW-1	09/14/00	X			X		X	X		3.0 - 5.0 feet
MW-5	09/14/00	X			X		X	X		1.0 - 3.0 feet
MW-3	09/14/00	X			X		X	X		0.0 - 2.0 feet
MW-3	09/14/00	X			X		X	X		4.0 - 6.0 feet
MW-2	09/15/00	X			X		X	X		3.0 - 5.0 feet
MW-2	09/15/00	X			X		X	X		7.0 - 9.0 feet, Duplicate collected
MW-4	09/16/00	X			X		X	X		3.0 - 5.0 feet
SB-16A	09/18/00	X			X		X	X		7.0 - 9.0 feet
SB-17	08/20/01	X								2.0 - 4.0 feet
SB-17	08/20/01	X								6.0 - 8.0 feet
SB-17	08/22/01	X								0 - 2.0 feet
SB-17	08/22/01	X								4.0 - 6.0 feet
SB-17	08/22/01	X								8.0 - 10.0 feet
SB-18	08/22/01	X	X							6.0 - 8.0 feet
SB-19	08/20/01	X	X							6.0 - 8.0 feet
SB-21	08/20/01	X								6.0 - 8.0 feet
SB-22	08/22/01	X								11.0 - 12.0 feet
SB-23	08/22/01	X								11.0 - 12.0 feet
SB-24	08/20/01	X	X							8.0 - 10.0 feet, Duplicate collected
SB-25	08/20/01	X								8.0 - 10.0 feet
SB-26	08/20/01		X							10.0 - 12.0 feet
SB-27	08/20/01		X							10.0 - 12.0 feet
SB-28	08/20/01	X								6.0 - 8.0 feet
SB-29	08/20/01	X								8.0 - 10.0 feet
BH-5	05/05/03	x	x							0-2.0 feet
	05/05/03	x	x							2.0-4.0 feet
	05/05/03	x	x							4.0-6.0 feet
	05/05/03	x	x							6.0-8.0 feet
	05/05/03	x	x							8.0-10.0 feet

TABLE 2.2

PRE-EXCAVATION SOIL SAMPLE COLLECTION AND ANALYSIS SUMMARY
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Analysis/Parameters								
Location	*Sample Date*	*TCL VOCs*	*TCL SVOCs*	*STARS VOCs*	*STARS SVOCs*	*Metals (Filtered)*	*Metals (Unfiltered)*	*CN*	*Lead Only*	*Comment*
BH-10	05/05/03	x	x							0-2.0 feet
	05/05/03	x	x							2.0-4.0 feet
	05/05/03	x	x							4.0-6.0 feet
	05/05/03	x	x							6.0-8.0 feet
	05/05/03	x	x							8.0-10.0 feet
BH-15	05/05/03	x	x							0-2.0 feet
	05/05/03	x	x							2.0-4.0 feet
	05/05/03	x	x							4.0-6.0 feet
	05/05/03	x	x							6.0-8.0 feet
	05/05/03	x	x							8.0-10.0 feet
BH-20	05/05/03	x	x							0-2.0 feet
	05/05/03	x	x							2.0-4.0 feet
	05/05/03	x	x							4.0-6.0 feet
	05/05/03	x								6.0-8.0 feet
BH-19	05/05/03	x	x							0-2.0 feet
	05/05/03	x	x							2.0-4.0 feet
	05/05/03	x	x							2.0-4.0 feet
	05/05/03	x	x							6.0-8.0 feet
BH-18	05/05/03	x								0-2.0 feet
	05/05/03	x	x							2.0-4.0 feet
	05/05/03	x								8.0-10.0 feet
BH-18B	05/05/03	x	x							0-2.0 feet
	05/05/03	x	x							2.0-4.0 feet
	05/05/03	x	x							2.0-4.0 feet[1], MS/MSD
	05/05/03	x								4.0-6.0 feet
BH-17	05/05/03	x	x							0-2.0 feet
	05/05/03	x								2.0-4.0 feet
	05/05/03	x	x							4.0-6.0 feet
	05/05/03	x	x							6.0-8.0 feet
BH-16	05/06/03	x	x							0-2.0 feet
	05/06/03	x	x							2.0-4.0 feet
	05/06/03	x	x							4.0-6.0 feet
	05/06/03	x	x							6.0-8.0 feet, Duplicate collected
	05/06/03	x	x							8.0-10.0 feet
	05/06/03	x								10-11
BH-8	05/06/03	x	x							0-2.0 feet
	05/06/03	x	x							2.0-4.0 feet
	05/06/03	x	x							4.0-6.0 feet
	05/06/03	x	x							6.0-8.0 feet
BH-3	05/06/03	x	x							0-2.0 feet
	05/06/03	x	x							2.0-4.0 feet
	05/06/03	x	x							4.0-6.0 feet
	05/06/03	x	x							6.0-8.0 feet
	05/06/03	x	x							8-9

TABLE 2.2

PRE-EXCAVATION SOIL SAMPLE COLLECTION AND ANALYSIS SUMMARY
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Analysis/Parameters								
Location	*Sample Date*	*TCL VOCs*	*TCL SVOCs*	*STARS VOCs*	*STARS SVOCs*	*Metals (Filtered)*	*Metals (Unfiltered)*	*CN*	*Lead Only*	*Comment*
BH-4	05/06/03	x	x							0-2.0 feet
	05/06/03	x	x							2.0-4.0 feet
	05/06/03	x	x							6.0-8.0 feet
	05/06/03	x	x							8-9', MS/MSD
BH-6	05/06/03	x	x							0-2.0 feet
	05/06/03	x	x							2.0-4.0 feet', Duplicate collected
	05/06/03	x	x							4.0-6.0 feet', MS/MSD
	05/06/03	x	x							6.0-8.0 feet
	05/06/03	x	x							8-9
BH-11	05/06/03	x	x							0-2.0 feet
	05/06/03	x	x							2.0-4.0 feet
	05/06/03	x	x							4.0-6.0 feet
	05/06/03	x	x							6.0-8.0 feet
BH-14	05/06/03	x	x							0-2.0 feet
	05/06/03	x	x							2.0-4.0 feet
	05/06/03	x	x							4.0-6.0 feet
	05/06/03	x	x							6.0-8.0 feet
	05/06/03	x	x							8.0-10.0 feet
BH-12	05/07/03	x	x							0-2.0 feet
	05/07/03	x	x							2.0-4.0 feet
	05/07/03	x	x							4.0-6.0 feet
	05/07/03	x	x							6.0-8.0 feet
BH-9	05/07/03	x								0-2.0 feet
	05/07/03	x	x							2.0-4.0 feet
	05/07/03	x	x							4.0-6.0 feet
	05/07/03	x	x							6.0-8.0 feet
BH-13	05/07/03	x	x							0-2.0 feet
	05/07/03	x	x							2.0-4.0 feet
	05/07/03	x	x							4.0-6.0 feet
	05/07/03	x	x							6.0-8.0 feet
BH-7	05/07/03	x	x							0-2.0 feet
	05/07/03	x	x							2.0-4.0 feet
	05/07/03	x	x							4.0-6.0 feet
BH-15	05/07/03	x								8.0-9.0 feet
BH-7	05/07/03	x	x							5.0-7.0 feet, Duplicate collected
	05/07/03	x	x							7.0-9.0 feet, MS/MSD

Notes:

CN	Cyanide.
MS	Matrix Spike.
MSD	Matrix Spike Duplicate.
STARS	Spill Technology and Remediation.
SVOCs	Semi-Volatile Organic Compounds.
TCL	Target Compound List.
VOCs	Volatile Organic Compounds.

TABLE 2.3

CONFIRMATORY AND POST-EXCAVATION SOIL SAMPLE COLLECTION AND ANALYSIS SUMMARY
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

Sample Date	*Sample No.*	*Excavation Area*	*Sidewall or Bottom* [(1)]	*Fill or Native?*	*Analyses*
10/21/03	S-102103-DRS-1	B	East Sidewall	Native	VOCs, SVOCs
	S-102103-DRS-2	B	North Sidewall East	Native	VOCs, SVOCs
	S-102103-DRS-3	B	North Sidewall Center	Native	VOCs, SVOCs
	S-102103-DRS-4	B	North Sidewall West	Native	VOCs, SVOCs
	S-102103-DRS-18	B/B2	South Sidewall West	Native	VOCs, SVOCs
	S-102103-DRS-19	B/B2	South Sidewall East	Native	VOCs, SVOCs
	S-102103-DRS-30	B/B2	South Sidewall East	Fill	SVOCs
	S-102103-DRS-31	B/B2	South Sidewall West	Fill	SVOCs
10/22/03	S-102203-DRS-5	D	East Sidewall	Native	VOCs, SVOCs
	S-102203-DRS-6	E	East Sidewall	Native	VOCs, SVOCs
	S-102203-DRS-7	E	North Sidewall	Native	VOCs, SVOCs
	S-102203-DRS-8	E	West Sidewall	Native	VOCs, SVOCs
	S-102203-DRS-9	D	West Sidewall	Native	VOCs, SVOCs
	S-102203-DRS-10	D	North Sidewall	Native	VOCs, SVOCs
	S-102203-DRS-25	D	Bottom	Native	VOCs, SVOCs
	S-102203-DRS-26	E	Bottom	Fill	VOCs, SVOCs
10/23/03	S-102303-DRS-13 (2)	B	West Sidewall	Native	VOCs, SVOCs
	S-102303-DRS-14	C	North Sidewall	Native	VOCs, SVOCs
	S-102303-DRS-15	C	West Sidewall North	Native	VOCs, SVOCs
	S-102303-DRS-16	C	West Sidewall South	Native	VOCs, SVOCs
	S-102303-DRS-17	C	South Sidewall	Native	VOCs, SVOCs
	S-102303-DRS-20	G	West Sidewall	Native	VOCs, SVOCs
	S-102302-DRS-21	G	East Sidewall	Native	VOCs, SVOCs
	S-102303-DRS-22	G	North Sidewall	Native	VOCs, SVOCs
	S-102303-DRS-23	F	North Sidewall	Native	VOCs, SVOCs
	S-102303-DRS-24	F	East Sidewall	Native	VOCs, SVOCs
	S-102303-DRS-27	C	Bottom	Native	VOCs, SVOCs
	S-102303-DRS-28	G	Bottom	Fill	VOCs, SVOCs
	S-102303-DRS-29	F	Bottom	Native	VOCs, SVOCs
	S-102302-DRS-32	C	North Sidewall East	Fill	VOCs, SVOCs
10/28/03	S-102803-DRS-33	H1	East Sidewall	Native	VOCs, SVOCs
	S-102803-DRS-34	H2	North Sidewall	Native	VOCs, SVOCs
	S-102803-DRS-35	H1	Bottom	Native	VOCs, SVOCs
	S-102803-DRS-36	E	Bottom	Native	VOCs, SVOCs
	S-102803-DRS-37	I	Bottom	Native	VOCs, SVOCs
	S-102803-DRS-38	I	North Sidewall	Native	VOCs, SVOCs
	S-102803-DRS-39	I	Spoils	--	VOCs, SVOCs
11/3/03	S-110303-DRS-40	K2	West Sidewall	Native	VOCs, SVOCs
	S-110303-DRS-41	K2	West Sidewall	Fill	VOCs, SVOCs
	S-110303-DRS-42	K1	West Sidewall	Native	VOCs, SVOCs
	S-110303-DRS-43	K1	West Sidewall	Fill	VOCs, SVOCs
	S-110303-DRS-44	J	Northwest Sidewall	Native	VOCs, SVOCs
	S-110303-DRS-45	J	Northwest Sidewall	Fill	VOCs, SVOCs
	S-110303-DRS-47	H	East Sidewall	Fill	VOCs, SVOCs
	S-110303-DRS-48	H	Northeast Sidewall	Fill	VOCs, SVOCs

Notes:

(1)	Compass directions based on Kingston Place due north of the Site.
(2)	No samples numbered 11, 12, and 46.
SVOCs	Semi-Volatile Organic Compounds.
VOCs	Volatile Organic Compounds.

SUMMARY OF VOC AND SVOC RESULTS FOR PRE-EXCAVATION SOIL SAMPLES [1]
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Sample Location:	*SB-15*	*MW-3*	*MW-5*	*MW-4*	*SB-16A*	*SB-19*	*SB-17*	*SB-18*
		Sample Depth [ft. BGS]:	*[5-7]*	*[0-2]*	*[1-3]*	*[3-5]*	*[7-9]*	*[6-8]*	*[8-10]*	*[6-8]*
		Sample Date:	*09/13/00*	*09/14/00*	*09/14/00*	*09/15/00*	*09/18/00*	*08/20/01*	*08/22/01*	*08/22/01*
Parameters	*TAGM Std.* [2]	*Units*								
Volatiles										
Acetone	200	µg/kg	21 U	25 UJ	27 U	21 U	**420 J**	25 U	24	46
Tetrachloroethene	1400	µg/Kg	28	6.2 U	6.7 U	13	**7200**	**29000**	**9700**	2.9 J
Semi-Volatiles										
Benzo(a)anthracene	224	µg/kg	**710 J**	160 J	88 J	**5700 J**	410 U	410 U	--	**3200 J**
Benzo(a)pyrene	61	µg/Kg	**720 J**	**160 J**	**90 J**	**5600**	410 U	410 U	--	**2200 J**
Benzo(b)fluoranthene	1100	µg/kg	750 J	210 J	78 J	**6400**	410 U	410 U	--	**2000 J**
Benzo(k)fluoranthene	1100	µg/kg	730 J	160 J	70 J	**5400**	410 U	410 U	--	**1400 J**
Chrysene	400	µg/Kg	**830 J**	180 J	110 J	**6200 J**	22 J	410 U	--	**2900 J**
Dibenz(a,h)anthracene	14	µg/kg	1800 UJ	410 U	440 U	**500 J**	410 U	410 U	--	3800 U
Fluoranthene	50000	µg/Kg	1800 J	490	220 J	22000	46 J	43 J	--	5900
Indeno(1,2,3-cd)pyrene	3200	µg/kg	290 J	53 J	45 J	1700 J	410 U	410 U	--	1100 J
Phenanthrene	50000	µg/kg	950 J	160 J	140 J	11000	46 J	410 U	--	6900
Pyrene	50000	µg/kg	860 J	180 J	120 J	8200 J	44 J	51 J	--	5800

SUMMARY OF VOC AND SVOC RESULTS FOR PRE-EXCAVATION SOIL SAMPLES (1)
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Sample Location:	*BH-5*	*BH-5*	*BH-10*	*BH-10*	*BH-10*	*BH-15*	*BH-15*	*BH-17*
		Sample Depth [ft. BGS]:	*[0-2]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[0-2]*	*[2-4]*	*[2-4]*
		Sample Date:	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*
Parameters	*TAGM Std.* (2)	*Units*								
Volatiles										
Acetone	200	µg/kg	23 U	23 U	24 U	25 U	12 J	23 U	24 J	100 U
Tetrachloroethene	1400	µg/Kg	5.9 U	5.7 U	5.9 U	6.2 U	6.2 U	5.5 J	1.9 J	620
Semi-Volatiles										
Benzo(a)anthracene	224	µg/kg	**240 J**	93 J	**690 J**	**500**	180 J	**2100**	**660 J**	90 J
Benzo(a)pyrene	61	µg/Kg	**260 J**	**95 J**	**580 J**	**430**	**150 J**	**1800**	**550 J**	**120 J**
Benzo(b)fluoranthene	1100	µg/kg	1500 U	100 J	490 J	330 J	140 J	**1500**	500 J	180 J
Benzo(k)fluoranthene	1100	µg/kg	310 J	67 J	510 J	320 J	100 J	**1400**	340 J	140 J
Chrysene	400	µg/Kg	290 J	120 J	**690 J**	**490**	180 J	**2100**	**670 J**	210 J
Dibenz(a,h)anthracene	14	µg/kg	1500 U	370 U	**150 J**	**78 J**	410 U	**390 J**	**110 J**	340 U
Fluoranthene	50000	µg/Kg	540 J	220 J	1400	990	370 J	5600	1300	580
Indeno(1,2,3-cd)pyrene	3200	µg/kg	170 J	62 J	340 J	220 J	94 J	1000	330 J	35 J
Phenanthrene	50000	µg/kg	250 J	100 J	1300	770	360 J	5900	1200	490
Pyrene	50000	µg/kg	470 J	160 J	1300	780	350 J	5100	1300	230 J

SUMMARY OF VOC AND SVOC RESULTS FOR PRE-EXCAVATION SOIL SAMPLES [1]
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Sample Location:	*BH-17*	*BH-17*	*BH-18B*	*BH-20*	*BH-20*	*BH-20*	*BH-3*	*BH-3*
		Sample Depth [ft. BGS]:	*[4-6]*	*[6-8]*	*[4-6]*	*[0-2]*	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*
		Sample Date:	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/06/03	05/06/03
Parameters	*TAGM Std.* [2]	*Units*								
Volatiles										
Acetone	200	μg/kg	21 U	24 U	25 U	24 U	14 J	26	26 U	23 U
Tetrachloroethene	1400	μg/Kg	65	100	160	3.2 J	12	3.3 J	16	10
Semi-Volatiles										
Benzo(a)anthracene	224	μg/kg	110 J	71 J	220 J	160 J	**660 J**	140 J	**270 J**	**4800**
Benzo(a)pyrene	61	μg/Kg	**100 J**	**62 J**	**240 J**	**130 J**	**520 J**	**110 J**	**260 J**	**4100 J**
Benzo(b)fluoranthene	1100	μg/kg	130 J	58 J	270 J	110 J	400 J	830 U	280 J	**3400 J**
Benzo(k)fluoranthene	1100	μg/kg	77 J	390 U	180 J	110 J	470 J	830 U	290 J	**4800**
Chrysene	400	μg/Kg	140 J	100 J	310 J	160 J	**620 J**	150 J	320 J	**4600**
Dibenz(a,h)anthracene	14	μg/kg	350 U	390 U	**40 J**	**29 J**	2100 U	830 U	**33 J**	**460 J**
Fluoranthene	50000	μg/Kg	260 J	150 J	760	320 J	1400 J	290 J	700	13000
Indeno(1,2,3-cd)pyrene	3200	μg/kg	28 J	390 U	84 J	83 J	350 J	830 U	87 J	1100 J
Phenanthrene	50000	μg/kg	180 J	95 J	500	290 J	1200 J	160 J	270 J	5400
Pyrene	50000	μg/kg	130 J	100 J	450	310 J	1100 J	230 J	570	7700

SUMMARY OF VOC AND SVOC RESULTS FOR PRE-EXCAVATION SOIL SAMPLES [(1)]
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Sample Location:	*BH-3*	*BH-3*	*BH-4*	*BH-4*	*BH-6*	*BH-6*	*BH-8*	*BH-8*
		Sample Depth [ft. BGS]:	*[4-6]*	*[8-9]*	*[0-2]*	*[2-4]*	*[0-2]*	*[2-4]*	*[0-2]*	*[2-4]*
		Sample Date:	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*
Parameters	*TAGM Std.* [(2)]	*Units*								
Volatiles										
Acetone	200	µg/kg	23 U	23 U	22 U	23 U	23 U	24 U	21 U	22 U
Tetrachloroethene	1400	µg/Kg	17	36	22	12	8.3	20	2.5 J	22
Semi-Volatiles										
Benzo(a)anthracene	224	µg/kg	**23000**	**1500 J**	170 J	160 J	160 J	130 J	85 J	**3200 J**
Benzo(a)pyrene	61	µg/Kg	**19000**	**1300 J**	**170 J**	**130 J**	**160 J**	**92 J**	**74 J**	**3200 J**
Benzo(b)fluoranthene	1100	µg/kg	**17000**	1100 J	190 J	120 J	140 J	62 J	69 J	**2700 J**
Benzo(k)fluoranthene	1100	µg/kg	**19000**	**1500 J**	190 J	140 J	170 J	82 J	75 J	**2900 J**
Chrysene	400	µg/Kg	**22000**	**1400 J**	210 J	150 J	210 J	120 J	110 J	**4000 J**
Dibenz(a,h)anthracene	14	µg/kg	**2000 J**	2300 U	360 U	390 U	380 U	400 U	350 U	**480 J**
Fluoranthene	50000	µg/Kg	**73000**	3900	450	360 J	450	270 J	190 J	7900
Indeno(1,2,3-cd)pyrene	3200	µg/kg	**5200 J**	400 J	61 J	36 J	77 J	34 J	27 J	1300 J
Phenanthrene	50000	µg/kg	**56000**	1700 J	170 J	210 J	200 J	260 J	120 J	3700 J
Pyrene	50000	µg/kg	**57000**	3200	360	230 J	280 J	180 J	140 J	4500 J

SUMMARY OF VOC AND SVOC RESULTS FOR PRE-EXCAVATION SOIL SAMPLES (1)
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Sample Location:	*BH-8*	*BH-11*	*BH-14*	*BH-14*	*BH-14*	*BH-16*	*BH-16*	*BH-16*
		Sample Depth [ft. BGS]:	*[4-6]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*	*[10-11]*	*[2-4]*
		Sample Date:	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*
Parameters	*TAGM Std.* (2)	*Units*								
Volatiles										
Acetone	200	µg/kg	22 U	24 U	22 U	7.8 J	20 J	21 U	21 U	21 U
Tetrachloroethene	1400	µg/Kg	18	8.2	41	50	5.1 J	6.6	28	22
Semi-Volatiles										
Benzo(a)anthracene	224	µg/kg	**2300**	140 J	**1300**	**1000 J**	**330 J**	**770**	**270 J**	**330 J**
Benzo(a)pyrene	61	µg/Kg	**2000**	**150 J**	**1200**	**910 J**	**380 J**	**860**	**280 J**	**390**
Benzo(b)fluoranthene	1100	µg/kg	**1800 J**	120 J	990 J	820 J	350 J	900	310 J	470
Benzo(k)fluoranthene	1100	µg/kg	**2300**	160 J	**1200**	1000 J	430 J	1100	360	440
Chrysene	400	µg/Kg	**2400**	170 J	**1600**	**1100 J**	370 J	**1000**	390	**490**
Dibenz(a,h)anthracene	14	µg/kg	**240 J**	400 U	**190 J**	1400 U	1700 U	**110 J**	**42 J**	**60 J**
Fluoranthene	50000	µg/Kg	6700	340 J	3200	2800	740 J	2400	760	1000
Indeno(1,2,3-cd)pyrene	3200	µg/kg	550 J	61 J	470 J	260 J	1700 U	320 J	120 J	170 J
Phenanthrene	50000	µg/kg	3900	140 J	1800	1600	320 J	1100	310 J	370
Pyrene	50000	µg/kg	3800	210 J	2200	1700	600 J	1500	540	640

SUMMARY OF VOC AND SVOC RESULTS FOR PRE-EXCAVATION SOIL SAMPLES (1)
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

Parameters	*TAGM Std.* (2)	*Units*								
		Sample Location:	*BH-16*	*BH-16*	*BH-16*	*BH-16*	*BH-7*	*BH-7*	*BH-7*	*BH-7*
		Sample Depth [ft. BGS]:	*[4-6]*	*[6-8]*	*[6-8]*	*[8-10]*	*[2-4]*	*[4-6]*	*[5-7]*	*[5-7]*
		Sample Date:	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/07/03*
Volatiles										
Acetone	200	µg/kg	22 U	22 U	24 U	21 U	23 U	22 U	23 J	25
Tetrachloroethene	1400	µg/Kg	18	11	6.1	11	20	16	4.3 J	1.7 J
Semi-Volatiles										
Benzo(a)anthracene	224	µg/kg	180 J	150 J	190 J	**330 J**	**1900 J**	**790 J**	**680 J**	**2600 J**
Benzo(a)pyrene	61	µg/Kg	**200 J**	**160 J**	**180 J**	**370**	**1800 J**	**760 J**	**640 J**	**2500 J**
Benzo(b)fluoranthene	1100	µg/kg	200 J	160 J	180 J	440	**1700 J**	7400 U	530 J	**2500 J**
Benzo(k)fluoranthene	1100	µg/kg	240 J	170 J	200 J	450	**1500 J**	7400 U	710 J	**2600 J**
Chrysene	400	µg/Kg	250 J	190 J	230 J	**490**	**1800 J**	**890 J**	**670 J**	**2500 J**
Dibenz(a,h)anthracene	14	µg/kg	**30 J**	**24 J**	**28 J**	**48 J**	7500 U	7400 U	1600 U	**220 J**
Fluoranthene	50000	µg/Kg	550	400	580	1000	4100 J	2000 J	1700 J	6000 J
Indeno(1,2,3-cd)pyrene	3200	µg/kg	88 J	68 J	75 J	170 J	600 J	7400 U	180 J	600 J
Phenanthrene	50000	µg/kg	250 J	200 J	350 J	370	2800 J	1200 J	1200 J	4900 J
Pyrene	50000	µg/kg	360 J	270 J	390	690	2900 J	1300 J	1200 J	3600 J

SUMMARY OF VOC AND SVOC RESULTS FOR PRE-EXCAVATION SOIL SAMPLES [1]
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Sample Location:	*BH-9*	*BH-12*	*BH-12*	*BH-13*	*BH-13*	*BH-13*
		Sample Depth [ft. BGS]:	*[4-6]*	*[0-2]*	*[2-4]*	*[0-2]*	*[2-4]*	*[4-6]*
		Sample Date:	*05/07/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/07/03*
Parameters	*TAGM Std.* [2]	*Units*						
Volatiles								
Acetone	200	µg/kg	24 U	53 U	9.6 J	22 U	22 U	21 U
Tetrachloroethene	1400	µg/Kg	18	330	19	18	58	81
Semi-Volatiles								
Benzo(a)anthracene	224	µg/kg	**290 J**	**1700 J**	120 J	**250 J**	**1200 J**	**700 J**
Benzo(a)pyrene	61	µg/Kg	**210 J**	**1800 J**	**120 J**	**230 J**	**1200 J**	**700 J**
Benzo(b)fluoranthene	1100	µg/kg	200 J	**2300 J**	100 J	260 J	**1300 J**	7000 U
Benzo(k)fluoranthene	1100	µg/kg	180 J	**1300 J**	100 J	1400 U	7100 U	7000 U
Chrysene	400	µg/Kg	310 J	**1800 J**	120 J	290 J	**1200 J**	**750 J**
Dibenz(a,h)anthracene	14	µg/kg	790 U	3500 U	380 U	1400 U	7100 U	7000 U
Fluoranthene	50000	µg/Kg	1100	3400 J	240 J	490 J	2100 J	1500 J
Indeno(1,2,3-cd)pyrene	3200	µg/kg	110 J	460 J	83 J	110 J	600 J	7000 U
Phenanthrene	50000	µg/kg	480 J	1400 J	120 J	180 J	920 J	950 J
Pyrene	50000	µg/kg	830	2000 J	200 J	370 J	1600 J	1100 J

Notes:

[1]	Complete analytical results presented in Appendix A.
[2]	New York State Recommended Soil Cleanup Objectives, Technical and Administrative Guidance Memorandum (TAGM) #4046, January 24, 1994.
ft. BGS	Feet Below Ground Surface.
J	Estimated.
U	Non-detect at associated value.
UJ	The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.
▭	Concentration exceeds standard.

TABLE 2.5

SUMMARY OF VOC AND SVOC RESULTS FOR POST-EXCAVATION SOIL SAMPLES [1]
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Area:	B	B/B2	B/B2	B/B2	B/B2	C	C	C	C	D
		Location:	*E. Sidewall*	*S. Sidewall W.*	*S. Sidewall E.*	*S. Sidewall E.*	*S. Sidewall W.*	*N. Sidewall*	*W. Sidewall N.*	*W. Sidewall S.*	*N. Sidewall E.*	*Bottom*
		Sample Number:	*1*	*18*	*19*	*30*	*31*	*14*	*15*	*16*	*32*	*25*
		Matrix:	*Native Clay*	*Native Clay*	*Native Clay*	*Fill*	*Fill*	*Native Clay*	*Native Clay*	*Native Clay*	*Fill*	*Native Clay*
		Sample Date:	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/22/2003*
Parameters	*TAGM Std.* [2]	*Units*										
Volatiles												
Acetone	200	µg/Kg	29 U	30 U	29 U	--	--	30 U	30 U	29 U	28 U	29 U
cis-1,2-Dichloroethene	NS	µg/Kg	6 U	18	6 U	--	--	6 U	6 U	6 U	6 U	18
Methylene chloride	100	µg/Kg	9	9 U	7 U	--	--	7	6	6	7	17
Tetrachloroethene	1400	µg/Kg	16	500	6 U	--	--	23	73	210	7	**3700**
Trichloroethene	700	µg/Kg	6 U	32	6 U	--	--	6 U	5 J	6 U	6 U	65
Vinyl chloride	200	µg/Kg	11 U	12 U	12 U	--	--	12 U	12 U	12 U	11 U	11 U
Semi-Volatiles												
Acenaphthene	50000	µg/Kg	400 U	400 U	410 U	2000 U	3800 U	390 U	450 U	400 U	370 U	380 U
Anthracene	50000	µg/Kg	400 U	400 U	410 U	1000 J	3800 U	390 U	450 U	400 U	370 U	380 U
Benzo(a)anthracene	224	µg/Kg	400 U	400 U	410 U	**2200**	3800 U	390 U	450 U	400 U	**310 J**	380 U
Benzo(a)pyrene	61	µg/Kg	400 U	400 U	410 U	**1800 J**	3800 U	390 U	450 U	400 U	**270 J**	380 U
Benzo(b)fluoranthene	1100	µg/Kg	400 U	400 U	410 U	**1400 J**	3800 U	390 U	450 U	400 U	290 J	380 U
Benzo(g,h,i)perylene	50000	µg/Kg	400 U	400 U	410 U	2000 U	3800 U	390 U	450 U	400 U	370 U	380 U
Benzo(k)fluoranthene	1100	µg/Kg	400 U	400 U	410 U	**1300 J**	3800 U	390 U	450 U	400 U	240 J	380 U
bis(2-Ethylhexyl)phthalate	50000	µg/Kg	400 U	400 U	410 U	2000 U	3800 U	390 U	450 U	400 U	240 J	380 U
Butyl benzylphthalate	50000	µg/Kg	400 U	400 U	410 U	2000 U	3800 U	390 U	450 U	400 U	370 U	380 U
Carbazole	NS	µg/Kg	400 U	400 U	410 U	2000 U	3800 U	390 U	450 U	400 U	370 U	380 U
Chrysene	400	µg/Kg	400 U	400 U	410 U	**1900 J**	3800 U	390 U	450 U	400 U	340 J	380 U
Di-n-butylphthalate	8100	µg/Kg	400 U	400 U	410 U	2000 U	3800 U	390 U	450 U	400 U	370 U	380 U
Di-n-octyl phthalate	50000	µg/Kg	550 U	540 U	560 U	2700 U	5200 U	520 U	610 U	540 U	500 U	510 U
Fluoranthene	50000	µg/Kg	400 U	400 U	410 U	3600	3800 U	390 U	450 U	400 U	560	380 U
Indeno(1,2,3-cd)pyrene	3200	µg/Kg	400 U	400 U	410 U	2000 U	3800 U	390 U	450 U	400 U	370 U	380 U
Phenanthrene	50000	µg/Kg	400 U	400 U	410 U	4000	3800 U	390 U	450 U	400 U	320 J	380 U
Pyrene	50000	µg/Kg	400 U	400 U	410 U	4600	3800 U	390 U	450 U	400 U	530	380 U

TABLE 2.5

SUMMARY OF VOC AND SVOC RESULTS FOR POST-EXCAVATION SOIL SAMPLES [1]
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Area:	E	E	E	F	F	F	G	G	G	H1	H2	H1
		Location:	*N. Sidewall*	*W. Sidewall*	*Bottom*	*N. Sidewall*	*E. Sidewall*	*Bottom*	*W. Sidewall*	*E. Sidewall*	*Bottom*	*E. Sidewall*	*N. Sidewall*	*Bottom*
		Sample Number:	7	8	36	23	24	29	20	21	28	33	34	35
		Matrix:	*Native Clay*	*Native Clay*	*Native Clay*	*Native Clay*	*Native Clay*	*Native Clay*	*Native Clay*	*Native Clay*	*Fill*	*Native Clay*	*Native Clay*	*Native Clay*
		Sample Date:	10/22/2003	10/22/2003	10/28/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/28/2003	10/28/2003	10/28/2003
Parameters	*TAGM Std.* [2]	*Units*												
Volatiles														
Acetone	200	µg/Kg	28 U	29 U	31 U	30 U	30 U	42	30 U	46	30	30 U	30 U	29 U
cis-1,2-Dichloroethene	NS	µg/Kg	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	3 J	4 J
Methylene chloride	100	µg/Kg	9	10	7	7	7	8	6	6	6	7	7	7
Tetrachloroethene	1400	µg/Kg	2 J	12	17	2 J	6	3 J	4 J	2 J	52	16	51	**4200**
Trichloroethene	700	µg/Kg	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	1 J	24
Vinyl chloride	200	µg/Kg	11 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
Semi-Volatiles														
Acenaphthene	50000	µg/Kg	390 U	8100 U	410 U	390 U	390 U	390 U	390 U	3800 U	2000 U	400 U	390 U	400 U
Anthracene	50000	µg/Kg	390 U	8100 U	410 U	390 U	390 U	390 U	390 U	3800 U	2000 U	400 U	390 U	400 U
Benzo(a)anthracene	224	µg/Kg	390 U	8100 U	410 U	390 U	390 U	390 U	390 U	3800 U	2000 U	400 U	390 U	400 U
Benzo(a)pyrene	61	µg/Kg	390 U	8100 U	410 U	390 U	390 U	390 U	390 U	3800 U	2000 U	400 U	390 U	400 U
Benzo(b)fluoranthene	1100	µg/Kg	390 U	8100 U	410 U	390 U	390 U	390 U	390 U	3800 U	2000 U	400 U	390 U	400 U
Benzo(g,h,i)perylene	50000	µg/Kg	390 U	8100 U	410 U	390 U	390 U	390 U	390 U	3800 U	2000 U	400 U	390 U	400 U
Benzo(k)fluoranthene	1100	µg/Kg	390 U	8100 U	410 U	390 U	390 U	390 U	390 U	3800 U	2000 U	400 U	390 U	400 U
bis(2-Ethylhexyl)phthalate	50000	µg/Kg	390 U	8100 U	410 U	390 U	390 U	390 U	390 U	3800 U	2000 U	400 U	390 U	400 U
Butyl benzylphthalate	50000	µg/Kg	390 U	8100 U	410 U	390 U	390 U	390 U	390 U	3800 U	3800	400 U	390 U	400 U
Carbazole	NS	µg/Kg	390 U	8100 U	410 U	390 U	390 U	390 U	390 U	3800 U	2000 U	400 U	390 U	400 U
Chrysene	400	µg/Kg	390 U	8100 U	410 U	390 U	390 U	390 U	390 U	3800 U	2000 U	400 U	390 U	400 U
Di-n-butylphthalate	8100	µg/Kg	390 U	8100 U	410 U	390 U	390 U	390 U	390 U	3800 U	2000 U	400 U	390 U	400 U
Di-n-octyl phthalate	50000	µg/Kg	520 U	11000 U	550 U	530 U	530 U	530 U	530 U	5100 U	2600 U	540 U	520 U	540 U
Fluoranthene	50000	µg/Kg	390 U	5000 J	410 U	390 U	390 U	390 U	160 J	1800 J	2000 U	400 U	390 U	400 U
Indeno(1,2,3-cd)pyrene	3200	µg/Kg	390 U	8100 U	410 U	390 U	390 U	390 U	390 U	3800 U	2000 U	400 U	390 U	400 U
Phenanthrene	50000	µg/Kg	390 U	3600 J	410 U	390 U	390 U	390 U	390 U	3800 U	2000 U	400 U	390 U	400 U
Pyrene	50000	µg/Kg	390 U	4400 J	410 U	390 U	390 U	390 U	160 J	1800 J	2000 U	400 U	390 U	400 U

TABLE 2.5

SUMMARY OF VOC AND SVOC RESULTS FOR POST-EXCAVATION SOIL SAMPLES (1)
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Area:	*H1*	*H2*	*I*	*J*	*J*	*K2*	*K2*	*K1*	*K1*
		Location:	*E. Sidewall*	*N.E. Sidewall*	*Bottom*	*N.W. Sidewall*	*N.W. Sidewall*	*W. Sidewall*	*W. Sidewall*	*W. Sidewall*	*W. Sidewall*
		Sample Number:	*47*	*48*	*37*	*44*	*45*	*40*	*41*	*42*	*43*
		Matrix:	*Fill*	*Fill*	*Native Clay*	*Native Clay*	*Fill*	*Native Clay*	*Fill*	*Native Clay*	*Fill*
		Sample Date:	*11/03/2003*	*11/03/2003*	*10/28/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*
Parameters	*TAGM Std.* (2)	*Units*									
Volatiles											
Acetone	200	µg/Kg	28 U	28 U	30 U	30 U	27 U	30 U	30 U	32 U	29 U
cis-1,2-Dichloroethene	NS	µg/Kg	6 U	6 U	50 J	6 U	5 U	6 U	6 U	9	6 U
Methylene chloride	100	µg/Kg	7	5 J	6 J	7	6	6	7	7	8
Tetrachloroethene	1400	µg/Kg	1 J	4 J	72000	5 J	2 J	180	90	47	110
Trichloroethene	700	µg/Kg	6 U	6 U	180 J	6 U	5 U	1 J	6 U	11	6 U
Vinyl chloride	200	µg/Kg	11 U	11 U	2 J	12 U	11 U	12 U	12 U	2 J	12 U
Semi-Volatiles											
Acenaphthene	50000	µg/Kg	4200 J	2000 U	390 U	400 U	3800 U	390 U	400 U	410 U	380 U
Anthracene	50000	µg/Kg	9300	2000 U	390 U	400 U	3800 U	390 U	400 U	410 U	380 U
Benzo(a)anthracene	224	µg/Kg	27000	1200 J	390 U	400 U	3800 U	390 U	400 U	410 U	380 U
Benzo(a)pyrene	61	µg/Kg	23000	1100 J	390 U	400 U	3800 U	390 U	400 U	410 U	380 U
Benzo(b)fluoranthene	1100	µg/Kg	18000	1000 J	390 U	400 U	3800 U	390 U	400 U	410 U	380 U
Benzo(g,h,i)perylene	50000	µg/Kg	12000	2000 U	390 U	400 U	3800 U	390 U	400 U	410 U	380 U
Benzo(k)fluoranthene	1100	µg/Kg	21000	2000 U	390 U	400 U	3800 U	390 U	400 U	410 U	380 U
bis(2-Ethylhexyl)phthalate	50000	µg/Kg	7500 U	2000 U	390 U	400 U	3800 U	390 U	400 U	410 U	630
Butyl benzylphthalate	50000	µg/Kg	7500 U	2000 U	390 U	400 U	3800 U	390 U	400 U	410 U	380 U
Carbazole	NS	µg/Kg	3400 J	2000 U	390 U	400 U	3800 U	390 U	400 U	410 U	380 U
Chrysene	400	µg/Kg	22000	1100 J	390 U	400 U	3800 U	390 U	400 U	410 U	380 U
Di-n-butylphthalate	8100	µg/Kg	7500 U	2000 U	390 U	400 U	3800 U	390 U	400 U	410 U	820
Di-n-octyl phthalate	50000	µg/Kg	10000 U	2700 U	520 U	540 U	5200 U	520 U	540 U	550 U	940
Fluoranthene	50000	µg/Kg	49000	2300	390 U	400 U	1900 J	390 U	400 U	410 U	380 U
Indeno(1,2,3-cd)pyrene	3200	µg/Kg	12000	2000 U	390 U	400 U	3800 U	390 U	400 U	410 U	380 U
Phenanthrene	50000	µg/Kg	33000	1700 J	390 U	400 U	1100 J	390 U	400 U	410 U	380 U
Pyrene	50000	µg/Kg	53000	2500	390 U	400 U	1700 J	390 U	400 U	410 U	380 U

Notes:

(1) Complete analytical results presented in Appendix C.

(2) New York State Recommended Soil Cleanup Objectives, Technical and Administrative Guidance Memorandum (TAGM) #4046, January 24, 1994.

NS	No standard.
--	Not analyzed.
J	Estimated.
U	Non-detect at associated value.
☐	Exceeds standard.

TABLE 2.6

GROUNDWATER MONITORING NETWORK
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

Well No.	*VOCs*	*KMnO$_4$*	*Chloride*
MW-2	X	X	X
MW-4	X	X	X
MW-4A	X	X	X
MW-7	X		
MW-7A	X		
MW-9	X		X
MW-9A	X		X
MW-11	X	X	X
MW-11A	X	X	X
MW-12	X		
MW-12A	X		
MW-13	X		X
MW-13A	X		X
MW-14	X		
MW-14A	X		
MW-15	X		
MW-15A	X		

Notes:

KMnO$_4$	Potassium Permanganate.
VOCs	Volatile Organic Compounds.

TABLE 2.7

MONITORING WELL INSTALLATION DETAILS
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

Well No.	*Borehole Depth (Ft. BGS)*	*Ground Elevation (Ft. NGVD)*	*Top of Casing Elevation (Ft. NGVD)*	*Sandpack Interval*		*Screened Interval*	
				(Ft. BGS)	*(Ft. NGVD)*	*(Ft. BGS)*	*(Ft. NGVD)*
MW-1	21.0	592.6	592.24	13.5 to 21.0	579.1 to 571.6	16.0 to 21.0	576.6 to 571.6
MW-2	18.0	591.7	591.23	9.0 to 18.0	582.7 to 573.7	12.5 to 17.5	579.2 to 574.2
MW-3	18.0	591.0	590.33	9.0 to 18.0	582.0 to 573.0	12.5 to 17.5	578.5 to 573.5
MW-4	18.0	591.2	590.51	9.0 to 18.0	582.2 to 573.2	12.5 to 17.5	578.7 to 573.7
MW-4A	30.0	591.0	590.61	21.5 to 29.6	569.5 to 561.4	24.4 to 29.4	566.6 to 561.6
MW-5	21.0	591.4	590.76	9.5 to 21.0	581.9 to 570.4	12.5 to 17.5	578.9 to 573.9
MW-6	20.0	591.6	591.47	23.0 to 20.0	568.6 to 571.6	15.0 to 20.0	576.6 to 571.6
MW-7	18.4	590.9	590.41	11.4 to 18.4	579.5 to 572.5	13.4 to 18.4	577.5 to 572.5
MW-7A	30.0	590.9	590.42	23.0 to 30.0	567.9 to 560.9	25.0 to 30.0	565.9 to 560.9
MW-8	16.2	589.7	588.88	8.0 to 16.2	581.7 to 573.5	11.2 to 16.2	578.5 to 573.5
MW-8A	30.0	589.6	589.04	22.0 to 30.0	567.6 to 559.6	25.0 to 30.0	564.6 to 559.6
MW-9	17.9	590.3	589.71	11.0 to 17.9	579.3 to 572.4	12.9 to 17.9	577.4 to 572.4
MW-9A	31.5	590.3	589.55	24.5 to 31.5	565.8 to 558.8	26.5 to 31.5	563.8 to 558.8
MW-10	16.0	589.4	589.02	7.0 to 16.0	582.4 to 573.4	11.0 to 16.0	578.4 to 573.4
MW-10A	25.0	589.6	589.07	12.0 to 25.0	577.6 to 564.6	20.0 to 25.0	569.6 to 564.6
MW-11	18.0	590.8	590.40	11.0 to 18.0	579.8 to 572.8	13.0 to 18.0	577.8 to 572.8
MW-11A	27.5	590.7	590.20	20.5 to 27.5	570.2 to 563.2	22.5 to 27.5	568.2 to 563.2
MW-12	18.0	590.6	590.68	11.0 to 18.0	579.6 to 572.6	13.0 to 18.0	577.6 to 572.6
MW-12A	30.0	590.6	590.55	23.0 to 30.0	567.6 to 560.6	25.0 to 30.0	565.6 to 560.6
MW-13	18.0	591.0	590.40	11.0 to 18.0	580.0 to 573.0	13.0 to 18.0	578.0 to 573.0
MW-13A	28.0	591.0	590.33	21.0 to 23.3	570.0 to 567.7	23.3 to 28.3	567.7 to 562.7
MW-14	16.0	589.8	589.28	9.0 to 16.0	580.8 to 573.8	11.0 to 16.0	578.8 to 573.8
MW-14A	30.0	589.8	589.08	23.0 to 30.0	566.8 to 559.8	25.0 to 30.0	564.8 to 559.8
MW-15	16.0	590.3	589.81	8.5 to 16.0	581.8 to 574.3	10.5 to 15.5	579.8 to 574.8
MW-15A	30.0	590.2	589.89	25.0 to 32.0	565.2 to 558.2	27.0 to 32.0	563.2 to 558.2
PZ-1	18.0	589.6	589.36	11.0 to 18.0	578.6 to 571.6	13.0 to 18.0	576.6 to 571.6
PZ-2	18.0	590.2	590.04	11.0 to 18.0	579.2 to 572.2	13.0 to 18.0	577.2 to 572.2
PZ-3	12.0	589.4	589.15	4.0 to 12.0	585.4 to 577.4	7.0 to 12.0	582.4 to 577.4

Notes:

Ft. BGS	Feet Below Ground Surface.
NGVD	National Geodetic Vertical Datum

APPENDIX A

PRE-EXCAVATION ANALYTICAL DATA AND SOIL BORING LOGS

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*SB-14*	*SB-15*	*MW-1*	*MW-3*	*MW-3*	*MW-5*	*MW-2*	*MW-2*
		Sample Depth [ft. BGS]:	*[5-7]*	*[5-7]*	*[3-5]*	*[0-2]*	*[4-6]*	*[1-3]*	*[3-5]*	*[7-9]*
		Sample Identification:	*S-091300-KL-003*	*S-091300-KL-004*	*S-091400-KL-007*	*S-091400-KL-009*	*S-091400-KL-010*	*S-091400-KL-008*	*S-091500-KL-012*	*S-091500-KL-013*
		Sample Date:	*09/13/00*	*09/13/00*	*09/14/00*	*09/14/00*	*09/14/00*	*09/14/00*	*09/15/00*	*09/15/00*
Parameters	*TAGM Std.* [1]	*Units*								
Volatiles										
1,1,1-Trichloroethane	800	µg/Kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
1,1,2,2-Tetrachloroethane	600	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
1,1,2-Trichloroethane	NS	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
1,1-Dichloroethane	200	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
1,1-Dichloroethene	400	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
1,2,4-Trichlorobenzene	3400	µg/kg	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	--	--	--	--	--	--	--	--
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/kg	--	--	--	--	--	--	--	--
1,2-Dichlorobenzene	7900	µg/kg	--	--	--	--	--	--	--	--
1,2-Dichloroethane	100	µg/Kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
1,2-Dichloropropane	NS	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
1,3-Dichlorobenzene	1600	µg/kg	--	--	--	--	--	--	--	--
1,4-Dichlorobenzene	8500	µg/kg	--	--	--	--	--	--	--	--
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	24 UJ	21 UJ	24 UJ	25 UJ	25 UJ	27 UJ	24 UJ	24 UJ
2-Hexanone	NS	µg/kg	24 U	21 U	24 UJ	25 UJ	25 UJ	27 UJ	24 UJ	24 UJ
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	24 UJ	21 UJ	24 U	25 U	25 U	27 U	24 U	24 U
Acetone	200	µg/kg	24 U	21 U	27 J	25 UJ	28 J	27 U	29 J	24 U
Benzene	60	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
Bromodichloromethane	NS	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
Bromoform	NS	µg/Kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
Bromomethane (Methyl Bromide)	NS	µg/kg	12 U	11 U	12 R	12 R	13 R	13 R	12 R	12 R
Carbon disulfide	2700	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
Carbon tetrachloride	600	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
Chlorobenzene	1700	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
Chloroethane	1900	µg/kg	12 UJ	11 UJ	12 U	12 U	13 U	13 U	12 U	12 U
Chloroform (Trichloromethane)	300	µg/Kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
Chloromethane (Methyl Chloride)	NS	µg/kg	12 U	11 U	12 U	12 U	13 U	13 U	12 U	12 U
cis-1,2-Dichloroethene	NS	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
cis-1,3-Dichloropropene	NS	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
Cyclohexane	NS	µg/Kg	--	--	--	--	--	--	--	--
Dibromochloromethane	NS	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	--	--	--	--	--	--	--	--
Ethylbenzene	5500	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
Isopropylbenzene	NS	µg/kg	--	--	--	--	--	--	--	--
Methyl acetate	NS	µg/kg	--	--	--	--	--	--	--	--
Methyl cyclohexane	NS	µg/kg	--	--	--	--	--	--	--	--
Methyl Tert Butyl Ether	NS	µg/Kg	--	--	--	--	--	--	--	--
Methylene chloride	100	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*SB-14*	*SB-15*	*MW-1*	*MW-3*	*MW-3*	*MW-5*	*MW-2*	*MW-2*
		Sample Depth [ft. BGS]:	*[5-7]*	*[5-7]*	*[3-5]*	*[0-2]*	*[4-6]*	*[1-3]*	*[3-5]*	*[7-9]*
		Sample Identification:	*S-091300-KL-003*	*S-091300-KL-004*	*S-091400-KL-007*	*S-091400-KL-009*	*S-091400-KL-010*	*S-091400-KL-008*	*S-091500-KL-012*	*S-091500-KL-013*
		Sample Date:	*09/13/00*	*09/13/00*	*09/14/00*	*09/14/00*	*09/14/00*	*09/14/00*	*09/15/00*	*09/15/00*
Parameters	*TAGM Std.* (1)	*Units*								
Volatiles										
Styrene	NS	µg/Kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
Tetrachloroethene	1400	µg/Kg	8.3	28	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
Toluene	1500	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
trans-1,2-Dichloroethene	300	µg/kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
trans-1,3-Dichloropropene	NS	µg/Kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
Trichloroethene	700	µg/Kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U
Trichlorofluoromethane (CFC-11)	NS	µg/kg	--	--	--	--	--	--	--	--
Trifluorotrichloroethane (Freon 113)	6000	µg/Kg	--	--	--	--	--	--	--	--
Vinyl chloride	200	µg/Kg	12 U	11 U	12 U	12 U	13 U	13 U	12 U	12 U
Xylene (total)	1200	µg/Kg	6.0 U	5.3 U	6.0 U	6.2 U	6.3 U	6.7 U	6.0 U	6.1 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*MW-2*	*MW-4*	*SB-16A*	*SB-17*	*SB-17*	*SB-19*	*SB-21*	*SB-24*
		Sample Depth [ft. BGS]:	*[7-9]*	*[3-5]*	*[7-9]*	*[2-4]*	*[6-8]*	*[6-8]*	*[6-8]*	*[8-10]*
		Sample Identification:	*S-091500-KL-014*	*S-091500-KL-015*	*S-091800-KL-016*	*082001-SB17-2-4*	*082001-SB17-6-8*	*082001-SB19-6-8*	*082001-SB21-6-8*	*082001-SB24-8-10*
		Sample Date:	*09/15/00*	*09/15/00*	*09/18/00*	*08/20/01*	*08/20/01*	*08/20/01*	*08/20/01*	*08/20/01*
Parameters	*TAGM Std.* [1]	*Units*								
Volatiles										
1,1,1-Trichloroethane	800	µg/Kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
1,1,2,2-Tetrachloroethane	600	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
1,1,2-Trichloroethane	NS	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
1,1-Dichloroethane	200	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
1,1-Dichloroethene	400	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
1,2,4-Trichlorobenzene	3400	µg/kg	--	--	--	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	--	--	--	10 U	12 U	13 U	12 U	12 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/kg	--	--	--	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
1,2-Dichlorobenzene	7900	µg/kg	--	--	--	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
1,2-Dichloroethane	100	µg/Kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
1,2-Dichloropropane	NS	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
1,3-Dichlorobenzene	1600	µg/kg	--	--	--	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
1,4-Dichlorobenzene	8500	µg/kg	--	--	--	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	25 UJ	21 UJ	1300 U	21 U	25 U	25 U	24 U	24 U
2-Hexanone	NS	µg/kg	25 UJ	21 UJ	1300 U	21 U	25 U	25 U	24 U	24 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	25 U	21 U	1300 U	21 U	25 U	25 U	24 U	24 U
Acetone	200	µg/kg	25 U	21 U	420 J	21 U	25 U	25 U	24	24
Benzene	60	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Bromodichloromethane	NS	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Bromoform	NS	µg/Kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Bromomethane (Methyl Bromide)	NS	µg/kg	12 R	11 R	630 U	10 U	12 U	13 U	12 U	12 U
Carbon disulfide	2700	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Carbon tetrachloride	600	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Chlorobenzene	1700	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Chloroethane	1900	µg/kg	12 U	11 U	630 U	10 U	12 U	13 U	12 U	12 U
Chloroform (Trichloromethane)	300	µg/Kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Chloromethane (Methyl Chloride)	NS	µg/kg	12 U	11 U	630 U	10 U	12 U	13 U	12 U	12 U
cis-1,2-Dichloroethene	NS	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	70	6.0 U	6.0 U
cis-1,3-Dichloropropene	NS	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Cyclohexane	NS	µg/Kg	--	--	--	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Dibromochloromethane	NS	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	--	--	--	10 U	12 U	13 U	12 U	12 U
Ethylbenzene	5500	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Isopropylbenzene	NS	µg/kg	--	--	--	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Methyl acetate	NS	µg/kg	--	--	--	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Methyl cyclohexane	NS	µg/kg	--	--	--	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Methyl Tert Butyl Ether	NS	µg/Kg	--	--	--	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Methylene chloride	100	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	MW-2	MW-4	SB-16A	SB-17	SB-17	SB-19	SB-21	SB-24
		Sample Depth [ft. BGS]:	[7-9]	[3-5]	[7-9]	[2-4]	[6-8]	[6-8]	[6-8]	[8-10]
		Sample Identification:	S-091500-KL-014	S-091500-KL-015	S-091800-KL-016	082001-SB17-2-4	082001-SB17-6-8	082001-SB19-6-8	082001-SB21-6-8	082001-SB24-8-10
		Sample Date:	09/15/00	09/15/00	09/18/00	08/20/01	08/20/01	08/20/01	08/20/01	08/20/01
Parameters	*TAGM Std.* (1)	*Units*								
Volatiles										
Styrene	NS	µg/Kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Tetrachloroethene	1400	µg/Kg	6.2 U	13	7200	33	140	29000	2.9 J	53 J
Toluene	1500	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
trans-1,2-Dichloroethene	300	µg/kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
trans-1,3-Dichloropropene	NS	µg/Kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Trichloroethene	700	µg/Kg	6.2 U	5.3 U	310 U	5.2 U	6.2 U	25	6.0 U	6.0 U
Trichlorofluoromethane (CFC-11)	NS	µg/kg	--	--	--	10 U	12 U	13 U	12 U	12 U
Trifluorotrichloroethane (Freon 113)	6000	µg/Kg	--	--	--	5.2 U	6.2 U	6.3 U	6.0 U	6.0 U
Vinyl chloride	200	µg/Kg	12 U	11 U	630 U	10 U	12 U	13 U	12 U	12 U
Xylene (total)	1200	µg/Kg	6.2 U	5.3 U	310 U	16 U	19 U	19 U	18 U	18 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*SB-25*	*SB-28*	*SB-29*	*SB-24*	*SB-17*	*SB-17*	*SB-17*	*SB-18*
		Sample Depth [ft. BGS]:	*[8-10]*	*[6-8]*	*[8-10]*	*[8-10]*	*[0-2]*	*[4-6]*	*[8-10]*	*[6-8]*
		Sample Identification:	*082001-SB25-8-10*	*082001-SB28-6-8*	*082001-SB29-8-10*	*082001-SB35-8-10*	*082201-SB17-0-2*	*082201-SB17-4-6*	*082201-SB17-8-10*	*082201-SB18-6-8*
		Sample Date:	*08/20/01*	*08/20/01*	*08/20/01*	*08/20/01*	*08/22/01*	*08/22/01*	*08/22/01*	*08/22/01*
Parameters	*TAGM Std.* (1)	*Units*								
Volatiles										
1,1,1-Trichloroethane	800	µg/Kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
1,1,2,2-Tetrachloroethane	600	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
1,1,2-Trichloroethane	NS	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
1,1-Dichloroethane	200	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
1,1-Dichloroethene	400	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
1,2,4-Trichlorobenzene	3400	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	12 U	12 U	12 U	12 U	10 U	12 U	12 U	11 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
1,2-Dichlorobenzene	7900	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
1,2-Dichloroethane	100	µg/Kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
1,2-Dichloropropane	NS	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
1,3-Dichlorobenzene	1600	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
1,4-Dichlorobenzene	8500	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	24 U	25 U	25 U	24 U	21 U	25 U	24 U	8.3 J
2-Hexanone	NS	µg/kg	24 U	25 U	25 U	24 U	21 U	25 U	24 U	23 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	24 U	25 U	25 U	24 U	21 U	25 U	24 U	23 U
Acetone	200	µg/kg	24 U	25 U	25 U	24 U	21 U	25 U	24	46
Benzene	60	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Bromodichloromethane	NS	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Bromoform	NS	µg/Kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Bromomethane (Methyl Bromide)	NS	µg/kg	12 U	12 U	12 U	12 U	10 U	12 U	12 U	11 U
Carbon disulfide	2700	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Carbon tetrachloride	600	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Chlorobenzene	1700	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Chloroethane	1900	µg/kg	12 U	12 U	12 U	12 U	10 U	12 U	12 U	11 U
Chloroform (Trichloromethane)	300	µg/Kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Chloromethane (Methyl Chloride)	NS	µg/kg	12 U	12 U	12 U	12 U	10 U	12 U	12 U	11 U
cis-1,2-Dichloroethene	NS	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	1.5 J	6.1
cis-1,3-Dichloropropene	NS	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Cyclohexane	NS	µg/Kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Dibromochloromethane	NS	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	12 U	12 U	12 U	12 U	10 U	12 U	12 U	11 U
Ethylbenzene	5500	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Isopropylbenzene	NS	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Methyl acetate	NS	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Methyl cyclohexane	NS	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Methyl Tert Butyl Ether	NS	µg/Kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Methylene chloride	100	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*SB-25*	*SB-28*	*SB-29*	*SB-24*	*SB-17*	*SB-17*	*SB-17*	*SB-18*
		Sample Depth [ft. BGS]:	*[8-10]*	*[6-8]*	*[8-10]*	*[8-10]*	*[0-2]*	*[4-6]*	*[8-10]*	*[6-8]*
		Sample Identification:	*082001-SB25-8-10*	*082001-SB28-6-8*	*082001-SB29-8-10*	*082001-SB35-8-10*	*082201-SB17-0-2*	*082201-SB17-4-6*	*082201-SB17-8-10*	*082201-SB18-6-8*
		Sample Date:	*08/20/01*	*08/20/01*	*08/20/01*	*08/20/01*	*08/22/01*	*08/22/01*	*08/22/01*	*08/22/01*
Parameters	*TAGM Std.* [1]	*Units*								
Volatiles										
Styrene	NS	µg/Kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Tetrachloroethene	1400	µg/Kg	1.5 J	6.2 U	6.2 U	9.8 J	13	16	9700	2.9 J
Toluene	1500	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
trans-1,2-Dichloroethene	300	µg/kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
trans-1,3-Dichloropropene	NS	µg/Kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Trichloroethene	700	µg/Kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	13	6.1
Trichlorofluoromethane (CFC-11)	NS	µg/kg	12 U	12 U	12 U	12 U	10 U	12 U	12 U	11 U
Trifluorotrichloroethane (Freon 113)	6000	µg/Kg	6.0 U	6.2 U	6.2 U	6.0 U	5.2 U	6.2 U	6.1 U	5.7 U
Vinyl chloride	200	µg/Kg	12 U	12 U	12 U	12 U	10 U	12 U	12 U	11 U
Xylene (total)	1200	µg/Kg	18 U	18 U	19 U	18 U	16 U	19 U	18 U	17 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*SB-22*	*SB-23*	*BH-3*	*BH-3*	*BH-3*	*BH-3*	*BH-3*	*BH-4*
		Sample Depth [ft. BGS]:	*[11-12]*	*[11-12]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[8-9]*	*[0-2]*
		Sample Identification:	*082201-SB22-11-12*	*082201-SB23-11-12*	*S-050603-JP-047*	*S-050603-JP-048*	*S-050603-JP-049*	*S-050603-JP-050*	*S-050603-JP-051*	*S-050603-JP-052*
		Sample Date:	*08/22/01*	*08/22/01*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*
Parameters	*TAGM Std.* [(1)]	*Units*								
Volatiles										
1,1,1-Trichloroethane	800	µg/Kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
1,1,2,2-Tetrachloroethane	600	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
1,1,2-Trichloroethane	NS	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
1,1-Dichloroethane	200	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
1,1-Dichloroethene	400	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
1,2,4-Trichlorobenzene	3400	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	12 U	12 U	13 U	12 U	11 U	12 U	12 U	11 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
1,2-Dichlorobenzene	7900	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
1,2-Dichloroethane	100	µg/Kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
1,2-Dichloropropane	NS	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
1,3-Dichlorobenzene	1600	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
1,4-Dichlorobenzene	8500	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	24 U	24 U	26 U	23 U	23 U	24 U	23 U	22 U
2-Hexanone	NS	µg/kg	24 U	24 U	26 U	23 U	23 U	24 U	23 U	22 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	24 U	24 U	26 U	23 U	23 U	24 U	23 U	22 U
Acetone	200	µg/kg	24 U	24	26 U	23 U	23 U	24 U	23 U	22 U
Benzene	60	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Bromodichloromethane	NS	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Bromoform	NS	µg/Kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Bromomethane (Methyl Bromide)	NS	µg/kg	12 U	12 U	13 U	12 U	11 U	12 U	12 U	11 U
Carbon disulfide	2700	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Carbon tetrachloride	600	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Chlorobenzene	1700	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Chloroethane	1900	µg/kg	12 U	12 U	13 U	12 U	11 U	12 U	12 U	11 U
Chloroform (Trichloromethane)	300	µg/Kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Chloromethane (Methyl Chloride)	NS	µg/kg	12 U	12 U	13 U	12 U	11 U	12 U	12 U	11 U
cis-1,2-Dichloroethene	NS	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
cis-1,3-Dichloropropene	NS	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Cyclohexane	NS	µg/Kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Dibromochloromethane	NS	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	12 U	12 U	13 U	12 U	11 U	12 U	12 U	11 U
Ethylbenzene	5500	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Isopropylbenzene	NS	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Methyl acetate	NS	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Methyl cyclohexane	NS	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Methyl Tert Butyl Ether	NS	µg/Kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Methylene chloride	100	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*SB-22*	*SB-23*	*BH-3*	*BH-3*	*BH-3*	*BH-3*	*BH-3*	*BH-4*
		Sample Depth [ft. BGS]:	*[11-12]*	*[11-12]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[8-9]*	*[0-2]*
		Sample Identification:	082201-SB22-11-12	082201-SB23-11-12	*S-050603-JP-047*	*S-050603-JP-048*	*S-050603-JP-049*	*S-050603-JP-050*	*S-050603-JP-051*	*S-050603-JP-052*
		Sample Date:	08/22/01	08/22/01	05/06/03	05/06/03	05/06/03	05/06/03	05/06/03	05/06/03
Parameters	*TAGM Std.* [1]	*Units*								
Volatiles										
Styrene	NS	µg/Kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Tetrachloroethene	1400	µg/Kg	19	1.6 J	16	10	17	23	36	22
Toluene	1500	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
trans-1,2-Dichloroethene	300	µg/kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
trans-1,3-Dichloropropene	NS	µg/Kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Trichloroethene	700	µg/Kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	1.3 J
Trichlorofluoromethane (CFC-11)	NS	µg/kg	12 U	12 U	13 U	12 U	11 U	12 U	12 U	11 U
Trifluorotrichloroethane (Freon 113)	6000	µg/Kg	5.9 U	5.9 U	6.5 U	5.8 U	5.6 U	6.1 U	5.8 U	5.5 U
Vinyl chloride	200	µg/Kg	12 U	12 U	13 U	12 U	11 U	12 U	12 U	11 U
Xylene (total)	1200	µg/Kg	18 U	18 U	19 U	18 U	17 U	18 U	18 U	16 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	**BH-4**	**BH-4**	**BH-4**	**BH-5**	**BH-5**	**BH-5**	**BH-5**	**BH-5**	**BH-6**
		Sample Depth [ft. BGS]:	*[2-4]*	*[6-8]*	*[8-9]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[8-10]*	*[0-2]*
		Sample Identification:	*S-050603-JP-053*	*S-050603-JP-054*	*S-050603-JP-055*	*S-050503-JP-001*	*S-050503-JP-002*	*S-050503-JP-003*	*S-050503-JP-004*	*S-050503-JP-005*	*S-050603-JP-056*
		Sample Date:	*05/06/03*	*05/06/03*	*05/06/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/06/03*
Parameters	*TAGM Std.* [(1)]	*Units*									
Volatiles											
1,1,1-Trichloroethane	800	µg/Kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
1,1,2,2-Tetrachloroethane	600	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
1,1,2-Trichloroethane	NS	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
1,1-Dichloroethane	200	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
1,1-Dichloroethene	400	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
1,2,4-Trichlorobenzene	3400	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	12 U	12 U	12 U	12 U	11 U	12 U	11 U	11 U	11 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
1,2-Dichlorobenzene	7900	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
1,2-Dichloroethane	100	µg/Kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
1,2-Dichloropropane	NS	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
1,3-Dichlorobenzene	1600	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
1,4-Dichlorobenzene	8500	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	23 U	24 U	24 U	23 U	22 U	25 U	23 U	22 U	23 U
2-Hexanone	NS	µg/kg	23 U	24 U	24 U	23 U	22 U	25 U	23 U	22 U	23 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	23 U	24 U	24 U	23 U	22 U	25 U	23 U	22 U	23 U
Acetone	200	µg/kg	23 U	24 U	24 U	23 U	22 U	25 U	23 U	22 U	23 U
Benzene	60	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Bromodichloromethane	NS	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Bromoform	NS	µg/Kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Bromomethane (Methyl Bromide)	NS	µg/kg	12 U	12 U	12 U	12 U	11 U	12 U	11 U	11 U	11 U
Carbon disulfide	2700	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Carbon tetrachloride	600	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Chlorobenzene	1700	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Chloroethane	1900	µg/kg	12 U	12 U	12 U	12 U	11 U	12 U	11 U	11 U	11 U
Chloroform (Trichloromethane)	300	µg/Kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Chloromethane (Methyl Chloride)	NS	µg/kg	12 U	12 U	12 U	12 U	11 U	12 U	11 U	11 U	11 U
cis-1,2-Dichloroethene	NS	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
cis-1,3-Dichloropropene	NS	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Cyclohexane	NS	µg/Kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Dibromochloromethane	NS	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	12 U	12 U	12 U	12 U	11 U	12 U	11 U	11 U	11 U
Ethylbenzene	5500	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Isopropylbenzene	NS	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Methyl acetate	NS	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Methyl cyclohexane	NS	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Methyl Tert Butyl Ether	NS	µg/Kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Methylene chloride	100	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	BH-4	BH-4	BH-4	BH-5	BH-5	BH-5	BH-5	BH-5	BH-6
		Sample Depth [ft. BGS]:	[2-4]	[6-8]	[8-9]	[0-2]	[2-4]	[4-6]	[6-8]	[8-10]	[0-2]
		Sample Identification:	S-050603-JP-053	S-050603-JP-054	S-050603-JP-055	S-050503-JP-001	S-050503-JP-002	S-050503-JP-003	S-050503-JP-004	S-050503-JP-005	S-050603-JP-056
		Sample Date:	05/06/03	05/06/03	05/06/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/06/03
Parameters	*TAGM Std.* (1)	*Units*									
Volatiles											
Styrene	NS	µg/Kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Tetrachloroethene	1400	µg/Kg	12	15	13	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	8.3
Toluene	1500	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
trans-1,2-Dichloroethene	300	µg/kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
trans-1,3-Dichloropropene	NS	µg/Kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Trichloroethene	700	µg/Kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Trichlorofluoromethane (CFC-11)	NS	µg/kg	12 U	12 U	12 U	12 U	11 U	12 U	11 U	11 U	11 U
Trifluorotrichloroethane (Freon 113)	6000	µg/Kg	5.9 U	6.0 U	6.1 U	5.9 U	5.6 U	6.1 U	5.7 U	5.5 U	5.7 U
Vinyl chloride	200	µg/Kg	12 U	12 U	12 U	12 U	11 U	12 U	11 U	11 U	11 U
Xylene (total)	1200	µg/Kg	18 U	18 U	18 U	18 U	17 U	18 U	17 U	17 U	17 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-6*	*BH-6*	*BH-6*	*BH-6*	*BH-6*	*BH-7*	*BH-7*	*BH-7*	*BH-7*
		Sample Depth [ft. BGS]:	*[2-4]*	*[2-4]*	*[4-6]*	*[6-8]*	*[8-9]*	*[0-2]*	*[2-4]*	*[4-6]*	*[5-7]*
		Sample Identification:	*S-050603-JP-057*	*S-050603-JP-058*	*S-050603-JP-059*	*S-050603-JP-060*	*S-050603-JP-061*	*S-050703-JP-083*	*S-050703-JP-084*	*S-050703-JP-085*	*S-050703-JP-087*
		Sample Date:	05/06/03	05/06/03	05/06/03	05/06/03	05/06/03	05/07/03	05/07/03	05/07/03	05/07/03
Parameters	*TAGM Std.* [1]	*Units*									
Volatiles											
1,1,1-Trichloroethane	800	µg/Kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
1,1,2,2-Tetrachloroethane	600	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
1,1,2-Trichloroethane	NS	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
1,1-Dichloroethane	200	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
1,1-Dichloroethene	400	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
1,2,4-Trichlorobenzene	3400	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	12 U	12 U	12 U	12 U	12 U	10 U	11 U	11 U	12 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
1,2-Dichlorobenzene	7900	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
1,2-Dichloroethane	100	µg/Kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
1,2-Dichloropropane	NS	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
1,3-Dichlorobenzene	1600	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
1,4-Dichlorobenzene	8500	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	24 U	25 U	25 U	25 U	24 U	21 U	23 U	22 U	24 U
2-Hexanone	NS	µg/kg	24 U	25 U	25 U	25 U	24 U	21 U	23 U	22 U	24 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	24 U	25 U	25 U	25 U	24 U	21 U	23 U	22 U	24 U
Acetone	200	µg/kg	24 U	25 U	25 U	25 U	24 U	21 U	23 U	22 U	23 J
Benzene	60	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Bromodichloromethane	NS	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Bromoform	NS	µg/Kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Bromomethane (Methyl Bromide)	NS	µg/kg	12 U	12 U	12 U	12 U	12 U	10 U	11 U	11 U	12 U
Carbon disulfide	2700	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Carbon tetrachloride	600	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Chlorobenzene	1700	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Chloroethane	1900	µg/kg	12 U	12 U	12 U	12 U	12 U	10 U	11 U	11 U	12 U
Chloroform (Trichloromethane)	300	µg/Kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Chloromethane (Methyl Chloride)	NS	µg/kg	12 U	12 U	12 U	12 U	12 U	10 U	11 U	11 U	12 U
cis-1,2-Dichloroethene	NS	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	2.2 J
cis-1,3-Dichloropropene	NS	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Cyclohexane	NS	µg/Kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	4.9 J	5.7 U	5.6 U	6.0 U
Dibromochloromethane	NS	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	12 U	12 U	12 U	12 U	12 U	10 U	11 U	11 U	12 U
Ethylbenzene	5500	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Isopropylbenzene	NS	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Methyl acetate	NS	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Methyl cyclohexane	NS	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.6	5.7 U	0.67 J	6.0 U
Methyl Tert Butyl Ether	NS	µg/Kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Methylene chloride	100	µg/kg	6.0 U	6.1 U	6.2 U	1.2 J	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	BH-6	BH-6	BH-6	BH-6	BH-6	BH-7	BH-7	BH-7	BH-7
		Sample Depth [ft. BGS]:	[2-4]	[2-4]	[4-6]	[6-8]	[8-9]	[0-2]	[2-4]	[4-6]	[5-7]
		Sample Identification:	S-050603-JP-057	S-050603-JP-058	S-050603-JP-059	S-050603-JP-060	S-050603-JP-061	S-050703-JP-083	S-050703-JP-084	S-050703-JP-085	S-050703-JP-087
		Sample Date:	05/06/03	05/06/03	05/06/03	05/06/03	05/06/03	05/07/03	05/07/03	05/07/03	05/07/03
Parameters	*TAGM Std.* [1]	*Units*									
Volatiles											
Styrene	NS	µg/Kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Tetrachloroethene	1400	µg/Kg	20	22	3.2 J	5.4 J	1.7 J	18	20	16	4.3 J
Toluene	1500	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
trans-1,2-Dichloroethene	300	µg/kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	1.3 J
trans-1,3-Dichloropropene	NS	µg/Kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Trichloroethene	700	µg/Kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	4.8 J
Trichlorofluoromethane (CFC-11)	NS	µg/kg	12 U	12 U	12 U	12 U	12 U	10 U	11 U	11 U	12 U
Trifluorotrichloroethane (Freon 113)	6000	µg/Kg	6.0 U	6.1 U	6.2 U	6.2 U	6.1 U	5.2 U	5.7 U	5.6 U	6.0 U
Vinyl chloride	200	µg/Kg	12 U	12 U	12 U	12 U	12 U	10 U	11 U	11 U	12 U
Xylene (total)	1200	µg/Kg	18 U	18 U	19 U	19 U	18 U	4.3 J	17 U	17 U	18 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-7*	*BH-7*	*BH-8*	*BH-8*	*BH-8*	*BH-8*	*BH-9*	*BH-9*	*BH-9*
		Sample Depth [ft. BGS]:	*[5-7]*	*[7-9]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*
		Sample Identification:	*S-050703-JP-088*	*S-050703-JP-089*	*S-050603-JP-043*	*S-050603-JP-044*	*S-050603-JP-045*	*S-050603-JP-046*	*S-050703-JP-075*	*S-050703-JP-076*	*S-050703-JP-077*
		Sample Date:	*05/07/03*	*05/07/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/07/03*	*05/07/03*	*05/07/03*
Parameters	*TAGM Std.* (1)	*Units*									
Volatiles											
1,1,1-Trichloroethane	800	µg/Kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
1,1,2,2-Tetrachloroethane	600	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
1,1,2-Trichloroethane	NS	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
1,1-Dichloroethane	200	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
1,1-Dichloroethene	400	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
1,2,4-Trichlorobenzene	3400	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	12 U	12 U	11 U	11 U	11 U	12 U	11 U	12 U	12 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
1,2-Dichlorobenzene	7900	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
1,2-Dichloroethane	100	µg/Kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
1,2-Dichloropropane	NS	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
1,3-Dichlorobenzene	1600	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
1,4-Dichlorobenzene	8500	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	2.4 J	24 U	21 U	22 U	22 U	24 U	22 U	24 U	24 U
2-Hexanone	NS	µg/kg	24 U	24 U	21 U	22 U	22 U	24 U	22 U	24 U	24 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	24 U	24 U	21 U	22 U	22 U	24 U	22 U	24 U	24 U
Acetone	200	µg/kg	25	6.8 J	21 U	22 U	22 U	24 U	22 U	24 U	24 U
Benzene	60	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Bromodichloromethane	NS	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Bromoform	NS	µg/Kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Bromomethane (Methyl Bromide)	NS	µg/kg	12 U	12 U	11 U	11 U	11 U	12 U	11 U	12 U	12 U
Carbon disulfide	2700	µg/kg	1.4 J	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Carbon tetrachloride	600	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Chlorobenzene	1700	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Chloroethane	1900	µg/kg	12 U	12 U	11 U	11 U	11 U	12 U	11 U	12 U	12 U
Chloroform (Trichloromethane)	300	µg/Kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Chloromethane (Methyl Chloride)	NS	µg/kg	12 U	12 U	11 U	11 U	11 U	12 U	11 U	12 U	12 U
cis-1,2-Dichloroethene	NS	µg/kg	0.87 J	2.8 J	5.4 U	5.5 U	5.6 U	4.0 J	0.65 J	6.0 U	6.0 U
cis-1,3-Dichloropropene	NS	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Cyclohexane	NS	µg/Kg	6.0 U	6.0 U	0.61 J	5.5 U	1.3 J	6.1 U	5.4 U	6.0 U	6.0 U
Dibromochloromethane	NS	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	12 U	12 U	11 U	11 U	11 U	12 U	11 U	12 U	12 U
Ethylbenzene	5500	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Isopropylbenzene	NS	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Methyl acetate	NS	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Methyl cyclohexane	NS	µg/kg	6.0 U	6.0 U	1.1 J	0.79 J	2.5 J	6.1 U	5.4 U	6.0 U	6.0 U
Methyl Tert Butyl Ether	NS	µg/Kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Methylene chloride	100	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	3.4 J	3.6 J

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-7*	*BH-7*	*BH-8*	*BH-8*	*BH-8*	*BH-8*	*BH-9*	*BH-9*	*BH-9*
		Sample Depth [ft. BGS]:	*[5-7]*	*[7-9]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*
		Sample Identification:	*S-050703-JP-088*	*S-050703-JP-089*	*S-050603-JP-043*	*S-050603-JP-044*	*S-050603-JP-045*	*S-050603-JP-046*	*S-050703-JP-075*	*S-050703-JP-076*	*S-050703-JP-077*
		Sample Date:	*05/07/03*	*05/07/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/07/03*	*05/07/03*	*05/07/03*
Parameters	*TAGM Std.* [1]	*Units*									
Volatiles											
Styrene	NS	µg/Kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Tetrachloroethene	1400	µg/Kg	1.7 J	280	2.5 J	22	18	340	18	2.3 J	18
Toluene	1500	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
trans-1,2-Dichloroethene	300	µg/kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
trans-1,3-Dichloropropene	NS	µg/Kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Trichloroethene	700	µg/Kg	2.3 J	9.2	5.4 U	5.5 U	5.6 U	9.3	1.3 J	6.0 U	6.0 U
Trichlorofluoromethane (CFC-11)	NS	µg/kg	12 U	12 U	11 U	11 U	11 U	12 U	11 U	12 U	12 U
Trifluorotrichloroethane (Freon 113)	6000	µg/Kg	6.0 U	6.0 U	5.4 U	5.5 U	5.6 U	6.1 U	5.4 U	6.0 U	6.0 U
Vinyl chloride	200	µg/Kg	12 U	12 U	11 U	11 U	11 U	12 U	11 U	12 U	12 U
Xylene (total)	1200	µg/Kg	18 U	18 U	16 U	17 U	17 U	18 U	16 U	18 U	18 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-9*	*BH-10*	*BH-10*	*BH-10*	*BH-10*	*BH-10*	*BH-11*	*BH-11*	*BH-11*
		Sample Depth [ft. BGS]:	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[8-10]*	*[0-2]*	*[2-4]*	*[4-6]*
		Sample Identification:	*S-050703-JP-078*	*S-050503-JP-006*	*S-050503-JP-007*	*S-050503-JP-008*	*S-050503-JP-009*	*S-050503-JP-010*	*S-050603-JP-062*	*S-050603-JP-063*	*S-050603-JP-064*
		Sample Date:	*05/07/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/06/03*	*05/06/03*	*05/06/03*
Parameters	*TAGM Std.* (1)	*Units*									
Volatiles											
1,1,1-Trichloroethane	800	µg/Kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
1,1,2,2-Tetrachloroethane	600	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
1,1,2-Trichloroethane	NS	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
1,1-Dichloroethane	200	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
1,1-Dichloroethene	400	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
1,2,4-Trichlorobenzene	3400	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg		12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
1,2-Dichlorobenzene	7900	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
1,2-Dichloroethane	100	µg/Kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
1,2-Dichloropropane	NS	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
1,3-Dichlorobenzene	1600	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
1,4-Dichlorobenzene	8500	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg		25 U	24 U	25 U	2.3 J	24 U	25 U	24 U	25 U
2-Hexanone	NS	µg/kg		25 U	24 U	25 U	25 U	24 U	25 U	24 U	25 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg		25 U	24 U	25 U	25 U	24 U	25 U	24 U	25 U
Acetone	200	µg/kg		25 U	24 U	25 U	12 J	24 U	25 U	24 U	25 U
Benzene	60	µg/kg		6.2 U	5.9 U	6.2 U	3.1 J	6.1 U	6.2 U	6.0 U	6.2 U
Bromodichloromethane	NS	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
Bromoform	NS	µg/Kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
Bromomethane (Methyl Bromide)	NS	µg/kg		12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
Carbon disulfide	2700	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
Carbon tetrachloride	600	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
Chlorobenzene	1700	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
Chloroethane	1900	µg/kg		12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
Chloroform (Trichloromethane)	300	µg/Kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
Chloromethane (Methyl Chloride)	NS	µg/kg		12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
cis-1,2-Dichloroethene	NS	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
cis-1,3-Dichloropropene	NS	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
Cyclohexane	NS	µg/Kg		6.2 U	5.9 U	0.83 J	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
Dibromochloromethane	NS	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg		12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
Ethylbenzene	5500	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
Isopropylbenzene	NS	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
Methyl acetate	NS	µg/kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
Methyl cyclohexane	NS	µg/kg		6.2 U	5.9 U	1.2 J	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
Methyl Tert Butyl Ether	NS	µg/Kg		6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U
Methylene chloride	100	µg/kg		3.3 J	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	**BH-9**	**BH-10**	**BH-10**	**BH-10**	**BH-10**	**BH-10**	**BH-11**	**BH-11**	**BH-11**
		Sample Depth [ft. BGS]:	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[8-10]*	*[0-2]*	*[2-4]*	*[4-6]*
		Sample Identification:	*S-050703-JP-078*	*S-050503-JP-006*	*S-050503-JP-007*	*S-050503-JP-008*	*S-050503-JP-009*	*S-050503-JP-010*	*S-050603-JP-062*	*S-050603-JP-063*	*S-050603-JP-064*
		Sample Date:	05/07/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/06/03	05/06/03	05/06/03
Parameters	*TAGM Std.* [1]	*Units*									
Volatiles											
Styrene	NS	µg/Kg	6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U	6.2 U
Tetrachloroethene	1400	µg/Kg	11	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	8.2	21	25
Toluene	1500	µg/kg	6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U	6.2 U
trans-1,2-Dichloroethene	300	µg/kg	6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U	6.2 U
trans-1,3-Dichloropropene	NS	µg/Kg	6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U	6.2 U
Trichloroethene	700	µg/Kg	6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U	6.2 U
Trichlorofluoromethane (CFC-11)	NS	µg/kg	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
Trifluorotrichloroethane (Freon 113)	6000	µg/Kg	6.2 U	5.9 U	6.2 U	6.2 U	6.1 U	6.2 U	6.0 U	6.2 U	6.2 U
Vinyl chloride	200	µg/Kg	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U	12 U
Xylene (total)	1200	µg/Kg	19 U	18 U	19 U	19 U	18 U	19 U	18 U	18 U	18 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-11*	*BH-12*	*BH-12*	*BH-12*	*BH-12*	*BH-13*	*BH-13*	*BH-13*	*BH-13*
		Sample Depth [ft. BGS]:	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*
		Sample Identification:	*S-050603-JP-065*	*S-050703-JP-071*	*S-050703-JP-072*	*S-050703-JP-073*	*S-050703-JP-074*	*S-050703-JP-079*	*S-050703-JP-080*	*S-050703-JP-081*	*S-050703-JP-082*
		Sample Date:	*05/06/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/07/03*
Parameters	*TAGM Std.* (1)	*Units*									
Volatiles											
1,1,1-Trichloroethane	800	µg/Kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
1,1,2,2-Tetrachloroethane	600	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
1,1,2-Trichloroethane	NS	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
1,1-Dichloroethane	200	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
1,1-Dichloroethene	400	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
1,2,4-Trichlorobenzene	3400	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	13 U	26 U	12 U	60 U	62 U	11 U	11 U	11 U	12 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
1,2-Dichlorobenzene	7900	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
1,2-Dichloroethane	100	µg/Kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
1,2-Dichloropropane	NS	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
1,3-Dichlorobenzene	1600	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
1,4-Dichlorobenzene	8500	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	25 U	53 U	23 U	120 U	120 U	22 U	22 U	21 U	24 U
2-Hexanone	NS	µg/kg	25 U	53 U	23 U	120 U	120 U	22 U	22 U	21 U	24 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	25 U	53 U	23 U	120 U	120 U	22 U	22 U	21 U	24 U
Acetone	200	µg/kg	25 U	53 U	9.6 J	120 U	120 U	22 U	22 U	21 U	24 U
Benzene	60	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Bromodichloromethane	NS	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Bromoform	NS	µg/Kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Bromomethane (Methyl Bromide)	NS	µg/kg	13 U	26 U	12 U	60 U	62 U	11 U	11 U	11 U	12 U
Carbon disulfide	2700	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Carbon tetrachloride	600	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Chlorobenzene	1700	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Chloroethane	1900	µg/kg	13 U	26 U	12 U	60 U	62 U	11 U	11 U	11 U	12 U
Chloroform (Trichloromethane)	300	µg/Kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Chloromethane (Methyl Chloride)	NS	µg/kg	13 U	26 U	12 U	60 U	62 U	11 U	11 U	11 U	12 U
cis-1,2-Dichloroethene	NS	µg/kg	6.3 U	7.7 J	5.5 J	3.5 J	89	5.4 U	5.4 U	5.3 U	1.8 J
cis-1,3-Dichloropropene	NS	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Cyclohexane	NS	µg/Kg	6.3 U	13 U	5.8 U	30 U	31 U	3.9 J	5.4 U	0.84 J	6.1 U
Dibromochloromethane	NS	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	13 U	26 U	12 U	60 U	62 U	11 U	11 U	11 U	12 U
Ethylbenzene	5500	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Isopropylbenzene	NS	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Methyl acetate	NS	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Methyl cyclohexane	NS	µg/kg	6.3 U	2.8 J	5.8 U	30 U	31 U	4.5 J	0.64 J	1.2 J	6.1 U
Methyl Tert Butyl Ether	NS	µg/Kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Methylene chloride	100	µg/kg	6.3 U	13 U	1.2 J	21 J	31 U	5.4 U	5.4 U	5.3 U	6.1 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-11*	*BH-12*	*BH-12*	*BH-12*	*BH-12*	*BH-13*	*BH-13*	*BH-13*	*BH-13*
		Sample Depth [ft. BGS]:	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*
		Sample Identification:	*S-050603-JP-065*	*S-050703-JP-071*	*S-050703-JP-072*	*S-050703-JP-073*	*S-050703-JP-074*	*S-050703-JP-079*	*S-050703-JP-080*	*S-050703-JP-081*	*S-050703-JP-082*
		Sample Date:	05/06/03	05/07/03	05/07/03	05/07/03	05/07/03	05/07/03	05/07/03	05/07/03	05/07/03
Parameters	*TAGM Std.* (1)	*Units*									
Volatiles											
Styrene	NS	µg/Kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Tetrachloroethene	1400	µg/Kg	8.6	330	19	760	19000	18	58	81	6100
Toluene	1500	µg/kg	6.3 U	2.8 J	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
trans-1,2-Dichloroethene	300	µg/kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
trans-1,3-Dichloropropene	NS	µg/Kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Trichloroethene	700	µg/Kg	6.3 U	17	2.7 J	14 J	57	5.4 U	1.5 J	4.0 J	8.3
Trichlorofluoromethane (CFC-11)	NS	µg/kg	13 U	26 U	12 U	60 U	62 U	11 U	11 U	11 U	12 U
Trifluorotrichloroethane (Freon 113)	6000	µg/Kg	6.3 U	13 U	5.8 U	30 U	31 U	5.4 U	5.4 U	5.3 U	6.1 U
Vinyl chloride	200	µg/Kg	13 U	26 U	12 U	60 U	62 U	11 U	11 U	11 U	12 U
Xylene (total)	1200	µg/Kg	19 U	6.4 J	17 U	90 U	92 U	16 U	16 U	16 U	18 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-14*	*BH-14*	*BH-14*	*BH-14*	*BH-14*	*BH-15*	*BH-15*	*BH-15*	*BH-15*
		Sample Depth [ft. BGS]:	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[8-10]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*
		Sample Identification:	*S-050603-JP-066*	*S-050603-JP-067*	*S-050603-JP-068*	*S-050603-JP-069*	*S-050603-JP-070*	*S-050503-JP-011*	*S-050503-JP-012*	*S-050503-JP-013*	*S-050503-JP-014*
		Sample Date:	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*
Parameters	*TAGM Std.* [1]	*Units*									
Volatiles											
1,1,1-Trichloroethane	800	µg/Kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
1,1,2,2-Tetrachloroethane	600	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
1,1,2-Trichloroethane	NS	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
1,1-Dichloroethane	200	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
1,1-Dichloroethene	400	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
1,2,4-Trichlorobenzene	3400	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	10 U	11 U	11 U	13 U	12 U	12 U	12 U	12 U	12 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
1,2-Dichlorobenzene	7900	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
1,2-Dichloroethane	100	µg/Kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
1,2-Dichloropropane	NS	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
1,3-Dichlorobenzene	1600	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
1,4-Dichlorobenzene	8500	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	21 U	22 U	22 U	26 U	24 U	23 U	4.8 J	24 U	24 U
2-Hexanone	NS	µg/kg	21 U	22 U	22 U	26 U	24 U	23 U	25 U	24 U	24 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	21 U	22 U	22 U	26 U	24 U	23 U	25 U	24 U	24 U
Acetone	200	µg/kg	21 U	22 U	7.8 J	20 J	24 U	23 U	24 J	24 U	24 U
Benzene	60	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	0.88 J	6.1 U	6.1 U
Bromodichloromethane	NS	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Bromoform	NS	µg/Kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Bromomethane (Methyl Bromide)	NS	µg/kg	10 U	11 U	11 U	13 U	12 U	12 U	12 U	12 U	12 U
Carbon disulfide	2700	µg/kg	5.1 U	5.4 U	5.4 U	1.7 J	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Carbon tetrachloride	600	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Chlorobenzene	1700	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Chloroethane	1900	µg/kg	10 U	11 U	11 U	13 U	12 U	12 U	12 U	12 U	12 U
Chloroform (Trichloromethane)	300	µg/Kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Chloromethane (Methyl Chloride)	NS	µg/kg	10 U	11 U	11 U	13 U	12 U	12 U	12 U	12 U	12 U
cis-1,2-Dichloroethene	NS	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	1.6 J	5.8 U	6.1 U	6.1 U	6.1 U
cis-1,3-Dichloropropene	NS	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Cyclohexane	NS	µg/Kg	1.5 J	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Dibromochloromethane	NS	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	10 U	11 U	11 U	13 U	12 U	12 U	12 U	12 U	12 U
Ethylbenzene	5500	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Isopropylbenzene	NS	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Methyl acetate	NS	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Methyl cyclohexane	NS	µg/kg	2.2 J	5.4 U	0.96 J	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Methyl Tert Butyl Ether	NS	µg/Kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Methylene chloride	100	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-14*	*BH-14*	*BH-14*	*BH-14*	*BH-14*	*BH-15*	*BH-15*	*BH-15*	*BH-15*
		Sample Depth [ft. BGS]:	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[8-10]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*
		Sample Identification:	*S-050603-JP-066*	*S-050603-JP-067*	*S-050603-JP-068*	*S-050603-JP-069*	*S-050603-JP-070*	*S-050503-JP-011*	*S-050503-JP-012*	*S-050503-JP-013*	*S-050503-JP-014*
		Sample Date:	05/06/03	05/06/03	05/06/03	05/06/03	05/06/03	05/05/03	05/05/03	05/05/03	05/05/03
Parameters	*TAGM Std.* [(1)]	*Units*									
Volatiles											
Styrene	NS	µg/Kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Tetrachloroethene	1400	µg/Kg	66	41	50	5.1 J	150	5.5 J	1.9 J	3.7 J	2.5 J
Toluene	1500	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
trans-1,2-Dichloroethene	300	µg/kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
trans-1,3-Dichloropropene	NS	µg/Kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Trichloroethene	700	µg/Kg	0.94 J	5.4 U	1.2 J	6.6 U	11	5.8 U	6.1 U	6.1 U	0.98 J
Trichlorofluoromethane (CFC-11)	NS	µg/kg	10 U	11 U	11 U	13 U	12 U	12 U	12 U	12 U	12 U
Trifluorotrichloroethane (Freon 113)	6000	µg/Kg	5.1 U	5.4 U	5.4 U	6.6 U	6.0 U	5.8 U	6.1 U	6.1 U	6.1 U
Vinyl chloride	200	µg/Kg	10 U	11 U	11 U	13 U	12 U	12 U	12 U	12 U	12 U
Xylene (total)	1200	µg/Kg	15 U	16 U	16 U	20 U	18 U	17 U	18 U	18 U	18 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-15*	*BH-15*	*BH-16*	*BH-16*	*BH-16*	*BH-16*	*BH-16*	*BH-16*	*BH-16*
		Sample Depth [ft. BGS]:	*[8-10]*	*[8-9]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[6-8]*	*[8-10]*	*[10-11]*
		Sample Identification:	*S-050503-JP-015*	*S-050703-JP-086*	*S-050603-JP-036*	*S-050603-JP-037*	*S-050603-JP-038*	*S-050603-JP-039*	*S-050603-JP-040*	*S-050603-JP-041*	*S-050603-JP-042*
		Sample Date:	*05/05/03*	*05/07/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*
Parameters	*TAGM Std.* (1)	*Units*									
Volatiles											
1,1,1-Trichloroethane	800	µg/Kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
1,1,2,2-Tetrachloroethane	600	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
1,1,2-Trichloroethane	NS	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
1,1-Dichloroethane	200	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
1,1-Dichloroethene	400	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
1,2,4-Trichlorobenzene	3400	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	12 U	12 U	11 U	11 U	11 U	11 U	12 U	11 U	11 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
1,2-Dichlorobenzene	7900	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
1,2-Dichloroethane	100	µg/Kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
1,2-Dichloropropane	NS	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
1,3-Dichlorobenzene	1600	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
1,4-Dichlorobenzene	8500	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	24 U	24 U	21 U	21 U	22 U	22 U	24 U	21 U	21 U
2-Hexanone	NS	µg/kg	24 U	24 U	21 U	21 U	22 U	22 U	24 U	21 U	21 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	24 U	24 U	21 U	21 U	22 U	22 U	24 U	21 U	21 U
Acetone	200	µg/kg	24 U	24 U	21 U	21 U	22 U	22 U	24 U	21 U	21 U
Benzene	60	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Bromodichloromethane	NS	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Bromoform	NS	µg/Kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Bromomethane (Methyl Bromide)	NS	µg/kg	12 U	12 U	11 U	11 U	11 U	11 U	12 U	11 U	11 U
Carbon disulfide	2700	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Carbon tetrachloride	600	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Chlorobenzene	1700	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Chloroethane	1900	µg/kg	12 U	12 U	11 U	11 U	11 U	11 U	12 U	11 U	11 U
Chloroform (Trichloromethane)	300	µg/Kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Chloromethane (Methyl Chloride)	NS	µg/kg	12 U	12 U	11 U	11 U	11 U	11 U	12 U	11 U	11 U
cis-1,2-Dichloroethene	NS	µg/kg	6.1 U	20	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
cis-1,3-Dichloropropene	NS	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Cyclohexane	NS	µg/Kg	6.1 U	6.1 U	5.4 U	0.75 J	1.2 J	5.6 U	5.9 U	0.73 J	2.5 J
Dibromochloromethane	NS	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	12 U	12 U	11 U	11 U	11 U	11 U	12 U	11 U	11 U
Ethylbenzene	5500	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Isopropylbenzene	NS	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Methyl acetate	NS	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Methyl cyclohexane	NS	µg/kg	6.1 U	6.1 U	5.4 U	1.1 J	1.6 J	5.6 U	5.9 U	0.85 J	3.8 J
Methyl Tert Butyl Ether	NS	µg/Kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Methylene chloride	100	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-15*	*BH-15*	*BH-16*	*BH-16*	*BH-16*	*BH-16*	*BH-16*	*BH-16*	*BH-16*
		Sample Depth [ft. BGS]:	*[8-10]*	*[8-9]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[6-8]*	*[8-10]*	*[10-11]*
		Sample Identification:	*S-050503-JP-015*	*S-050703-JP-086*	*S-050603-JP-036*	*S-050603-JP-037*	*S-050603-JP-038*	*S-050603-JP-039*	*S-050603-JP-040*	*S-050603-JP-041*	*S-050603-JP-042*
		Sample Date:	*05/05/03*	*05/07/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*
Parameters	*TAGM Std.* (1)	*Units*									
Volatiles											
Styrene	NS	µg/Kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Tetrachloroethene	1400	µg/Kg	6.1 U	9300	6.6	22	18	11	6.1	11	28
Toluene	1500	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
trans-1,2-Dichloroethene	300	µg/kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
trans-1,3-Dichloropropene	NS	µg/Kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Trichloroethene	700	µg/Kg	6.1 U	31	5.4 U	5.4 U	5.6 U	2.8 J	0.93 J	5.3 U	5.3 U
Trichlorofluoromethane (CFC-11)	NS	µg/kg	12 U	12 U	11 U	11 U	11 U	11 U	12 U	11 U	11 U
Trifluorotrichloroethane (Freon 113)	6000	µg/Kg	6.1 U	6.1 U	5.4 U	5.4 U	5.6 U	5.6 U	5.9 U	5.3 U	5.3 U
Vinyl chloride	200	µg/Kg	12 U	12 U	11 U	11 U	11 U	11 U	12 U	11 U	11 U
Xylene (total)	1200	µg/Kg	18 U	18 U	16 U	16 U	17 U	17 U	18 U	16 U	1.2 J

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-17*	*BH-17*	*BH-17*	*BH-17*	*BH-18*	*BH-18*	*BH-18*	*BH-18B*	*BH-18B*
		Sample Depth [ft. BGS]:	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[8-10]*	*[0-2]*	*[2-4]*
		Sample Identification:	*S-050503-JP-032*	*S-050503-JP-033*	*S-050503-JP-034*	*S-050503-JP-035*	*S-050503-JP-024*	*S-050503-JP-025*	*S-050503-JP-026*	*S-050503-JP-027*	*S-050503-JP-028*
		Sample Date:	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*
Parameters	*TAGM Std.* (1)	*Units*									
Volatiles											
1,1,1-Trichloroethane	800	µg/Kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
1,1,2,2-Tetrachloroethane	600	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
1,1,2-Trichloroethane	NS	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
1,1-Dichloroethane	200	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
1,1-Dichloroethene	400	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
1,2,4-Trichlorobenzene	3400	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	10 U	51 U	11 U	12 U	10 U	13 U	12 U	13 U	13 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
1,2-Dichlorobenzene	7900	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
1,2-Dichloroethane	100	µg/Kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
1,2-Dichloropropane	NS	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
1,3-Dichlorobenzene	1600	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
1,4-Dichlorobenzene	8500	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	20 U	100 U	21 U	24 U	21 U	25 U	25 U	27 U	25 U
2-Hexanone	NS	µg/kg	20 U	100 U	21 U	24 U	21 U	25 U	25 U	27 U	25 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	20 U	100 U	21 U	24 U	21 U	25 U	25 U	27 U	25 U
Acetone	200	µg/kg	20 U	100 U	21 U	24 U	21 U	25 U	25 U	27 U	25 U
Benzene	60	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
Bromodichloromethane	NS	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
Bromoform	NS	µg/Kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
Bromomethane (Methyl Bromide)	NS	µg/kg	10 U	51 U	11 U	12 U	10 U	13 U	12 U	13 U	13 U
Carbon disulfide	2700	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
Carbon tetrachloride	600	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
Chlorobenzene	1700	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
Chloroethane	1900	µg/kg	10 U	51 U	11 U	12 U	10 U	13 U	12 U	13 U	13 U
Chloroform (Trichloromethane)	300	µg/Kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
Chloromethane (Methyl Chloride)	NS	µg/kg	10 U	51 U	11 U	12 U	10 U	13 U	12 U	13 U	13 U
cis-1,2-Dichloroethene	NS	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
cis-1,3-Dichloropropene	NS	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
Cyclohexane	NS	µg/Kg	1.9 J	26 U	5.3 U	6.0 U	1.1 J	6.3 U	1.3 J	6.7 U	6.4 U
Dibromochloromethane	NS	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	10 U	51 U	11 U	12 U	10 U	13 U	12 U	13 U	13 U
Ethylbenzene	5500	µg/kg	0.53 J	3.0 J	5.3 U	6.0 U	5.2 U	6.3 U	2.2 J	6.7 U	6.4 U
Isopropylbenzene	NS	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
Methyl acetate	NS	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
Methyl cyclohexane	NS	µg/kg	3.3 J	4.5 J	5.3 U	6.0 U	1.6 J	6.3 U	1.4 J	6.7 U	6.4 U
Methyl Tert Butyl Ether	NS	µg/Kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
Methylene chloride	100	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-17*	*BH-17*	*BH-17*	*BH-17*	*BH-18*	*BH-18*	*BH-18*	*BH-18B*	*BH-18B*
		Sample Depth [ft. BGS]:	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[8-10]*	*[0-2]*	*[2-4]*
		Sample Identification:	*S-050503-JP-032*	*S-050503-JP-033*	*S-050503-JP-034*	*S-050503-JP-035*	*S-050503-JP-024*	*S-050503-JP-025*	*S-050503-JP-026*	*S-050503-JP-027*	*S-050503-JP-028*
		Sample Date:	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*
Parameters	*TAGM Std.* (1)	*Units*									
Volatiles											
Styrene	NS	µg/Kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
Tetrachloroethene	1400	µg/Kg	660	620	65	100	65	140	1000	210	91
Toluene	1500	µg/kg	2.6 J	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
trans-1,2-Dichloroethene	300	µg/kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
trans-1,3-Dichloropropene	NS	µg/Kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
Trichloroethene	700	µg/Kg	0.82 J	26 U	5.3 U	1.1 J	2.1 J	6.3 U	5.2 J	2.4 J	6.4 U
Trichlorofluoromethane (CFC-11)	NS	µg/kg	10 U	51 U	11 U	12 U	10 U	13 U	12 U	13 U	13 U
Trifluorotrichloroethane (Freon 113)	6000	µg/Kg	5.1 U	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U
Vinyl chloride	200	µg/Kg	10 U	51 U	11 U	12 U	10 U	13 U	12 U	13 U	13 U
Xylene (total)	1200	µg/Kg	5.3 J	27 J	16 U	18 U	1.5 J	19 U	2.5 J	20 U	19 U

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-18B*	*BH-19*	*BH-19*	*BH-19*	*BH-19*	*BH-20*	*BH-20*	*BH-20*	*BH-20*
		Sample Depth [ft. BGS]:	*[4-6]*	*[0-2]*	*[2-4]*	*[2-4]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*
		Sample Identification:	*S-050503-JP-031*	*S-050503-JP-020*	*S-050503-JP-021*	*S-050503-JP-022*	*S-050503-JP-023*	*S-050503-JP-016*	*S-050503-JP-017*	*S-050503-JP-018*	*S-050503-JP-019*
		Sample Date:	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*
Parameters	*TAGM Std.* (1)	*Units*									
Volatiles											
1,1,1-Trichloroethane	800	µg/Kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
1,1,2,2-Tetrachloroethane	600	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
1,1,2-Trichloroethane	NS	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
1,1-Dichloroethane	200	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
1,1-Dichloroethene	400	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
1,2,4-Trichlorobenzene	3400	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	12 U	11 U	12 U	24 U	41 U	12 U	11 U	13 U	13 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
1,2-Dichlorobenzene	7900	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
1,2-Dichloroethane	100	µg/Kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
1,2-Dichloropropane	NS	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
1,3-Dichlorobenzene	1600	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
1,4-Dichlorobenzene	8500	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	25 U	23 U	24 U	48 U	81 U	24 U	22 U	25 U	25 U
2-Hexanone	NS	µg/kg	25 U	23 U	24 U	48 U	81 U	24 U	22 U	25 U	25 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	25 U	23 U	24 U	48 U	81 U	24 U	22 U	25 U	25 U
Acetone	200	µg/kg	25 U	23 U	24 U	48 U	81 U	24 U	22 U	14 J	26
Benzene	60	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Bromodichloromethane	NS	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Bromoform	NS	µg/Kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Bromomethane (Methyl Bromide)	NS	µg/kg	12 U	11 U	12 U	24 U	41 U	12 U	11 U	13 U	13 U
Carbon disulfide	2700	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Carbon tetrachloride	600	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Chlorobenzene	1700	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Chloroethane	1900	µg/kg	12 U	11 U	12 U	24 U	41 U	12 U	11 U	13 U	13 U
Chloroform (Trichloromethane)	300	µg/Kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Chloromethane (Methyl Chloride)	NS	µg/kg	12 U	11 U	12 U	24 U	41 U	12 U	11 U	13 U	13 U
cis-1,2-Dichloroethene	NS	µg/kg	1.1 J	5.7 U	6.0 U	12 U	3.5 J	5.9 U	5.6 U	6.3 U	6.3 U
cis-1,3-Dichloropropene	NS	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Cyclohexane	NS	µg/Kg	0.88 J	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Dibromochloromethane	NS	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	12 U	11 U	12 U	24 U	41 U	12 U	11 U	13 U	13 U
Ethylbenzene	5500	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Isopropylbenzene	NS	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Methyl acetate	NS	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Methyl cyclohexane	NS	µg/kg	1.1 J	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Methyl Tert Butyl Ether	NS	µg/Kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Methylene chloride	100	µg/kg	6.2 U	5.7 U	2.9 J	12 U	20 U	5.1 J	4.8 J	7.5	3.7 J

TABLE A-1

SOILS PRE-EXCAVATION ANALYTICAL DATA - VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	**BH-18B**	**BH-19**	**BH-19**	**BH-19**	**BH-19**	**BH-20**	**BH-20**	**BH-20**	**BH-20**
		Sample Depth [ft. BGS]:	*[4-6]*	*[0-2]*	*[2-4]*	*[2-4]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*
		Sample Identification:	*S-050503-JP-031*	*S-050503-JP-020*	*S-050503-JP-021*	*S-050503-JP-022*	*S-050503-JP-023*	*S-050503-JP-016*	*S-050503-JP-017*	*S-050503-JP-018*	*S-050503-JP-019*
		Sample Date:	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03
Parameters	*TAGM Std.* [1]	*Units*									
Volatiles											
Styrene	NS	µg/Kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Tetrachloroethene	1400	µg/Kg	160	22	300	290	480	3.2 J	6.4	12	3.3 J
Toluene	1500	µg/kg	0.96 J	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
trans-1,2-Dichloroethene	300	µg/kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
trans-1,3-Dichloropropene	NS	µg/Kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Trichloroethene	700	µg/Kg	1.5 J	5.7 U	0.76 J	12 U	9.1 J	5.9 U	5.6 U	6.3 U	6.3 U
Trichlorofluoromethane (CFC-11)	NS	µg/kg	12 U	11 U	12 U	24 U	41 U	12 U	11 U	13 U	13 U
Trifluorotrichloroethane (Freon 113)	6000	µg/Kg	6.2 U	5.7 U	6.0 U	12 U	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Vinyl chloride	200	µg/Kg	12 U	11 U	12 U	24 U	41 U	12 U	11 U	13 U	13 U
Xylene (total)	1200	µg/Kg	19 U	17 U	18 U	36 U	61 U	18 U	17 U	19 U	19 U

Notes:

[1]	New York State Recommended Soil Cleanup Objectives, Technical and Administrative Guidance Memorandum (TAGM) #4046, January 24, 1994.
-	Not analyzed.
J	Estimated.
NS	No Standard.
U	Non-detect at associated value.
UJ	The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.
☐	Concentration exceeds standard.

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*SB-11*	*SB-12*	*SB-13*	*SB-14*	*SB-15*	*MW-1*	*MW-3*	*MW-3*	*MW-5*
		Sample Depth [ft. BGS]:	*[7-9]*	*[7-9]*	*[7-9]*	*[5-7]*	*[5-7]*	*[3-5]*	*[0-2]*	*[4-6]*	*[1-3]*
		Sample Identification:	*S-091300-KL-001*	*S-091300-KL-005*	*S-091300-KL-002*	*S-091300-KL-003*	*S-091300-KL-004*	*S-091400-KL-007*	*S-091400-KL-009*	*S-091400-KL-010*	*S-091400-KL-008*
		Sample Date:	*09/13/00*	*09/13/00*	*09/13/00*	*09/13/00*	*09/13/00*	*09/14/00*	*09/14/00*	*09/14/00*	*09/14/00*
Parameters	*TAGM Std.* (1)	*Units*									
Semi-Volatiles											
2,2'-oxybis(1-Chloropropane)	NS	µg/Kg	--	--	--	--	--	--	--	--	--
2,4,5-Trichlorophenol	100	µg/kg	--	--	--	--	--	--	--	--	--
2,4,6-Trichlorophenol	NS	µg/kg	--	--	--	--	--	--	--	--	--
2,4-Dichlorophenol	400	µg/kg	--	--	--	--	--	--	--	--	--
2,4-Dimethylphenol	NS	µg/kg	--	--	--	--	--	--	--	--	--
2,4-Dinitrophenol	200	µg/kg	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	NS	µg/kg	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	1000	µg/kg	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	NS	µg/kg	--	--	--	--	--	--	--	--	--
2-Chlorophenol	800	µg/kg	--	--	--	--	--	--	--	--	--
2-Methylnaphthalene	36400	µg/kg	--	--	--	--	--	--	--	--	--
2-Methylphenol	100	µg/kg	--	--	--	--	--	--	--	--	--
2-Nitroaniline	NS	µg/kg	--	--	--	--	--	--	--	--	--
2-Nitrophenol	330	µg/kg	--	--	--	--	--	--	--	--	--
3,3'-Dichlorobenzidine	NS	µg/kg	--	--	--	--	--	--	--	--	--
3-Nitroaniline	500	µg/kg	--	--	--	--	--	--	--	--	--
4,6-Dinitro-2-methylphenol	NS	µg/kg	--	--	--	--	--	--	--	--	--
4-Bromophenyl phenyl ether	NS	µg/kg	--	--	--	--	--	--	--	--	--
4-Chloro-3-methylphenol	240	µg/kg	--	--	--	--	--	--	--	--	--
4-Chloroaniline	220	µg/kg	--	--	--	--	--	--	--	--	--
4-Chlorophenyl phenyl ether	NS	µg/kg	--	--	--	--	--	--	--	--	--
4-Methylphenol	900	µg/kg	--	--	--	--	--	--	--	--	--
4-Nitroaniline	NS	µg/kg	--	--	--	--	--	--	--	--	--
4-Nitrophenol	100	µg/kg	--	--	--	--	--	--	--	--	--
Acenaphthene	50000	µg/Kg	400 U	410 U	390 U	400 U	1800 UJ	400 U	410 U	410 U	440 U
Acenaphthylene	41000	µg/kg	--	--	--	--	--	--	--	--	--
Acetophenone	NS	µg/kg	--	--	--	--	--	--	--	--	--
Anthracene	50000	µg/kg	400 U	410 U	390 U	400 U	170 J	400 U	31 J	410 U	30 J
Atrazine	NS	µg/kg	--	--	--	--	--	--	--	--	--
Benzaldehyde	NS	µg/kg	--	--	--	--	--	--	--	--	--
Benzo(a)anthracene	224	µg/kg	400 U	410 U	390 U	400 U	**710 J**	400 U	160 J	410 U	88 J
Benzo(a)pyrene	61	µg/Kg	400 U	410 U	390 U	400 U	**720 J**	22 J	**160 J**	410 U	**90 J**
Benzo(b)fluoranthene	1100	µg/kg	400 U	410 U	390 U	400 U	750 J	30 J	210 J	410 U	78 J
Benzo(g,h,i)perylene	50000	µg/Kg	400 U	410 U	390 U	400 U	280 J	400 U	53 J	410 U	50 J
Benzo(k)fluoranthene	1100	µg/kg	400 U	410 U	390 U	400 U	730 J	400 U	160 J	410 U	70 J
Biphenyl	NS	µg/Kg	--	--	--	--	--	--	--	--	--
bis(2-Chloroethoxy)methane	NS	µg/Kg	--	--	--	--	--	--	--	--	--
bis(2-Chloroethyl)ether	NS	µg/kg	--	--	--	--	--	--	--	--	--
bis(2-Ethylhexyl)phthalate	50000	µg/kg	--	--	--	--	--	--	--	--	--

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*SB-11*	*SB-12*	*SB-13*	*SB-14*	*SB-15*	*MW-1*	*MW-3*	*MW-3*	*MW-5*
		Sample Depth [ft. BGS]:	*[7-9]*	*[7-9]*	*[7-9]*	*[5-7]*	*[5-7]*	*[3-5]*	*[0-2]*	*[4-6]*	*[1-3]*
		Sample Identification:	*S-091300-KL-001*	*S-091300-KL-005*	*S-091300-KL-002*	*S-091300-KL-003*	*S-091300-KL-004*	*S-091400-KL-007*	*S-091400-KL-009*	*S-091400-KL-010*	*S-091400-KL-008*
		Sample Date:	*09/13/00*	*09/13/00*	*09/13/00*	*09/13/00*	*09/13/00*	*09/14/00*	*09/14/00*	*09/14/00*	*09/14/00*
Parameters	*TAGM Std.* (1)	*Units*									
Semi-Volatiles											
Butyl benzylphthalate	50000	µg/Kg	--	--	--	--	--	--	--	--	--
Caprolactam	NS	µg/kg	--	--	--	--	--	--	--	--	--
Carbazole	NS	µg/Kg	--	--	--	--	--	--	--	--	--
Chrysene	400	µg/Kg	400 U	410 U	390 U	400 U	**830 J**	28 J	180 J	410 U	110 J
Dibenz(a,h)anthracene	14	µg/kg	400 U	410 U	390 U	400 U	1800 UJ	400 U	410 U	410 U	440 U
Dibenzofuran	6200	µg/Kg	--	--	--	--	--	--	--	--	--
Diethyl phthalate	7100	µg/kg	--	--	--	--	--	--	--	--	--
Dimethyl phthalate	2000	µg/kg	--	--	--	--	--	--	--	--	--
Di-n-butylphthalate	8100	µg/kg	--	--	--	--	--	--	--	--	--
Di-n-octyl phthalate	50000	µg/kg	--	--	--	--	--	--	--	--	--
Fluoranthene	50000	µg/Kg	400 U	410 U	390 U	400 U	1800 J	55 J	490	410 U	220 J
Fluorene	50000	µg/kg	400 U	410 U	390 U	400 U	1800 UJ	400 U	410 U	410 U	440 U
Hexachlorobenzene	410	µg/kg	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	NS	µg/kg	--	--	--	--	--	--	--	--	--
Hexachlorocyclopentadiene	NS	µg/kg	--	--	--	--	--	--	--	--	--
Hexachloroethane	NS	µg/kg	--	--	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	3200	µg/kg	400 U	410 U	390 U	400 U	290 J	400 U	53 J	410 U	45 J
Isophorone	4400	µg/kg	--	--	--	--	--	--	--	--	--
Naphthalene	13000	µg/kg	400 U	410 U	390 U	400 U	1800 UJ	400 U	410 U	410 U	440 U
Nitrobenzene	200	µg/kg	--	--	--	--	--	--	--	--	--
N-Nitrosodi-n-propylamine	NS	µg/kg	--	--	--	--	--	--	--	--	--
N-Nitrosodiphenylamine	NS	µg/Kg	--	--	--	--	--	--	--	--	--
Pentachlorophenol	1000	µg/kg	--	--	--	--	--	--	--	--	--
Phenanthrene	50000	µg/kg	400 U	410 U	390 U	400 U	950 J	29 J	160 J	410 U	140 J
Phenol	30	µg/kg	--	--	--	--	--	--	--	--	--
Pyrene	50000	µg/kg	400 U	410 U	390 U	400 U	860 J	22 J	180 J	410 U	120 J

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*MW-2*	*MW-2*	*MW-2*	*MW-4*	*SB-16A*	*SB-19*	*SB-24*	*SB-26*	*SB-27*
		Sample Depth [ft. BGS]:	*[3-5]*	*[7-9]*	*[7-9]*	*[3-5]*	*[7-9]*	*[6-8]*	*[8-10]*	*[10-12]*	*[10-12]*
		Sample Identification:	*S-091500-KL-012*	*S-091500-KL-013*	*S-091500-KL-014*	*S-091500-KL-015*	*S-091800-KL-016*	*082001-SB19-6-8*	*082001-SB24-8-10*	*082001-SB26-10-12*	*082001-SB27-10-12*
		Sample Date:	*09/15/00*	*09/15/00*	*09/15/00*	*09/15/00*	*09/18/00*	*08/20/01*	*08/20/01*	*08/20/01*	*08/20/01*
Parameters	*TAGM Std.* (1)	*Units*									
Semi-Volatiles											
2,2'-oxybis(1-Chloropropane)	NS	µg/Kg	--	--	--	--	--	410 U	400 U	390 U	400 U
2,4,5-Trichlorophenol	100	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
2,4,6-Trichlorophenol	NS	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
2,4-Dichlorophenol	400	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
2,4-Dimethylphenol	NS	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
2,4-Dinitrophenol	200	µg/kg	--	--	--	--	--	2000 U	1900 U	1900 U	1900 U
2,4-Dinitrotoluene	NS	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
2,6-Dinitrotoluene	1000	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
2-Chloronaphthalene	NS	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
2-Chlorophenol	800	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
2-Methylnaphthalene	36400	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
2-Methylphenol	100	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
2-Nitroaniline	NS	µg/kg	--	--	--	--	--	2000 U	1900 U	1900 U	1900 U
2-Nitrophenol	330	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
3,3'-Dichlorobenzidine	NS	µg/kg	--	--	--	--	--	2000 U	1900 U	1900 U	1900 U
3-Nitroaniline	500	µg/kg	--	--	--	--	--	2000 U	1900 U	1900 U	1900 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	--	--	--	--	--	2000 U	1900 U	1900 U	1900 U
4-Bromophenyl phenyl ether	NS	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
4-Chloro-3-methylphenol	240	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
4-Chloroaniline	220	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
4-Chlorophenyl phenyl ether	NS	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
4-Methylphenol	900	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
4-Nitroaniline	NS	µg/kg	--	--	--	--	--	2000 U	1900 U	1900 U	1900 U
4-Nitrophenol	100	µg/kg	--	--	--	--	--	2000 U	1900 U	1900 U	1900 U
Acenaphthene	50000	µg/Kg	2000 U	400 U	410 U	970 J	410 U	410 U	400 U	390 U	400 U
Acenaphthylene	41000	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Acetophenone	NS	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Anthracene	50000	µg/kg	2000 U	400 U	410 U	2100 J	410 U	410 U	400 U	390 U	400 U
Atrazine	NS	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Benzaldehyde	NS	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Benzo(a)anthracene	224	µg/kg	150 J	400 U	410 U	5700 J	410 U	410 U	400 U	390 U	400 U
Benzo(a)pyrene	61	µg/Kg	2000 U	400 U	410 U	5600	410 U	410 U	400 U	390 U	400 U
Benzo(b)fluoranthene	1100	µg/kg	190 J	400 U	410 U	6400	410 U	410 U	400 U	390 U	400 U
Benzo(g,h,i)perylene	50000	µg/Kg	2000 U	400 U	410 U	1500 J	410 U	410 U	400 U	390 U	400 U
Benzo(k)fluoranthene	1100	µg/kg	170 J	400 U	410 U	5400	410 U	410 U	400 U	390 U	400 U
Biphenyl	NS	µg/Kg	--	--	--	--	--	410 U	400 U	390 U	400 U
bis(2-Chloroethoxy)methane	NS	µg/Kg	--	--	--	--	--	410 U	400 U	390 U	400 U
bis(2-Chloroethyl)ether	NS	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	--	--	--	--	--	120 J	400 U	390 U	400 U

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*MW-2*	*MW-2*	*MW-2*	*MW-4*	*SB-16A*	*SB-19*	*SB-24*	*SB-26*	*SB-27*
		Sample Depth [ft. BGS]:	*[3-5]*	*[7-9]*	*[7-9]*	*[3-5]*	*[7-9]*	*[6-8]*	*[8-10]*	*[10-12]*	*[10-12]*
		Sample Identification:	*S-091500-KL-012*	*S-091500-KL-013*	*S-091500-KL-014*	*S-091500-KL-015*	*S-091800-KL-016*	*082001-SB19-6-8*	*082001-SB24-8-10*	*082001-SB26-10-12*	*082001-SB27-10-12*
		Sample Date:	*09/15/00*	*09/15/00*	*09/15/00*	*09/15/00*	*09/18/00*	*08/20/01*	*08/20/01*	*08/20/01*	*08/20/01*
Parameters	*TAGM Std.* (1)	*Units*									
Semi-Volatiles											
Butyl benzylphthalate	50000	µg/Kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Caprolactam	NS	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Carbazole	NS	µg/Kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Chrysene	400	µg/Kg	190 J	400 U	410 U	6200 J	22 J	410 U	400 U	390 U	400 U
Dibenz(a,h)anthracene	14	µg/kg	2000 U	400 U	410 U	500 J	410 U	410 U	400 U	390 U	400 U
Dibenzofuran	6200	µg/Kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Diethyl phthalate	7100	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Dimethyl phthalate	2000	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Di-n-butylphthalate	8100	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Di-n-octyl phthalate	50000	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Fluoranthene	50000	µg/Kg	540 J	400 U	410 U	22000	46 J	43 J	400 U	390 U	400 U
Fluorene	50000	µg/kg	2000 U	400 U	410 U	1100 J	410 U	410 U	400 U	390 U	400 U
Hexachlorobenzene	410	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Hexachlorobutadiene	NS	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Hexachlorocyclopentadiene	NS	µg/kg	--	--	--	--	--	2000 U	1900 U	1900 U	1900 U
Hexachloroethane	NS	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Indeno(1,2,3-cd)pyrene	3200	µg/kg	2000 U	400 U	410 U	1700 J	410 U	410 U	400 U	390 U	400 U
Isophorone	4400	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Naphthalene	13000	µg/kg	2000 U	400 U	410 U	3500 U	410 U	410 U	400 U	390 U	400 U
Nitrobenzene	200	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
N-Nitrosodi-n-propylamine	NS	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
N-Nitrosodiphenylamine	NS	µg/Kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Pentachlorophenol	1000	µg/kg	--	--	--	--	--	2000 U	1900 U	1900 U	1900 U
Phenanthrene	50000	µg/kg	260 J	400 U	410 U	11000	46 J	410 U	400 U	390 U	400 U
Phenol	30	µg/kg	--	--	--	--	--	410 U	400 U	390 U	400 U
Pyrene	50000	µg/kg	220 J	400 U	410 U	8200 J	44 J	51 J	400 U	390 U	400 U

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*SB-24*	*SB-18*	*BH-3*	*BH-3*	*BH-3*	*BH-3*	*BH-3*	*BH-4*	*BH-4*	*BH-4*
		Sample Depth [ft. BGS]:	*[8-10]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[8-9]*	*[0-2]*	*[2-4]*	*[6-8]*
		Sample Identification:	*082001-SB35-8-10*	*082201-SB18-6-8*	*S-050603-JP-047*	*S-050603-JP-048*	*S-050603-JP-049*	*S-050603-JP-050*	*S-050603-JP-051*	*S-050603-JP-052*	*S-050603-JP-053*	*S-050603-JP-054*
		Sample Date:	*08/20/01*	*08/22/01*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*
Parameters	*TAGM Std.* (1)	*Units*										
Semi-Volatiles												
2,2'-oxybis(1-Chloropropane)	NS	µg/Kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
2,4,5-Trichlorophenol	100	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
2,4,6-Trichlorophenol	NS	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
2,4-Dichlorophenol	400	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
2,4-Dimethylphenol	NS	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
2,4-Dinitrophenol	200	µg/kg	1900 U	18000 U	2100 U	22000 U	54000 U	1900 U	11000 U	1800 U	1900 U	1900 U
2,4-Dinitrotoluene	NS	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
2,6-Dinitrotoluene	1000	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
2-Chloronaphthalene	NS	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
2-Chlorophenol	800	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
2-Methylnaphthalene	36400	µg/kg	400 U	460 J	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
2-Methylphenol	100	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
2-Nitroaniline	NS	µg/kg	1900 U	18000 U	2100 U	22000 U	54000 U	1900 U	11000 U	1800 U	1900 U	1900 U
2-Nitrophenol	330	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
3,3'-Dichlorobenzidine	NS	µg/kg	1900 U	18000 U	2100 U	22000 U	54000 U	1900 U	11000 U	1800 U	1900 U	1900 U
3-Nitroaniline	500	µg/kg	1900 U	18000 U	2100 U	22000 U	54000 U	1900 U	11000 U	1800 U	1900 U	1900 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	1900 U	18000 U	2100 U	22000 U	54000 U	1900 U	11000 U	1800 U	1900 U	1900 U
4-Bromophenyl phenyl ether	NS	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
4-Chloro-3-methylphenol	240	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
4-Chloroaniline	220	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
4-Chlorophenyl phenyl ether	NS	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
4-Methylphenol	900	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
4-Nitroaniline	NS	µg/kg	1900 U	18000 U	2100 U	22000 U	54000 U	1900 U	11000 U	1800 U	37 J	1900 U
4-Nitrophenol	100	µg/kg	1900 U	18000 U	2100 U	22000 U	54000 U	1900 U	11000 U	1800 U	1900 U	1900 U
Acenaphthene	50000	µg/Kg	400 U	1200 J	430 U	530 J	5300 J	400 U	2300 U	360 U	390 U	400 U
Acenaphthylene	41000	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Acetophenone	NS	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Anthracene	50000	µg/kg	400 U	1800 J	50 J	1600 J	14000	400 U	550 J	360 U	59 J	400 U
Atrazine	NS	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Benzaldehyde	NS	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Benzo(a)anthracene	224	µg/kg	400 U	**3200 J**	**270 J**	**4800**	**23000**	400 U	**1500 J**	170 J	160 J	400 U
Benzo(a)pyrene	61	µg/Kg	400 U	**2200 J**	**260 J**	**4100 J**	**19000**	400 U	**1300 J**	**170 J**	**130 J**	400 U
Benzo(b)fluoranthene	1100	µg/kg	400 U	**2000 J**	280 J	**3400 J**	**17000**	400 U	1100 J	190 J	120 J	400 U
Benzo(g,h,i)perylene	50000	µg/Kg	400 U	1100 J	77 J	940 J	4400 J	400 U	330 J	55 J	390 U	400 U
Benzo(k)fluoranthene	1100	µg/kg	400 U	**1400 J**	290 J	**4800**	**19000**	400 U	**1500 J**	190 J	140 J	400 U
Biphenyl	NS	µg/Kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
bis(2-Chloroethoxy)methane	NS	µg/Kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
bis(2-Chloroethyl)ether	NS	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	400 U	3800 U	210 J	4600 U	11000 U	400 U	2300 U	100 J	390 U	400 U

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*SB-24*	*SB-18*	*BH-3*	*BH-3*	*BH-3*	*BH-3*	*BH-3*	*BH-4*	*BH-4*	*BH-4*
		Sample Depth [ft. BGS]:	*[8-10]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[8-9]*	*[0-2]*	*[2-4]*	*[6-8]*
		Sample Identification:	*082001-SB35-8-10*	*082201-SB18-6-8*	*S-050603-JP-047*	*S-050603-JP-048*	*S-050603-JP-049*	*S-050603-JP-050*	*S-050603-JP-051*	*S-050603-JP-052*	*S-050603-JP-053*	*S-050603-JP-054*
		Sample Date:	*08/20/01*	*08/22/01*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*
Parameters	*TAGM Std.* [1]	*Units*										
Semi-Volatiles												
Butyl benzylphthalate	50000	µg/Kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Caprolactam	NS	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Carbazole	NS	µg/Kg	400 U	880 J	430 U	630 J	4700 J	400 U	2300 U	360 U	390 U	400 U
Chrysene	400	µg/Kg	400 U	**2900 J**	320 J	**4600**	**22000**	400 U	**1400 J**	210 J	150 J	400 U
Dibenz(a,h)anthracene	14	µg/kg	400 U	3800 U	**33 J**	**460 J**	**2000 J**	400 U	2300 U	360 U	390 U	400 U
Dibenzofuran	6200	µg/Kg	400 U	730 J	430 U	4600 U	3100 J	400 U	2300 U	360 U	390 U	400 U
Diethyl phthalate	7100	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Dimethyl phthalate	2000	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Di-n-butylphthalate	8100	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Di-n-octyl phthalate	50000	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Fluoranthene	50000	µg/Kg	400 U	5900	700	13000	**73000**	77 J	3900	450	360 J	400 U
Fluorene	50000	µg/kg	400 U	1100 J	430 U	530 J	5400 J	400 U	2300 U	360 U	390 U	400 U
Hexachlorobenzene	410	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Hexachlorobutadiene	NS	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Hexachlorocyclopentadiene	NS	µg/kg	1900 U	18000 U	2100 U	22000 U	54000 U	1900 U	11000 U	1800 U	1900 U	1900 U
Hexachloroethane	NS	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Indeno(1,2,3-cd)pyrene	3200	µg/kg	400 U	1100 J	87 J	1100 J	**5200 J**	400 U	400 J	61 J	36 J	400 U
Isophorone	4400	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Naphthalene	13000	µg/kg	400 U	1700 J	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Nitrobenzene	200	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
N-Nitrosodi-n-propylamine	NS	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
N-Nitrosodiphenylamine	NS	µg/Kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Pentachlorophenol	1000	µg/kg	1900 U	18000 U	2100 U	22000 U	54000 U	1900 U	11000 U	1800 U	1900 U	1900 U
Phenanthrene	50000	µg/kg	400 U	6900	270 J	5400	**56000**	39 J	1700 J	170 J	210 J	400 U
Phenol	30	µg/kg	400 U	3800 U	430 U	4600 U	11000 U	400 U	2300 U	360 U	390 U	400 U
Pyrene	50000	µg/kg	400 U	5800	570	7700	**57000**	60 J	3200	360	230 J	400 U

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-4*	*BH-5*	*BH-5*	*BH-5*	*BH-5*	*BH-5*	*BH-6*	*BH-6*	*BH-6*	*BH-6*
		Sample Depth [ft. BGS]:	*[8-9]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[8-10]*	*[0-2]*	*[2-4]*	*[2-4]*	*[4-6]*
		Sample Identification:	*S-050603-JP-055*	*S-050503-JP-001*	*S-050503-JP-002*	*S-050503-JP-003*	*S-050503-JP-004*	*S-050503-JP-005*	*S-050603-JP-056*	*S-050603-JP-057*	*S-050603-JP-058*	*S-050603-JP-059*
		Sample Date:	*05/06/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*
Parameters	*TAGM Std.* [(1)]	*Units*										
Semi-Volatiles												
2,2'-oxybis(1-Chloropropane)	NS	µg/Kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
2,4,5-Trichlorophenol	100	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
2,4,6-Trichlorophenol	NS	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
2,4-Dichlorophenol	400	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
2,4-Dimethylphenol	NS	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
2,4-Dinitrophenol	200	µg/kg	2000 U	7500 U	1800 U	2000 U	1800 U	1800 U	1800 U	1900 U	2000 U	2000 U
2,4-Dinitrotoluene	NS	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
2,6-Dinitrotoluene	1000	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
2-Chloronaphthalene	NS	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
2-Chlorophenol	800	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
2-Methylnaphthalene	36400	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
2-Methylphenol	100	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
2-Nitroaniline	NS	µg/kg	2000 U	7500 U	1800 U	2000 U	1800 U	1800 U	1800 U	1900 U	2000 U	2000 U
2-Nitrophenol	330	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
3,3'-Dichlorobenzidine	NS	µg/kg	2000 U	7500 U	1800 U	2000 U	1800 U	1800 U	1800 U	1900 U	2000 U	2000 U
3-Nitroaniline	500	µg/kg	2000 U	7500 U	1800 U	2000 U	1800 U	1800 U	1800 U	1900 U	2000 U	2000 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	2000 U	7500 U	1800 U	2000 U	1800 U	1800 U	1800 U	1900 U	2000 U	2000 U
4-Bromophenyl phenyl ether	NS	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
4-Chloro-3-methylphenol	240	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
4-Chloroaniline	220	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
4-Chlorophenyl phenyl ether	NS	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
4-Methylphenol	900	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
4-Nitroaniline	NS	µg/kg	2000 U	7500 U	1800 U	2000 U	1800 U	1800 U	1800 U	1900 U	2000 U	2000 U
4-Nitrophenol	100	µg/kg	2000 U	7500 U	1800 U	2000 U	1800 U	1800 U	1800 U	1900 U	2000 U	2000 U
Acenaphthene	50000	µg/Kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Acenaphthylene	41000	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Acetophenone	NS	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Anthracene	50000	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	76 J	410 U	410 U
Atrazine	NS	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Benzaldehyde	NS	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Benzo(a)anthracene	224	µg/kg	400 U	**240 J**	370 U	400 U	93 J	360 U	160 J	130 J	410 U	410 U
Benzo(a)pyrene	61	µg/Kg	400 U	**260 J**	370 U	400 U	**95 J**	360 U	**160 J**	**92 J**	410 U	410 U
Benzo(b)fluoranthene	1100	µg/kg	400 U	1500 U	370 U	400 U	100 J	360 U	140 J	62 J	410 U	410 U
Benzo(g,h,i)perylene	50000	µg/Kg	400 U	150 J	370 U	400 U	71 J	360 U	77 J	400 U	410 U	410 U
Benzo(k)fluoranthene	1100	µg/kg	400 U	310 J	370 U	400 U	67 J	360 U	170 J	82 J	410 U	410 U
Biphenyl	NS	µg/Kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
bis(2-Chloroethoxy)methane	NS	µg/Kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
bis(2-Chloroethyl)ether	NS	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	400 U	310 J	370 U	400 U	280 J	360 U	180 J	400 U	410 U	410 U

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-4*	*BH-5*	*BH-5*	*BH-5*	*BH-5*	*BH-5*	*BH-6*	*BH-6*	*BH-6*	*BH-6*
		Sample Depth [ft. BGS]:	*[8-9]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[8-10]*	*[0-2]*	*[2-4]*	*[2-4]*	*[4-6]*
		Sample Identification:	*S-050603-JP-055*	*S-050503-JP-001*	*S-050503-JP-002*	*S-050503-JP-003*	*S-050503-JP-004*	*S-050503-JP-005*	*S-050603-JP-056*	*S-050603-JP-057*	*S-050603-JP-058*	*S-050603-JP-059*
		Sample Date:	05/06/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/06/03	05/06/03	05/06/03	05/06/03
Parameters	*TAGM Std.* (1)	*Units*										
Semi-Volatiles												
Butyl benzylphthalate	50000	µg/Kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Caprolactam	NS	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Carbazole	NS	µg/Kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	37 J	410 U	410 U
Chrysene	400	µg/Kg	400 U	290 J	370 U	400 U	120 J	360 U	210 J	120 J	410 U	410 U
Dibenz(a,h)anthracene	14	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Dibenzofuran	6200	µg/Kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Diethyl phthalate	7100	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Dimethyl phthalate	2000	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Di-n-butylphthalate	8100	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Di-n-octyl phthalate	50000	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Fluoranthene	50000	µg/Kg	400 U	540 J	370 U	400 U	220 J	360 U	450	270 J	410 U	410 U
Fluorene	50000	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Hexachlorobenzene	410	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Hexachlorobutadiene	NS	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Hexachlorocyclopentadiene	NS	µg/kg	2000 U	7500 U	1800 U	2000 U	1800 U	1800 U	1800 U	1900 U	2000 U	2000 U
Hexachloroethane	NS	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Indeno(1,2,3-cd)pyrene	3200	µg/kg	400 U	170 J	370 U	400 U	62 J	360 U	77 J	34 J	410 U	410 U
Isophorone	4400	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Naphthalene	13000	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Nitrobenzene	200	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
N-Nitrosodi-n-propylamine	NS	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
N-Nitrosodiphenylamine	NS	µg/Kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Pentachlorophenol	1000	µg/kg	2000 U	7500 U	1800 U	2000 U	1800 U	1800 U	1800 U	1900 U	2000 U	2000 U
Phenanthrene	50000	µg/kg	400 U	250 J	370 U	400 U	100 J	360 U	200 J	260 J	410 U	410 U
Phenol	30	µg/kg	400 U	1500 U	370 U	400 U	370 U	360 U	380 U	400 U	410 U	410 U
Pyrene	50000	µg/kg	400 U	470 J	370 U	400 U	160 J	360 U	280 J	180 J	410 U	410 U

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-6*	*BH-6*	*BH-7*	*BH-7*	*BH-7*	*BH-7*	*BH-7*	*BH-7*	*BH-8*	*BH-8*
		Sample Depth [ft. BGS]:	*[6-8]*	*[8-9]*	*[0-2]*	*[2-4]*	*[4-6]*	*[5-7]*	*[5-7]*	*[7-9]*	*[0-2]*	*[2-4]*
		Sample Identification:	*S-050603-JP-060*	*S-050603-JP-061*	*S-050703-JP-083*	*S-050703-JP-084*	*S-050703-JP-085*	*S-050703-JP-087*	*S-050703-JP-088*	*S-050703-JP-089*	*S-050603-JP-043*	*S-050603-JP-044*
		Sample Date:	*05/06/03*	*05/06/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/06/03*	*05/06/03*
Parameters	*TAGM Std.* [(1)]	*Units*										
Semi-Volatiles												
2,2'-oxybis(1-Chloropropane)	NS	µg/Kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
2,4,5-Trichlorophenol	100	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
2,4,6-Trichlorophenol	NS	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
2,4-Dichlorophenol	400	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
2,4-Dimethylphenol	NS	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
2,4-Dinitrophenol	200	µg/kg	2000 U	2000 U	1700 U	36000 U	36000 U	7700 U	7700 U	1900 U	1700 U	26000 U
2,4-Dinitrotoluene	NS	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
2,6-Dinitrotoluene	1000	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
2-Chloronaphthalene	NS	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
2-Chlorophenol	800	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
2-Methylnaphthalene	36400	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	290 J	400 U	42 J	5400 U
2-Methylphenol	100	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
2-Nitroaniline	NS	µg/kg	2000 U	2000 U	1700 U	36000 U	36000 U	7700 U	7700 U	1900 U	1700 U	26000 U
2-Nitrophenol	330	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
3,3'-Dichlorobenzidine	NS	µg/kg	2000 U	2000 U	1700 U	36000 U	36000 U	7700 U	7700 U	1900 U	1700 U	26000 U
3-Nitroaniline	500	µg/kg	2000 U	2000 U	1700 U	36000 U	36000 U	7700 U	7700 U	1900 U	1700 U	26000 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	2000 U	2000 U	1700 U	36000 U	36000 U	7700 U	7700 U	1900 U	1700 U	26000 U
4-Bromophenyl phenyl ether	NS	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
4-Chloro-3-methylphenol	240	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
4-Chloroaniline	220	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
4-Chlorophenyl phenyl ether	NS	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
4-Methylphenol	900	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
4-Nitroaniline	NS	µg/kg	2000 U	2000 U	1700 U	36000 U	36000 U	7700 U	7700 U	1900 U	1700 U	26000 U
4-Nitrophenol	100	µg/kg	2000 U	2000 U	1700 U	36000 U	36000 U	7700 U	7700 U	1900 U	1700 U	26000 U
Acenaphthene	50000	µg/Kg	410 U	400 U	340 U	7500 U	7400 U	170 J	740 J	400 U	350 U	5400 U
Acenaphthylene	41000	µg/Kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
Acetophenone	NS	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
Anthracene	50000	µg/kg	410 U	400 U	340 U	820 J	7400 U	350 J	1400 J	400 U	350 U	820 J
Atrazine	NS	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
Benzaldehyde	NS	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
Benzo(a)anthracene	224	µg/kg	410 U	400 U	340 U	**1900 J**	**790 J**	**680 J**	**2600 J**	400 U	85 J	**3200 J**
Benzo(a)pyrene	61	µg/Kg	410 U	400 U	340 U	**1800 J**	**760 J**	**640 J**	**2500 J**	400 U	**74 J**	**3200 J**
Benzo(b)fluoranthene	1100	µg/kg	410 U	400 U	340 U	**1700 J**	7400 U	530 J	**2500 J**	400 U	69 J	**2700 J**
Benzo(g,h,i)perylene	50000	µg/Kg	410 U	400 U	340 U	7500 U	7400 U	170 J	530 J	400 U	350 U	1200 J
Benzo(k)fluoranthene	1100	µg/kg	410 U	400 U	340 U	**1500 J**	7400 U	710 J	**2600 J**	400 U	75 J	**2900 J**
Biphenyl	NS	µg/Kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
bis(2-Chloroethoxy)methane	NS	µg/Kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
bis(2-Chloroethyl)ether	NS	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	200 J	400 U	350 U	5400 U

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-6*	*BH-6*	*BH-7*	*BH-7*	*BH-7*	*BH-7*	*BH-7*	*BH-7*	*BH-8*	*BH-8*
		Sample Depth [ft. BGS]:	*[6-8]*	*[8-9]*	*[0-2]*	*[2-4]*	*[4-6]*	*[5-7]*	*[5-7]*	*[7-9]*	*[0-2]*	*[2-4]*
		Sample Identification:	*S-050603-JP-060*	*S-050603-JP-061*	*S-050703-JP-083*	*S-050703-JP-084*	*S-050703-JP-085*	*S-050703-JP-087*	*S-050703-JP-088*	*S-050703-JP-089*	*S-050603-JP-043*	*S-050603-JP-044*
		Sample Date:	05/06/03	05/06/03	05/07/03	05/07/03	05/07/03	05/07/03	05/07/03	05/07/03	05/06/03	05/06/03
Parameters	*TAGM Std.* $^{(1)}$	*Units*										
Semi-Volatiles												
Butyl benzylphthalate	50000	μg/Kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
Caprolactam	NS	μg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
Carbazole	NS	μg/Kg	410 U	400 U	340 U	7500 U	7400 U	180 J	720 J	400 U	350 U	5400 U
Chrysene	400	μg/Kg	410 U	400 U	340 U	**1800 J**	**890 J**	**670 J**	**2500 J**	400 U	110 J	**4000 J**
Dibenz(a,h)anthracene	14	μg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	**220 J**	400 U	350 U	**480 J**
Dibenzofuran	6200	μg/Kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	480 J	400 U	350 U	5400 U
Diethyl phthalate	7100	μg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
Dimethyl phthalate	2000	μg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
Di-n-butylphthalate	8100	μg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	150 J	400 U	350 U	5400 U
Di-n-octyl phthalate	50000	μg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
Fluoranthene	50000	μg/Kg	410 U	400 U	43 J	4100 J	2000 J	1700 J	6000 J	400 U	190 J	7900
Fluorene	50000	μg/kg	410 U	400 U	340 U	7500 U	7400 U	200 J	840 J	400 U	350 U	5400 U
Hexachlorobenzene	410	μg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
Hexachlorobutadiene	NS	μg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
Hexachlorocyclopentadiene	NS	μg/kg	2000 U	2000 U	1700 U	36000 U	36000 U	7700 U	7700 U	1900 U	1700 U	26000 U
Hexachloroethane	NS	μg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
Indeno(1,2,3-cd)pyrene	3200	μg/kg	410 U	400 U	340 U	600 J	7400 U	180 J	600 J	400 U	27 J	1300 J
Isophorone	4400	μg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
Naphthalene	13000	μg/kg	410 U	400 U	340 U	7500 U	7400 U	230 J	770 J	400 U	350 U	5400 U
Nitrobenzene	200	μg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
N-Nitrosodi-n-propylamine	NS	μg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
N-Nitrosodiphenylamine	NS	μg/Kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
Pentachlorophenol	1000	μg/kg	2000 U	2000 U	1700 U	36000 U	36000 U	7700 U	7700 U	1900 U	1700 U	26000 U
Phenanthrene	50000	μg/kg	410 U	400 U	34 J	2800 J	1200 J	1200 J	4900 J	400 U	120 J	3700 J
Phenol	30	μg/kg	410 U	400 U	340 U	7500 U	7400 U	1600 U	1600 U	400 U	350 U	5400 U
Pyrene	50000	μg/kg	410 U	400 U	340 U	2900 J	1300 J	1200 J	3600 J	400 U	140 J	4500 J

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-8*	*BH-8*	*BH-9*	*BH-9*	*BH-9*	*BH-9*	*BH-10*	*BH-10*	*BH-10*	*BH-10*
		Sample Depth [ft. BGS]:	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*
		Sample Identification:	*S-050603-JP-045*	*S-050603-JP-046*	*S-050703-JP-075*	*S-050703-JP-076*	*S-050703-JP-077*	*S-050703-JP-078*	*S-050503-JP-006*	*S-050503-JP-007*	*S-050503-JP-008*	*S-050503-JP-009*
		Sample Date:	*05/06/03*	*05/06/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*
Parameters	*TAGM Std.* (1)	*Units*										
Semi-Volatiles												
2,2'-oxybis(1-Chloropropane)	NS	µg/Kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
2,4,5-Trichlorophenol	100	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
2,4,6-Trichlorophenol	NS	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
2,4-Dichlorophenol	400	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
2,4-Dimethylphenol	NS	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
2,4-Dinitrophenol	200	µg/kg	9000 U	1900 U	3500 U	1900 U	3800 U	2000 U	3800 U	2000 U	2000 U	2000 U
2,4-Dinitrotoluene	NS	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
2,6-Dinitrotoluene	1000	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
2-Chloronaphthalene	NS	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
2-Chlorophenol	800	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
2-Methylnaphthalene	36400	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	79 J	410 U	400 U
2-Methylphenol	100	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
2-Nitroaniline	NS	µg/kg	9000 U	1900 U	3500 U	1900 U	3800 U	2000 U	3800 U	2000 U	2000 U	2000 U
2-Nitrophenol	330	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
3,3'-Dichlorobenzidine	NS	µg/kg	9000 U	1900 U	3500 U	1900 U	3800 U	2000 U	3800 U	2000 U	2000 U	2000 U
3-Nitroaniline	500	µg/kg	9000 U	1900 U	3500 U	1900 U	3800 U	2000 U	3800 U	2000 U	2000 U	2000 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	9000 U	1900 U	3500 U	1900 U	3800 U	2000 U	3800 U	2000 U	2000 U	2000 U
4-Bromophenyl phenyl ether	NS	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
4-Chloro-3-methylphenol	240	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
4-Chloroaniline	220	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
4-Chlorophenyl phenyl ether	NS	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
4-Methylphenol	900	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
4-Nitroaniline	NS	µg/kg	9000 U	1900 U	3500 U	1900 U	3800 U	2000 U	3800 U	2000 U	2000 U	2000 U
4-Nitrophenol	100	µg/kg	9000 U	1900 U	3500 U	1900 U	3800 U	2000 U	3800 U	2000 U	2000 U	2000 U
Acenaphthene	50000	µg/Kg	360 J	400 U	720 U	400 U	790 U	410 U	170 J	110 J	46 J	400 U
Acenaphthylene	41000	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	56 J	410 U	400 U
Acetophenone	NS	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
Anthracene	50000	µg/kg	870 J	400 U	720 U	400 U	89 J	410 U	380 J	230 J	81 J	400 U
Atrazine	NS	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
Benzaldehyde	NS	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
Benzo(a)anthracene	224	µg/kg	**2300**	400 U	720 U	400 U	**290 J**	410 U	**690 J**	**500**	180 J	400 U
Benzo(a)pyrene	61	µg/Kg	**2000**	400 U	720 U	400 U	**210 J**	410 U	**580 J**	**430**	**150 J**	400 U
Benzo(b)fluoranthene	1100	µg/kg	**1800 J**	400 U	720 U	400 U	200 J	410 U	490 J	330 J	140 J	400 U
Benzo(g,h,i)perylene	50000	µg/Kg	490 J	400 U	720 U	400 U	790 U	410 U	390 J	250 J	110 J	400 U
Benzo(k)fluoranthene	1100	µg/kg	**2300**	400 U	720 U	400 U	180 J	410 U	510 J	320 J	100 J	400 U
Biphenyl	NS	µg/Kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
bis(2-Chloroethoxy)methane	NS	µg/Kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
bis(2-Chloroethyl)ether	NS	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-8*	*BH-8*	*BH-9*	*BH-9*	*BH-9*	*BH-9*	*BH-10*	*BH-10*	*BH-10*	*BH-10*
		Sample Depth [ft. BGS]:	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*
		Sample Identification:	*S-050603-JP-045*	*S-050603-JP-046*	*S-050703-JP-075*	*S-050703-JP-076*	*S-050703-JP-077*	*S-050703-JP-078*	*S-050503-JP-006*	*S-050503-JP-007*	*S-050503-JP-008*	*S-050503-JP-009*
		Sample Date:	05/06/03	05/06/03	05/07/03	05/07/03	05/07/03	05/07/03	05/05/03	05/05/03	05/05/03	05/05/03
Parameters	*TAGM Std.* (1)	*Units*										
Semi-Volatiles												
Butyl benzylphthalate	50000	µg/Kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
Caprolactam	NS	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
Carbazole	NS	µg/Kg	430 J	400 U	720 U	400 U	74 J	410 U	130 J	72 J	410 U	400 U
Chrysene	400	µg/Kg	**2400**	400 U	720 U	400 U	310 J	410 U	**690 J**	**490**	180 J	400 U
Dibenz(a,h)anthracene	14	µg/kg	**240 J**	400 U	720 U	400 U	790 U	410 U	**150 J**	**78 J**	410 U	400 U
Dibenzofuran	6200	µg/Kg	210 J	400 U	720 U	400 U	790 U	410 U	98 J	68 J	410 U	400 U
Diethyl phthalate	7100	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
Dimethyl phthalate	2000	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
Di-n-butylphthalate	8100	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
Di-n-octyl phthalate	50000	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
Fluoranthene	50000	µg/Kg	6700	400 U	720 U	400 U	1100	410 U	1400	990	370 J	400 U
Fluorene	50000	µg/kg	360 J	400 U	720 U	400 U	790 U	410 U	170 J	91 J	45 J	400 U
Hexachlorobenzene	410	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
Hexachlorobutadiene	NS	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
Hexachlorocyclopentadiene	NS	µg/kg	9000 U	1900 U	3500 U	1900 U	3800 U	2000 U	3800 U	2000 U	2000 U	2000 U
Hexachloroethane	NS	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
Indeno(1,2,3-cd)pyrene	3200	µg/kg	550 J	400 U	720 U	400 U	110 J	410 U	340 J	220 J	94 J	400 U
Isophorone	4400	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
Naphthalene	13000	µg/kg	1900 U	400 U	720 U	400 U	790 U	150 J	780 U	130 J	410 U	400 U
Nitrobenzene	200	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
N-Nitrosodi-n-propylamine	NS	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
N-Nitrosodiphenylamine	NS	µg/Kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
Pentachlorophenol	1000	µg/kg	9000 U	1900 U	3500 U	1900 U	3800 U	2000 U	3800 U	2000 U	2000 U	2000 U
Phenanthrene	50000	µg/kg	3900	400 U	720 U	400 U	480 J	410 U	1300	770	360 J	400 U
Phenol	30	µg/kg	1900 U	400 U	720 U	400 U	790 U	410 U	780 U	410 U	410 U	400 U
Pyrene	50000	µg/kg	3800	400 U	720 U	400 U	830	410 U	1300	780	350 J	400 U

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-10*	*BH-11*	*BH-11*	*BH-11*	*BH-11*	*BH-12*	*BH-12*	*BH-12*	*BH-12*	*BH-13*
		Sample Depth [ft. BGS]:	*[8-10]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*
		Sample Identification:	*S-050503-JP-010*	*S-050603-JP-062*	*S-050603-JP-063*	*S-050603-JP-064*	*S-050603-JP-065*	*S-050703-JP-071*	*S-050703-JP-072*	*S-050703-JP-073*	*S-050703-JP-074*	*S-050703-JP-079*
		Sample Date:	*05/05/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/07/03*	*05/07/03*
Parameters	*TAGM Std.* [(1)]	*Units*										
Semi-Volatiles												
2,2'-oxybis(1-Chloropropane)	NS	µg/Kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
2,4,5-Trichlorophenol	100	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
2,4,6-Trichlorophenol	NS	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
2,4-Dichlorophenol	400	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
2,4-Dimethylphenol	NS	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
2,4-Dinitrophenol	200	µg/kg	2000 U	1900 U	2000 U	2000 U	2000 U	17000 U	1900 U	1900 U	2000 U	6900 U
2,4-Dinitrotoluene	NS	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
2,6-Dinitrotoluene	1000	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
2-Chloronaphthalene	NS	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
2-Chlorophenol	800	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
2-Methylnaphthalene	36400	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
2-Methylphenol	100	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
2-Nitroaniline	NS	µg/kg	2000 U	1900 U	2000 U	2000 U	2000 U	17000 U	1900 U	1900 U	2000 U	6900 U
2-Nitrophenol	330	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
3,3'-Dichlorobenzidine	NS	µg/kg	2000 U	1900 U	2000 U	2000 U	2000 U	17000 U	1900 U	1900 U	2000 U	6900 U
3-Nitroaniline	500	µg/kg	2000 U	1900 U	2000 U	2000 U	2000 U	17000 U	1900 U	1900 U	2000 U	6900 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	2000 U	1900 U	2000 U	2000 U	2000 U	17000 U	1900 U	1900 U	2000 U	6900 U
4-Bromophenyl phenyl ether	NS	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
4-Chloro-3-methylphenol	240	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
4-Chloroaniline	220	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
4-Chlorophenyl phenyl ether	NS	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
4-Methylphenol	900	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
4-Nitroaniline	NS	µg/kg	2000 U	1900 U	2000 U	2000 U	2000 U	17000 U	1900 U	1900 U	2000 U	6900 U
4-Nitrophenol	100	µg/kg	2000 U	1900 U	2000 U	2000 U	2000 U	17000 U	1900 U	1900 U	2000 U	6900 U
Acenaphthene	50000	µg/Kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Acenaphthylene	41000	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Acetophenone	NS	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Anthracene	50000	µg/kg	410 U	400 U	410 U	410 U	410 U	440 J	380 U	400 U	410 U	1400 U
Atrazine	NS	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Benzaldehyde	NS	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Benzo(a)anthracene	224	µg/kg	46 J	140 J	410 U	410 U	410 U	**1700 J**	120 J	45 J	410 U	**250 J**
Benzo(a)pyrene	61	µg/Kg	410 U	**150 J**	410 U	410 U	410 U	**1800 J**	**120 J**	44 J	410 U	**230 J**
Benzo(b)fluoranthene	1100	µg/kg	410 U	120 J	410 U	410 U	410 U	**2300 J**	100 J	400 U	410 U	260 J
Benzo(g,h,i)perylene	50000	µg/Kg	410 U	61 J	410 U	410 U	410 U	440 J	100 J	400 U	410 U	130 J
Benzo(k)fluoranthene	1100	µg/kg	410 U	160 J	410 U	410 U	410 U	**1300 J**	100 J	400 U	410 U	1400 U
Biphenyl	NS	µg/Kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
bis(2-Chloroethoxy)methane	NS	µg/Kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
bis(2-Chloroethyl)ether	NS	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	410 U	57 J	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-10*	*BH-11*	*BH-11*	*BH-11*	*BH-11*	*BH-12*	*BH-12*	*BH-12*	*BH-12*	*BH-13*
		Sample Depth [ft. BGS]:	*[8-10]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*
		Sample Identification:	*S-050503-JP-010*	*S-050603-JP-062*	*S-050603-JP-063*	*S-050603-JP-064*	*S-050603-JP-065*	*S-050703-JP-071*	*S-050703-JP-072*	*S-050703-JP-073*	*S-050703-JP-074*	*S-050703-JP-079*
		Sample Date:	05/05/03	05/06/03	05/06/03	05/06/03	05/06/03	05/07/03	05/07/03	05/07/03	05/07/03	05/07/03
Parameters	*TAGM Std.* (1)	*Units*										
Semi-Volatiles												
Butyl benzylphthalate	50000	µg/Kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Caprolactam	NS	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Carbazole	NS	µg/Kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Chrysene	400	µg/Kg	46 J	170 J	410 U	410 U	410 U	1800 J	120 J	54 J	410 U	290 J
Dibenz(a,h)anthracene	14	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Dibenzofuran	6200	µg/Kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Diethyl phthalate	7100	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Dimethyl phthalate	2000	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Di-n-butylphthalate	8100	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Di-n-octyl phthalate	50000	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Fluoranthene	50000	µg/Kg	110 J	340 J	410 U	410 U	410 U	3400 J	240 J	120 J	410 U	490 J
Fluorene	50000	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Hexachlorobenzene	410	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Hexachlorobutadiene	NS	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Hexachlorocyclopentadiene	NS	µg/kg	2000 U	1900 U	2000 U	2000 U	2000 U	17000 U	1900 U	1900 U	2000 U	6900 U
Hexachloroethane	NS	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Indeno(1,2,3-cd)pyrene	3200	µg/kg	410 U	61 J	410 U	410 U	410 U	460 J	83 J	38 J	410 U	110 J
Isophorone	4400	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Naphthalene	13000	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Nitrobenzene	200	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
N-Nitrosodi-n-propylamine	NS	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
N-Nitrosodiphenylamine	NS	µg/Kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Pentachlorophenol	1000	µg/kg	2000 U	1900 U	2000 U	2000 U	2000 U	17000 U	1900 U	1900 U	2000 U	6900 U
Phenanthrene	50000	µg/kg	130 J	140 J	410 U	410 U	410 U	1400 J	120 J	95 J	410 U	180 J
Phenol	30	µg/kg	410 U	400 U	410 U	410 U	410 U	3500 U	380 U	400 U	410 U	1400 U
Pyrene	50000	µg/kg	110 J	210 J	410 U	410 U	410 U	2000 J	200 J	94 J	410 U	370 J

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-13*	*BH-13*	*BH-13*	*BH-14*	*BH-14*	*BH-14*	*BH-14*	*BH-14*	*BH-15*	*BH-15*
		Sample Depth [ft. BGS]:	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[8-10]*	*[0-2]*	*[2-4]*
		Sample Identification:	*S-050703-JP-080*	*S-050703-JP-081*	*S-050703-JP-082*	*S-050603-JP-066*	*S-050603-JP-067*	*S-050603-JP-068*	*S-050603-JP-069*	*S-050603-JP-070*	*S-050503-JP-011*	*S-050503-JP-012*
		Sample Date:	*05/07/03*	*05/07/03*	*05/07/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/05/03*	*05/05/03*
Parameters	*TAGM Std.* (1)	*Units*										
Semi-Volatiles												
2,2'-oxybis(1-Chloropropane)	NS	µg/Kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
2,4,5-Trichlorophenol	100	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
2,4,6-Trichlorophenol	NS	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
2,4-Dichlorophenol	400	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
2,4-Dimethylphenol	NS	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
2,4-Dinitrophenol	200	µg/kg	34000 U	34000 U	1900 U	1600 U	5200 U	6900 U	8400 U	1900 U	3700 U	3900 U
2,4-Dinitrotoluene	NS	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
2,6-Dinitrotoluene	1000	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
2-Chloronaphthalene	NS	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
2-Chlorophenol	800	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
2-Methylnaphthalene	36400	µg/kg	7100 U	7000 U	400 U	62 J	1100 U	1400 U	1700 U	400 U	210 J	87 J
2-Methylphenol	100	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
2-Nitroaniline	NS	µg/kg	34000 U	34000 U	1900 U	1600 U	5200 U	6900 U	8400 U	1900 U	3700 U	3900 U
2-Nitrophenol	330	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
3,3'-Dichlorobenzidine	NS	µg/kg	34000 U	34000 U	1900 U	1600 U	5200 U	6900 U	8400 U	1900 U	3700 U	3900 U
3-Nitroaniline	500	µg/kg	34000 U	34000 U	1900 U	1600 U	5200 U	6900 U	8400 U	1900 U	3700 U	3900 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	34000 U	34000 U	1900 U	1600 U	5200 U	6900 U	8400 U	1900 U	3700 U	3900 U
4-Bromophenyl phenyl ether	NS	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
4-Chloro-3-methylphenol	240	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
4-Chloroaniline	220	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
4-Chlorophenyl phenyl ether	NS	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
4-Methylphenol	900	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
4-Nitroaniline	NS	µg/kg	34000 U	34000 U	1900 U	1600 U	5200 U	6900 U	8400 U	1900 U	3700 U	3900 U
4-Nitrophenol	100	µg/kg	34000 U	34000 U	1900 U	1600 U	5200 U	6900 U	8400 U	1900 U	3700 U	3900 U
Acenaphthene	50000	µg/Kg	7100 U	7000 U	400 U	340 U	1100 U	120 J	1700 U	400 U	700 J	150 J
Acenaphthylene	41000	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Acetophenone	NS	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Anthracene	50000	µg/kg	7100 U	7000 U	400 U	340 U	300 J	340 J	1700 U	400 U	1400	350 J
Atrazine	NS	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Benzaldehyde	NS	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Benzo(a)anthracene	224	µg/kg	**1200 J**	**700 J**	400 U	340 U	**1300**	**1000 J**	**330 J**	400 U	**2100**	**660 J**
Benzo(a)pyrene	61	µg/Kg	**1200 J**	**700 J**	400 U	340 U	**1200**	**910 J**	**380 J**	400 U	**1800**	**550 J**
Benzo(b)fluoranthene	1100	µg/kg	**1300 J**	7000 U	400 U	340 U	990 J	820 J	350 J	400 U	**1500**	500 J
Benzo(g,h,i)perylene	50000	µg/Kg	7100 U	7000 U	400 U	340 U	420 J	240 J	1700 U	400 U	1200	380 J
Benzo(k)fluoranthene	1100	µg/kg	7100 U	7000 U	400 U	340 U	**1200**	1000 J	430 J	400 U	**1400**	340 J
Biphenyl	NS	µg/Kg	7100 U	7000 U	400 U	44 J	1100 U	1400 U	1700 U	400 U	760 U	810 U
bis(2-Chloroethoxy)methane	NS	µg/Kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
bis(2-Chloroethyl)ether	NS	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-13*	*BH-13*	*BH-13*	*BH-14*	*BH-14*	*BH-14*	*BH-14*	*BH-14*	*BH-15*	*BH-15*
		Sample Depth [ft. BGS]:	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[8-10]*	*[0-2]*	*[2-4]*
		Sample Identification:	*S-050703-JP-080*	*S-050703-JP-081*	*S-050703-JP-082*	*S-050603-JP-066*	*S-050603-JP-067*	*S-050603-JP-068*	*S-050603-JP-069*	*S-050603-JP-070*	*S-050503-JP-011*	*S-050503-JP-012*
		Sample Date:	05/07/03	05/07/03	05/07/03	05/06/03	05/06/03	05/06/03	05/06/03	05/06/03	05/05/03	05/05/03
Parameters	*TAGM Std.* (1)	*Units*										
Semi-Volatiles												
Butyl benzylphthalate	50000	µg/Kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Caprolactam	NS	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Carbazole	NS	µg/Kg	7100 U	7000 U	400 U	340 U	160 J	180 J	1700 U	400 U	650 J	85 J
Chrysene	400	µg/Kg	**1200 J**	**750 J**	400 U	61 J	**1600**	**1100 J**	370 J	400 U	**2100**	**670 J**
Dibenz(a,h)anthracene	14	µg/kg	7100 U	7000 U	400 U	340 U	**190 J**	1400 U	1700 U	400 U	**390 J**	**110 J**
Dibenzofuran	6200	µg/Kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	420 J	84 J
Diethyl phthalate	7100	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Dimethyl phthalate	2000	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Di-n-butylphthalate	8100	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Di-n-octyl phthalate	50000	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Fluoranthene	50000	µg/Kg	2100 J	1500 J	400 U	63 J	3200	2800	740 J	400 U	5600	1300
Fluorene	50000	µg/kg	7100 U	7000 U	400 U	340 U	100 J	140 J	1700 U	400 U	720 J	170 J
Hexachlorobenzene	410	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Hexachlorobutadiene	NS	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Hexachlorocyclopentadiene	NS	µg/kg	34000 U	34000 U	1900 U	1600 U	5200 U	6900 U	8400 U	1900 U	3700 U	3900 U
Hexachloroethane	NS	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Indeno(1,2,3-cd)pyrene	3200	µg/kg	600 J	7000 U	400 U	340 U	470 J	260 J	1700 U	400 U	1000	330 J
Isophorone	4400	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Naphthalene	13000	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	340 J	110 J
Nitrobenzene	200	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
N-Nitrosodi-n-propylamine	NS	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
N-Nitrosodiphenylamine	NS	µg/Kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Pentachlorophenol	1000	µg/kg	34000 U	34000 U	1900 U	1600 U	5200 U	6900 U	8400 U	1900 U	3700 U	3900 U
Phenanthrene	50000	µg/kg	920 J	950 J	400 U	72 J	1800	1600	320 J	400 U	5900	1200
Phenol	30	µg/kg	7100 U	7000 U	400 U	340 U	1100 U	1400 U	1700 U	400 U	760 U	810 U
Pyrene	50000	µg/kg.	1600 J	1100 J	400 U	39 J	2200	1700	600 J	400 U	5100	1300

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	**BH-15**	**BH-15**	**BH-15**	**BH-15**	**BH-16**	**BH-16**	**BH-16**	**BH-16**	**BH-16**	**BH-16**
		Sample Depth [ft. BGS]:	*[4-6]*	*[6-8]*	*[8-10]*	*[8-9]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[6-8]*	*[8-10]*
		Sample Identification:	*S-050503-JP-013*	*S-050503-JP-014*	*S-050503-JP-015*	*S-050703-JP-086*	*S-050603-JP-036*	*S-050603-JP-037*	*S-050603-JP-038*	*S-050603-JP-039*	*S-050603-JP-040*	*S-050603-JP-041*
		Sample Date:	*05/05/03*	*05/05/03*	*05/05/03*	*05/07/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*	*05/06/03*
Parameters	*TAGM Std.* (1)	*Units*										
Semi-Volatiles												
2,2'-oxybis(1-Chloropropane)	NS	µg/Kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
2,4,5-Trichlorophenol	100	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
2,4,6-Trichlorophenol	NS	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
2,4-Dichlorophenol	400	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
2,4-Dimethylphenol	NS	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
2,4-Dinitrophenol	200	µg/kg	1900 U	2000 U	2000 U	2000 U	3400 U	1700 U	1800 U	1800 U	1900 U	1700 U
2,4-Dinitrotoluene	NS	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
2,6-Dinitrotoluene	1000	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
2-Chloronaphthalene	NS	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
2-Chlorophenol	800	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
2-Methylnaphthalene	36400	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
2-Methylphenol	100	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
2-Nitroaniline	NS	µg/kg	1900 U	2000 U	2000 U	2000 U	3400 U	1700 U	1800 U	1800 U	1900 U	1700 U
2-Nitrophenol	330	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
3,3'-Dichlorobenzidine	NS	µg/kg	1900 U	2000 U	2000 U	2000 U	3400 U	1700 U	1800 U	1800 U	1900 U	1700 U
3-Nitroaniline	500	µg/kg	1900 U	2000 U	2000 U	2000 U	3400 U	1700 U	1800 U	1800 U	1900 U	1700 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	1900 U	2000 U	2000 U	2000 U	3400 U	1700 U	1800 U	1800 U	1900 U	1700 U
4-Bromophenyl phenyl ether	NS	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
4-Chloro-3-methylphenol	240	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
4-Chloroaniline	220	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
4-Chlorophenyl phenyl ether	NS	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
4-Methylphenol	900	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
4-Nitroaniline	NS	µg/kg	1900 U	2000 U	2000 U	2000 U	3400 U	1700 U	1800 U	1800 U	1900 U	1700 U
4-Nitrophenol	100	µg/kg	1900 U	2000 U	2000 U	2000 U	3400 U	1700 U	1800 U	1800 U	1900 U	1700 U
Acenaphthene	50000	µg/Kg	400 U	400 U	400 U	400 U	100 J	28 J	370 U	370 U	390 U	350 U
Acenaphthylene	41000	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Acetophenone	NS	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Anthracene	50000	µg/kg	400 U	400 U	400 U	400 U	140 J	64 J	43 J	43 J	72 J	58 J
Atrazine	NS	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Benzaldehyde	NS	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Benzo(a)anthracene	224	µg/kg	400 U	400 U	400 U	400 U	770	330 J	180 J	150 J	190 J	**330 J**
Benzo(a)pyrene	61	µg/Kg	400 U	400 U	400 U	400 U	**860**	**390**	**200 J**	**160 J**	**180 J**	**370**
Benzo(b)fluoranthene	1100	µg/kg	400 U	400 U	400 U	400 U	900	470	200 J	160 J	180 J	440
Benzo(g,h,i)perylene	50000	µg/Kg	400 U	400 U	400 U	400 U	310 J	160 J	86 J	66 J	76 J	160 J
Benzo(k)fluoranthene	1100	µg/kg	400 U	400 U	400 U	400 U	1100	440	240 J	170 J	200 J	450
Biphenyl	NS	µg/Kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
bis(2-Chloroethoxy)methane	NS	µg/Kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
bis(2-Chloroethyl)ether	NS	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	400 U	400 U	400 U	400 U	340 J	180 J	95 J	66 J	55 J	200 J

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-15*	*BH-15*	*BH-15*	*BH-15*	*BH-16*	*BH-16*	*BH-16*	*BH-16*	*BH-16*	*BH-16*
		Sample Depth [ft. BGS]:	*[4-6]*	*[6-8]*	*[8-10]*	*[8-9]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[6-8]*	*[8-10]*
		Sample Identification:	*S-050503-JP-013*	*S-050503-JP-014*	*S-050503-JP-015*	*S-050703-JP-086*	*S-050603-JP-036*	*S-050603-JP-037*	*S-050603-JP-038*	*S-050603-JP-039*	*S-050603-JP-040*	*S-050603-JP-041*
		Sample Date:	05/05/03	05/05/03	05/05/03	05/07/03	05/06/03	05/06/03	05/06/03	05/06/03	05/06/03	05/06/03
Parameters	*TAGM Std.* [(1)]	*Units*										
Semi-Volatiles												
Butyl benzylphthalate	50000	µg/Kg	400 U	400 U	400 U	400 U	410 J	82 J	370 U	370 U	390 U	82 J
Caprolactam	NS	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Carbazole	NS	µg/Kg	400 U	400 U	400 U	400 U	110 J	56 J	33 J	370 U	42 J	52 J
Chrysene	400	µg/Kg	400 U	400 U	400 U	400 U	**1000**	**490**	250 J	190 J	230 J	**490**
Dibenz(a,h)anthracene	14	µg/kg	400 U	400 U	400 U	400 U	**110 J**	**60 J**	**30 J**	**24 J**	**28 J**	**48 J**
Dibenzofuran	6200	µg/Kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Diethyl phthalate	7100	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	58 J
Dimethyl phthalate	2000	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Di-n-butylphthalate	8100	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Di-n-octyl phthalate	50000	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Fluoranthene	50000	µg/Kg	400 U	400 U	400 U	400 U	2400	1000	550	400	580	1000
Fluorene	50000	µg/kg	400 U	400 U	400 U	400 U	84 J	350 U	370 U	370 U	390 U	350 U
Hexachlorobenzene	410	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Hexachlorobutadiene	NS	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Hexachlorocyclopentadiene	NS	µg/kg	1900 U	2000 U	2000 U	2000 U	3400 U	1700 U	1800 U	1800 U	1900 U	1700 U
Hexachloroethane	NS	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Indeno(1,2,3-cd)pyrene	3200	µg/kg	400 U	400 U	400 U	400 U	320 J	170 J	88 J	68 J	75 J	170 J
Isophorone	4400	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Naphthalene	13000	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Nitrobenzene	200	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
N-Nitrosodi-n-propylamine	NS	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
N-Nitrosodiphenylamine	NS	µg/Kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Pentachlorophenol	1000	µg/kg	1900 U	2000 U	2000 U	2000 U	3400 U	1700 U	1800 U	1800 U	1900 U	1700 U
Phenanthrene	50000	µg/kg	400 U	400 U	400 U	400 U	1100	370	250 J	200 J	350 J	370
Phenol	30	µg/kg	400 U	400 U	400 U	400 U	710 U	350 U	370 U	370 U	390 U	350 U
Pyrene	50000	µg/kg	400 U	400 U	400 U	400 U	1500	640	360 J	270 J	390	690

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-16*	*BH-17*	*BH-17*	*BH-17*	*BH-17*	*BH-18*	*BH-18*	*BH-18*	*BH-18B*	*BH-18B*
		Sample Depth [ft. BGS]:	*[10-11]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[8-10]*	*[0-2]*	*[2-4]*
		Sample Identification:	*S-050603-JP-042*	*S-050503-JP-032*	*S-050503-JP-033*	*S-050503-JP-034*	*S-050503-JP-035*	*S-050503-JP-024*	*S-050503-JP-025*	*S-050503-JP-026*	*S-050503-JP-027*	*S-050503-JP-028*
		Sample Date:	*05/06/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*
Parameters	*TAGM Std.* (1)	*Units*										
Semi-Volatiles												
2,2'-oxybis(1-Chloropropane)	NS	µg/Kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
2,4,5-Trichlorophenol	100	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
2,4,6-Trichlorophenol	NS	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
2,4-Dichlorophenol	400	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
2,4-Dimethylphenol	NS	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
2,4-Dinitrophenol	200	µg/kg	1700 U	8200 U	1600 U	1700 U	1900 U	1700 U	2000 U	2000 U	2100 U	2000 U
2,4-Dinitrotoluene	NS	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
2,6-Dinitrotoluene	1000	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
2-Chloronaphthalene	NS	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
2-Chlorophenol	800	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
2-Methylnaphthalene	36400	µg/kg	350 U	1700 U	190 J	38 J	390 U	76 J	420 U	410 U	440 U	420 U
2-Methylphenol	100	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
2-Nitroaniline	NS	µg/kg	1700 U	8200 U	1600 U	1700 U	1900 U	1700 U	2000 U	2000 U	2100 U	2000 U
2-Nitrophenol	330	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
3,3'-Dichlorobenzidine	NS	µg/kg	1700 U	8200 U	1600 U	1700 U	1900 U	1700 U	2000 U	2000 U	2100 U	2000 U
3-Nitroaniline	500	µg/kg	1700 U	8200 U	1600 U	1700 U	1900 U	1700 U	2000 U	2000 U	2100 U	2000 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	1700 U	8200 U	1600 U	1700 U	1900 U	1700 U	2000 U	2000 U	2100 U	2000 U
4-Bromophenyl phenyl ether	NS	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
4-Chloro-3-methylphenol	240	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
4-Chloroaniline	220	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
4-Chlorophenyl phenyl ether	NS	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
4-Methylphenol	900	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
4-Nitroaniline	NS	µg/kg	1700 U	8200 U	1600 U	1700 U	1900 U	1700 U	2000 U	2000 U	2100 U	2000 U
4-Nitrophenol	100	µg/kg	1700 U	8200 U	1600 U	1700 U	1900 U	1700 U	2000 U	2000 U	2100 U	2000 U
Acenaphthene	50000	µg/Kg	350 U	1700 U	44 J	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Acenaphthylene	41000	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Acetophenone	NS	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Anthracene	50000	µg/kg	57 J	1700 U	42 J	37 J	390 U	340 U	420 U	410 U	440 U	420 U
Atrazine	NS	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Benzaldehyde	NS	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Benzo(a)anthracene	224	µg/kg	**270 J**	1700 U	90 J	110 J	71 J	59 J	420 U	410 U	440 U	54 J
Benzo(a)pyrene	61	µg/Kg	**280 J**	1700 U	**120 J**	**100 J**	**62 J**	59 J	420 U	410 U	440 U	54 J
Benzo(b)fluoranthene	1100	µg/kg	310 J	1700 U	180 J	130 J	58 J	97 J	420 U	410 U	440 U	420 U
Benzo(g,h,i)perylene	50000	µg/Kg	130 J	1700 U	38 J	350 U	390 U	34 J	420 U	410 U	440 U	40 J
Benzo(k)fluoranthene	1100	µg/kg	360	1700 U	140 J	77 J	390 U	59 J	420 U	410 U	440 U	420 U
Biphenyl	NS	µg/Kg	350 U	1700 U	90 J	350 U	390 U	62 J	420 U	410 U	440 U	420 U
bis(2-Chloroethoxy)methane	NS	µg/Kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
bis(2-Chloroethyl)ether	NS	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	140 J	1700 U	340 U	350 U	390 U	44 J	420 U	410 U	440 U	420 U

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-16*	*BH-17*	*BH-17*	*BH-17*	*BH-17*	*BH-18*	*BH-18*	*BH-18*	*BH-18B*	*BH-18B*
		Sample Depth [ft. BGS]:	*[10-11]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*	*[0-2]*	*[2-4]*	*[8-10]*	*[0-2]*	*[2-4]*
		Sample Identification:	*S-050603-JP-042*	*S-050503-JP-032*	*S-050503-JP-033*	*S-050503-JP-034*	*S-050503-JP-035*	*S-050503-JP-024*	*S-050503-JP-025*	*S-050503-JP-026*	*S-050503-JP-027*	*S-050503-JP-028*
		Sample Date:	05/06/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03
Parameters	*TAGM Std.* $^{(1)}$	*Units*										
Semi-Volatiles												
Butyl benzylphthalate	50000	µg/Kg	63 J	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Caprolactam	NS	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Carbazole	NS	µg/Kg	43 J	1700 U	40 J	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Chrysene	400	µg/Kg	390	1700 U	210 J	140 J	100 J	130 J	420 U	410 U	440 U	73 J
Dibenz(a,h)anthracene	14	µg/kg	42 J	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Dibenzofuran	6200	µg/Kg	350 U	1700 U	43 J	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Diethyl phthalate	7100	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Dimethyl phthalate	2000	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Di-n-butylphthalate	8100	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Di-n-octyl phthalate	50000	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Fluoranthene	50000	µg/Kg	760	200 J	580	260 J	150 J	350	420 U	410 U	440 U	120 J
Fluorene	50000	µg/kg	350 U	1700 U	44 J	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Hexachlorobenzene	410	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Hexachlorobutadiene	NS	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Hexachlorocyclopentadiene	NS	µg/kg	1700 U	8200 U	1600 U	1700 U	1900 U	1700 U	2000 U	2000 U	2100 U	2000 U
Hexachloroethane	NS	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Indeno(1,2,3-cd)pyrene	3200	µg/kg	120 J	1700 U	35 J	28 J	390 U	340 U	420 U	410 U	440 U	31 J
Isophorone	4400	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Naphthalene	13000	µg/kg	350 U	1700 U	44 J	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Nitrobenzene	200	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
N-Nitrosodi-n-propylamine	NS	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
N-Nitrosodiphenylamine	NS	µg/Kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Pentachlorophenol	1000	µg/kg	1700 U	8200 U	1600 U	1700 U	1900 U	1700 U	2000 U	2000 U	2100 U	2000 U
Phenanthrene	50000	µg/kg	310 J	1700 U	490	180 J	95 J	170 J	420 U	410 U	440 U	64 J
Phenol	30	µg/kg	350 U	1700 U	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U
Pyrene	50000	µg/kg	540	1700 U	230 J	130 J	100 J	170 J	420 U	410 U	440 U	100 J

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-18B*	*BH-19*	*BH-19*	*BH-19*	*BH-19*	*BH-20*	*BH-20*	*BH-20*	*BH-20*
		Sample Depth [ft. BGS]:	*[4-6]*	*[0-2]*	*[2-4]*	*[2-4]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*
		Sample Identification:	*S-050503-JP-031*	*S-050503-JP-020*	*S-050503-JP-021*	*S-050503-JP-022*	*S-050503-JP-023*	*S-050503-JP-016*	*S-050503-JP-017*	*S-050503-JP-018*	*S-050503-JP-019*
		Sample Date:	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*
Parameters	*TAGM Std.* [(1)]	*Units*									
Semi-Volatiles											
2,2'-oxybis(1-Chloropropane)	NS	µg/Kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
2,4,5-Trichlorophenol	100	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
2,4,6-Trichlorophenol	NS	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
2,4-Dichlorophenol	400	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
2,4-Dimethylphenol	NS	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
2,4-Dinitrophenol	200	µg/kg	2000 U	1800 U	1900 U	1900 U	2000 U	1900 U	1800 U	10000 U	4000 U
2,4-Dinitrotoluene	NS	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
2,6-Dinitrotoluene	1000	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
2-Chloronaphthalene	NS	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
2-Chlorophenol	800	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
2-Methylnaphthalene	36400	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
2-Methylphenol	100	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
2-Nitroaniline	NS	µg/kg	2000 U	1800 U	1900 U	1900 U	2000 U	1900 U	1800 U	10000 U	4000 U
2-Nitrophenol	330	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
3,3'-Dichlorobenzidine	NS	µg/kg	2000 U	1800 U	1900 U	1900 U	2000 U	1900 U	1800 U	10000 U	4000 U
3-Nitroaniline	500	µg/kg	2000 U	1800 U	1900 U	1900 U	2000 U	1900 U	1800 U	10000 U	4000 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	2000 U	1800 U	1900 U	1900 U	2000 U	1900 U	1800 U	10000 U	4000 U
4-Bromophenyl phenyl ether	NS	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
4-Chloro-3-methylphenol	240	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
4-Chloroaniline	220	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
4-Chlorophenyl phenyl ether	NS	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
4-Methylphenol	900	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
4-Nitroaniline	NS	µg/kg	2000 U	1800 U	1900 U	1900 U	2000 U	1900 U	1800 U	10000 U	4000 U
4-Nitrophenol	100	µg/kg	2000 U	1800 U	1900 U	1900 U	2000 U	1900 U	1800 U	10000 U	4000 U
Acenaphthene	50000	µg/Kg	42 J	380 U	400 U	400 U	400 U	36 J	370 U	2100 U	830 U
Acenaphthylene	41000	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Acetophenone	NS	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Anthracene	50000	µg/kg	53 J	380 U	400 U	400 U	400 U	80 J	370 U	270 J	830 U
Atrazine	NS	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Benzaldehyde	NS	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Benzo(a)anthracene	224	µg/kg	220 J	380 U	400 U	400 U	400 U	160 J	52 J	**660 J**	140 J
Benzo(a)pyrene	61	µg/Kg	**240 J**	380 U	400 U	400 U	400 U	**130 J**	49 J	**520 J**	**110 J**
Benzo(b)fluoranthene	1100	µg/kg	270 J	380 U	400 U	400 U	400 U	110 J	370 U	400 J	830 U
Benzo(g,h,i)perylene	50000	µg/Kg	83 J	380 U	400 U	400 U	400 U	100 J	42 J	440 J	830 U
Benzo(k)fluoranthene	1100	µg/kg	180 J	380 U	400 U	400 U	400 U	110 J	370 U	470 J	830 U
Biphenyl	NS	µg/Kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
bis(2-Chloroethoxy)methane	NS	µg/Kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
bis(2-Chloroethyl)ether	NS	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	50 J	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	87 J

TABLE A-2

SOILS PRE-EXCAVATION ANALYTICAL DATA - SEMI-VOLATILE ORGANIC COMPOUNDS
PARCEL 2 - SENECA STREET

		Sample Location:	*BH-18B*	*BH-19*	*BH-19*	*BH-19*	*BH-19*	*BH-20*	*BH-20*	*BH-20*	*BH-20*
		Sample Depth [ft. BGS]:	*[4-6]*	*[0-2]*	*[2-4]*	*[2-4]*	*[6-8]*	*[0-2]*	*[2-4]*	*[4-6]*	*[6-8]*
		Sample Identification:	*S-050503-JP-031*	*S-050503-JP-020*	*S-050503-JP-021*	*S-050503-JP-022*	*S-050503-JP-023*	*S-050503-JP-016*	*S-050503-JP-017*	*S-050503-JP-018*	*S-050503-JP-019*
		Sample Date:	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*	*05/05/03*
Parameters	*TAGM Std.* (1)	*Units*									
Semi-Volatiles											
Butyl benzylphthalate	50000	µg/Kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	45000	91 J
Caprolactam	NS	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Carbazole	NS	µg/Kg	75 J	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Chrysene	400	µg/Kg	310 J	380 U	400 U	400 U	400 U	160 J	54 J	**620 J**	150 J
Dibenz(a,h)anthracene	14	µg/kg	**40 J**	380 U	400 U	400 U	400 U	**29 J**	370 U	2100 U	830 U
Dibenzofuran	6200	µg/Kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Diethyl phthalate	7100	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Dimethyl phthalate	2000	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Di-n-butylphthalate	8100	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Di-n-octyl phthalate	50000	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Fluoranthene	50000	µg/Kg	760	48 J	400 U	400 U	400 U	320 J	87 J	1400 J	290 J
Fluorene	50000	µg/kg	42 J	380 U	400 U	400 U	400 U	39 J	370 U	2100 U	830 U
Hexachlorobenzene	410	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Hexachlorobutadiene	NS	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Hexachlorocyclopentadiene	NS	µg/kg	2000 U	1800 U	1900 U	1900 U	2000 U	1900 U	1800 U	10000 U	4000 U
Hexachloroethane	NS	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Indeno(1,2,3-cd)pyrene	3200	µg/kg	84 J	380 U	400 U	400 U	400 U	83 J	34 J	350 J	830 U
Isophorone	4400	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Naphthalene	13000	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	290 J	830 U
Nitrobenzene	200	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
N-Nitrosodi-n-propylamine	NS	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
N-Nitrosodiphenylamine	NS	µg/Kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Pentachlorophenol	1000	µg/kg	2000 U	1800 U	1900 U	1900 U	2000 U	1900 U	1800 U	10000 U	4000 U
Phenanthrene	50000	µg/kg	500	380 U	400 U	400 U	400 U	290 J	43 J	1200 J	160 J
Phenol	30	µg/kg	410 U	380 U	400 U	400 U	400 U	390 U	370 U	2100 U	830 U
Pyrene	50000	µg/kg	450	380 U	400 U	400 U	400 U	310 J	81 J	1100 J	230 J

Notes:

(1)	New York State Recommended Soil Cleanup Objectives, Technical and Administrative Guidance Memorandum (TAGM) #4046, January 24, 1994.
-	Not analyzed.
J	Estimated.
NS	No Standard.
U	Non-detect at associated value.
UJ	The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.
☐	Concentration exceeds standard.

TABLE A-3

SOILS PRE-EXCAVATION ANALYTICAL DATA - METALS
PARCEL 2 - SENECA STREET

		Sample Location:	*SB-11*	*SB-12*	*SB-13*	*SB-14*	*SB-15*	*MW-1*	*MW-3*
		Sample Depth [ft. BGS]:	*[7-9]*	*[7-9]*	*[7-9]*	*[5-7]*	*[5-7]*	*[3-5]*	*[0-2]*
		Sample Identification:	*S-091300-KL-001*	*S-091300-KL-005*	*S-091300-KL-002*	*S-091300-KL-003*	*S-091300-KL-004*	*S-091400-KL-007*	*S-091400-KL-009*
		Sample Date:	*09/13/00*	*09/13/00*	*09/13/00*	*09/13/00*	*09/13/00*	*09/14/00*	*09/14/00*
Parameters	*TAGM Std.* [(1)]	*Units*							
Metals									
Aluminum	Background	mg/Kg	14500	14100	10200	10500	4230	11700	9460
Antimony	Background	mg/Kg	0.70 UJ	0.93 J	0.62 UJ	0.32 UJ	0.46 UJ	0.80 UJ	0.81 J
Arsenic	7.5	mg/Kg	**9.7**	**12.9**	**8.6**	**9.3**	4.8	**8.5**	**8.1**
Barium	300	mg/Kg	80.2	103	50.8	56.4	71.4	68.7	76.2
Beryllium	Background	mg/Kg	0.60 UJ	0.69 UJ	0.47 UJ	0.50 UJ	0.24 UJ	0.47 UJ	0.51 UJ
Cadmium	1	mg/Kg	0.61 UJ	0.62 UJ	0.60 UJ	0.60 UJ	0.48 J	0.60 UJ	0.12 J
Calcium	Background	mg/Kg	2020	1450	1840	2190	178000	20000	27400
Chromium Total	10	mg/Kg	**18.9**	**18.6**	**13.2**	**12.9**	**22.8**	**16.0**	**14.9**
Cobalt	30	mg/Kg	13.2	16.6	11.9	14.8	3.0	11.1	10.7
Copper	25	mg/Kg	**30.0**	**33.7**	**27.1**	**31.5**	21.0	16.8	**30.2**
Iron	Background	mg/Kg	34000	36100	26300	26900	9270	28500	23100
Lead	Background	mg/Kg	12.6	17.3	11.7	13.7	354	33.9	87.6
Magnesium	Background	mg/Kg	5360 J	5230 J	3790 J	3730 J	26400 J	4740 J	9790 J
Manganese	Background	mg/Kg	459	673	422	668	315	453	627
Nickel	13	mg/Kg	**37.8**	**37.5**	**28.4**	**31.2**	8.7	**23.6**	**22.2**
Potassium	Background	mg/Kg	1090	1030	737	902	585	915	924
Selenium	2	mg/Kg	1.2 U	0.62 U	0.60 U	0.60 U	0.54 U	0.34	0.62 U
Silver	Background	mg/Kg	1.2 U	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U
Sodium	Background	mg/Kg	112 U	255 U	156 U	114 U	421	343 U	138 U
Thallium	Background	mg/Kg	1.8	1.2	1.4	2.2	0.86	1.2	1.5
Vanadium	150	mg/Kg	21.0	21.4	17.3	18.2	9.6 U	17.8	18.8
Zinc	20	mg/Kg	**102**	**103**	**81.0**	**84.6**	**186**	**84.3**	**121**
Mercury	0.1	mg/Kg	0.032 U	0.026 U	0.017 U	0.033 U	**0.13**	0.043	**0.11**
Cyanide (total)	NS	mg/Kg	0.61 U	0.62 U	0.60 U	0.60 U	0.53 U	0.60 U	17.1

TABLE A-3

SOILS PRE-EXCAVATION ANALYTICAL DATA - METALS
PARCEL 2 - SENECA STREET

Parameters	TAGM Std. [1]	Units							
		Sample Location:	*MW-3*	*MW-5*	*MW-2*	*MW-2*	*MW-2*	*MW-4*	*SB-16A*
		Sample Depth [ft. BGS]:	*[4-6]*	*[1-3]*	*[3-5]*	*[7-9]*	*[7-9]*	*[3-5]*	*[7-9]*
		Sample Identification:	*S-091400-KL-010*	*S-091400-KL-008*	*S-091500-KL-012*	*S-091500-KL-013*	*S-091500-KL-014*	*S-091500-KL-015*	*S-091800-KL-016*
		Sample Date:	*09/14/00*	*09/14/00*	*09/15/00*	*09/15/00*	*09/15/00*	*09/15/00*	*09/18/00*
Metals									
Aluminum	Background	mg/Kg	12900	14100	15300	9050	8990	9060	11100
Antimony	Background	mg/Kg	0.54 UJ	0.58 UJ	0.64 UJ	0.40 UJ	0.88 J	0.46 UJ	0.78 UJ
Arsenic	7.5	mg/Kg	**10.7**	**9.7**	4.8	7.5	7.0	4.6	**9.9**
Barium	300	mg/Kg	107	85.9	**457**	55.1	60.1	129	67.9
Beryllium	Background	mg/Kg	0.61 UJ	0.74 UJ	1.8 UJ	0.45 UJ	0.43 UJ	1.3 UJ	0.53 UJ
Cadmium	1	mg/Kg	0.63 UJ	**1.5 J**	0.60 UJ	0.61 UJ	0.62 UJ	0.88 J	0.63 UJ
Calcium	Background	mg/Kg	1770	42600	171000	2760	2890	201000	2100
Chromium Total	10	mg/Kg	**16.9**	**18.4**	**12.6**	**11.9**	**12.0**	6.1	**13.7**
Cobalt	30	mg/Kg	15.9	15.7	8.5	11.2	10.9	2.6	16.8
Copper	25	mg/Kg	**31.0**	**96.6**	20.6	**27.4**	**26.1**	11.2	**32.0**
Iron	Background	mg/Kg	32400	30800	11700	23600	23200	9310	28000
Lead	Background	mg/Kg	15.8	44.8	25.6	11.3	11.1	34.9	13.9
Magnesium	Background	mg/Kg	4830 J	11100 J	31200 J	3400 J	3470 J	9420 J	3940 J
Manganese	Background	mg/Kg	603	515	1700	384	365	413	708
Nickel	13	mg/Kg	**35.4**	**31.8**	11.3	**25.4**	**26.0**	7.6	**31.3**
Potassium	Background	mg/Kg	943	1620	1360	771	691	931	795
Selenium	2	mg/Kg	0.63 U	0.67 U	1.2 U	0.61 U	0.62 U	0.53 U	0.63 U
Silver	Background	mg/Kg	1.3 U	1.4 U	0.19	1.2 U	1.2 U	1.1 U	1.3 U
Sodium	Background	mg/Kg	79.0 U	151 U	507	142 U	161 U	358 U	220 U
Thallium	Background	mg/Kg	1.1	1.5	3.4	1.4	0.87	1.6	1.4
Vanadium	150	mg/Kg	19.6	21.4	13.2	15.7	14.8	9.3 U	17.9
Zinc	20	mg/Kg	**108**	**1310**	**141**	**83.2**	**82.0**	**311**	**87.5**
Mercury	0.1	mg/Kg	0.035	0.091	0.068	0.031	0.023	0.042	0.034
Cyanide (total)	NS	mg/Kg	0.63 U	0.67 U	3.8	0.61 U	0.62 U	0.53 U	0.63 U

Notes:

(1)	New York State Recommended Soil Cleanup Objectives, Technical and Administrative Guidance Memorandum (TAGM) #4046, January 24, 1994.
J	Estimated.
NS	No Standard.
U	Non-detect at associated value.
UJ	The analyte was not detected above the sample quantitation limit. The reported quantitation limit is an estimated quantity.
☐	Concentration exceeds standard.

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-1
DATE COMPLETED: May 6, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (ft)	'N' VALUE	
	refusal @ 1.0 ft BGS due to concrete		▨ BENTONITE 2"Ø BOREHOLE					
	END OF BOREHOLE @ 1.0ft BGS	1.0						
2								
4								
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

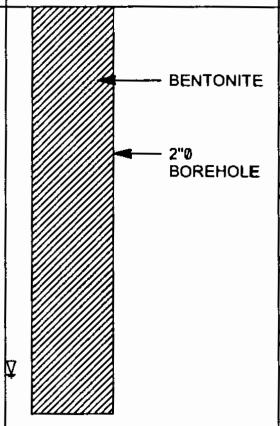
Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-2
DATE COMPLETED: May 6, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	PT-ORGANIC SOILS, very slightly moist, no odor	0.7	047	☒			58.9
	FILL, sand and gravel, light grey, dry, no odor	0.9					
2 4	CL-SILTY CLAY, medium brown with grey mottling, slightly moist, no odor - concrete fragments with black staining @ 0.9 and 1.6 ft BGS	4.2	048	☒			52.1
	FILL, brick fragments with gravel mix, slightly moist, no odor	5.0	049	☒			55.8
6	SM-SAND, coarse grained, medium brown, slightly moist, no odor	5.3					
8	CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	8.8	050	☒			>2000
10	CL-SM-SILTY CLAY and SAND, alternating layers of brown silty clay and grey sand, no odor - wet below 10 ft BGS	11.1	051	☒			121
12	END OF BOREHOLE @ 11.1ft BGS						
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

SOIL BORING INSTALLATION



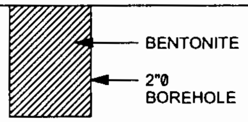
NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽ 5/6/03
CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-3
DATE COMPLETED: May 6, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
2	FILL, concrete/sand mix, slightly moist, no odor - refusal @ 3 ft BGS	3.0			☒			272
4	END OF BOREHOLE @ 3.0ft BGS							
6								
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

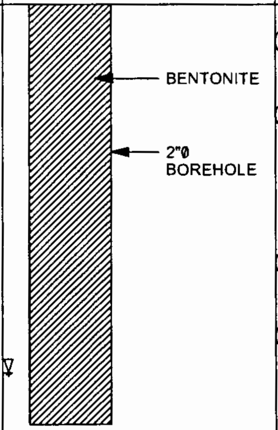
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-4
DATE COMPLETED: May 6, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
PT-ORGANIC SOILS, dark brown, slightly moist	0.4
FILL, large gravel up to 1.5"Ø	1.3
CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	6.2
GW-layer of large gravel (up to 1.5"Ø) mixed with sand and smaller gravel, moist, no odor	6.4
CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	8.8
CL-SM-SILTY CLAY and SAND, alternating layers of silty clay and sand, medium brown, saturated, no odor - wet below 10 ft BGS - wood from 11.3 to 11.4 ft BGS	12.0
END OF BOREHOLE @ 11.4ft BGS	



SAMPLE NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
052				148
053				161
-				
054				79.0
055				81.7
-				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ⊽ 5/6/03
CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

Page 1 of 1

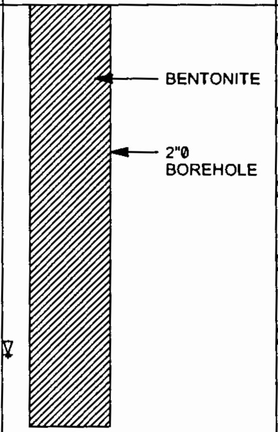
PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-5
DATE COMPLETED: May 5, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
PT-ORGANIC SOIL, some gravel, some sand, slightly moist, brown grading to black near 0.8 ft BGS	0.8
GP-SAND AND GRAVEL, brown, dry @ 0.8 ft BGS becoming slightly moist with depth, no odor	4.8
CL-SILTY CLAY, medium brown with grey mottling, very slightly moist	6.3
GP-SAND AND GRAVEL, gravels up to 1"0, slightly moist, no odor	6.8
CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	8.4
GP-SAND and GRAVEL, slightly moist, no odor	9.0
SW-SAND LENS, light brown	9.0
CL-SILTY CLAY, medium brown, moist, no odor	9.5
END OF BOREHOLE @ 9.5ft BGS	

DEPTH ft BGS: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34

SOIL BORING INSTALLATION



SAMPLE NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
001	☒			15.8
002	☒			23.4
003	☒			9.2
004	☒			0.8
005	☒			1.1

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽ 5/5/03
CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2

PROJECT NUMBER: 15867

CLIENT: Confidential

LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-6

DATE COMPLETED: May 6, 2003

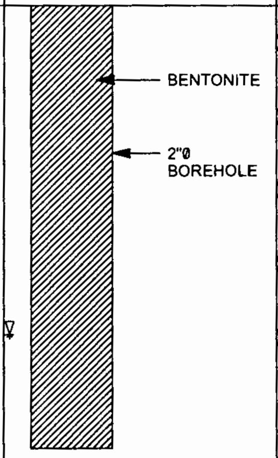
DRILLING METHOD: Direct Push/ Geoprobe

FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34

STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
PT-ORGANIC SOIL, dark brown, no odor	0.7
SM-SAND, fine grained, orange, dry, no odor	0.8
CL-SILTY CLAY, dark brown with grey mottling, very slightly moist, no odor - some old concrete fragments between 2.5 and 2.7 ft BGS - clay becomes medium brown with grey mottling below 4 ft BGS - coarse sand layer from 4.7 to 4.8 ft BGS	8.9
CL-SM-SILTY CLAY and SAND, alternating layers of silty clay and sand, brown, saturated, no odor	11.2
GP-SAND and GRAVEL, medium brown, saturated	12.0
END OF BOREHOLE @ 12.0ft BGS	

SOIL BORING INSTALLATION



Water found ⊽ at 8.9

SAMPLE

NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
056	☒			>2000
057/058	☒			680
059	☒			>2000
060	☒			>2000
061	☒			>2000
-	☒			

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

WATER FOUND ⊽ 5/6/03

CHEMICAL ANALYSIS ○

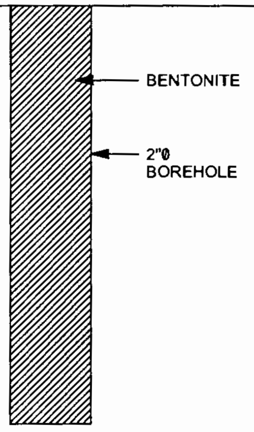
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY
HOLE DESIGNATION: BH-7
DATE COMPLETED: May 7, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
ASPHALT	0.3
FILL, sand and gravel, some clay, dark brown, very slightly moist, no odor - layer of large gravel, light grey, dry @ 1.3 ft BGS - layer of large concrete bits (up to 2"Ø) @ 2 ft BGS - brick fragments from 5.0 to 5.8 ft BGS	5.8
- layer of wood from 6.0 to 6.1 ft BGS CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	10.0
CL-SANDY CLAY, dark brown, moist, no odor	11.2
CH-CLAY, grey, moist	11.3
END OF BOREHOLE @ 11.3ft BGS	

SOIL BORING INSTALLATION



SAMPLE

NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
083				178
084				293
085				41.7
087/088				4.2
089				132
-				
-				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ○

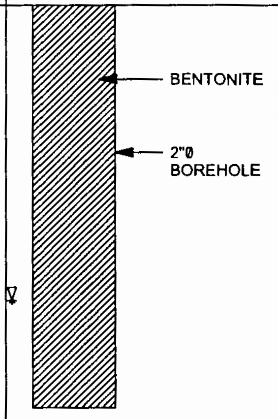
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY
HOLE DESIGNATION: BH-8
DATE COMPLETED: May 6, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
FILL, gravel and sand, light grey, dry, no odor	0.9
OL-ORGANIC SILT and CLAY, dark brown, dry, no odor	1.1
BRICK FRAGMENTS	1.3
FILL, gravel and sand, small brick fragments, black, dry, no odor - sand layer, some small gravels, light brown, dry, no odor from 2.0 to 2.3 ft BGS - some clay mixed in with fill at 2.9 ft BGS - large brick fragments from 4.6 to 5.1 ft BGS - wood fragments from 5.1 to 5.3 ft BGS	5.3
CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	8.0
CL-SM-SILTY CLAY and SAND, alternating layers of silty clay and sand, medium brown, saturated, no odor - layer of orange oxidized sand @ 9.3 ft BGS	10.9
END OF BOREHOLE @ 10.9ft BGS	

SOIL BORING INSTALLATION



NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
043	☒			344
044	☒			106
045	☒			329
046	☒			269
-	☒			
-	☒			

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽ 5/6/03
CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

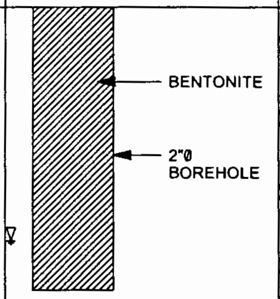
Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-9
DATE COMPLETED: May 7, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
ASPHALT	0.2
FILL, large gravel and sand, grey (sand), very slightly moist, no odor	0.7
CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor - layer of sand and gravel, medium grey, very slightly moist, no odor from 4.5 to 4.8 ft BGS - wet below 6.3 ft BGS	7.7
END OF BOREHOLE @ 7.7ft BGS	

SOIL BORING INSTALLATION



SAMPLE NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
075	☒			
076	☒			19.3
077	☒			66.4
078	☒			38.2

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽ 5/7/03
CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

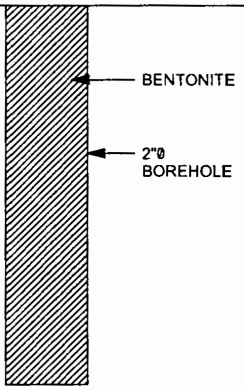
Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-10
DATE COMPLETED: May 5, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	PT-ORGANIC SOIL, dark brown, loose, no odor	0.3	006	☒			10.3
2	FILL, clay and sand, brick fragments, gravel - wood layer from 0.6 to 0.8 ft BGS		007	☒			16.0
4	- sandy clay, grey, very moist from 3.3 to 3.6 ft BGS	4.4	006	☒			12.0
6	CL-SILTY CLAY, brown-black, some grey mottling, very slightly moist, no odor - clay becomes uniform medium brown with grey mottling below 5.3 ft BGS		009	☒			5.9
8	- moist below 5.6 ft BGS		010	☒			5.0
10	- very moist below 10 ft BGS	10.3					
	END OF BOREHOLE @ 10.3ft BGS						
12							
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

SOIL BORING INSTALLATION



NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-11
DATE COMPLETED: May 6, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING INSTALLATION	SAMPLE NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
	PT-ORGANIC SOILS, dark brown, very slightly moist, no odor	0.7		062	☒			10.7
	SM-SAND, fine grained, orange, dry, no odor	0.8						
2	CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor		BENTONITE					
				063	☒			7.7
4			2"Ø BOREHOLE					
				064	☒			8.2
6								
				065	☒			8.4
8	CL-SM-SILTY CLAY and SAND, alternating layers of silty clay and sand, medium brown grading to grey with depth, saturated, no odor	8.1						
				-	☒			
10								
				-	☒			
12	END OF BOREHOLE @ 12.0ft BGS	12.0						
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

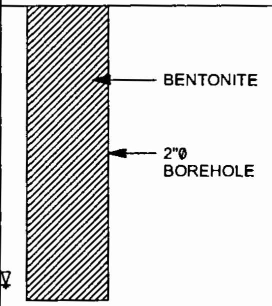
CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-12
DATE COMPLETED: May 7, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
	ASPHALT	0.3						
2	FILL, sand and gravel, dry, no odor - brown silty clay layer from 0.8 to 0.8 ft BGS - light brown sand layer from 0.8 to 0.9 ft BGS - silty clay lense	2.0		071	☒			633
4 6 8	CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor - layer of sand and gravel, grey, dry, no odor from 4.3 to 4.4 ft BGS - layer of sand, light brown from 5.2 to 5.5 ft BGS - wet below 7.6 ft BGS	8.0		072 073 074	☒ ☒ ☒			67.8 146 71.9
10 12 14 16 18 20 22 24 26 28 30 32 34	END OF BOREHOLE @ 8.0ft BGS							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 5/7/03
CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

Page 1 of 1

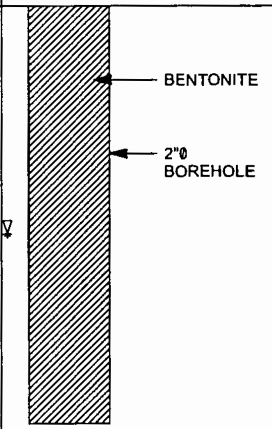
PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-13
DATE COMPLETED: May 7, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34

STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
ASPHALT	0.3
FILL, gravel, sand, and asphalt bits, very slightly moist, no odor -grey from 0.3 to 0.7 ft BGS - dark brown to black, no odor from 0.7 to 2.3 ft BGS - layer of asphalt @ 1.7 ft BGS - layer of brick fragments @ 2.2 ft BGS - large gravel layer @ 5.3 ft BGS - sand lense @ 5.5 ft BGS	5.5
CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor - wet below 6.2 ft BGS	9.0
CL-SM-SILTY CLAY and SAND, altemating layers of silty clay and sand, brown, saturated, no odor	11.3
END OF BOREHOLE @ 11.3ft BGS	

SOIL BORING INSTALLATION



SAMPLE

NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
079				116
080				99
081				101
082				380
-				
-				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 5/7/03
CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

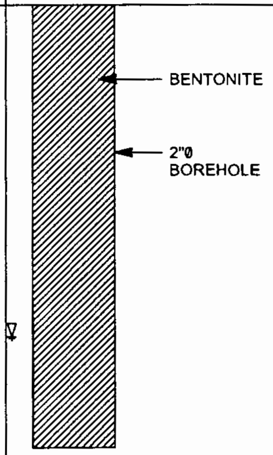
Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-14
DATE COMPLETED: May 6, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
	ASPHALT	0.8
2 4	FILL, sand and gravel with old concrete fragments, dry, no odor -layer of oxidized material @ 1.1 ft BGS - layer of brick fragments from 5.0 to 5.1 ft BGS - layer of wood and brick fragments from 5.3 to 5.6 ft BGS	5.6
6	CL-SILTY CLAY, brown with black staining, no odor	8.0
8	CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	9.0
10	SM-SAND, fine grained, some clay, brown to grey, no odor, saturated	9.8
	GP-SAND and GRAVEL, brown, saturated, no odor	10.3
12	CL-SM-SILTY CLAY and SAND, alternating layers of silty clay and sand, grey, saturated, no odor	12.0
14	END OF BOREHOLE @ 12.0ft BGS	
16		
18		
20		
22		
24		
26		
28		
30		
32		
34		

SOIL BORING INSTALLATION



SAMPLE

NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
066	☒			7.7
067	☒			8.7
068	☒			4.9
069	☒			16.6
070	☒			9.2
-	☒			

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽ 5/6/03
CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

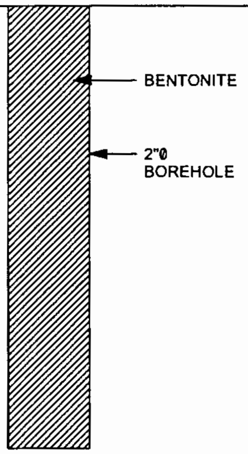
Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-15
DATE COMPLETED: May 5, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	FILL, concrete bits, clay, brick fragments, some sand, slightly moist, no odor - more clay below 0.4 ft BGS	0.6	011	☒			6.8
2	CL-SILTY CLAY, brown and black, some organic matter, very slightly moist - charcoal @ 1.2 ft BGS - charcoal @ 3.0 ft BGS - charcoal @ 3.7 ft BGS		012	☒			23.7
4		4.2					
	CL-SILTY CLAY, medium brown with grey mottling, slightly moist		013	☒			7.2
6			014	☒			10.2
8	- silty sand lenses present in clay, moisture content increasing below 9 ft BGS		015	☒			9.8
10	CL-SM-SILTY CLAY and SAND, alternating layers of silty clay and sand, brown, saturated, no odor	10.0 ∇	-	☒			
12	END OF BOREHOLE @ 12.0ft BGS	12.0					
14							
16							
18							
20							
22							
24							
26							
28							
30							
32							
34							

SOIL BORING INSTALLATION



NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 5/5/03
CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

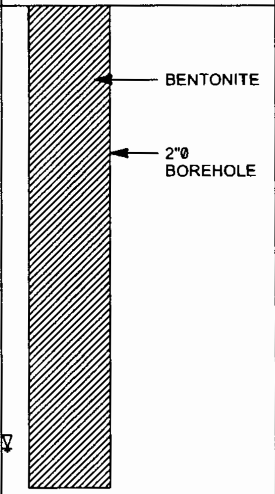
Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-16
DATE COMPLETED: May 6, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
PT-ORGANIC SOIL	0.8
FILL, gravel, sand, grey, dry, no odor - gravels up to 1.5"Ø, color changes to dark brown, slightly moist below 2 ft BGS - gravels up to 2"Ø below 4.3 ft BGS	7.0
CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	8.0
FILL, sand, gravel, dry, no odor	8.8
CL-SILTY CLAY, gravel within clay, medium brown with grey mottling, very slightly moist, no odor	10.0
FILL, sand and gravel, brick fragments, large pieces of old galss, 1"Ø, slightly moist - wet below 12 ft BGS	12.7
FILL, silty clay and fill mix, clay with small gravel and glass within, very moist, no odor	13.1
END OF BOREHOLE @ 13.1ft BGS	

SOIL BORING INSTALLATION



SAMPLE

NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
036	☒			52.3
037	☒			805
038	☒			34.5
039/040	☒			1005
041	☒			
042	☒			

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 5/6/03
CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

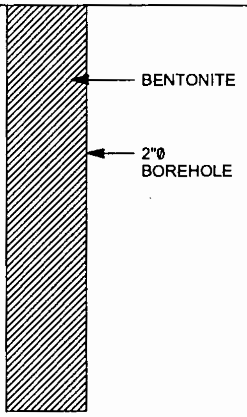
Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-17
DATE COMPLETED: May 5, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
	FILL, sand and gravel, light grey, gravel to 1.5"0, no odor	1.2
2	CL-SILTY CLAY, some charcoal within clay, brown, no odor	2.0
4 6	FILL, sand and gravel, dry, no odor - old porous concrete fragments between 2.7 and 2.9 ft BGS - some charcoal, slight odor @ 4.2 ft BGS	6.8
8	CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	8.3
10	CL-SM-SILTY CLAY and SAND, alternating layers of silty clay and sand, brown, saturated, no odor	10.4
	CL-SANDY SILTY CLAY, dark grey, moist, no odor	11.0
12	END OF BOREHOLE @ 11.0ft BGS	
14		
16		
18		
20		
22		
24		
26		
28		
30		
32		
34		

SOIL BORING INSTALLATION



SAMPLE

NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
032				22.6
033				
034				555
035				143
086				
-				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-18
DATE COMPLETED: May 5, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
	FILL, asphalt, gravel, sand, dry, no odor							
	CL-SILTY CLAY, medium grown with grey mottling, very slightly moist, no odor	0.8		-	☒			
2			BENTONITE	025	☒			
4			2"Ø BOREHOLE	-	☒			18.4
6				026	☒			
8	- saturated below 8.5 ft BGS	∇						
10	END OF BOREHOLE @ 10.0ft BGS	10.0						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 5/5/03
CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

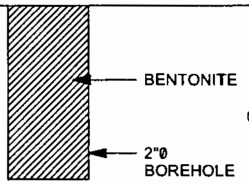
PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-18B
DATE COMPLETED: May 5, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
	ASPHALT	0.2
2	CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	2.6
	FILL, gravel and charcoal	2.7
4	CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	4.4
	GP-SAND and GRAVEL, gravel up to 0.75"Ø	4.6
6	CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	4.7
	END OF BOREHOLE @ 4.7ft BGS	

8 10 12 14 16 18 20 22 24 26 28 30 32 34

SOIL BORING INSTALLATION



SAMPLE NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
022				18.1
028/029/030				18.0
031				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

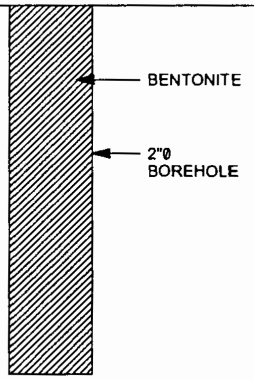
Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-19
DATE COMPLETED: May 5, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.5					
	FILL, sand and gravel, light brown, dry, no odor	2.0	020	☒			13.8
2	CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor		021/022	☒			11.3
4			-	☒			
6			023	☒			14.1
8	CL-SM-SILTY CLAY and SAND, alternating layers of silty clay and sand, brown, saturated, no odor	8.2 ∇	-	☒			
10	END OF BOREHOLE @ 10.0ft BGS	10.0					

SOIL BORING INSTALLATION



NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 5/5/03
CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Seneca St. Parcel #2

PROJECT NUMBER: 15867

CLIENT: Confidential

LOCATION: Buffalo, NY

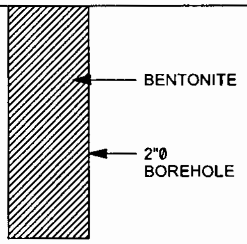
HOLE DESIGNATION: BH-20

DATE COMPLETED: May 5, 2003

DRILLING METHOD: Direct Push/ Geoprobe

FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	CONCRETE	0.4						
	FILL, clay, sand, and gravel, slightly moist, red-brown clay, no odor			016	☒			6.5
2	- light brown sandy clay, dry between 2.3 and 3.2 ft BGS		BENTONITE					
	- large brick fragments @ 3.2 ft BGS			017	☒			5.0
4			2"Ø BOREHOLE					
	- white crystalline fragments, angular @ 5.2 ft BGS			018	☒			13.3
6		6.3						
	END OF BOREHOLE @ 6.3ft BGS			019	☒			
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								



NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ○

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-22
DATE COMPLETED: May 15, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
	ASPHALT	0.5						
	FILL, gravel, concrete fragments, sand, grey, dry, no odor	2.0	BENTONITE		☒			>2000
2	CLAY, some organics, medium brown, dry, easily crumbles, no odor	4.0	2"Ø BOREHOLE		☒			>2000
4	CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	6.3	∇		☒			>2000
6	CL-SILTY CLAY, some fine grained sand layers, brown, saturated, no odor	8.0			☒			1315
8	END OF BOREHOLE @ 8.0ft BGS							
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 05/15/2003

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-23
DATE COMPLETED: May 14, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.5						
	FILL, sand, gravel, brown, dry, no odor	2.0	BENTONITE		☒			4.6
2	CL-SILTY CLAY, some gravel, medium brown with grey mottling, slightly moist, no odor	4.2	2"Ø BOREHOLE		☒			32.2
4	CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	6.2	∇		☒			59.1
6	CL-SM-SILTY CLAY and SAND, alternating layers of silty clay and sand, brown, saturated, no odor	8.0			☒			281
8	GP-SAND and GRAVEL, medium brown, saturated, no odor	10.0			☒			140
10	END OF BOREHOLE @ 10.0ft BGS							
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

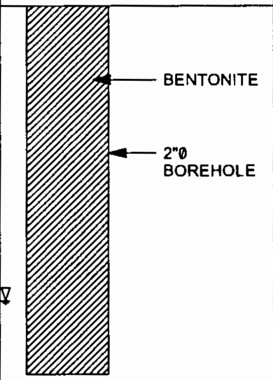
NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 05/14/2003

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-24
DATE COMPLETED: May 7, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich



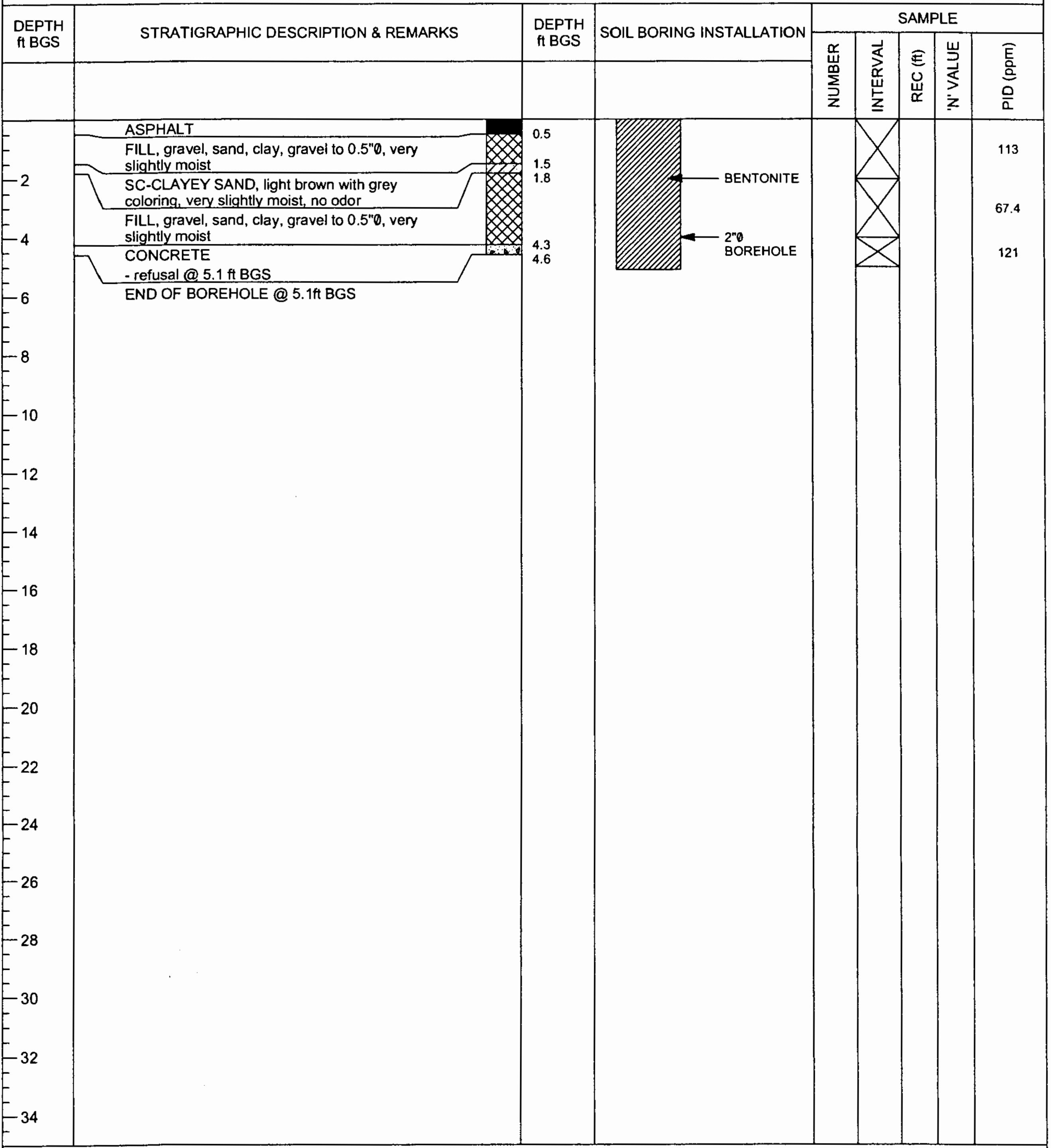
DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
	ASPHALT	0.4						
	FILL, gravel, medium grey, very slightly moist, no odor	0.8			☒			9.8
2	CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor - some glass fragments @ 1.7 ft BGS				☒			5.1
4					☒			6.8
6	- sand lense with gravel @ 6 ft BGS - clay becomes dark brown below 6.3 ft BGS				☒			18.4
8	CL-SM-SILTY CLAY and SAND, alternating layers of silty clay and sand, brown, moist	8.0	∇		☒			-
10	END OF BOREHOLE @ 10.0ft BGS	10.0						
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 05/07/2003

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY
HOLE DESIGNATION: BH-25
DATE COMPLETED: May 7, 2003
DRILLING METHOD: Direct Push/ Geoprobe
FIELD PERSONNEL: J. Pietraszek-Polovich



DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SOIL BORING INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	ASPHALT	0.5						
	FILL, gravel, sand, clay, gravel to 0.5"Ø, very slightly moist	1.5						113
2	SC-CLAYEY SAND, light brown with grey coloring, very slightly moist, no odor	1.8	BENTONITE					
	FILL, gravel, sand, clay, gravel to 0.5"Ø, very slightly moist	4.3						67.4
4	CONCRETE - refusal @ 5.1 ft BGS	4.6	2"Ø BOREHOLE					121
6	END OF BOREHOLE @ 5.1ft BGS							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

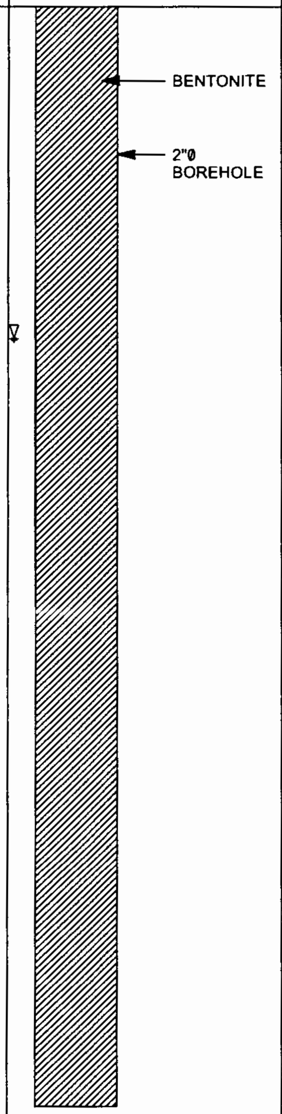
OVERBURDEN LOG 15867.GPJ CRA_CORP.GDT 6/26/03

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: BH-26
DATE COMPLETED: May 14, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich



DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	SAMPLE NUMBER	INTERVAL	REC (ft)	'N' VALUE
2 4	FILL, asphalt, gravel, dry, no odor - brick fragments @ 4 ft BGS					
6 8	CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	6.0				
10 12 14 16	GP-SAND and GRAVEL, medium brown, saturated, no odor	9.0				
18 20	CH-CLAY, grey, very malleable, slightly moist, no odor	16.3				
22	CL-CLAY with SAND and GRAVEL, saturated, no odor	21.8				
24 26 28	GP-SAND and GRAVEL, large gravels, coarse sand, grey, saturated, no odor	24.0				
30 32 34	END OF BOREHOLE @ 30.0ft BGS	30.0				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ⊻ 05/14/2003

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: Seneca St. Parcel #2

PROJECT NUMBER: 15867

CLIENT: Confidential

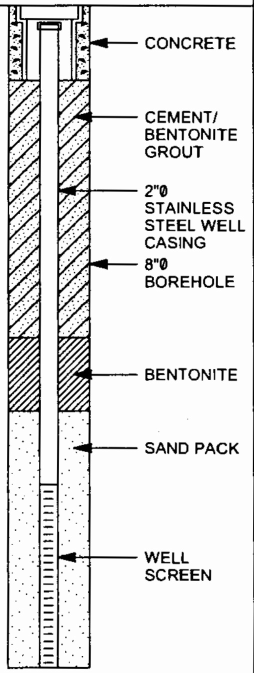
LOCATION: Buffalo, NY

HOLE DESIGNATION: MW-13/BH-21

DATE COMPLETED: May 16, 2003

DRILLING METHOD: HSA

FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	INTERVAL	REC (ft)	'N' VALUE
2 4 6 8 10 12 14 16	OVERBURDEN (see overburden stratigraphy for well MW-13A)						
18 20 22 24 26 28 30 32 34	END OF BOREHOLE @ 18.0ft BGS	18.0	WELL DETAILS Screened interval: 13.0 to 18.0ft BGS Length: 5ft Diameter: 2in Slot Size: 10 Material: Stainless Steel Seal: 9.0 to 11.0ft BGS Material: Bentonite Volclay Pellets Sand Pack: 11.0 to 18.0ft BGS Material: #20 Silica Sand				

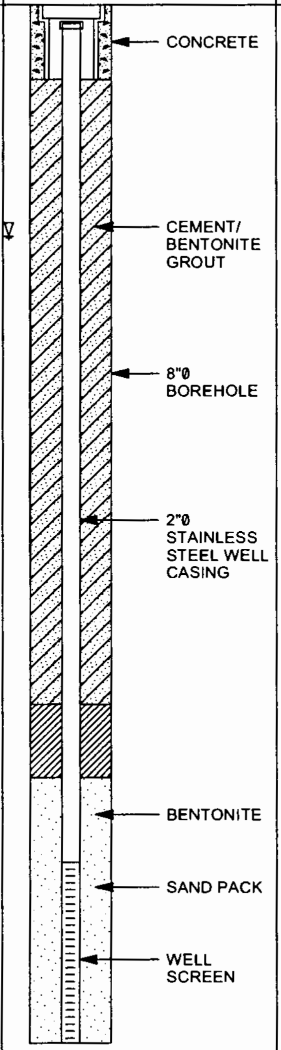
NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: MW-13A
DATE COMPLETED: May 15, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
PT-ORGANIC SOIL, slight clay content, brown, very slightly moist, no odor	2.5
CL-SILTY CLAY, medium brown with grey mottling, dry, no odor	6.3
CL-SM-SILTY CLAY and FINE SAND, alternating layers of silty clay and sand, brown, saturated, no odor	10.0
GP-SAND and GRAVEL, medium to large gravels, coarse sand, brown, saturated, no odor - some red discolored wood flakes @ 12.2 ft BGS	12.2
SW-SAND, coarse grained, grey, saturated, no odor	12.6
GP-SAND and GRAVEL, medium to large gravels, coarse sand, brown, saturated, no odor	16.3
CH-CLAY, grey, very malleable, very slightly moist, no odor - gravel present @ 23.8 ft BGS - gravel and sand present @ 24.0 ft BGS	25.1
GP-SAND and GRAVEL, some clay, grey, saturated, no odor	28.0
END OF BOREHOLE @ 28.0ft BGS	



NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
SS1		1.1	11	84.3
SS2		1.3	13	91.8
SS3		1.3	15	80.9
SS4		1.4	7	68.3
SS5		1.0	3	0
SS6		0.9	5	0
SS7		0.8	2	0
SS8		0.5	4	0
SS9		0.9	6	0
SS10		1.5	4	0
SS11		2.0	-	0
SS12		2.0	28	0
SS13		1.1	58	0
SS14		0.9	23	0

WELL DETAILS
Screened interval:
23.3 to 28.3ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 10
Material: Stainless Steel
Seal:
19.0 to 21.0ft BGS
Material: Bentonite Volclay Pellets

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 05/15/2003

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

Page 2 of 2

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: MW-13A
DATE COMPLETED: May 15, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITOR INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
36			Sand Pack: 21.0 to 28.3ft BGS Material: #20 Silica Sand					
38								
40								
42								
44								
46								
48								
50								
52								
54								
56								
58								
60								
62								
64								
66								
68								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽ 05/15/2003

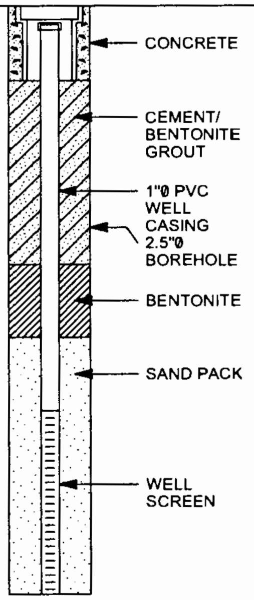
STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: MW-14
DATE COMPLETED: May 19, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITOR INSTALLATION	SAMPLE			
				NUMBER	INTERVAL	REC (ft)	'N' VALUE
2 4 6 8 10 12 14	OVERBURDEN (see overburden stratigraphy for well MW-14A)						
16 18 20 22 24 26 28 30 32 34	END OF BOREHOLE @ 16.0ft BGS	16.0	WELL DETAILS Screened interval: 11.0 to 16.0ft BGS Length: 5ft Diameter: 2in Slot Size: 10 Material: Stainless Steel Seal: 7.0 to 9.0ft BGS Material: Bentonite Volclay Pellets Sand Pack: 9.0 to 16.0ft BGS Material: #20 Silica Sand				



NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

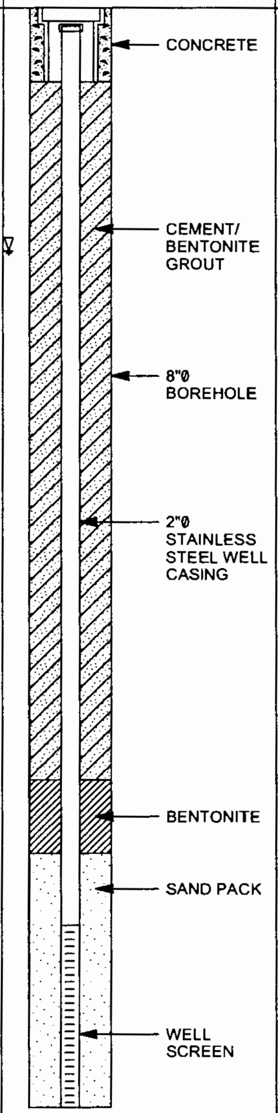
Page 1 of 2

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: MW-14A
DATE COMPLETED: May 19, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS
0.5	ASPHALT
	CL-CLAY, some silt, medium brown, no odor
2.2	- some black staining, very slight petroleum odor
	CL-CLAY, some silt, medium brown with grey mottling, very slightly moist, no odor
6.6 ∇	CL-SM-CLAY and FINE SAND, alternating layers of silty clay and sand, medium brown, saturated, no odor
8.7	CL-SILTY CLAY, medium brown with grey and red mottling, very slightly moist, no odor
10.9	CL-SILTY CLAY, grey, slightly malleable, slightly moist, no odor
12.3	GP-COARSE SAND and GRAVEL, medium to large gravel, brown, saturated
14.3	CH-CLAY, grey, very malleable, slightly moist, no odor
	- gravel in clay @ 25.5 ft BGS
25.8	GP-SAND and GRAVEL, some clay, brown/grey, saturated, no odor
30.0	END OF BOREHOLE @ 30.0ft BGS

MONITOR INSTALLATION



WELL DETAILS
Screened interval:
25.0 to 30.0ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 10
Material: Stainless Steel
Seal:

SAMPLE				
NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
SS1	☒	0.6	5	19.5
SS2	☒	0.4	11	9.7
SS3	☒	1.0	10	8.3
SS4	☒	1.4	8	5.0
SS5	☒	1.6	5	22.7
SS6	☒	1.8	5	
SS7	☒	0.6	5	
SS8	☒	0.5	2	
SS9	☒	1.9	2	
SS10	☒	1.8	2	
SS11	☒	2.0	2	
SS12	☒	2.0	1	
SS13	☒	1.8	19	
SS14	☒	0.5	13	
SS15	☒	0.7	84	

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 05/19/2003

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: MW-14A
DATE COMPLETED: May 19, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITOR INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68			21.0 to 23.0ft BGS Material: Bentonite Volclay Pellets Sand Pack: 23.0 to 30.0ft BGS Material: #20 Silica Sand					

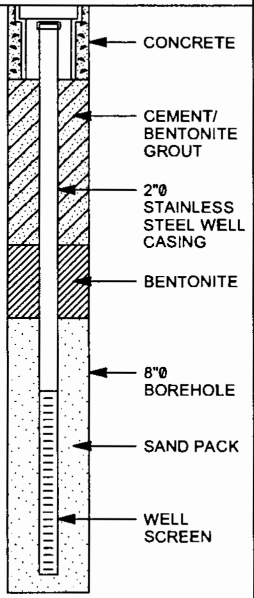
NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ⊻ 05/19/2003

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: MW-15
DATE COMPLETED: May 14, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITOR INSTALLATION	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	OVERBURDEN (see Overburden stratigraphy for well MW-15A)						
2							
4							
6							
8							
10							
12							
14							
16	END OF BOREHOLE @ 16.0ft BGS	16.0	WELL DETAILS Screened interval: 10.5 to 15.5ft BGS Length: 5ft Diameter: 2in Slot Size: 10 Material: Stainless Steel Seal: 6.5 to 8.5ft BGS Material: Bentonite Volclay Pellets Sand Pack: 8.5 to 16.0ft BGS Material: #20 Silica Sand				
18							
20							
22							
24							
26							
28							
30							
32							
34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

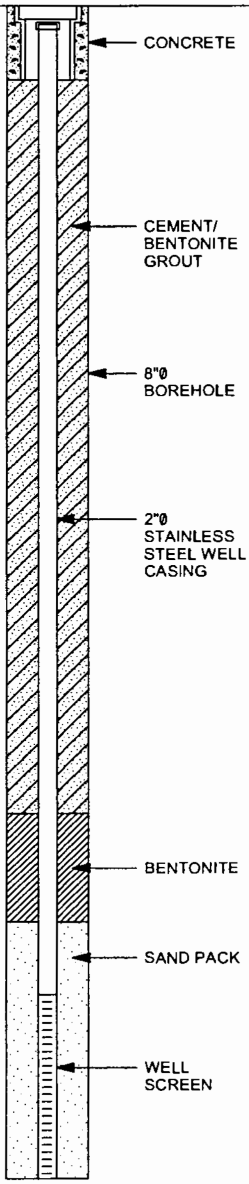
STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

Page 1 of 2

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY
HOLE DESIGNATION: MW-15A
DATE COMPLETED: May 13, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
ASPHALT	0.5
FILL, asphalt, brick fragments, gravel, sand, dry, no odor - some clay with fill @ 2.0 ft BGS	4.3
FILL, sand, light grey, dry, no odor	4.5
CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	10.3
CL-SILTY CLAY, dark grey, some gravel with depth, slightly moist, no odor - some sand, very moist @ 12 ft BGS	14.0
SW-SAND, brown, moist, no odor	14.2
CH-CLAY, grey, very malleable, slightly moist, no odor	27.0
GM-CLAY, GRAVEL, and SILT, moist, no odor	30.0
END OF BOREHOLE @ 30.0ft BGS	

MONITOR INSTALLATION



WELL DETAILS
Screened interval:
27.0 to 32.0ft BGS
Length: 5ft

SAMPLE				
NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
SS1		0.8	24	
SS2		0.8	8	
SS3		0.5	8	0
SS4		1.0	8	
SS5		1.1	6	0
SS6		1.3	6	0
SS7		1.1	4	9.5
SS8		0.2	5	9.0
SS9		2.0	0	17.3
SS10		2.0	1	26.1
SS11		2.0	1	69.2
SS12		2.0	0	69.1
SS13		2.0	1	51.2
SS14		2.0	6	7.9
SS15		0.7	50	
SS16				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: MW-15A
DATE COMPLETED: May 13, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITOR INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68			Diameter: 2in Slot Size: 10 Material: Stainless Steel Seal: 22.0 to 25.0ft BGS Material: Bentonite Volclay Pellets Sand Pack: 25.0 to 32.0ft BGS Material: #20 Silica Sand					

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

APPENDIX B

WASTE CHARACTERIZATION PLAN AND RESULTS

PLAN FOR CHARACTERIZATION AND DISPOSAL OF EXCAVATED SOILS
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK
V00370-9

All soils excavated during the Remedial Action at the Parcel 2 Site will be sent off-Site for disposal at a permitted disposal facility. Due to the necessity of controlling potential future settlement to maintain the integrity of the asphalt pavement surface of the restored excavated area, excavated soils will not be used as backfill in the excavation. Based on the soils analytical data collected to date, the soils are expected to be of two types:

i) Resource Conservation and Recovery Act (RCRA) listed hazardous waste; or
ii) non-hazardous waste.

Soil samples collected from on-Site soil borings have been analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). The locations of the soil borings are shown on Figure 1, a sample collection and analysis summary is presented in Table 1, and a summary of the analytical data is presented in Table 2. A Data Usability Summary Report is presented in Attachment A. To aid in the evaluation of the data for the estimation of the limits of excavation and development of a plan for waste handling and disposal, the analytical results presented in Table 2 have been compared to the New York State Department of Environmental Conservation (NYSDEC) soil cleanup objectives. The concentrations of VOCs or SVOCs detected in the soil samples which are greater than the NYSDEC objectives are highlighted in Table 2.

The estimated limits of the areas to be excavated are shown on Figure 2. The area shown as "Area A" on Figure 2 overlies the location of a former dry cleaning establishment on the Site. Soils at depths greater than 7 feet below grade in Area A exhibited concentrations of tetrachloroethene (PCE) which exceeded the NYSDEC soil cleanup objectives. Based on the known historic activities within Area A and the presence of PCE in the soils immediately overlying the water table, the soils excavated at depth in this area (from 7 to 10 feet below ground surface) will be managed as a RCRA listed hazardous waste. These soils will be tested further as required by the disposal facility to determine whether the soils also meet the criteria of a RCRA characteristic hazardous waste.

Soils in the remaining areas of excavation contain concentrations of SVOC compounds that exceed their respective NYSDEC soil cleanup objectives. Depending upon the requirements of the disposal facility, these soils will be:

i) excavated, stockpiled, chemically characterized, and then disposed of; or
ii) chemically pre-characterized and loaded for direct haulage to the disposal facility.

To pre-characterize the soils, samples will be collected at the same locations and depths as previous samples containing the highest exceedances of the NYSDEC soil cleanup objectives or highest concentrations of PCE. To pre-characterize soils in Area A, samples will be collected at depths of between 7 and 10 feet below grade from borings installed adjacent to SB-16A, SB-17, and SB-19. Discrete samples will be collected for TCL VOC analyses and a composite sample will be prepared and submitted for preparation of leachate using the Toxicity Characteristic Leaching Procedure (TCLP) with analyses of the leachate for the RCRA VOCs.

Pre-characterization of soils from the remaining areas will be completed by collecting samples from a depth of 0 to 4 feet below grade in borings installed adjacent to BH-15 and BH-20. Discrete soil samples will be collected for VOC analyses. A composite sample will be prepared and submitted for analyses in accordance with the requirements of the disposal facility. At a minimum, the composite sample from Areas B through G will be analyzed for:

i) TCLP preparation and analysis for RCRA VOCs, SVOCs, and metals;
ii) TCL VOCs and SVOCs;
iii) reactivity, corrosivity, and flash-point;
iv) paint filter; and
v) total petroleum hydrocarbons.

TABLE 1

SOIL SAMPLE COLLECTION AND ANALYSES SUMMARY
SITE INVESTIGATION/FEASIBILITY STUDY
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Analysis/Parameters									
Location	*Sample Date*	*TCL VOCs*	*TCL SVOCs*	*STARS VOCs*	*STARS SVOCs*	*Metals (Filtered)*	*Metals (Unfiltered)*	*CN*	*Lead Only*	*Sample Interval (feet below grade)*	*Comment*
SB-1	07/21/99	X								8.0-12.0	Wet at 10 ft.
SB-3	07/21/99	X								12.0-16.0	Wet
SB-4	07/21/99	X								12.0-16.0	Wet
SB-5	07/21/99			X	X				X	12.0-16.0	Moist
SB-6	07/21/99			X	X				X	8.0-12.0	
SB-7	07/21/99			X	X				X	8.0-12.0	Wet at 10 ft.
SB-8	07/21/99			X	X				X	4.0-8.0	
SB-9	07/21/99			X	X				X	0-4.0	
SB-10	07/21/99			X	X				X	8.0-12.0	
SB-11	09/13/00				X		X	X		7.0-9.0	
SB-12	09/13/00				X		X	X		7.0-9.0	
SB-13	09/13/00				X		X	X		7.0-9.0	
SB-14	09/13/00	X			X		X	X		5.0-7.0	
SB-15	09/13/00	X			X		X	X		5.0-7.0	
SB-16A	09/18/00	X			X		X	X		7.0-9.0	Wet at 8 ft.
SB-17	08/20/01	X								2.0-4.0	
SB-17	08/20/01	X								6.0-8.0	
SB-17	08/22/01	X								0-2.0	
SB-17	08/22/01	X								4.0-6.0	
SB-17	08/22/01	X								8.0-10.0	
SB-18	08/22/01	X	X							6.0-8.0	
SB-19	08/20/01	X	X							6.0-8.0	
SB-21	08/20/01	X								6.0-8.0	
SB-22	08/22/01	X								11.0-12.0	Wet
SB-23	08/22/01	X								11.0-12.0	Wet
SB-24	08/20/01	X	X							8.0-10.0	Duplicate collected
SB-25	08/20/01	X								8.0-10.0	Wet at 9 ft.
SB-26	08/20/01		X							10.0-12.0	Wet at 11 ft.
SB-27	08/20/01		X							10.0-12.0	Wet
SB-28	08/20/01	X								6.0-8.0	Moist 6.5-8.0 ft.
SB-29	08/20/01	X								8.0-10.0	Wet
MW-1	09/14/00	X			X		X	X		3.0-5.0	
MW-2	09/15/00	X			X		X	X		3.0-5.0	
	09/15/00	X			X		X	X		7.0-9.0	Moist, duplicate collec
MW-3	09/14/00	X			X		X	X		0.0-2.0	
	09/14/00	X			X		X	X		4.0-6.0	
MW-4	09/16/00	X			X		X	X		3.0-5.0	
MW-5	09/14/00	X			X		X	X		1.0-3.0	
BH-3	05/06/03	X	X							0-2.0	
	05/06/03	X	X							2.0-4.0	
	05/06/03	X	X							4.0-6.0	
	05/06/03	X	X							6.0-8.0	
	05/06/03	X	X							8.0-9.0	

TABLE 1

SOIL SAMPLE COLLECTION AND ANALYSES SUMMARY
SITE INVESTIGATION/FEASIBILITY STUDY
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Analysis/Parameters									
Location	*Sample Date*	*TCL VOCs*	*TCL SVOCs*	*STARS VOCs*	*STARS SVOCs*	*Metals (Filtered)*	*Metals (Unfiltered)*	*CN*	*Lead Only*	*Sample Interval (feet below grade)*	*Comment*
BH-4	05/06/03	X	X							0-2.0	
	05/06/03	X	X							2.0-4.0	
	05/06/03	X	X							6.0-8.0	
	05/06/03	X	X							8.0-9.0	MS/MSD
BH-5	05/05/03	X	X							0-2.0	
	05/05/03	X	X							2.0-4.0	
	05/05/03	X	X							4.0-6.0	
	05/05/03	X	X							6.0-8.0	
	05/05/03	X	X							8.0-10.0	
BH-6	05/06/03	X	X							0-2.0	
	05/06/03	X	X							2.0-4.0	Duplicate collected
	05/06/03	X	X							4.0-6.0	MS/MSD
	05/06/03	X	X							4.0-6.0	
	05/06/03	X	X							6.0-8.0	
BH-7	05/07/03	X	X							0-2.0	
	05/07/03	X	X							2.0-4.0	
	05/07/03	X	X							4.0-6.0	
	05/06/03	X	X							8.0-9.0	
	05/07/03	X	X							5.0-7.0	Duplicate collected
	05/07/03	X	X							7.0-9.0	MS/MSD
BH-8	05/06/03	X	X							0-2.0	
	05/06/03	X	X							2.0-4.0	
	05/06/03	X	X							4.0-6.0	
	05/06/03	X	X							6.0-8.0	
BH-9	05/07/03	X								0-2.0	
	05/07/03	X	X							2.0-4.0	
	05/07/03	X	X							4.0-6.0	
	05/07/03	X	X							6.0-8.0	
BH-10	05/05/03	X	X							0-2.0	
	05/05/03	X	X							2.0-4.0	
	05/05/03	X	X							4.0-6.0	
	05/05/03	X	X							6.0-8.0	
	05/05/03	X	X							8.0-10.0	
BH-11	05/06/03	X	X							0-2.0	
	05/06/03	X	X							2.0-4.0	
	05/06/03	X	X							4.0-6.0	
	05/06/03	X	X							6.0-8.0	
BH-12	05/07/03	X	X							0-2.0	
	05/07/03	X	X							2.0-4.0	
	05/07/03	X	X							4.0-6.0	
	05/07/03	X	X							6.0-8.0	

TABLE 1

SOIL SAMPLE COLLECTION AND ANALYSES SUMMARY
SITE INVESTIGATION/FEASIBILITY STUDY
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Analysis/Parameters									
Location	*Sample Date*	*TCL VOCs*	*TCL SVOCs*	*STARS VOCs*	*STARS SVOCs*	*Metals (Filtered)*	*Metals (Unfiltered)*	*CN*	*Lead Only*	*Sample Interval (feet below grade)*	*Comment*
BH-13	05/07/03	X	X							0-2.0	
	05/07/03	X	X							2.0-4.0	
	05/07/03	X	X							4.0-6.0	
	05/07/03	X	X							6.0-8.0	
BH-14	05/06/03	X	X							0-2.0	
	05/06/03	X	X							2.0-4.0	
	05/06/03	X	X							4.0-6.0	
	05/06/03	X	X							6.0-8.0	
	05/06/03	X	X							8.0-10.0	
BH-15	05/05/03	X	X							0-2.0	
	05/05/03	X	X							2.0-4.0	
	05/05/03	X	X							4.0-6.0	
	05/05/03	X	X							6.0-8.0	
	05/07/03	X								8.0-9.0	
	05/05/03	X	X							8.0-10.0	
BH-16	05/06/03	X	X							0-2.0	
	05/06/03	X	X							2.0-4.0	
	05/06/03	X	X							4.0-6.0	
	05/06/03	X	X							6.0-8.0	Duplicate collected
	05/06/03	X	X							8.0-10.0	
	05/06/03	X								10.0-11.0	
BH-17	05/05/03	X	X							0-2.0	
	05/05/03	X								2.0-4.0	
	05/05/03	X	X							4.0-6.0	
	05/05/03	X	X							6.0-8.0	
BH-18	05/05/03	X								0-2.0	
	05/05/03	X	X							2.0-4.0	
	05/05/03	X								8.0-10.0	
BH-18B	05/05/03	X	X							0-2.0	
	05/05/03	X	X							2.0-4.0	MS/MSD
	05/05/03	X								4.0-6.0	
BH-19	05/05/03	X	X							0-2.0	
	05/05/03	X	X							2.0-4.0	Duplicate collected
	05/05/03	X	X							6.0-8.0	
BH-20	05/05/03	X	X							0-2.0	
	05/05/03	X	X							2.0-4.0	
	05/05/03	X	X							4.0-6.0	
	05/05/03	X								6.0-8.0	

Notes:

CN	Chloroacetophenone.
MS	Matrix Spike.
MSD	Matrix Spike Duplicate.
STARS	Spill Technology and Remediation.
SVOCs	Semi-Volatile Organic Compounds.
TCL	Target Compound List.
VOCs	Volatile Organic Compounds.

TABLE 2

ORGANIC CHEMICAL COMPOUNDS DETECTED IN SOILS
SITE INVESTIGATION/FEASIBILITY STUDY
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Sample Location:	*SB-1B*	*SB-3*	*SB-4*	*SB-6*	*SB-7*	*SB-8*	*SB-9*	*SB-10*	*SB-14*	*SB-15*
		Sample Depth (ft BGS):	*8.0-12.0*	*12.0-16.0*	*12.0-16.0*	*8.0-12.0*	*8.0-12.0*	*4.0-8.0*	*0-4.0*	*8.0-12.0*	*5.0-7.0*	*5.0-7.0*
		Sample Date:	*07/21/99*	*07/21/99*	*07/21/99*	*07/21/99*	*07/21/99*	*07/21/99*	*07/21/99*	*07/21/99*	*9/13/2000*	*9/13/2000*
Parameter	*TAGM 4046 Standard*	*Unit*										
Volatiles												
Acetone	200	µg/Kg	100 U	100 U	25	NA	NA	NA	NA	NA	24 U	21 U
2-Butanone	300	µg/Kg	100 U	100 U	100 U	NA	NA	NA	NA	NA	24 U	21UJ
cis-1,2-Dichloroethene	NS	µg/Kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0 U	5.3 U
Tetrachloroethene	1400	µg/Kg	15	12000	421	NA	NA	NA	NA	NA	8.3	28
Methylene chloride	100	µg/Kg	20	7	3	NA	NA	NA	NA	NA	6.0 U	5.3 U
Trichloroethene	700	µg/Kg	2	54	12	NA	NA	NA	NA	NA	6.0 U	5.3 U
Toluene	1500	µg/Kg	3	5 U	5 U	1.5	2.7	7.0	1.9	5.9	6.0 U	5.3 U
Xylenes, total	1200	µg/Kg	2	5 U	5 U	2.8 U	2.8 U	7.5	2.8 U	7.6	6.0 U	5.3 U
Benzene	60	µg/Kg	5 U	5 U	5 U	1 U	1 U	5.1	1 U	1 U	6.0 U	5.3 U
Ethylbenzene	5500	µg/Kg	5 U	5 U	5 U	1 U	1 U	1.8	1 U	1 U	6.0 U	5.3 U
Semi-Volatiles												
Acenaphthene	50000	µg/Kg	NA	NA	NA	330 U	330 U	330 U	330 U	330 U	400 U	1800 UJ
Anthracene	50000	µg/Kg	NA	NA	NA	330 U	330 U	164	330 U	330 U	400 U	170 J
Benzo(a)anthracene	224	µg/Kg	NA	NA	NA	89	330 U	450	6340	330 U	400 U	710 J
Benzo(a)pyrene	61	µg/Kg	NA	NA	NA	87	330 U	520	6080	330 U	400 U	720 J
Benzo(b)fluoranthene	1100	µg/Kg	NA	NA	NA	157	330 U	513	6280	330 U	400 U	750 J
Benzo(g,h,i)perylene	50000	µg/Kg	NA	NA	NA	330 U	330 U	328	3420	330 U	400 U	280 J
Benzo(k)fluoranthene	1100	µg/Kg	NA	NA	NA	87	330 U	475	4080	330 U	400 U	730 J
bis(2-Ethylhexyl) phthalate	50000	µg/Kg	NA	NA	NA	330 U	330 U	330 U	330 U	330 U	400 U	1800 UJ
Carbazole	NS	µg/Kg	NA	NA	NA	330 U	330 U	330 U	330 U	330 U	400 U	1800 UJ
Chrysene	400	µg/Kg	NA	NA	NA	129	330 U	514	6670	330 U	400 U	830 J
Dibenzofuran	6200	µg/Kg	NA	NA	NA	330 U	330 U	330 U	330 U	330 U	400 U	1800 UJ
Dibenz(a,h)anthracene	14	µg/Kg	NA	NA	NA	330 U	330 U	330 U	1690	330 U	400 U	1800 UJ
Fluoranthene	50000	µg/Kg	NA	NA	NA	258	330 U	1280	8330	330 U	400 U	1800 J
Fluorene	50000	µg/Kg	NA	NA	NA	330 U	330 U	89	330 U	330 U	400 U	1800 UJ
Indeno(1,2,3-cd)pyrene	3200	µg/Kg	NA	NA	NA	330 U	330 U	275	3180	330 U	400 U	290 J
Naphthalene	13000	µg/Kg	NA	NA	NA	330 U	330 U	330 U	330 U	330 U	400 U	1800 UJ
Phenanthrene	50000	µg/Kg	NA	NA	NA	160	330 U	979	330 U	330 U	400 U	950 J
Pyrene	50000	µg/Kg	NA	NA	NA	242	330 U	1340	12600	330 U	400 U	860 J
2-Methyl naphthalene	35400	µg/Kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 2

ORGANIC CHEMICAL COMPOUNDS DETECTED IN SOILS
SITE INVESTIGATION/FEASIBILITY STUDY
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Sample Location:	*SB-16A*	*SB-17*	*SB-17*	*SB-17*	*SB-17*	*SB-17*	*SB-18*	*SB-19*	*SB-21*	*SB-22*
		Sample Depth (ft BGS):	*7.0-9.0*	*0-2.0*	*2.0-4.0*	*4.0-6.0*	*6.0-8.0*	*8.0-10.0*	*6.0-8.0*	*6.0-8.0*	*6.0-8.0*	*11.0-22.0*
		Sample Date:	*9/18/2000*	*08/22/01*	*08/22/01*	*08/22/01*	*08/22/01*	*08/22/01*	*08/22/01*	*08/20/01*	*08/20/01*	*08/22/01*
Parameter	*TAGM 4046 Standard*	*Unit*										
Volatiles												
Acetone	200	µg/Kg	420 J	21 U	21 U	25 U	25 U	24 U	46 U	25 U	24 U	24 U
2-Butanone	300	µg/Kg	1300U	21 U	21 U	25 U	25 U	24 U	8.3 J	25 U	24 U	24 U
cis-1,2-Dichloroethene	NS	µg/Kg	310 U	5.2 U	5.2 U	6.2 U	6.2 U	1.5J	6.1	70	6.0 U	5.9 U
Tetrachloroethene	1400	µg/Kg	7200	13	33	16	140	9700	2.9J	29000	2.9 J	19
Methylene chloride	100	µg/Kg	310 U	5.2 U	5.2 U	6.2 U	6.2 U	6.1 U	5.7 U	6.3 U	6.0 U	5.9 U
Trichloroethene	700	µg/Kg	310 U	5.2 U	5.2 U	6.2 U	6.2 U	13	6.1	25	6.0 U	5.9 U
Toluene	1500	µg/Kg	310 U	5.2 U	5.2 U	6.2 U	6.2 U	6.1 U	5.7 U	6.3 U	6.0 U	5.9 U
Xylenes, total	1200	µg/Kg	310 U	16 U	16 U	19 U	19 U	18 U	17 U	19 U	18 U	18 U
Benzene	60	µg/Kg	310 U	5.2 U	5.2 U	6.2 U	6.2 U	6.1 U	5.7 U	6.3 U	6.0 U	5.9 U
Ethylbenzene	5500	µg/Kg	310 U	5.2 U	5.2 U	6.2 U	6.2 U	6.1 U	5.7 U	6.3 U	6.0 U	5.9 U
Semi-Volatiles												
Acenaphthene	50000	µg/Kg	410 U	NA	NA	NA	NA	NA	1200 J	410 U	NA	NA
Anthracene	50000	µg/Kg	410 U	NA	NA	NA	NA	NA	1800 J	410 U	NA	NA
Benzo(a)anthracene	224	µg/Kg	410 U	NA	NA	NA	NA	NA	3200 J	410 U	NA	NA
Benzo(a)pyrene	61	µg/Kg	410 U	NA	NA	NA	NA	NA	2200 J	410 U	NA	NA
Benzo(b)fluoranthene	1100	µg/Kg	410 U	NA	NA	NA	NA	NA	2000 J	410 U	NA	NA
Benzo(g,h,i)perylene	50000	µg/Kg	410 U	NA	NA	NA	NA	NA	1100 J	410 U	NA	NA
Benzo(k)fluoranthene	1100	µg/Kg	410 U	NA	NA	NA	NA	NA	1400 J	410 U	NA	NA
bis(2-Ethylhexyl) phthalate	50000	µg/Kg	410 U	NA	NA	NA	NA	NA	3800 U	120 J	NA	NA
Carbazole	NS	µg/Kg	410 U	NA	NA	NA	NA	NA	880 J	410 U	NA	NA
Chrysene	400	µg/Kg	22 J	NA	NA	NA	NA	NA	2900 J	410 U	NA	NA
Dibenzofuran	6200	µg/Kg	410 U	NA	NA	NA	NA	NA	730 J	410 U	NA	NA
Dibenz(a,h)anthracene	14	µg/Kg	410 U	NA	NA	NA	NA	NA	3800 U	410 U	NA	NA
Fluoranthene	50000	µg/Kg	46 J	NA	NA	NA	NA	NA	5900	43 J	NA	NA
Fluorene	50000	µg/Kg	410 U	NA	NA	NA	NA	NA	1100 J	410 U	NA	NA
Indeno(1,2,3-cd)pyrene	3200	µg/Kg	410 U	NA	NA	NA	NA	NA	1100 J	410 U	NA	NA
Naphthalene	13000	µg/Kg	410 U	NA	NA	NA	NA	NA	1700 J	410 U	NA	NA
Phenanthrene	50000	µg/Kg	46 J	NA	NA	NA	NA	NA	6900	410 U	NA	NA
Pyrene	50000	µg/Kg	44 J	NA	NA	NA	NA	NA	5800	51 J	NA	NA
2-Methyl naphthalene	35400	µg/Kg	NA	NA	NA	NA	NA	NA	460 J	410 U	NA	NA

TABLE 2

ORGANIC CHEMICAL COMPOUNDS DETECTED IN SOILS
SITE INVESTIGATION/FEASIBILITY STUDY
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Sample Location:	*SB-23*	*SB-24*	*SB-25*	*MW-1*	*MW-2*	*MW-3*	*MW-3*	*MW-4*	*MW-5*	*BH-5*	*BH-5*
		Sample Depth (ft BGS):	*11.0-12.0*	*8.0-10.0*	*8.0-10.0*	*3.0-5.0*	*3.0-5.0*	*0-2.0*	*4.0-6.0*	*3.0-5.0*	*1.0-3.0*	*0-2*	*6-8*
		Sample Date:	*08/22/01*	*08/20/01*	*08/20/01*	*9/14/2000*	*9/15/2000*	*9/14/2000*	*9/14/2000*	*9/15/2000*	*9/14/2000*	*05/05/03*	*05/05/03*
Parameter	*TAGM 4046 Standard*	*Unit*											
Volatiles													
Acetone	200	µg/Kg	24 U	24 U/24 U	24 U	27 J	29 J	25 UJ	28 J	21 U	27 U	23 U	23 U
2-Butanone	300	µg/Kg	24 U	24 U/24 U	24 U	24 UJ	24 UJ	25 UJ	25 UJ	21 UJ	27 UJ	23 U	23 U
cis-1,2-Dichloroethene	NS	µg/Kg	5.9 U	6.0 U/6.0 U	6.0 U	6.0 U	6.0 U	6.2 U	6.3 U	5.3 U	6.7 U	5.9 U	5.7 U
Tetrachloroethene	1400	µg/Kg	1.6 J	53/9.8	1.5 J	6.0 U	6.0 U	6.2 U	6.3 U	13	6.7 U	5.9 U	5.7 U
Methylene chloride	100	µg/Kg	5.9 U	6.0 U/6.0 U	6.0 U	6.0 U	6.0 U	6.2 U	6.3 U	5.3 U	6.7 U	5.9 U	5.7 U
Trichloroethene	700	µg/Kg	5.9 U	6.0 U/6.0 U	6.0 U	6.0 U	6.0 U	6.2 U	6.3 U	5.3 U	6.7 U	5.9 U	5.7 U
Toluene	1500	µg/Kg	5.9 U	6.0 U/6.0 U	6.0 U	6.0 U	6.0 U	6.2 U	6.3 U	5.3 U	6.7 U	5.9 U	5.7 U
Xylenes, total	1200	µg/Kg	18 U	18 U/18 U	18 U	6.0 U	6.0 U	6.2 U	6.3 U	5.3 U	6.7 U	18 U	17 U
Benzene	60	µg/Kg	5.9 U	6.0 U/6.0 U	6.0 U	6.0 U	6.0 U	6.2 U	6.3 U	5.3 U	6.7 U	5.9 U	5.7 U
Ethylbenzene	5500	µg/Kg	5.9 U	6.0 U/6.0 U	6.0 U	6.0 U	6.0 U	6.2 U	6.3 U	5.3 U	6.7 U	5.9 U	5.7 U
Semi-Volatiles													
Acenaphthene	50000	µg/Kg	NA	400 U/400 U	NA	400 U	2000 U	410 U	410 U	970 J	440 U	1500 U	370 U
Anthracene	50000	µg/Kg	NA	400 U/400 U	NA	400 U	2000 U	31 J	410 U	2100 J	30 J	1500 U	370 U
Benzo(a)anthracene	224	µg/Kg	NA	400 U/400 U	NA	400 U	150 J	160 J	410 U	5700 J	88 J	240 J	93 J
Benzo(a)pyrene	61	µg/Kg	NA	400 U/400 U	NA	22 J	2000 U	160 J	410 U	5600	90 J	260 J	95 J
Benzo(b)fluoranthene	1100	µg/Kg	NA	400 U/400 U	NA	30 J	190 J	210 J	410 U	6400	78 J	1500 U	100 J
Benzo(g,h,i)perylene	50000	µg/Kg	NA	400 U/400 U	NA	400 U	2000 U	53 J	410 U	1500 J	50 J	150 J	71 J
Benzo(k)fluoranthene	1100	µg/Kg	NA	400 U/400 U	NA	400 U	170 J	160 J	410 U	5400	70 J	310 J	67 J
bis(2-Ethylhexyl) phthalate	50000	µg/Kg	NA	400 U/400 U	NA	400 U	2000 U	410 U	410 U	3500 U	440 U	310 J	280 J
Carbazole	NS	µg/Kg	NA	400 U/400 U	NA	400 U	2000 U	410 U	410 U	3500 U	440 U	1500 U	370 U
Chrysene	400	µg/Kg	NA	400 U/400 U	NA	28 J	190 J	180 J	410 U	6200 J	110 J	290 J	120 J
Dibenzofuran	6200	µg/Kg	NA	400 U/400 U	NA	400 U	2000 U	410 U	410 U	3500 U	440 U	1500 U	370 U
Dibenz(a,h)anthracene	14	µg/Kg	NA	400 U/400 U	NA	400 U	2000 U	410 U	410 U	500 J	440 U	1500 U	370 U
Fluoranthene	50000	µg/Kg	NA	400 U/400 U	NA	55 J	540 J	490	410 U	22000	220 J	540 J	220 J
Fluorene	50000	µg/Kg	NA	400 U/400 U	NA	400 U	2000 U	410 U	410 U	1100 J	440 U	1500 U	370 U
Indeno(1,2,3-cd)pyrene	3200	µg/Kg	NA	400 U/400 U	NA	400 U	2000 U	53 J	410 U	1700 J	45 J	170 J	62 J
Naphthalene	13000	µg/Kg	NA	400 U/400 U	NA	400 U	2000 U	410 U	410 U	3500 U	440 U	1500 U	370 U
Phenanthrene	50000	µg/Kg	NA	400 U/400 U	NA	29 J	260 J	160 J	410 U	11000	140 J	250 J	100 J
Pyrene	50000	µg/Kg	NA	400 U/400 U	NA	22 J	220 J	180 J	410 U	8200 J	120 J	470 J	160 J
2-Methyl naphthalene	35400	µg/Kg	NA	400 U/400 U	NA	NA	NA	NA	NA	NA	NA	1500 U	370 U

TABLE 2

ORGANIC CHEMICAL COMPOUNDS DETECTED IN SOILS
SITE INVESTIGATION/FEASIBILITY STUDY
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Sample Location:	*BH-10*	*BH-10*	*BH-10*	*BH-10*	*BH-15*	*BH-15*	*BH-15*	*BH-15*	*BH-15*	*BH-17*
		Sample Depth (ft BGS):	*0-2*	*2-4*	*4-6*	*8-10*	*0-2*	*2-4*	*4-6*	*6-8*	*8-10*	*0-2*
		Sample Date:	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03
Parameter	*TAGM 4046 Standard*	*Unit*										
Volatiles												
Acetone	200	µg/Kg	24 U	25 U	12 J	25 U	23 U	24 J	24 U	24 U	24 U	20 U
2-Butanone	300	µg/Kg	24 U	25 U	2.3 J	25 U	23 U	4.8 J	24 U	24 U	24 U	20 U
cis-1,2-Dichloroethene	NS	µg/Kg	5.9 U	6.2 U	6.2 U	6.2 U	5.8 U	6.1 U	6.1 U	6.1 U	6.1 U	5.1 U
Tetrachloroethene	1400	µg/Kg	5.9 U	6.2 U	6.2 U	6.2 U	5.5 J	1.9 J	3.7 J	2.5 J	6.1 U	660
Methylene chloride	100	µg/Kg	5.9 U	6.2 U	6.2 U	6.2 U	5.8 U	6.1 U	6.1 U	6.1 U	6.1 U	5.1 U
Trichloroethene	700	µg/Kg	5.9 U	6.2 U	6.2 U	6.2 U	5.8 U	6.1 U	6.1 U	0.98 J	6.1 U	0.82 J
Toluene	1500	µg/Kg	5.9 U	6.2 U	6.2 U	6.2 U	5.8 U	6.1 U	6.1 U	6.1 U	6.1 U	2.6 J
Xylenes, total	1200	µg/Kg	18 U	19 U	19 U	19 U	17 U	18 U	18 U	18 U	18 U	5.3 J
Benzene	60	µg/Kg	5.9 U	6.2 U	3.1 J	6.2 U	5.8 U	0.88 J	6.1 U	6.1 U	6.1 U	5.1 U
Ethylbenzene	5500	µg/Kg	5.9 U	6.2 U	6.2 U	6.2 U	5.8 U	6.1 U	6.1 U	6.1 U	6.1 U	0.53 J
Semi-Volatiles												
Acenaphthene	50000	µg/Kg	170 J	110 J	46 J	410 U	700 J	150 J	400 U	400 U	400 U	1700 U
Anthracene	50000	µg/Kg	380 J	230 J	81 J	410 U	1400	350 J	400 U	400 U	400 U	1700 U
Benzo(a)anthracene	224	µg/Kg	690 J	500	180 J	46 J	2100	660 J	400 U	400 U	400 U	1700 U
Benzo(a)pyrene	61	µg/Kg	580 J	430	150 J	410 U	1800	550 J	400 U	400 U	400 U	1700 U
Benzo(b)fluoranthene	1100	µg/Kg	490 J	330 J	140 J	410 U	1500	500 J	400 U	400 U	400 U	1700 U
Benzo(g,h,i)perylene	50000	µg/Kg	390 J	250 J	110 J	410 U	1200	380 J	400 U	400 U	400 U	1700 U
Benzo(k)fluoranthene	1100	µg/Kg	510 J	320 J	100 J	410 U	1400	340 J	400 U	400 U	400 U	1700 U
bis(2-Ethylhexyl) phthalate	50000	µg/Kg	780 U	410 U	410 U	410 U	760 U	810 U	400 U	400 U	400 U	1700 U
Carbazole	NS	µg/Kg	130 J	72 J	410 U	410 U	650 J	85 J	400 U	400 U	400 U	1700 U
Chrysene	400	µg/Kg	690 J	490	180 J	46 J	2100	670 J	400 U	400 U	400 U	1700 U
Dibenzofuran	6200	µg/Kg	98 J	68 J	410 U	410 U	420 J	84 J	400 U	400 U	400 U	1700 U
Dibenz(a,h)anthracene	14	µg/Kg	150 J	78 J	410 U	410 U	390 J	110 J	400 U	400 U	400 U	1700 U
Fluoranthene	50000	µg/Kg	1400	990	370 J	110 J	5600	1300	400 U	400 U	400 U	200 J
Fluorene	50000	µg/Kg	170 J	91 J	45 J	410 U	720 J	170 J	400 U	400 U	400 U	1700 U
Indeno(1,2,3-cd)pyrene	3200	µg/Kg	340 J	220 J	94 J	410 U	1000	330 J	400 U	400 U	400 U	1700 U
Naphthalene	13000	µg/Kg	780 U	130 J	410 U	410 U	340 J	110 J	400 U	400 U	400 U	1700 U
Phenanthrene	50000	µg/Kg	1300	770	360 J	130 J	5900	1200	400 U	400 U	400 U	1700 U
Pyrene	50000	µg/Kg	1300	780	350 J	110 J	5100	1300	400 U	400 U	400 U	1700 U
2-Methyl naphthalene	35400	µg/Kg	780 U	79 J	410 U	410 U	210 J	87 J	400 U	400 U	400 U	1700 U

TABLE 2

ORGANIC CHEMICAL COMPOUNDS DETECTED IN SOILS
SITE INVESTIGATION/FEASIBILITY STUDY
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Sample Location:	*BH-17*	*BH-17*	*BH-17*	BH-18	BH-18	BH-18	BH-18B	BH-18B	BH-18B	*BH-19*	*BH-19*
		Sample Depth (ft BGS):	2-4	4-6	6-8	0-2	2-4	8-10	0-2	2-4	4-6	0-2	2-4
		Sample Date:	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03	5/5/03	5/5/03	5/5/03	05/05/03	05/05/03
Parameter	*TAGM 4046 Standard*	*Unit*											
Volatiles													
Acetone	200	µg/Kg	100 U	21 U	24 U	21 U	25 U	25 U	27 U	25 U	25 U	23 U	24 U/48 U
2-Butanone	300	µg/Kg	100 U	21 U	24 U	21 U	25 U	25 U	27 U	25 U	25 U	23 U	24 U/48 U
cis-1,2-Dichloroethene	NS	µg/Kg	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U	1.1 J	5.7 U	6.0 U/12 U
Tetrachloroethene	1400	µg/Kg	620	65	10 U	65	14 U	1000	210	91	160	22	300 E/290
Methylene chloride	100	µg/Kg	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U	6.2 U	5.7 U	2.9 J/12 U
Trichloroethene	700	µg/Kg	26 U	5.3 U	1.1 J	2.1 J	6.3 U	5.2 J	2.4 J	6.4 U	1.5 J	5.7 U	0.76 J/12 U
Toluene	1500	µg/Kg	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U	0.96 J	5.7 U	6.0 U/12 U
Xylenes, total	1200	µg/Kg	27 J	16 U	18 U	1.5 J	19 U	2.5 J	20 U	19 U	19 U	17 U	18 U/36 U
Benzene	60	µg/Kg	26 U	5.3 U	6.0 U	5.2 U	6.3 U	6.2 U	6.7 U	6.4 U	6.2 U	5.7 U	6.0 U/12 U
Ethylbenzene	5500	µg/Kg	3.0 J	5.3 U	6.0 U	5.2 U	6.3 U	2.2 J	6.7 U	6.4 U	6.2 U	5.7 U	6.0 U/12 U
Semi-Volatiles													
Acenaphthene	50000	µg/Kg	44 J	350 U	390 U	340 U	420 U	410 U	440 U	420 U	42 J	380 U	400 U/400 U
Anthracene	50000	µg/Kg	42 J	37 J	390 U	340 U	420 U	410 U	440 U	420 U	53 J	380 U	400 U/400 U
Benzo(a)anthracene	224	µg/Kg	90 J	110 J	71 J	59 J	420 U	410 U	440 U	54 J	220 J	380 U	400 U/400 U
Benzo(a)pyrene	61	µg/Kg	120 J	100 J	62 J	59 J	420 U	410 U	440 U	54 J	240 J	380 U	400 U/400 U
Benzo(b)fluoranthene	1100	µg/Kg	180 J	130 J	58 J	97 J	420 U	410 U	440 U	420 U	270 J	380 U	400 U/400 U
Benzo(g,h,i)perylene	50000	µg/Kg	38 J	350 U	390 U	34 J	420 U	410 U	440 U	40 J	83 J	380 U	400 U/400 U
Benzo(k)fluoranthene	1100	µg/Kg	140 J	77 J	390 U	59 J	420 U	410 U	440 U	420 U	180 J	380 U	400 U/400 U
bis(2-Ethylhexyl) phthalate	50000	µg/Kg	340 U	350 U	390 U	44 J	420 U	410 U	440 U	420 U	50 J	380 U	400 U/400 U
Carbazole	NS	µg/Kg	40 J	350 U	390 U	340 U	420 U	410 U	440 U	420 U	75 J	380 U	400 U/400 U
Chrysene	400	µg/Kg	210 J	140 J	100 J	130 J	420 U	410 U	440 U	73 J	310 J	380 U	400 U/400 U
Dibenzofuran	6200	µg/Kg	43 J	350 U	390 U	340 U	420 U	410 U	440 U	420 U	410 U	380 U	400 U/400 U
Dibenz(a,h)anthracene	14	µg/Kg	340 U	350 U	390 U	340 U	420 U	410 U	440 U	420 U	40 J	380 U	400 U/400 U
Fluoranthene	50000	µg/Kg	580	260 J	150 J	350	420 U	410 U	440 U	120 J	760	48 J	400 U/400 U
Fluorene	50000	µg/Kg	44 J	350 U	390 U	340 U	420 U	410 U	440 U	420 U	42 J	380 U	400 U/400 U
Indeno(1,2,3-cd)pyrene	3200	µg/Kg	35 J	28 J	390 U	340 U	420 U	410 U	440 U	31 J	84 J	380 U	400 U/400 U
Naphthalene	13000	µg/Kg	44 J	350 U	390 U	340 U	420 U	410 U	440 U	420 U	410 U	380 U	400 U/400 U
Phenanthrene	50000	µg/Kg	490	180 J	95 J	170 J	420 U	410 U	440 U	64 J	500	380 U	400 U/400 U
Pyrene	50000	µg/Kg	230 J	130 J	100 J	170 J	420 U	410 U	440 U	100 J	450	380 U	400 U/400 U
2-Methyl naphthalene	35400	µg/Kg	190 J	38 J	390 U	76 J	420 U	410 U	440 U	420 U	410 U	380 U	400 U/400 U

TABLE 2

ORGANIC CHEMICAL COMPOUNDS DETECTED IN SOILS
SITE INVESTIGATION/FEASIBILITY STUDY
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

		Sample Location:	*BH-19*	*BH-20*	*BH-20*	*BH-20*	*BH-20*
		Sample Depth (ft BGS):	*6-8*	*0-2*	*2-4*	*4-6*	*6-8*
		Sample Date:	05/05/03	05/05/03	05/05/03	05/05/03	05/05/03
Parameter	*TAGM 4046 Standard*	*Unit*					
Volatiles							
Acetone	200	µg/Kg	81 U	24 U	22 U	14 J	26
2-Butanone	300	µg/Kg	81 U	24 U	22 U	25 U	25 U
cis-1,2-Dichloroethene	NS	µg/Kg	3.5 J	5.9 U	5.6 U	6.3 U	6.3 U
Tetrachloroethene	1400	µg/Kg	480	3.2 J	6.4	12	3.3 J
Methylene chloride	100	µg/Kg	20 U	5.1 J	4.8 J	7.5	3.7 J
Trichloroethene	700	µg/Kg	9.1 J	5.9 U	5.6 U	6.3 U	6.3 U
Toluene	1500	µg/Kg	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Xylenes, total	1200	µg/Kg	61 U	18 U	17 U	19 U	19 U
Benzene	60	µg/Kg	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Ethylbenzene	5500	µg/Kg	20 U	5.9 U	5.6 U	6.3 U	6.3 U
Semi-Volatiles							
Acenaphthene	50000	µg/Kg	400 U	36 J	370 U	2100 U	830 U
Anthracene	50000	µg/Kg	400 U	80 J	370 U	270 J	830 U
Benzo(a)anthracene	224	µg/Kg	400 U	160 J	52 J	660 J	140 J
Benzo(a)pyrene	61	µg/Kg	400 U	130 J	49 J	520 J	110 J
Benzo(b)fluoranthene	1100	µg/Kg	400 U	110 J	370 U	400 J	830 U
Benzo(g,h,i)perylene	50000	µg/Kg	400 U	100 J	42 J	440 J	830 U
Benzo(k)fluoranthene	1100	µg/Kg	400 U	110 J	370 U	470 J	830 U
bis(2-Ethylhexyl) phthalate	50000	µg/Kg	400 U	390 U	370 U	2100 U	87 J
Carbazole	NS	µg/Kg	400 U	390 U	370 U	2100 U	830 U
Chrysene	400	µg/Kg	400 U	160 J	54 J	620 J	150 J
Dibenzofuran	6200	µg/Kg	400 U	390 U	370 U	2100 U	830 U
Dibenz(a,h)anthracene	14	µg/Kg	400 U	29 J	370 U	2100 U	830 U
Fluoranthene	50000	µg/Kg	400 U	320 J	87 J	1400 J	290 J
Fluorene	50000	µg/Kg	400 U	39 J	370 U	2100 U	830 U
Indeno(1,2,3-cd)pyrene	3200	µg/Kg	400 U	83 J	34 J	350 J	830 U
Naphthalene	13000	µg/Kg	400 U	390 U	370 U	290 J	830 U
Phenanthrene	50000	µg/Kg	400 U	290 J	43 J	1200 J	160 J
Pyrene	50000	µg/Kg	400 U	310 J	81 J	1100 J	230 J
2-Methyl naphthalene	35400	µg/Kg	400 U	390 U	370 U	2100 U	830 U

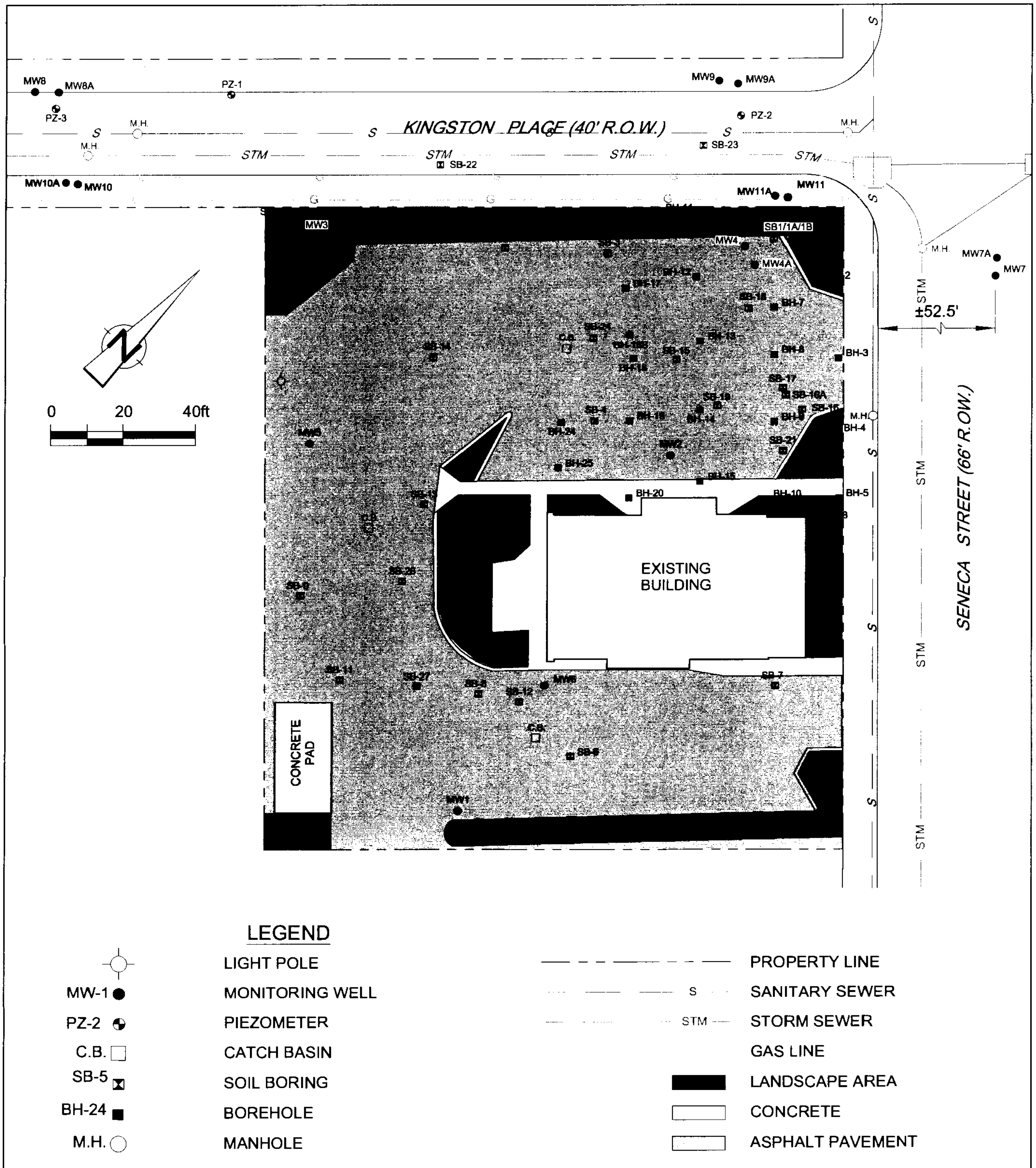
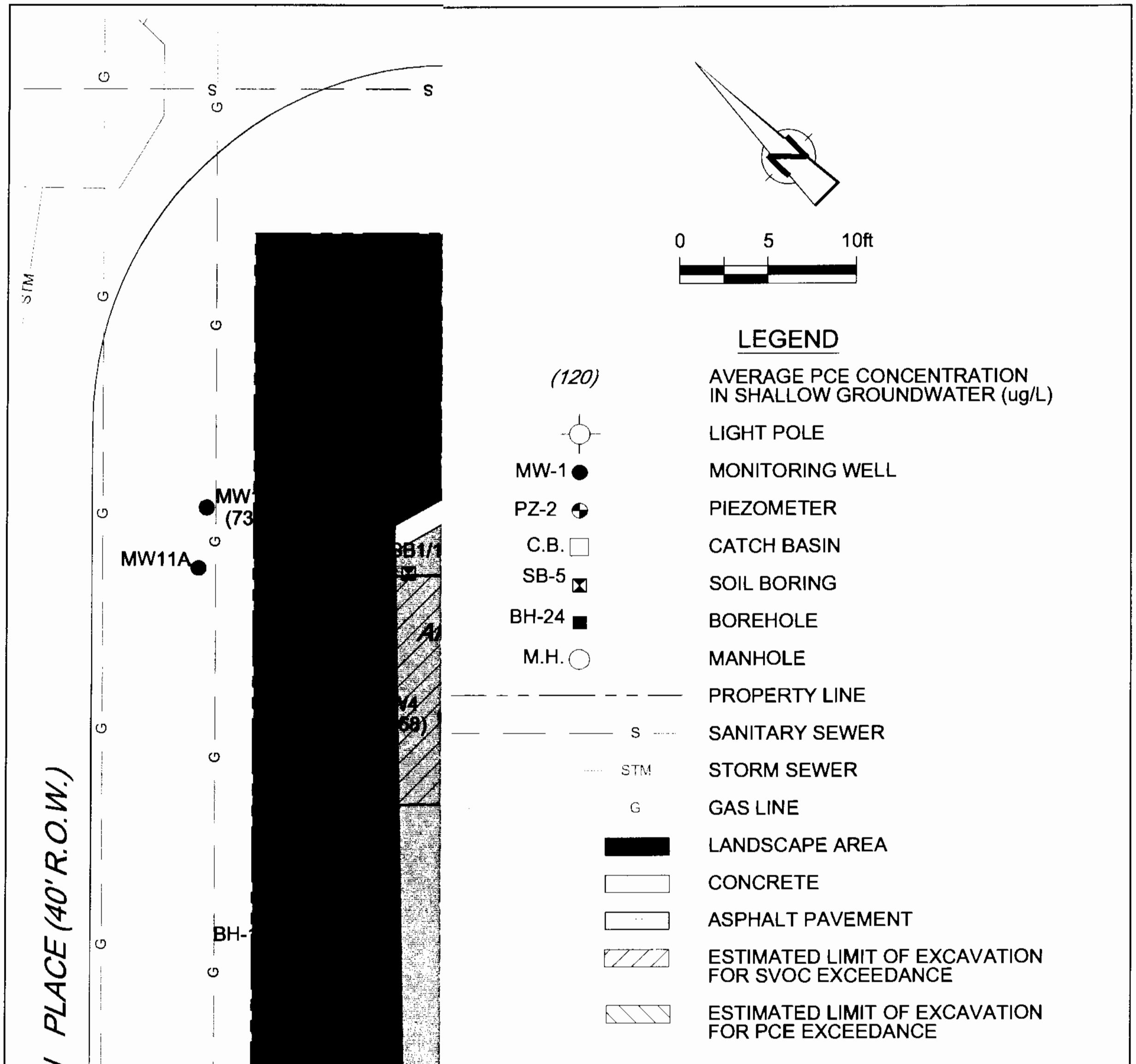


figure 1

EXISTING CONDITIONS
SITE REMEDIATION PROGRAM
PARCEL 2 - SENECA STREET
Buffalo, New York

15867-00(005)GN-NF016 APR 02/2004



EXCAVATION AREA	EXCAVATION DEPTH
A	7-10' (HAZARDOUS DISPOSAL)
B	7-10'
C	6'
D	8'
E	5'
F	4'
G	2'

figure 2

ESTIMATED EXCAVATION AREAS
SITE REMEDIATION PROGRAM
PARCEL 2 - SENECA STREET
Buffalo, New York

15867-00(005)GN-NF017 APR 01/2004

APPENDIX B

WASTE CHARACTERIZATION DATA

Client: SLC Environmental Services

Lab Project No.: 03-2521

Client Job Site: Seneca Street

Client Job No.: 03-081

Sample Type: Soil
Analytical Method: SW846, 7.3
Date Sampled: 09/16/2003
Date Received: 09/17/2003
Date Analyzed: 09/24/2003

Lab Sample ID.	Client Sample ID.	Cyanide Reactivity (mg/kg)	Sulfide Reactivity (mg/kg)
8359	SLC - Non Haz	ND<1 Non-Reactive	ND<10 Non-Reactive
8361	SLC - Haz	ND<1 Non-Reactive	ND<10 Non-Reactive

ELAP ID. No.: 10709

Comments: ND denotes Non Detected.

Hazardous Waste Regulatory Levels for Reactivity are as follows:
Sulfide - 500 mg/kg, Cyanide - 250 mg/kg.

Approved By Technical Director: ______________________
Bruce Hoogesteger

Chain of Custody provides additional sample information.

File ID: ReactivityC&S03-2521.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for TCLP Extract

Client: SLC Environmental Services

Client Job Site: Seneca St

Lab Project Number: 03-2521

Lab Sample Number: 8361

Client Job Number: 03-081

Field Location: SLC Haz

Field ID Number: N/A

Sample Type: TCLP Extract

Date Sampled: 09/16/2002

Date Received: 09/17/2003

Date Analyzed: 09/19/2003

TCLP Analytes	Results in ug / L	Regulatory Limits in ug / L
Benzene	ND< 200	500
2-Butanone	ND< 500	200,000
Carbon tetrachloride	ND< 200	500
Chlorobenzene	ND< 200	100,000
Chloroform	ND< 200	6,000
1,2-Dichloroethane	ND< 200	500
1,1-Dichloroethene	ND< 200	700
Tetrachloroethene	12,000	700
Trichloroethene	ND< 200	500
Vinyl Chloride	ND< 200	200

ELAP Number 10958 Method: EPA 8260B Data File: 67150.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

Volatile Analysis Report for TCLP Extract

Client: **SLC Environmental Services**

Client Job Site:	Seneca St	**Lab Project Number:**	03-2521
		Lab Sample Number:	8359
Client Job Number:	03-081		
Field Location:	SLC - Non Haz	**Date Sampled:**	09/16/2002
Field ID Number:	N/A	**Date Received:**	09/17/2003
Sample Type:	TCLP Extract	**Date Analyzed:**	09/18/2003

TCLP Analytes	Results in ug / L	Regulatory Limits in ug / L
Benzene	ND< 20.0	500
2-Butanone	ND< 50.0	200,000
Carbon tetrachloride	ND< 20.0	500
Chlorobenzene	ND< 20.0	100,000
Chloroform	ND< 20.0	6,000
1,2-Dichloroethane	ND< 20.0	500
1,1-Dichloroethene	ND< 20.0	700
Tetrachloroethene	ND< 20.0	700
Trichloroethene	ND< 20.0	500
Vinyl Chloride	ND< 20.0	200

ELAP Number 10958 Method: EPA 8260B Data File: 67137.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 032521V1.XLS

Volatile Analysis Report for Soils/Solids/Sludges

Client: SLC Environmental Services

Client Job Site:	Seneca St	**Lab Project Number:**	03-2521
		Lab Sample Number:	8362
Client Job Number:	03-081		
Field Location:	SLC SB19	**Date Sampled:**	09/16/2003
Field ID Number:	N/A	**Date Received:**	09/17/2003
Sample Type:	Soil	**Date Analyzed:**	09/24/2003

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 19,900
Bromomethane	ND< 19,900
Bromoform	ND< 19,900
Carbon Tetrachloride	ND< 19,900
Chloroethane	ND< 19,900
Chloromethane	ND< 19,900
2-Chloroethyl vinyl Ether	ND< 19,900
Chloroform	ND< 19,900
Dibromochloromethane	ND< 19,900
1,1-Dichloroethane	ND< 19,900
1,2-Dichloroethane	ND< 19,900
1,1-Dichloroethene	ND< 19,900
cis-1,2-Dichloroethene	ND< 19,900
trans-1,2-Dichloroethene	ND< 19,900
1,2-Dichloropropane	ND< 19,900
cis-1,3-Dichloropropene	ND< 19,900
trans-1,3-Dichloropropene	ND< 19,900
Methylene chloride	ND< 49,700
1,1,2,2-Tetrachloroethane	ND< 19,900
Tetrachloroethene	144,000
1,1,1-Trichloroethane	ND< 19,900
1,1,2-Trichloroethane	ND< 19,900
Trichloroethene	ND< 19,900
Trichlorofluoromethane	ND< 19,900
Vinyl chloride	ND< 19,900

Aromatics	Results in ug / Kg
Benzene	ND< 19,900
Chlorobenzene	ND< 19,900
Ethylbenzene	ND< 19,900
Toluene	ND< 19,900
m,p-Xylene	ND< 19,900
o-Xylene	ND< 19,900
Styrene	ND< 19,900
1,2-Dichlorobenzene	ND< 19,900
1,3-Dichlorobenzene	ND< 19,900
1,4-Dichlorobenzene	ND< 19,900

Ketones	Results in ug / Kg
Acetone	ND< 99,400
2-Butanone	ND< 49,700
2-Hexanone	ND< 49,700
4-Methyl-2-pentanone	ND< 49,700

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 49,700
Vinyl acetate	ND< 49,700

ELAP Number 10958 Method: EPA 8260B Data File: 16280.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: SLC Environmental Services

Client Job Site:	Seneca St	**Lab Project Number:**	03-2521
		Lab Sample Number:	8360
Client Job Number:	03-081		
Field Location:	SLC SB17	**Date Sampled:**	09/16/2003
Field ID Number:	N/A	**Date Received:**	09/17/2003
Sample Type:	Soil	**Date Analyzed:**	09/24/2003

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 121
Bromomethane	ND< 121
Bromoform	ND< 121
Carbon Tetrachloride	ND< 121
Chloroethane	ND< 121
Chloromethane	ND< 121
2-Chloroethyl vinyl Ether	ND< 121
Chloroform	ND< 121
Dibromochloromethane	ND< 121
1,1-Dichloroethane	ND< 121
1,2-Dichloroethane	ND< 121
1,1-Dichloroethene	ND< 121
cis-1,2-Dichloroethene	ND< 121
trans-1,2-Dichloroethene	ND< 121
1,2-Dichloropropane	ND< 121
cis-1,3-Dichloropropene	ND< 121
trans-1,3-Dichloropropene	ND< 121
Methylene chloride	ND< 303
1,1,2,2-Tetrachloroethane	ND< 121
Tetrachloroethene	3,930
1,1,1-Trichloroethane	ND< 121
1,1,2-Trichloroethane	ND< 121
Trichloroethene	ND< 121
Trichlorofluoromethane	ND< 121
Vinyl chloride	ND< 121

Aromatics	Results in ug / Kg
Benzene	ND< 121
Chlorobenzene	ND< 121
Ethylbenzene	ND< 121
Toluene	ND< 121
m,p-Xylene	ND< 121
o-Xylene	ND< 121
Styrene	ND< 121
1,2-Dichlorobenzene	ND< 121
1,3-Dichlorobenzene	ND< 121
1,4-Dichlorobenzene	ND< 121

Ketones	Results in ug / Kg
Acetone	ND< 607
2-Butanone	ND< 303
2-Hexanone	ND< 303
4-Methyl-2-pentanone	ND< 303

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 303
Vinyl acetate	ND< 303

ELAP Number 10958 Method: EPA 8260B Data File: 16279.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: SLC Environmental Services

Client Job Site:	Seneca St	**Lab Project Number:**	03-2521
		Lab Sample Number:	8358
Client Job Number:	03-081		
Field Location:	SLC - BH20	**Date Sampled:**	09/16/2003
Field ID Number:	N/A	**Date Received:**	09/17/2003
Sample Type:	Soil	**Date Analyzed:**	09/20/2003

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 7.30
Bromomethane	ND< 7.30
Bromoform	ND< 7.30
Carbon Tetrachloride	ND< 7.30
Chloroethane	ND< 7.30
Chloromethane	ND< 7.30
2-Chloroethyl vinyl Ether	ND< 7.30
Chloroform	ND< 7.30
Dibromochloromethane	ND< 7.30
1,1-Dichloroethane	ND< 7.30
1,2-Dichloroethane	ND< 7.30
1,1-Dichloroethene	ND< 7.30
cis-1,2-Dichloroethene	ND< 7.30
trans-1,2-Dichloroethene	ND< 7.30
1,2-Dichloropropane	ND< 7.30
cis-1,3-Dichloropropene	ND< 7.30
trans-1,3-Dichloropropene	ND< 7.30
Methylene chloride	ND< 18.3
1,1,2,2-Tetrachloroethane	ND< 7.30
Tetrachloroethene	32.1
1,1,1-Trichloroethane	ND< 7.30
1,1,2-Trichloroethane	ND< 7.30
Trichloroethene	ND< 7.30
Trichlorofluoromethane	ND< 7.30
Vinyl chloride	ND< 7.30

Aromatics	Results in ug / Kg
Benzene	ND< 7.30
Chlorobenzene	ND< 7.30
Ethylbenzene	ND< 7.30
Toluene	ND< 7.30
m,p-Xylene	ND< 7.30
o-Xylene	ND< 7.30
Styrene	ND< 7.30
1,2-Dichlorobenzene	ND< 7.30
1,3-Dichlorobenzene	ND< 7.30
1,4-Dichlorobenzene	ND< 7.30

Ketones	Results in ug / Kg
Acetone	ND< 36.5
2-Butanone	ND< 18.3
2-Hexanone	ND< 18.3
4-Methyl-2-pentanone	ND< 18.3

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 18.3
Vinyl acetate	ND< 18.3

ELAP Number 10958 Method: EPA 8260B Data File: 16216.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

Volatile Analysis Report for Soils/Solids/Sludges

Client: SLC Environmental Services

Client Job Site:	Seneca St	**Lab Project Number:**	03-2521
		Lab Sample Number:	8357
Client Job Number:	03-081		
Field Location:	SLC - BH 15	**Date Sampled:**	09/16/2003
Field ID Number:	N/A	**Date Received:**	09/17/2003
Sample Type:	Soil	**Date Analyzed:**	09/20/2003

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 10.1
Bromomethane	ND< 10.1
Bromoform	ND< 10.1
Carbon Tetrachloride	ND< 10.1
Chloroethane	ND< 10.1
Chloromethane	ND< 10.1
2-Chloroethyl vinyl Ether	ND< 10.1
Chloroform	ND< 10.1
Dibromochloromethane	ND< 10.1
1,1-Dichloroethane	ND< 10.1
1,2-Dichloroethane	ND< 10.1
1,1-Dichloroethene	ND< 10.1
cis-1,2-Dichloroethene	ND< 10.1
trans-1,2-Dichloroethene	ND< 10.1
1,2-Dichloropropane	ND< 10.1
cis-1,3-Dichloropropene	ND< 10.1
trans-1,3-Dichloropropene	ND< 10.1
Methylene chloride	ND< 25.1
1,1,2,2-Tetrachloroethane	ND< 10.1
Tetrachloroethene	ND< 10.1
1,1,1-Trichloroethane	ND< 10.1
1,1,2-Trichloroethane	ND< 10.1
Trichloroethene	ND< 10.1
Trichlorofluoromethane	ND< 10.1
Vinyl chloride	ND< 10.1

Aromatics	Results in ug / Kg
Benzene	ND< 10.1
Chlorobenzene	ND< 10.1
Ethylbenzene	ND< 10.1
Toluene	ND< 10.1
m,p-Xylene	ND< 10.1
o-Xylene	ND< 10.1
Styrene	ND< 10.1
1,2-Dichlorobenzene	ND< 10.1
1,3-Dichlorobenzene	ND< 10.1
1,4-Dichlorobenzene	ND< 10.1

Ketones	Results in ug / Kg
Acetone	ND< 50.3
2-Butanone	ND< 25.1
2-Hexanone	ND< 25.1
4-Methyl-2-pentanone	ND< 25.1

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 25.1
Vinyl acetate	ND< 25.1

ELAP Number 10958 Method: EPA 8260B Data File: 16215.D

Comments: ND denotes Non Detect
ug / Kg = microgram per Kilogram

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 032521V3.XLS

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for TCLP Extract

Client: **SLC Environmental Services**

Client Job Site:	Seneca St	**Lab Project Number:**	03-2521
		Lab Sample Number:	8361
Client Job Number:	03-081		
Field Location:	SLC Haz	**Date Sampled:**	09/16/2003
Field ID Number:	N/A	**Date Received:**	09/17/2003
Sample Type:	TCLP Extract	**Date Analyzed:**	09/23/2003

Base / Neutrals	Results in ug / L	Regulatory Limits in ug / L
1,4-Dichlorobenzene	ND< 40.0	7,500
2,4-Dinitrotoluene	ND< 40.0	130
Hexachlorobenzene	ND< 40.0	3,000
Hexachlorobutadiene	ND< 40.0	500
Hexachloroethane	ND< 40.0	130
Nitrobenzene	ND< 40.0	2,000
Pyridine	ND< 40.0	5,000

Acids	Results in ug / L	Regulatory Limits in ug / L
Cresols (as m,p,o-Cresol)	ND< 80.0	200,000
Pentachlorophenol	ND< 100	100,000
2,4,5-Trichlorophenol	ND< 100	400,000
2,4,6-Trichlorophenol	ND< 40.0	2,000

ELAP Number 10958 Method: EPA 8270C Data File: 12954.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for TCLP Extract

Client: **SLC Environmental Services**

Client Job Site:	Seneca St	**Lab Project Number:**	03-2521
		Lab Sample Number:	8359
Client Job Number:	03-081		
Field Location:	SLC - Non Haz	**Date Sampled:**	09/16/2003
Field ID Number:	N/A	**Date Received:**	09/17/2003
Sample Type:	TCLP Extract	**Date Analyzed:**	09/23/2003

Base / Neutrals	Results in ug / L	Regulatory Limits in ug / L
1,4-Dichlorobenzene	ND< 40.0	7,500
2,4-Dinitrotoluene	ND< 40.0	130
Hexachlorobenzene	ND< 40.0	3,000
Hexachlorobutadiene	ND< 40.0	500
Hexachloroethane	ND< 40.0	130
Nitrobenzene	ND< 40.0	2,000
Pyridine	ND< 40.0	5,000

Acids	Results in ug / L	Regulatory Limits in ug / L
Cresols (as m,p,o-Cresol)	ND< 80.0	200,000
Pentachlorophenol	ND< 100	100,000
2,4,5-Trichlorophenol	ND< 100	400,000
2,4,6-Trichlorophenol	ND< 40.0	2,000

ELAP Number 10958 Method: EPA 8270C Data File: 12953.D

Comments: ND denotes Non Detect
ug / L = microgram per Liter

Signature:
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

PHC Analysis Report for Soils/Solids/Sludges

Client: **SLC Environmental Services**

Client Job Site:	Seneca St	**Lab Project Number:**	03-2521
		Lab Sample Number:	8359
Client Job Number:	03-081		
Field Location:	SLC - Non Haz	**Date Sampled:**	09/16/2003
Field ID Number:	N/A	**Date Received:**	09/17/2003
Sample Type:	Soil	**Date Analyzed:**	09/24/2003

PHC Classification	Results in ug / Kg
Heavy Weight PHC as: Lube Oil	15,100

ELAP Number 10958 Method: NYSDOH 310.13

Comments:
ND denotes Non Detect
ug / Kg = microgram per Kilogram
PHC = Petroleum Hydrocarbon

Signature:

Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: SLC Environmental Services

Client Job Site: Seneca Street

Client Job No.: 03-081

Field Location: SLC-Haz
Field ID No.: N/A

Lab Project No.: 03-2521
Lab Sample No.: 8361

Sample Type: TCLP Extract

Date Sampled: 09/16/2003
Date Received: 09/17/2003

Laboratory Report for TCLP Metals Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Arsenic	09/23/2003	EPA 6010	<0.100	5.0
Barium	09/23/2003	EPA 6010	0.605	100.0
Cadmium	09/23/2003	EPA 6010	<0.025	1.0
Chromium	09/23/2003	EPA 6010	<0.050	5.0
Lead	09/23/2003	EPA 6010	<0.100	5.0
Mercury	09/24/2003	EPA 7470	<0.0020	0.2
Selenium	09/23/2003	EPA 6010	<0.100	1.0
Silver	09/23/2003	EPA 6010	<0.050	5.0

ELAP ID No.: 10958

Comments:

oproved By: ______________________
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:032521.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: SLC Environmental Services
Client Job Site: Seneca Street
Client Job No.: 03-081
Field Location: SLC-Non Haz
Field ID No.: N/A

Lab Project No.: 03-2521
Lab Sample No.: 8359
Sample Type: TCLP Extract
Date Sampled: 09/16/2003
Date Received: 09/17/2003

Laboratory Report for TCLP Metals Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Arsenic	09/23/2003	EPA 6010	<0.100	5.0
Barium	09/23/2003	EPA 6010	1.05	100.0
Cadmium	09/23/2003	EPA 6010	<0.025	1.0
Chromium	09/23/2003	EPA 6010	<0.050	5.0
Lead	09/23/2003	EPA 6010	<0.100	5.0
Mercury	09/24/2003	EPA 7470	<0.0020	0.2
Selenium	09/23/2003	EPA 6010	<0.100	1.0
Silver	09/23/2003	EPA 6010	<0.050	5.0

ELAP ID No.: 10958

Comments:

pproved By: ______________________
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:032521.xls

Flashpoint by Pensky-Martin Analysis Report

Client: **SLC Environmental Services**

Client Job Site: Seneca St

Lab Project Number: 03-2521

Client Job Number: 03-081

Date Sampled: 09/16/2003
Date Received: 09/17/2003
Date Analyzed: 09/23/2003

Sample Type: Soil

Lab Sample Number	Field Number	Field Location	Result (°C)
8359	N/A	SLC - Non Haz	>70
8361	N/A	SLC Haz	>70

ELAP Number 10958

Method: SW846 1010

Comments: °C = degrees Centigrade

Signature:

Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 032521FL.XLS

Client: SLC Environmental Services

Client Job Site: Seneca Street

Client Job No.: 03-081

Lab Project No.: 03-2521

Sample Type: Solid
Method: SW846 9095

Date(s) Sampled: 09/16/2003
Date Received: 09/17/2003
Date Analyzed: 09/17/2003

Laboratory Report for Paint Filter Analysis

Lab Sample No.	Field ID No.	Field Location	Paint Filter Test Result (Pass/Fail)
8359	N/A	SLC - Non Haz	Pass
8361	N/A	SLC Haz	Pass

ELAP ID No.: 10958

Comments: Pass = No Free Liquids

Approved By:
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:032521.xls

Client: SLC Environmental Services

Client Job Site: Seneca Street

Client Job No.: 03-081

Lab Project No.: 03-2521

Sample Type: Solid
Method: SW846 9045C

Date(s) Sampled: 09/16/2003
Date Received: 09/17/2003
Date Analyzed: 09/17/2003

Laboratory Report for pH Analysis

Lab Sample No.	Field ID No.	Field Location	pH Results (S.U.)
8359	N/A	SLC - Non Haz	10.39
8361	N/A	SLC Haz	7.61

ELAP ID No.: 10958

Comments:

pproved By:
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:032521.xls

PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
Rochester, NY 14608
(585) 647-2530 * (800) 724-1997
FAX: (585) 647-3311

CHAIN OF CUSTODY

REPORT TO			INVOICE TO				
COMPANY: SLC ENV. SER			COMPANY: SAME			LAB PROJECT #: 03-2521	CLIENT PROJECT #: 03-081
ADDRESS: 295 Mill St			ADDRESS:			TURNAROUND TIME: (WORKING DAYS)	
CITY: LockporT	STATE: NY	ZIP: 14094	CITY:	STATE:	ZIP:		
PHONE: 716 433-077	FAX: 433-0802		PHONE:	FAX:		☐ 1 ☐ 2 ☐ 3 STD ☒ 5	OTHER ☐
ATTN: JERRY Jones			ATTN:				

PROJECT NAME/SITE NAME: Seneca St

COMMENTS: PO# 03-081-001

REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	TAL VOC	TCLP VOC	TCLP SVOC	Reactivity	Corrosivity	FLASH	TPH	Paint Filter	TCLP Reclamda		REMARKS	PARADIGM LAB SAMPLE NUMBER
1 9/16	9:30		X	SLC-BH15	SOIL	1	X										3 0'-4'	8357
2 9/16	9:30		X	SLC-BH20	SOIL	1	X										2 0'-4	8358
3 9/16	9:30	X		SLC-NON HAZ	SOIL	2		X	X	X	X	X	X	X	X		BH15 BH20	8359
4 9/16	9:00		X	SLCSB17	SOIL	1	X										BH17, SB16A	8360
5 9/16	9:00	X		SLC HAZ	SOIL	2		X	X	X	X	X		X	X		BH 17 & BH19	8361
6 9/16	9:00		X	SLCSB19	SOIL	1	X											8362
7															added 9/18 per	JJ/ah		
8																		
9																		
10																		

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable or note deviation:
CONTAINER TYPE: ☑
PRESERVATIONS: ☑
HOLDING TIME: ☑
TEMPERATURE: ☑ 8C iced

9/16/03

Sampled By:	Date/Time: 9/16/03 1:45pm	Relinquished By:	Date/Time:	Total Cost:
Relinquished By: Allen J Embury	Date/Time:	Received By:	Date/Time:	
Received By: Michael E McMahon	Date/Time: 9/16/03 1:46 pm	Received @ Lab By: Pamela M Blake	Date/Time: 9/17/03 @ 9:50	P.I.F.

APPENDIX C

CONFIRMATORY & POST-EXCAVATION ANALYTICAL DATA

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*
		Sample Identification	*S-102103-DRS-1*	*S-102103-DRS-18*	*S-102103-DRS-18DL*	*S-102103-DRS-19*	*S-102103-DRS-2*	*S-102103-DRS-2DL*	*S-102103-DRS-3*
		Sample Collection Date:	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*
			East Sidewall	*South Sidewall West*	*South Sidewall West*	*South Sidewall East*	*North Sidewall East*	*North Sidewall East*	*North Sidewall Center*
Parameters	*TAGM Std.* (1)	*Units*							
Volatiles									
1,1,1-Trichloroethane	800	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
1,1,2,2-Tetrachloroethane	600	µg/Kg	6 U	6 U	--	6 U	6 U	--	6 U
1,1,2-Trichloroethane	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
1,1-Dichloroethane	200	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
1,1-Dichloroethene	400	µg/Kg	6 U	6 U	--	6 U	6 U	--	6 U
1,2,4-Trichlorobenzene	3400	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/Kg	6 U	6 U	--	6 U	6 U	--	6 U
1,2-Dichlorobenzene	7900	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
1,2-Dichloroethane	100	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
1,2-Dichloropropane	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
1,3-Dichlorobenzene	1600	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
1,4-Dichlorobenzene	8500	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	29 U	30 U	--	29 U	29 U	--	30 U
2-Hexanone	NS	µg/Kg	29 U	30 U	--	29 U	29 U	--	30 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	29 U	30 U	--	29 U	29 U	--	30 U
Acetone	200	µg/kg	29 U	30 U	--	29 U	29 U	--	30 U
Benzene	60	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Bromodichloromethane	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Bromoform	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Bromomethane (Methyl Bromide)	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Carbon disulfide	2700	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Carbon tetrachloride	600	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Chlorobenzene	1700	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Chloroethane	1900	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Chloroform (Trichloromethane)	300	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Chloromethane (Methyl Chloride)	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
cis-1,2-Dichloroethene	NS	µg/Kg	6 U	18	--	6 U	4 J	--	27
cis-1,3-Dichloropropene	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Cyclohexane	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Dibromochloromethane	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Ethylbenzene	5500	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Isopropylbenzene	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Methyl acetate	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Methyl cyclohexane	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Methyl Tert Butyl Ether	NS	µg/Kg	6 U	6 U	--	6 U	6 U	--	6 U
Methylene chloride	100	µg/kg	9	9 U	--	7 U	8	--	9
Styrene	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Tetrachloroethene	1400	µg/kg	16	--	500	6 U	--	560	3 J
Toluene	1500	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
trans-1,2-Dichloroethene	300	µg/kg	6 U	6 U	--	6 U	6 U	--	2 J
trans-1,3-Dichloropropene	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Trichloroethene	700	µg/kg	6 U	32	--	6 U	21	--	6 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	Excavation-B	Excavation-B	Excavation-B	Excavation-B	Excavation-B	Excavation-B	Excavation-B
		Sample Identification	S-102103-DRS-1	S-102103-DRS-18	S-102103-DRS-18DL	S-102103-DRS-19	S-102103-DRS-2	S-102103-DRS-2DL	S-102103-DRS-3
		Sample Collection Date:	10/21/2003	10/21/2003	10/21/2003	10/21/2003	10/21/2003	10/21/2003	10/21/2003
Parameters	*TAGM Std.* [1]	*Units*	*East Sidewall*	*South Sidewall West*	*South Sidewall West*	*South Sidewall East*	*North Sidewall East*	*North Sidewall East*	*North Sidewall Center*
Volatiles (Cont'd.)									
Trichlorofluoromethane (CFC-11)	NS	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Trifluorotrichloroethane (Freon 113)	6000	µg/kg	6 U	6 U	--	6 U	6 U	--	6 U
Vinyl chloride	200	µg/Kg	11 U	12 U	--	12 U	12 U	--	2 J
Xylene (total)	1200	µg/kg	17 U	18 U	--	17 U	17 U	--	18 U
Semi-Volatiles		*Units*							
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
2,4,5-Trichlorophenol	100	µg/kg	980 U	960 U	--	1000 U	18000 U	--	940 U
2,4,6-Trichlorophenol	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
2,4-Dichlorophenol	400	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
2,4-Dimethylphenol	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
2,4-Dinitrophenol	200	µg/kg	2000 U	1900 U	--	2000 U	37000 U	--	1900 U
2,4-Dinitrotoluene	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
2,6-Dinitrotoluene	1000	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
2-Chloronaphthalene	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
2-Chlorophenol	800	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
2-Methylnaphthalene	36400	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
2-Methylphenol	100	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
2-Nitroaniline	NS	µg/kg	2000 U	1900 U	--	2000 U	37000 U	--	1900 U
2-Nitrophenol	330	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
3,3'-Dichlorobenzidine	NS	µg/kg	810 U	790 U	--	820 U	15000 U	--	780 U
3-Nitroaniline	500	µg/kg	2000 U	1900 U	--	2000 U	37000 U	--	1900 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	20000 U	20000 U	--	21000 U	380000 U	--	19000 U
4-Bromophenyl phenyl ether	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
4-Chloro-3-methylphenol	240	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

Sample Location:			*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*
Sample Identification			*S-102103-DRS-1*	*S-102103-DRS-18*	*S-102103-DRS-18DL*	*S-102103-DRS-19*	*S-102103-DRS-2*	*S-102103-DRS-2DL*	*S-102103-DRS-3*
Sample Collection Date:			*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*
			East Sidewall	*South Sidewall West*	*South Sidewall West*	*South Sidewall East*	*North Sidewall East*	*North Sidewall East*	*North Sidewall Center*
Parameters	*TAGM Std.* (1)	*Units*							
Semi-Volatiles (Cont'd.)									
4-Chloroaniline	220	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
4-Chlorophenyl phenyl ether	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
4-Methylphenol	900	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
4-Nitroaniline	NS	µg/kg	2000 U	1900 U	--	2000 U	37000 U	--	1900 U
4-Nitrophenol	100	µg/kg	2000 U	1900 U	--	2000 U	37000 U	--	1900 U
Acenaphthene	50000	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Acenaphthylene	41000	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Acetophenone	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Anthracene	50000	µg/kg	400 U	400 U	--	410 U	3400 J	--	390 U
Atrazine	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Benzaldehyde	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Benzo(a)anthracene	224	µg/kg	400 U	400 U	--	410 U	**7700**	--	390 U
Benzo(a)pyrene	61	µg/kg	400 U	400 U	--	410 U	**6900 J**	--	390 U
Benzo(b)fluoranthene	1100	µg/Kg	400 U	400 U	--	410 U	**5100 J**	--	390 U
Benzo(g,h,i)perylene	50000	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Benzo(k)fluoranthene	1100	µg/kg	400 U	400 U	--	410 U	**6500 J**	--	390 U
Biphenyl	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
bis(2-Chloroethoxy)methane	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
bis(2-Chloroethyl)ether	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Butyl benzylphthalate	50000	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Caprolactam	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Carbazole	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Chrysene	400	µg/kg	400 U	400 U	--	410 U	**6600 J**	--	390 U
Dibenz(a,h)anthracene	14	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Dibenzofuran	6200	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Diethyl phthalate	7100	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Dimethyl phthalate	2000	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Di-n-butylphthalate	8100	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Di-n-octyl phthalate	50000	µg/kg	550 U	540 U	--	560 U	10000 U	--	530 U
Fluoranthene	50000	µg/kg	400 U	400 U	--	410 U	15000	--	390 U
Fluorene	50000	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Hexachlorobenzene	410	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Hexachlorobutadiene	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Hexachlorocyclopentadiene	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Hexachloroethane	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Indeno(1,2,3-cd)pyrene	3200	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Isophorone	4400	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Naphthalene	13000	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Nitrobenzene	200	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*
		Sample Identification	*S-102103-DRS-1*	*S-102103-DRS-18*	*S-102103-DRS-18DL*	*S-102103-DRS-19*	*S-102103-DRS-2*	*S-102103-DRS-2DL*	*S-102103-DRS-3*
		Sample Collection Date:	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*
			East Sidewall	*South Sidewall West*	*South Sidewall West*	*South Sidewall East*	*North Sidewall East*	*North Sidewall East*	*North Sidewall Center*
Parameters	*TAGM Std.* (1)	*Units*							
Semi-Volatiles (Cont'd.)									
N-Nitrosodi-n-propylamine	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
N-Nitrosodiphenylamine	NS	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Pentachlorophenol	1000	µg/kg	2000 U	1900 U	--	2000 U	37000 U	--	1900 U
Phenanthrene	50000	µg/kg	400 U	400 U	--	410 U	13000	--	390 U
Phenol	30	µg/kg	400 U	400 U	--	410 U	7600 U	--	390 U
Pyrene	50000	µg/kg	400 U	400 U	--	410 U	14000	--	390 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-D*	*Excavation-D*	*Excavation-D*
		Sample Identification	*S-102103-DRS-30*	*S-102103-DRS-31*	*S-102103-DRS-4*	*S-102103-DRS-4DL*	*S-102203-DRS-10*	*S-102203-DRS-25*	*S-102203-DRS-25DL*
		Sample Collection Date:	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/22/2003*	*10/22/2003*	*10/22/2003*
			South Sidewall East	*South Sidewall West*	*North Sidewall West*	*North Sidewall West*	*North Sidewall*	*Bottom*	*Bottom*
Parameters	*TAGM Std.* [1]	*Units*							
Volatiles									
1,1,1-Trichloroethane	800	µg/kg	--	--	6 U	--	6 U	6 U	--
1,1,2,2-Tetrachloroethane	600	µg/Kg	--	--	6 U	--	6 U	6 U	--
1,1,2-Trichloroethane	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
1,1-Dichloroethane	200	µg/kg	--	--	6 U	--	6 U	6 U	--
1,1-Dichloroethene	400	µg/Kg	--	--	6 U	--	6 U	6 U	--
1,2,4-Trichlorobenzene	3400	µg/kg	--	--	6 U	--	6 U	6 U	--
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/Kg	--	--	6 U	--	6 U	6 U	--
1,2-Dichlorobenzene	7900	µg/kg	--	--	6 U	--	6 U	6 U	--
1,2-Dichloroethane	100	µg/kg	--	--	6 U	--	6 U	6 U	--
1,2-Dichloropropane	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
1,3-Dichlorobenzene	1600	µg/kg	--	--	6 U	--	6 U	6 U	--
1,4-Dichlorobenzene	8500	µg/kg	--	--	6 U	--	6 U	6 U	--
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	--	--	29 U	--	30 U	29 U	--
2-Hexanone	NS	µg/Kg	--	--	29 U	--	30 U	29 U	--
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	--	--	29 U	--	30 U	29 U	--
Acetone	200	µg/kg	--	--	29 U	--	30 U	29 U	--
Benzene	60	µg/kg	--	--	6 U	--	6 U	6 U	--
Bromodichloromethane	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
Bromoform	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
Bromomethane (Methyl Bromide)	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
Carbon disulfide	2700	µg/kg	--	--	6 U	--	6 U	6 U	--
Carbon tetrachloride	600	µg/kg	--	--	6 U	--	6 U	6 U	--
Chlorobenzene	1700	µg/kg	--	--	6 U	--	6 U	6 U	--
Chloroethane	1900	µg/kg	--	--	6 U	--	6 U	6 U	--
Chloroform (Trichloromethane)	300	µg/kg	--	--	6 U	--	6 U	6 U	--
Chloromethane (Methyl Chloride)	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
cis-1,2-Dichloroethene	NS	µg/Kg	--	--	5 J	--	6 U	18	--
cis-1,3-Dichloropropene	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
Cyclohexane	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
Dibromochloromethane	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
Ethylbenzene	5500	µg/kg	--	--	6 U	--	6 U	6 U	--
Isopropylbenzene	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
Methyl acetate	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
Methyl cyclohexane	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
Methyl Tert Butyl Ether	NS	µg/Kg	--	--	6 U	--	6 U	6 U	--
Methylene chloride	100	µg/kg	--	--	8	--	8	17	--
Styrene	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
Tetrachloroethene	1400	µg/kg	--	--	--	7500	2 J	--	3700
Toluene	1500	µg/kg	--	--	6 U	--	6 U	6 U	--
trans-1,2-Dichloroethene	300	µg/kg	--	--	6 U	--	6 U	6 U	--
trans-1,3-Dichloropropene	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
Trichloroethene	700	µg/kg	--	--	19	--	6 U	65	--

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-D*	*Excavation-D*	*Excavation-D*
		Sample Identification	*S-102103-DRS-30*	*S-102103-DRS-31*	*S-102103-DRS-4*	*S-102103-DRS-4DL*	*S-102203-DRS-10*	*S-102203-DRS-25*	*S-102203-DRS-25DL*
		Sample Collection Date:	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/22/2003*	*10/22/2003*	*10/22/2003*
			South Sidewall East	*South Sidewall West*	*North Sidewall West*	*North Sidewall West*	*North Sidewall*	*Bottom*	*Bottom*
Parameters	*TAGM Std.* $^{(1)}$	*Units*							
Volatiles (Cont'd.)									
Trichlorofluoromethane (CFC-11)	NS	µg/kg	--	--	6 U	--	6 U	6 U	--
Trifluorotrichloroethane (Freon 113)	6000	µg/kg	--	--	6 U	--	6 U	6 U	--
Vinyl chloride	200	µg/Kg	--	--	12 U	--	12 U	11 U	--
Xylene (total)	1200	µg/kg	--	--	17 U	--	18 U	17 U	--
Semi-Volatiles		***Units***							
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	NS	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
2,4,5-Trichlorophenol	100	µg/kg	4900 U	9400 U	960 U	--	960 U	920 U	--
2,4,6-Trichlorophenol	NS	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
2,4-Dichlorophenol	400	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
2,4-Dimethylphenol	NS	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
2,4-Dinitrophenol	200	µg/kg	9700 U	19000 U	1900 U	--	1900 U	1800 U	--
2,4-Dinitrotoluene	NS	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
2,6-Dinitrotoluene	1000	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
2-Chloronaphthalene	NS	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
2-Chlorophenol	800	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
2-Methylnaphthalene	36400	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
2-Methylphenol	100	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
2-Nitroaniline	NS	µg/kg	9700 U	19000 U	1900 U	--	1900 U	1800 U	--
2-Nitrophenol	330	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
3,3'-Dichlorobenzidine	NS	µg/kg	4000 U	7700 U	790 U	--	800 U	760 U	--
3-Nitroaniline	500	µg/kg	9700 U	19000 U	1900 U	--	1900 U	1800 U	--
4,6-Dinitro-2-methylphenol	NS	µg/kg	100000 U	190000 U	20000 U	--	20000 U	19000 U	--
4-Bromophenyl phenyl ether	NS	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
4-Chloro-3-methylphenol	240	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-D*	*Excavation-D*	*Excavation-D*
		Sample Identification	*S-102103-DRS-30*	*S-102103-DRS-31*	*S-102103-DRS-4*	*S-102103-DRS-4DL*	*S-102203-DRS-10*	*S-102203-DRS-25*	*S-102203-DRS-25DL*
		Sample Collection Date:	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/22/2003*	*10/22/2003*	*10/22/2003*
			South Sidewall East	*South Sidewall West*	*North Sidewall West*	*North Sidewall West*	*North Sidewall*	*Bottom*	*Bottom*
Parameters	*TAGM Std.* (1)	*Units*							
Semi-Volatiles (Cont'd.)									
4-Chloroaniline	220	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
4-Chlorophenyl phenyl ether	NS	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
4-Methylphenol	900	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
4-Nitroaniline	NS	μg/kg	9700 U	19000 U	1900 U	--	1900 U	1800 U	--
4-Nitrophenol	100	μg/kg	9700 U	19000 U	1900 U	--	1900 U	1800 U	--
Acenaphthene	50000	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Acenaphthylene	41000	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Acetophenone	NS	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Anthracene	50000	μg/kg	1000 J	3800 U	390 U	--	400 U	380 U	--
Atrazine	NS	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Benzaldehyde	NS	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Benzo(a)anthracene	224	μg/kg	**2200**	3800 U	390 U	--	400 U	380 U	--
Benzo(a)pyrene	61	μg/kg	**1800 J**	3800 U	390 U	--	400 U	380 U	--
Benzo(b)fluoranthene	1100	μg/Kg	**1400 J**	3800 U	390 U	--	400 U	380 U	--
Benzo(g,h,i)perylene	50000	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Benzo(k)fluoranthene	1100	μg/kg	**1300 J**	3800 U	390 U	--	400 U	380 U	--
Biphenyl	NS	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
bis(2-Chloroethoxy)methane	NS	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
bis(2-Chloroethyl)ether	NS	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
bis(2-Ethylhexyl)phthalate	50000	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Butyl benzylphthalate	50000	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Caprolactam	NS	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Carbazole	NS	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Chrysene	400	μg/kg	**1900 J**	3800 U	390 U	--	400 U	380 U	--
Dibenz(a,h)anthracene	14	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Dibenzofuran	6200	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Diethyl phthalate	7100	μg/kg	2000 U	3800 U	390 U	--	400 U	490	--
Dimethyl phthalate	2000	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Di-n-butylphthalate	8100	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Di-n-octyl phthalate	50000	μg/kg	2700 U	5200 U	530 U	--	540 U	510 U	--
Fluoranthene	50000	μg/kg	3600	3800 U	390 U	--	400 U	380 U	--
Fluorene	50000	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Hexachlorobenzene	410	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Hexachlorobutadiene	NS	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Hexachlorocyclopentadiene	NS	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Hexachloroethane	NS	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Indeno(1,2,3-cd)pyrene	3200	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Isophorone	4400	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Naphthalene	13000	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Nitrobenzene	200	μg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-B*	*Excavation-D*	*Excavation-D*	*Excavation-D*
		Sample Identification	*S-102103-DRS-30*	*S-102103-DRS-31*	*S-102103-DRS-4*	*S-102103-DRS-4DL*	*S-102203-DRS-10*	*S-102203-DRS-25*	*S-102203-DRS-25DL*
		Sample Collection Date:	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/21/2003*	*10/22/2003*	*10/22/2003*	*10/22/2003*
			South Sidewall East	*South Sidewall West*	*North Sidewall West*	*North Sidewall West*	*North Sidewall*	*Bottom*	*Bottom*
Parameters	*TAGM Std. (1)*	*Units*							
Semi-Volatiles (Cont'd.)									
N-Nitrosodi-n-propylamine	NS	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
N-Nitrosodiphenylamine	NS	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Pentachlorophenol	1000	µg/kg	9700 U	19000 U	1900 U	--	1900 U	1800 U	--
Phenanthrene	50000	µg/kg	4000	3800 U	390 U	--	400 U	380 U	--
Phenol	30	µg/kg	2000 U	3800 U	390 U	--	400 U	380 U	--
Pyrene	50000	µg/kg	4600	3800 U	390 U	--	400 U	380 U	--

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	Excavation-D	Excavation-D	Excavation-D	Excavation-E	Excavation-E	Excavation-E	Excavation-E	Excavation-B
		Sample Identification	S-102203-DRS-5	S-102203-DRS-5DL	S-102203-DRS-9	S-102203-DRS-26	S-102203-DRS-6	S-102203-DRS-7	S-102203-DRS-8	S-102303-DRS-13
		Sample Collection Date:	10/22/2003	10/22/2003	10/22/2003	10/22/2003	10/22/2003	10/22/2003	10/22/2003	10/23/2003
			East Sidewall	East Sidewall	West Sidewall	Bottom	East Sidewall	North Sidewall	West Sidewall	West Sidewall
Parameters	TAGM Std. (1)	Units								
Volatiles										
1,1,1-Trichloroethane	800	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
1,1,2,2-Tetrachloroethane	600	μg/Kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
1,1,2-Trichloroethane	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
1,1-Dichloroethane	200	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
1,1-Dichloroethene	400	μg/Kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
1,2,4-Trichlorobenzene	3400	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	μg/Kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
1,2-Dichlorobenzene	7900	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
1,2-Dichloroethane	100	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
1,2-Dichloropropane	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
1,3-Dichlorobenzene	1600	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
1,4-Dichlorobenzene	8500	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
2-Butanone (Methyl Ethyl Ketone)	300	μg/kg	30 U	--	27 U	28 U	28 U	28 U	29 U	30 U
2-Hexanone	NS	μg/Kg	30 U	--	27 U	28 U	28 U	28 U	29 U	30 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	μg/kg	30 U	--	27 U	28 U	28 U	28 U	29 U	30 U
Acetone	200	μg/kg	30 U	--	27 U	28 U	28 U	28 U	29 U	30 U
Benzene	60	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Bromodichloromethane	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Bromoform	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Bromomethane (Methyl Bromide)	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Carbon disulfide	2700	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Carbon tetrachloride	600	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Chlorobenzene	1700	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Chloroethane	1900	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Chloroform (Trichloromethane)	300	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Chloromethane (Methyl Chloride)	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
cis-1,2-Dichloroethene	NS	μg/Kg	15	--	5 U	6 U	6 U	6 U	6 U	68
cis-1,3-Dichloropropene	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Cyclohexane	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Dibromochloromethane	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Dichlorodifluoromethane (CFC-12)	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Ethylbenzene	5500	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Isopropylbenzene	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Methyl acetate	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Methyl cyclohexane	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Methyl Tert Butyl Ether	NS	μg/Kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Methylene chloride	100	μg/kg	13	--	7	7	8	9	10	6
Styrene	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Tetrachloroethene	1400	μg/kg	--	1700	12	16	5 J	2 J	12	--
Toluene	1500	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
trans-1,2-Dichloroethene	300	μg/kg	4 J	--	5 U	6 U	6 U	6 U	6 U	6 U
trans-1,3-Dichloropropene	NS	μg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Trichloroethene	700	μg/kg	54	--	1 J	6 U	6 U	6 U	6 U	66

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-D*	*Excavation-D*	*Excavation-D*	*Excavation-E*	*Excavation-E*	*Excavation-E*	*Excavation-E*	*Excavation-B*
		Sample Identification	*S-102203-DRS-5*	*S-102203-DRS-5DL*	*S-102203-DRS-9*	*S-102203-DRS-26*	*S-102203-DRS-6*	*S-102203-DRS-7*	*S-102203-DRS-8*	*S-102303-DRS-13*
		Sample Collection Date:	*10/22/2003*	*10/22/2003*	*10/22/2003*	*10/22/2003*	*10/22/2003*	*10/22/2003*	*10/22/2003*	*10/23/2003*
			East Sidewall	*East Sidewall*	*West Sidewall*	*Bottom*	*East Sidewall*	*North Sidewall*	*West Sidewall*	*West Sidewall*
Parameters	*TAGM Std.* (1)	*Units*								
Volatiles (Cont'd.)										
Trichlorofluoromethane (CFC-11)	NS	µg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Trifluorotrichloroethane (Freon 113)	6000	µg/kg	6 U	--	5 U	6 U	6 U	6 U	6 U	6 U
Vinyl chloride	200	µg/Kg	12 U	--	11 U	11 U	11 U	11 U	12 U	12 U
Xylene (total)	1200	µg/kg	18 U	--	16 U	16 U	17 U	17 U	18 U	18 U
Semi-Volatiles		*Units*								
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	NS	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
2,4,5-Trichlorophenol	100	µg/kg	960 U	--	17000 U	18000 U	9800 U	940 U	20000 U	980 U
2,4,6-Trichlorophenol	NS	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
2,4-Dichlorophenol	400	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
2,4-Dimethylphenol	NS	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
2,4-Dinitrophenol	200	µg/kg	1900 U	--	35000 U	37000 U	20000 U	1900 U	39000 U	2000 U
2,4-Dinitrotoluene	NS	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
2,6-Dinitrotoluene	1000	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
2-Chloronaphthalene	NS	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
2-Chlorophenol	800	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
2-Methylnaphthalene	36400	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
2-Methylphenol	100	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
2-Nitroaniline	NS	µg/kg	1900 U	--	35000 U	37000 U	20000 U	1900 U	39000 U	2000 U
2-Nitrophenol	330	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
3,3'-Dichlorobenzidine	NS	µg/kg	790 U	--	14000 U	15000 U	8100 U	770 U	16000 U	810 U
3-Nitroaniline	500	µg/kg	1900 U	--	35000 U	37000 U	20000 U	1900 U	39000 U	2000 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	20000 U	--	360000 U	380000 U	200000 U	19000 U	410000 U	20000 U
4-Bromophenyl phenyl ether	NS	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
4-Chloro-3-methylphenol	240	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-D*	*Excavation-D*	*Excavation-D*	*Excavation-E*	*Excavation-E*	*Excavation-E*	*Excavation-E*	*Excavation-B*
		Sample Identification	*S-102203-DRS-5*	*S-102203-DRS-5DL*	*S-102203-DRS-9*	*S-102203-DRS-26*	*S-102203-DRS-6*	*S-102203-DRS-7*	*S-102203-DRS-8*	*S-102303-DRS-13*
		Sample Collection Date:	*10/22/2003*	*10/22/2003*	*10/22/2003*	*10/22/2003*	*10/22/2003*	*10/22/2003*	*10/22/2003*	*10/23/2003*
Parameters	*TAGM Std.* [1]	*Units*	*East Sidewall*	*East Sidewall*	*West Sidewall*	*Bottom*	*East Sidewall*	*North Sidewall*	*West Sidewall*	*West Sidewall*
Semi-Volatiles (Cont'd.)										
4-Chloroaniline	220	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
4-Chlorophenyl phenyl ether	NS	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
4-Methylphenol	900	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
4-Nitroaniline	NS	μg/kg	1900 U	--	35000 U	37000 U	20000 U	1900 U	39000 U	2000 U
4-Nitrophenol	100	μg/kg	1900 U	--	35000 U	37000 U	20000 U	1900 U	39000 U	2000 U
Acenaphthene	50000	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Acenaphthylene	41000	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Acetophenone	NS	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Anthracene	50000	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Atrazine	NS	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Benzaldehyde	NS	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Benzo(a)anthracene	224	μg/kg	400 U	--	4400 J	4400 J	2800 J	390 U	8100 U	400 U
Benzo(a)pyrene	61	μg/kg	400 U	--	4000 J	3800 J	2800 J	390 U	8100 U	400 U
Benzo(b)fluoranthene	1100	μg/Kg	400 U	--	3500 J	3600 J	2400 J	390 U	8100 U	400 U
Benzo(g,h,i)perylene	50000	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Benzo(k)fluoranthene	1100	μg/kg	400 U	--	7200 U	7600 U	2400 J	390 U	8100 U	400 U
Biphenyl	NS	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
bis(2-Chloroethoxy)methane	NS	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
bis(2-Chloroethyl)ether	NS	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
bis(2-Ethylhexyl)phthalate	50000	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Butyl benzylphthalate	50000	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Caprolactam	NS	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Carbazole	NS	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Chrysene	400	μg/kg	400 U	--	3900 J	4000 J	2700 J	390 U	8100 U	400 U
Dibenz(a,h)anthracene	14	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Dibenzofuran	6200	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Diethyl phthalate	7100	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Dimethyl phthalate	2000	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Di-n-butylphthalate	8100	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Di-n-octyl phthalate	50000	μg/kg	540 U	--	9700 U	10000 U	5500 U	520 U	11000 U	550 U
Fluoranthene	50000	μg/kg	400 U	--	8400	8500	5800	390 U	5000 J	400 U
Fluorene	50000	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Hexachlorobenzene	410	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Hexachlorobutadiene	NS	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Hexachlorocyclopentadiene	NS	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Hexachloroethane	NS	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Indeno(1,2,3-cd)pyrene	3200	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Isophorone	4400	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Naphthalene	13000	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Nitrobenzene	200	μg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-D*	*Excavation-D*	*Excavation-D*	*Excavation-E*	*Excavation-E*	*Excavation-E*	*Excavation-E*	*Excavation-B*
		Sample Identification	S-102203-DRS-5	S-102203-DRS-5DL	S-102203-DRS-9	S-102203-DRS-26	S-102203-DRS-6	S-102203-DRS-7	S-102203-DRS-8	S-102303-DRS-13
		Sample Collection Date:	10/22/2003	10/22/2003	10/22/2003	10/22/2003	10/22/2003	10/22/2003	10/22/2003	10/23/2003
			East Sidewall	*East Sidewall*	*West Sidewall*	*Bottom*	*East Sidewall*	*North Sidewall*	*West Sidewall*	*West Sidewall*
Parameters	*TAGM Std.* (1)	*Units*								
Semi-Volatiles (Cont'd.)										
N-Nitrosodi-n-propylamine	NS	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
N-Nitrosodiphenylamine	NS	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Pentachlorophenol	1000	µg/kg	1900 U	--	35000 U	37000 U	20000 U	1900 U	39000 U	2000 U
Phenanthrene	50000	µg/kg	400 U	--	5700 J	6000 J	4000	390 U	3600 J	400 U
Phenol	30	µg/kg	400 U	--	7200 U	7600 U	4000 U	390 U	8100 U	400 U
Pyrene	50000	µg/kg	400 U	--	8200 J	9000 J	5700 J	390 U	4400 J	400 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-B*	*Excavation-C*	*Excavation-C*	*Excavation-C*	*Excavation-C*	*Excavation-C*	*Excavation-C*
		Sample Identification	*S-102303-DRS-13DL*	*S-102303-DRS-14*	*S-102303-DRS-15*	*S-102303-DRS-16*	*S-102303-DRS-17*	*S-102303-DRS-17DL*	*S-102303-DRS-27*
		Sample Collection Date:	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*
			West Sidewall	*North Sidewall*	*West Sidewall North*	*West Sidewall South*	*South Sidewall*	*South Sidewall*	*Bottom*
Parameters	*TAGM Std.* (1)	*Units*							
Volatiles									
1,1,1-Trichloroethane	800	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
1,1,2,2-Tetrachloroethane	600	µg/Kg	--	6 U	6 U	6 U	6 U	--	6 U
1,1,2-Trichloroethane	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
1,1-Dichloroethane	200	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
1,1-Dichloroethene	400	µg/Kg	--	6 U	6 U	6 U	6 U	--	6 U
1,2,4-Trichlorobenzene	3400	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/Kg	--	6 U	6 U	6 U	6 U	--	6 U
1,2-Dichlorobenzene	7900	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
1,2-Dichloroethane	100	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
1,2-Dichloropropane	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
1,3-Dichlorobenzene	1600	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
1,4-Dichlorobenzene	8500	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	--	30 U	30 U	29 U	30 U	--	29 U
2-Hexanone	NS	µg/Kg	--	30 U	30 U	29 U	30 U	--	29 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	--	30 U	30 U	29 U	30 U	--	29 U
Acetone	200	µg/kg	--	30 U	30 U	29 U	30 U	--	29 U
Benzene	60	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Bromodichloromethane	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Bromoform	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Bromomethane (Methyl Bromide)	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Carbon disulfide	2700	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Carbon tetrachloride	600	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Chlorobenzene	1700	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Chloroethane	1900	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Chloroform (Trichloromethane)	300	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Chloromethane (Methyl Chloride)	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
cis-1,2-Dichloroethene	NS	µg/Kg	--	6 U	6 U	6 U	6 U	--	6 U
cis-1,3-Dichloropropene	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Cyclohexane	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Dibromochloromethane	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Ethylbenzene	5500	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Isopropylbenzene	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Methyl acetate	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Methyl cyclohexane	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Methyl Tert Butyl Ether	NS	µg/Kg	--	6 U	6 U	6 U	6 U	--	6 U
Methylene chloride	100	µg/kg	--	7	6	6	6	--	5 J
Styrene	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Tetrachloroethene	1400	µg/kg	4200	23	73	210	--	2800	--
Toluene	1500	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
trans-1,2-Dichloroethene	300	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
trans-1,3-Dichloropropene	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Trichloroethene	700	µg/kg	--	6 U	5 J	6 U	4 J	--	4 J

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-B*	*Excavation-C*	*Excavation-C*	*Excavation-C*	*Excavation-C*	*Excavation-C*	*Excavation-C*
		Sample Identification	*S-102303-DRS-13DL*	*S-102303-DRS-14*	*S-102303-DRS-15*	*S-102303-DRS-16*	*S-102303-DRS-17*	*S-102303-DRS-17DL*	*S-102303-DRS-27*
		Sample Collection Date:	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*
Parameters	**TAGM Std.** (1)	**Units**	*West Sidewall*	*North Sidewall*	*West Sidewall North*	*West Sidewall South*	*South Sidewall*	*South Sidewall*	*Bottom*
Volatiles (Cont'd.)									
Trichlorofluoromethane (CFC-11)	NS	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Trifluorotrichloroethane (Freon 113)	6000	µg/kg	--	6 U	6 U	6 U	6 U	--	6 U
Vinyl chloride	200	µg/Kg	--	12 U	12 U	12 U	12 U	--	12 U
Xylene (total)	1200	µg/kg	--	18 U	18 U	17 U	18 U	--	18 U
Semi-Volatiles		***Units***							
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
2,4,5-Trichlorophenol	100	µg/kg	--	940 U	1100 U	970 U	990 U	--	960 U
2,4,6-Trichlorophenol	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
2,4-Dichlorophenol	400	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
2,4-Dimethylphenol	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
2,4-Dinitrophenol	200	µg/kg	--	1900 U	2200 U	1900 U	2000 U	--	1900 U
2,4-Dinitrotoluene	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
2,6-Dinitrotoluene	1000	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
2-Chloronaphthalene	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
2-Chlorophenol	800	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
2-Methylnaphthalene	36400	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
2-Methylphenol	100	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
2-Nitroaniline	NS	µg/kg	--	1900 U	2200 U	1900 U	2000 U	--	1900 U
2-Nitrophenol	330	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
3,3'-Dichlorobenzidine	NS	µg/kg	--	770 U	900 U	800 U	820 U	--	800 U
3-Nitroaniline	500	µg/kg	--	1900 U	2200 U	1900 U	2000 U	--	1900 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	--	19000 U	22000 U	20000 U	20000 U	--	20000 U
4-Bromophenyl phenyl ether	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
4-Chloro-3-methylphenol	240	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-B*	*Excavation-C*	*Excavation-C*	*Excavation-C*	*Excavation-C*	*Excavation-C*	*Excavation-C*
		Sample Identification	*S-102303-DRS-13DL*	*S-102303-DRS-14*	*S-102303-DRS-15*	*S-102303-DRS-16*	*S-102303-DRS-17*	*S-102303-DRS-17DL*	*S-102303-DRS-27*
		Sample Collection Date:	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*
Parameters	*TAGM Std.* [(1)]	*Units*	*West Sidewall*	*North Sidewall*	*West Sidewall North*	*West Sidewall South*	*South Sidewall*	*South Sidewall*	*Bottom*
Semi-Volatiles (Cont'd.)									
4-Chloroaniline	220	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
4-Chlorophenyl phenyl ether	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
4-Methylphenol	900	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
4-Nitroaniline	NS	µg/kg	--	1900 U	2200 U	1900 U	2000 U	--	1900 U
4-Nitrophenol	100	µg/kg	--	1900 U	2200 U	1900 U	2000 U	--	1900 U
Acenaphthene	50000	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Acenaphthylene	41000	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Acetophenone	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Anthracene	50000	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Atrazine	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Benzaldehyde	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Benzo(a)anthracene	224	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Benzo(a)pyrene	61	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Benzo(b)fluoranthene	1100	µg/Kg	--	390 U	450 U	400 U	410 U	--	400 U
Benzo(g,h,i)perylene	50000	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Benzo(k)fluoranthene	1100	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Biphenyl	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
bis(2-Chloroethoxy)methane	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
bis(2-Chloroethyl)ether	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Butyl benzylphthalate	50000	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Caprolactam	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Carbazole	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Chrysene	400	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Dibenz(a,h)anthracene	14	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Dibenzofuran	6200	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Diethyl phthalate	7100	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Dimethyl phthalate	2000	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Di-n-butylphthalate	8100	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Di-n-octyl phthalate	50000	µg/kg	--	520 U	610 U	540 U	550 U	--	540 U
Fluoranthene	50000	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Fluorene	50000	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Hexachlorobenzene	410	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Hexachlorobutadiene	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Hexachlorocyclopentadiene	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Hexachloroethane	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Indeno(1,2,3-cd)pyrene	3200	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Isophorone	4400	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Naphthalene	13000	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Nitrobenzene	200	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-B*	*Excavation-C*	*Excavation-C*	*Excavation-C*	*Excavation-C*	*Excavation-C*	*Excavation-C*
		Sample Identification	*S-102303-DRS-13DL*	*S-102303-DRS-14*	*S-102303-DRS-15*	*S-102303-DRS-16*	*S-102303-DRS-17*	*S-102303-DRS-17DL*	*S-102303-DRS-27*
		Sample Collection Date:	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*
			West Sidewall	*North Sidewall*	*West Sidewall North*	*West Sidewall South*	*South Sidewall*	*South Sidewall*	*Bottom*
Parameters	*TAGM Std.* [1]	*Units*							
Semi-Volatiles (Cont'd.)									
N-Nitrosodi-n-propylamine	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
N-Nitrosodiphenylamine	NS	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Pentachlorophenol	1000	µg/kg	--	1900 U	2200 U	1900 U	2000 U	--	1900 U
Phenanthrene	50000	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Phenol	30	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U
Pyrene	50000	µg/kg	--	390 U	450 U	400 U	410 U	--	400 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

	Sample Location:		*Excavation-C*	*Excavation-C*	*Excavation-F*	*Excavation-F*	*Excavation-F*	*Excavation-G*	*Excavation-G*
	Sample Identification		*S-102303-DRS-27DL*	*S-102303-DRS-32*	*S-102303-DRS-23*	*S-102303-DRS-24*	*S-102303-DRS-29*	*S-102303-DRS-20*	*S-102303-DRS-21*
	Sample Collection Date:		*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*
			Bottom	*North Sidewall East*	*North Sidewall*	*East Sidewall*	*Bottom*	*West Sidewall*	*East Sidewall*
Parameters	*TAGM Std.* (1)	*Units*							
Volatiles									
1,1,1-Trichloroethane	800	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
1,1,2,2-Tetrachloroethane	600	µg/Kg	--	6 U	6 U	6 U	6 U	6 U	6 U
1,1,2-Trichloroethane	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
1,1-Dichloroethane	200	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
1,1-Dichloroethene	400	µg/Kg	--	6 U	6 U	6 U	6 U	6 U	6 U
1,2,4-Trichlorobenzene	3400	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/Kg	--	6 U	6 U	6 U	6 U	6 U	6 U
1,2-Dichlorobenzene	7900	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
1,2-Dichloroethane	100	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
1,2-Dichloropropane	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
1,3-Dichlorobenzene	1600	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
1,4-Dichlorobenzene	8500	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	--	28 U	30 U	30 U	31 U	30 U	29 U
2-Hexanone	NS	µg/Kg	--	28 U	30 U	30 U	31 U	30 U	29 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	--	28 U	30 U	30 U	31 U	30 U	29 U
Acetone	200	µg/kg	--	28 U	30 U	30 U	42	30 U	46
Benzene	60	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Bromodichloromethane	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Bromoform	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Bromomethane (Methyl Bromide)	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Carbon disulfide	2700	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Carbon tetrachloride	600	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Chlorobenzene	1700	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Chloroethane	1900	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Chloroform (Trichloromethane)	300	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Chloromethane (Methyl Chloride)	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
cis-1,2-Dichloroethene	NS	µg/Kg	--	6 U	6 U	6 U	6 U	6 U	6 U
cis-1,3-Dichloropropene	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Cyclohexane	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Dibromochloromethane	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Ethylbenzene	5500	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Isopropylbenzene	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Methyl acetate	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Methyl cyclohexane	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Methyl Tert Butyl Ether	NS	µg/Kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Methylene chloride	100	µg/kg	--	7	7	7	8	6	6
Styrene	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Tetrachloroethene	1400	µg/kg	2900	7	2 J	6	3 J	4 J	2 J
Toluene	1500	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
trans-1,2-Dichloroethene	300	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
trans-1,3-Dichloropropene	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Trichloroethene	700	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-C*	*Excavation-C*	*Excavation-F*	*Excavation-F*	*Excavation-F*	*Excavation-G*	*Excavation-G*
		Sample Identification	*S-102303-DRS-27DL*	*S-102303-DRS-32*	*S-102303-DRS-23*	*S-102303-DRS-24*	*S-102303-DRS-29*	*S-102303-DRS-20*	*S-102303-DRS-21*
		Sample Collection Date:	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*
			Bottom	*North Sidewall East*	*North Sidewall*	*East Sidewall*	*Bottom*	*West Sidewall*	*East Sidewall*
Parameters	*TAGM Std.* (1)	*Units*							
Volatiles (Cont'd.)									
Trichlorofluoromethane (CFC-11)	NS	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Trifluorotrichloroethane (Freon 113)	6000	µg/kg	--	6 U	6 U	6 U	6 U	6 U	6 U
Vinyl chloride	200	µg/Kg	--	11 U	12 U	12 U	12 U	12 U	12 U
Xylene (total)	1200	µg/kg	--	17 U	18 U	18 U	18 U	18 U	17 U
Semi-Volatiles		*Units*							
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
2,4,5-Trichlorophenol	100	µg/kg	--	900 U	950 U	960 U	950 U	950 U	9200 U
2,4,6-Trichlorophenol	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
2,4-Dichlorophenol	400	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
2,4-Dimethylphenol	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
2,4-Dinitrophenol	200	µg/kg	--	1800 U	1900 U	1900 U	1900 U	1900 U	18000 U
2,4-Dinitrotoluene	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
2,6-Dinitrotoluene	1000	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
2-Chloronaphthalene	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
2-Chlorophenol	800	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
2-Methylnaphthalene	36400	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
2-Methylphenol	100	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
2-Nitroaniline	NS	µg/kg	--	1800 U	1900 U	1900 U	1900 U	1900 U	18000 U
2-Nitrophenol	330	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
3,3'-Dichlorobenzidine	NS	µg/kg	--	740 U	790 U	790 U	790 U	780 U	7600 U
3-Nitroaniline	500	µg/kg	--	1800 U	1900 U	1900 U	1900 U	1900 U	18000 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	--	18000 U	20000 U	20000 U	20000 U	20000 U	190000 U
4-Bromophenyl phenyl ether	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
4-Chloro-3-methylphenol	240	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-C*	*Excavation-C*	*Excavation-F*	*Excavation-F*	*Excavation-F*	*Excavation-G*	*Excavation-G*
		Sample Identification	*S-102303-DRS-27DL*	*S-102303-DRS-32*	*S-102303-DRS-23*	*S-102303-DRS-24*	*S-102303-DRS-29*	*S-102303-DRS-20*	*S-102303-DRS-21*
		Sample Collection Date:	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*
			Bottom	*North Sidewall East*	*North Sidewall*	*East Sidewall*	*Bottom*	*West Sidewall*	*East Sidewall*
Parameters	*TAGM Std.* (1)	*Units*							
Semi-Volatiles (Cont'd.)									
4-Chloroaniline	220	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
4-Chlorophenyl phenyl ether	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
4-Methylphenol	900	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
4-Nitroaniline	NS	µg/kg	--	1800 U	1900 U	1900 U	1900 U	1900 U	18000 U
4-Nitrophenol	100	µg/kg	--	1800 U	1900 U	1900 U	1900 U	1900 U	18000 U
Acenaphthene	50000	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Acenaphthylene	41000	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Acetophenone	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Anthracene	50000	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Atrazine	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Benzaldehyde	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Benzo(a)anthracene	224	µg/kg	--	310 J	390 U	390 U	390 U	390 U	3800 U
Benzo(a)pyrene	61	µg/kg	--	270 J	390 U	390 U	390 U	390 U	3800 U
Benzo(b)fluoranthene	1100	µg/Kg	--	290 J	390 U	390 U	390 U	390 U	3800 U
Benzo(g,h,i)perylene	50000	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Benzo(k)fluoranthene	1100	µg/kg	--	240 J	390 U	390 U	390 U	390 U	3800 U
Biphenyl	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
bis(2-Chloroethoxy)methane	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
bis(2-Chloroethyl)ether	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	--	240 J	390 U	390 U	390 U	390 U	3800 U
Butyl benzylphthalate	50000	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Caprolactam	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Carbazole	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Chrysene	400	µg/kg	--	340 J	390 U	390 U	390 U	390 U	3800 U
Dibenz(a,h)anthracene	14	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Dibenzofuran	6200	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Diethyl phthalate	7100	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Dimethyl phthalate	2000	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Di-n-butylphthalate	8100	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Di-n-octyl phthalate	50000	µg/kg	--	500 U	530 U	530 U	530 U	530 U	5100 U
Fluoranthene	50000	µg/kg	--	560	390 U	390 U	390 U	160 J	1800 J
Fluorene	50000	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Hexachlorobenzene	410	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Hexachlorobutadiene	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Hexachlorocyclopentadiene	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Hexachloroethane	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Indeno(1,2,3-cd)pyrene	3200	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Isophorone	4400	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Naphthalene	13000	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Nitrobenzene	200	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-C*	*Excavation-C*	*Excavation-F*	*Excavation-F*	*Excavation-F*	*Excavation-G*	*Excavation-G*
		Sample Identification	*S-102303-DRS-27DL*	*S-102303-DRS-32*	*S-102303-DRS-23*	*S-102303-DRS-24*	*S-102303-DRS-29*	*S-102303-DRS-20*	*S-102303-DRS-21*
		Sample Collection Date:	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*	*10/23/2003*
			Bottom	*North Sidewall East*	*North Sidewall*	*East Sidewall*	*Bottom*	*West Sidewall*	*East Sidewall*
Parameters	*TAGM Std.* (1)	*Units*							
Semi-Volatiles (Cont'd.)									
N-Nitrosodi-n-propylamine	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
N-Nitrosodiphenylamine	NS	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Pentachlorophenol	1000	µg/kg	--	1800 U	1900 U	1900 U	1900 U	1900 U	18000 U
Phenanthrene	50000	µg/kg	--	320 J	390 U	390 U	390 U	390 U	3800 U
Phenol	30	µg/kg	--	370 U	390 U	390 U	390 U	390 U	3800 U
Pyrene	50000	µg/kg	--	530	390 U	390 U	390 U	160 J	1800 J

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

Sample Location:			*Excavation-G*	*Excavation-G*	*Excavation-E*	*Excavation-H*	*Excavation-H*	*Excavation-H*	*Excavation-H*	*Excavation-I*
Sample Identification			*S-102303-DRS-22*	*S-102303-DRS-28*	*S-102803-DRS-36*	*S-102803-DRS-33*	*S-102803-DRS-34*	*S-102803-DRS-35*	*S-102803-DRS-35DL*	*S-102803-DRS-37*
Sample Collection Date:			*10/23/2003*	*10/23/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*
			North Sidewall	*Bottom*	*Bottom*	*East Sidewall*	*North Sidewall*	*Bottom*	*Bottom*	*Bottom*
Parameters	*TAGM Std.* (1)	*Units*								
Volatiles										
1,1,1-Trichloroethane	800	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
1,1,2,2-Tetrachloroethane	600	µg/Kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
1,1,2-Trichloroethane	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
1,1-Dichloroethane	200	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
1,1-Dichloroethene	400	µg/Kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
1,2,4-Trichlorobenzene	3400	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/Kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
1,2-Dichlorobenzene	7900	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
1,2-Dichloroethane	100	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
1,2-Dichloropropane	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
1,3-Dichlorobenzene	1600	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
1,4-Dichlorobenzene	8500	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	29 U	30 U	31 U	30 U	30 U	29 U	--	30 U
2-Hexanone	NS	µg/Kg	29 U	30 U	31 U	30 U	30 U	29 U	--	30 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	29 U	30 U	31 U	30 U	30 U	29 U	--	30 U
Acetone	200	µg/kg	29 U	30	31 U	30 U	30 U	29 U	--	30 U
Benzene	60	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Bromodichloromethane	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Bromoform	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Bromomethane (Methyl Bromide)	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Carbon disulfide	2700	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Carbon tetrachloride	600	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Chlorobenzene	1700	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Chloroethane	1900	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Chloroform (Trichloromethane)	300	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Chloromethane (Methyl Chloride)	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
cis-1,2-Dichloroethene	NS	µg/Kg	6 U	6 U	6 U	6 U	3 J	4 J	--	50 J
cis-1,3-Dichloropropene	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Cyclohexane	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Dibromochloromethane	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Ethylbenzene	5500	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Isopropylbenzene	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Methyl acetate	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Methyl cyclohexane	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Methyl Tert Butyl Ether	NS	µg/Kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Methylene chloride	100	µg/kg	7	6	7	7	7	7	--	6 J
Styrene	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Tetrachloroethene	1400	µg/kg	29	52	17	16	51	--	4200	--
Toluene	1500	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
trans-1,2-Dichloroethene	300	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
trans-1,3-Dichloropropene	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Trichloroethene	700	µg/kg	6 U	6 U	6 U	6 U	1 J	24	--	180 J

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-G*	*Excavation-G*	*Excavation-E*	*Excavation-H*	*Excavation-H*	*Excavation-H*	*Excavation-H*	*Excavation-I*
		Sample Identification	*S-102303-DRS-22*	*S-102303-DRS-28*	*S-102803-DRS-36*	*S-102803-DRS-33*	*S-102803-DRS-34*	*S-102803-DRS-35*	*S-102803-DRS-35DL*	*S-102803-DRS-37*
		Sample Collection Date:	*10/23/2003*	*10/23/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*
			North Sidewall	*Bottom*	*Bottom*	*East Sidewall*	*North Sidewall*	*Bottom*	*Bottom*	*Bottom*
Parameters	*TAGM Std.* (1)	*Units*								
Volatiles (Cont'd.)										
Trichlorofluoromethane (CFC-11)	NS	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Trifluorotrichloroethane (Freon 113)	6000	µg/kg	6 U	6 U	6 U	6 U	6 U	6 U	--	6 U
Vinyl chloride	200	µg/Kg	12 U	12 U	12 U	12 U	12 U	12 U	--	2 J
Xylene (total)	1200	µg/kg	17 U	18 U	19 U	18 U	18 U	18 U	--	18 U
Semi-Volatiles		***Units***								
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
2,4,5-Trichlorophenol	100	µg/kg	9500 U	4800 U	980 U	980 U	940 U	980 U	--	940 U
2,4,6-Trichlorophenol	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
2,4-Dichlorophenol	400	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
2,4-Dimethylphenol	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
2,4-Dinitrophenol	200	µg/kg	19000 U	9500 U	2000 U	2000 U	1900 U	2000 U	--	1900 U
2,4-Dinitrotoluene	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
2,6-Dinitrotoluene	1000	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
2-Chloronaphthalene	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
2-Chlorophenol	800	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
2-Methylnaphthalene	36400	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
2-Methylphenol	100	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
2-Nitroaniline	NS	µg/kg	19000 U	9500 U	2000 U	2000 U	1900 U	2000 U	--	1900 U
2-Nitrophenol	330	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
3,3'-Dichlorobenzidine	NS	µg/kg	7900 U	3900 U	810 U	800 U	780 U	810 U	--	770 U
3-Nitroaniline	500	µg/kg	19000 U	9500 U	2000 U	2000 U	1900 U	2000 U	--	1900 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	200000 U	98000 U	20000 U	20000 U	19000 U	20000 U	--	19000 U
4-Bromophenyl phenyl ether	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
4-Chloro-3-methylphenol	240	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-G*	*Excavation-G*	*Excavation-E*	*Excavation-H*	*Excavation-H*	*Excavation-H*	*Excavation-H*	*Excavation-I*
		Sample Identification	*S-102303-DRS-22*	*S-102303-DRS-28*	*S-102803-DRS-36*	*S-102803-DRS-33*	*S-102803-DRS-34*	*S-102803-DRS-35*	*S-102803-DRS-35DL*	*S-102803-DRS-37*
		Sample Collection Date:	*10/23/2003*	*10/23/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*
			North Sidewall	*Bottom*	*Bottom*	*East Sidewall*	*North Sidewall*	*Bottom*	*Bottom*	*Bottom*
Parameters	*TAGM Std.* (1)	*Units*								
Semi-Volatiles (Cont'd.)										
4-Chloroaniline	220	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
4-Chlorophenyl phenyl ether	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	–	390 U
4-Methylphenol	900	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
4-Nitroaniline	NS	µg/kg	19000 U	9500 U	2000 U	2000 U	1900 U	2000 U	--	1900 U
4-Nitrophenol	100	µg/kg	19000 U	9500 U	2000 U	2000 U	1900 U	2000 U	--	1900 U
Acenaphthene	50000	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Acenaphthylene	41000	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Acetophenone	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Anthracene	50000	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Atrazine	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Benzaldehyde	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Benzo(a)anthracene	224	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Benzo(a)pyrene	61	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Benzo(b)fluoranthene	1100	µg/Kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Benzo(g,h,i)perylene	50000	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Benzo(k)fluoranthene	1100	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	–	390 U
Biphenyl	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
bis(2-Chloroethoxy)methane	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
bis(2-Chloroethyl)ether	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	8700	2000 U	410 U	400 U	390 U	400 U	--	390 U
Butyl benzylphthalate	50000	µg/kg	6900	3800	410 U	400 U	390 U	400 U	--	390 U
Caprolactam	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Carbazole	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Chrysene	400	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Dibenz(a,h)anthracene	14	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Dibenzofuran	6200	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Diethyl phthalate	7100	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Dimethyl phthalate	2000	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Di-n-butylphthalate	8100	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Di-n-octyl phthalate	50000	µg/kg	5300 U	2600 U	550 U	540 U	520 U	540 U	--	520 U
Fluoranthene	50000	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Fluorene	50000	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Hexachlorobenzene	410	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Hexachlorobutadiene	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Hexachlorocyclopentadiene	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Hexachloroethane	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Indeno(1,2,3-cd)pyrene	3200	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Isophorone	4400	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Naphthalene	13000	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Nitrobenzene	200	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-G*	*Excavation-G*	*Excavation-E*	*Excavation-H*	*Excavation-H*	*Excavation-H*	*Excavation-H*	*Excavation-I*
		Sample Identification	*S-102303-DRS-22*	*S-102303-DRS-28*	*S-102803-DRS-36*	*S-102803-DRS-33*	*S-102803-DRS-34*	*S-102803-DRS-35*	*S-102803-DRS-35DL*	*S-102803-DRS-37*
		Sample Collection Date:	*10/23/2003*	*10/23/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*
			North Sidewall	*Bottom*	*Bottom*	*East Sidewall*	*North Sidewall*	*Bottom*	*Bottom*	*Bottom*
Parameters	*TAGM Std.* [1]	*Units*								
Semi-Volatiles (Cont'd.)										
N-Nitrosodi-n-propylamine	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
N-Nitrosodiphenylamine	NS	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Pentachlorophenol	1000	µg/kg	19000 U	9500 U	2000 U	2000 U	1900 U	2000 U	--	1900 U
Phenanthrene	50000	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Phenol	30	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U
Pyrene	50000	µg/kg	3900 U	2000 U	410 U	400 U	390 U	400 U	--	390 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

Parameters	TAGM Std. (1)	Units	*Excavation-I* *S-102803-DRS-37DL* *10/28/2003* *Bottom*	*Excavation-I* *S-102803-DRS-38* *10/28/2003* *North Sidewall*	*Excavation-I* *S-102803-DRS-39* *10/28/2003* *Spoils*	*Excavation-I* *S-102803-DRS-39DL* *10/28/2003* *Spoils*	*Excavation-H* *S-110303-DRS-47* *11/03/2003* *East Sidewall*	*Excavation-H* *S-110303-DRS-48* *11/03/2003* *Northeast Sidewall*	*Excavation-J* *S-110303-DRS-44* *11/03/2003* *Northwest Sidewall*
Sample Location: *Sample Identification* *Sample Collection Date:*									
Volatiles									
1,1,1-Trichloroethane	800	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
1,1,2,2-Tetrachloroethane	600	µg/Kg	--	760 U	6 U	--	6 U	6 U	6 U
1,1,2-Trichloroethane	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
1,1-Dichloroethane	200	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
1,1-Dichloroethene	400	µg/Kg	--	760 U	6 U	--	6 U	6 U	6 U
1,2,4-Trichlorobenzene	3400	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/Kg	--	760 U	6 U	--	6 U	6 U	6 U
1,2-Dichlorobenzene	7900	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
1,2-Dichloroethane	100	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
1,2-Dichloropropane	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
1,3-Dichlorobenzene	1600	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
1,4-Dichlorobenzene	8500	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	--	3800 U	30 U	--	28 U	28 U	30 U
2-Hexanone	NS	µg/Kg	--	3800 U	30 U	--	28 U	28 U	30 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	--	3800 U	30 U	--	28 U	28 U	30 U
Acetone	200	µg/kg	--	3800 U	30 U	--	28 U	28 U	30 U
Benzene	60	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Bromodichloromethane	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Bromoform	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Bromomethane (Methyl Bromide)	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Carbon disulfide	2700	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Carbon tetrachloride	600	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Chlorobenzene	1700	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Chloroethane	1900	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Chloroform (Trichloromethane)	300	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Chloromethane (Methyl Chloride)	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
cis-1,2-Dichloroethene	NS	µg/Kg	--	760 U	6 U	--	6 U	6 U	6 U
cis-1,3-Dichloropropene	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Cyclohexane	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Dibromochloromethane	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Ethylbenzene	5500	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Isopropylbenzene	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Methyl acetate	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Methyl cyclohexane	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Methyl Tert Butyl Ether	NS	µg/Kg	--	760 U	6 U	--	6 U	6 U	6 U
Methylene chloride	100	µg/kg	--	760 U	5 J	--	7	5 J	7
Styrene	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Tetrachloroethene	1400	µg/kg	72000	3900	--	51000	1 J	4 J	5 J
Toluene	1500	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
trans-1,2-Dichloroethene	300	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
trans-1,3-Dichloropropene	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Trichloroethene	700	µg/kg	--	760 U	5 J	--	6 U	6 U	6 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-I*	*Excavation-I*	*Excavation-I*	*Excavation-I*	*Excavation-H*	*Excavation-H*	*Excavation-J*
		Sample Identification	*S-102803-DRS-37DL*	*S-102803-DRS-38*	*S-102803-DRS-39*	*S-102803-DRS-39DL*	*S-110303-DRS-47*	*S-110303-DRS-48*	*S-110303-DRS-44*
		Sample Collection Date:	*10/28/2003*	*10/28/2003*	*10/28/2003*	*10/28/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*
Parameters	*TAGM Std.* [1]	*Units*	*Bottom*	*North Sidewall*	*Spoils*	*Spoils*	*East Sidewall*	*Northeast Sidewall*	*Northwest Sidewall*
Volatiles (Cont'd.)									
Trichlorofluoromethane (CFC-11)	NS	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Trifluorotrichloroethane (Freon 113)	6000	µg/kg	--	760 U	6 U	--	6 U	6 U	6 U
Vinyl chloride	200	µg/Kg	--	1500 U	12 U	--	11 U	11 U	12 U
Xylene (total)	1200	µg/kg	--	2300 U	18 U	--	17 U	17 U	18 U
Semi-Volatiles		*Units*							
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
2,4,5-Trichlorophenol	100	µg/kg	--	970 U	--	--	18000 U	4900 U	970 U
2,4,6-Trichlorophenol	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
2,4-Dichlorophenol	400	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
2,4-Dimethylphenol	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
2,4-Dinitrophenol	200	µg/kg	--	1900 U	--	--	36000 U	9700 U	1900 U
2,4-Dinitrotoluene	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
2,6-Dinitrotoluene	1000	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
2-Chloronaphthalene	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
2-Chlorophenol	800	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
2-Methylnaphthalene	36400	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
2-Methylphenol	100	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
2-Nitroaniline	NS	µg/kg	--	1900 U	--	--	36000 U	9700 U	1900 U
2-Nitrophenol	330	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
3,3'-Dichlorobenzidine	NS	µg/kg	--	800 U	--	--	15000 U	4000 U	800 U
3-Nitroaniline	500	µg/kg	--	1900 U	--	--	36000 U	9700 U	1900 U
4,6-Dinitro-2-methylphenol	NS	µg/kg	--	20000 U	--	--	380000 U	100000 U	20000 U
4-Bromophenyl phenyl ether	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
4-Chloro-3-methylphenol	240	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	Excavation-I	Excavation-I	Excavation-I	Excavation-I	Excavation-H	Excavation-H	Excavation-J
		Sample Identification	S-102803-DRS-37DL	S-102803-DRS-38	S-102803-DRS-39	S-102803-DRS-39DL	S-110303-DRS-47	S-110303-DRS-48	S-110303-DRS-44
		Sample Collection Date:	10/28/2003	10/28/2003	10/28/2003	10/28/2003	11/03/2003	11/03/2003	11/03/2003
Parameters	TAGM Std. (1)	Units	Bottom	North Sidewall	Spoils	Spoils	East Sidewall	Northeast Sidewall	Northwest Sidewall
Semi-Volatiles (Cont'd.)									
4-Chloroaniline	220	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
4-Chlorophenyl phenyl ether	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
4-Methylphenol	900	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
4-Nitroaniline	NS	µg/kg	--	1900 U	--	--	36000 U	9700 U	1900 U
4-Nitrophenol	100	µg/kg	--	1900 U	--	--	36000 U	9700 U	1900 U
Acenaphthene	50000	µg/kg	--	400 U	--	--	4200 J	2000 U	400 U
Acenaphthylene	41000	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Acetophenone	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Anthracene	50000	µg/kg	--	400 U	--	--	9300	2000 U	400 U
Atrazine	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Benzaldehyde	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Benzo(a)anthracene	224	µg/kg	--	400 U	--	--	27000	1200 J	400 U
Benzo(a)pyrene	61	µg/kg	--	400 U	--	--	23000	1100 J	400 U
Benzo(b)fluoranthene	1100	µg/Kg	--	400 U	--	--	18000	1000 J	400 U
Benzo(g,h,i)perylene	50000	µg/kg	--	400 U	--	--	12000	2000 U	400 U
Benzo(k)fluoranthene	1100	µg/kg	--	400 U	--	--	21000	2000 U	400 U
Biphenyl	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
bis(2-Chloroethoxy)methane	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
bis(2-Chloroethyl)ether	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Butyl benzylphthalate	50000	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Caprolactam	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Carbazole	NS	µg/kg	--	400 U	--	--	3400 J	2000 U	400 U
Chrysene	400	µg/kg	--	400 U	--	--	22000	1100 J	400 U
Dibenz(a,h)anthracene	14	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Dibenzofuran	6200	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Diethyl phthalate	7100	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Dimethyl phthalate	2000	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Di-n-butylphthalate	8100	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Di-n-octyl phthalate	50000	µg/kg	--	540 U	--	--	10000 U	2700 U	540 U
Fluoranthene	50000	µg/kg	--	400 U	--	--	49000	2300	400 U
Fluorene	50000	µg/kg	--	400 U	--	--	3500 J	2000 U	400 U
Hexachlorobenzene	410	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Hexachlorobutadiene	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Hexachlorocyclopentadiene	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Hexachloroethane	NS	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Indeno(1,2,3-cd)pyrene	3200	µg/kg	--	400 U	--	--	12000	2000 U	400 U
Isophorone	4400	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Naphthalene	13000	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Nitrobenzene	200	µg/kg	--	400 U	--	--	7500 U	2000 U	400 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-I*	*Excavation-I*	*Excavation-I*	*Excavation-I*	*Excavation-H*	*Excavation-H*	*Excavation-J*
		Sample Identification	S-102803-DRS-37DL	S-102803-DRS-38	S-102803-DRS-39	S-102803-DRS-39DL	S-110303-DRS-47	S-110303-DRS-48	S-110303-DRS-44
		Sample Collection Date:	10/28/2003	10/28/2003	10/28/2003	10/28/2003	11/03/2003	11/03/2003	11/03/2003
			Bottom	*North Sidewall*	*Spoils*	*Spoils*	*East Sidewall*	*Northeast Sidewall*	*Northwest Sidewall*
Parameters	*TAGM Std.* (1)	*Units*							
Semi-Volatiles (Cont'd.)									
N-Nitrosodi-n-propylamine	NS	μg/kg	--	400 U	--	--	7500 U	2000 U	400 U
N-Nitrosodiphenylamine	NS	μg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Pentachlorophenol	1000	μg/kg	--	1900 U	--	--	36000 U	9700 U	1900 U
Phenanthrene	50000	μg/kg	--	400 U	--	--	33000	1700 J	400 U
Phenol	30	μg/kg	--	400 U	--	--	7500 U	2000 U	400 U
Pyrene	50000	μg/kg	--	400 U	--	--	53000	2500	400 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-J*	*Excavation-K*	*Excavation-K*	*Excavation-K*	*Excavation-K*	*Excavation-K*
		Sample Identification	*S-110303-DRS-45*	*S-110303-DRS-40*	*S-110303-DRS-40DL*	*S-110303-DRS-41*	*S-110303-DRS-42*	*S-110303-DRS-43*
		Sample Collection Date:	*11/03/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*
Parameters	*TAGM Std.* (1)	*Units*	*Northwest Sidewall*	*West Sidewall*	*West Sidewall*	*West Sidewall*	*West Sidewall*	*West Sidewall*
Volatiles								
1,1,1-Trichloroethane	800	µg/kg	5 U	6 U	--	6 U	6 U	6 U
1,1,2,2-Tetrachloroethane	600	µg/Kg	5 U	6 U	--	6 U	6 U	6 U
1,1,2-Trichloroethane	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
1,1-Dichloroethane	200	µg/kg	5 U	6 U	--	6 U	6 U	6 U
1,1-Dichloroethene	400	µg/Kg	5 U	6 U	--	6 U	6 U	6 U
1,2,4-Trichlorobenzene	3400	µg/kg	5 U	6 U	--	6 U	6 U	6 U
1,2-Dibromo-3-chloropropane (DBCP)	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
1,2-Dibromoethane (Ethylene Dibromide)	NS	µg/Kg	5 U	6 U	--	6 U	6 U	6 U
1,2-Dichlorobenzene	7900	µg/kg	5 U	6 U	--	6 U	6 U	6 U
1,2-Dichloroethane	100	µg/kg	5 U	6 U	--	6 U	6 U	6 U
1,2-Dichloropropane	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
1,3-Dichlorobenzene	1600	µg/kg	5 U	6 U	--	6 U	6 U	6 U
1,4-Dichlorobenzene	8500	µg/kg	5 U	6 U	--	6 U	6 U	6 U
2-Butanone (Methyl Ethyl Ketone)	300	µg/kg	27 U	30 U	--	30 U	32 U	29 U
2-Hexanone	NS	µg/Kg	27 U	30 U	--	30 U	32 U	29 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1000	µg/kg	27 U	30 U	--	30 U	32 U	29 U
Acetone	200	µg/kg	27 U	30 U	--	30 U	32 U	29 U
Benzene	60	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Bromodichloromethane	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Bromoform	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Bromomethane (Methyl Bromide)	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Carbon disulfide	2700	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Carbon tetrachloride	600	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Chlorobenzene	1700	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Chloroethane	1900	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Chloroform (Trichloromethane)	300	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Chloromethane (Methyl Chloride)	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
cis-1,2-Dichloroethene	NS	µg/Kg	5 U	6 U	--	6 U	9	6 U
cis-1,3-Dichloropropene	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Cyclohexane	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Dibromochloromethane	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Dichlorodifluoromethane (CFC-12)	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Ethylbenzene	5500	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Isopropylbenzene	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Methyl acetate	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Methyl cyclohexane	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Methyl Tert Butyl Ether	NS	µg/Kg	5 U	6 U	--	6 U	6 U	6 U
Methylene chloride	100	µg/kg	6	6	--	7	7	8
Styrene	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Tetrachloroethene	1400	µg/kg	2 J	--	180	90	47	110
Toluene	1500	µg/kg	5 U	6 U	--	6 U	6 U	6 U
trans-1,2-Dichloroethene	300	µg/kg	5 U	6 U	--	6 U	6 U	6 U
trans-1,3-Dichloropropene	NS	µg/kg	5 U	6 U	--	6 U	6 U	6 U
Trichloroethene	700	µg/kg	5 U	1 J	--	6 U	11	6 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-J*	*Excavation-K*	*Excavation-K*	*Excavation-K*	*Excavation-K*	*Excavation-K*
		Sample Identification	*S-110303-DRS-45*	*S-110303-DRS-40*	*S-110303-DRS-40DL*	*S-110303-DRS-41*	*S-110303-DRS-42*	*S-110303-DRS-43*
		Sample Collection Date:	*11/03/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*
Parameters	*TAGM Std.* (1)	*Units*	*Northwest Sidewall*	*West Sidewall*	*West Sidewall*	*West Sidewall*	*West Sidewall*	*West Sidewall*
Volatiles (Cont'd.)								
Trichlorofluoromethane (CFC-11)	NS	μg/kg	5 U	6 U	--	6 U	6 U	6 U
Trifluorotrichloroethane (Freon 113)	6000	μg/kg	5 U	6 U	--	6 U	6 U	6 U
Vinyl chloride	200	μg/Kg	11 U	12 U	--	12 U	2 J	12 U
Xylene (total)	1200	μg/kg	16 U	18 U	--	18 U	19 U	17 U
Semi-Volatiles		*Units*						
2,2'-oxybis(1-Chloropropane) (bis(2-chloroisopropyl) ether)	NS	μg/kg	3800 U	390 U	--	400 U	410 U	380 U
2,4,5-Trichlorophenol	100	μg/kg	9300 U	940 U	--	970 U	990 U	910 U
2,4,6-Trichlorophenol	NS	μg/kg	3800 U	390 U	--	400 U	410 U	380 U
2,4-Dichlorophenol	400	μg/kg	3800 U	390 U	--	400 U	410 U	380 U
2,4-Dimethylphenol	NS	μg/kg	3800 U	390 U	--	400 U	410 U	380 U
2,4-Dinitrophenol	200	μg/kg	19000 U	1900 U	--	1900 U	2000 U	1800 U
2,4-Dinitrotoluene	NS	μg/kg	3800 U	390 U	--	400 U	410 U	380 U
2,6-Dinitrotoluene	1000	μg/kg	3800 U	390 U	--	400 U	410 U	380 U
2-Chloronaphthalene	NS	μg/kg	3800 U	390 U	--	400 U	410 U	380 U
2-Chlorophenol	800	μg/kg	3800 U	390 U	--	400 U	410 U	380 U
2-Methylnaphthalene	36400	μg/kg	3800 U	390 U	--	400 U	410 U	380 U
2-Methylphenol	100	μg/kg	3800 U	390 U	--	400 U	410 U	380 U
2-Nitroaniline	NS	μg/kg	19000 U	1900 U	--	1900 U	2000 U	1800 U
2-Nitrophenol	330	μg/kg	3800 U	390 U	--	400 U	410 U	380 U
3,3'-Dichlorobenzidine	NS	μg/kg	7700 U	780 U	--	800 U	820 U	750 U
3-Nitroaniline	500	μg/kg	19000 U	1900 U	--	1900 U	2000 U	1800 U
4,6-Dinitro-2-methylphenol	NS	μg/kg	190000 U	19000 U	--	20000 U	20000 U	19000 U
4-Bromophenyl phenyl ether	NS	μg/kg	3800 U	390 U	--	400 U	410 U	380 U
4-Chloro-3-methylphenol	240	μg/kg	3800 U	390 U	--	400 U	410 U	380 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-J*	*Excavation-K*	*Excavation-K*	*Excavation-K*	*Excavation-K*	*Excavation-K*
		Sample Identification	*S-110303-DRS-45*	*S-110303-DRS-40*	*S-110303-DRS-40DL*	*S-110303-DRS-41*	*S-110303-DRS-42*	*S-110303-DRS-43*
		Sample Collection Date:	*11/03/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*
Parameters	*TAGM Std.* (1)	*Units*	*Northwest Sidewall*	*West Sidewall*	*West Sidewall*	*West Sidewall*	*West Sidewall*	*West Sidewall*
Semi-Volatiles (Cont'd.)								
4-Chloroaniline	220	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
4-Chlorophenyl phenyl ether	NS	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
4-Methylphenol	900	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
4-Nitroaniline	NS	µg/kg	19000 U	1900 U	--	1900 U	2000 U	1800 U
4-Nitrophenol	100	µg/kg	19000 U	1900 U	--	1900 U	2000 U	1800 U
Acenaphthene	50000	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Acenaphthylene	41000	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Acetophenone	NS	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Anthracene	50000	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Atrazine	NS	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Benzaldehyde	NS	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Benzo(a)anthracene	224	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Benzo(a)pyrene	61	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Benzo(b)fluoranthene	1100	µg/Kg	3800 U	390 U	--	400 U	410 U	380 U
Benzo(g,h,i)perylene	50000	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Benzo(k)fluoranthene	1100	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Biphenyl	NS	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
bis(2-Chloroethoxy)methane	NS	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
bis(2-Chloroethyl)ether	NS	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
bis(2-Ethylhexyl)phthalate	50000	µg/kg	3800 U	390 U	--	400 U	410 U	630
Butyl benzylphthalate	50000	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Caprolactam	NS	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Carbazole	NS	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Chrysene	400	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Dibenz(a,h)anthracene	14	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Dibenzofuran	6200	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Diethyl phthalate	7100	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Dimethyl phthalate	2000	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Di-n-butylphthalate	8100	µg/kg	3800 U	390 U	--	400 U	410 U	820
Di-n-octyl phthalate	50000	µg/kg	5200 U	520 U	--	540 U	550 U	940
Fluoranthene	50000	µg/kg	1900 J	390 U	--	400 U	410 U	380 U
Fluorene	50000	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Hexachlorobenzene	410	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Hexachlorobutadiene	NS	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Hexachlorocyclopentadiene	NS	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Hexachloroethane	NS	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Indeno(1,2,3-cd)pyrene	3200	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Isophorone	4400	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Naphthalene	13000	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Nitrobenzene	200	µg/kg	3800 U	390 U	--	400 U	410 U	380 U

TABLE C-1

SOILS CONFIRMATORY AND POST-EXCAVATION SOILS ANALYTICAL DATA
PARCEL 2 - SENECA STREET

		Sample Location:	*Excavation-J*	*Excavation-K*	*Excavation-K*	*Excavation-K*	*Excavation-K*	*Excavation-K*
		Sample Identification	*S-110303-DRS-45*	*S-110303-DRS-40*	*S-110303-DRS-40DL*	*S-110303-DRS-41*	*S-110303-DRS-42*	*S-110303-DRS-43*
		Sample Collection Date:	*11/03/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*	*11/03/2003*
			Northwest Sidewall	*West Sidewall*	*West Sidewall*	*West Sidewall*	*West Sidewall*	*West Sidewall*
Parameters	*TAGM Std.* (1)	*Units*						
Semi-Volatiles (Cont'd.)								
N-Nitrosodi-n-propylamine	NS	µg/kg	3800 U	390 U	–	400 U	410 U	380 U
N-Nitrosodiphenylamine	NS	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Pentachlorophenol	1000	µg/kg	19000 U	1900 U	--	1900 U	2000 U	1800 U
Phenanthrene	50000	µg/kg	1100 J	390 U	--	400 U	410 U	380 U
Phenol	30	µg/kg	3800 U	390 U	--	400 U	410 U	380 U
Pyrene	50000	µg/kg	1700 J	390 U	--	400 U	410 U	380 U

Notes:

(1)	New York State Recommended Soil Cleanup Objectives, Technical and Administrative Guidance Memorandum (TAGM) #4046, January 24, 1994.
-	Not analyzed.
J	Estimated.
NS	No Standard.
U	Non-detect at associated value.
☐	Concentration exceeds standard.

APPENDIX D

CAMP RESULTS SUMMARY

TABLE D-1

SUMMARY OF AIR MONITORING RESULTS
COMMUNITY AIR MONITORING PROGRAM
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

Date	*Time*	*Location of Measurement*	*PID Results (ppm)*	*Particulate Results (mcg/m ^{3})*	*Location of Activities*	*Comments*
10/17/03	1115	upwind (1)	0.1	15	NA	Background result
		downwind (2)	0.1	17	NA	Background result
	1315	n/o site on sidewalk along Seneca Street	NM	9	Site parking lot	Removal of asphalt
	1430	upwind	NM	17	Site parking lot	Removal of asphalt
		downwind	NM	17		
	1530	upwind	NM	11	Site parking lot	Removal of asphalt
		downwind	NM	12		
10/20/03	915	upwind	0.0	33	Area B	
		downwind	0.0	34		
	950	upwind	0.0	40	Area B	
		downwind	0.0	40		
	1300	upwind	0.0	6	Area B	
		downwind	0.0	6		
	1430	upwind	0.0	8	Area B	
		downwind	0.0	8		
	1530	upwind	0.0	7	Area B	
		downwind	0.0	7		
10/21/03	730	upwind	0.0	20	NA	Background measurements
		downwind	0.0	20		
10/21/03	800	upwind	0.0	18	Areas A and B	Non-haz soils
		downwind	0.0	18		
	900	upwind	0.0	25	Areas A and B	
		downwind	0.0	29		
	940	upwind	0.0	45	Areas A and B	Increased wind speed
		downwind	0.0	45		
	1015	upwind	0.0	47	Areas A and B	
		downwind	0.0	47		
	1045	upwind	0.0	47	Areas A and B	
		downwind	0.1	47		
	1145	upwind	0.0	47	Areas A and B	
		downwind	0.0	47		

TABLE D-1

SUMMARY OF AIR MONITORING RESULTS
COMMUNITY AIR MONITORING PROGRAM
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

Date	*Time*	*Location of Measurement*	*PID Results (ppm)*	*Particulate Results (mcg/m^3)*	*Location of Activities*	*Comments*
10/21/03	1300	upwind	0.0	47	Areas D and E	
		downwind	0.0	47		
	1400	upwind	0.0	20	Areas D and E	
		downwind	0.6	20		
	1500	upwind	0.0	28	Areas D and E	
		downwind	0.0	28		
10/22/03	800	upwind	0.0	NM	Area A haz soils	Background measurements Rain
		downwind	0.0			
	830	n/o site on sidewalk along Seneca St.	0.0 - 0.7	NM	Area A haz soils	1st haz. Trailer
10/22/03	930	n/o site on sidewalk along Seneca St.	0.0 - 0.2	NM	Area A haz soils	2nd haz. Trailer
	1030	upwind	0.0	NM	Areas D and E	Rain continues
		downwind	0.0			
	1300	upwind	0.0	NM	Areas D and E	
		downwind	0.0			
	1400	upwind	0.0	NM	Areas D and E	
		downwind	0.0			
10/23/03	735	upwind on Kingston St.	0.0	17	NA	Background measurements
		downwind s/o bldg.	0.0	17		
	930	upwind on Kingston St.	0.0	9	Area A haz. Soils	1st haz. Trailer
		downwind s/o bldg.	0.6	9		
		along Seneca St. store fronts	0.0	9		
	1100	upwind	0.0	9	Areas C, F, and G	
		downwind	0.0	9		
10/27/03	800	upwind	0.0	NM	NA	Background measurements Rain
		downwind	0.0			
	900	upwind	0.0	NM	Area B	Rain continues
		downwind	0.0			
	1040	upwind	0.0	NM	Area B	Rain continues
		downwind	0.0			

TABLE D-1

SUMMARY OF AIR MONITORING RESULTS
COMMUNITY AIR MONITORING PROGRAM
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

Date	*Time*	*Location of Measurement*	*PID Results (ppm)*	*Particulate Results (mcg/m^3)*	*Location of Activities*	*Comments*
10/27/03	1400	upwind downwind	0.0 0.0	NM	Area B	Rain continues
	1500	upwind downwind	0.0 0.0	NM	Areas B, D, and E	Rain continues
10/28/03	730	upwind downwind	0.0 0.0	2 2	Areas B, C, D, and E	
	900	upwind downwind	0.0 0.0	9 9	Areas B, C, D, and E	
	1000	upwind downwind	0.0 0.0	11 11	Areas B, C, D, and E	
	1100	upwind downwind	0.0 0.0	15 15	Areas B, C, D, and E	
	1200	upwind downwind	0.0 0.0	14 14	Areas B, C, D, and E	
	1400	upwind downwind	0.0 0.0	17 17	Areas B, C, D, and E	
10/29/03	930	upwind downwind	0.0 0.0	NM	background measurements	Rain
10/31/03	840	upwind downwind	0.0 0.0	6 6	background measurements	
	1030	upwind downwind	0.0 0.0	5 5	stockpiled haz. materials	1st. Haz. Trailer
10/31/03	1050	along store front of 'Second Look' on Seneca St.	0.0	15	stockpiled haz. materials	1st. Haz. Trailer
	1100	downwind	0.2 - 0.4	15	stockpiled haz. materials	1st. Haz. Trailer
	1135	upwind	0	19	stockpiled haz. materials	2nd. Haz. Trailer
	1145	downwind along store front of 'Second Look' on Seneca St.	0.0 - 5.1 0.0 - 0.1	19 19	stockpiled haz. materials	3rd. Haz. Trailer

TABLE D-1

SUMMARY OF AIR MONITORING RESULTS
COMMUNITY AIR MONITORING PROGRAM
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

Date	*Time*	*Location of Measurement*	*PID Results (ppm)*	*Particulate Results (mcg/m^3)*	*Location of Activities*	*Comments*
10/31/03	1300	upwind downwind	0.0 0.0	10 10	stockpiled haz. materials	4th. Haz. Trailer
	1330	downwind	0.0	34	stockpiled haz. materials	
	1350	downwind	0.0	50	stockpiled haz. materials	5th. Haz. Trailer increased traffic on Seneca St.
	1415	downwind	0.0	46	stockpiled haz. materials	6th. Haz. Trailer
	1500	upwind downwind	0.0 0.0	42 42		Stockpiling non-haz. soils
11/3/03	730	upwind downwind	0.0 0.0	NM	background measurements	Rain
	755	downwind	0.0	NM	1st. Haz. Trailer	Rain
	900	downwind	0.0	NM	2nd. Haz. Trailer	Rain
	1030	upwind downwind	0.0 0.0	NM	Area B	Non-haz
	1130	upwind downwind	0.0 0.0	NM	Area B	Non-haz.
	1320	downwind	0.0	NM	3rd. Haz. Trailer	

Notes:

downwind	Location on the north side of the site along the side walk on Seneca Street immediately adjacent to the Site.
upwind	Location on the south side of the site near the construction trailer.
haz.	Hazardous Waste.
mcg/m^3	Micrograms per Meter Cubed
n/o	North of.
NA	Not Applicable.
NM	Not Measured.
non-haz.	Non-Hazardous Waste.
PID	Photoionization Detector.
ppm	Parts Per Million.
s/o	South of.

APPENDIX E

BACKFILL INFORMATION AND TESTING RESULTS

APPENDIX E - SUPPLIER INFORMATION

LAFARGE

October 8, 2003

SLC

Att: Jerry Jones
Fax: 433-0802

To whom it may concern:

This is to certify that the material being supplied to the above project has been produced from a natural gravel source and is produced without contaminants and conforms to NYSDOT gradation requirements for Section 703-0202 Coarse Aggregates Number 1 blend Gravel, Below is a gradation of the No. 1 gravel blend.

Date: 10/7/2003
Location: Genesee Source #: 5-59F3
Material Type: #1 Gravel

Sieve Size	Weight	% Retained	% Passing	#1 Stone Specification
2"	0.0	0.0	100.0	
1 1/2"	0.0	0.0	100.0	
1"	0.0	0.0	100.0	100
1/2"	167.1	2.2	97.8	90 - 100
1/4"	6396.2	84.2	13.6	0 - 15
1/8"	486.2	6.4	7.2	
#10	235.5	3.1	4.1	
#20	136.7	1.8	2.3	
#80	136.7	1.8	0.5	
#200	22.8	0.3	0.2	
pan	15.2	0.2		
Total	7596.4			

Sincerely,

Nicholas Dylyk
Quality Control Technician

CONSTRUCTION MATERIALS / NORTHERN DIVISION
PO Box 510 ~ 400 Hinman Road, Lockport, New York 14094
Office: (716) 439-1300 Fax (716) 439-9447

LAFARGE

September 19, 2003

AT & A
77 Drullard Rd.
PO Box 367
Lancaster, NY 14086

This material will be used as sand bedding.

Att: Ken Z.
Fax: 681-7742
Re:SLC/Seneca St.

To whom it may concern:

This is to certify that the material being supplied to the above project conforms to the outlined NYSDOT requirements for Section 703-01 Fine Aggregate. Below is a gradation for Niagara Screenings. Our NYSDOT source is 5-5R and our most recent test number is 98AR46.

Date: 9/19/2003
Location: Lockport Source #: 5-5R
Material Type: Dry Screenings

Sieve Size	Weight	% Retained	% Passing	Specification
1"	0.0	0.0	100.0	
1/2"	0.0	0.0	100.0	
3/8"	0.0	0.0	100.0	
#4	7.5	1.2	98.8	
#8	177.6	28.6	70.2	
#16	222.3	35.8	34.4	
#30	91.9	14.8	19.6	
#50	52.2	8.4	11.2	
#100	27.9	4.5	6.7	
#200	21.1	3.4	3.3	
pan	20.5	3.3		
Total	621			

Sincerely,

Jeffrey Jeziorо
Quality Control Technician

CONSTRUCTION MATERIALS / NORTHERN DIVISION
PO Box 510 ~ 400 Hinman Road, Lockport, New York 14094
Office: (716) 439-1300 Fax: (716) 439-9447

LAFARGE
CORPORATION

Nicholas Dolyk
Lafarge North America
400 Hinman Rd.
Lockport, NY 14095

Re: Letter of Certification

To whom it may concern,

This letter is to inform that the materials of which you are receiving are produced from a natural and contaminate free source. Our sites are annually tested by the New York State Dept. of Transportation for approval as sources of aggregates for state funded jobs. If there are any questions in regard to this letter, please feel free to contact me at 716-998-7212. Thank You.

Sincerely,

Nicholas Dolyk

Quality Control
Lafarge Construction Materials
Lockport, NY 14095

BUFFALO CRUSHED STONE, INC.
Subsidiary of New Enterprise Stone & Lime Co., Inc.
2544 Clinton St. · P.O. Box 710 · Buffalo, NY 14224 · (716) 826-7310 · FAX (716) 826-1342

This material will be used
As structural fill

September 19, 2003

Mr. Ken Ziccarelli
AT&A Trucking
PO Box 367
Lancaster, New York 14086

Via Fax 681-7642

Re: North Ridge – Seneca Street

Gentlemen:

We certify the aggregates we supply on the subject project meet the New York State Department Of Transportation Specifications and Gradations as follows:

-2" Crusher Run Stone

Sieve Size	Percent Passing
2"	100
¼"	25-60
No. 40	5-40
No. 200	0-10

Our New York State Test Number Como Park 02AR53.

We trust this meets with your approval.

Very truly yours,

Richard S. Ruggiero
Account Representative

RSR/dlw
Enc.

BUFFALO CRUSHED STONE, INC.
Buffalo Slag
CONSTRUCTION MATERIALS

2544 Clinton St.. P.O. Box 710, Buffalo, NY 14224
(716) 826-7310

September 25, 2003

A.T.& A. Trucking
P.O. Box 367
Lancaster, N.Y. 14086

RE: North Ridge – Seneca Street
Material Certification

Attn: Ken Zicarelli

Dear Ken,

I can assure you and certify that all materials produced at our quarry on Como Park Boulevard are natural and are the result of processing the local Onondaga Limestone formation. The material is virgin material free from any contaminants.

Our quarry is, and has been for years, a New York State Department of Transportation approved supplier. Our NYSDOT Source # is 5-1R, and you are well aware we have literally supplied hundreds of their projects.

Please call if you need any further information.

Sincerely,

Buffalo Crushed Stone, Inc.

APPENDIX E - COMPACTION TESTING REPORTS

Quality Inspection Services, Inc.

186 Warwick Ave P.O. Box 732 Buffalo, NY 14215-0732
Phone (716) 836-0131 Fax (716) 836-9608
Visit Us At: www.qisi.com **E-Mail:** buffalo @ qisi.com

FIELD IN-PLACE DENSITY TEST REPORT

PROJECT: 2137 Seneca St. **LOCATION:** Buffalo, NY

CLIENT: SLC Environmental Services **REPORT NO.:** 25-1766

CONTRACTOR: SLC Environmental Services **PROJECT NO.:** BT-03-147

WEATHER/TEMPERATURE: Sunny/60° **DATE:** 11/04/03

Test No.	Depth Or Elevation	In-Place Density (pcf)	In-Place Moisture (%)	% Compaction	Proctor Code	Location and Remarks
1	-6'	124.5	1.1	89.0	SLC-1	7' E of MW, 11' S of N Wall
2	-6'	126.2	1.3	90.2	SLC-1	12' E of E MW, 10' S of N Wall
3	-7'	139.8	3.2	99.9	SLC-1	10' E of E MW, 6' S of N Wall
4	-6.5'	134.3	2.1	96.0	SLC-1	12' W of E MW, 10.5' E of W Wall
5	-6'	132.7	5.0	94.9	SLC-1	25' SE of E MW, 31' E of W Wall

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
SLC-1	139.9	6.3	-2" ROC Stone; Buffalo Crushed Stone-Como Pit

Comments: Tests 3-5 taken after the addition of water and more rolling; MW: Monitoring Well

Technician: Christopher Barton

Time On Site: 9:30 am-10:30 am/12:30 pm-1:30 pm/ 2:30 pm-3:30 pm

Respectfully Submitted,

Quality Inspection Services, Inc.

Sustaining Member

Quality Inspection Services, Inc.

186 Warwick Ave P.O. Box 732 Buffalo, NY 14215-0732
Phone (716) 836-0131 Fax (716) 836-9608
Visit Us At: www.qisi.com **E-Mail:** buffalo @ qisi.com

FIELD IN-PLACE DENSITY TEST REPORT

PROJECT: 2137 Seneca St. **LOCATION:** Buffalo, NY

CLIENT: SLC Environmental Services **REPORT NO.:** 25-1778

CONTRACTOR: SLC Environmental Services **PROJECT NO.:** BT-03-147

WEATHER/TEMPERATURE: Overcast/60° **DATE:** 11/5/03

Test No.	Depth Or Elevation	In-Place Density (pcf)	In-Place Moisture (%)	% Compaction	Proctor Code	Location and Remarks
1	-5.5’	136.0	3.4	97.2	SLC-1	9’ East of 4A MW, 22 .5’ South of North Wall
2	-5’	133.0	2.7	95.1	SLC-1	10’ East of West Wall, 11’5” South of 4A MW
3	-5’	140.4	3.6	100+	SLC-1	20’ West of East Sidewalk, 5.5’ North of the South Wall
4	-4.5’	135.8	2.9	97.1	SLC-1	23’5” East of West Wall, 27’ North of Light Pole
5	-5’	137.9	4.2	98.5	SLC-1	5’ East of West Wall, 10’ South of North Wall

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
SLC-1	139.9	6.3	-2” ROC Stone, Buffalo Crushed Stone-Como Pit

Comments:

Technician: John Rhinehart

Time On Site: 7:30 am-8:30 am

Respectfully Submitted,

Quality Inspection Services, Inc.

Quality Inspection Services, Inc.

186 Warwick Ave P.O. Box 732 Buffalo, NY 14215-0732
Phone (716) 836-0131 Fax (716) 836-9608
Visit Us At: www.qisi.com **E-Mail:** buffalo @ qisi.com

FIELD IN-PLACE DENSITY TEST REPORT

PROJECT: 2137 Seneca St **LOCATION:** Buffalo, NY

CLIENT: SLC Construction **REPORT NO.:** 25-1784

CONTRACTOR: SLC Construction **PROJECT NO.:** BT-03-147

WEATHER/TEMPERATURE: Overcast/45° **DATE:** 11/06/03

Test No.	Depth Or Elevation	In-Place Density (pcf)	In-Place Moisture (%)	% Compaction	Proctor Code	Location and Remarks
1	-4'	141.0	3.9	100+	SLC-1	17.5' East of West Wall, 34' South of North Wall
2	-4.5'	133.4	3.3	95.4	SLC-1	24.3' East of West Wall, 16.5' South of North Wall

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
SLC-1	139.9	6.3	-2" ROC Stone, Buffalo Crushed Stone-Como Pit

Comments:

Technician: Christopher Barton

Time On Site: 1:00 pm-2:00 pm

Respectfully Submitted,

Quality Inspection Services, Inc.

Sustaining Member

Quality Inspection Services, Inc.
186 Warwick Ave P.O. Box 732 Buffalo, NY 14215-0732
Phone (716) 836-0131 Fax (716) 836-9608
Visit Us At: www.qisi.com **E-Mail:** buffalo @ qisi.com

FIELD IN-PLACE DENSITY TEST REPORT

PROJECT: 2137 Seneca St.
LOCATION: Buffalo, NY
CLIENT: SLC Construction
REPORT NO.: 25-1811
CONTRACTOR: SLC Construction
PROJECT NO.: BT-03-147
WEATHER/TEMPERATURE: Sunny/40°
DATE: 11/07/03

Test No.	Depth Or Elevation	In-Place Density (pcf)	In-Place Moisture (%)	% Compaction	Proctor Code	Location and Remarks
1	-4'6"	135.6	3.3	96.9	SLC-1	18' West of Building, 11' North of South Wall
2	-6'	124.4	3.2	88.9	SLC-1	14' West of East Wall, 25' South of North Wall (Over Piping)
3	-3'	137.5	4.1	98.3	SLC-1	18' East of West Wall, 32' South of North Wall

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
SLC-1	139.9	6.3	-2" ROC Stone-BCS-Como Pit

Comments: Gauge 26020

Technician: Kevin Donner

Time On Site: 9:00 am-11:00 am

Respectfully Submitted,

Quality Inspection Services, Inc.

Sustaining Member

Quality Inspection Services, Inc.

186 Warwick Ave P.O. Box 732 Buffalo, NY 14215-0732
Phone (716) 836-0131 Fax (716) 836-9608
Visit Us At: www.qisi.com **E-Mail:** buffalo @ qisi.com

FIELD IN-PLACE DENSITY TEST REPORT

PROJECT: 2137 Seneca St. **LOCATION:** Buffalo, NY
CLIENT: SLC Environmental Services **REPORT NO.:** 25-1818
CONTRACTOR: SLC Environmental Services **PROJECT NO.:** BT-03-147
WEATHER/TEMPERATURE: Sunny/30° **DATE:** 11/10/03

Test No.	Depth Or Elevation	In-Place Density (pcf)	In-Place Moisture (%)	% Compaction	Proctor Code	Location and Remarks
1	-2.5'	128.5	1.5	91.8	SLC-1	30' West of Building, 21' North of South Wall
2	-5.5'	118.9	1.2	85.0	SLC-1	16' South of North Wall, 10' West of East Wall (O.P.)
3	-30"	143.1	2.0	100+	SLC-1	28' South of North Wall, 19' East of West Wall
4	-30"	129.5	2.1	92.6	SLC-1	6.5' South of North Wall, 8.5' East of West Wall
5	-4'	127.0	1.0	90.8	SLC-1	19' South of North Wall, 33' West of East Wall (O.P.)
6	-30"	122.1	2.1	87.3	SLC-1	18' West of Building, 21.5' North of South Wall

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
SLC-1	139.9	6.3	-2" ROC Stone; Buffalo Crushed Stone-Como Pit

Comments: O.P.= Over Piping System

Technician: Christopher Barton

Respectfully Submitted,

Time On Site:

Christopher Bart

Quality Inspection Services, Inc.

AWS

Sustaining Member

Quality Inspection Services, Inc.

186 Warwick Ave P.O. Box 732 Buffalo, NY 14215-0732
Phone (716) 836-0131 Fax (716) 836-9608
Visit Us At: www.qisi.com **E-Mail:** buffalo @ qisi.com

FIELD IN-PLACE DENSITY TEST REPORT

PROJECT: 2137 Seneca St **LOCATION:** Buffalo, NY

CLIENT: SLC Construction **REPORT NO.:** 25-1832

CONTRACTOR: SLC Construction **PROJECT NO.:** BT-03-147

WEATHER/TEMPERATURE: 50° **DATE:** 11/12/03

Test No.	Depth Or Elevation	In-Place Density (pcf)	In-Place Moisture (%)	% Compaction	Proctor Code	Location and Remarks
1	-30"	147.1	3.1	100+	SLC-1	7' S of N Wall, 14' E of W Wall
2	-4"	138.7	2.9	99.1	SLC-1	21' S of N Wall, 33' W of E Wall
3	-4"	142.7	2.4	100+	SLC-1	17' N of S Wall, 19' W of E Wall
4	-30"	141.9	3.1	100+	SLC-1	27' S of N Wall, 14' E of W Wall
5	-5'	124.9	2.6	89.3	SLC-1	14' S of N Wall, 34' W of E Wall (O.P.)
6	-5'	128.7	2.7	92.0	SLC-1	28.5' S of N Wall, 28' W of E Wall (O.P.)
7	-5'	123.6	1.2	88.4	SLC-1	31' S of N Wall, 7.5' W of E Wall (O.P.)

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
SLC-1	139.9	6.3	-2" ROC Stone, Buffalo Crushed Stone-Como Pit

Comments: Tests 5, 6 &7 were over piping system (O.P.)

Technician: Christopher Barton

Time On Site:

Respectfully Submitted,

Quality Inspection Services, Inc.

Sustaining Member

Quality Inspection Services, Inc.

186 Warwick Ave P.O. Box 732 Buffalo, NY 14215-0732
Phone (716) 836-0131 Fax (716) 836-9608
Visit Us At: www.qisi.com **E-Mail:** buffalo @ qisi.com

FIELD IN-PLACE DENSITY TEST REPORT

PROJECT: 2137 Seneca St. **LOCATION:** Buffalo, NY

CLIENT: SLC Construction **REPORT NO.:** 25-1832A

CONTRACTOR: SLC Construction **PROJECT NO.:** BT-03-147

WEATHER/TEMPERATURE: Overcast/60° **DATE:** 11/12/03

Test No.	Depth Or Elevation	In-Place Density (pcf)	In-Place Moisture (%)	% Compaction	Proctor Code	Location and Remarks
1	-3.5’	127.0	2.6	90.8	SLC-1	20’ N of S Wall, 15.5’ W of Building
2	-3.5’	129.7	3.3	92.7	SLC-1	15’ W of E Wall, 27’ S of N Wall (OP)
3	-3.5’	129.2	2.4	92.4	SLC-1	9’ S of N Wall, 18.5’ W of E Wall (OP)
4	-3.5’	127.7	2.3	91.2	SLC-1	30’ S of N Wall, 30’ W of E Wall (OP)
5	-20”	137.6	2.2	98.3	SLC-1	24’ S of N Wall, 30’ E of W Wall
6	-20”	134.7	3.0	96.3	SLC-1	15’ E of W Wall, 7’ S of N Wall
7	-2’	135.8	3.1	97.1	SLC-1	31’ S of N Wall, 13’ E of W Wall
8	-2’	135.5	2.6	96.9	SLC-1	30’ E of W Wall, 33’ S of N Wall
9	-2.5’	137.3	4.3	98.1	SLC-1	15.5’ S of N Wall, 27’ W of E Wall (OP)
10	-3.5’	135.5	3.8	96.8	SLC-1	8.5’ W of E Wall, 27’ S of N Wall (OP)

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
SLC-1	139.9	6.3	-2” ROC Stone; Buffalo Crushed Stone-Como Pit

Comments: O.P.= Over Piping

Technician: Christopher Barton

Respectfully Submitted,

Time On Site:

Quality Inspection Services, Inc.

Sustaining Member

Quality Inspection Services, Inc.

186 Warwick Ave P.O. Box 732 Buffalo, NY 14215-0732
Phone (716) 836-0131 Fax (716) 836-9608
Visit Us At: www.qisi.com **E-Mail:** buffalo @ qisi.com

FIELD IN-PLACE DENSITY TEST REPORT

PROJECT: 2137 Seneca St **LOCATION:** Buffalo, NY

CLIENT: SLC Construction **REPORT NO.:** 25-1846

CONTRACTOR: SLC Construction **PROJECT NO.:** BT-03-147

WEATHER/TEMPERATURE: 36° Overcast/Windy **DATE:** 11/13/03

Test No.	Depth Or Elevation	In-Place Density (pcf)	In-Place Moisture (%)	% Compaction	Proctor Code	Location and Remarks
1	-1’	133.1	3.3	95.1	SLC-1	16’ E of W Wall, 28’ S of N Wall
2	-1’	136.8	4.4	97.8	SLC-1	7’ S of N Wall, 18’ E of W Wall
3	-1’	136.9	2.6	97.8	SLC-1	22’ E if W Wall, 22’ N of S Wall
4	-2’	140.7	5.5	100+	SLC-1	20’ S of N Wall, 27’ W of E Wall
5	-2.5’	134.3	3.7	96.0	SLC-1	22’ W of E Wall, 34.5’ S of N Wall
6	-2.5’	135.6	5.1	97.0	SLC-1	20.5’ W of Building, 47.5’ S of N Wall

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
SLC-1	139.9	6.3	-2” ROC Stone, Buffalo Crushed Stone-Como Pit

Comments:

Technician: Christopher Barton

Respectfully Submitted,

Time On Site:

Quality Inspection Services, Inc.

Sustaining Member

318 North Morrison Street
Warren, Pennsylvania 16365
(814) 726-1988 ∞ Fax (814) 726-7850

6730 Myers Road
East Syracuse, New York 13057
(315) 431-4291 ∞ Fax (315) 431-4292

1322 Space Park, Suite A256
Houston, Texas 77058
(281) 335-7940 ∞ Fax (281) 335-1931

P.O. Box 597
Nyack, New York 10960
(914) 645-6463

2659 Edison Avenue
Jacksonville, Florida 32204
(904) 387-5959 ∞ Fax (904) 387-5912

PMB #309, 4 State Road
Media, Pennsylvania 19063
(610) 745-7423

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186 Warwick Ave P.O. Box 732 Buffalo, NY 14215-0732
Phone (716) 836-0131 Fax (716) 836-9608
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FIELD IN-PLACE DENSITY TEST REPORT

PROJECT: 2137 Seneca St. **LOCATION:** Buffalo, NY

CLIENT: SLC Environmental Services **REPORT NO.:** 25-1846

CONTRACTOR: SLC Environmental Services **PROJECT NO.:** BT-03-147

WEATHER/TEMPERATURE: Overcast/36° **DATE:** 11/13/03

Test No.	Depth Or Elevation	In-Place Density (pcf)	In-Place Moisture (%)	% Compaction	Proctor Code	Location and Remarks
7	-6”	136.6	5.0	97.7	SLC-1	11’ S of N Sidewalk, 28’ W of E Sidewalk
8	-6’	141.5	5.6	100+	SLC-1	16’ W of E Sidewalk, 24’ S of N Wall
9	-6”	141.4	5.5	100+	SLC-1	24.5’ W of E Wall, 39.5’ S of N Sidewalk
10	-6”	139.9	4.9	99.9	SLC-1	23’ W of Building, 54’ S of N Sidewalk
11	-6”	143.6	4.7	100+	SLC-1	17’ E of W Wall, 26’ S of N Wall
12	-6”	145.2	5.4	100+	SLC-1	6’ S of N Wall, 9’ E of W Wall

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
SLC-1	139.9	6.3	-2” ROC Stone, Buffalo Crushed Stone-Como Pit

Comments:

Technician: John Rhinehart

Time On Site: 2:00 pm-3:00 pm

Respectfully Submitted,

Quality Inspection Services, Inc.

Sustaining Member

Quality Inspection Services, Inc.

186 Warwick Ave P.O. Box 732 Buffalo, NY 14215-0732
Phone (716) 836-0131 Fax (716) 836-9608
Visit Us At: www.qisi.com **E-Mail:** buffalo @ qisi.com

FIELD IN-PLACE DENSITY TEST REPORT

PROJECT: 2137 Seneca St. **LOCATION:** Buffalo, NY

CLIENT: SLC Construction **REPORT NO.:** 25-1855

CONTRACTOR: SLC Construction **PROJECT NO.:** BT-03-147

WEATHER/TEMPERATURE: Cloudy/35° **DATE:** 11/14/03

Test No.	Depth Or Elevation	In-Place Density (pcf)	In-Place Moisture (%)	% Compaction	Proctor Code	Location and Remarks
1	+0'	136.2	2.6	97.4	SLC-1	51.5' South of North Wall; 16.5' West of Building
2	+0'	139.2	2.6	99.5	SLC-1	31' South of North Wall; 7' West of East Sidewalk
3	+0'	141.5	2.3	100+	SLC-1	18.5' South of North Wall; 20' East of West Wall
4	+0'	141.8	4.2	100+	SLC-1	18.5' South of North Sidewalk; 20.5' East of West Wall
5	+0'	143.0	4.0	100+	SLC-1	37' South of North Sidewalk; 22' East of West Wall
6	+0'	142.6	3.4	100+	SLC-1	42' South of North Sidewalk; 33' East of West Wall

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
SLC-1	139.9	6.3	-2" ROC Stone; Buffalo Crushed Stone-Como Pit

Comments: Gauge 26020

Technician: Kevin Donner

Time On Site: 1:00 pm-2:00 pm

Respectfully Submitted,

Quality Inspection Services, Inc.

Sustaining Member

APPENDIX E - ANALYTICAL RESULTS FOR BACKFILL SAMPLES

TABLE 1

SUMMARY OF ANALYTICAL RESULTS FOR BACKFILL SAMPLES

Analyte	*Units*	*TAGM 4046*	*Sample Location (see list below)*						
			B-1	*B-2*	*B-3*	*B-4*	*B-5*	*B-6*	*B-7*
Cyclohexane	µg/kg	na	--	--	12	2 J	--	1 J	--
Methylcyclohexane	µg/kg	na	--	--	9	2 J	--	1 J	--
Methylene Chloride	µg/kg	100	8	7	6	5	4 J	5	4 J
Tetrachloroethene	µg/kg	1400	--	8	2 J	1 J	4 J	--	19
Toluene	µg/kg	1500	--	--	2 J	--	--	--	--
Total Xylenes	µg/kg	1200	--	--	4 J	--	--	--	--

Notes

Detected values shown only
na - not available
J - estimated value

Sample Locations

B-1	Area A, backfill immediately overlying fabric
B-2	Area E, approx. 5-7 feet below natural grade
B-3	Area E, approx. 3-5 feet below natural grade
B-4	BH-19 area, approx. 3-5 feet below natural grade
B-5	"Peninsula" area, approx. 5-7 feet below natural grade
B-6	"Peninsula" area, approx. 3-5 feet below natural grade
B-7	Backfill stockpile.

Table E-1

Excavation Backfill Analytical Data
Parcel 2 - Seneca Street

	Location:	*Backfill Stockpile*	*Excavation-A*	*Excavation-E*	*Excavation-E*	*Excavation-K*	*Excavation-K*	*Excavation-K*
	Sample ID:	*S-1110003-CB-B-7*	*S-1110003-CB-B-1*	*S-1110003-CB-B-2*	*S-1110003-CB-B-3*	*S-1110003-CB-B-4*	*S-1110003-CB-B-5*	*S-1110003-CB-B-6*
	Sample Date:	*11/10/2003*	*11/10/2003*	*11/10/2003*	*11/10/2003*	*11/10/2003*	*11/10/2003*	*11/10/2003*
		Backfill stockpile	*Backfill-immediately overlying fabric*	*Backfill*	*Backfill*	*Backfill*	*Backfill*	*Backfill*
	Depth (ft BGS):	*[-]*	*[-]*	*[5-7]*	*[3-5]*	*[3-5]*	*[5-7]*	*[3-5]*
Parameter	***Units***							
Volatiles								
1,1,1-Trichloroethane	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2,4-Trichlorobenzene	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dibromoethane (Ethylene Dibromide)	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichlorobenzene	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichlorobenzene	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,4-Dichlorobenzene	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (Methyl Ethyl Ketone)	µg/Kg	25 U	25 U	26 U	26 U	25 U	25 U	25 U
2-Hexanone	µg/Kg	25 U	25 U	26 U	26 U	25 U	25 U	25 U
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	µg/Kg	25 U	25 U	26 U	26 U	25 U	25 U	25 U
Acetone	µg/Kg	25 U	25 U	26 U	26 U	25 U	25 U	25 U
Benzene	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane (Methyl Bromide)	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon disulfide	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform (Trichloromethane)	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane (Methyl Chloride)	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,3-Dichloropropene	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Cyclohexane	µg/Kg	5 U	5 U	5 U	12	2 J	5 U	1 J
Dibromochloromethane	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane (CFC-12)	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Isopropylbenzene	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl acetate	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methyl cyclohexane	µg/Kg	5 U	5 U	5 U	9	2 J	5 U	1 J
Methyl Tert Butyl Ether	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Methylene chloride	µg/Kg	4 J	8	7	6	5	4 J	5
Styrene	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U

Table E-1

Excavation Backfill Analytical Data
Parcel 2 - Seneca Street

	Location:	*Backfill Stockpile*	*Excavation-A*	*Excavation-E*	*Excavation-E*	*Excavation-K*	*Excavation-K*	*Excavation-K*
	Sample ID:	*S-1110003-CB-B-7*	*S-1110003-CB-B-1*	*S-1110003-CB-B-2*	*S-1110003-CB-B-3*	*S-1110003-CB-B-4*	*S-1110003-CB-B-5*	*S-1110003-CB-B-6*
	Sample Date:	*11/10/2003*	*11/10/2003*	*11/10/2003*	*11/10/2003*	*11/10/2003*	*11/10/2003*	*11/10/2003*
		Backfill stockpile	*Backfill-immediately overlying fabric*	*Backfill*	*Backfill*	*Backfill*	*Backfill*	*Backfill*
	Depth (ft BGS):	*[-]*	*[-]*	*[5-7]*	*[3-5]*	*[3-5]*	*[5-7]*	*[3-5]*
Parameter	*Units*							
Volatiles								
Tetrachloroethene	µg/Kg	19	5 U	8	2 J	1 J	4 J	5 U
Toluene	µg/Kg	5 U	5 U	5 U	2 J	5 U	5 U	5 U
trans-1,2-Dichloroethene	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichlorofluoromethane (CFC-11)	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trifluorotrichloroethane (Freon 113)	µg/Kg	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	µg/Kg	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylene (total)	µg/Kg	15 U	15 U	15 U	4 J	15 U	15 U	15 U

Notes:

ft. BGS	Ft. Below Ground Surface.
J	Estimated.
U	Non-detect at associated value.

APPENDIX F

TAGM 4046 CRITERIA

New York State Department of Environmental Conservation

TECHNICAL AND ADMINISTRATIVE GUIDANCE MEMORANDUM #4046

DETERMINATION OF SOIL CLEANUP OBJECTIVES AND CLEANUP LEVELS

TO: Regional Haz. Waste Remediation Engineers, Bureau Directors, and Section Chiefs

FROM: Michael J. O'Toole, Jr., Director, Division of Hazardous Waste Remediation

SUBJECT: DIVISION TECHNICAL AND ADMINISTRATIVE GUIDANCE MEMORANDUM: DETERMINATION OF SOIL CLEANUP OBJECTIVES AND CLEANUP LEVELS

DATE: JAN 24, 1994

Michael J. O'Toole, Jr. (signed)

Appendix A - Recommended Soil Cleanup Objectives | Appendix B - Total Organic Carbon (TOC)
- Table 1 - Volatile Organic Contaminants
- Table 2 - Semi-Volatile Organic Contaminants
- Table 3 - Organic Pesticides / Herbicides and PCBs
- Table 4 - Heavy Metals

The cleanup goal of the Department is to restore inactive hazardous waste sites to predisposal conditions, to the extent feasible and authorized by law. However, it is recognized that restoration to predisposal conditions will not always be feasible.

1. INTRODUCTION:

This TAGM provides a basis and procedure to determine soil cleanup levels at individual Federal Superfund, State Superfund, 1986 EQBA Title 3 and Responsible Party (RP) sites, when the Director of the DHWR determines that cleanup of a site to predisposal conditions is not possible or feasible.

The process starts with development of soil cleanup objectives by the Technology Section for the contaminants identified by the Project Managers. The Technology Section uses the procedure described in this TAGM to develop soil cleanup objectives. Attainment ofthese generic soil cleanup objectives will, at a minimum, eliminate all significant threats to human health and/or the environment posed by the inactive hazardous waste site. Project Managers should use these cleanup objectives in selecting alternatives in the Feasibility Study (FS). Based on the proposed selected remedial technology (outcome of FS), final site specific soil cleanup levels are established in the Record of Decision (ROD) for these sites.

It should be noted that even after soil cleanup levels are established in the ROD, these levels may prove to be unattainable when remedial construction begins. In that event, alternative remedial actions or institutional controls may be necessary to protect the environment.

2. BASIS FOR SOIL CLEANUP OBJECTIVES:

The following alternative bases are used to determine soil cleanup objectives:

a. Human health based levels that correspond to excess lifetime cancer risks of one in a million for Class A[1] and B[2] carcinogens, or one in 100,000 for Class C[3] carcinogens. These levels are contained in USEPA's Health Effects Assessment Summary Tables (HEASTs) which are compiled and updated quarterly by the NYSDEC's Division of Hazardous Substances Regulation;

b. Human health based levels for systemic toxicants, calculated from Reference Doses (RfDs). RfDs are an estimate of the daily exposure an individual (including sensitive individuals) can experience without appreciable risk of health effects during a lifetime. An average scenario of exposure in which children ages one to six (who exhibit the greatest tendency to ingest soil) is assumed. An intake rate of 0.2 gram/day for a five-year exposure period for a 16-kg child is assumed. These levels are contained in USEPA's Health Effects Assessment Summary Tables (HEASTs) which are compiled and updated quarterly by the NYSDEC's Division of Hazardous Substances Regulation;

c. Environmental concentrations which are protective of groundwater/drinking water quality; based on promulgated or proposed New York State Standards;

d. Background values for contaminants; and

e. Detection limits.

A recommendation on the appropriate cleanup objective is based on the criterion that produces the most stringent cleanup level using criteria a, b, and c for organic chemicals, and criteria a, b, and d for heavy metals. If criteria a and/or b are below criterion d for a contaminant, its background value should be used as the cleanup objective. However, cleanup objectives developed using this approach must be, at a minimum, above the method detection limit (MDL) and it is preferable to have the soil cleanup objectives above the Contract Required Quantitation Limit (CRQL) as defined by NYSDEC. If the cleanup objective of a compound is "non-detectable", it should mean that it is not detected at the MDL. Efforts should be made to obtain the best MDL detection possible when selecting a laboratory and analytical protocol.

3. DETERMINATION OF SOIL CLEANUP GOALS FOR ORGANICS IN SOIL FOR PROTECTION OF WATER QUALITY

The water/soil partitioning theory is used to determine soil cleanup objectives which would be protective of groundwater/drinking water quality for its best use. This theory is conservative in nature and assumes that contaminated soil and groundwater are in direct contact. This theory is based upon the ability of organic matter in soil to adsorb organic chemicals. The approach predicts the maximum amount of contamination that may remain in soil so that leachate from the contaminated soil will not violate groundwater and/or drinking water standards.

This approach is not used for heavy metals, which do not partition appreciably into soil organic matter. For heavy metals, eastern USA or New York State soil background values may be used as soil cleanup objectives. A list of values that have been tabulated is attached. Soil background data near the site, if available, is preferable and should be used as the cleanup objective for such metals. Background samples should be free from the influences of this site and any other source of contaminants. Ideal background samples may be obtained from uncontaminated upgradient and upwind locations.

Protection of water quality from contaminated soil is a two-part problem. The first is predicting the amount of contamination that will leave the contaminated media as leachate. The second part of the problem is to determine how much of that contamination will actually contribute to a violation of groundwater standards upon reaching and dispersing into groundwater. Some of the contamination which initially leaches out of soil will be absorbed by other soil before it reaches groundwater. Some portion will be reduced through natural attenuation or other mechanism.

PART A: PARTITION THEORY MODEL

There are many test and theoretical models which are used to predict leachate quality given a known value of soil contamination. The Water-Soil Equilibrium Partition Theory is used as a basis to determine soil standard or contamination limit for protection of water quality by most of the models currently in use. It is based on the ability of organic carbon in soil to adsorb contamination. Using a water quality value which may not be exceeded in leachate and the partition coefficient method, the equilibrium concentration (Cs) will be expressed in the same units as the water standards. The following expression is used:

Allowable Soil Concentration $Cs = f \times Koc \times Cw$ . . . . (1)

Where: f = fraction of organic carbon of the natural soil medium.

Koc = partition coefficient between water and soil media. Koc can be estimated by the following equation:

$$\log Koc = 3.64 - 0.55 \log S$$

S = water solubility in ppm
Cw = appropriate water quality value from TOGS 1.1.1

Most Koc and S values are listed in the Exhibit A-1 of the USEPA Superfund Public Health Evaluation Manual (EPA/540/1-86/060). The Koc values listed in this manual should be used for the purpose. If the Koc value for a contaminant is not listed, it should be estimated using the above mentioned equation.

PART B: PROCEDURE FOR DETERMINATION OF SOIL CLEANUP OBJECTIVES

When the contaminated soil is in the unsaturated zone above the water table, many mechanisms are at work that prevent all of the contamination that would leave the contaminated soil from impacting groundwater. These mechanisms occur during transport and may work simultaneously. They include the following: (1) volatility, (2) sorption and desorption, (3) leaching and diffusion, (4) transformation and degradation, and (5) change in concentration of contaminants after reaching and/or mixing with the groundwater surface. To account for these mechanisms, a correction factor of 100 is used to establish soil cleanup objectives. This value of 100 for the correction is consistent with the logic used by EPA in its Dilution Attenuation Factor (DAF) approach for EP Toxicity and TCLP. (Federal Register/Vol. 55, No. 61, March 29, 1990/Pages 11826-27). Soil cleanup objectives are calculated by multiplying the allowable soil concentration by the correction factor. If the contaminated soil is very close (<3' - 5') to the groundwater table or in the groundwater, extreme caution should be exercised when using the correction factor of 100 (one hundred) as this may not give conservative cleanup objectives. For such situations the Technology Section should be consulted for site-specific cleanup objectives.

Soil cleanup objectives are limited to the following maximum values. These values are consistent with the approach promulgated by the States of Washington and Michigan.

1. Total VOCs ≤ 10 ppm.
2. Total Semi VOCs ≤ 500 ppm.
3. Individual Semi VOCs ≤ 50 ppm.
4. Total Pesticides ≤ 10 ppm.

One concern regarding the semi-volatile compounds is that some of these compounds are so insoluble that their Cs values are fairly large. Experience (Draft TOGS on Petroleum Contaminated Soil Guidance) has shown that soil containing some of these insoluble substances at high concentrations can exhibit a distinct odor even though the substance will not leach from the soil. Hence any time a soil exhibits a discernible odor nuisance, it shall not be considered clean even if it has met the numerical criteria.

4. DETERMINATION OF FINAL CLEANUP LEVELS:

Recommended soil cleanup objectives should be utilized in the development of final cleanup levels through the Feasibility Study (FS) process. During the FS, various alternative remedial actions developed during the Remedial Investigation (RI) are initially screened and narrowed down to the list of potential alternative remedial actions that will be evaluated in detail. These alternative remedial actions are evaluated using the criteria discussed in TAGM 4030, Selection of Remedial Actions at Inactive Hazardous Waste Sites, revised May 15, 1990, and the preferred remedial action will be selected. After the detailed evaluation of the preferred remedial action, the final cleanup levels which can be actually achieved using the preferred remedial action must be established. Remedy selection, which will include final cleanup levels, is the subject of TAGM 4030.

Recommended soil cleanup objectives that have been calculated by the Technology Section are presented in Appendix A. These objectives are based on a soil organic carbon content of 1% (0.01) and should be adjusted for the actual organic carbon content if it is known. For determining soil organic carbon content, use attached USEPA method (Appendix B). Please contact the Technology Section, Bureau of Program Management for soil cleanup objectives not included in Appendix A.

TAGM 4046 Footnotes:

1. Class A are proved human carcinogens
2. Class B are probable human carcinogens
3. Class C are possible human carcinogens

APPENDIX A

TABLE 1
Recommended soil cleanup objectives (mg/kg or ppm)
Volatile Organic Contaminants

Contaminant	Partition Coefficient, Koc	Groundwater Standards/ Criteria, Cw (ug/l or ppb)	a Allowable soil conc., Cs (ppm)	b ** Soil cleanup objectives to protect GW quality (ppm)	USEPA Health Based (ppm)		CRQL (ppb)	*** Rec. Soil Cleanup Objective (ppm)
					Carcin-ogens	Systemic Toxicants		
Acetone	2.2	50	0.0011	0.11	N/A	8,000	10	0.2
Benzene	83	0.7	0.0006	0.06	24	N/A	5	0.06
Benzoic Acid	54 *	50	0.027	2.7	N/A	300,000	5	2.7
2-Butanone	4.5 *	50	0.003	0.3	N/A	4,000	10	0.3
Carbon Disulfide	54 *	50	0.027	2.7	N/A	8,000	5	2.7
Carbon Tetrachloride	110 *	5	0.006	0.6	5.4	60	5	0.6
Chlorobenzene	330	5	0.017	1.7	N/A	2,000	5	1.7
Chloroethane	37 *	50	0.019	1.9	N/A	N/A	10	1.9
Chloroform	31	7	0.003	0.30	114	800	5	0.3
Dibromochloromethane	N/A	50	N/A	N/A	N/A	N/A	5	N/A
1,2-Dichlorobenzene	1,700	4.7	0.079	7.9	N/A	N/A	330	7.9
1,3-Dichlorobenzene	310 *	5	0.0155	1.55	N/A	N/A	330	1.6
1,4-Dichlorobenzene	1,700	5	0.085	8.5	N/A	N/A	330	8.5
1,1-Dichloroethane	30	5	0.002	0.2	N/A	N/A	5	0.2
1,2-Dichloroethane	14	5	0.001	0.1	7.7	N/A	5	0.1
1,1-Dichloroethene	65	5	0.004	0.4	12	700	5	0.4
1,2-Dichloroethene (trans)	59	5	0.003	0.3	N/A	2,000	5	0.3
1-3 dichloropropane	51	5	0.003	0.3	N/A	N/A	5	0.3
Ethylbenzene	1,100	5	0.055	5.5	N/A	8,000	5	5.5
113 Freon (1,1,2 Trichloro-1,2,2 Trifluoroethane)	1,230 *	5	0.060	6.0	N/A	200,000	5	6.0
Methylene chloride	21	5	0.001	0.1	93	5,000	5	0.1
4-Methyl-2-Pentanone	19 *	50	0.01	1.0	N/A	N/A	10	1.0

TABLE 1 (Continued)

Contaminant	Partition Coefficient, Koc	Groundwater Standards/ Criteria, Cw (ug/l or ppb)	a Allowable soil conc., Cs (ppm)	b ** Soil cleanup objectives to protect GW quality (ppm)	USEPA Health Based (ppm)		CRQL (ppb)	*** Rec. Soil Cleanup Objective (ppm)
					Carcinogens	Systemic Toxicants		
Tetrachloroethene	277	5	0.014	1.4	14	800	5	1.4
1,1,1-Trichloroethane	152	5	0.0076	0.76	N/A	7,000	5	0.8
1,1,2,2-Tetrachloroethane	118	5	0.006	0.6	35	N/A	5	0.6
1,2,3-trichloropropane	68	5	0.0034	0.34	N/A	80	5	0.4
1,2,4-trichlorobenzene	670 *	5	0.034	3.4	N/A	N/A	330	3.4
Toluene	300	5	0.015	1.5	N/A	20,000	5	1.5
Trichloroethene	126	5	0.007	0.70	64	N/A	5	0.7
Vinyl chloride	57	2	0.0012	0.12	N/A	N/A	10	0.2
Xylenes	240	5	0.012	1.2	N/A	200,000	--	1.2

a. Allowable Soil Concentration Cs = f x Cw x Koc
b. Soil cleanup objective = Cs x Correction Factor (CF)
N/A is not available

* Partition coefficient is calculated by using the following equation:
$\log Koc = -0.55 \log S + 3.64$, where S is solubility in water in ppm.
All other Koc values are experimental values.

** Correction Factor (CF) of 100 is used as per TAGM #4046

*** As per TAGM #4046, Total VOCs < 10 ppm.

Note: Soil cleanup objectives are developed for soil organic carbon content (f) of 1%, and should be adjusted for the actual soil organic carbon content if it is known.

APPENDIX A

TABLE 2

Recommended soil cleanup objectives (mg/kg or ppm)
Semi-Volatile Organic Contaminants

Contaminant	Partition Coefficient, Koc	Groundwater Standards/ Criteria, Cw (ug/l or ppb)	a Allowable soil conc., Cs (ppm)	b ** Soil cleanup objectives to protect GW quality (ppm)	USEPA Health Based (ppm)		CRQL (ppb)	*** Rec. Soil Cleanup Objective (ppm)
					Carcin- ogens	Systemic Toxicants		
Acenaphthene	4,600	20	0.9	90.0	N/A	5,000	330	50.0 ***
Acenaphthylene	2,056 *	20	0.41	41.0	N/A	N/A	330	41.0
Aniline	13.8	5	0.001	0.1	123	N/A	330	0.1
Anthracene	14,000	50	7.00	700.0	N/A	20,000	330	50.0 ***
Benzo(a)anthracene	1,380,000	0.002	0.03	3.0	0.224	N/A	330	0.224 or MDL
Benzo (a) pyrene	5,500,000	0.002 (ND)	0.110	11.0	0.0609	N/A	330	0.061 or MDL
Benzo (b) fluoranthene	550,000	0.002	0.011	1.1	N/A	N/A	330	1.1
Benzo (g,h,i) perylene	1,600,000	5	8.0	800	N/A	N/A	330	50.0 ***
Benzo (k) fluoranthene	550,000	0.002	0.011	1.1	N/A	N/A	330	1.1
bis(2-ethylhexyl)phthalate	8,706 *	50	4.35	435.0	50	2,000	330	50.0 ***
Butylbenzylphthlate	2,430	50	1.215	122.0	N/A	20,000	330	50.0 ***
Chrysene	200,000	0.002	0.004	0.4	N/A	N/A	330	0.4
4- Chloroaniline	43 ****	5	0.0022	0.22	200	300	330	0.220 or MDL
4-Chloro-3-methylphenol	47	5	0.0024	0.24	N/A	N/A	330	0.240 or MDL
2-Chlorophenol	15 *	50	0.008	0.8	N/A	400	330	0.8

TABLE 2 (Continued)

Contaminant	Partition Coefficient, Koc	Groundwater Standards/ Criteria, Cw (ug/l or ppb)	a Allowable soil conc., Cs (ppm)	b ** Soil cleanup objectives to protect GW quality (ppm)	USEPA Health Based (ppm)		CRQL (ppb)	*** Rec. Soil Cleanup Objective (ppm)
					Carcin-ogens	Systemic Toxicants		
Dibenzofuran	1,230 *	5	0.062	6.2	N/A	N/A	330	6.2
Dibenzo(a,h)anthracene	33,000,000	50	1,650	165,000	0.0143	N/A	330	0.014 or MDL
3,3'-Dichlorobenzidine	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2,4-Dichlorophenol	380	1	0.004	0.4	N/A	200	330	0.4
2,4-Dinitrophenol	38	5	0.002	0.2	N/A	200	1,600	0.200 or MDL
2,6 Dinitrotoluene	198*	5	0.01	1.0	1.03	N/A	330	1.0
Diethylphthlate	142	50	0.071	7.1	N/A	60,000	330	7.1
Dimethylphthlate	40	50	0.020	2.0	N/A	80,000	330	2.0
Di-n-butyl phthalate	162*	50	0.081	8.1	N/A	8,000	330	8.1
Di-n-octyl phthlate	2,346 *	50	1.2	120.0	N/A	2,000	330	50.0 ***
Fluoranthene	38,000	50	19	1900.0	N/A	3,000	330	50.0 ***
Fluorene	7,300	50	3.5	350.0	N/A	3,000	330	50.0 ***
Hexachlorobenzene	3,900	0.35	0.014	1.4	0.41	60	330	0.41
Indeno (1,2,3-cd)pyrene	1,600,000	0.002	0.032	3.2	N/A	N/A	330	3.2
Isophorone	88.31 *	50	0.044	4.40	1,707	20,000	330	4.40
2-methylnaphthalene	727 *	50	0.364	36.4	N/A	N/A	330	36.4
2-Methylphenol	15	5	0.001	0.1	N/A	N/A	330	0.100 or MDL
4-Methylphenol	17	50	0.009	0.9	N/A	4,000	330	0.9
Naphthalene	1,300	10	0.130	13.0	N/A	300	330	13.0
Nitrobenzene	36	5	0.002	0.2	N/A	40	330	0.200 or MDL

TABLE 2 (Continued)

Contaminant	Partition Coefficient, Koc	Groundwater Standards/ Criteria, Cw (ug/l or ppb)	a Allowable soil conc., Cs (ppm)	b ** Soil cleanup objectives to protect GW quality (ppm)	USEPA Health Based (ppm)		CRQL (ppb)	*** Rec. Soil Cleanup Objective (ppm)
					Carcin- ogens	Systemic Toxicants		
2-Nitroaniline	86	5	0.0043	0.43	N/A	N/A	1,600	0.430 or MDL
2-Nitrophenol	65	5	0.0033	0.33	N/A	N/A	330	0.330 or MDL
4-Nitrophenol	21	5	0.001	0.1	N/A	N/A	1,600	0.100 or MDL
3-Nitroaniline	93	5	0.005	0.5	N/A	N/A	1,600	0.500 or MDL
Pentachlorophenol	1,022	1	0.01	1.0	N/A	2,000	1,600	1.0 or MDL
Phenanthrene	4,365 *	50	2.20	220.0	N/A	N/A	330	50.0 ***
Phenol	27	1	0.0003	0.03	N/A	50,000	330	0.03 or MDL
Pyrene	13,295 *	50	6.65	665.0	N/A	2,000	330	50.0 ***
2,4,5-Trichlorophenol	89 *	1	0.001	0.1	N/A	8,000	330	0.1

a. Allowable Soil Concentration Cs = f x Cw x Koc
b. Soil cleanup objective = Cs x Correction Factor (CF)
N/A is not available
MDL is Method Detection Limit

* Partition coefficient is calculated by using the following equation:
log Koc = -0.55 log S + 3.64, where S is solubility in water in ppm.
Other Koc values are experimental values.

** Correction Factor (CF) of 100 is used as per TAGM #4046

*** As per TAGM #4046, Total VOCs < 10 ppm., Total Semi- VOCs < 500ppm. and Individual Semi-VOCs < 50 ppm.

**** Koc is derived from the correlation Koc = 0.63 Kow (Determining Soil Response Action Levels...... EPA/540/2-89/057). Kow is obtained from the USEPA computer database 'MAIN'.

Note: Soil cleanup objectives are developed for soil organic carbon content (f) of 1%, and should be adjusted for the actual soil organic carbon content if it is known.

APPENDIX A

TABLE 3
Recommended soil cleanup objectives (mg/kg or ppm)
Organic Pesticides / Herbicides and PCBs

Contaminant	Partition Coefficient, Koc	Groundwater Standards/ Criteria, Cw (ug/l or ppb)	a Allowable soil conc., Cs (ppm)	b ** Soil cleanup objectives to protect GW quality (ppm)	USEPA Health Based (ppm)		CRQL (ppb)	*** Rec. Soil Cleanup Objective (ppm)
					Carcinogens	Systemic Toxicants		
Aldrin	96,000	ND (<0.01)	0.005	0.5	0.041	2	8	0.041
alpha- BHC	3,800	ND (<0.05)	0.002	0.2	0.111	N/A	8	0.11
beta - BHC	3,800	ND (<0.05)	0.002	0.2	3.89	N/A	8	0.2
delta - BHC	6,600	ND (<0.05)	0.003	0.3	N/A	N/A	8	0.3
Chlordane	21,305 *	0.1	0.02	2.0	0.54	50	80	0.54
2,4-D	104 *	4.4	0.005	0.5	N/A	800	800	0.5
4,4'- DDD	770,000 *	ND (<0.01)	0.077	7.7	2.9	N/A	16	2.9
4,4'-DDE	440,000 *	ND (<0.01)	0.0440	4.4	2.1	N/A	16	2.1
4,4'-DDT	243,000 *	ND (<0.01)	0.025	2.5	2.1	40	16	2.1
Dibenzo-P-dioxins (PCDD) 2,3,7,8 TCDD	1709800	0.000035	0.0006	0.06	N/A	N/A	N/A	N/A
Dieldrin	10,700 *	ND (< 0.01)	0.0010	0.1	0.044	4	16	0.044
Endosulfan I	8,168 *	0.1	0.009	0.9	N/A	N/A	16	0.9
Endosulfan II	8,031 *	0.1	0.009	0.9	N/A	N/A	16	0.9
Endosulfan Sulfate	10,038 *	0.1	0.01	1.0	N/A	N/A	16	1.0
Endrin	9,157 *	ND (<0.01)	0.001	0.1	N/A	20	8	0.10

TABLE 3 (Continued)

Contaminant	Partition Coefficient, Koc	Groundwater Standards/ Criteria, Cw (ug/l or ppb)	a Allowable soil conc., Cs (ppm)	b ** Soil cleanup objectives to protect GW quality (ppm)	USEPA Health Based (ppm)		CRQL (ppb)	*** Rec. Soil Cleanup Objective (ppm)
					Carcinogens	Systemic Toxicants		
Endrin keytone	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
gamma - BHC (Lindane)	1,080	ND (<0.05)	0.0006	0.06	5.4	20	8	0.06
gamma - chlordane	140,000	0.1	0.14	14.0	0.54	5	80	0.54
Heptachlor	12,000	ND (<0.01)	0.0010	0.1	0.16	40	8	0.10
Heptachlor epoxide	220	ND (<0.01)	0.0002	0.02	0.077	0.8	8	0.02
Methoxychlor	25,637	35.0	9.0	900	N/A	400	80	***
Mitotane	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Parathion	760	1.5	0.012	1.2	N/A	500	8	1.2
PCBs	17,510 *	0.1	0.1	10.0	1.0	N/A	160	1.0 (Surface) 10 (sub-surf)
Polychlorinated dibenzo-furans (PCDF)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Silvex	2,600	0.26	0.007	0.7	N/A	600	330	0.7
2,4,5-T	53	35	0.019	1.9	N/A	200	330	1.9

a. Allowable Soil Concentration Cs = f x Cw x Koc
b. Soil cleanup objective = Cs x Correction Factor (CF)
N/A is not available

* Partition coefficient is calculated by using the following equation:
log Koc = -0.55 log S + 3.64, where S is solubility in water in ppm.
All other Koc values are experimental values.

** Correction Factor (CF) of 100 is used as per TAGM #4046

*** As per TAGM #4046, Total VOCs < 10 ppm.

Note: Soil cleanup objectives are developed for soil organic carbon content (f) of 1% (5% for PCBs as per PCB Guidance Document), and should be adjusted for the actual soil organic carbon content if it is known.

APPENDIX A

TABLE 4

Recommended soil cleanup objectives (mg/kg or ppm)
Heavy Metals

Contaminants	Protect Water Quality (ppm)	Eastern USA Background (ppm)	* CRDL (mg/kg or ppm)	***** Rec. Soil Cleanup Objective (ppm)
Aluminum	N/A	33,000	2.0	SB
Antimony	N/A	N/A	0.6	SB
Arsenic	N/A	3-12 **	0.1	7.5 or SB
Barium	N/A	15-600	2.0	300 or SB
Beryllium	N/A	0-1.75	0.05	0.16 (HEAST) or SB
Cadmium	N/A	0.1-1	0.05	1 or SB
Calcium	N/A	130 - 35,000 ***	50.0	SB
Chromium	N/A	1.5 - 40 **	0.1	10 or SB
Cobalt	N/A	2.5 - 60 **	0.5	30 or SB
Copper	N/A	1 - 50	0.25	25 or SB
Cyanide	N/A	N/A	0.1	***
Iron	N/A	2,000 - 550,000	1.0	2,000 or SB
Lead	N/A	****	0.03	SB ****
Magnesium	N/A	100 - 5,000	50.0	SB
Manganese	N/A	50 - 5,000	0.15	SB
Mercury	N/A	0.001 - 0.2	0.002	0.1
Nickel	N/A	0.5 -25	0.4	13 or SB
Potassium	N/A	8,500 - 43,000 **	50.0	SB
Selenium	N/A	0.1 - 3.9	0.05	2 or SB
Silver	N/A	N/A	0.1	SB
Sodium	N/A	6,000 - 8,000	50.0	SB
Thallium	N/A	N/A	0.1	SB
Vanadium	N/A	1-300	0.5	150 or SB
Zinc	N/A	9-50	0.2	20 or SB

Note: Some forms of metal salts such as Aluminum Phosphide, Calcium Cyanide, Potassium Cyanide, Copper cyanide, Silver cyanide, Sodium cyanide, Zinc phosphide, Thallium salts, Vanadium pentoxide and Chromium (VI) compounds are more toxic in nature. Please refer to the USEPA HEASTs database to find cleanup objectives if such metals are present in soil.

SB is site background
N/A is not available

* CRDL is contract required detection limit which is approx. 10 times the CRDL for water.

** New York State background

*** Some forms of Cyanide are complex and very stable while other forms are pH dependent and hence are very unstable. Site-specific form(s) of Cyanide should be taken into consideration when establishing soil cleanup objective.

**** Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm.

***** Recommended soil cleanup objectives are average background concentrations as reported in a 1984 survey of reference material by E. Carol McGovern, NYSDEC.

APPENDIX B

TOTAL ORGANIC CARBON (TOC)

USE AND LIMITATIONS

Total organic carbon is a measure of the total amount of nonvolatile, volatile, partially volatile, and particulate organic compounds in a sample. Total organic carbon is independent of the oxidation state of the organic compounds and is not a measure of the organically bound and inorganic elements that can contribute to the biochemical and chemical oxygen demand tests.

Because inorganic carbon (e.g., carbonates, bicarbonates, free CO_2) will interfere with total organic carbon determinations, samples should be treated to remove inorganic carbon before being analyzed.

FIELD PROCEDURES

Collection

Samples can be collected in glass or plastic containers. A minimum sample size of 25 g is recommended. If unrepresentative material is to be removed from the sample, it should be removed in the field under the supervision of the chief scientist and noted on the field log sheet.

Processing

Samples should be stored frozen and can be held for up to 6 months under that condition. Excessive temperatures should not be used to thaw samples.

LABORATORY PROCEDURES

Analytical Procedures

- Equipment
  - Induction furnace
    e.g., Leco WR-12, Dohrmann DC-50, Coleman CH analyzer, Perkin Elmer 240 elemental analyzer, Carlo-Erba 1106
  - Analytical balance
    0.1 mg accuracy
  - Desiccator
  - Combustion boats
  - 10 percent hydrochloric acid (HCL)
  - Cupric oxide fines (or equivalent material)
  - Benzoic acid or other carbon source as a standard.

- Equipment preparation

  - Clean combustion boats by placing them in the induction furnace at 950° C. After being cleaned, combustion boats should not be touched with bare hands.
  - Cool boats to room temperature in a desiccator.
  - Weigh each boat to the nearest 0.1 mg.

- <u>Sample preparation</u>
  - Allow frozen samples to warm to room temperature.
  - Homogenize each sample mechanically, incorporating any overlying water.
  - Transfer a representative aliquot (5-10 g) to a clean container.

- <u>Analytical procedures</u>
  - Dry samples to constant weight at 70 ± 2°C. The drying temperature is relatively low to minimize loss of volatile organic compounds.
  - Cool dried samples to room temperature in a desiccator.
  - Grind sample using a mortar and pestle to break up aggregates.
  - Transfer a representative aliquot (0.2-0.5 g) to a clean, preweighed combustion boat.
  - Determine sample weight to the nearest 0.1 mg.
  - Add several drops of HCL to the dried sample to remove carbonates. Wait until the effervescing is completed and add more acid. Continue this process until the incremental addition of acid causes no further effervescence. Do not add too much acid at one time as this may cause loss of sample due to frothing. Exposure of small samples (i.e., 1-10 mg) having less than 50 percent carbonate to an HCL atmosphere for 24-48 h has been shown to be an effective means of removing carbonates (Hedges and Stern 1984). If this method is used for sample sizes greater than 10 mg, its effectiveness should be demonstrated by the user.
  - Dry the HCL-treated sample to constant weight at 70 ± 2° C.
  - Cool to room temperature in a desiccator.
  - Add previously ashed cupric oxide fines or equivalent material (e.g., alumina oxide) to the sample in the combustion boat.
  - Combust the sample in an induction furnace at a minimum temperature of 950 ± 10° C.

- <u>Calculations</u>
  - If an ascarite-filled tube is used to capture CO_2, the carbon content of the sample can be calculated as follows:

$$\text{Percent carbon} = \frac{A\ (0.2729)\ (100)}{B}$$

Where:

A = the weight (g) of CO_2 determined by weighing the ascarite tube before and after combustion

B = dry weight (g) of the unacidified sample in the combustion boat

0.2729 = the ratio of the molecular weight of carbon to the molecular weight of carbon dioxide

A silica gel trap should be placed before the ascarite tube to catch any moisture driven off during sample combustion. Additional silica gel should be placed at the exit end of the ascarite tube to trap any water that might be formed by reaction of the trapped CO_2 with the NaOH in the ascarite.

- If an elemental analyzer is used, the amount of CO_2 will be measured by a thermal conductivity detector. The instrument should be calibrated daily using an empty boat blank as the zero point and at least two standards. Standards should bracket the expected range of carbon concentrations in the samples.

QA/QC Procedures

It is critical that each sample be thoroughly homogenized in the laboratory before a subsample is taken for analysis. Laboratory homogenization should be conducted even if samples were homogenized in the field.

Dried samples should be cooled in a desiccator and held there until they are weighed. If a desiccator is not used, the sediment will accumulate ambient moisture and the sample weight will be overestimated. A color-indicating desiccant is recommended so that spent desiccant can be detected easily. Also, the seal on the desiccator should be checked periodically and, if necessary, the ground glass rims should be greased or the "O" rings should be replaced.

It is recommended that triplicate analyses be conducted on one of every 20 samples, or on one sample per batch if less than 20 samples are analyzed. A method blank should be analyzed at the same frequency as the triplicate analyses. The analytical balance should be inspected daily and calibrated at least once per week. The carbon analyzer should be calibrated daily with freshly prepared standards. A standard reference material should be analyzed at least once for each major survey.

DATA REPORTING REQUIREMENTS

Total organic carbon should be reported as a percentage of the dry weight of the unacidified sample to the nearest 0.1 unit. The laboratory should report the results of all samples (including QA replicates, method blanks, and standard reference measurements) and should note any problems that may have influenced sample quality. The laboratory should also provide a summary of the calibration procedure and results (e.g., range covered, regression equation, coefficient of determination).

APPENDIX G

WASTE DISPOSAL INFORMATION

HAZARDOUS WASTE

A total of 285.20 tons of hazardous waste was removed and transported from the Parcel #2 Site on Seneca Street, Buffalo, New York to EQ-The Environmental Quality Co.; Michigan Disposal Waste Treatment Plant, at 49350 North I-94 Service Drive, Belleville, Michigan.

The hazardous waste was excavated and removed for transportation to the disposal facility on October 22, October 23, October 31, and November 3, 2003.

Listed below are the dates, manifest numbers and corresponding net weights (tons):

Date	*Manifest Number*	*Net Weight (Tons)*
October 22, 2003	MI 8688549	20.87
October 22, 2003	MI 8688550	18.19
October 23, 2003	MI 8688551	23.61
October 23, 2003	MI 8688552	21.47
October 31, 2003	MI 8666065	17.87
October 31, 2003	MI 8666066	21.76
October 31, 2003	MI 8666067	23.29
October 31, 2003	MI 8666068	20.69
October 31, 2003	MI 8666069	23.52
October 31, 2003	MI 8666070	25.47
November 3, 2003	MI 8666071	23.46
November 3, 2003	MI 8666072	22.81
November 3, 2003	MI 8666078	22.19
TOTAL	**13**	**285.20**

NON-HAZARDOUS WASTE

A total of 1523.75 tons of non-hazardous waste was removed and transported from the Parcel #2 Site, on Seneca Street, Buffalo, New York to Waste Management's Chaffee Landfill, at 10860 Olean Road, Chaffee, New York.

The non-hazardous waste was excavated and removed for transportation to the landfill on October 20, 21, 22, 23, 27, 28, 31, November 3, and December 3, 2003.

Listed below are the dates, tractor numbers from A.T. & A. Tripi Trucking Corp., Lancaster, New York and corresponding net weights (Tons).

Date	*Ticket Number*	*Tractor Number*	*Net Weight (Tons)*
October 20, 2003	126819	08	23.96
October 20, 2003	126782	08	25.32
October 20, 2003	126844	08	22.32
October 20, 2003	126781	24	21.24
October 20, 2003	126810	24	22.69
October 20, 2003	126837	24	19.56
October 20, 2003	126828	23	22.82
October 21, 2003	126883	07	23.38
October 21, 2003	126920	07	25.39
October 21, 2003	126983	07	20.41
October 21, 2003	126958	07	19.35
October 21, 2003	126985	23	24.27
October 21, 2003	126964	23	21.59
October 21, 2003	126872	24	20.39
October 21, 2003	126907	24	20.87
October 21, 2003	126968	24	21.84
October 21, 2003	126939	24	23.76
October 21, 2003	126981	22	19.66
October 21, 2003	126879	22	18.66
October 21, 2003	126954	22	20.12
October 21, 2003	126913	22	21.49
October 21, 2003	126873	08	21.41
October 21, 2003	126910	08	23.95
October 21, 2003	126971	08	21.79
October 21, 2003	126942	08	22.48
October 22, 2003	127056	24	19.16
October 22, 2003	127118	24	22.38
October 22, 2003	127005	24	23.31
October 22, 2003	127127	23	27.32
October 22, 2003	127041	23	24.60
October 22, 2003	127091	23	24.43
October 22, 2003	127095	22	20.77
October 22, 2003	127128	22	20.76
October 22, 2003	127046	22	19.17
October 22, 2003	127107	08	26.49
October 22, 2003	127007	08	23.32
October 22, 2003	127060	08	22.29
October 23, 2003	127193	24	22.30
October 23, 2003	127144	24	21.12
October 23, 2003	127204	22	26.23
October 23, 2003	127153	22	22.89
October 23, 2003	127148	07	23.28
October 23, 2003	127198	07	20.52
October 23, 2003	127157	23	23.91

Date	*Ticket Number*	*Tractor Number*	*Net Weight (Tons)*
October 27, 2003	127514	08	23.21
October 27, 2003	127444	08	24.35
October 27, 2003	127475	08	22.35
October 28, 2003	127584	22	18.95
October 28, 2003	127659	22	20.10
October 28, 2003	127549	22	18.12
October 28, 2003	127621	22	23.51
October 28, 2003	127546	24	23.60
October 28, 2003	127578	24	22.19
October 28, 2003	127651	24	22.75
October 28, 2003	127612	24	24.44
October 28, 2003	127668	17	21.12
October 28, 2003	127632	17	22.69
October 28, 2003	127558	17	21.00
October 28, 2003	127596	17	17.36
October 28, 2003	127642	15	21.16
October 28, 2003	127601	14	19.74
October 28, 2003	127565	14	21.30
October 31, 2003	128030	14	21.92
October 31, 2003	128071	14	21.06
November 3, 2003	128294	22	17.22
November 3, 2003	128220	22	21.95
November 3, 2003	128248	22	23.52
November 3, 2003	128281	23	22.01
November 3, 2003	128230	23	16.76
DECEMBER 3, 2003	130963	22	8.40
TOTAL		70	1523.75

APPENDIX G - HAZARDOUS WASTE MANIFESTS AND DISPOSAL RECEIPTS

WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Part 111 and Part 121 of Act 451, 1994, as amended.

Failure to file may subject you to criminal and/or civil penalties under Sections 324.11151 or 324.12116 MCL.

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N Y R 0 0 0 0 9 6 1 3 1 Manifest Document No. 1 8 8 3 4 9
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address GE Franchise Finance Corporation
17207 N. Perimeter Drive
Scottsdale, AZ 85255

4. Generator's Phone (480) 563-6293

A. State Manifest Document Number MI 8688549

B. State Generator 2137 Seneca Street
Buffalo, NY 14210

5. Transporter 1 Company Name Buffalo Fuel Corp.
6. US EPA ID Number N Y R 0 0 0 0 4 5 7 2 4

C. State Transporter's ID AD-1583? (NY)
D. Transporter's Phone (716) 278-2000

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive
Belleville, MI 48111

10. US EPA ID Number M I D 0 0 0 7 2 4 8 3 1

G. State Facility's ID
H. Facility's Phone (734) 697-7830

	HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER).	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	RQ Hazardous waste, solid, n.o.s. (F001,D039) 9, NA3077, III	0 0 1	D T	EST 42,000	lbs	F 0 0 1
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a.(S) WT IN-73160
b. WT out 31420
c.
d.

K. Handling Codes
a
b
c
d

15. Special Handling Instructions and Additional Information a.021055WTS, ERG# 171 WTS#10730 CONF# 35353
Emer. Contact: 1-800-424-9300 - CHEMTREC ENFAC #

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; If I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name GARY LALIBERTY (AS AGENT FOR GE FRANCHISE FINANCE CORP)
Signature Gary LaLiberty
Date Month Day Year 1 0 2 2 0 3

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name WESLEY J. HAMMER
Signature
Date Month Day Year 1 0 2 2 0 3

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name Reinaldo Sala Sr.
Signature Reinaldo Sala Sr.
Date Month Day Year 1 0 2 3 0 3

GENERATOR

TRANSPORTER

FACILITY

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

EQ-The Environmental Quality Co.

Michigan Disposal Waste Treatment Plant

49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

WASTE TECHNOLOGY SERVICES
640 PARK PLACE

Receipt ID: 342069
EQ Account #: 583
Manifest: MI8688549
Hauler: BUFF
Date: 10/22/2003
Time In: 16:05 PM
Time Out: 01:38 AM

Line #:	**Approval / Service**		**Generator**				
		Waste Code	**Bill Unit**	**Gross**	**Tare**	**Net**	**Quantity**
01	021055WTS		NYR000096131 GE FRANCHISE FINANCE CORPORATION				
		F001	TONS	73,160	31,420	41,740	20,870
		Hazardous Surcharge					

I understand and acknowledge that entry into an EQ environmental protection facility is permitted only at my own risk. I, both personally and on behalf of my employer, release EQ - The Environmental Quality Company from any and all liability not caused by its gross negligence or willful misconduct.

DELIVERED BY

R1859

WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

DO NOT WRITE IN THIS SPACE
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Required under authority of Part 111 and Part 121 of Act 451, 1994, as amended.

Failure to file may subject you to criminal and/or civil penalties under Sections 324.11151 or 324.12116 MCL.

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N Y R 0 0 0 0 9 6 1 3 1 Manifest Document No. 8 8 5 5 0
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address GE Franchise Finance Corporation
17207 N. Perimeter Drive
Scottsdale, AZ 85255
4. Generator's Phone (480) 563-6293

A. State Manifest Document Number MI 8688550

B. State Generator's ID 2137 Seneca Street
Buffalo, NY 14210

5. Transporter 1 Company Name Buffalo Fuel Corp.
6. US EPA ID Number N Y R 0 0 0 0 4 5 7 2 4

C. State Transporter's ID NY AD15799

D. Transporter's Phone (716) 278-2000

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive
Belleville, MI 48111
10. US EPA ID Number M I D 0 0 0 7 2 4 8 3 1

G. State Facility's ID

H. Facility's Phone (734) 697-7830

GENERATOR

	HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER).	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	RQ Hazardous waste, solid, n.o.s. (F001,D039) 9, NA3077, III	0 0 1	D T	36380 ~~[illegible]~~		F 0 0 1
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a.(5) WT IN 69000
b. WT out 32620
c.
d.

K. Handling Codes
a
b
c
d

15. Special Handling Instructions and Additional Information a.021055WTS, ERG# 171 WTS#10730 CONF# 35353
Emer. Contact: 1-800 424-9300 – CHEMTREC [illegible] #

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classifi packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulatio If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determi to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my wa generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name GARY LALIBERTY AS AGENT OF GE FRANCHISE FINANCE
Signature Gary L. Laliberty
Date Month Day 10 22

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name SAMUEL LONG
Signature Samuel Long
Date Month Day 10 22

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date Month Day

FACILITY

19. Discrepancy Indication Space OK. TO change 13 a per [illegible] WTS 10703 [illegible]

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name Reynaldo Sales Sr.
Signature Reynaldo Sales Sr.
Date Month Day 11 4 [illegible]

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

TSDF COPY

EQ-The Environmental Quality Co.
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

WASTE TECHNOLOGY SERVICES
640 PARK PLACE

Receipt ID: 342070
EQ Account #: 583
Manifest: MI8688550
Hauler: BUFF
Date: 10/22/2003
Time In: 16:19 PM
Time Out: 01:45 AM

Line #:	Approval / Service		Generator				
		Waste Code	Bill Unit	Gross	Tare	Net	Quantity
01	021055WTS		NYR000096131 GE FRANCHISE FINANCE CORPORATION				
		F001	TONS	69,000	32,620	36,380	18.190
		Hazardous Surcharge					

I understand and acknowledge that entry into an EQ environmental protection facility is permitted only at my own risk. I, both personally and on behalf of my employer, release EQ - The Environmental Quality Company from any and all liability not caused by its gross negligence or willful misconduct.

DELIVERED BY

Invoice ID: 20051043 Receipt ID: 042216 Manifest: MI8688551

DEQ

WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

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1850

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Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N Y R 0 0 0 0 9 6 1 3
Manifest Document No. 1 8 8 5 5
2. Page 1: 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
GE Franchise Finance Corporation
17207 N. Perimeter Drive
Scottsdale, AZ 85255

4. Generator's Phone (480) 563-6293

A. State Manifest Document Number: MI 8688551

B. State Generator's ID: 2137 Seneca Street
Buffalo, NY 14210

5. Transporter 1 Company Name: Buffalo Fuel Corp.
6. US EPA ID Number: N Y R 0 0 0 0 4 5 7 2 4

C. State Transporter's ID: NY(AD-15932)
D. Transporter's Phone: (716) 278-2000

7. Transporter 2 Company Name:
8. US EPA ID Number:

E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive
Belleville, MI 48111

10. US EPA ID Number: M I D 0 0 0 7 2 4 8 3 1

G. State Facility's ID:
H. Facility's Phone: (734) 697-7830

HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER).	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. X	RQ Hazardous waste, solid, n.o.s. (F001,D039) 9, NA3077, III	0 0 1	D T	EST. ~~42,000~~ 47720	lbs	F 0 0 1
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a. (S)
b.
c.
d.

K. Handling Codes
a
b
c
d

15. Special Handling Instructions and Additional Information
a.021055WTS, ERG# 171 WTS#10730 CONF# 35353
Emer. Contact: 1-800-424-9300 - CHEMTREC

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Gary LaLiberty as owner representative for GE Franchise Finance Corporation
Signature: Gary LaLiberty
Date Month Day Year: 10 23 03

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Wesley J Homer
Signature:
Date Month Day Year: 10 23 03

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Date Month Day Year:

19. Discrepancy Indication Space
OK to change 13 per
Molly OWTS 102403

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name:
Signature:
Date Month Day Year: 10 24 03

GENERATOR
TRANSPORTER
FACILITY

LL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MIC[illegible]N AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

EQ-The Environmental Quality Co.
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

WASTE TECHNOLOGY SERVICES
640 PARK PLACE

Receipt ID: 342216
EQ Account #: 583
Manifest: MI8688551
Hauler: BUFF
Date: 10/24/2003
Time In: 08:23 AM
Time Out; 15:34 PM

Line #:	Approval / Service	Generator					
	Waste Code	Bill Unit		Gross	Tare	Net	Quantity
01	021055WTS	NYR000096131 GE FRANCHISE FINANCE CORPORATION					
	F001	TONS		78,520	31,300	47,220	23.610
	Hazardous Surcharge						

I understand and acknowledge that entry into an EQ environmental protection facility is permitted only at my own risk. I, both personally and on behalf of my employer, release EQ - The Environmental Quality Company from any and all liability not caused by its gross negligence or willful misconduct.

DELIVERED BY

R1859

DEQ

WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

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ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Part 111 and Part 121 of Act 451, 1994, as amended.

Failure to file may subject you to criminal and/or civil penalties under Sections 324.11151 or 324.12118 MCL.

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N Y R 0 0 0 0 9 6 1 3 1 Manifest Document No. 8 6 3 5 2
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address GE Franchise Finance Corporation
17207 N. Perimeter Drive
Scottsdale, AZ 85255
4. Generator's Phone (480) 563-6293
A. State Manifest Document Number MI 8688552
B. State Generator 2137 Seneca Street
Buffalo, NY 14210
5. Transporter 1 Company Name Buffalo Fuel Corp.
6. US EPA ID Number N Y R 0 0 0 0 4 5 7 2 4
C. State Transporter's ID NY (AU-15994)
D. Transporter's Phone (716) 278-2000
7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone
9. Designated Facility Name and Site Address
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive
Belleville, MI 48111
10. US EPA ID Number M I D 0 0 0 7 2 4 8 3 1
G. State Facility's ID
H. Facility's Phone (734) 697-7830

11. US DOT Description *(including Proper Shipping Name, Hazard Class, and ID NUMBER).*

	HM	11. US DOT Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	RQ Hazardous waste, solid, n.o.s. (F001,D039) 9, NA3077, III	0 0 1	D T	EST 42,000	lbs	F 0 0 1
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a. (S)
b.
c.
d.

K. Handling Codes
a
b
c
d

15. Special Handling Instructions and Additional Information a.021055WTS, ERG# 171 WTS#10730 CONF# 35353
Emer. Contact: 1-800-424-9300 - CHEMTREC

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name Gary Laliberty as Owner's Attnes. for GE Franchise Finance Corp
Signature Gary Laliberty
Date Month Day Year 10 23 93

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name ~~Samuel Langoliere — GE Franchise~~ ~~Gary Laliberty as Attn. for Finance Corp~~
Signature Samuel Long
Date Month Day Year 10 23 93

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name ~~SAMUEL~~
Signature
Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name Diedre Price
Signature
Date Month Day Year

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

GENERATOR
TRANSPORTER
FACILITY

EQ-The Environmental Quality Co.
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

WASTE TECHNOLOGY SERVICES
640 PARK PLACE

Receipt ID: 342215
EQ Account #: 583
Manifest: MI8688552
Hauler: BUFF
Date: 10/24/2003
Time In: 08:19 AM
Time Out: 15:30 PM

Line #:	Approval / Service	Waste Code	Generator Bill Unit	Gross	Tare	Net	Quantity
01	021055WTS		NYR000096131 GE FRANCHISE FINANCE CORPORATION				
		F001	TONS	75,580	32,640	42,940	21.470
		Hazardous Surcharge					

I understand and acknowledge that entry into an EQ environmental protection facility is permitted only at my own risk. I, both personally and on behalf of my employer, release EQ - The Environmental Quality Company from any and all liability not caused by its gross negligence or willful misconduct.

DELIVERED BY

WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Part 111 and Part 121 of Act 451, 1994, as amended.

Failure to file may subject you to criminal and/or civil penalties under Sections 324.11151 or 324.12116 MCL.

68340

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N Y R 0 0 0 0 9 6 1 3 1 Manifest Document No. 0 0 0 8 5
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address GE Franchise Finance Corporation
17207 N. Perimeter Drive
Scottsdale, AZ 85255

4. Generator's Phone (480) 563-6293

A. State Manifest Document Number MI 8666065

B. State Generator's ID 2137 Seneca Street
Buffalo, NY 14210

5. Transporter 1 Company Name Buffalo Fuel Corp.
6. US EPA ID Number N Y R 0 0 0 0 4 5 7 2 4

C. State Transporter's ID NY-AD-1530
D. Transporter's Phone (716) 278-2000

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive
Belleville, MI 48111

10. US EPA ID Number M I D 0 0 0 7 2 4 8 3 1

G. State Facility's ID
H. Facility's Phone (734) 697-7830

	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER). HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	RQ Hazardous waste, solid, n.o.s. (F001,D039) 9, NA3077, III	0 0 1	D T	Estim. ~~41,000~~ 35740	lb	F 0 0 1
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a. (S)
b.
c.
d.

K. Handling Codes
a
b
c
d

15. Special Handling Instructions and Additional Information a.021055WTS, ERG# 171 WTS# 10879 CONF# 36027
Emer. Contact: 1-800-424-9300
CHEMTREC

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name GARY LALIBERTY AS OWNERS REPRESENT. FOR GE-FRANCHISE FINANCE CORP.
Signature
Date Month Day Year 10 31 03

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name Hartley Kroening
Signature Hartley Kroening
Date Month Day Year 10 31 03

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date Month Day Year

19. Discrepancy Indication Space
CU B CHANGE PER M[illegible] QWTS 11 4 03

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name BRIAN SCHULTZ
Signature
Date Month Day Year 11 04 03

GENERATOR

TRANSPORTER

FACILITY

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

EPA Form 8700-22

EQP 5110 Rev. 5/00

TSDF COPY

EQ-The Environmental Quality Co.
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

WASTE TECHNOLOGY SERVICES
640 PARK PLACE

Receipt ID: 342854
EQ Account #: 583
Manifest: MI8666065
Hauler: BUFF
Date: 11/3/2003
Time In: 13:25 PM
Time Out: 00:34 AM

Line #:	**Approval / Service**	**Waste Code**	**Generator** **Bill Unit**	**Gross**	**Tare**	**Net**	**Quantity**
01	021055WTS		NYR000096131 GE FRANCHISE FINANCE CORPORATION				
		F001	TONS	68,340	32,600	35,740	17.870
		Hazardous Surcharge					

I understand and acknowledge that entry into an EQ environmental protection facility is permitted only at my own risk. I, both personally and on behalf of my employer, release EQ - The Environmental Quality Company from any and all liability not caused by its gross negligence or willful misconduct.

DELIVERED BY

DEQ WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Part 111 and Part 121 of Act 451, 1994, as amended.

Failure to file may subject you to criminal and/or civil penalties under Sections 324.11151 or 324.12116 MCL.

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N Y R 0 0 0 0 9 6 1 3 1 Manifest Document No. 6 6 0 0 6

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
GE Franchise Finance Corporation
17207 N. Perimeter Drive
Scottsdale, AZ 85255

4. Generator's Phone (480) 563-6293

A. State Manifest Document Number MI 8666066

B. State Generator's ID 37 Seneca Street
Buffalo, NY 14210

5. Transporter 1 Company Name Buffalo Fuel Corp.

6. US EPA ID Number N Y R 0 0 0 0 4 5 7 2 4

C. State Transporter's ID NY-AD15857

D. Transporter's Phone (716) 278-2000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive
Belleville, MI 48111

10. US EPA ID Number M I D 0 0 0 7 2 4 8 3 1

G. State Facility's ID

H. Facility's Phone (734) 697-7830

	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER). HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	RQ Hazardous waste, solid, n.o.s. (F001,D039) 9, NA3077, III	0 0 1	D T	ESTIM. 44,000	lbs	F 0 0 1
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a. (S) c.
b. d.

K. Handling Codes
a
b
c
d

15. Special Handling Instructions and Additional Information a.021055WTS, ERG# 171 WTS#10879 CONF# 36027
Emer. Contact: 1-800-424-9300
CHEMTREC

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name AS OWNERS REPRES. Gary LaLiberty for GE-Franchise Finance Corp. Signature Date Month Day Year 10/31/03

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name JOHN GIESCHEN Signature Date Month Day Year 10/31/03

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name BRYAN SCHULTZ Signature Date Month Day Year 11/04/93

GENERATOR

TRANSPORTER

FACILITY

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

EPA Form 8700-22 (Rev. 9/88)

TSDF COPY

EQP 5114 Rev. 9/00

EQ-The Environmental Quality Co.
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

WASTE TECHNOLOGY SERVICES
640 PARK PLACE

Receipt ID: 342851
EQ Account #: 583
Manifest: MI8666066
Hauler: BUFF
Date: 11/3/2003
Time In: 13:03 PM
Time Out: 00:23 AM

Line #:	**Approval / Service**	**Generator**				
	Waste Code	**Bill Unit**	**Gross**	**Tare**	**Net**	**Quantity**
01	021055WTS	NYR000096131 GE FRANCHISE FINANCE CORPORATION				
	F001	TONS	74,220	30,700	43,520	21.760
	Hazardous Surcharge					

I understand and acknowledge that entry into an EQ environmental protection facility is permitted only at my own risk. I, both personally and on behalf of my employer, release EQ - The Environmental Quality Company from any and all liability not caused by its gross negligence or willful misconduct.

DELIVERED BY

DEQ

WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Part 111 and Part 121 of Act 451, 1994, as amended.

Failure to file may subject you to criminal and/or civil penalties under Sections 324.11151 or 324.12116 MCL.

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N Y R 0 0 0 0 9 6 1 3 1 Manifest Document No. 0 0 0 0 7
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
GE Franchise Finance Corporation
17207 N. Perimeter Drive
Scottsdale, AZ 85255

4. Generator's Phone (480) 563-6293

A. State Manifest Document Number MI 8666067

B. State Generator's ID 115 Seneca Street
Buffalo, NY 14210

5. Transporter 1 Company Name Buffalo Fuel Corp.
6. US EPA ID Number N Y R 0 0 0 0 4 5 7 2 4

C. State Transporter's ID NY-AD58964
D. Transporter's Phone (716) 278-2000

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive
Belleville, MI 48111

10. US EPA ID Number M I D 0 0 0 7 2 4 8 3 1

G. State Facility's ID

H. Facility's Phone (734) 697-7830

	HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER).	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	RQ Hazardous waste, solid, n.o.s. (F001,D039) 9, NA3077, III	0 0 1	D T	ESTIM 46,000	lbs	F 0 0 1
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a.(S)
b.
c.
d.

K. Handling Codes
a
b
c
d

15. Special Handling Instructions and Additional Information a.021055WTS, ERG# 171 WTS#10879 CONF# 36027
Emer. Contact: 1-800-424-9300
CHEMTREC

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; If I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name AS OWNERS REPRESENTATIVE GARY LALIBERTY FOR GE FRANCHISE FINANCE CORP
Signature
Date Month Day Year 1 0 3 1 0 3

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name MARK FALTISKO
Signature
Date Month Day Year 1 0 3 1 0 3

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name BRIAN SCHULTZ
Signature
Date Month Day Year 1 1 0 4 0

GENERATOR
TRANSPORTER
FACILITY

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

TSDF COPY

EQ-The Environmental Quality Co.
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

WASTE TECHNOLOGY SERVICES
640 PARK PLACE

Receipt ID: 342876
EQ Account #: 583
Manifest: MI8666067
Hauler: BUFF
Date: 11/3/2003
Time In: 15:27 PM
Time Out: 00:44 AM

Line #:	Approval / Service		Generator				
		Waste Code	Bill Unit	Gross	Tare	Net	Quantity
01	021055WTS		NYR000096131 GE FRANCHISE FINANCE CORPORATION				
		F001	TONS	80,000	33,420	46,580	23.290
		Hazardous Surcharge					

I understand and acknowledge that entry into an EQ environmental protection facility is permitted only at my own risk. I, both personally and on behalf of my employer, release EQ - The Environmental Quality Company from any and all liability not caused by its gross negligence or willful misconduct.

DELIVERED BY

Invoice ID: 20092022 Receipt ID: 342857 Manifest: MI866606

WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Part 111 and Part 121 of Act 451, 1994, as amended.

Failure to file may subject you to criminal and/or civil penalties under Sections 324.11151 or 324.12116 MCL.

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N Y R 0 0 0 0 9 6 1 3 1 Manifest Document No. 0 0 0 0 8
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address GE Franchise Finance Corporation
17207 N. Perimeter Drive
Scottsdale, AZ 85255
4. Generator's Phone (480) 563-6293

A. State Manifest Document Number MI 8666068

B. State Generator's ID 2107 Seneca Street
Buffalo, NY 14210

5. Transporter 1 Company Name Buffalo Fuel Corp.
6. US EPA ID Number N Y R 0 0 0 0 4 5 7 2 4

C. State Transporter's ID NY-AC24689
D. Transporter's Phone (716) 278-2000

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive
Belleville, MI 48111
10. US EPA ID Number M I D 0 0 0 7 2 4 8 3 1

G. State Facility's ID
H. Facility's Phone (734) 697-7830

	HM	11. US DOT Description *(including Proper Shipping Name, Hazard Class, and ID NUMBER)*.	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	RQ Hazardous waste, solid, n.o.s. (F001,D039) 9, NA3077, III	0 0 1	D T	ESTIMATED 42,000	lbs	F 0 0 1
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a.(S) c.
b. d.

K. Handling Codes
a
b
c
d

15. Special Handling Instructions and Additional Information a.021055WTS, ERG# 171 WTS#10879 CONF# 36027
Emer. Contact: 1-800-424-9300
CHEMTREC

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name AS OWNER REPRESENTATIVE GARY LALIBERTY FOR GE FRANCHISE FINANCE CORP. Signature Gary La Liberty Date Month Day Year 10 31 03

GENERATOR

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name Paul F. Walker Jr Signature Date Month Day Year 10 31 03

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Date Month Day Year

TRANSPORTER

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name BRYAN SCHWETZ Signature Date Month Day Year 11 04 03

FACILITY

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

EPA Form 8700-22 (Rev. 9/88) TSDF COPY EQP 5310 Rev. 5/00

EQ-The Environmental Quality Co.
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

WASTE TECHNOLOGY SERVICES
640 PARK PLACE

Receipt ID: 342857
EQ Account #: 583
Manifest: MI8666068
Hauler: BUFF
Date: 11/3/2003
Time In: 13:56 PM
Time Out: 00:48 AM

Line #:	Approval / Service	Waste Code	Generator	Bill Unit	Gross	Tare	Net	Quantity
01	021055WTS		NYR000096131 GE FRANCHISE FINANCE CORPORATION					
		F001		TONS	75,020	33,640	41,380	20.690
		Hazardous Surcharge						

I understand and acknowledge that entry into an EQ environmental protection facility is permitted only at my own risk. I, both personally and on behalf of my employer, release EQ - The Environmental Quality Company from any and all liability not caused by its gross negligence or willful misconduct.

DELIVERED BY

DEQ WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Part 111 and Part 121 of Act 451, 1994, as amended.

78420

Failure to file may subject you to criminal and/or civil penalties under Sections 324.11151 or 324.12116 MCL.

P-6443

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N Y R 0 0 0 0 9 6 1 3 1   Manifest Document No. 6 6 0 6 9
2. Page 1 of 1

* Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
~~GE Franchise Finance Corporation~~
17207 N. Perimeter Drive
Scottsdale, AZ 85255

4. Generator's Phone (480) 563-6293

A. State Manifest Document Number MI 8666069

B. State Generator's [illegible] Seneca Street
Buffalo, NY 14210

5. Transporter 1 Company Name Buffalo Fuel Corp.
6. US EPA ID Number N Y R 0 0 0 0 4 5 7 2 4

C. State Transporter's ID NY-AD15627
D. Transporter's Phone (716) 273-2000

7. Transporter 2 Company Name
8. US EPA ID Number

E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive
Belleville, MI 48111

10. US EPA ID Number M I D 0 0 0 7 2 4 8 3 1

G. State Facility's ID

H. Facility's Phone (734) 697-7830

GENERATOR

	HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER).	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	~~RQ Hazardous waste, solid, n.o.s. (F001,D039)~~ 9, NA3077, III	0 0 1	D T	~~ESTIM~~		F 0 0 1
b.					47040		
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a. (S)
b.
c.
d.

K. Handling Codes
a
b
c
d

15. Special Handling Instructions and Additional Information
a.021033WTS, ERG# 171 WTS#10879 CONF# 36027
Emer. Contact: 1-800-424-9300
CHEMTREC

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name AS OWNER REPRESENTATIVE GARY LALIBERTY FOR GE FRANCHISE FINANCE CORP.
Signature Gary La Liberty
Date Month Day Year 10 31 03

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name Mark Jaquish
Signature Mark Jaquish
Date Month Day Year 10 31 03

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date Month Day Year

FACILITY

19. Discrepancy Indication Space
QU B CHANGE PER [illegible]

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name RYAN SCHULTZ
Signature
Date Month Day Year 11 04 03

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

EPA Form 8700-22 (Rev. 9/88)
TSDF COPY
EQP 5110 Rev. 5/00

EQ-The Environmental Quality Co.

Michigan Disposal Waste Treatment Plant

49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

WASTE TECHNOLOGY SERVICES
640 PARK PLACE

Receipt ID: 342886
EQ Account #: 583
Manifest: MI8666069
Hauler: BUFF
Date: 11/3/2003
Time In: 16:34 PM
Time Out: 00:56 AM

Line #:	Approval / Service		Generator				
		Waste Code	Bill Unit	Gross	Tare	Net	Quantity
01	021055WTS		NYR000096131 GE FRANCHISE FINANCE CORPORATION				
		F001	TONS	78,420	31,380	47,040	23.520
		Hazardous Surcharge					

I understand and acknowledge that entry into an EQ environmental protection facility is permitted only at my own risk. I, both personally and on behalf of my employer, release EQ - The Environmental Quality Company from any and all liability not caused by its gross negligence or willful misconduct.

DELIVERED BY

DEQ WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

DO NOT WRITE IN THIS SPACE
ATT. ☐ DIS. ☐ REJ. ☐ PR. ☐

Required under authority of Part 111 and Part 121 of Act 451, 1994, as amended.

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477

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NYR000096131 Manifest Document No. 10007

2. Page 1 0 of 1

* Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address GE Franchise Finance Corporation
17207 N. Perimeter Drive
Scottsdale, AZ 85255

4. Generator's Phone (480) 563-6293

A. State Manifest Document Number MI 8666070

B. State Generator's ID 2137 Seneca Street
Buffalo, NY 14210

5. Transporter 1 Company Name Buffalo Fuel Corp.

6. US EPA ID Number NYR000045724

C. State Transporter's ID NY-A015617

D. Transporter's Phone (716) 278-2000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive
Belleville, MI 48111

10. US EPA ID Number MID000724831

G. State Facility's ID

H. Facility's Phone (734) 697-7830

GENERATOR

	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER).	12. Containers		13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
HM		No.	Type			
a. X	RQ Hazardous waste, solid, n.o.s. (F001,D039) 9, NA3077, III	001	DT	ESTIm. ~~40 [illegible]~~ 50940		F001
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a.(S)
b.
c.
d.

K. Handling Codes
a
b
c
d

15. Special Handling Instructions and Additional Information a.021055WTS, ERG# 171 WTS#10879 CONF# ~~36027~~
Emer. Contact: 1-800-424-9300
ChemTREC

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR; if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name GARY LALIBERTY AS OWNER REPRESENTATIVE FOR GE FRANCHISE FINANCE CORP
Signature Gary Laliberty
Date Month Day Year 11/03/03

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name WARREN BAKER
Signature Warren Baker
Date Month Day Year 11/03/03

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date Month Day Year

FACILITY

19. Discrepancy Indication Space
OK 13 CHANGE PER [illegible] 11-4-03

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name BRYAN SCHULTZ
Signature
Date Month Day Year 11/04/03

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

EPA Form 8700-22 (Rev. 9/88)

TSDF COPY

EQP 5110 Rev. 5/00

EQ-The Environmental Quality Co.

Michigan Disposal Waste Treatment Plant

49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

WASTE TECHNOLOGY SERVICES
640 PARK PLACE

Receipt ID: 342885
EQ Account #: 583
Manifest: MI8666070
Hauler: BUFF
Date: 11/3/2003
Time In: 16:30 PM
Time Out: 00:52 AM

Line #:	Approval / Service	Generator					
	Waste Code	Bill Unit	Gross	Tare	Net	Quantity	
01	021055WTS	NYR000096131 GE FRANCHISE FINANCE CORPORATION					
	F001	TONS	82,000	31,060	50,940	25.470	
	Hazardous Surcharge						

I understand and acknowledge that entry into an EQ environmental protection facility is permitted only at my own risk. I, both personally and on behalf of my employer, release EQ - The Environmental Quality Company from any and all liability not caused by its gross negligence or willful misconduct.

DELIVERED BY

DEQ WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

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Required under authority of Part 111 and Part 121 of Act 451, 1994, as amended.

1855

Failure to file may subject you to criminal and/or civil penalties under Sections 324.11151 or 324.12116 MCL.

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N Y R 0 0 0 0 9 6 1 3 1 Manifest Document No. 8 0 0 7 1

2. Page 1 of 1

* Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address GE Franchise Finance Corporation
17207 N. Perimeter Drive
Scottsdale, AZ 85255

4. Generator's Phone (480) 563-6293

A. State Manifest Document Number MI 8666071

B. State Generator's ID 2157 Seneca Street
Buffalo, NY 14210

5. Transporter 1 Company Name Buffalo Fuel Corp.

6. US EPA ID Number N Y R 0 0 0 0 4 5 7 2 4

C. State Transporter's ID NY-AD-15827

D. Transporter's Phone (716) 278-2000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive
Belleville, MI 48111

10. US EPA ID Number M I D 0 0 0 7 2 4 8 3 1

G. State Facility's ID

H. Facility's Phone (734) 697-7830

	HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER).	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	RQ Hazardous waste, solid, n.o.s. (F001,D039) 9, NA3077, III	0 0 1	D T	Estim. 44000	lbs	F 0 0 1
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a.(S), also D039
b.
c.
d.

K. Handling Codes
a
b
c
d

15. Special Handling Instructions and Additional Information a.021055WTS, ERG# 171 WTS#10879, CONF#36098
Emer. Contact: 1-800-424-9300
CHEMTREC

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Printed/Typed Name GARY LALIBERTY AS OWNER'S REPRESENTATIVE FOR GE FRANCHISE FINANCE CORP.
Signature Gary Laliberty
Date Month Day Year 11 03 03

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name Michael A. Negroni
Signature Michael A. Negroni
Date Month Day Year 11 03 03

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name BRIAN SCHULTZ
Signature
Date Month Day Year 11 04 03

GENERATOR

TRANSPORTER

FACILITY

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

EQ-The Environmental Quality Co.
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

WASTE TECHNOLOGY SERVICES
640 PARK PLACE

Receipt ID: 342935
EQ Account #: 583
Manifest: MI8666071
Hauler: BUFF
Date: 11/4/2003
Time In: 09:28 AM
Time Out: 23:07 PM

Line #:	Approval / Service		Generator				
		Waste Code	Bill Unit	Gross	Tare	Net	Quantity
01	021055WTS		NYR000096131 GE FRANCHISE FINANCE CORPORATION				
		F001	TONS	78,500	31,580	46,920	23.460
		Hazardous Surcharge					

I understand and acknowledge that entry into an EQ environmental protection facility is permitted only at my own risk. I, both personally and on behalf of my employer, release EQ - The Environmental Quality Company from any and all liability not caused by its gross negligence or willful misconduct.

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DEQ

WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

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Required under authority of Part 111 and Part 121 of Act 451, 1994, as amended.

Failure to file may subject you to criminal and/or civil penalties under Sections 324.11151 or 324.12116 MCL.

469

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NYR000096131 Manifest Document No. 66072

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address GE Franchise Finance Corporation
17207 N. Perimeter Drive
Scottsdale, AZ 85255

4. Generator's Phone (480) 563-6293

A. State Manifest Document Number MI 8666072

B. State Generato 2137 Seneca Street
Buffalo, NY 14210

5. Transporter 1 Company Name Buffalo Fuel Corp.

6. US EPA ID Number NYR000045724

C. State Transporter's ID AD15624 NY

D. Transporter's Phone (716) 278-2000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive
Belleville, MI 48111

10. US EPA ID Number MID000724831

G. State Facility's ID

H. Facility's Phone (734) 697-7830

	HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	RQ Hazardous waste, solid, n.o.s. (F001,D039) 9, NA3077, III	001	DT	Estimat 44,000	lbs	F001
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a.(S), also D039
b.
c.
d.

K. Handling Codes
a
b
c
d

15. Special Handling Instructions and Additional Information a.021055WTS, ERG# 171 WTS#10879, CONF#36098
Emer. Contact: 1-800-424-9300 CHEMTREC

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Printed/Typed Name Gary LaLiberty AS OWNER'S REPRES. FOR GE FRANCHISE FINANCE CORP.
Signature Gary LaLiberty
Date Month Day Year 11 03 03

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name Timothy W Elledge
Signature Timothy W Elledge
Date Month Day Year 11 03 03

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name Bryan Schultz
Signature
Date Month Day Year 11 04 03

GENERATOR
TRANSPORTER
FACILITY

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

EPA Form 8700-22 (Rev. 9/88)

TSDF COPY

EQP 5110 Rev. 5/00

EQ-The Environmental Quality Co.
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

WASTE TECHNOLOGY SERVICES
640 PARK PLACE

Receipt ID: 342933
EQ Account #: 583
Manifest: MI8666072
Hauler: BUFF
Date: 11/4/2003
Time In: 09:25 AM
Time Out: 23:01 PM

Line #:	**Approval / Service**		**Generator**				
		Waste Code	**Bill Unit**	**Gross**	**Tare**	**Net**	**Quantity**
01	021055WTS		NYR000096131 GE FRANCHISE FINANCE CORPORATION				
		F001	TONS	76,600	30,980	45,620	22.810
		Hazardous Surcharge					

I understand and acknowledge that entry into an EQ environmental protection facility is permitted only at my own risk. I, both personally and on behalf of my employer, release EQ - The Environmental Quality Company from any and all liability not caused by its gross negligence or willful misconduct.

DELIVERED BY

1604

DEQ

WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

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Required under authority of Part 111 and Part 121 of Act 451, 1994, as amended.

Failure to file may subject you to criminal and/or civil penalties under Sections 324.11151 or 324.12116 MCL.

1/6 ed

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N Y R 0 0 0 0 9 6 1 3 1 Manifest Document No. 6 6 0 7 8

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address GE Franchise Finance Corporation
17207 N. Perimeter Drive
Scottsdale, AZ 85255

4. Generator's Phone (480) 563-6293

A. State Manifest Document Number MI 8666078

B. State Generator's 2107 Seneca Street
Buffalo, NY 14210

5. Transporter 1 Company Name Buffalo Fuel Corp.

6. US EPA ID Number N Y R 0 0 0 0 4 5 7 2 4

C. State Transporter's ID (NY)-AD-1580

D. Transporter's Phone (716) 278-2000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive
Belleville, MI 48111

10. US EPA ID Number M I D 0 0 0 7 2 4 8 3 1

G. State Facility's ID

H. Facility's Phone (734) 697-7830

GENERATOR

	HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER).	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	RQ Hazardous waste, solid, n.o.s. (F001,D039) 9, NA3077, III	0 0 1	D T	ESTIMATE 44,000	lbs	F 0 0 1
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a.(S), also D039
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a
b
c
d

15. Special Handling Instructions and Additional Information a.021055WTS, ERG# 171 WTS#10879, CONF#36098
Emer. Contact: 1-800-424-9300
CHEMTREC

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Printed/Typed Name GARY LALIBERTY as OWNER REPRESENTATIVE FOR GE FRANCHISE FINANCE Corp.
Signature Gary LaLiberty
Date Month Day Y 1 1 0 3 0

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name WESLEY S. HAMMER
Signature
Date Month Day Y 1 1 0 3 0

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name ROBERT ADAMS
Signature Robert J. Adams
Date Month Day Y 1 1 0 5 0

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name
Signature
Date Month Day 1 1 9 4

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EQ-The Environmental Quality Co.
Michigan Disposal Waste Treatment Plant
49350 North I-94 Service Drive, Belleville, Michigan 48111

Receipt

WASTE TECHNOLOGY SERVICES
640 PARK PLACE

Receipt ID: 342948
EQ Account #: 583
Manifest: MI8666078
Hauler: BUFF
Date: 11/4/2003
Time In: 11:20 AM
Time Out: 23:11 PM

Line #:	Approval / Service		Generator				
		Waste Code	Bill Unit	Gross	Tare	Net	Quantity
01	021055WTS		NYR000096131 GE FRANCHISE FINANCE CORPORATION				
		F001	TONS	76,040	31,660	44,380	22.190
		Hazardous Surcharge					

I understand and acknowledge that entry into an EQ environmental protection facility is permitted only at my own risk. I, both personally and on behalf of my employer, release EQ - The Environmental Quality Company from any and all liability not caused by its gross negligence or willful misconduct.

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APPENDIX H

TREATABILITY STUDY REPORT

CONESTOGA-ROVERS & ASSOCIATES

2055 Niagara Falls Blvd., Suite #3
Niagara Falls, New York 14304
Telephone: (716) 297-6150 Fax: (716) 297-2265
www.CRAworld.com

MEMORANDUM

TO: David Locey

REF. NO. 15867

FROM: Carol Barron/js/1

DATE: July 14, 2003

C.C.: J. Brown, A. Kent, R. Shepherd

RE: **Treatability Study Results**
Chemical Oxidation of Chlorinated Solvents in
Groundwater by Potassium Permanganate
Seneca Street, Buffalo, New York

INTRODUCTION

The Parcel 2 Site (Site) is located at 2137 Seneca Street in Buffalo, Erie County, New York, and includes the properties at 2137 to 2153 Seneca Street, excluding 2151 Seneca Street. Previous Site investigations showed that volatile organic compounds (VOCs) are present in the soil and groundwater at the Site. Both VOCs and semi-volatile organic compounds (SVOCs) were detected in soil samples in the northern quadrant of the Site at concentrations exceeding recommended soil cleanup objectives listed in the New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM) #4046. Perchloroethylene (PCE), trichloroethylene (TCE) and cis-1,2-dichloroethylene (cis-1,2-DCE) were detected as the main chemicals of concern (COCs) in groundwater. The presence of these chemicals is consistent with previous land use. Laundry and dry cleaners had been located in the area of PCE exceedances, and a tire retail facility had been located in the area where SVOCs were detected.

Soil excavation with off-Site disposal and in situ chemical oxidation (ISCO) using potassium permanganate ($KMnO_4$) were identified as potential cost effective alternatives for remediation of the COCs in Site groundwater. Conestoga-Rovers & Associates (CRA) conducted a laboratory treatability study in order to assess the feasibility of ISCO using $KMnO_4$ as an effective alternative for groundwater remediation at the Site. This memo presents a discussion of the tasks conducted and the results obtained.

BACKGROUND

$KMnO_4$ reacts relatively quickly with chlorinated alkene compounds such as PCE, TCE, and vinyl chloride (VC) through a series of chemical reactions resulting in their complete destruction and production of neutral end products such as manganese dioxide (MnO_2), water, and carbon dioxide. Successful ISCO treatment is a function of the effectiveness of delivery of sufficient amounts of oxidant to the impacted groundwater (i.e., contact) and subsequent transport of the oxidant within the aquifer.

A critical factor in the evaluation of ISCO treatment is determining the dosage of oxidant that is required to effectively oxidize the contaminant present (stoichiometric demand) as well as the competing reactions. The competing reactions are typically caused by the presence of natural organic materials in soil and groundwater, such as humates and fulvates as well as reduced metal species. The consumption of $KMnO_4$ by these non-target compounds is defined as natural oxidant demand (NOD). ISCO treatment is, therefore, site-specific and its performance is dependent to a great extent on the soil and groundwater chemistry.

The objective of this study was to gather data necessary to:

i) assess the effectiveness of $KMnO_4$ for treatment of the COCs in groundwater at the Site; and

ii) determine the effective concentration/dosage of $KMnO_4$ required to complete treatment as expeditiously as possible.

The following section describes briefly the tests conducted in the laboratory treatability studies and summarizes the results obtained under each task.

TREATABILITY STUDY RESULTS

Sample Acquisition

Five 1-gallon bottles of groundwater and two soil samples were collected from the Site by CRA personnel on May 15, 2003. The soil sample came from BH-26, located at the northern corner of the parking lot, near the intersection of Seneca St. and Kingston Place, about 5 feet north of the MW-4/4A well pair. The water sample was collected from well MW-4.

Both the water and soil samples were obtained in accordance with the procedures presented in Appendix D of the Remedial Action Work Plan, dated June 2003. Soil samples were collected from the saturated sand and gravel above and below the native silt/clay, at depths 9.0 to 16.0 and 22.0 to 30.0 feet below ground surface, utilizing the standard penetration test method (American Society for Testing and Materials [ATSM]-1586-84). Samples were collected using precleaned, stainless steel split-spoon samplers of 2-foot length and 2-inch diameter advanced through hollow stem augers. Upon retrieval of the split spoon, the sampler was laid on a surface covered with plastic and carefully opened. The sample aliquot was removed from the sampler and placed directly into pre-cleaned sample jars. Approximately 1.5 gallons of sample were collected and placed into clear 1-gallon jars.

MW-4 was purged using a peristaltic pump with dedicated tubing until field parameter stabilization was achieved. The well was sampled using a dedicated Teflon bailer immediately following the completion of purging. Approximately 6 gallons of water were collected into 1-gallon amber jars with no headspace.

The samples were placed on ice and delivered the same day to the CRA Treatability Laboratory in Niagara Falls, NY (see attached Chain of Custody form). Composite soil and groundwater samples were prepared in the laboratory by removing equal aliquots from each of the sample containers of each media type. Once combined, the aliquots were mixed to homogenize the samples.

Initial Characterization

The composite soil sample was analyzed for pH, percent moisture, total organic carbon (TOC), and VOCs. The composite groundwater sample was analyzed for pH, chemical oxygen demand (COD), and VOCs. The analytical results are shown in the attached Tables 1 and 2.

The soil pH was in the neutral range (7.8) and contained approximately 2 percent total combustible matter. The VOC analyses of the composite soil sample showed the presence of PCE and TCE at approximately 40,000 and 4,300 micrograms per kilogram (µg/Kg), respectively. Benzene, ethylbenzene, and xylenes were also present at lower concentrations (20, 184, and 692 µg/Kg, respectively).

Groundwater analyses showed the water also had a pH within the neutral range (7.4). COD of the water was less than 5 milligrams per liter (mg/L). The primary detected VOCs include PCE, which was present at a concentration of 21,000 µg/L, as well as TCE and cis-1,2-DCE at 950 and 210 µg/L, respectively. Lower concentrations of other VOCs were detected.

Microcosm Test Results

In order to evaluate the effectiveness and dosage of $KMnO_4$ in the treatment of COCs at the Site, a series of microcosm tests were conducted. These tests involved treatment of pre-measured volumes of composited Site soil and groundwater mixed with $KMnO_4$ solutions of varying concentrations. In the cold room, 20 grams of the composite soil was weighed into each of ten 160-milliliter (mL) serum bottles, which were then filled with the composite water. Each bottle was then treated with 10 mL of water and 0.5, 1, 2, or 3 percent solution of $KMnO_4$. The serum bottles were sealed immediately following the oxidant addition using Teflon-lined butyl rubber septa crimped with aluminum caps to prevent the loss of COCs through volatilization. The serum bottles did not contain any headspace. Each treatment was carried out in duplicate along with a control test prepared similarly but with the addition of water instead of the oxidant solution. The bottles were incubated in the dark at laboratory temperature for 2 weeks. The various treatments were monitored by sacrificing whole microcosms and analyzing them for residual VOCs and $KMnO_4$ concentrations.

The results of the chemical oxidation study are summarized in the attached Table 3. In all treatments, the residual concentrations of $KMnO_4$ were less than the detection limit of 0.0005 percent. The results showed that $KMnO_4$ is effective in the treatment of all of the major VOCs compounds detected in groundwater. For example, the use of a 0.5 percent solution of $KMnO_4$ resulted in the reduction of PCE, TCE, and cis-1,2-DCE concentrations by 87, 85, and 96 percent, respectively, after 2 weeks. The use of 3 percent concentration solution of $KMnO_4$ enhanced the removal percentage of these compounds to 98, 99, and >99 percent, respectively.

CONCLUSIONS AND RECOMMENDATIONS

The results of the laboratory study confirmed the feasibility of ISCO using $KMnO_4$ as an effective alternative for the remediation of the impacted groundwater at the Site. In the laboratory treatability study, 0.5 percent solution of $KMnO_4$ was effective in achieving significant reduction in the concentrations of the major COCs in groundwater. However, these results were obtained under highly optimized laboratory conditions. Lower removal rates are expected under the less optimized field conditions; therefore, it is our recommendation to use at least a 1 percent $KMnO_4$ concentration in the field treatment.

The size of the area that will be treated is estimated at 50 x 90 x 20 feet or approximately 90,000 ft^3. Assuming 30 percent soil porosity, the volume of impacted groundwater is estimated at 90,000 ft^3 x 0.3 or 27,000 ft^3 (approximately 202,000 gallons). At least 10 percent, 20,000 gallons, of this volume will need to be replaced by $KMnO_4$ solution for complete remediation. It is anticipated that three to four applications will be required. Assuming four applications of $KMnO_4$, each application would involve the use of approximately 5,000 gallons of 1 percent $KMnO_4$ solution or 415 pounds of $KMnO_4$ in 5,000 gallons of water. Applications should be repeated at 3-month intervals to allow for complete reaction of the reagent and monitoring of the performance of the treatment.

The results of the treatability study are consistent with the assumptions made in the Feasibility Study (FS) with the exception of the quantity of $KMnO_4$ to be utilized. A total of 600 pounds was estimated in the FS while 1,600 pounds are estimated based on the treatability study results. The effect of this difference is approximately $2,000 in the cost of the $KMnO_4$. The scenarios for application are the same so there is no difference in estimated cost for application.

Should you have any questions, or if you need additional information, please don't hesitate to contact me.

TABLE 1

INITIAL CHARACTERIZATION - COMPOSITE WATER SAMPLE
CHEMICAL OXIDATION TREATABILITY STUDY
PARCEL 2 SENECA STREET SITE
BUFFALO, NEW YORK

Parameter	*Units*	*Composite Water*
pH	S.U.	7.4
COD	mg/L	ND (5)
Vinyl chloride	µg/L	5.8
trans-1,2-Dichloroethylene	µg/L	0.43
cis-1,2-Dichloroethylene	µg/L	207
Benzene	µg/L	ND (2)
Trichloroethylene	µg/L	948
Toluene	µg/L	1.1
Perchloroethylene	µg/L	20810
Ethylbenzene	µg/L	7.8
m/p-Xylene	µg/L	28
o-Xylene	µg/L	4.7

Notes:

COD	Chemical oxygen demand.
ND (x)	Not detected at or above x.
S.U.	Standard units.

TABLE 2

INITIAL CHARACTERIZATION - COMPOSITE SOIL SAMPLE
CHEMICAL OXIDATION TREATABILITY STUDY
PARCEL 2 SENECA STREET SITE
BUFFALO, NEW YORK

Parameter	*Units*	*Composite Soil*
pH	S.U.	7.8
Total Organic Matter	%	2
Moisture Content	%	16
Vinyl chloride	µg/Kg	ND (2)
trans-1,2-Dichloroethylene	µg/Kg	ND (2)
cis-1,2-Dichloroethylene	µg/Kg	ND (2)
Benzene	µg/Kg	20
Trichloroethylene	µg/Kg	4266
Toluene	µg/Kg	ND (2)
Perchloroethylene	µg/Kg	39854
Ethylbenzene	µg/Kg	184
m/p-Xylene	µg/Kg	692
o-Xylene	µg/Kg	ND (2)

Notes:

ND (x)	Not detected at or above x.
S.U.	Standard units.

TABLE 3

FINAL RESULTS
CHEMICAL OXIDATION TREATABILITY STUDY
PARCEL 2 SENECA STREET SITE
BUFFALO, NEW YORK

Parameter	*Units*	*Control*	*0.5% Solution $KMnO_4$*	*1% Solution $KMnO_4$*	*2% Solution $KMnO_4$*	*3% Solution $KMnO_4$*
trans-1,2-Dichloroethylene (DCE)	µg/L	0.87	ND (2)	ND (2)	ND (2)	ND (2)
cis-1,2-DCE	µg/L	240	11	3.7	2.1	ND (2)
Trichloroethylene (TCE)	µg/L	1406	218	123	64	11
Toluene	µg/L	2.0	1.6	1.3	0.35	ND (2)
Perchloroethylene (PCE)	µg/L	15000	1911	1344	573	268
Ethylbenzene	µg/L	10	3.8	1.3	ND (2)	ND (2)
o-Xylene	µg/L	5.8	3.3	2.2	ND (2)	ND (2)
Percent Removal of cis-1,2-DCE	%	--	95	98	99	>99
Percent Removal of TCE	%	--	84	91	95	99
Percent Removal of Toluene	%	--	22	35	83	--
Percent Removal of PCE	%	--	87	91	96	98
Percent Removal of Ethylbenzene	%	--	63	87	>90	>90
Percent Removal of o-Xylene	%	--	43	62	>83	>83

Notes:

All values are averages of duplicate sample results.

--	Not applicable; analyte not detected in untreated sample.
$KMnO_4$	Potassium permanganate.
ND (x)	Not detected at or above x.

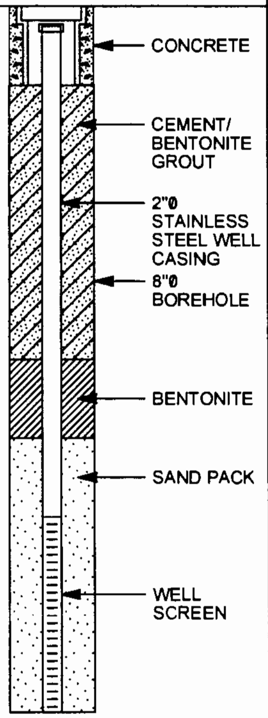
APPENDIX I

MONITORING WELL LOGS

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: MW-13/BH-21
DATE COMPLETED: May 16, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	MONITOR INSTALLATION	SAMPLE			
				NUMBER	INTERVAL	REC (ft)	'N' VALUE
	GROUND SURFACE TOP OF RISER	591.0 590.4					
2 4 6 8 10 12 14 16	OVERBURDEN (see overburden stratigraphy for well MW-13A)						
18 20 22 24 26 28 30 32 34	END OF BOREHOLE @ 18.0ft BGS	573.0	WELL DETAILS Screened interval: 578.0 to 573.0ft AMSL 13.0 to 18.0ft BGS Length: 5ft Diameter: 2in Slot Size: 10 Material: Stainless Steel Seal: 582.0 to 580.0ft AMSL 9.0 to 11.0ft BGS Material: Bentonite Volclay Pellets Sand Pack: 580.0 to 573.0ft AMSL 11.0 to 18.0ft BGS Material: #20 Silica Sand				

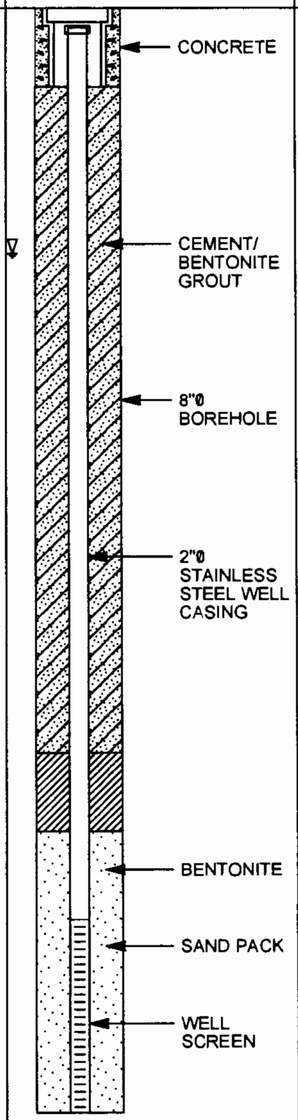
NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: MW-13A
DATE COMPLETED: May 15, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL
	GROUND SURFACE	591.0
	TOP OF RISER	590.3
0	PT-ORGANIC SOIL, slight clay content, brown, very slightly moist, no odor	
2.5	CL-SILTY CLAY, medium brown with grey mottling, dry, no odor	588.5
6.3	CL-SM-SILTY CLAY and FINE SAND, alternating layers of silty clay and sand, brown, saturated, no odor	584.7
10.0	GP-SAND and GRAVEL, medium to large gravels, coarse sand, brown, saturated, no odor - some red discolored wood flakes @ 12.2 ft BGS	581.0
12.2	SW-SAND, coarse grained, grey, saturated, no odor	578.8
12.6	GP-SAND and GRAVEL, medium to large gravels, coarse sand, brown, saturated, no odor	578.4
16.3	CH-CLAY, grey, very malleable, very slightly moist, no odor - gravel present @ 23.8 ft BGS - gravel and sand present @ 24.0 ft BGS	574.7
25.1	GP-SAND and GRAVEL, some clay, grey, saturated, no odor	565.9
28.0	END OF BOREHOLE @ 28.0ft BGS	563.0



SAMPLE

NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
SS1		1.1	11	84.3
SS2		1.3	13	91.8
SS3		1.3	15	80.9
SS4		1.4	7	68.3
SS5		1.0	3	0
SS6		0.9	5	0
SS7		0.8	2	0
SS8		0.5	4	0
SS9		0.9	6	0
SS10		1.5	4	0
SS11		2.0	-	0
SS12		2.0	28	0
SS13		1.1	58	0
SS14		0.9	23	0

WELL DETAILS
Screened interval:
567.7 to 562.7ft AMSL
23.3 to 28.3ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 10
Material: Stainless Steel
Seal:
572.0 to 570.0ft AMSL
19.0 to 21.0ft BGS

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 05/15/2003

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: MW-13A
DATE COMPLETED: May 15, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	MONITOR INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
36			Material: Bentonite Volclay Pellets Sand Pack: 570.0 to 562.7ft AMSL 21.0 to 28.3ft BGS Material: #20 Silica Sand					
38								
40								
42								
44								
46								
48								
50								
52								
54								
56								
58								
60								
62								
64								
66								
68								

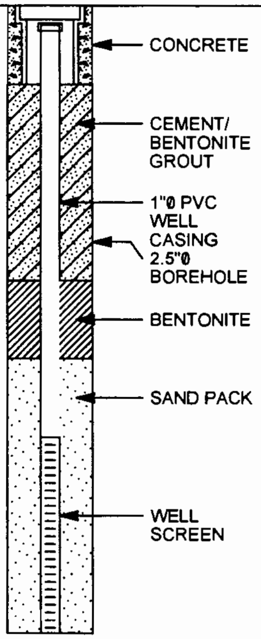
NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 05/15/2003

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

Page 1 of 1

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: MW-14
DATE COMPLETED: May 19, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	MONITOR INSTALLATION	SAMPLE			
				NUMBER	INTERVAL	REC (ft)	'N' VALUE
	GROUND SURFACE TOP OF RISER	589.8 589.3					
2 4 6 8 10 12 14	OVERBURDEN (see overburden stratigraphy for well MW-14A)						
16	END OF BOREHOLE @ 16.0ft BGS	573.8	WELL DETAILS Screened interval: 578.8 to 573.8ft AMSL 11.0 to 16.0ft BGS Length: 5ft Diameter: 2in Slot Size: 10 Material: Stainless Steel Seal: 582.8 to 580.8ft AMSL 7.0 to 9.0ft BGS Material: Bentonite Volclay Pellets Sand Pack: 580.8 to 573.8ft AMSL 9.0 to 16.0ft BGS Material: #20 Silica Sand				
18 20 22 24 26 28 30 32 34							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

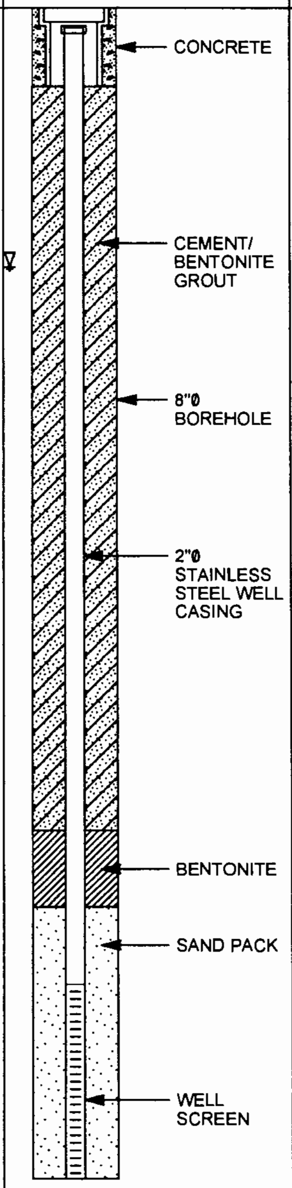
Page 1 of 2

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: MW-14A
DATE COMPLETED: May 19, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL
	GROUND SURFACE TOP OF RISER	589.8 589.1
	ASPHALT	
2	CL-CLAY, some silt, medium brown, no odor - some black staining, very slight petroleum odor	589.3
4 6	CL-CLAY, some silt, medium brown with grey mottling, very slightly moist, no odor	587.6
8	CL-SM-CLAY and FINE SAND, alternating layers of silty clay and sand, medium brown, saturated, no odor	583.2
10	CL-SILTY CLAY, medium brown with grey and red mottling, very slightly moist, no odor	581.1
12	CL-SILTY CLAY, grey, slightly malleable, slightly moist, no odor	578.9
14	GP-COARSE SAND and GRAVEL, medium to large gravel, brown, saturated	577.5
16 18 20 22 24	CH-CLAY, grey, very malleable, slightly moist, no odor - gravel in clay @ 25.5 ft BGS	575.5
26 28	GP-SAND and GRAVEL, some clay, brown/grey, saturated, no odor	564.0
30 32 34	END OF BOREHOLE @ 30.0ft BGS	559.8

MONITOR INSTALLATION



WELL DETAILS
Screened interval:
564.8 to 559.8ft AMSL
25.0 to 30.0ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 10
Material: Stainless Steel

SAMPLE

NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
SS1	☒	0.6	5	19.5
SS2	☒	0.4	11	9.7
SS3	☒	1.0	10	8.3
SS4	☒	1.4	8	5.0
SS5	☒	1.6	5	22.7
SS6	☒	1.8	5	
SS7	☒	0.6	5	
SS8	☒	0.5	2	
SS9	☒	1.9	2	
SS10	☒	1.8	2	
SS11	☒	2.0	2	
SS12	☒	2.0	1	
SS13	☒	1.8	19	
SS14	☒	0.5	13	
SS15	☒	0.7	84	

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 05/19/2003

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

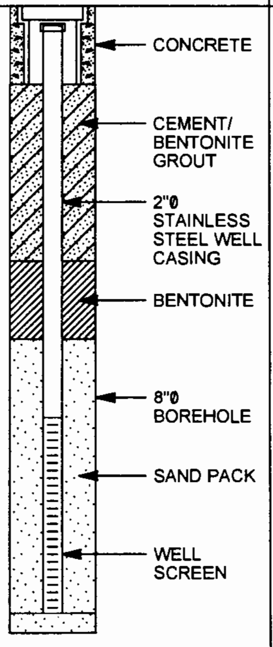
PROJECT NAME: Seneca St. Parcel #2
HOLE DESIGNATION: MW-14A
PROJECT NUMBER: 15867
DATE COMPLETED: May 19, 2003
CLIENT: Confidential
DRILLING METHOD: HSA
LOCATION: Buffalo, NY
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	MONITOR INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
36			Seal: 568.8 to 566.8ft AMSL 21.0 to 23.0ft BGS Material: Bentonite Volclay Pellets Sand Pack: 566.8 to 559.8ft AMSL 23.0 to 30.0ft BGS Material: #20 Silica Sand					
38								
40								
42								
44								
46								
48								
50								
52								
54								
56								
58								
60								
62								
64								
66								
68								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽ 05/19/2003

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY
HOLE DESIGNATION: MW-15
DATE COMPLETED: May 14, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	MONITOR INSTALLATION	SAMPLE			
				NUMBER	INTERVAL	REC (ft)	'N' VALUE
	GROUND SURFACE TOP OF RISER	590.3 589.8					
	OVERBURDEN (see Overburden stratigraphy for well MW-15A)						
16	END OF BOREHOLE @ 16.0ft BGS	574.3					

WELL DETAILS
Screened interval:
579.8 to 574.8ft AMSL
10.5 to 15.5ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 10
Material: Stainless Steel
Seal:
583.8 to 581.8ft AMSL
6.5 to 8.5ft BGS
Material: Bentonite Volclay Pellets
Sand Pack:
581.8 to 574.3ft AMSL
8.5 to 16.0ft BGS
Material: #20 Silica Sand

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

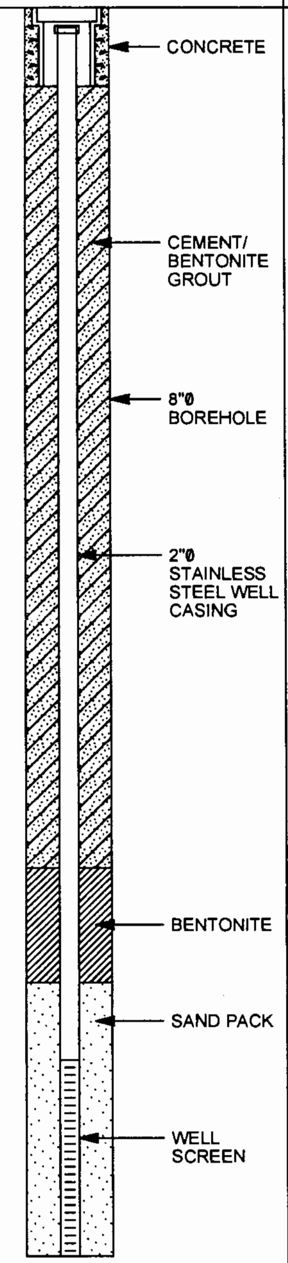
STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: MW-15A
DATE COMPLETED: May 13, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL
GROUND SURFACE	590.2
TOP OF RISER	589.9
ASPHALT	589.7
FILL, asphalt, brick fragments, gravel, sand, dry, no odor - some clay with fill @ 2.0 ft BGS	585.9
FILL, sand, light grey, dry, no odor	585.7
CL-SILTY CLAY, medium brown with grey mottling, very slightly moist, no odor	579.9
CL-SILTY CLAY, dark grey, some gravel with depth, slightly moist, no odor - some sand, very moist @ 12 ft BGS	576.2
SW-SAND, brown, moist, no odor	576.0
CH-CLAY, grey, very malleable, slightly moist, no odor	563.2
GM-CLAY, GRAVEL, and SILT, moist, no odor	560.2
END OF BOREHOLE @ 30.0ft BGS	

MONITOR INSTALLATION



WELL DETAILS
Screened interval:
563.2 to 558.2ft AMSL
27.0 to 32.0ft BGS

NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
SS1		0.8	24	
SS2		0.8	8	
SS3		0.5	8	0
SS4		1.0	8	
SS5		1.1	6	0
SS6		1.3	6	0
SS7		1.1	4	9.5
SS8		0.2	5	9.0
SS9		2.0	0	17.3
SS10		2.0	1	26.1
SS11		2.0	1	69.2
SS12		2.0	0	69.1
SS13		2.0	1	51.2
SS14		2.0	6	7.9
SS15		0.7	50	
SS16				

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Seneca St. Parcel #2
PROJECT NUMBER: 15867
CLIENT: Confidential
LOCATION: Buffalo, NY

HOLE DESIGNATION: MW-15A
DATE COMPLETED: May 13, 2003
DRILLING METHOD: HSA
FIELD PERSONNEL: J. Pietraszek-Polovich

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	MONITOR INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (ft)	'N' VALUE	PID (ppm)
36			Length: 5ft Diameter: 2in Slot Size: 10 Material: Stainless Steel Seal: 568.2 to 565.2ft AMSL 22.0 to 25.0ft BGS Material: Bentonite Volclay Pellets Sand Pack: 565.2 to 558.2ft AMSL 25.0 to 32.0ft BGS Material: #20 Silica Sand					
38								
40								
42								
44								
46								
48								
50								
52								
54								
56								
58								
60								
62								
64								
66								
68								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

APPENDIX J

QUALITY ASSURANCE PROJECT PLAN

TABLE OF CONTENTS

Page

1.0 INTRODUCTION J-1

2.0 PROJECT BACKGROUND J-2
  2.1 GENERAL J-2

3.0 PROJECT ORGANIZATION AND RESPONSIBILITY J-3

4.0 PROJECT OBJECTIVES J-6
  4.1 QUALITY ASSURANCE OBJECTIVES FOR MEASUREMENT DATA J-6
  4.2 LABORATORY QUALITY ASSURANCE J-6
  4.2.1 ACCURACY, PRECISION, AND SENSITIVITY OF ANALYSES J-6
  4.2.2 COMPLETENESS, REPRESENTATIVENESS AND COMPARABILITY J-7
  4.3 FIELD MEASUREMENT QUALITY ASSURANCE J-7

5.0 SAMPLING PROCEDURES J-8

6.0 SAMPLE CUSTODY AND DOCUMENT CONTROL J-9
  6.1 FIELD LOG BOOK J-9
  6.2 SAMPLE NUMBERING J-10
  6.3 CHAIN OF CUSTODY RECORDS J-10
  6.4 SAMPLE DOCUMENTATION IN THE LABORATORY J-11
  6.5 STORAGE OF SAMPLES J-12
  6.6 SAMPLE DOCUMENTATION J-12

7.0 ANALYTICAL PROCEDURES FOR CHEMICAL ANALYSES J-13
  7.1 ANALYTICAL METHODS J-13
  7.2 COMPOUND IDENTIFICATION J-13
  7.3 QUANTITATION J-13
  7.4 QUANTITATION LIMIT REQUIREMENTS J-14

8.0 CALIBRATION PROCEDURES AND FREQUENCY J-15
  8.1 GC/MS J-15
  8.2 INSTRUMENTATION FOR INORGANIC ANALYSES J-15
  8.3 FIELD INSTRUMENTATION J-16

9.0 DATA REDUCTION, VALIDATION ASSESSMENT AND REPORTING J-17
  9.1 GENERAL J-17
  9.2 LABORATORY REPORTING, DATA, PRESENTATION AND FINAL REPORT J-18

TABLE OF CONTENTS

Page

9.3 DOCUMENT CONTROL SYSTEM J-18
9.4 QC CHECK POINTS AND DATA FLOW J-18

10.0 INTERNAL QUALITY CONTROL CHECKS AND FREQUENCY J-20
10.1 QC FOR LABORATORY ANALYSES J-20
10.1.1 REAGENT BLANKS J-20
10.1.2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD)/DUPLICATE ANALYSES J-20
10.1.3 SURROGATE ANALYSES J-20
10.2 QC FOR FIELD SAMPLING J-21
10.2.1 FIELD (RINSE) BLANKS J-21
10.2.2 FIELD DUPLICATE SAMPLES J-21
10.2.3 TRIP BLANKS J-21

11.0 PERFORMANCE AND SYSTEM AUDITS J-22

12.0 PREVENTATIVE MAINTENANCE J-23

13.0 SPECIFIC ROUTINE PROCEDURES USES TO ASSESS DATA PRECISION, ACCURACY AND COMPLETENESS J-24
13.1 QA MEASUREMENT QUALITY INDICATORS J-24
13.1.1 PRECISION J-24
13.1.2 ACCURACY J-24
13.1.3 COMPLETENESS J-25
13.1.4 OUTLIERS J-25

14.0 CORRECTIVE ACTION J-26

15.0 QUALITY ASSURANCE REPORTS J27

LIST OF TABLES
(Following Appendix j)

TABLE 4.1	TARGET QUANTITATION LIMITS
TABLE 4.2	SAMPLING AND ANALYSIS SUMMARY
TABLE 5.1	SAMPLE CONTAINER, PRESERVATION, AND HOLDING TIME PERIODS
TABLE 9.1	LABORATORY REPORTING DELIVERABLES - STANDARD DATA PACKAGE

LIST OF ATTACHMENTS

ATTACHMENT A	MEASUREMENT OF POTASSIUM PERMANGANATE (COLORIMETRIC)

1.0 INTRODUCTION

This Quality Assurance Project Plan (QAPP) is Site-specific and has been prepared for the Remedial Action of Parcel 2, Seneca Street, Buffalo, New York (Site).

The objectives of this QAPP are to provide additional data and documentation to determine the nature and extent of the presence of chemicals in the north quadrant of the Site. This QAPP provides comprehensive information regarding the project personnel responsibilities, and sets forth specific procedures to be used during sampling of groundwater and analyses of data.

2.0 PROJECT BACKGROUND

2.1 GENERAL

This QAPP provides Quality Assurance/Quality Control (QA/QC) criteria for work efforts associated with groundwater sample analyses. Methods for sample analyses have been selected to provide results characterizing the samples, such that the sampling objectives can be met.

3.0 PROJECT ORGANIZATION AND RESPONSIBILITY

A brief description of the duties of the key project personnel is presented below.

Project Director

1. provides overall project management;
2. ensures professional services by the Contractor are cost effective and of highest quality;
3. ensures all resources of the Contractor are available on an as-required basis;
4. participates in key technical negotiations; and
5. provides managerial and technical guidance to the Contractor's Coordinator.

Project Manager

1. provides day-to-day project management;
2. provides managerial guidance to the QA/QC Officer - Sampling and Analytical Activities;
3. prepares and reviews reports;
4. conducts preliminary chemical data interpretation and assessment; and
5. responsible for overall project completion in accordance with the approved design.

QA/QC Officer - Sampling and Analytical Activities

1. oversees and reviews laboratory activities;
2. determines laboratory data corrective action;
3. performs analytical data validation and assessment;
4. reviews laboratory QA/QC;
5. assists in preparation and review of final report;
6. provides technical representation for analytical activities;
7. oversees and reviews field activities;
8. provides managerial and technical guidance to the Field Sampling Supervisor;
9. performs field sampling performance audit(s);
10. ensures that field and Chain of Custody records are properly maintained; and
11. determines field procedure corrective actions.

Field Sampling Supervisor

1. provides immediate supervision of all on-Site activities;
2. provides field management of sample collection and field QA/QC;
3. provides technical representation for field activities; and
4. is responsible for maintenance of the field equipment.

Laboratory - Project Manager, Analytical Contractor

1. ensures resources of laboratory are available on an as-required basis;
2. coordinates laboratory analyses;
3. supervises laboratory's in-house Chain of Custody;
4. schedules analyses of samples;
5. oversees review of data;
6. oversees preparation of analytical reports; and
7. approves final analytical reports.

Laboratory - Quality Assurance/Quality Control Officer, Analytical Contractor

1. overviews laboratory QA/QC;
2. overviews QA/QC documentation;
3. conducts detailed data review;
4. decides laboratory corrective actions, if required; and
5. provides technical representation for laboratory QA/QC procedures.

Laboratory - Sample Custodian - Analytical Contractor

1. receives and inspects the sample containers;
2. records the condition of the sample containers;
3. signs appropriate documents;
4. verifies Chain of Custody and their correctness;
5. notifies laboratory Project Manager and laboratory QA/QC Officer of sample receipt and inspection;
6. assigns a unique laboratory identification number correlated to the field sample identification number, and enters each into the sample receiving log;
7. initiates transfer of samples to the appropriate lab sections with assistance from the laboratory project manager; and
8. controls and monitors access to and storage of samples and extracts.

The analytical laboratories selected to perform the analyses for which there are United States Environmental Protection Agency (USEPA) approved methods will be full-service chemical analytical laboratories certified by the New York State Department of Health (NYSDOH) through the National Environmental Laboratory Accreditation Program (NELAP).

The analysis of potassium permanganate in groundwater will be performed by the treatability laboratory.

4.0 PROJECT OBJECTIVES

4.1 QUALITY ASSURANCE OBJECTIVES FOR MEASUREMENT DATA

The overall QA objective is to develop and implement procedures for sample collection and analyses which will provide data with an acceptable level of accuracy and precision.

Quality assurance measures for this project will begin with sample containers. Sample containers will be purchased from a certified manufacturer and will be precleaned (I-Chem Series 200 or equivalent).

4.2 LABORATORY QUALITY ASSURANCE

The following subsections define the QA goals required to meet the Data Quality Objectives (DQOs) of the project.

4.2.1 ACCURACY, PRECISION, AND SENSITIVITY OF ANALYSES

The fundamental QA objective with respect to the accuracy, precision, and sensitivity of analytical data is to meet the QC acceptance criteria of each analytical protocol. Analytical methods and targeted detection limits listed have been specified to meet DQOs.

A summary of the targeted detection limits is provided in Tables 4.1, 4.2, and 4.3. It should be noted that these limits are targeted detection limits only; limits are highly matrix dependent and may not always be achieved.

The method accuracy (percent recovery) will be determined by spiking selected samples (matrix spikes) with the method recommended spiking compounds. Accuracy will be reported as the percent recovery of the spiking compound(s) and will compare with the criteria given in the appropriate methods, as identified in Section 7.0.

The method(s) precision (reproducibility between duplicate analyses) will be determined based on the duplicate analysis of matrix spike samples for organic parameters and duplicate sample analyses for inorganic parameters. Precision will be reported as Relative Percent Differences (RPDs) between duplicate analyses; acceptance criteria will be as specified in the appropriate methods identified in Section 7.0.

4.2.2 COMPLETENESS, REPRESENTATIVENESS AND COMPARABILITY

A completeness requirement of 90 percent will be targeted for the program (see Section 13.1.3 for definition of completeness).

The quantity of samples to be collected has been estimated in an effort to effectively represent the population being studied. A summary of the sampling and analysis program is presented in Table 4.2.

4.3 FIELD MEASUREMENT QUALITY ASSURANCE

Measurement data will be generated during field activities. These activities include, but are not limited to, the following:

i) documenting time and weather conditions; and

iii) observation of sample appearance and other conditions.

The general QA objective for measurement data is to obtain reproducible and comparable measurements to a degree of accuracy consistent with the use of standardized procedures.

5.0 SAMPLING PROCEDURES

The sample collection procedures are described in the Field Sampling Procedures contained in Appendix F of the "Remedial Action Report, Soil Excavation, Disposal, and Installation of Groundwater Remediation System".

The sample container, preservation, shipping, and packaging requirements are identified in Table 5.1 and in Section 6.3.

6.0 SAMPLE CUSTODY AND DOCUMENT CONTROL

The following documentation procedures will be used during sampling and analysis to provide Chain of Custody control during transfer of samples from collection through storage. Record keeping documentation will include use of the following:

i) field log books (bound with numbered pages) to document sampling activities in the field;
ii) labels to identify individual samples;
iii) Chain of Custody record sheet to document analyses to be performed; and
iv) laboratory sample custody log book.

6.1 FIELD LOG BOOK

In the field, the sampler will record the following information in the field log book (bound) for each sample collected:

i) project number;
ii) sample matrix;
iii) name of sampler;
iv) sample source;
v) time and date;
vi) pertinent data (e.g., depth);
vii) analysis to be conducted;
viii) sampling method;
ix) appearance of each sample (i.e., color, evidence of soil staining);
x) preservation added, if any;
xi) number of sample bottles collected; and
xii) pertinent weather data.

Each field log book page will be signed by the sampler.

6.2 SAMPLE NUMBERING

A unique sample numbering system will be used to identify each collected sample. This system will provide a tracking number to allow retrieval and cross-referencing of sample information. The sample numbering system to be used is described as follows:

Example: GW-121695 - AA-XXX
Where: GW - Designates sample Type
(GW = Soil)
121695: Date of collection (mm/dd/yy)
AA: Sampler initials
XXX: Unique sample number

Field duplicate samples will be numbered with a unique sample number.

6.3 CHAIN OF CUSTODY RECORDS

Chain of Custody forms will be completed for all samples collected during the program.

The Chain of Custody form will document the transfer of sample containers. Custody seals will be placed on each cooler. The cooler will then be sealed with packing tape. Sample container labels will include sample number, place of collection and date and time of collection. All samples will be refrigerated using wet ice at 4°C (±2°C) and delivered to the analytical laboratory within 24 to 48 hours of collection. All samples will be delivered to the laboratory by commercial courier or Contractor personnel. All samples will be stored at 4°C (±2°C) at the laboratory.

The Chain of Custody record, completed at the time of sampling, will contain, but not be limited to, the sample number, date and time of sampling, and the name of the sampler. The Chain of Custody document will be signed, timed, and dated by the sampler when transferring the samples.

Each sample cooler being shipped to the laboratory will contain a Chain of Custody form. The Chain of Custody form will consist of four copies which will be distributed as follows:

i) the shipper will maintain a copy while the other three copies will be enclosed in a waterproof envelop within the cooler with the samples. The cooler will then be sealed properly for shipment;

ii) the laboratory, upon receiving the samples, will complete the three remaining copies. The laboratory will maintain one copy for their records;

iii) one copy will be returned to the QA/QC Officer-Sampling and Analytical Activities upon receipt of the samples by the laboratory; and

iv) one copy will be returned with the data deliverables package.

Upon receipt of the cooler at the laboratory, the shipping cooler and the custody seal will be inspected by the Sample Custodian. The condition of the cooler and the custody seal will be noted on the Chain of Custody record sheet by the Sample Custodian. The Sample Custodian will record the temperature of one sample (or temperature blank) from each cooler and the temperature will be noted on the Chain of Custody. If the shipping cooler seal is intact, the sample containers will be accepted for analyses. The Sample Custodian will document the date and time of receipt of the container, and sign the form.

If damage or discrepancies are noticed (including sample temperature exceedances), they will be recorded in the remarks column of the record sheet, dated and signed. Any damage or discrepancies will be reported to the Laboratory Project Manager and Laboratory QA/QC Officer before samples are processed.

6.4 SAMPLE DOCUMENTATION IN THE LABORATORY

Each sample or group of samples shipped to the laboratory for analysis will be given a unique identification number. The Sample Custodian will record the client name, number of samples and date of receipt of samples in the Sample Control Log Book. Samples removed from storage for analyses will be documented in the Sample Control Log Book.

The laboratory will be responsible for maintaining analytical log books and laboratory data as well as a sample (on hand) inventory for submittal to the QA/QC Officer - Sampling and Analytical Activities on an "as required" basis. Raw laboratory data produced from the analysis of samples submitted for this program will be inventoried and maintained by the laboratory for a period of 5 years at which time the QA/QC Officer - Sampling and Analytical Activities will advise the laboratory regarding the need for additional storage.

6.5 STORAGE OF SAMPLES

After the Sample Custodian has completed the Chain of Custody forms and the incoming sample log, the Chain of Custody will be checked to ensure that all samples are stored in the appropriate locations. All samples will be stored within an access controlled custody room and will be maintained at 4°C (±2°C) until all analytical work is complete.

6.6 SAMPLE DOCUMENTATION

Evidentiary files for the entire project shall be inventoried and maintained by the QA/QC Officer - Sampling and Analytical Activities and shall consist of the following:

i) project related plans;
ii) project log books;
iii) field data records;
iv) sample identification documents;
v) Chain of Custody records;
vi) report notes, calculations, etc.;
vii) lab data, etc.;
viii) references, copies of pertinent literature;
ix) miscellaneous - photos, maps, drawings, etc.; and
x) copies of all final reports pertaining to the project.

The evidentiary file materials shall be the responsibility of the Project Manager with respect to maintenance and document removal.

7.0 ANALYTICAL PROCEDURES FOR CHEMICAL ANALYSES

7.1 ANALYTICAL METHODS

Samples collected for laboratory chemical analyses will be analyzed for the parameters listed in Table 4.1, using the methods cited in Table 4.2. These methods have been selected to meet the DQOs for each sampling activity. All reporting and deliverables will be consistent with Analytical Services Protocol (ASP) Category A format, but including QA/QC summary forms. The data package should include all items listed in Table 9.1.

7.2 COMPOUND IDENTIFICATION

Compounds which will be analyzed by gas chromatograph/mass spectrometer (GC/MS) will be identified by comparison of the sample mass spectrum with the mass spectrum of a standard of the suspected compound (standard reference spectrum). Mass spectra for standard references should be obtained on the user's GC/MS within the same 12 hours as the sample analysis. These standard reference spectra may be obtained through analysis of the calibration standards. The following criteria must be satisfied to verify identification:

i) elution of the sample component at the same GC relative retention time (RRT) as the standard component; and

ii) correspondence of the sample component and the standard component mass spectrum.

For GC determination of specific analytes, the RRT of the unknown will be compared with that of an authentic standard. Since a true identification by GC is not possible, an analytical run for compound confirmation will be followed according to the specifications in the methods. Peaks must elute within daily retention time windows established for each indicator parameter to be declared a tentative or confirmed identification. Retention time windows are determined using standard protocols defined in each method.

7.3 QUANTITATION

The procedures for quantitation of analytes are discussed in the appropriate analytical methods. Sample results are generally calculated using external standards with the exception of the samples analyzed by GC/MS; these methods employ the use of internal standards for analyte quantitation.

7.4 QUANTITATION LIMIT REQUIREMENTS

Targeted quantitation limits will be consistent with those presented in Tables 4.1. When matrix interferences are noted during sample analysis, actions will be taken by the laboratory to achieve the specified quantitation limits. Sample will be not be diluted by more than a factor of five to reduce matrix effects. The laboratory will re-extract and/or use any of the cleanup techniques presented in the analytical methods to eliminate matrix interferences.

Samples may be diluted to a greater extent if the concentrations of analytes of concern exceed the calibration range of the instrument. In such cases, the laboratory QA/QC Officer will assure that the laboratory demonstrates good analytical practices and that such practices are documented in order to achieve the specified quantitation limits.

8.0 CALIBRATION PROCEDURES AND FREQUENCY

Calibration of instrumentation is required to ensure that the analytical system is operating correctly and functioning at the proper sensitivity to meet established reporting limits. Each instrument is calibrated with standard solutions appropriate to the type of instrument and the linear range established for the analytical method. The frequency of calibration and the concentration of calibration standards is determined by the manufacturers guidelines, the analytical method, or the requirements of special contracts.

A bound notebook will be kept with each instrument requiring calibration in which will be recorded activities associated with QA monitoring and repairs program. These records will be checked during periodic equipment review and internal and external QA/QC audits.

8.1 GC/MS

It is necessary to establish that a given GC/MS meets the standard mass spectral abundance criteria prior to initiating any ongoing data collection. This is accomplished through the analyses of tuning compounds as specified in the analytical methods.

Calibration of the GC/MS system will be performed daily at the beginning of the day or with each 12 hours of instrument operating time. All method-specified calibration criteria must be met prior to sample analyses. All calibrations must be performed using either average response factors or first-order linear regression (with a correlation coefficient requirement of ≥0.995). Higher order fits will not be allowed.

8.2 INSTRUMENTATION FOR INORGANIC ANALYSES

All method-specified calibration procedures will be performed and acceptance criteria will be met prior to sample analyses. Standard curves derived from data consisting of one reagent blank and a minimum of three concentrations (one reagent blank and one concentration for ion coupled plasma [ICP]) will be prepared for each inorganic analyte. Calibrations will be performed using either average response factors, or first order linear regression (with a correlation coefficient requirement of 0.995). Higher order fits will not be allowed unless the laboratory can demonstrate that the instrument is working properly, and that the instrument response over the concentration range of interest is second-order.

The standard curve will be used with each subsequent analysis provided the standard curve is verified by using at least one reagent blank and one standard at a level normally encountered or expected in such samples. If the results of the verification are not within ±10 percent of the original standard curve, a reference standard will be used to determine if the discrepancy is with the standard or with the instrument.

New standards will also be prepared on a quarterly basis at a minimum. All data used in drawing or describing the curve will be so indicated on the curve or its description. A record will be made of the verification.

8.3 FIELD INSTRUMENTATION

Field equipment used during the sample collection will be calibrated both prior to and following the day's utilization in accordance with the manufacturer's instructions. The equipment will also be operated in accordance with the manufacturer's instructions. Records of calibrations of field equipment will be recorded in a bound field notebook.

9.0 DATA REDUCTION, VALIDATION ASSESSMENT AND REPORTING

9.1 GENERAL

The contract laboratory will perform analytical data reduction and validation in-house under the direction of the Laboratory QA/QC Officer. The Laboratory QA/QC Officer will be responsible for assessing data quality and advising of any data which were rated "preliminary" or "unacceptable" or other qualifications based on the QC criteria outlined in the relevant methods, which would caution the data user of possible unreliability. Data reduction, validation and reporting by the laboratory will be conducted as detailed in the following:

i) raw data produced and checked by the responsible analysts is turned over for independent review by another analyst;

ii) the area supervisor reviews the data for attainment of quality control criteria presented in the referenced analytical methods;

iii) upon completion of all reviews and acceptance of the raw data by the laboratory operations manager, a computerized report will be generated and sent to the Laboratory QA/QC Officer;

iv) the Laboratory QA/QC Officer will complete a thorough inspection of all reports;

v) the Laboratory QA/QC Officer and area supervisor will decide whether any sample reanalysis is required; and

vi) upon acceptance of the preliminary reports by the Laboratory QA/QC Officer, final reports will be generated and signed by the Laboratory Project Manager.

Validation of the analytical data will be performed by the QA/QC Officer - Sampling and Analytical Activities. Assessment of analytical data will include checks on data consistency by looking for comparability of duplicate analyses, comparability to previous data from the same sampling location (if available), adherence to accuracy and precision control criteria detailed in this QAPP and anomalously high or low parameter values. The results of these data validations will be reported to the Project Manager and the contract laboratory, noting any discrepancies and their effect upon acceptability of the data.

Raw data from field measurements and sample collection activities that are used in project reports will be appropriately identified and appended to the report. Where data have been reduced or summarized, the method of reduction will be documented in the report. Field data will be audited for anomalously high or low values that may appear to be inconsistent with other data.

9.2 LABORATORY REPORTING, DATA, PRESENTATION AND FINAL REPORT

Reporting and deliverables should be ASP Category A and shall include, but not be limited to, all items listed in Table 9.1.

All sample data and corresponding QA/QC data as specified in the analytical methods, shall be maintained accessible either in hard copy or on magnetic tape or disk (computer data files).

The laboratory will submit one copy of the final analytical report and an electronic submission in EQuIS format (or compatible) within 21 calendar days of receipt of the final sample included in the sample delivery group (SDG).

9.3 DOCUMENT CONTROL SYSTEM

A document control system ensures that all documents are accounted for when the project is complete.

A project number will be assigned to the project. This number will appear on sample identification tags, log books, data sheets, control charts, project memos and analytical reports, document control logs, corrective action forms and logs, QA plans, and other project analytical records.

9.4 QC CHECK POINTS AND DATA FLOW

The following specific QC check points will be common to all metals, GC, and GC/MS analyses. They are presented with the decision points.

Chemist - Bench Level Checks

1. Systems check: sensitivity, linearity, and reproducibility within specified limits.
2. Duplicate analyses within control limits.
3. Matrix spike results within control limits.
4. Surrogate spike results within control limits (organics only).

5. Calculation/data reduction checks: calculations cross-checked, any discrepancies between forms and results evident, results tabulated sequentially on the correct forms.

Laboratory Project Manager

1. Systems operating within limits.
2. Data transcription correct.
3. Data complete.
4. Data acceptable.

Sample Control

1. Samples returned to sample control following analysis.

Laboratory QA/QC Officer

1. QA objectives met.
2. QC checks are completed.
3. Final data and report package is complete.

10.0 INTERNAL QUALITY CONTROL CHECKS AND FREQUENCY

10.1 QC FOR LABORATORY ANALYSES

Specific procedures related to internal laboratory QC samples are described in the following subsections.

10.1.1 REAGENT BLANKS

A reagent blank will be analyzed by the laboratory at a frequency of one blank per analytical batch. The reagent blank, an aliquot of analyte-free water or solvent, will be carried through the entire analytical procedure.

10.1.2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD)/DUPLICATE ANALYSES

An MS/MSD sample will be analyzed for organic parameters (except HRGC/HRMS) and a duplicate and matrix spike will be analyzed for inorganic parameters at a minimum frequency of one per analytical batch. Acceptable criteria and analytes that will be used for matrix spikes are identified in the methods. Where method specified limits were not available, general control limits should be used. Percent spike recoveries will be used to evaluate analytical accuracy while percent relative standard deviation or the RPD between duplicate analyses will be used to assess analytical precision.

10.1.3 SURROGATE ANALYSES

Surrogates are organic compounds which are similar to the analytes of interest, but which are not normally found in environmental samples. Surrogates are added to samples to monitor the effect of the matrix on the accuracy of the analysis. Every blank, standard and environmental sample analyzed by GC or GC/MS, including MS/MSD samples, will be spiked with surrogate compounds prior to sample preparation.

The compounds that will be used as surrogates and the levels of recommended spiking are specified in the methods. Surrogate spike recoveries must fall within the control limits specified in the methods. If surrogate recoveries are excessively low (<10 percent), the laboratory will contact the QA/QC Officer - Sampling and Analytical Activities for further instructions. Dilution of samples to bring the analyte concentration into the linear range of calibration may dilute the surrogates out of the quantification limit. Reanalysis of these samples is not required. Assessment of analytical quality in these cases will be based on the MS/MSD sample analysis results.

10.2 QC FOR FIELD SAMPLING

To assess the quality of data resulting from the field sampling program, field duplicate and field blank samples will be collected (where appropriate) and submitted to the analytical laboratory as samples.

10.2.1 FIELD (RINSE) BLANKS

Field blanks will be used during the sampling programs to detect contamination introduced through sample collection procedures and equipment, external field conditions, sample transport, sample container preparation, sample storage, and/or the analytical process.

10.2.2 FIELD DUPLICATE SAMPLES

Field duplicate samples will be collected and used to assess the aggregate precision of sampling techniques and laboratory analysis. For every 20 investigative samples, a field duplicate sample will be collected using standard sampling procedures. This duplicate will be packed and shipped to the laboratory for analysis.

10.2.3 TRIP BLANKS

Trip blanks for volatile organic compounds (VOCs) will be prepared by the laboratory using analyte free water and submitted with the sample collection containers. The trip blanks will be kept unopened in the field with sample bottles. One trip blank will be transported to the laboratory with each batch of aqueous VOC samples. The laboratory will analyze trip banks as samples.

11.0 PERFORMANCE AND SYSTEM AUDITS

For the purpose of external evaluation, performance evaluation check samples are analyzed periodically by the laboratory. Internally, the evaluation of data from these samples is done on a continuing basis over the duration of a given project.

The QA/QC Officer - Sampling and Analytical Activities may carry out performance and/or systems audits to ensure that data of known and defensible quality are consistently produced during this program.

Systems audits are qualitative evaluations of all components of field and laboratory quality control measurement systems. They determine if the measurement systems are being used appropriately. The audits may be carried out before all systems are operational, during the program, or after completion of the program. Such audits typically involve a comparison of the activities given in the QA/QC plan described herein, with activities actually scheduled or performed. A special type of systems audit is the data management audit. This audit addresses only data collection and management activities.

The performance audit is a quantitative evaluation of the measurement systems used for a monitoring program. It requires testing the measurement systems with samples of known composition or behavior to quantitatively evaluate precision and accuracy. A performance audit may be carried out by or under the auspices of the QA/QC Officer - Sampling and Analytical Activities without the knowledge of the analyst during each sampling event for this program.

It should be noted, however, that any additional external QA audits will only be performed if deemed necessary.

12.0 PREVENTATIVE MAINTENANCE

This section applies to both field and laboratory equipment. Specific preventive maintenance procedures for field equipment will be consistent with the manufacturer's guidelines. Specific preventive maintenance protocols for laboratory equipment will be consistent with the contract laboratory's standard operating procedures.

All analytical instruments to be used in this project will be serviced by laboratory personnel at regularly scheduled intervals in accordance with the manufacturers' recommendations. Instruments may also be serviced at other times due to failure. Requisite servicing beyond the abilities of laboratory personnel will be performed by the equipment manufacturer or their designated representative.

Routine maintenance of the instruments will be performed as per manufacturers' recommendations. The Laboratory Project Manager is responsible for the preventive maintenance of the instruments.

13.0 SPECIFIC ROUTINE PROCEDURES USES TO ASSESS DATA PRECISION, ACCURACY AND COMPLETENESS

13.1 QA MEASUREMENT QUALITY INDICATORS

13.1.1 PRECISION

Precision will be assessed by comparing the analytical results between duplicate spike analyses. Precision as percent relative difference will be calculated as follows for values significantly greater than the associated detection limit:

$$\text{Precision} = \left| \frac{(D_2 - D_1)}{(D_1 + D_2)/2} \right| \times 100$$

D_1 = matrix spike recovery

D_2 = matrix spike duplicate spike recovery

For results near the associated detection limits, precision will be assessed based on the following criteria:

$$\text{Precision} = \left| \text{Original result - duplicate result} \right| < \text{CRDL}$$

13.1.2 ACCURACY

Accuracy will be assessed by comparing a set of analytical results to the accepted or "true" values that would be expected. In general, MS/MSD and check sample recoveries will be used to assess accuracy. Accuracy as percent recovery will be calculated as follows:

$$\text{Accuracy} = \frac{A - B}{C} \times 100$$

A = The analyte determined experimentally from the spike sample

B = The background level determined by a separate analysis of the unspiked sample

C = The amount of spike added

In some cases, MS and/or MSD recoveries may not be available due to elevated levels of the spiked analyte in the investigative sample. In such cases, accuracy will be assessed based on surrogate spike recoveries and/or laboratory control samples.

13.1.3 COMPLETENESS

Completeness is a measure of the amount of valid data obtained from a measurement system compared with the amount that was expected to be obtained under normal conditions.

To be considered complete, the data set must contain all QC check analyses verifying precision and accuracy for the analytical protocol. In addition, all data are reviewed in terms of stated goals in order to determine if the database is sufficient.

When possible, the percent completeness for each set of samples will be calculated as follows:

$$\text{Completeness} = \frac{\text{usable data obtained}}{\text{total data planned}} \text{ x } 100 \text{ percent}$$

13.1.4 OUTLIERS

Procedures discussed previously will be followed for documenting deviations. In the event that a result deviates significantly from method established control limits, this deviation will be noted and its effect on the quality of the remaining data assessed and documented.

14.0 CORRECTIVE ACTION

The need for corrective action may be identified by system or performance audits or by standard QC procedures. The essential steps in the corrective actions system will be:

i) checking the predetermined limits for data acceptability beyond which corrective action is required;

ii) identifying and defining problems;

iii) assigning responsibility for investigating the problem;

iv) investigating and determining the cause of the problem;

v) determination of a corrective action to eliminate the problem (this may include reanalysis or resampling and analyses);

vi) assigning and accepting responsibility for implementing the corrective action;

vii) implementing the corrective action and evaluating the effectiveness;

viii) verifying that the corrective action has eliminated the problem; and

ix) documenting the corrective action taken.

For each measurement system, the laboratory QA/QC Officer will be responsible for initiating the corrective action and the Laboratory Project Manager will be responsible for implementing the corrective action.

15.0 QUALITY ASSURANCE REPORTS

Final reports will contain a discussion on QA/QC summarizing the quality of the data collected and/or used as appropriate for each phase of the project. The Project Manager who has responsibility for these summaries, will rely on written reports/memoranda documenting the data assessment activities, performance and systems audits and footnotes identifying qualifications to the data, if any.

Each summary of sampling activities will include a tabulation of the data including:

i) field blank and field duplicate sample results;
ii) maps showing well locations; and
iii) an explanation of any sampling conditions or quality assurance problems and their effect on data quality.

QA reports will be prepared by the QA/QC Officer - Sampling and Analytical Activities following receipt of all analytical data. These reports will include discussions of the following and their effects on the quality of the data reported:

i) sample holding times,
ii) laboratory/reagent blank data
iii) surrogate spike, matrix spike and matrix spike duplicate data;
iv) field QA/QC data;
v) pertinent instrument performance per method protocols; and
vi) audit results (if performed).

In addition, the QA reports will summarize all QA problems, and give a general assessment of QA results versus control criteria for such parameters as accuracy, precision, etc.

The QA reports will be forwarded to the Project Manager.

APPENDIX J - TABLES

TABLE 4.1

TARGET QUANTITATION LIMITS - GROUNDWATER AND SOIL
REMEDIAL ACTION
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

	CAS Number	*Groundwater Quantitation Limits*
Volatiles		*µg/L*
1,1,2,2-Tetrachloroethane	79-34-5	10
1,1,2-Trichloroethane	79-00-5	10
1,1-Dichloroethane	75-34-3	10
1,1-Dichloroethylene	75-35-4	10
1,2-Dibromo-3-chloropropane	96-12-8	10
1,2-Dibromoethane	106-93-4	10
1,2-Dichloroethane	107-06-2	10
1,2-Dichloropropane	78-87-5	10
Bromodichloromethane	75-27-4	10
Bromoform	75-25-2	10
Carbon tetrachloride	56-23-5	10
Chlorobenzene	108-90-7	10
Chloroethane	75-00-3	10
Chloroform	67-66-3	10
cis-1,3-Dichloropropene	10061-01-5	10
Dibromochloromethane	124-48-1	10
Dichlorodifluoromethane	75-71-8	10
m-Dichlorobenzene	541-73-1	10
Bromomethane	74-83-9	10
Chloromethane	74-87-3	10
Methylene chloride	75-09-2	10
o-Dichlorobenzene	95-50-1	10
p-Dichlorobenzene	106-46-7	10
Tetrachloroethylene	127-18-4	10
trans-1,2-Dichloroethylene	156-60-5	10
trans-1,3-Dichloropropene	10061-02-6	10
Trichloroethylene	79-01-6	10
Trichlorofluoromethane	75-69-4	10
Vinyl chloride	75-01-4	10
4-Methyl-2-pentanone	108-10-1	10
2-Butanone	78-93-3	10
Benzene	71-43-2	10
Ethylbenzene	100-41-4	10
Styrene	100-42-5	10
Toluene	108-88-3	10
Xylene(total)	1330-20-7	10
1,1,1-Trichloroethane	71-55-6	10
2-Hexanone	591-78-6	10
Acetone	67-64-1	10
Carbon disulfide	75-15-0	10
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	10
Methyl Acetate	79-20-9	10
Methyl tert-Butyl Ether	1634-04-4	10
cis-1,2-Dichloroethene	156-59-2	10
Cyclohexane	110-82-7	10
Methylcyclohexane	108-87-2	10
Isopropylbenzene	98-82-8	10
1,2,-Trichlorobenzene	120-82-1	10
Inorganics		
Chloride	-	1.0 mg/L
Potassium Permanganate	-	10 mg/L

TABLE 4.2

SAMPLING AND ANALYSIS SUMMARY
REMEDIAL ACTION
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

Analytical Parameters	*Analytical Method*	*Investigative Samples*	*Field Duplicates*	*Field Blanks*	*Trip Blanks*	*MS/MSD/ Dup*
TCL Volatiles	SW-846 8260[1]	17[3]	1	1	1	1/1/0
Chloride	EPA 325.1[2]	9[3]	1	1	-	1/0/1
Potassium Permanganate	*	5[3]	1	1	-	0/0/1

Notes:

[1] Methods referenced from "Test Methods for Evaluating Solid Waste - Physical/Chemical Methods", SW-846, Third Edition, 1986 (Revised 9/94).

[2] Methods referenced from "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater", EPA-600/4-82-057, July 1982 and "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983.

[3] Number of samples per monitoring event.

* See Attachment A for method summary.

Dup Duplicate.

MS Matrix Spike.

MSD Matrix Spike Duplicate.

TCL Target Compound List.

TABLE 5.1

SAMPLE CONTAINER, PRESERVATION, AND HOLDING TIME PERIODS
REMEDIAL ACTION
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

Analyses	*Sample Containers*	*Preservation*	*Maximum Holding Time*	*Notes*
VOCs	Four 40-mL Teflon lined septum vials	Cool 4°C, HC1 to pH<2	14 Days from collection to analyses	Fill completely, no air bubbles
Chloride	One 250-mL plastic	Cool 4°C	28 Days from collection to analysis	Fill to neck of bottles
Potassium Permanganate	Two 40-mL Teflon lined septum vials	Cool 4°C	48 Hours from collection to analysis	Fill completely, no air bubbles

Notes:
VOC Volatile Organic Compound.

TABLE 9.1

LABORATORY REPORTING DELIVERABLES - STANDARD DATA PACKAGE
REMEDIAL ACTION
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

A detailed report narrative should accompany each submission, summarizing the contents and results.

A. Chain of Custody Documentation and Detailed Narrative (1)

B. Sample Information
   1. date collected
   2. date extracted or digested
   3. date analyzed
   4. analytical method and reference

C. Field Results
   1. samples
   2. laboratory duplicates (2)
   3. method blanks
   4. spikes; spike duplicates (2)(3)
   5. surrogate recoveries (2)
   6. internal standard recoveries
   7. TICs (if applicable)

D. Miscellaneous
   1. method detection limits and/or instrument detection limits
   2. percent solids (where applicable)
   3. metals run logs
   4. dates of extraction or digestion and analysis for method blanks and blank spikes.

All sample data and its corresponding QA/QC data shall be maintained accessible to CRA either in hard copy or on magnetic tape or disc (computer data files). All solid sample results must be reported on a dry-weight basis.

Notes:

(1) Any QC outliers must be addressed and corrective action taken must be specified.

(2) Laboratory must specify applicable control limits for all QC sample results.

(3) A blank spike must be prepared and analyzed with each sample batch.

TICs. Tentative Identified Compounds.

ATTACHMENT A

MEASUREMENT OF POTASSIUM PERMANGANATE (COLORIMETRIC)

MEASUREMENT OF POTASSIUM PERMANGANATE (COLORIMETRIC)

Scope and Application

1. This method is applicable to measuring the presence of potassium permanganate ($KMnO_4$) in groundwater.
2. $KMnO_4$ is analyzed by scanning a sample from 280 nanometers (nm) to 600 nm at 960 nm/minute on the spectrometer. The major $KMnO_4$ peak is at 525 nm. This peak is used to quantitate the $KMnO_4$ present in the sample.

Summary of Method

1. A sample of groundwater is put into the spectrometer and the absorbance at 525 nm is determined to be the blank value for the sample set.
2. Samples are analyzed by measuring the absorbance at 525 nm and converting it to concentration based on a standard curve.
3. Samples with absorbencies greater than the curve values will be diluted using laboratory grade deionized water.

Sample Handling and Preservation

1. Since biological activity and oxygen may change the color characteristics of a sample, the samples should be analyzed within 48 hours from collection.
2. Refrigeration at 4°C is recommended.

Calibration

1. Standard curves must be established using a blank and at least 3 different concentrations of $KMnO_4$.
2. Typical range of standards is 20 milligrams per liter (mg/L) to 80 mg/L.

Apparatus

1. Perkin-Elmer Lambda 2 UV/VIS Spectrometer.

APPENDIX K

FIELD SAMPLING PROCEDURES

TABLE OF CONTENTS

Page

1.0 FIELD PROCEDURES........K-1
    1.1 BOREHOLE DRILLING/SOIL SAMPLING........K-1
    1.2 MONITORING WELL/PIEZOMETER INSTALLATION........K-2
    1.3 WELL DEVELOPMENT........K-2
    1.5 WATER LEVEL MEASUREMENT........K-3
    1.6 GROUNDWATER SAMPLING........K-3
    1.6.1 PURGING........K-4
    1.6.2 SAMPLE COLLECTION........K-4
    1.6.3 RECORDKEEPING........K-5
    1.7 WELL ABANDONMENT........K-6
    1.8 DECONTAMINATION OF SAMPLING AND DRILLING EQUIPMENT........K-6
    1.9 WASTE HANDLING........K-7
    1.10 SAMPLE PREPARATION AND PRESERVATION........K-7

2.0 SAMPLE DESIGNATION........K-8

3.0 DATA VALIDATION........K-9

LIST OF FIGURES
(Following Appendix K)

FIGURE 1.1 TYPICAL BOREHOLE

FIGURE 1.2 TYPICAL MONITORING WELL INSTALLATION

LIST OF TABLES

		Following Page
TABLE 1.1	SAMPLE CONTAINER, PRESERVATION, AND HOLDING TIME PERIODS	K-7

LIST OF ATTACHMENTS

ATTACHMENT A MONITORING WELL DECOMMISSIONING PROCEDURES

1.0 FIELD PROCEDURES

All monitoring and sampling activities described in this document shall be conducted in accordance with the protocols detailed in this section as well as the standards and criteria set forth in the Work Plan, Quality Assurance Project Plan (QAPP), and Health and Safety Plan (HASP).

Site dedicated equipment will be used whenever possible.

1.1 BOREHOLE DRILLING/SOIL SAMPLING

Borehole drilling for the geologic logging and sampling of subsurface soils will be performed using the hollow stem auger technique. The borehole will be advanced using approximately 4-inch inside diameter (ID) (8-inch outside diameter [OD]) hollow-stem augers from ground surface to the desired depth of installation. Soil samples will be collected from the specified depth intervals by the standard penetration test method (American Society for Testing and Materials [ASTM] -1586-84) using split spoon samplers of appropriate length and diameter. Sampling equipment will be cleaned between samples in accordance with the protocols described in Section 1.8. All soil samples collected will be described and classified according to the Unified Soil Classification System (USCS).

In locations which are covered by pavement, the pavement and granular sub-base will be penetrated to the original ground surface prior to commencement of continuous sampling or augering for sample collection. After the borehole has been completed and the sample has been obtained, either a monitoring well shall be installed as described in Section 6.2 or the borehole shall be backfilled as follows:

i) boreholes in areas covered with pavement shall be backfilled to within approximately 6 inches of the ground surface using a cement/bentonite grout. The remainder of the borehole shall be filled with asphalt or concrete; or

ii) boreholes in areas not covered with pavement (i.e., gravel or soil surfaces) shall be backfilled to within 1 foot of the ground surface using cement/bentonite grout. The remainder of the borehole will be filled with material similar to the surrounding ground surface.

A typical borehole installation is shown on Figure 1.1.

1.2 MONITORING WELL/PIEZOMETER INSTALLATION

Monitoring wells shall be installed in the completed boreholes as follows:

i) install a 2-inch diameter well consisting of 5-foot long stainless steel well screen (#10 slot) and 2-inch diameter black or stainless steel pipe of threaded or welded construction with lockable cap and lock. The well screen and riser pipe shall be steam cleaned and inspected for any foreign matter including greases or coatings adhering to surfaces prior to well construction;

ii) backfill each well installation with a measured sandpack around the well screen (Montery, Filter No. 20 [12x20] sand) placed to a minimum of 2.0 feet above top of screen and a 2.0-foot measured bentonite pellet seal over the sandpack;

iii) wait one-half hour after the placement of the bentonite seal and then grout the remaining annular space between the well pipe and borehole by positive displacement using a tremie tube. The grout shall consist of Portland cement, bentonite, and clean water. The grout shall be mixed in the proportion of not less than 5 nor more than 6 gallons of water to one bag (94) of cement. Bentonite powder shall be added at a ratio of 3 percent by volume. Hydrated lime, up to 10 percent by volume, may be added to facilitate pumping; and

iv) flush-mount wells shall be set 3 inches below ground surface (BGS) and an approved protective curb box (12-inch minimum length) casing will be grouted in place around the well for protection. The flush-mount casings will be raised slightly above ground surface to allow the sealing grout to be sloped away from the well to prevent surface water run-in.

A typical monitoring well installation is shown on Figure D1.3.

1.3 WELL DEVELOPMENT

All new monitoring wells will be developed no sooner than 48 hours following installation.

Well development will be accomplished by either pumping or bailing accompanied by surging. Well development will continue until the purged water exhibits a turbidity of 50 nephelometric turbidity units (NTUs) or lower or for a maximum of 1 hour. Groundwater removed from the wells will be collected or advance approval will be obtained for direct discharge to the municipal wastewater treatment system.

Equipment placed in a monitoring well will be cleaned following decontamination procedures as described in Section 1.8.

1.5 WATER LEVEL MEASUREMENT

Each well shall have a permanent easily identified reference point on the well casing from which its water level elevation is taken. The reference point will be marked on the well and described in the field notebook. The reference points shall be established by a licensed surveyor in relation to an established USGS datum.

An electric tape water level measuring device sufficiently sensitive to reliably provide a measurement accurate to 0.01 feet shall be used to determine the depth to groundwater. The water level probe and wire will be cleaned in accordance with the protocols described in Section 1.8 before use each day and between wells.

Data shall be recorded in a bound notebook and shall include the following:

i) well number;
ii) date;
iii) time;
iv) top of casing (measuring point) elevation;
v) measured depth to water; and
vi) initials of person taking the measurement.

1.6 GROUNDWATER SAMPLING

The sampling procedures for the groundwater monitoring wells are described below. These procedures are used to maintain consistent and reproducible methods in obtaining groundwater samples.

The initial step at each well will be to measure the static water level. This will be accomplished following the procedures described in Section 1.5.

All purging and sampling equipment will either be well-dedicated or will be cleaned in accordance with the procedures contained in Section 1.8 prior to use in each well.

1.6.1 PURGING

Two criteria for purging requirements have been developed. For wells in which sufficient groundwater is readily available, a minimum of three to a maximum of five well volumes of groundwater will be removed from the well prior to sampling. Turbidity, temperature, pH, and specific conductance will be measured after the removal of each well volume of water. A goal of 50 NTUs will be used as a criteria for purging. Wells with slow groundwater recovery will be evacuated to dryness once prior to sample collection.

A well volume is defined as the volume of groundwater (at static condition) contained within the open cavity (i.e., casing and open section of rock) of a well. This volume must be calculated prior to each well purging event as the static water level will vary according to seasonal conditions. To assist in the calculation of well volume, the following volumes of water per foot of submerged cavity are provided:

i) 2-inch diameter cavity = 0.163 gallons per foot;
ii) 3-inch diameter cavity = 0.367 gallons per foot;
iii) 4-inch diameter cavity = 0.653 gallons per foot; and
iv) 6-inch diameter cavity = 1.469 gallons per foot.

The groundwater shall be purged from the wells to be sampled by one of the methods listed below:

i) bailing with a bottom loading teflon or stainless steel bailer; or
ii) purging with a peristaltic pump fitted with well-dedicated tubing. When used, the pump will be staged from the top of the water column downward to ensure removal of stagnant water. Peristaltic pumps will not be used for volatile organic compound (VOC) sample collection.

1.6.2 SAMPLE COLLECTION

Wells will be sampled as soon after purging as possible. In the case of slow recovery wells, sampling will be conducted as soon as the recovered volume of water is adequate to provide the full sample volume or 100 percent of the well volume, whichever occurs first. If a full sample volume cannot be obtained over a maximum of 4 days, the well will be considered to be non-sampleable.

A well-dedicated teflon or stainless steel bailer will be used for VOC sample collection in order to minimize the stripping of volatile compounds from the groundwater samples and adsorption of trace constituents and eliminate the potential for cross-contamination of wells. If a non-dedicated bailer is used for sample collection, the first bailer volume of sample will be discarded to acclimate the bailer. Groundwater will be poured directly into laboratory supplied sample containers from the bailer.

Samples will be placed on ice or cooler packs in laboratory supplied coolers immediately after collection and labeling. Samples will be delivered to the laboratory by courier under approved Chain of Custody procedures in accordance with the QAPP and Section 1.10 of this Field Sampling Plan (FSP).

1.6.3 RECORDKEEPING

A bound logbook will be used to record all pertinent sampling data including:

i) date(s) and time(s) of well purging and sampling;
ii) sounded depth of well;
iii) names of sampling personnel;
iv) calculation of well volume;
v) volume of water purged;
vi) methods of purging and sampling;
vii) initial and final water quality descriptions;
viii) water quality measurements;
ix) sample volume collected and analyses requested;
x) sample identification number; and
xi) Chain of Custody number.

Field log books will be numbered and maintained in a safe location. Entries will be made only in indelible ink. Any corrections will be marked through with a single line so as to remain legible and will be initialed.

1.7 WELL ABANDONMENT

Should an installed monitoring well require abandonment, the procedures will be in accordance with the New York State Department of Environmental Conservation (NYSDEC) "Decommissioning Procedures" dated April 1993. A copy of the Decommissioning Procedures document is contained in Attachment A.

1.8 DECONTAMINATION OF SAMPLING AND DRILLING EQUIPMENT

Decontamination procedures will be applicable to all drilling, sampling, and testing activities. Drilling and well construction equipment mobilized to the Site will receive an initial decontamination prior to use. Decontamination will consist of steam cleaning of the drill rig and associated equipment to the satisfaction of the Site Representative. The rear portion of the drill rig will also be decontaminated by steam cleaning between monitoring well installations. In addition, equipment entering a well but not used for sample collection (e.g., augers) will be decontaminated using a high pressure steam cleaner to remove soil and volatilize organics. Drilling equipment will be decontaminated prior to removing the equipment from the Site.

The field sampling equipment (including soil and groundwater sampling equipment) decontamination procedures will be as follows:

i) non-phosphate detergent wash;
ii) tap water rinse;
iii) distilled water rinse;
iv) isopropanol rinse;
v) air dry; and
vi) distilled water rinse

When practicable, sampling equipment will be wrapped in a material that will prevent it from becoming contaminated. When cleaning pressure transducer and water level measurement equipment the isopropanol rinse shall not be used. Field decontamination wastes will be handled in accordance with all applicable regulations.

1.9 WASTE HANDLING

Borehole cuttings, wastewater and cleaning solvents shall be placed in separate containers and covered. At the end of every day, all containers will be securely covered and full containers will be transferred to an on-Site staging area. All containers will be properly labeled as to contents in conformance with all Federal and State regulations.

Following characterization, waste material will be disposed in accordance with the appropriate regulations.

1.10 SAMPLE PREPARATION AND PRESERVATION

Immediately after collection, samples will be transferred to properly labeled sample containers and properly preserved. Table 1.1 lists the proper container materials, volume requirements, and preservation needed for the Site analyses. Samples requiring refrigeration for preservation will be immediately transferred to coolers packed with ice and/or ice packs. Samples will be shipped within 24 hours of being collected and will arrive at the laboratory no later than 48 hours after sample collection. Proper Chain of Custody documentation will be maintained as discussed in the QAPP.

TABLE 1.1

SAMPLE CONTAINER, PRESERVATION, AND HOLDING TIME PERIODS
REMEDIAL ACTION
PARCEL 2 - SENECA STREET
BUFFALO, NEW YORK

Analyses	*Sample Containers*	*Preservation*	*Maximum Holding Time*	*Notes*
Groundwater				
VOCs	Four 40-mL Teflon lined septum vials	Cool 4°C, HC1 to pH<2	14 Days from collection to analyses	Fill completely, no air bubbles
SVOCs	Two 1-liter amber glass bottles	Cool 4°C	7 Days from collection to extraction 40 Days from extraction to analysis	Fill to neck of bottles
Chloride	One 250-mL plastic	Cool 4°C	28 Days from collection to analysis	Fill to neck of bottles
Potassium Permanganate	Two 40-mL Teflon lined septum vials	Cool 4°C	48 Hours from collection to analysis	Fill completely, no air bubbles
Air				
TCL VOCs	One Summa canister	None	30 Days from collection to analysis	Fill per laboratory instructions

Notes:

ASAP	As Soon As Possible.
SVOC	Semi-Volatile Organic Compounds.
TCLP	Toxicity Characteristic Leaching Procedure.
TOC	Total Organic Carbon.
VOC	Volatile Organic Compound.
ZHE	Zero Headspace Extraction.

2.0 SAMPLE DESIGNATION

A unique sample numbering system will be used to identify each collected sample. This system will provide a tracking number to allow retrieval and cross-referencing of sample information. The sample numbering system to be used is described as follows:

Example:	S-121695 - AA-XXX
Where:	S - Designates sample Type (S = Soil, G = Groundwater, A = Air)
121695:	Date of collection (mm/dd/yy)
AA:	Sampler initials
XXX:	Unique sample number

Quality control (QC) samples will also be numbered with a unique sample number.

3.0 DATA VALIDATION

Analytical data will be validated to demonstrate the usability of the data to support the evaluation of the Site remedy.

The analytical laboratories selected to perform analyses for which there are USEPA approved methods will be full-service chemical analytical laboratories certified by the NYSDOH through the Environmental Laboratory Approval Program (ELAP) and the Contract Laboratory Program (CLP) for the appropriate categories of analysis. The analysis of potassium permanganate in groundwater will be performed by the treatability laboratory.

All analytical data generated by the subcontract laboratory(s) will be assessed and validated by an independent Data Validator.

APPENDIX K - FIGURES

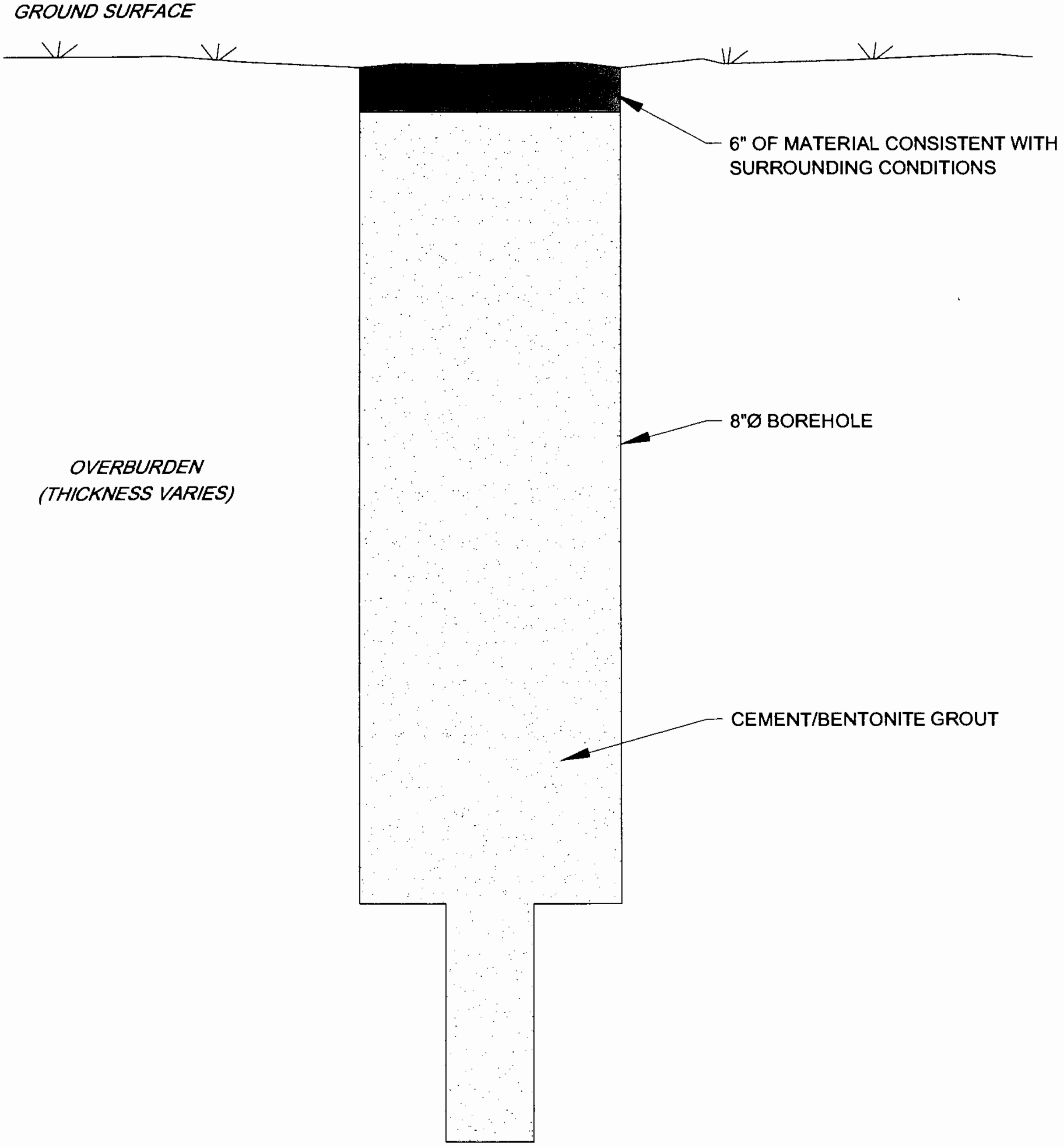
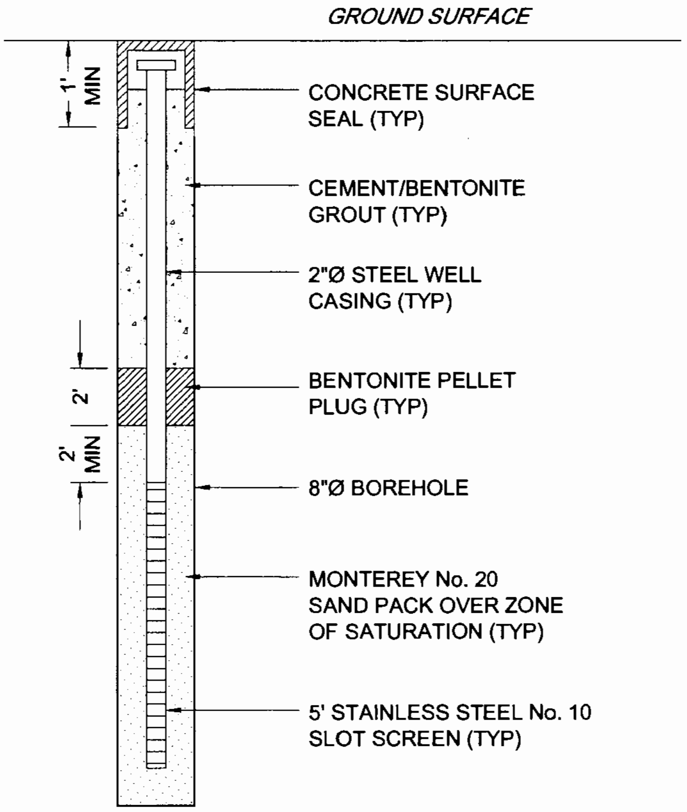
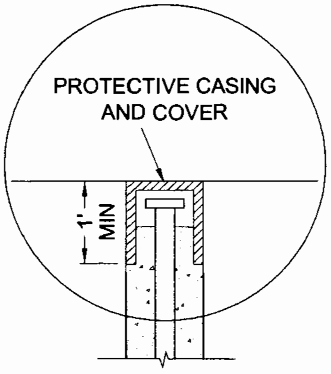


figure K1.1

TYPICAL BOREHOLE
PARCEL 2, SENECA STREET
Buffalo, New York

15867-00(005)GN-NF004 FEB 17/2004





FLUSH WITH GROUND
WELL INSTALLATION

figure K1.2

TYPICAL MONITORING WELL INSTALLATION
PARCEL 2, SENECA STREET
Buffalo, New York

ATTACHMENT A

MONITORING WELL DECOMMISSIONING PROCEDURES

DECOMMISSIONING PROCEDURES

New York State Superfund Standby Contract
Work Assignment D002852-3
NYSDEC Monitoring Well Decommissioning

Prepared for:

New York State
Department of Environmental Conservation
Division of Hazardous Waste Remediation

RECEIVED

JUN 1 1 1993

N.Y.S. DEPT. OF
ENVIRONMENTAL CONSERVATION
REGION 9

April, 1993

Malcolm Pirnie, Inc.
Albany, New York

1.0 RATIONALE

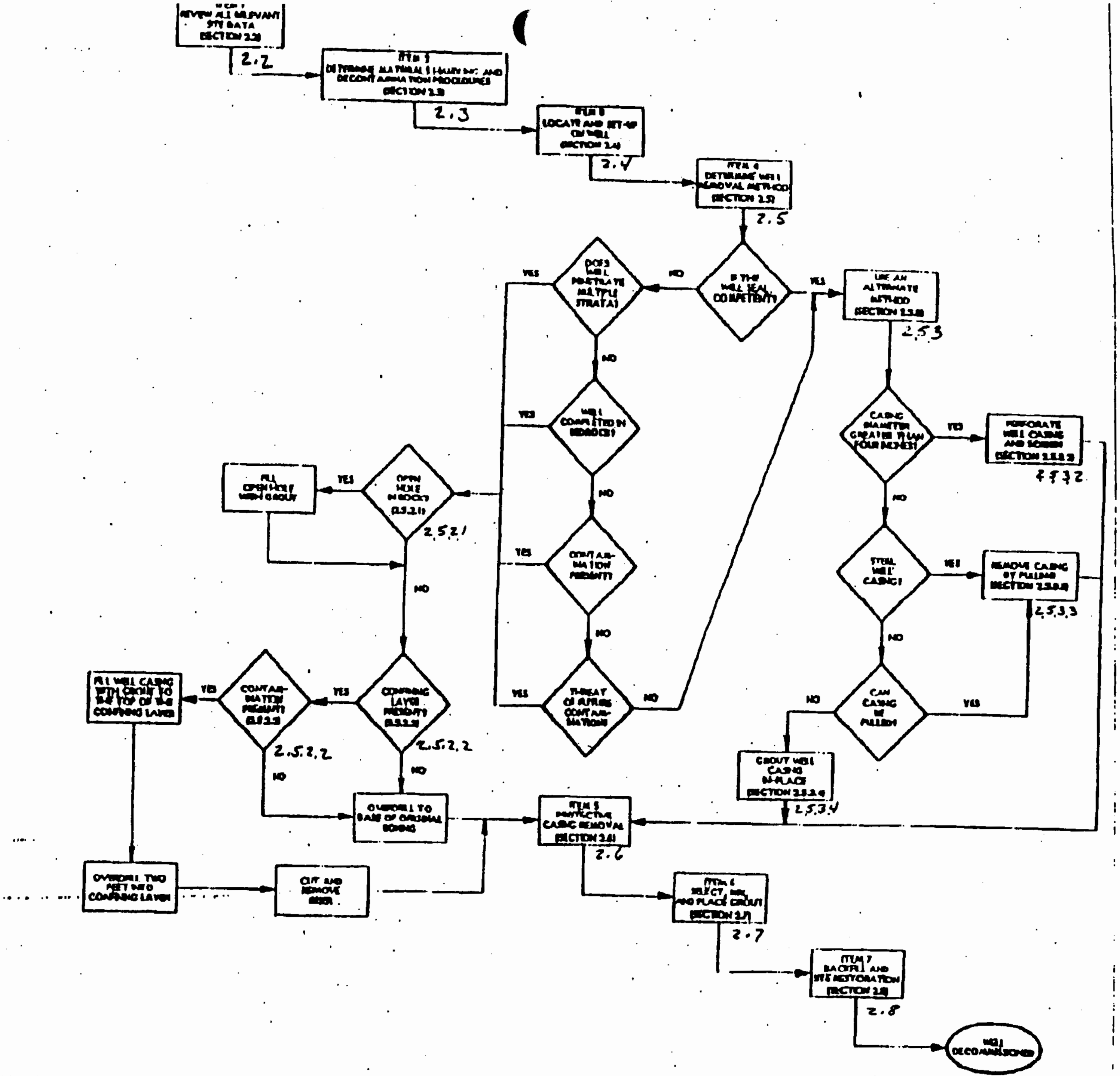
These monitoring well decommissioning procedures have been developed by Malcolm Pirnie, Inc. for the New York State Department of Environmental Conservation (NYSDEC) under the New York State Superfund Standby Contract. The procedures were designed to successfully decommission wells that are no longer used for monitoring. A well is successfully decommissioned when:

- The well does not allow migration of existing or future contaminants into an aquifer or between aquifers
- The well does not allow migration of existing or future contaminants in the vadose zone
- The potential for vertical or horizontal migration of fluids in the well or adjacent to the well is minimized
- aquifer yield and hydrostatic head are conserved, and
- The possibility that the well is used for purposes other than intended is eliminated

Malcolm Pirnie developed these procedures by performing an extensive literature search, consulting industry officials, and consulting the NYSDEC. The literature search included a review of sources from the National Ground Water Association, American Society for Testing and Materials (A.S.T.M.), State and EPA guidance documents, Malcolm Pirnie decommissioning procedures, and various other technical sources. A complete listing of references is included at the end of these procedures. The industry officials that were consulted included drilling contractors, equipment suppliers and manufacturers, and A.S.T.M. members on Soil and Rock (D-18) and Water (D-19) committees.

These procedures are performance oriented. They describe the conditions that must be met to satisfactorily decommission a well without specifying the method. Performance-oriented procedures are best suited for well decommissioning for two reasons. Firstly, there are often several acceptable methods that can be used to accomplish the same end result. Secondly, procedures of this type encourage the development of innovative and cost-saving techniques by the drilling contractor.

To allow these procedures to afford the greatest degree of protection to humans and the environment, Malcolm Pirnie and the NYSDEC decided during development of the procedures that they would be based on two assumptions: 1) well seals are not competent unless documentation is provided that proves otherwise, and 2) any material returned to the surface during the decommissioning process will be treated as a non-hazardous waste. Disposal methods for these materials are contained in the specifications and are dependent on information gleaned from site investigation reports. Unless these assumptions are shown to be invalid, a procedure is followed that is appropriate for the physical and hydrologic setting of the well, and is the most protective of the environment.



MALCOLM PIRNIE

WELL DECOMMISSIONING PROCEDURE DECISION FLOWCHART
NYSDEC WELL DECOMMISSIONING PROJECT

MALCOLM PIRNIE, INC.

FIGURE 1

2.0 WELL DECOMMISSIONING PROCEDURES

2.1 Description

This section describes the process that is used to determine which *decommissioning method* and which *group of procedures* to use to properly decommission a well, and then presents the procedures.

There are four *decommissioning methods*:

1) Overdrilling,
2) Casing Perforation,
3) Casing Pulling, and
4) Grouting the Well Casing In-Place.

For each decommissioning method there is a *group of procedures* that must be followed. The specific procedures contained in the group are determined by the physical and chemical nature of the materials surrounding the well and by the design of the well. For example, overdrilling a well that penetrates a confining layer can require a different group of procedures than overdrilling an unconfined water table well. Each group of procedures consists of seven items:

1) Reviewing Site Data
2) Determining Materials Handling and Decontamination Procedures
3) Locating and Setting-Up on the Well
4) Selecting the Well Decommissioning Method
5) Removing the Protective Casing
6) Selecting, Mixing, and Placing Grout
7) Backfilling and Site Restoration

The proper method and group of procedures to use to successfully decommission a well are selected by using a flow chart (Figure 1). The flow chart also references the relevant sections in the text. The structure of the flow chart is based on the assumptions discussed in Section 1 of this document.

2.2 Item 1 - Reviewing Site Data

The first item of the flow chart consists of reviewing all pertinent site information, including boring and well logs, field inspection sheets, and laboratory analytical results performed on site soil and ground water samples. These data will be used to make decisions throughout the flow chart. If site data is incomplete, or of insufficient reliability to enable its use, it is recommended that field verification of the characteristics and conditions of the wells be conducted. A sample Monitoring Well Field Inspection Log, indicating information which could be obtained during field verification activities, is included herein.

All of the sites where well decommissioning is scheduled have been delisted. It is therefore assumed that none of the sites contain hazardous materials.

2.3 Item 2 - Determining Materials Handling and Decontamination Procedures

2.3.1 Description

After all available site data have been reviewed, the procedures for handling all materials generated during decommissioning, and decontaminating the drilling rig and tools, must be selected. The specific procedures followed for both materials handling and decontamination are dependent on three factors: 1) whether the site is located within or near a closed Part 360 landfill, 2) the presence and type of contamination (if present) at the well to be decommissioned, and 3) the use of the land surrounding the well.

2.3.2 Materials Handling Procedures

To determine the proper materials handling procedure to use for a particular well:

1) Determine whether the site is located within or near a Part 360 landfill. If the well is located *near* a closed Part 360 landfill, the materials can be disposed of on the ground surrounding the well. If the well is located *within* a closed Part 360 landfill, the materials must be disposed of at an active Part 360 landfill. If the well is not located on or near a Part 360 landfill, see (2) below.

2) Determine the presence and type of contamination (if present) at the well by reviewing available well data (Section 2.2). From the data. place the well into one of the following categories: a) wells containing contamination in concentrations exceeding the ground water standard, or b) wells containing no contamination. If a determination cannot be made from the existing data, a meeting with the NYSDEC will occur to determine how to obtain the necessary data.

   For wells in the contamination category, all materials returned to the surface must either be disposed of in a Part 360 landfill, or can be left at the surface near the former well. See (3) below to determine which of these options is applicable. For all uncontaminated wells, the materials can be left at the surface, near the former well, unless disposing the materials in this manner would be inconsistent with the surrounding land use, see (3) below.

3) Determine the surrounding land use. If the well is located in an urbanized area, where it is feasible that people could be exposed to the materials left on the surface, or if the leaving the materials at the surface would not be consistent with the intended use of the land, then the materials must be disposed of in a Part 360 landfill.

2.3.3 Decontamination Procedures

The drill rig and all tools must be decontaminated with a pressurized steam cleaner after decommissioning a contaminated well (as determined in 2.3.2 above). Decontamination will take place at each former well location whenever possible. If site conditions preclude performing decontamination activities at the well location, a more suitable location must be selected.

The procedures for handling and disposal of decontamination fluids are the same as for materials returned to the surface, see Section 2.3.2.

2.4 Item 3 - Locating and Setting-Up on the Well

Perform the following tasks to locate the well to be decommissioned:

- Notify property owner prior to site mobilization whenever possible.
- Review information about the well contained in the site file. This information may include one or more of the following: the site map, well boring log, well construction diagram, field inspection log, well photograph, and proposed well decommissioning procedure.
- Verify the well location and identification by locating the identifying marker.
- Verify the depth of the well by sounding with a weighted tape and compare the measurement with the well construction log.

When the well has been located, set the drilling rig up over the well. Consider the selected decommissioning procedures when setting-up over the well.

2.5 Item 4 - Selecting the Well Decommissioning Method

2.5.1 General

The well removal method used to decommission a well depends primarily on the integrity of the well seal. If it can be documented that the seal is competent, one of the three decommissioning methods other than overdrilling can be used. (These three methods are referred to hereafter as *alternate* decommissioning methods.) If no such documentation exists, the well seal is assumed *not* to be competent. In cases where the well seal is not competent, the well must be overdrilled whenever any *one* of the following conditions is true:

- The well penetrates multiple hydraulic strata,
- The well is a bedrock well, and
- The well is located in an area where a significant threat of chemical/biological contamination exists.

If none of these conditions are true, the well can be decommissioned by a method other than overdrilling, even though it cannot be documented that the well seal is competent.

Procedures for all four decommissioning methods are presented below.

2.5.2 Overdrilling

2.5.2.1 Determine if the Well is Constructed as an Open-Hole in Rock

Open-hole wells have no well casing, sand pack, or bentonite seal installed inside the bedrock borehole. Overlying unconsolidated deposits, where present, are usually cased off by grouting a casing into the bedrock before further drilling of the bedrock is performed. Decommissioning wells of this type requires that the hole in rock be filled with sealing grout before overdrilling of the cased portion of the borehole is begun. (If bedrock occurs at the land surface, no overdrilling is required.) This prevents the rock hole from filling with cuttings which would have to be flushed out. The grout must be mixed and placed according to the grouting procedures contained in Section 2.7. After the rock hole is grouted, the cased portion of the well is overdrilled according to the procedures contained in Section 2.5.2.3.

2.5.2.2 Determine Whether a Confining Layer and Contamination Exist

Review site data to determine whether a confining layer is present and, if so, whether contamination was detected during installation or sampling of the well. If a confining layer and contamination are found to exist, then extra care must be used to prevent cross contamination between the water-bearing zones above and below the confining layer.

One acceptable procedure for decommissioning wells where both a confining layer and contamination exist is to: 1) fill the well casing with grout to the top of the confining layer; and 2) overdrill the well according to the overdrilling procedure contained in Section 2.5.2.3 until two feet of the confining layer have been penetrated. If the confining layer is less than two-feet thick, this procedure may not be possible. When overdrilling is completed, the borehole must be grouted according to the procedure contained in Section 2.7. Other acceptable procedures may exist, however they must receive Department approval prior to implementation.

2.5.2.3 Overdrill the Well

This section describes the requirements common to all overdrilling procedures, regardless of whether a well penetrates a confining layer or bedrock.

Select a drilling method that:

1. follows the original well bore,

2. creates a borehole of the same or greater diameter than the original boring, and,

3. removes all of the well construction materials.

Acceptable methods for overdrilling include: 1) using an overreaming tool with a pilot bit which is nearly the same size as the inside diameter of the casing and a reaming bit which has a slightly larger diameter than the original borehole diameter. This method can be used for wells with steel casings. 2) using a hollow stem auger equipped with outward facing carbide cutting teeth with a diameter two to four inches larger than the casing. It is important to use outward facing cutting teeth in order that the cutting tool does not sever the casing and drift off center. An alternative is to install a steel guide pipe inside the casing so that the augers remain centered. The casing guides the cutter head and remains inside the auger. This temporary working pipe should be firmly attached to the inside of the casing by use of a packer, or other type of expansion or friction device. When the full diameter and length of the well has been penetrated, the casing and screen can be retrieved from the center of the auger (American Society for Testing and Materials, Standard D 5299-92, 1992).

After overdrilling is completed, the borehole must be grouted according to the procedures contained in Section 2.7

2.5.3 Alternate Decommissioning Methods

2.5.3.1 General

There are three alternate decommissioning methods: casing perforation, casing pulling, and grouting the casing in-place. A series of decisions are required to determine which of these methods will be used for a particular well (See Figure 1.) The first criterion to determine is whether the inside diameter of the well casing is four inches or greater. If it is determined that the diameter is four inches or greater, casing perforation is selected as the alternate decommissioning method. This is because casing perforation is the most desirable of the alternate decommissioning methods, but it is not practical to perforate casings with a diameter of less than four inches.

If it is determined that the inside diameter of well casing is less than four inches, it must be decided whether the well casing is able to be removed by pulling. This determination is made based on review of the site specific data. If it is determined that the casing can be pulled, casing pulling is selected as the alternate decommissioning method. Casing pulling is the next most desirable alternate decommissioning method.

If it is determined that the casing cannot be pulled, then grouting the casing in-place is the alternate decommissioning method to be used. This is the least desirable alternate decommissioning method.

The procedures for each alternate method are presented below.

2.5.3.2 Casing Perforation

This method consists of perforating the well casing and screen using a suitable tool and grouting the well. A wide variety of commercial equipment is available for perforating casings and screens in wells with four-inch or larger inside diameters. This method should not be used for wells with inside diameters less than four inches. Due to the diversity of application, experienced contractors must recommend a specific technique based on site specific conditions. A minimum of four rows of perforations several inches long and a minimum of five perforations per linear foot of casing or screen is recommended (American Society for Testing and Materials, Standard D 5299-92, 1992).

After perforating is completed, the borehole must be grouted according to the procedures contained in Section 2.7.

2.5.3.3 Casing Pulling

This method consists of removing the well casing by lifting. The method used to remove the casing must allow grout to be added during pulling to fill the space occupied by the material being withdrawn. Grout mixing and placement must be performed according to the procedures contained in Section 2.7.

An acceptable method to remove steel casing consists of puncturing the bottom of the casing, filling the casing with grout tremied from the bottom of the well, using jacks to free casing from the hole, and lifting the casing out by using a drill rig, backhoe, crane, or other suitable equipment of sufficient capacity. Additional grout must be added to the casing as it is withdrawn.

PVC and other low tensile strength materials may not be able to be removed by pulling in certain conditions. Excessive deformation or breakage of the well casing may preclude removal by pulling deep wells in extremely cohesive soils. If pulling a PVC casing is recommended by an engineer or drilling contractor, the pulling method must be approved in advance by the Department.

2.5.3.4 Grouting the Casing In-Place

Grouting the casing in place is the simplest, but least protective of all the decommissioning procedures. The procedure consists of filling the casing with grout to a level of five feet below the land surface, cutting the well casing at a depth of five feet below the land surface, and removing the casing and associated well materials from the ground. The casing must be grouted according to the procedures contained in Section 2.7.

2.6 Item 5 - Removing the Protective Casing

2.6.1 General

The protective casing of a well must be removed in a manner that will not interfere with or compromise the integrity of decommissioning activities performed at the well.

The procedure for removing the protective casing of a well depends upon the decommissioning method used. When a well is being decommissioned by the overdrilling or casing pulling method, the protective casing will, in most cases, be removed before continuing with the decommissioning activity. When the decommissioning procedure calls for the well casing to be perforated or left in place, the protective casing should be removed after grout is added to the well. The protective casing must be disposed of in a manner consistent with solid waste regulations.

2.6.2 Removing the Protective Casing Prior to Sealing the Well Bore

When overdrilling is required, the protective casing must be removed first, unless the drilling tools used to overdrill the well have an inside diameter that is larger than the protective casing. The many different types of protective casings available preclude developing a specific removal procedure. In all cases, however, the specific procedure used must minimize the risk of:

1. Breaking the well casing off below ground, and
2. Allowing foreign material to enter the well casing.

When casing pulling is required, the determination of when to remove the protective casing is not critical. For this reason, the determination can be made by the drilling contractor.

An acceptable method of removing a protective casing consists of breaking up the concrete seal surrounding the casing and jacking or hoisting the casing out of the ground.

A check should be made during pulling to insure that the inner well casing is not being pulled up with the protective casing. If this occurs, the well casing should be cut off above ground after the base of the protective casing is lifted above the land surface.

2.6.3 Removing the Protective Casing After Sealing the Well

If a decommissioning method is used that allows well casing to remain in the ground, the protective casing should be removed after the well has been filled to the proper level with grout. This will insure that the well is properly sealed even if problems arise when removing the protective casing. Since the well casing must be removed to a depth of five feet below the land surface, this procedure will enable the upper five feet of casing and the protective casing to be removed in one operation if a casing cutter is used. If the height of the protective casing makes working conditions at the well awkward, the casing can be cut off at a lower level as long as the inner well casing remains above ground and is not damaged in a way that prevents the well from being filled with grout.

2.7 Item 6 - Selecting, Mixing, and Placing Grout

2.7.1 Selecting Grout Mixture

There are two types of grout mixes that may be used to seal wells: a standard mix and a special mix. Both mixes use Type 1 Portland Cement and six percent bentonite by weight. The difference between the two mixes is the volume of water used. The special mix uses less water and is used in situations where excessive loss of the standard grout mix is possible, for example in highly-fractured bedrock or coarse gravels.

2.7.1.1 Standard Grout Mixture

For most boreholes, the following standard mixture will be used:

- One 94-pound bag type I Portland cement
- 5.6 pounds powdered bentonite
- 9.1 gallons potable water

This mixture results in a grout with a bentonite content of six percent by weight, and will be used in all cases except in boreholes where excessive use of grout is anticipated. In these cases a special mixture will be used (see Section 2.7.1.2).

See Section 2.7.2 for grout mixing procedures.

2.7.1.2 Special Mixture

In cases where excessive use of grout is anticipated, such as high permeability formations and highly fractured or cavernous bedrock formations, the following special mixture will be used:

- One 94-pound bag type I Portland cement
- 5.6 pounds powdered bentonite
- 6-9 gallons potable water (depending on desired thickness)

The special mixture also results in a grout with a bentonite content of six percent by [illegible] but the amount of added water is decreased to produce a thicker mixture. The least amount of water that can be added for the mixture to be readily pumpable is six gallons per 94-pound bag of cement.

See Section 2.7.2 for grout mixing procedures.

2.7.2 Grout Mixing Procedure

Calculate the volume of grout required to fill the borehole before beginning to mix the grout. If possible, the grout basin should be large enough to hold all of the grout necessary for the borehole. Tall cylindrical and long shallow basins should not be used as it is difficult to obtain a homogeneous mixture in these types of basins.

Mix grout until a smooth, homogeneous mixture is achieved. No lumps or dry clots should be present. Grout can be mixed manually or with a mechanized mixer. One acceptable type of mixer is a vertical paddle grout mixer. Colloidal mixers should not be used as they tend to excessively decrease the thickness of the grout for the above recipes.

See Section 2.7.3 for grout placement procedures.

2.7.3 Grout Placement

Grout will be placed in the borehole from the bottom to the top. This will be accomplished by using a tremie pipe of not less than 1-inch diameter. Grout will then be pumped into the borehole at a rate of 5-10 gpm until the grout appears at the land surface. The only exception to this is when open hole in bedrock is being grouted. With this situation the grout level must reach above the bedrock surface. At this time the rate of settling should be observed. When the grout level stabilizes, casing or augers will be removed from the hole. As each section is removed, grout will be added to keep the level just below land surface. If the grout level cannot be maintained near the land surface, this will imply excessive loss of grout and an alternate grouting method must be used. One possibility is to grout in stages, whereby the first batch of grout is allowed to partially cure before a second batch of grout is added. Upon completion of grouting, it is important to make sure the final grout level is approximately five feet below land surface. A ferrous metal marker will be embedded in the top of the grout to indicate the location of the former monitoring well.

2.8 Item 7 - Backfilling and Site Restoration

The uppermost five feet of the borehole at the land surface will be filled with a material appropriate to the intended use of the land. The materials used are to be physically similar to the natural soils. No materials will be used that will limit the use of the property in any way. The surface of the borehole will also be restored to the condition of the area surrounding the borehole. For example, concrete or asphalt will be patched with concrete or asphalt of the same type and thickness, grassed areas will be seeded, and topsoil will be used in other areas. All solid waste materials generated during the decommissioning process will be disposed of properly. In summary, the site will be left in a condition equivalent to the pre-well condition.

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SITE NAME: ______________________________

WELL I.D.: ____________________

DATE/TIME: ____________________

INSPECTOR'S NAME: ____________________

MONITORING WELL FIELD INSPECTION LOG
NYSDEC WELL DECOMMISSIONING PROGRAM

ITEM	YES	NO
WELL VISIBLE? (If not, provide directions below)		
WELL I.D. VISIBLE?		
WELL LOCATION MATCH SITE MAP? (If not, sketch actual location on back)		

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: ____________________

	YES	NO
SURFACE SEAL PRESENT?		
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)		

HEADSPACE READING (ppm) AND INSTRUMENT USED ____________________

TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) ____________________

PROTECTIVE CASING MATERIAL TYPE: ____________________

MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): ____________________

	YES	NO
LOCK PRESENT?		
LOCK FUNCTIONAL?		
DID YOU REPLACE THE LOCK?		
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes, describe below)		
[illegible] POINT VISIBLE?		

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): ____________________

MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): ____________________

MEASURE WELL DIAMETER (Inches): ____________________

WELL CASING MATERIAL: ____________________

[illegible]ICAL CONDITION OF VISIBLE WELL CASING: ____________________

ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE ____________________

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY. :

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED. :

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

REMARKS:

APPENDIX L

CRA LETTERS REGARDING SOIL GAS AND INDOOR AIR SAMPLING

CONESTOGA-ROVERS
& ASSOCIATES

2055 Niagara Falls Blvd., Suite #3, Niagara Falls, NY 14304
Telephone: 716-297-6150 Facsimile: 716-297-2265
www.CRAworld.com

January 7, 2004 Reference No. 15867

Mr. David P. Locey
Environmental Engineer I
New York State Department of
Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203-2999

Dear Mr. Locey:

Re: Soil Gas Analytical Results
Pizza Hut - 2137 Seneca Street
VCP Site #V-00370-9

In accordance with the Remedial Action Work Plan (RA Work Plan) dated May 2003, soil gas samples were collected on November 17, 2003, from three locations beneath the building at the above-referenced site. Mssrs. D. Locey (NYSDEC) and M. Forcucci (NYSDOH) were present to select the sample locations and observe sample collection. A memorandum summarizing the sampling program is presented in Attachment A.

The soil gas samples were submitted to Air Toxics Ltd. for analysis of volatile organic compounds (VOCs) by Method TO-14. A copy of the analytical laboratory data report is presented in Attachment B and a summary of the compounds detected in the samples is presented in Table 1.

Review of the data presented in Table 1 shows various VOCs detected at concentrations ranging between 3.3 micrograms per cubic meter ($\mu g/m^3$) and 130 $\mu g/m^3$.

Four of the compounds detected in the soil gas samples (m,p-xylene, o-xylene, 1,3,5-trimethylbenzene, and 4-ethyltoluene), were not present at concentrations exceeding 10 $\mu g/m^3$. Six compounds (Freon 12, Freon 11, benzene, toluene, 1,2,4-trimethylbenzene, and acetone) were detected at concentrations ranging between 10 and 100 $\mu g/m^3$. Four compounds (hexane, cyclohexane, heptane, and tetrachloroethene) were present at concentrations exceeding 100 $\mu g/m^3$. Of the four compounds detected at concentrations exceeding 100 $\mu g/m^3$, none were present at these concentrations in more than one sample.

The RA Work Plan details specific actions based on the soil gas analytical results, ranging from no further action to additional soil gas and indoor air sampling. In order to further assess site conditions, and based on the results of the soil gas analyses, CRA will proceed with sampling the air within the building. Three samples will be collected from the same areas in which the soil gas samples were collected. Samples will be collected over an eight-hour period using Summa™ canisters placed three to four feet above the floor of the building. This plan of action and sampling procedure was discussed with M. Forcucci of the NYSDOH on January 7, 2004, and verbally approved. Samples will be analyzed in accordance with Method TO-14.

The sampling of indoor air is currently scheduled for January 12, 2003. Should you have questions or require additional information, please do hesitate to contact us.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Carol Barron

Carol F. Barron

CFB/dl/1
Attachments

cc M. Doster, NYSDEC
A. English, NYSDEC
M. Forcucci, NYSDOH
M. Schulz, GE Capital Franchise Finance Corp

TABLE 1

Summary of Compounds Detected in Soil gas
Parcel 2 - Seneca Street, Buffalo, New York

Compound	*Units*	*Utility Room*	*Food Prep Area*	*Dining Area*
Freon 12	µg/m3	14	6	35
Freon 11	µg/m3	12	3.8 U	14
Benzene	µg/m3	17	48	2.2 U
Toluene	µg/m3	8.9	16	3.3
m,p-Xylene	µg/m3	6.8	8.4	3.0 U
o-Xylene	µg/m3	3.4	2.9 U	3.0 U
1,3,5-Trimethylbenzene	µg/m3	3.8 U	5.2	5.9
1,2,4-Trimethylbenzene	µg/m3	7.2	12	14
Hexane	µg/m3	110	53	58
Cyclohexane	µg/m3	110	14	3.4
Heptane	µg/m3	130	24	31
Acetone	µg/m3	19	19	9.3
4-Ethyltoluene	µg/m3	15 U	13 U	9.6
Tetrachloroethene	µg/m3	11	120	4.6 U

Notes:
U Compound not detected at or above specified limit.

ATTACHMENT A

CONESTOGA-ROVERS
& ASSOCIATES

2055 Niagara Falls Blvd., Suite #3
Niagara Falls, New York 14304
Telephone: (716) 297-6150 Fax: (716) 297-2265
www.CRAworld.com

MEMORANDUM

TO:	Julian Hayward, Rick Shepherd	REF. NO.:	15867
FROM:	Carol Barron/js/1	DATE:	November 19, 2003
C.C.:	G. LaLiberty, S. Scrocchi, R. Snyder		
RE:	**Collection of Soil Gas Samples – Parcel 2**		

Three soil gas samples were collected from beneath the floor slab of the existing building at "Parcel 2," Seneca Street, Buffalo, New York, on November 17, 2003. All sampling was conducted with the oversight of Messrs. D. Locey of the New York State Department of Environmental Conservation (NYSDEC) and M. Forcucci of the New York Department of Health (NYSDOH).

SAMPLING PROCEDURE

The soil gas samples were collected as follows:

1. Sample locations were selected by Messrs. Locey and Forcucci. The sample locations were in three separate areas of the building: utility room; food preparation area; and dining/ordering area. A figure showing the approximate locations of sample collection is attached.
2. The floor of the building was cored and removed. The thickness of the floor slab was approximately 8 inches in the utility room and food preparation areas and approximately 6 inches in the dining/ordering area. A gravel sub-base was present beneath the concrete at all three locations. In the utility room and food preparation areas plastic sheeting was observed between the concrete and gravel sub-base.
3. After the concrete core was removed, Geoprobe rods fitted with a sacrificial point were driven by hand to a depth of approximately 2 feet below the top of the floor.
4. Once driven to the desired depth, the rods were retracted 1 to 2 inches exposing the screen of the sacrificial point. The Geoprobe Post-Run Tubing System (PRT) was then inserted into the screened point. A catalogue cut of the PRT system is contained in Attachment 1 for reference.
5. A Summa canister was attached to the PRT and the soil gas sample was collected.
6. Once sampling was complete, the drill rods were removed and the open hole was filled with pre-mix concrete. The cored pieces of floor tile were replaced at the top of the concrete.

SAMPLE ANALYSES

All samples were submitted to Air Toxics, Inc. for analysis of volatile organic compounds (VOCs) by Method TO-14. Mr. Forcucci of the NYSDOH reviewed the standard and low level laboratory reporting limits and approved the use of the standard limits for these analyses.

A sample collected and analysis summary is attached.

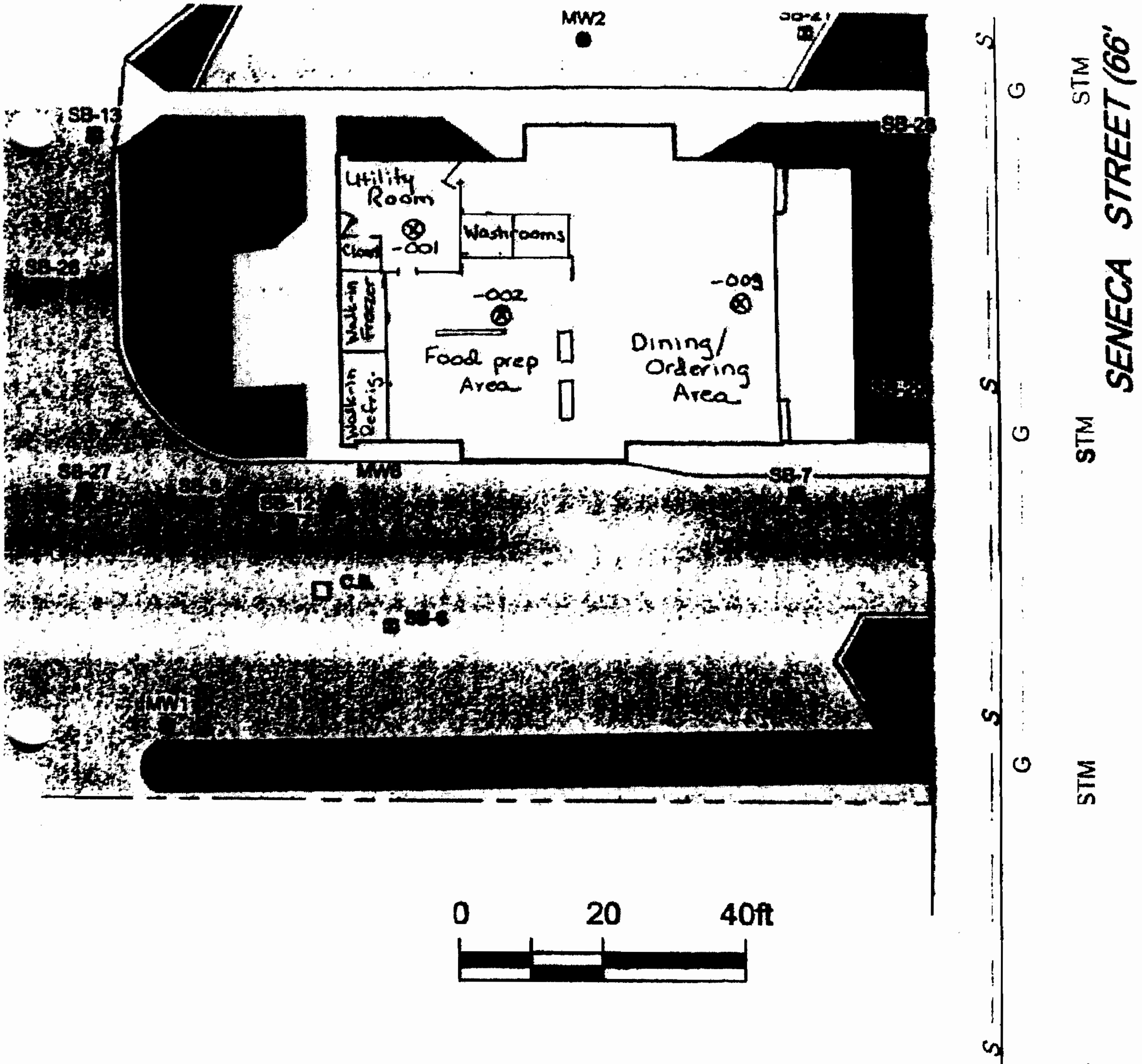
TABLE 1

SOIL GAS SAMPLE COLLECTION AND ANALYSIS SUMMARY
PARCEL 2
SENECA STREET
BUFFALO, NEW YORK

Date	*Time*	*Sample No.*	*Sample Location*	*Initial Vacuum (in Hg)*	*Analyses*
11/17/2003	1000	SG-111703-CB-001	Utility Room	28.5	VOCs, TO-14
11/17/2003	1030	SG-111703-CB-002	Food Preparation Area	29	VOCs, TO-14
11/17/2003	1100	SG-111703-CB-001	Dining/Ordering Area	29.5	VOCs, TO-14

Notes:

VOCs	Volatile Organic Compounds.



SG-111703 CB 001 Utility Room
002 Food Prep A
003 Dining Ordering

Figure 1
Soil Gas Sample Locations
Parcel 2 Seneca St

67 CB

ATTACHMENT 1

GEOPROBE POST-RUN TUBING SYSTEM (PRT)

Geoprobe.com

HOME PRODUCTS LITERATURE TECH SVCS CO

Geoprobe® Tools

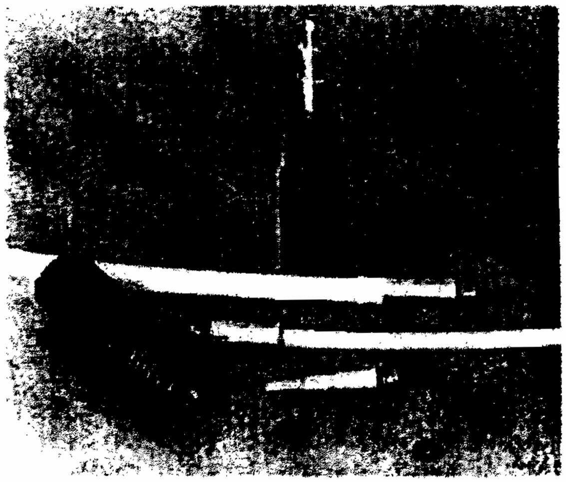
| Sampling: Soil - Groundwater - Soil Gas - Manual | GW Monitoring | Hydraulic Conductivity | Geotechnical | Direct Sensing

PRT Systems

➤ **Main Info**

Here's How It Works...

PRT Active Sampling



The Post Run Tubing System (PRT) is an ideal tool for locating and delineating contaminated areas when used properly. It allows the user to collect soil vapor samples quickly and easily at the desired sampling depth WITHOUT the time-consuming complications associated with rod leakage and contamination. O-ring connections enable the PRT system to deliver a vacuum-tight seal that prevents sample contamination from UP hole, and assures that the sample is taken from the desired depth at the BOTTOM of the hole. The sample is drawn through the point holder, through the adapter, and into the sample tubing. The tubing can be replaced after each sample, thus eliminating sample carryover problems and the need to decontaminate the probe rods. The resulting time-savings translates into a higher productivity rate for you and your client.

The PRT is inserted AFTER the probe rods are driven to depth.
Advantages include...

- Increases speed and accuracy of soil gas sampling.
- Eliminates problems associated with rod leakage and sample carryover.
- Utilizes simple design for ease of use and vacuum-tight probing.
- Sampling train and all connections can be checked to verify leak-free status.
- Requires no management of inner tubing during probing.

PRT Applications:

- Rapidly define the extent of VOC contamination in the subsurface, under appropriate conditions.
- Rapidly define potential source areas of VOC contamination over large or small areas.
- Determine the types of VOC contamination present in the subsurface at a facility.
- Rapidly define the potential extent of groundwater contamination and down gradient migration of VOC's under appropriate conditions.
- Determine presence, extent, concentration, and types of landfill gasses (methane, carbon dioxide, et.) present in the subsurface at active and abandoned landfills.

ATTACHMENT B

- 15867

12/2/2003

@ AIR TOXICS LTD.

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

@ **AIR TOXICS LTD.**

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0311320

Work Order Summary

CLIENT:
Ms. Susan Scrocchi
Conestoga-Rovers Associates
2371 George Urban Blvd.
Depew, NY 14042

BILL TO:
Ms. Susan Scrocchi
Conestoga-Rovers Associates
2371 George Urban Blvd.
Depew, NY 14042

PHONE: 716-206-0202
FAX: 716-206-0201
DATE RECEIVED: 11/18/03
DATE COMPLETED: 12/2/03

P.O. # 23842
PROJECT # 18657 Parcel 2, Seneca St, Buffalo, NY
CONTACT: Betty Chu

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	SG-111703-CB-001	Modified TO-14A	3.5 "Hg
02A	SG-111703-CB-002	Modified TO-14A	0.2 psi
03A	SG-111703-CB-003	Modified TO-14A	0.0 "Hg
04A	Lab Blank	Modified TO-14A	NA
04B	Lab Blank	Modified TO-14A	NA
05A	CCV	Modified TO-14A	NA
05B	CCV	Modified TO-14A	NA
06A	LCS	Modified TO-14A	NA
06B	LCS	Modified TO-14A	NA

CERTIFIED BY: Linda A. Freeman

Laboratory Director

DATE: 12/02/03

Certfication numbers: AR DEQ - 03-084-0, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/03, Expiration date: 06/30/04
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

LABORATORY NARRATIVE
Modified TO-14A
Conestoga-Rovers Associates
Workorder# 0311320

Three 6 Liter Summa Canister (100% Certified) samples were received on November 18, 2003. The laboratory performed analysis via modified EPA Method TO-14A using GC/MS in the full scan mode. The method involves concentrating up to 0.5 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	*TO-14A*	*ATL Modifications*
Continuing Calibration criteria	</= 30% Difference	</= 30% Difference with two allowed out to </= 40% Difference; flag and narrate outliers
Initial Calibration criteria	RSD<30%	RSD</=30%, two compounds allowed up to 40%.
Moisture control	Nafion Dryer	Multisorbent trap
Blank acceptance criteria	<0.20 ppbv	<Reporting Limit
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106
Dilutions for Initial Calibration	Dynamic dilutions or static using canisters	Syringe dilutions
BFB absolute abundance criteria	Within 10% of that from previous day.	CCV internal standard area counts are compared to ICAL, corrective action for > 40% D
Sample Load Volume	400 mL	Varied to 200 mL

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction no performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Utility Room

AIR TOXICS LTD.

SAMPLE NAME: SG-111703-CB-001

ID#: 0311320-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name: d112023 **Date of Collection:** 11/17/03
Dil. Factor: 1.52 **Date of Analysis:** 11/21/03 08:50 AM

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.76	3.8	2.9	14
Freon 114	0.76	5.4	Not Detected	Not Detected
Vinyl Chloride	0.76	2.0	Not Detected	Not Detected
Bromomethane	0.76	3.0	Not Detected	Not Detected
Chloroethane	0.76	2.0	Not Detected	Not Detected
Freon 11	0.76	4.3	2.1	12
1,1-Dichloroethene	0.76	3.1	Not Detected	Not Detected
Freon 113	0.76	5.9	Not Detected	Not Detected
Methylene Chloride	0.76	2.7	Not Detected	Not Detected
1,1-Dichloroethane	0.76	3.1	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.76	3.1	Not Detected	Not Detected
Chloroform	0.76	3.8	Not Detected	Not Detected
1,1,1-Trichloroethane	0.76	4.2	Not Detected	Not Detected
Carbon Tetrachloride	0.76	4.9	Not Detected	Not Detected
Benzene	0.76	2.5	5.2	17
1,2-Dichloroethane	0.76	3.1	Not Detected	Not Detected
Trichloroethene	0.76	4.2	Not Detected	Not Detected
1,2-Dichloropropane	0.76	3.6	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.76	3.5	Not Detected	Not Detected
Toluene	0.76	2.9	2.3	8.9
trans-1,3-Dichloropropene	0.76	3.5	Not Detected	Not Detected
1,1,2-Trichloroethane	0.76	4.2	Not Detected	Not Detected
Tetrachloroethene	0.76	5.2	1.6	11
1,2-Dibromoethane (EDB)	0.76	5.9	Not Detected	Not Detected
Chlorobenzene	0.76	3.6	Not Detected	Not Detected
Ethyl Benzene	0.76	3.4	Not Detected	Not Detected
m,p-Xylene	0.76	3.4	1.6	6.8
o-Xylene	0.76	3.4	0.78	3.4
Styrene	0.76	3.3	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.76	5.3	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.76	3.8	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.76	3.8	1.4	7.2
1,3-Dichlorobenzene	0.76	4.6	Not Detected	Not Detected
1,4-Dichlorobenzene	0.76	4.6	Not Detected	Not Detected
alpha-Chlorotoluene	0.76	4.0	Not Detected	Not Detected
1,2-Dichlorobenzene	0.76	4.6	Not Detected	Not Detected
1,3-Butadiene	0.76	1.7	Not Detected	Not Detected
Hexane	0.76	2.7	31	110
Cyclohexane	0.76	2.6	33	110
Heptane	0.76	3.2	30	130
Bromodichloromethane	0.76	5.2	Not Detected	Not Detected
Dibromochloromethane	0.76	6.6	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: SG-111703-CB-001

ID#: 0311320-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**d112023**	**Date of Collection: 11/17/03**
Dil. Factor:	**1.52**	**Date of Analysis: 11/21/03 06:50 AM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Cumene	0.76	3.8	Not Detected	Not Detected
Propylbenzene	0.76	3.8	Not Detected	Not Detected
Chloromethane	3.0	6.4	Not Detected	Not Detected
1,2,4-Trichlorobenzene	3.0	23	Not Detected	Not Detected
Hexachlorobutadiene	3.0	33	Not Detected	Not Detected
Acetone	3.0	7.3	7.7	19
Carbon Disulfide	3.0	9.6	Not Detected	Not Detected
2-Propanol	3.0	7.6	Not Detected	Not Detected
trans-1,2-Dichloroethene	3.0	12	Not Detected	Not Detected
Vinyl Acetate	3.0	11	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.0	9.1	Not Detected	Not Detected
Tetrahydrofuran	3.0	9.1	Not Detected	Not Detected
1,4-Dioxane	3.0	11	Not Detected	Not Detected
4-Methyl-2-pentanone	3.0	13	Not Detected	Not Detected
2-Hexanone	3.0	13	Not Detected	Not Detected
Bromoform	3.0	32	Not Detected	Not Detected
4-Ethyltoluene	3.0	15	Not Detected	Not Detected
Methyl tert-butyl ether	3.0	11	Not Detected	Not Detected
Ethanol	3.0	5.8	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	99	70-130

Food Prep
Area

AIR TOXICS LTD.

SAMPLE NAME: SG-111703-CB-002

ID#: 0311320-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**s112020**	**Date of Collection: 11/17/03**	
Dil. Factor:	**1.32**	**Date of Analysis: 11/20/03 10:18 PM**	

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.66	3.3	1.2	6.0
Freon 114	0.66	4.7	Not Detected	Not Detected
Vinyl Chloride	0.66	1.7	Not Detected	Not Detected
Bromomethane	0.66	2.6	Not Detected	Not Detected
Chloroethane	0.66	1.8	Not Detected	Not Detected
Freon 11	0.66	3.8	Not Detected	Not Detected
1,1-Dichloroethene	0.66	2.7	Not Detected	Not Detected
Freon 113	0.66	5.1	Not Detected	Not Detected
Methylene Chloride	0.66	2.3	Not Detected	Not Detected
1,1-Dichloroethane	0.66	2.7	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.66	2.6	Not Detected	Not Detected
Chloroform	0.66	3.3	Not Detected	Not Detected
1,1,1-Trichloroethane	0.66	3.7	Not Detected	Not Detected
Carbon Tetrachloride	0.66	4.2	Not Detected	Not Detected
Benzene	0.66	2.1	15	48
1,2-Dichloroethane	0.66	2.7	Not Detected	Not Detected
Trichloroethene	0.66	3.6	Not Detected	Not Detected
1,2-Dichloropropane	0.66	3.1	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.66	3.0	Not Detected	Not Detected
Toluene	0.66	2.5	4.2	16
trans-1,3-Dichloropropene	0.66	3.0	Not Detected	Not Detected
1,1,2-Trichloroethane	0.66	3.7	Not Detected	Not Detected
Tetrachloroethene	0.66	4.6	17	120
1,2-Dibromoethane (EDB)	0.66	5.2	Not Detected	Not Detected
Chlorobenzene	0.66	3.1	Not Detected	Not Detected
Ethyl Benzene	0.66	2.9	Not Detected	Not Detected
m,p-Xylene	0.66	2.9	1.9	8.4
o-Xylene	0.66	2.9	Not Detected	Not Detected
Styrene	0.66	2.8	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.66	4.6	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.66	3.3	1.0	5.2
1,2,4-Trimethylbenzene	0.66	3.3	2.4	12
1,3-Dichlorobenzene	0.66	4.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.66	4.0	Not Detected	Not Detected
alpha-Chlorotoluene	0.66	3.5	Not Detected	Not Detected
1,2-Dichlorobenzene	0.66	4.0	Not Detected	Not Detected
1,3-Butadiene	0.66	1.5	Not Detected	Not Detected
Hexane	0.66	2.4	15	53
Cyclohexane	0.66	2.3	4.1	14
Heptane	0.66	2.7	5.7	24
Bromodichloromethane	0.66	4.5	Not Detected	Not Detected
Dibromochloromethane	0.66	5.7	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: SG-111703-CB-002

ID#: 0311320-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**a112026**	**Date of Collection:**	**11/17/03**
Dil. Factor:	**1.32**	**Date of Analysis:**	**11/20/03 10:18 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Cumene	0.66	3.3	Not Detected	Not Detected
Propylbenzene	0.66	3.3	Not Detected	Not Detected
Chloromethane	2.6	5.5	Not Detected	Not Detected
1,2,4-Trichlorobenzene	2.6	20	Not Detected	Not Detected
Hexachlorobutadiene	2.6	29	Not Detected	Not Detected
Acetone	2.6	6.4	8.1	19
Carbon Disulfide	2.6	8.4	Not Detected	Not Detected
2-Propanol	2.6	6.6	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.6	11	Not Detected	Not Detected
Vinyl Acetate	2.6	9.4	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.6	7.9	Not Detected	Not Detected
Tetrahydrofuran	2.6	7.9	Not Detected	Not Detected
1,4-Dioxane	2.6	9.7	Not Detected	Not Detected
4-Methyl-2-pentanone	2.6	11	Not Detected	Not Detected
2-Hexanone	2.6	11	Not Detected	Not Detected
Bromoform	2.6	28	Not Detected	Not Detected
4-Ethyltoluene	2.6	13	Not Detected	Not Detected
Methyl tert-butyl ether	2.6	9.7	Not Detected	Not Detected
Ethanol	2.6	5.0	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	101	70-130

Dining Area

AIR TOXICS LTD.

SAMPLE NAME: SG-111703-CB-003

ID#: 0311320-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name: a112021 **Date of Collection:** 11/17/03
Dil. Factor: 1.34 **Date of Analysis:** 11/20/03 10:59 PM

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.67	3.4	7.0	35
Freon 114	0.67	4.8	Not Detected	Not Detected
Vinyl Chloride	0.67	1.7	Not Detected	Not Detected
Bromomethane	0.67	2.6	Not Detected	Not Detected
Chloroethane	0.67	1.8	Not Detected	Not Detected
Freon 11	0.67	3.8	2.4	14
1,1-Dichloroethene	0.67	2.7	Not Detected	Not Detected
Freon 113	0.67	5.2	Not Detected	Not Detected
Methylene Chloride	0.67	2.4	Not Detected	Not Detected
1,1-Dichloroethane	0.67	2.8	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.67	2.7	Not Detected	Not Detected
Chloroform	0.67	3.3	Not Detected	Not Detected
1,1,1-Trichloroethane	0.67	3.7	Not Detected	Not Detected
Carbon Tetrachloride	0.67	4.3	Not Detected	Not Detected
Benzene	0.67	2.2	Not Detected	Not Detected
1,2-Dichloroethane	0.67	2.8	Not Detected	Not Detected
Trichloroethene	0.67	3.6	Not Detected	Not Detected
1,2-Dichloropropane	0.67	3.1	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.67	3.1	Not Detected	Not Detected
Toluene	0.67	2.6	0.86	3.3
trans-1,3-Dichloropropene	0.67	3.1	Not Detected	Not Detected
1,1,2-Trichloroethane	0.67	3.7	Not Detected	Not Detected
Tetrachloroethene	0.67	4.6	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	0.67	5.2	Not Detected	Not Detected
Chlorobenzene	0.67	3.1	Not Detected	Not Detected
Ethyl Benzene	0.67	3.0	Not Detected	Not Detected
m,p-Xylene	0.67	3.0	Not Detected	Not Detected
o-Xylene	0.67	3.0	Not Detected	Not Detected
Styrene	0.67	2.9	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.67	4.7	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.67	3.3	1.2	5.9
1,2,4-Trimethylbenzene	0.67	3.3	2.7	14
1,3-Dichlorobenzene	0.67	4.1	Not Detected	Not Detected
1,4-Dichlorobenzene	0.67	4.1	Not Detected	Not Detected
alpha-Chlorotoluene	0.67	3.5	Not Detected	Not Detected
1,2-Dichlorobenzene	0.67	4.1	Not Detected	Not Detected
1,3-Butadiene	0.67	1.5	Not Detected	Not Detected
Hexane	0.67	2.4	16	58
Cyclohexane	0.67	2.3	0.97	3.4
Heptane	0.67	2.8	7.5	31
Bromodichloromethane	0.67	4.6	Not Detected	Not Detected
Dibromochloromethane	0.67	5.8	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: SG-111703-CB-003

ID#: 0311320-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name: a112021 **Date of Collection:** 11/17/03
Dil. Factor: 1.34 **Date of Analysis:** 11/20/03 10:59 PM

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Cumene	0.67	3.3	Not Detected	Not Detected
Propylbenzene	0.67	3.3	Not Detected	Not Detected
Chloromethane	2.7	5.6	Not Detected	Not Detected
1,2,4-Trichlorobenzene	2.7	20	Not Detected	Not Detected
Hexachlorobutadiene	2.7	29	Not Detected	Not Detected
Acetone	2.7	6.5	3.8	9.3
Carbon Disulfide	2.7	8.5	3.0	9.6
2-Propanol	2.7	6.7	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.7	11	Not Detected	Not Detected
Vinyl Acetate	2.7	9.6	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.7	8.0	Not Detected	Not Detected
Tetrahydrofuran	2.7	8.0	Not Detected	Not Detected
1,4-Dioxane	2.7	9.8	Not Detected	Not Detected
4-Methyl-2-pentanone	2.7	11	Not Detected	Not Detected
2-Hexanone	2.7	11	Not Detected	Not Detected
Bromoform	2.7	28	Not Detected	Not Detected
4-Ethyltoluene	2.7	13	3.0	15
Methyl tert-butyl ether	2.7	9.8	Not Detected	Not Detected
Ethanol	2.7	5.1	Not Detected	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	101	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0311320-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**d112006**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/20/03 02:54 PM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.50	2.5	Not Detected	Not Detected
Freon 114	0.50	3.6	Not Detected	Not Detected
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Bromomethane	0.50	2.0	Not Detected	Not Detected
Chloroethane	0.50	1.3	Not Detected	Not Detected
Freon 11	0.50	2.8	Not Detected	Not Detected
1,1-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Freon 113	0.50	3.9	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Carbon Tetrachloride	0.50	3.2	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
1,2-Dichloropropane	0.50	2.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
1,1,2-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	0.50	3.9	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Styrene	0.50	2.2	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.50	3.5	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,3-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,3-Butadiene	0.50	1.1	Not Detected	Not Detected
Hexane	0.50	1.8	Not Detected	Not Detected
Cyclohexane	0.50	1.7	Not Detected	Not Detected
Heptane	0.50	2.1	Not Detected	Not Detected
Bromodichloromethane	0.50	3.4	Not Detected	Not Detected
Dibromochloromethane	0.50	4.3	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0311320-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**d112006**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/20/03 02:54 PM**

Compound	**Rpt. Limit (ppbv)**	**Rpt. Limit (uG/m3)**	**Amount (ppbv)**	**Amount (uG/m3)**
Cumene	0.50	2.5	Not Detected	Not Detected
Propylbenzene	0.50	2.5	Not Detected	Not Detected
Chloromethane	2.0	4.2	Not Detected	Not Detected
1,2,4-Trichlorobenzene	2.0	15	Not Detected	Not Detected
Hexachlorobutadiene	2.0	22	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
2-Propanol	2.0	5.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
Vinyl Acetate	2.0	7.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Tetrahydrofuran	2.0	6.0	Not Detected	Not Detected
1,4-Dioxane	2.0	7.3	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
2-Hexanone	2.0	8.3	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
4-Ethyltoluene	2.0	10	Not Detected	Not Detected
Methyl tert-butyl ether	2.0	7.3	Not Detected	Not Detected
Ethanol	2.0	3.8	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	97	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0311320-04B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**e112005**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/20/03 10:21 AM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Freon 12	0.50	2.5	Not Detected	Not Detected
Freon 114	0.50	3.6	Not Detected	Not Detected
Vinyl Chloride	0.50	1.3	Not Detected	Not Detected
Bromomethane	0.50	2.0	Not Detected	Not Detected
Chloroethane	0.50	1.3	Not Detected	Not Detected
Freon 11	0.50	2.8	Not Detected	Not Detected
1,1-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Freon 113	0.50	3.9	Not Detected	Not Detected
Methylene Chloride	0.50	1.8	Not Detected	Not Detected
1,1-Dichloroethane	0.50	2.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.50	2.0	Not Detected	Not Detected
Chloroform	0.50	2.5	Not Detected	Not Detected
1,1,1-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Carbon Tetrachloride	0.50	3.2	Not Detected	Not Detected
Benzene	0.50	1.6	Not Detected	Not Detected
1,2-Dichloroethane	0.50	2.0	Not Detected	Not Detected
Trichloroethene	0.50	2.7	Not Detected	Not Detected
1,2-Dichloropropane	0.50	2.3	Not Detected	Not Detected
cis-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
Toluene	0.50	1.9	Not Detected	Not Detected
trans-1,3-Dichloropropene	0.50	2.3	Not Detected	Not Detected
1,1,2-Trichloroethane	0.50	2.8	Not Detected	Not Detected
Tetrachloroethene	0.50	3.4	Not Detected	Not Detected
1,2-Dibromoethane (EDB)	0.50	3.9	Not Detected	Not Detected
Chlorobenzene	0.50	2.3	Not Detected	Not Detected
Ethyl Benzene	0.50	2.2	Not Detected	Not Detected
m,p-Xylene	0.50	2.2	Not Detected	Not Detected
o-Xylene	0.50	2.2	Not Detected	Not Detected
Styrene	0.50	2.2	Not Detected	Not Detected
1,1,2,2-Tetrachloroethane	0.50	3.5	Not Detected	Not Detected
1,3,5-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,2,4-Trimethylbenzene	0.50	2.5	Not Detected	Not Detected
1,3-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,4-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
alpha-Chlorotoluene	0.50	2.6	Not Detected	Not Detected
1,2-Dichlorobenzene	0.50	3.0	Not Detected	Not Detected
1,3-Butadiene	0.50	1.1	Not Detected	Not Detected
Hexane	0.50	1.8	Not Detected	Not Detected
Cyclohexane	0.50	1.7	Not Detected	Not Detected
Heptane	0.50	2.1	Not Detected	Not Detected
Bromodichloromethane	0.50	3.4	Not Detected	Not Detected
Dibromochloromethane	0.50	4.3	Not Detected	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0311320-04B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**s112005**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis:**	**11/20/03 10:21 AM**

Compound	Rpt. Limit (ppbv)	Rpt. Limit (uG/m3)	Amount (ppbv)	Amount (uG/m3)
Cumene	0.50	2.5	Not Detected	Not Detected
Propylbenzene	0.50	2.5	Not Detected	Not Detected
Chloromethane	2.0	4.2	Not Detected	Not Detected
1,2,4-Trichlorobenzene	2.0	15	Not Detected	Not Detected
Hexachlorobutadiene	2.0	22	Not Detected	Not Detected
Acetone	2.0	4.8	Not Detected	Not Detected
Carbon Disulfide	2.0	6.3	Not Detected	Not Detected
2-Propanol	2.0	5.0	Not Detected	Not Detected
trans-1,2-Dichloroethene	2.0	8.0	Not Detected	Not Detected
Vinyl Acetate	2.0	7.2	Not Detected	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	6.0	Not Detected	Not Detected
Tetrahydrofuran	2.0	6.0	Not Detected	Not Detected
1,4-Dioxane	2.0	7.3	Not Detected	Not Detected
4-Methyl-2-pentanone	2.0	8.3	Not Detected	Not Detected
2-Hexanone	2.0	8.3	Not Detected	Not Detected
Bromoform	2.0	21	Not Detected	Not Detected
4-Ethyltoluene	2.0	10	Not Detected	Not Detected
Methyl tert-butyl ether	2.0	7.3	Not Detected	Not Detected
Ethanol	2.0	3.8	Not Detected	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0311320-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name: d112002 **Date of Collection:** NA

Dil. Factor: 1.00 **Date of Analysis:** 11/20/03 10:15 AM

Compound	%Recovery
Freon 12	84
Freon 114	88
Vinyl Chloride	90
Bromomethane	98
Chloroethane	95
Freon 11	85
1,1-Dichloroethene	86
Freon 113	86
Methylene Chloride	90
1,1-Dichloroethane	88
cis-1,2-Dichloroethene	87
Chloroform	87
1,1,1-Trichloroethane	87
Carbon Tetrachloride	90
Benzene	88
1,2-Dichloroethane	88
Trichloroethene	88
1,2-Dichloropropane	89
cis-1,3-Dichloropropene	93
Toluene	87
trans-1,3-Dichloropropene	93
1,1,2-Trichloroethane	87
Tetrachloroethene	86
1,2-Dibromoethane (EDB)	92
Chlorobenzene	85
Ethyl Benzene	86
m,p-Xylene	87
o-Xylene	85
Styrene	95
1,1,2,2-Tetrachloroethane	85
1,3,5-Trimethylbenzene	83
1,2,4-Trimethylbenzene	81
1,3-Dichlorobenzene	82
1,4-Dichlorobenzene	83
alpha-Chlorotoluene	89
1,2-Dichlorobenzene	79
1,3-Butadiene	86
Hexane	87
Cyclohexane	86
Heptane	91
Bromodichloromethane	94
Dibromochloromethane	98

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0311320-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**d112002**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/20/03 10:15 AM**

Compound	%Recovery
Cumene	84
Propylbenzene	84
Chloromethane	93
1,2,4-Trichlorobenzene	80
Hexachlorobutadiene	80
Acetone	92
Carbon Disulfide	92
2-Propanol	95
trans-1,2-Dichloroethene .	90
Vinyl Acetate	95
2-Butanone (Methyl Ethyl Ketone)	95
Tetrahydrofuran	91
1,4-Dioxane	93
4-Methyl-2-pentanone	96
2-Hexanone	96
Bromoform	98
4-Ethyltoluene	90
Methyl tert-butyl ether	91
Ethanol	125

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	102	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0311320-05B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**s112002**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/20/03 07:47 AM**

Compound	%Recovery
Freon 12	103
Freon 114	98
Vinyl Chloride	101
Bromomethane	89
Chloroethane	118
Freon 11	105
1,1-Dichloroethene	95
Freon 113	97
Methylene Chloride	97
1,1-Dichloroethane	96
cis-1,2-Dichloroethene	97
Chloroform	99
1,1,1-Trichloroethane	102
Carbon Tetrachloride	108
Benzene	92
1,2-Dichloroethane	101
Trichloroethene	96
1,2-Dichloropropane	100
cis-1,3-Dichloropropene	105
Toluene	98
trans-1,3-Dichloropropene	102
1,1,2-Trichloroethane	99
Tetrachloroethene	97
1,2-Dibromoethane (EDB)	101
Chlorobenzene	97
Ethyl Benzene	98
m,p-Xylene	101
o-Xylene	100
Styrene	102
1,1,2,2-Tetrachloroethane	111
1,3,5-Trimethylbenzene	107
1,2,4-Trimethylbenzene	112
1,3-Dichlorobenzene	114
1,4-Dichlorobenzene	118
alpha-Chlorotoluene	120
1,2-Dichlorobenzene	116
1,3-Butadiene	95
Hexane	95
Cyclohexane	96
Heptane	99
Bromodichloromethane	106
Dibromochloromethane	107

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0311320-05B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**s112002**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/20/03 07:47 AM**

Compound	%Recovery
Cumene	101
Propylbenzene	107
Chloromethane	93
1,2,4-Trichlorobenzene	102
Hexachlorobutadiene	106
Acetone	97
Carbon Disulfide	96
2-Propanol	98
trans-1,2-Dichloroethene	96
Vinyl Acetate	92
2-Butanone (Methyl Ethyl Ketone)	99
Tetrahydrofuran	99
1,4-Dioxane	96
4-Methyl-2-pentanone	104
2-Hexanone	103
Bromoform	112
4-Ethyltoluene	107
Methyl tert-butyl ether	83
Ethanol	115

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	105	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0311320-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**d112004**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 11/20/03 11:36 AM**

Compound	%Recovery
Freon 12	93
Freon 114	96
Vinyl Chloride	100
Bromomethane	101
Chloroethane	104
Freon 11	86
1,1-Dichloroethene	82
Freon 113	85
Methylene Chloride	86
1,1-Dichloroethane	78
cis-1,2-Dichloroethene	89
Chloroform	86
1,1,1-Trichloroethane	86
Carbon Tetrachloride	94
Benzene	92
1,2-Dichloroethane	88
Trichloroethene	91
1,2-Dichloropropane	88
cis-1,3-Dichloropropene	93
Toluene	88
trans-1,3-Dichloropropene	98
1,1,2-Trichloroethane	88
Tetrachloroethene	92
1,2-Dibromoethane (EDB)	86
Chlorobenzene	86
Ethyl Benzene	87
m,p-Xylene	82
o-Xylene	80
Styrene	103
1,1,2,2-Tetrachloroethane	82
1,3,5-Trimethylbenzene	74
1,2,4-Trimethylbenzene	69 Q
1,3-Dichlorobenzene	79
1,4-Dichlorobenzene	74
alpha-Chlorotoluene	104
1,2-Dichlorobenzene	74
1,3-Butadiene	88
Hexane	86
Cyclohexane	85
Heptane	84
Bromodichloromethane	88
Dibromochloromethane	93

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0311320-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name: d112004 **Date of Collection:** NA

Dil. Factor: 1.00 **Date of Analysis:** 11/20/03 11:36 AM

Compound	%Recovery
Cumene	91
Propylbenzene	68
Chloromethane	96
1,2,4-Trichlorobenzene	73
Hexachlorobutadiene	70
Acetone	91
Carbon Disulfide	93
2-Propanol	92
trans-1,2-Dichloroethene	97
Vinyl Acetate	87
2-Butanone (Methyl Ethyl Ketone)	95
Tetrahydrofuran	90
1,4-Dioxane	94
4-Methyl-2-pentanone	91
2-Hexanone	86
Bromoform	78
4-Ethyltoluene	74
Methyl tert-butyl ether	92
Ethanol	97

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0311320-06B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**s112004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis:**	**11/20/03 09:24 AM**

Compound	%Recovery
Freon 12	118
Freon 114	115
Vinyl Chloride	117
Bromomethane	102
Chloroethane	150 Q
Freon 11	113
1,1-Dichloroethene	97
Freon 113	102
Methylene Chloride	102
1,1-Dichloroethane	92
cis-1,2-Dichloroethene	107
Chloroform	105
1,1,1-Trichloroethane	108
Carbon Tetrachloride	123
Benzene	104
1,2-Dichloroethane	109
Trichloroethene	110
1,2-Dichloropropane	104
cis-1,3-Dichloropropene	110
Toluene	107
trans-1,3-Dichloropropene	114
1,1,2-Trichloroethane	107
Tetrachloroethene	112
1,2-Dibromoethane (EDB)	101
Chlorobenzene	107
Ethyl Benzene	105
m,p-Xylene	102
o-Xylene	99
Styrene	115
1,1,2,2-Tetrachloroethane	108
1,3,5-Trimethylbenzene	94
1,2,4-Trimethylbenzene	92
1,3-Dichlorobenzene	103
1,4-Dichlorobenzene	100
alpha-Chlorotoluene	124
1,2-Dichlorobenzene	99
1,3-Butadiene	104
Hexane	102
Cyclohexane	102
Heptane	102
Bromodichloromethane	106
Dibromochloromethane	110

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0311320-06B

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**a112004**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 11/20/03 08:24 AM**	

Compound	**%Recovery**
Cumene	111
Propylbenzene	84
Chloromethane	101
1,2,4-Trichlorobenzene	84
Hexachlorobutadiene	85
Acetone	107
Carbon Disulfide	105
2-Propanol	109
trans-1,2-Dichloroethene	112
Vinyl Acetate	102
2-Butanone (Methyl Ethyl Ketone)	108
Tetrahydrofuran	106
1,4-Dioxane	104
4-Methyl-2-pentanone	109
2-Hexanone	105
Bromoform	92
4-Ethyltoluene	89
Methyl tert-butyl ether	113
Ethanol	129

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	103	70-130

CHAIN OF CUSTODY RECORD

CC: S. Scrocchi

0311320

CONESTOGA-ROVERS & ASSOCIATES
2055 Niagara Falls Blvd., Suite 3
Niagara Falls, N.Y. 14304 (716) 297-6150

SHIPPED TO (Laboratory Name): Air Toxics, LTD.

REFERENCE NUMBER: 18657
Parcel 2, Seneca St.
Buffalo, NY.

SAMPLER'S SIGNATURE:

PRINTED NAME: Dwight Oscar

SEC. No.	DATE	TIME	SAMPLE No.	SAMPLE TYPE	No. of Containers	TO-14 PARAMETERS	REMARKS MW 11-19 03
01A	11/17/03	1000	SG-111703-CB-001	VAPOR	1	X	NOTE; 3.5" Hg
02A	↓	1030	SG-111703-CB-002	"	1	X	SUMMA 0.2 Hg
03A	↓	1100	SG-111703-CB-003	"	1	X	CANISTER 0.0" Hg
							SAMPLES

CUSTODY SEAL INTACT?
Y N [✓ NONE] TEMP.

TOTAL NUMBER OF CONTAINERS 3

HEALTH/CHEMICAL HAZARDS

RELINQUISHED BY: ①	DATE: 11/17/03 TIME: 1650	RECEIVED BY: ①	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ②	DATE: TIME:
RELINQUISHED BY: ③	DATE: TIME:	RECEIVED BY: ③	DATE: TIME:

METHOD OF SHIPMENT: FED EX

WAY BILL No.

White	–Fully Executed Copy
Yellow	–Receiving Laboratory Copy
Pink	–Shipper Copy
Goldenrod	–Sampler Copy

SAMPLE TEAM:
C. Barron
D. Oscar

RECEIVED FOR LABORATORY BY: Laurel Thomas AT
DATE: 11/18/03 TIME: 1000

No N 2969

1001 (C) APR 28/97(NF) REV. 0 (F-15)

CONESTOGA-ROVERS
& ASSOCIATES

2371 George Urban Blvd., Depew, New York 14043
Telephone: 716·206·0202 Facsimile: 716·206·0201
www.CRAworld.com

February 13, 2004

Reference No. 15867

Mr. David P. Locey
Environmental Engineer I
NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
270 Michigan Avenue
Buffalo, New York 14203-2999

Dear Mr. Locey:

Re: Indoor Air Analytical Results
Pizza Hut - 2137 Seneca Street
VCP Site #V-00370-9
GEFF Property #4936-0611

Further to our letter dated January 7, 2004, indoor air sampling was conducted at the above-referenced site on January 13, 2004. Three samples were collected over an 8-hour period at locations adjacent to the soil vapor sample locations within the building.

The indoor air samples were collected approximately 4 feet above the floor using Summa™ canisters and were submitted to Air Toxics Ltd. for analysis of volatile organic compounds (VOCs) by Method TO-14. The sample locations, sample collection height, sampling procedures, and analytical detection limits were discussed with Mr. Matt Forcucci of the NYSDOH prior to sampling and were verbally approved by him. A copy of the analytical laboratory report is presented in Attachment A. Table 1 presents a summary of the detected compounds. Table 1 also shows the corresponding soil gas results (from December 2003) and OSHA permissible exposure limits (PELs).

As shown on Table 1, detected VOC concentrations in the utility room and food preparation area samples ranged from 2.5 µg/m³ to 45 µg/m³. No VOCs were detected in the Dining Area sample. The detected VOC concentrations are at least two orders of magnitude below the respective OSHA PELs.

Due to the low concentrations of VOCs detected, we do not believe that the indoor air quality has been significantly impacted. Therefore, we are recommending to our client that no further action is necessary to address indoor air quality. However, we are recommending, and our client has agreed, that final confirmatory sampling should be conducted when the building ventilation system is re-activated. This sampling event will repeat the indoor air sampling described herein, and we expect that it will demonstrate that the air quality in this building continues to be acceptable for future use. We will notify you when the confirmatory air sampling is completed.

Should you have any questions on the above, please do not hesitate to contact us.

Yours truly,

Carol Barron

Carol F. Barron

CFB/dl/2
Attachments

cc M. Doster, NYSDEC
A. English, NYSDEC
M. Forcucci, NYSDOH
M. Schulz, GE Franchise Finance Corp.
J. Brown, Hodgson Russ

TABLE 1

Summary of Compounds Detected in Soil Gas
Parcel 2 - Seneca Street, Buffalo, New York

Compound	*Units*	*OSHA PEL*	*Utility Room*		*Food Prep Area*		*Dining Area*	
			Soil Gas	*Indoor Air*	*Soil Gas*	*Indoor Air*	*Soil Gas*	*Indoor Air*
Freon 12	uG/m3	4,950,000	14	3.5 U	6	3.9 U	35	3.9 U
Freon 11	uG/m3	5,600,000	12	4.0 U	3.8 U	4.4 U	14	4.4 U
Chloroform	uG/m3	240,000	3.8 U	3.4 U	3.3 U	3.9	3.3 U	5.3 U
Benzene	uG/m3	314	17	2.5	48	2.5 U	2.2 U	2.5 U
Toluene	uG/m3	385,000$^{(1)}$	8.9	45	16	3.0 U	3.3	3.0 U
m,p-Xylene	uG/m3	435,000	6.8	3.1 U	8.4	3.4 U	3.0 U	3.4 U
o-Xylene	uG/m3	435,000	3.4	3.1 U	2.9 U	3.4 U	3.0 U	3.4 U
1,3,5-Trimethylbenzene	uG/m3	NA	3.8 U	3.5 U	5.2	3.9 U	5.9	3.9 U
1,2,4-Trimethylbenzene	uG/m3	NA	7.2	3.5 U	12	23 U	14	23 U
Hexane	uG/m3	1,800,000	110	3.3	53	2.8 U	58	2.8 U
Cyclohexane	uG/m3	1,050,000	110	2.4 U	14	2.7 U	3.4	2.7 U
Heptane	uG/m3	2,000,000	130	2.9 U	24	3.2 U	31	3.2 U
Acetone	uG/m3	610,000	19	8.3	19	7.4J	9.3	7.5 U
4-Ethyltoluene	uG/m3	NA	15 U	14 U	13 U	15 U	9.6	15 U
Tetrachloroethene	uG/m3	339,000$^{(1)}$	11	6	120	6.4	4.6 U	5.3 U

Notes:

U	Compound not detected at or above specified limit.
PEL	Permissible Exposure Limit, worker exposure over an 8-hour period.
(1)	Recommended PEL
NA	Not available.

ATTACHMENT A

ANALYTICAL LABORATORY DATA REPORT

@ **AIR TOXICS LTD.**

AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific
E-mail to:samplereceiving@airtoxics.com

@ **AIR TOXICS LTD.**

AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0401183

Work Order Summary

CLIENT:
Ms. Susan Scrocchi
Conestoga-Rovers Associates
2371 George Urban Blvd.
Depew, NY 14042

BILL TO:
Ms. Susan Scrocchi
Conestoga-Rovers Associates
2371 George Urban Blvd.
Depew, NY 14042

PHONE: 716-206-0202

FAX: 716-206-0201

DATE RECEIVED: 1/15/04

DATE COMPLETED: 1/28/04

P.O. # 24233

PROJECT # 15867 Pizza Hut Seneca St, Buffalo, NY

CONTACT: Betty Chu

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.
01A	VS1-011304-DO	Modified TO-14A	4.0 "Hg
02A	VS2-011304-DO	Modified TO-14A	4.0 "Hg
03A	VS3-011304-DO	Modified TO-14A	1.0 "Hg
04A	Lab Blank	Modified TO-14A	NA
05A	CCV	Modified TO-14A	NA
06A	LCS	Modified TO-14A	NA

CERTIFIED BY: Linda L. Freeman

DATE: 01/28/04

Laboratory Director

Certfication numbers: AR DEQ - 03-084-0, CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892
Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/03, Expiration date: 06/30/04
Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-14A
Conestoga-Rovers Associates
Workorder# 0401183

Three 6 Liter Summa Canister (100% Certified) samples were received on January 15, 2004. The laboratory performed analysis via modified EPA Method TO-14A using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis. See the data sheets for the reporting limits for each compound.

Method modifications taken to run these samples include:

Requirement	*TO-14A*	*ATL Modifications*
Continuing Calibration criteria	</= 30% Difference	</= 30% Difference with two allowed out to </= 40% Difference; flag and narrate outliers
Initial Calibration criteria	RSD<30%	RSD</=30%, two compounds allowed up to 40%.
Moisture control	Nafion Dryer	Multisorbent trap
Blank acceptance criteria	<0.20 ppbv	<Reporting Limit
Primary ions for Quantification	Freon 114: 85, Carbon Tetrachloride: 117, Trichloroethene: 130, Ethyl Benzene, m,p- and o-Xylene: 91	Freon 114: 135, Carbon Tetrachloride: 119, Trichloroethene: 95, Ethyl Benzene, m,p- and o-Xylene: 106
Dilutions for Initial Calibration	Dynamic dilutions or static using canisters	Syringe dilutions
BFB absolute abundance criteria	Within 10% of that from previous day.	CCV internal standard area counts are compared to ICAL, corrective action for > 40% D
Sample Load Volume	400 mL	Varied to 200 mL

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one individual analytical file.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction no performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

AIR TOXICS LTD.

SAMPLE NAME: VS1-011304-DO

ID#: 0401183-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name: s011607 **Date of Collection:** 1/13/04
Dil. Factor: 1.55 **Date of Analysis:** 1/16/04 04:17 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.78	Not Detected	3.9	Not Detected
Freon 114	0.78	Not Detected	5.5	Not Detected
Vinyl Chloride	0.78	Not Detected	2.0	Not Detected
Bromomethane	0.78	Not Detected	3.0	Not Detected
Chloroethane	0.78	Not Detected	2.1	Not Detected
Freon 11	0.78	Not Detected	4.4	Not Detected
1,1-Dichloroethene	0.78	Not Detected	3.1	Not Detected
Freon 113	0.78	Not Detected	6.0	Not Detected
Methylene Chloride	0.78	Not Detected	2.7	Not Detected
1,1-Dichloroethane	0.78	Not Detected	3.2	Not Detected
cis-1,2-Dichloroethene	0.78	Not Detected	3.1	Not Detected
Chloroform	0.78	Not Detected	3.8	Not Detected
1,1,1-Trichloroethane	0.78	Not Detected	4.3	Not Detected
Carbon Tetrachloride	0.78	Not Detected	5.0	Not Detected
Benzene	0.78	Not Detected	2.5	Not Detected
1,2-Dichloroethane	0.78	Not Detected	3.2	Not Detected
Trichloroethene	0.78	Not Detected	4.2	Not Detected
1,2-Dichloropropane	0.78	Not Detected	3.6	Not Detected
cis-1,3-Dichloropropene	0.78	Not Detected	3.6	Not Detected
Toluene	0.78	Not Detected	3.0	Not Detected
trans-1,3-Dichloropropene	0.78	Not Detected	3.6	Not Detected
1,1,2-Trichloroethane	0.78	Not Detected	4.3	Not Detected
Tetrachloroethene	0.78	Not Detected	5.3	Not Detected
1,2-Dibromoethane (EDB)	0.78	Not Detected	6.0	Not Detected
Chlorobenzene	0.78	Not Detected	3.6	Not Detected
Ethyl Benzene	0.78	Not Detected	3.4	Not Detected
m,p-Xylene	0.78	Not Detected	3.4	Not Detected
o-Xylene	0.78	Not Detected	3.4	Not Detected
Styrene	0.78	Not Detected	3.4	Not Detected
1,1,2,2-Tetrachloroethane	0.78	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	0.78	Not Detected	3.9	Not Detected
1,2,4-Trimethylbenzene	0.78	Not Detected	3.9	Not Detected
1,3-Dichlorobenzene	0.78	Not Detected	4.7	Not Detected
1,4-Dichlorobenzene	0.78	Not Detected	4.7	Not Detected
alpha-Chlorotoluene	0.78	Not Detected	4.1	Not Detected
1,2-Dichlorobenzene	0.78	Not Detected	4.7	Not Detected
1,3-Butadiene	0.78	Not Detected	1.7	Not Detected
Hexane	0.78	Not Detected	2.8	Not Detected
Cyclohexane	0.78	Not Detected	2.7	Not Detected
Heptane	0.78	Not Detected	3.2	Not Detected
Bromodichloromethane	0.78	Not Detected	5.3	Not Detected
Dibromochloromethane	0.78	Not Detected	6.7	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: VS1-011304-DO

ID#: 0401183-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name: s011607 **Date of Collection:** 1/13/04
Dil. Factor: 1.55 **Date of Analysis:** 1/16/04 04:17 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Cumene	0.78	Not Detected	3.9	Not Detected
Propylbenzene	0.78	Not Detected	3.9	Not Detected
Chloromethane	3.1	Not Detected	6.5	Not Detected
1,2,4-Trichlorobenzene	3.1	Not Detected	23	Not Detected
Hexachlorobutadiene	3.1	Not Detected	34	Not Detected
Acetone	3.1	Not Detected	7.5	Not Detected
Carbon Disulfide	3.1	Not Detected	9.8	Not Detected
2-Propanol	3.1	Not Detected	7.7	Not Detected
trans-1,2-Dichloroethene	3.1	Not Detected	12	Not Detected
Vinyl Acetate	3.1	Not Detected	11	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.1	Not Detected	9.3	Not Detected
Tetrahydrofuran	3.1	Not Detected	9.3	Not Detected
1,4-Dioxane	3.1	Not Detected	11	Not Detected
4-Methyl-2-pentanone	3.1	Not Detected	13	Not Detected
2-Hexanone	3.1	Not Detected	13	Not Detected
Bromoform	3.1	Not Detected	32	Not Detected
4-Ethyltoluene	3.1	Not Detected	15	Not Detected
Methyl tert-butyl ether	3.1	Not Detected	11	Not Detected
Ethanol	3.1	Not Detected	5.9	Not Detected

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	99	70-130

AIR TOXICS LTD.

SAMPLE NAME: VS2-011304-DO

ID#: 0401183-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**s011608**	**Date of Collection:**	**1/13/04**
Dil. Factor:	**1.55**	**Date of Analysis:**	**1/16/04 04:58 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.78	Not Detected	3.9	Not Detected
Freon 114	0.78	Not Detected	5.5	Not Detected
Vinyl Chloride	0.78	Not Detected	2.0	Not Detected
Bromomethane	0.78	Not Detected	3.0	Not Detected
Chloroethane	0.78	Not Detected	2.1	Not Detected
Freon 11	0.78	Not Detected	4.4	Not Detected
1,1-Dichloroethene	0.78	Not Detected	3.1	Not Detected
Freon 113	0.78	Not Detected	6.0	Not Detected
Methylene Chloride	0.78	Not Detected	2.7	Not Detected
1,1-Dichloroethane	0.78	Not Detected	3.2	Not Detected
cis-1,2-Dichloroethene	0.78	Not Detected	3.1	Not Detected
Chloroform	0.78	0.79	3.8	3.9
1,1,1-Trichloroethane	0.78	Not Detected	4.3	Not Detected
Carbon Tetrachloride	0.78	Not Detected	5.0	Not Detected
Benzene	0.78	Not Detected	2.5	Not Detected
1,2-Dichloroethane	0.78	Not Detected	3.2	Not Detected
Trichloroethene	0.78	Not Detected	4.2	Not Detected
1,2-Dichloropropane	0.78	Not Detected	3.6	Not Detected
cis-1,3-Dichloropropene	0.78	Not Detected	3.6	Not Detected
Toluene	0.78	Not Detected	3.0	Not Detected
trans-1,3-Dichloropropene	0.78	Not Detected	3.6	Not Detected
1,1,2-Trichloroethane	0.78	Not Detected	4.3	Not Detected
Tetrachloroethene	0.78	0.93	5.3	6.4
1,2-Dibromoethane (EDB)	0.78	Not Detected	6.0	Not Detected
Chlorobenzene	0.78	Not Detected	3.6	Not Detected
Ethyl Benzene	0.78	Not Detected	3.4	Not Detected
m,p-Xylene	0.78	Not Detected	3.4	Not Detected
o-Xylene	0.78	Not Detected	3.4	Not Detected
Styrene	0.78	Not Detected	3.4	Not Detected
1,1,2,2-Tetrachloroethane	0.78	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	0.78	Not Detected	3.9	Not Detected
1,2,4-Trimethylbenzene	0.78	Not Detected	3.9	Not Detected
1,3-Dichlorobenzene	0.78	Not Detected	4.7	Not Detected
1,4-Dichlorobenzene	0.78	Not Detected	4.7	Not Detected
alpha-Chlorotoluene	0.78	Not Detected	4.1	Not Detected
1,2-Dichlorobenzene	0.78	Not Detected	4.7	Not Detected
1,3-Butadiene	0.78	Not Detected	1.7	Not Detected
Hexane	0.78	Not Detected	2.8	Not Detected
Cyclohexane	0.78	Not Detected	2.7	Not Detected
Heptane	0.78	Not Detected	3.2	Not Detected
Bromodichloromethane	0.78	Not Detected	5.3	Not Detected
Dibromochloromethane	0.78	Not Detected	6.7	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: VS2-011304-DO

ID#: 0401183-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**s011608**	**Date of Collection:**	**1/13/04**
Dil. Factor:	**1.55**	**Date of Analysis:**	**1/16/04 04:58 PM**

Compound	**Rpt. Limit (ppbv)**	**Amount (ppbv)**	**Rpt. Limit (uG/m3)**	**Amount (uG/m3)**
Cumene	0.78	Not Detected	3.9	Not Detected
Propylbenzene	0.78	Not Detected	3.9	Not Detected
Chloromethane	3.1	Not Detected	6.5	Not Detected
1,2,4-Trichlorobenzene	3.1	Not Detected	23	Not Detected
Hexachlorobutadiene	3.1	Not Detected	34	Not Detected
Acetone	3.1	3.1 J	7.5	7.4 J
Carbon Disulfide	3.1	Not Detected	9.8	Not Detected
2-Propanol	3.1	Not Detected	7.7	Not Detected
trans-1,2-Dichloroethene	3.1	Not Detected	12	Not Detected
Vinyl Acetate	3.1	Not Detected	11	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.1	Not Detected	9.3	Not Detected
Tetrahydrofuran	3.1	Not Detected	9.3	Not Detected
1,4-Dioxane	3.1	Not Detected	11	Not Detected
4-Methyl-2-pentanone	3.1	Not Detected	13	Not Detected
2-Hexanone	3.1	Not Detected	13	Not Detected
Bromoform	3.1	Not Detected	32	Not Detected
4-Ethyltoluene	3.1	Not Detected	15	Not Detected
Methyl tert-butyl ether	3.1	Not Detected	11	Not Detected
Ethanol	3.1	Not Detected	5.9	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: VS3-011304-DO

ID#: 0401183-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**s011609**	**Date of Collection:**	**1/13/04**
Dil. Factor:	**1.39**	**Date of Analysis:**	**1/16/04 05:39 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.70	Not Detected	3.5	Not Detected
Freon 114	0.70	Not Detected	4.9	Not Detected
Vinyl Chloride	0.70	Not Detected	1.8	Not Detected
Bromomethane	0.70	Not Detected	2.7	Not Detected
Chloroethane	0.70	Not Detected	1.9	Not Detected
Freon 11	0.70	Not Detected	4.0	Not Detected
1,1-Dichloroethene	0.70	Not Detected	2.8	Not Detected
Freon 113	0.70	Not Detected	5.4	Not Detected
Methylene Chloride	0.70	Not Detected	2.4	Not Detected
1,1-Dichloroethane	0.70	Not Detected	2.8	Not Detected
cis-1,2-Dichloroethene	0.70	Not Detected	2.8	Not Detected
Chloroform	0.70	Not Detected	3.4	Not Detected
1,1,1-Trichloroethane	0.70	Not Detected	3.8	Not Detected
Carbon Tetrachloride	0.70	Not Detected	4.4	Not Detected
Benzene	0.70	0.77	2.2	2.5
1,2-Dichloroethane	0.70	Not Detected	2.8	Not Detected
Trichloroethene	0.70	Not Detected	3.8	Not Detected
1,2-Dichloropropane	0.70	Not Detected	3.3	Not Detected
cis-1,3-Dichloropropene	0.70	Not Detected	3.2	Not Detected
Toluene	0.70	12	2.7	45
trans-1,3-Dichloropropene	0.70	Not Detected	3.2	Not Detected
1,1,2-Trichloroethane	0.70	Not Detected	3.8	Not Detected
Tetrachloroethene	0.70	0.87	4.8	6.0
1,2-Dibromoethane (EDB)	0.70	Not Detected	5.4	Not Detected
Chlorobenzene	0.70	Not Detected	3.2	Not Detected
Ethyl Benzene	0.70	Not Detected	3.1	Not Detected
m,p-Xylene	0.70	Not Detected	3.1	Not Detected
o-Xylene	0.70	Not Detected	3.1	Not Detected
Styrene	0.70	Not Detected	3.0	Not Detected
1,1,2,2-Tetrachloroethane	0.70	Not Detected	4.8	Not Detected
1,3,5-Trimethylbenzene	0.70	Not Detected	3.5	Not Detected
1,2,4-Trimethylbenzene	0.70	Not Detected	3.5	Not Detected
1,3-Dichlorobenzene	0.70	Not Detected	4.2	Not Detected
1,4-Dichlorobenzene	0.70	Not Detected	4.2	Not Detected
alpha-Chlorotoluene	0.70	Not Detected	3.6	Not Detected
1,2-Dichlorobenzene	0.70	Not Detected	4.2	Not Detected
1,3-Butadiene	0.70	Not Detected	1.6	Not Detected
Hexane	0.70	0.92	2.5	3.3
Cyclohexane	0.70	Not Detected	2.4	Not Detected
Heptane	0.70	Not Detected	2.9	Not Detected
Bromodichloromethane	0.70	Not Detected	4.7	Not Detected
Dibromochloromethane	0.70	Not Detected	6.0	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: VS3-011304-DO

ID#: 0401183-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**s011609**	**Date of Collection:**	**1/13/04**
Dil. Factor:	**1.39**	**Date of Analysis:**	**1/16/04 05:39 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Cumene	0.70	Not Detected	3.5	Not Detected
Propylbenzene	0.70	Not Detected	3.5	Not Detected
Chloromethane	2.8	Not Detected	5.8	Not Detected
1,2,4-Trichlorobenzene	2.8	Not Detected	21	Not Detected
Hexachlorobutadiene	2.8	Not Detected	30	Not Detected
Acetone	2.8	3.4	6.7	8.3
Carbon Disulfide	2.8	Not Detected	8.8	Not Detected
2-Propanol	2.8	Not Detected	6.9	Not Detected
trans-1,2-Dichloroethene	2.8	Not Detected	11	Not Detected
Vinyl Acetate	2.8	Not Detected	9.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.8	Not Detected	8.3	Not Detected
Tetrahydrofuran	2.8	Not Detected	8.3	Not Detected
1,4-Dioxane	2.8	Not Detected	10	Not Detected
4-Methyl-2-pentanone	2.8	Not Detected	12	Not Detected
2-Hexanone	2.8	Not Detected	12	Not Detected
Bromoform	2.8	Not Detected	29	Not Detected
4-Ethyltoluene	2.8	Not Detected	14	Not Detected
Methyl tert-butyl ether	2.8	Not Detected	10	Not Detected
Ethanol	2.8	9.0	5.3	17

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0401183-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**s011605**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 1/16/04 12:24 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.6	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Bromomethane	0.50	Not Detected	2.0	Not Detected
Chloroethane	0.50	Not Detected	1.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Freon 113	0.50	Not Detected	3.9	Not Detected
Methylene Chloride	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Chloroform	0.50	Not Detected	2.5	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.8	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.2	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.8	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
1,2-Dibromoethane (EDB)	0.50	Not Detected	3.9	Not Detected
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.2	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected	3.5	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.5	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.5	Not Detected
1,3-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
alpha-Chlorotoluene	0.50	Not Detected	2.6	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected	3.0	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Heptane	0.50	Not Detected	2.1	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
Dibromochloromethane	0.50	Not Detected	4.3	Not Detected

AIR TOXICS LTD.

SAMPLE NAME: Lab Blank

ID#: 0401183-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**s011605**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 1/16/04 12:24 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Cumene	0.50	Not Detected	2.5	Not Detected
Propylbenzene	0.50	Not Detected	2.5	Not Detected
Chloromethane	2.0	Not Detected	4.2	Not Detected
1,2,4-Trichlorobenzene	2.0	Not Detected	15	Not Detected
Hexachlorobutadiene	2.0	Not Detected	22	Not Detected
Acetone	2.0	Not Detected	4.8	Not Detected
Carbon Disulfide	2.0	Not Detected	6.3	Not Detected
2-Propanol	2.0	Not Detected	5.0	Not Detected
trans-1,2-Dichloroethene	2.0	Not Detected	8.0	Not Detected
Vinyl Acetate	2.0	Not Detected	7.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	6.0	Not Detected
Tetrahydrofuran	2.0	Not Detected	6.0	Not Detected
1,4-Dioxane	2.0	Not Detected	7.3	Not Detected
4-Methyl-2-pentanone	2.0	Not Detected	8.3	Not Detected
2-Hexanone	2.0	Not Detected	8.3	Not Detected
Bromoform	2.0	Not Detected	21	Not Detected
4-Ethyltoluene	2.0	Not Detected	10	Not Detected
Methyl tert-butyl ether	2.0	Not Detected	7.3	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	100	70-130

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0401183-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name: s011602 **Date of Collection:** NA

Dil. Factor: 1.00 **Date of Analysis:** 1/16/04 10:26 AM

Compound	%Recovery
Freon 12	100
Freon 114	105
Vinyl Chloride	98
Bromomethane	94
Chloroethane	99
Freon 11	104
1,1-Dichloroethene	99
Freon 113	98
Methylene Chloride	101
1,1-Dichloroethane	96
cis-1,2-Dichloroethene	97
Chloroform	98
1,1,1-Trichloroethane	99
Carbon Tetrachloride	106
Benzene	92
1,2-Dichloroethane	100
Trichloroethene	96
1,2-Dichloropropane	97
cis-1,3-Dichloropropene	102
Toluene	96
trans-1,3-Dichloropropene	103
1,1,2-Trichloroethane	98
Tetrachloroethene	98
1,2-Dibromoethane (EDB)	101
Chlorobenzene	98
Ethyl Benzene	99
m,p-Xylene	97
o-Xylene	98
Styrene	105
1,1,2,2-Tetrachloroethane	102
1,3,5-Trimethylbenzene	96
1,2,4-Trimethylbenzene	98
1,3-Dichlorobenzene	97
1,4-Dichlorobenzene	97
alpha-Chlorotoluene	95
1,2-Dichlorobenzene	96
1,3-Butadiene	96
Hexane	97
Cyclohexane	98
Heptane	99
Bromodichloromethane	103
Dibromochloromethane	105

AIR TOXICS LTD.

SAMPLE NAME: CCV

ID#: 0401183-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**s011602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis:**	**1/16/04 10:26 AM**

Compound	**%Recovery**
Cumene	84
Propylbenzene	80
Chloromethane	83
1,2,4-Trichlorobenzene	96
Hexachlorobutadiene	98
Acetone	96
Carbon Disulfide	98
2-Propanol	97
trans-1,2-Dichloroethene	95
Vinyl Acetate	86
2-Butanone (Methyl Ethyl Ketone)	102
Tetrahydrofuran	97
1,4-Dioxane	92
4-Methyl-2-pentanone	101
2-Hexanone	99
Bromoform	107
4-Ethyltoluene	99
Methyl tert-butyl ether	80
Ethanol	112

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0401183-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**s011604**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 1/16/04 11:45 AM**

Compound	%Recovery
Freon 12	97
Freon 114	89
Vinyl Chloride	96
Bromomethane	106
Chloroethane	85
Freon 11	108
1,1-Dichloroethene	107
Freon 113	103
Methylene Chloride	92
1,1-Dichloroethane	107
cis-1,2-Dichloroethene	84
Chloroform	110
1,1,1-Trichloroethane	125
Carbon Tetrachloride	128
Benzene	102
1,2-Dichloroethane	115
Trichloroethene	115
1,2-Dichloropropane	118
cis-1,3-Dichloropropene	128
Toluene	100
trans-1,3-Dichloropropene	116
1,1,2-Trichloroethane	109
Tetrachloroethene	105
1,2-Dibromoethane (EDB)	115
Chlorobenzene	107
Ethyl Benzene	98
m,p-Xylene	100
o-Xylene	98
Styrene	114
1,1,2,2-Tetrachloroethane	114
1,3,5-Trimethylbenzene	100
1,2,4-Trimethylbenzene	99
1,3-Dichlorobenzene	109
1,4-Dichlorobenzene	109
alpha-Chlorotoluene	138 Q
1,2-Dichlorobenzene	107
1,3-Butadiene	101
Hexane	96
Cyclohexane	98
Heptane	104
Bromodichloromethane	108
Dibromochloromethane	108

AIR TOXICS LTD.

SAMPLE NAME: LCS

ID#: 0401183-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**s011604**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 1/16/04 11:45 AM**

Compound	**%Recovery**
Cumene	118
Propylbenzene	128
Chloromethane	74
1,2,4-Trichlorobenzene	80
Hexachlorobutadiene	78
Acetone	95
Carbon Disulfide	90
2-Propanol	97
trans-1,2-Dichloroethene	88
Vinyl Acetate	99
2-Butanone (Methyl Ethyl Ketone)	100
Tetrahydrofuran	94
1,4-Dioxane	101
4-Methyl-2-pentanone	108
2-Hexanone	115
Bromoform	114
4-Ethyltoluene	120
Methyl tert-butyl ether	84
Ethanol	88

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	102	70-130

AIR TOXICS LTD.
AN ENVIRONMENTAL ANALYTICAL LABORATORY

CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action of any kind related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX: (916) 985-1020

Page 1 of 1

Contact Person SUSAN SCROCCHI
Company CONESTOGA - ROVERS & ASSOC
Address 2055 N.F. BLVD City N.F. State NY Zip 14304
Phone 716-297-6150 FAX 716-297-2265
Collected By: Signature

Project info:
P.O. #
Project # 15967
Project Name PIZZA HUT, SENECA ST, BUFFALO, NY.

Turn Around Time:
☒ Normal
☐ Rush ________ Specify

mw 1/16/04

Lab I.D.	Field Sample I.D.	Date & Time	Analyses Requested	Canister Pressure / Vacuum		
				Initial	Final	Receipt
01A	VS1-011304-DDO	1/13/04 1740	TO-14	27.5	5.5	4.0"Hg
02A	VS2-011304-DDO	1/13/04 1743	TO-14	27.0	6.5	4.0"Hg
03A	VS3-011304-DDO	1/13/04 1747	TO-14	27.0	5.0	1.0"Hg

Relinquished By: (Signature) Date/Time 1/14/03 1800
Received By: (Signature) Date/Time
Relinquished By: (Signature) Date/Time
Received By: (Signature) Date/Time
Relinquished By: (Signature) Date/Time
Received By: (Signature) Date/Time ATL 1/15/04 940

Notes:

Lab Use Only

Shipper Name	Air Bill #	Opened By:	Temp. (°C)	Condition	Custody Seals Intact?	Work Order #
E.Z	844379005 1502	CH	—	Good	Yes No [✓ None]	0401183

Form 1202 rev. 02