FILE COPY

HILL ENVIRONMENTAL GROUP, INC.
Environmental & Engineering Services

July 2, 2003

Mr. James Malcolm, P.E.
NYSDEC – Div. of Env. Remediation
Remedial Bureau C
625 Broadway (11th floor)
Albany, NY 12233-7014

Subject: Work Plan for Phase II Site Investigation Activities
Beacon Terminal, Beacon, New York
Site No.: V00443-3

Dear Jamie:

On behalf of Beacon Terminal Associates, L.P., Hill Environmental Group, Inc. (HILL) has prepared this Scope of Work (SOW) for additional site investigation activities at the Beacon Terminal site. This SOW is based on several conversations between us, and addresses two of the five Areas of Concern (AOCs) discussed in the Site Investigation Report dated October 2002. The Beacon Terminal site (the site) and the two AOCs addressed by this SOW are shown on Figure 1. The SOW also includes installation and sampling of three monitoring wells. The wells will be used to further characterize groundwater quality and flow direction at the facility, to further investigate AOC 3 (located in the southern portion of the site) and to determine if any off-site impacts to Fishkill Creek are occurring due to any contamination at the site.

The proposed scope of work is presented below. All field work will be conducted in accordance with the Site Specific Health and Safety Plan included in the Final Investigation Work Plan dated February 2002.

AOC 1: Toluene UST Area

Soil Vapor Sampling

Toluene concentrations ranging from 1.4 to 12 parts per million by volume (ppmv) were detected in soil vapor samples collected beneath the floor in Building 5, in the area adjacent to AOC 1. To determine the areal extent of the elevated concentrations of toluene in soil gas, it is proposed that soil vapor samples be collected at the 7 locations shown on Figure 2.

At each sampling location, it is proposed that a nominal 12-inch diameter hole be opened in the concrete floor using an electric jackhammer. Based on earlier work, it is

19 Brookside Avenue, Pennington, NJ 08534-9998
Phone: (609) 730-1205 Fax: (609) 730-1222

anticipated that soils encountered below the slab will include a 12-inch layer of soil/gravel mix overlying silty clay.

Soil vapor samples will be collected using a hammer-driven probe. The probe is a hollow tube with sample ports shielded by the drive point and rod that is inside the tube. The probe will be driven to a depth of 1.0 to 1.5 feet below the slab and the drive point removed (exposing the approximately 6 inches of perforations in the outside of the probe). The soil surface will be sealed with a grout/water mixture around the probe shaft. The hose barb (leading to the sample ports) will be connected to a vacuum pump that will be adjusted to remove approximately 0.1 to 0.2 liters per minute of soil gas. After 3 to 4 minutes of purging, the pump discharge will be connected to a Summa canister for sample collection.

Samples slated for analysis will be placed in a cooler (not containing ice), sealed for shipment, and delivered to Accutest Laboratories in Dayton, NJ. Air samples will be analyzed for TCL VOCs using EPA Method TO-14. (Note that the laboratory recommends that no field QA/QC samples are appropriate for vapor sampling.) All sampling and analysis procedures employed during this event shall comply with the QA/QC protocols described in the Final Investigation Work Plan dated February 2002. HILL will prepare a DUSR for the Phase II work and provide a written explanation for any data deficiencies, analytical protocol deviations, and quality control problems.

Soil Sampling

In order to determine if soil contamination associated with AOC 1 is present beneath Building 5, soil borings will be advanced at two locations adjacent to the former toluene UST area, as shown on Figure 2. In addition, two additional borings (one at either end of Building 5 as shown on Figure 2) will be advanced to more generally assess soil quality under the building. The borings will be advanced using a portable direct-push rig (either a "Gator" or a "Dingo" style rig) that can be set up inside of Building 5.

Continuous air monitoring for carbon monoxide (CO) will be conducted. If possible, exhaust from the rig will be vented directly outside the building. As necessary, all building doors will be opened, and an industrial grade fan will be utilized to enhance ventilation. As per the recommendation of the NYSDEC Project Manager, the CO concentration should not exceed 25 ppm. In the event of CO concentrations above 25 ppm, the rig will be turned off, and not restarted until CO concentrations have lowered below 25 ppm. (Note: because CO is not mentioned in the site-specific HASP, an OSHA CO Fact Sheet will be appended to the HASP.)

The soil borings will be advanced to the water table or bedrock refusal, whichever is first encountered or, if neither is encountered, to a minimum of 15 feet. Continuous split-spoon samples will be collected. Soils will be screened using a photoionization (PID) meter, and two samples will typically be collected for laboratory analyses: one at the depth showing the highest PID reading, and one at the bottom of the boring. HILL will log cores in accordance with the Unified Soils Classification System (USCS) and include

a description of color, texture, moisture content, odor, staining, and PID headspace reading.

The borings will be extended 5 feet beyond the deepest zone showing a positive PID reading. Soil samples will be analyzed for target compound list (TCL) VOCs and if necessary, other parameters (TCL semi-volatile organic compound (SVOCs), TAL metals, fingerprinting) as determined by field conditions.

NOTE: Based on field observations (evidence of staining, odor, presence of non-aqueous phase liquid, or elevated PID readings) and at the discretion of the NYSDEC Project Manager and the HILL field staff, additional borings may be installed, as per the above specifications.

AOC 3: Oil-Impacted Soil between Buildings 2 & 3

A soil boring advanced during the July 2002 field work encountered a light non-aqueous phase liquid (LNAPL) at the water table at AOC 3 (in the vicinity of former abovegrade mineral oil tanks). While the analytical results did not indicate the presence of target organic compounds (volatile or semi-volatile organic compounds), additional work is proposed to determine the nature and extent of the LNAPL and any associated contamination.

It is proposed that a portable direct push rig (the one used for soil sampling under Building 5) be used to advance soil borings at AOC 3. The number and location of borings will be determined in the field by the NYSDEC Project Manager and HILL field staff. Although the primary objective of this effort is to determine the extent of the LNAPL it is anticipated that soil will be collected for laboratory analysis (TCL VOCs, TCL SVOCs, and TAL metals), and, if possible, one LNAPL sample will be collected for laboratory characterization (i.e., "fingerprinting")..

Note: HILL will be prepared to use a backhoe for digging test pits if the direct-push rig proves ineffective in obtaining soil samples from the saturated zone.

Monitoring Well Installation and Sampling

HILL proposes the installation of three monitoring wells at the locations shown on Figure 3. The wells will be constructed of 2-inch diameter PVC casing and riser, with 10 feet of screen straddling the groundwater table. The wells will be installed using a hollow-stem auger rig. After installation, the wells will be developed (pumping with surging if necessary) until a clear flow of water is obtained. Development water will be collected and stored on-site in drums pending laboratory analysis.

After a minimum of one week, the wells will be sampled using low-flow sampling techniques (as specified in the April 1996 EPA document "Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures" by Puls and Barcelona) with a

peristaltic pump. Samples will be analyzed for TCL VOCs and SVOCs, and TAL metals including cyanide.

Purge water will be combined with development water. Based on sampling results, the water will either be emptied on-site as directed by the NYSDEC Project Manager, or properly transported and disposed to a permitted off-site facility. Proper disposal of all investigation derived waste (drill cuttings, purge water, development water, etc.) will be performed within 60 days of generation. HILL will provide copies of all waste manifests and documentation related to the disposal of IDW as attachments to the Site Investigation Report.

Site Investigation Report

HILL will prepare an addendum to the existing Site Investigation Report that documents all field methodologies and results for the Phase II work. The addendum will provide the following information:

- Project narrative that summarizes the tasks and activities;
- Revised site map with surveyed sampling locations;
- Description of each soil sample, including physical appearance, color, and USCS field classification;
- Data summary tables of physical and analytical results;
- A copy of the DUSR and any additional notes regarding the sample results;
- Copy of field notes, boring logs, and other related information.

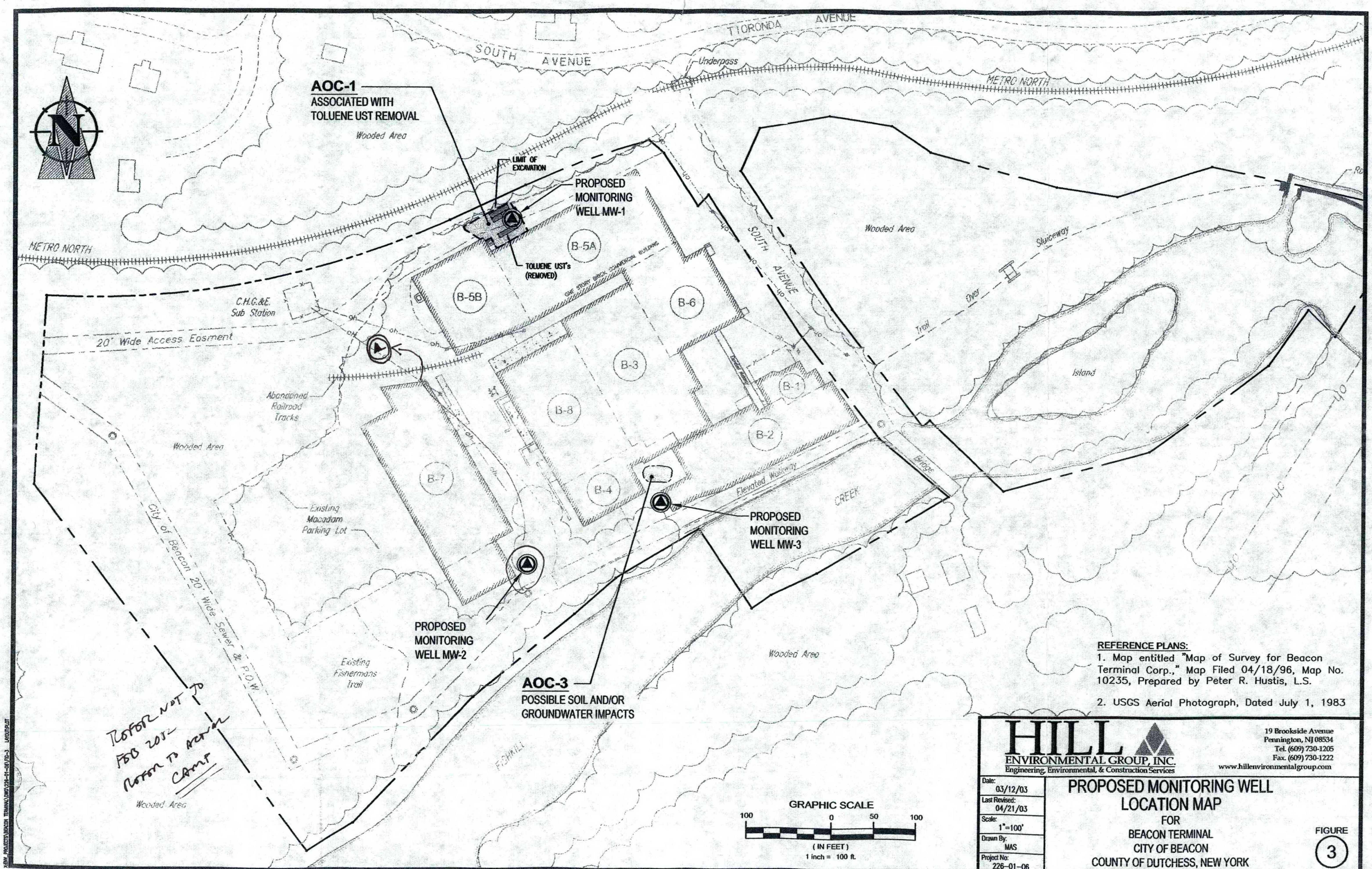
If you have any questions or concerns about this Scope of Work, do not hesitate to give me a call.

Sincerely,

HILL ENVIRONMENTAL GROUP, INC.

J. Gregory Hill, P.E., P.G.
Project Manager

cc: John Steinberg, Beacon Terminal Associates
John Olm, NYSDOH
Ram Pergadia, NYSDEC Region 3
Denise D'Ambrosio, NYSDEC – DEE/EFU Region 3



TIORONDA AVENUE
SOUTH AVENUE
Underpass
METRO NORTH
AOC-1
ASSOCIATED WITH
TOLUENE UST REMOVAL
Wooded Area
LIMIT OF EXCAVATION
PROPOSED MONITORING WELL MW-1
TOLUENE UST's (REMOVED)
METRO NORTH
B-5A
B-5B
B-6
B-3
B-1
B-8
B-2
B-7
B-4
ONE STORY BRICK COMMERCIAL BUILDING
C.H.G.&E. Sub Station
20' Wide Access Easment
SOUTH AVENUE
Wooded Area
Sluiceway
Trail Over
Island
Abandoned Railroad Tracks
Wooded Area
Elevated Walkway
CREEK
Bridge
Existing Macadam Parking Lot
City of Beacon 20' Wide Sewer & R.O.W.
PROPOSED MONITORING WELL MW-3
PROPOSED MONITORING WELL MW-2
Existing Fishermans Trail
Wooded Area
AOC-3
POSSIBLE SOIL AND/OR GROUNDWATER IMPACTS
FISHKILL
Wooded Area
REFERENCE PLANS:
1. Map entitled "Map of Survey for Beacon Terminal Corp.," Map Filed 04/18/96, Map No. 10235, Prepared by Peter R. Hustis, L.S.
2. USGS Aerial Photograph, Dated July 1, 1983
GRAPHIC SCALE
100 0 50 100
(IN FEET)
1 inch = 100 ft.
HILL ENVIRONMENTAL GROUP, INC.
Engineering, Environmental, & Construction Services
19 Brookside Avenue
Pennington, NJ 08534
Tel. (609) 730-1205
Fax. (609) 730-1222
www.hillenvironmentalgroup.com
Date: 03/12/03
Last Revised: 04/21/03
Scale: 1"=100'
Drawn By: MAS
Project No: 226-01-06
PROPOSED MONITORING WELL LOCATION MAP
FOR
BEACON TERMINAL
CITY OF BEACON
COUNTY OF DUTCHESS, NEW YORK
FIGURE
3

Wooded

Meacham Drive

Edge of Trees

Area of Former
Toluene UST
Excavation

Meacham Drive

Stairs

AIR-1
[1.4]

AIR-2
[7.8]

AIR-3
[4.1]

AIR-4
[12]

BUILDING 5B

BUILDING 5A

SYMBOL LEGEND

- ⊙ Air Sample Location (Samples collected 07/01/02)
- [1.0] Toluene Concentrations (ppbV)
- ⊕ Proposed Soil Vapor Sampling Locations
- ⊠ Proposed Soil Boring Locations

GRAPHIC SCALE

20' 0 10' 20'

(IN FEET)

1 inch = 20' ft.

HILL ENVIRONMENTAL GROUP, INC.
Engineering, Environmental, & Construction Services

19 Brookside Avenue
Pennington, NJ 08534
Tel. (609) 730-1205
Fax. (609) 730-1222
www.hillenvironmentalgroup.com

Date:	03/12/03
Last Revised:	04/21/03
Scale:	1"=20'
Drawn By:	MAS
Project No:	226-01-06

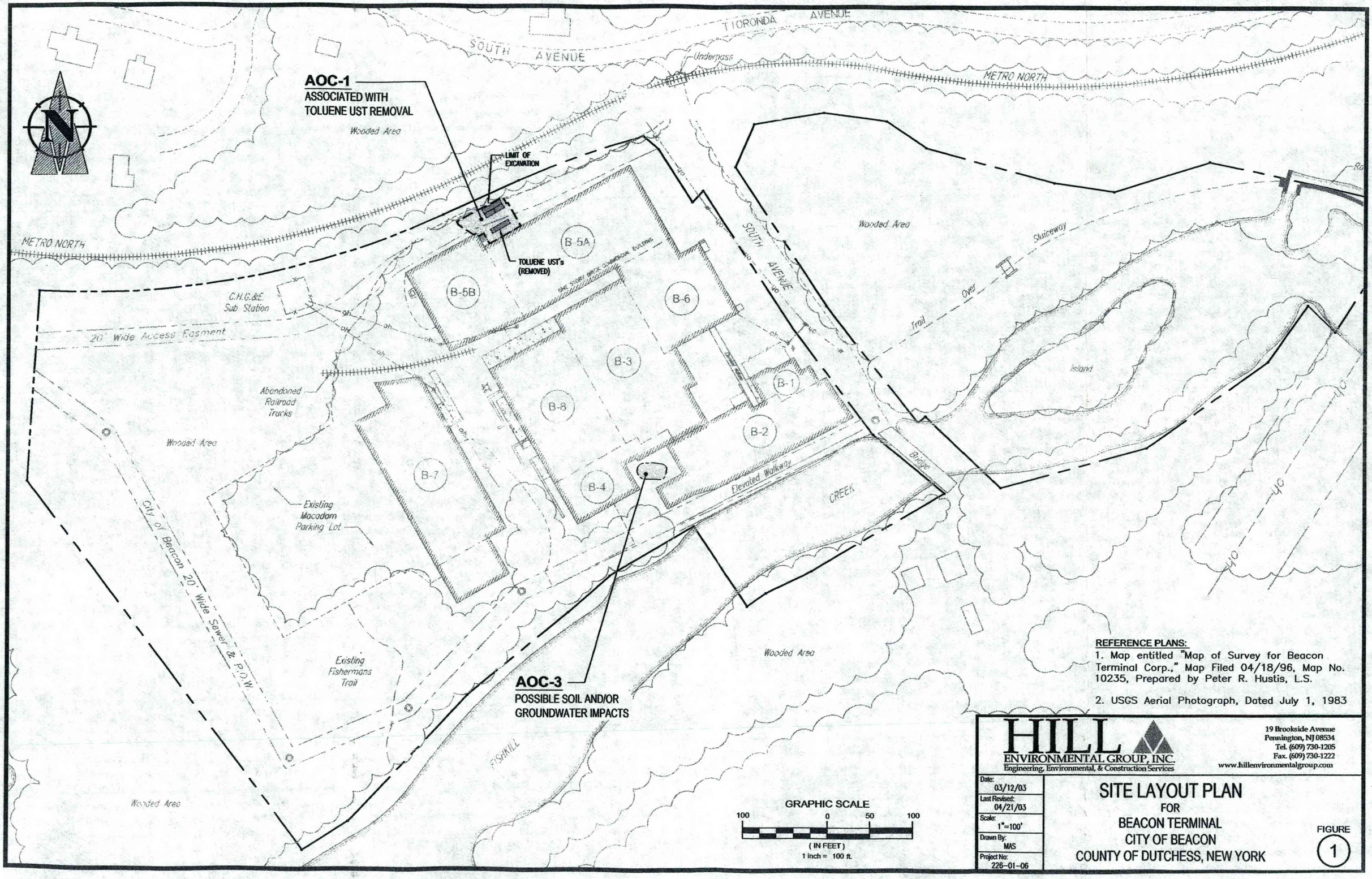
SOIL VAPOR AND SOIL SAMPLE LOCATIONS

FOR

BEACON TERMINAL
CITY OF BEACON
COUNTY OF DUTCHESS, NEW YORK

FIGURE 2

X:\HV_PROJECTS\BEACON TERMINAL\DWG\226-01-06\FIG-2 LAYOUT.PLOT



REFERENCE PLANS:

1. Map entitled "Map of Survey for Beacon Terminal Corp.," Map Filed 04/18/96, Map No. 10235, Prepared by Peter R. Hustis, L.S.

2. USGS Aerial Photograph, Dated July 1, 1983

HILL ENVIRONMENTAL GROUP, INC.
Engineering, Environmental, & Construction Services

19 Brookside Avenue
Pennington, NJ 08534
Tel. (609) 730-1205
Fax. (609) 730-1222
www.hillenvironmentalgroup.com

Date:	03/12/03
Last Revised:	04/21/03
Scale:	1"=100'
Drawn By:	MAS
Project No:	226-01-06

SITE LAYOUT PLAN
FOR
BEACON TERMINAL
CITY OF BEACON
COUNTY OF DUTCHESS, NEW YORK

FIGURE 1

HILL ENVIRONMENTAL GROUP, INC.
Environmental & Engineering Services

SITE INVESTIGATION REPORT

Beacon Terminal
South Avenue
Beacon, NY

(Volume 1 of 2)

Prepared for:
Beacon Terminal Associates, L.P.

Prepared by:
HILL ENVIRONMENTAL GROUP, INC.

J. Gregory Hill, P.E., P.G.
Technical Director

Andrea McGahan, P.G.
Manager, Environmental Projects

October 2002

19 Brookside Avenue, Pennington, NJ 08534-9998
Phone: (609) 730-1205 Fax: (609) 730-1222

Table of Contents

HILL GROUP

Tables

Figures

Appendices

HILL GROUP

1.0 INTRODUCTION

Hill Environmental Group, Inc. (HILL) was retained by Beacon Terminal Associates, L.P. (BTA) to perform a Site Investigation (SI) of the Beacon Terminal property in Beacon, NY ("the site"). The purpose of this SI was to investigate five areas of concern (AOCs) identified in the February 2002 Investigation Workplan.

Previously HILL removed four toluene underground storage tanks (toluene USTs) at the site (two 2,000-gallon and two 4,000-gallon tanks). These four tanks, plus an additional 550-gallon tank (previous contents unknown) not associated with the toluene USTs, were removed in October 2000. Contaminated soil associated with the toluene USTs was excavated and stockpiled on site. Based on post-excavation sampling results, not all toluene-impacted soils were removed.

In July 2001, BTA entered into a Voluntary Cleanup Agreement with the New York State Department of Environmental Conservation (NYSDEC) as an Innocent Owner Volunteer.

2.0 SITE DESCRIPTION

2.1 Setting

The Beacon Terminal property is located on South Avenue in the City of Beacon, Dutchess County, New York (Figure 1). The Dutchess County Tax office identifies the 4.7-acre property as Map 5954, Block 16, Lot 808256, Parcel C.

The site contains eight vacant buildings formerly used for various industrial and/or warehouse purposes. The remainder of the site includes paved parking areas and undeveloped grassland and woodland. The south side of the property is bounded by Fishkill Creek. A rail line borders the property to the north; further north beyond the railroad is scattered residential housing. East and west of the property are undeveloped woodlands.

Figure 2 shows these site features and also includes the locations of the five former USTs. (The four toluene USTs are grouped together on the north side of Building 5A, while the fifth UST is on the west end of Building 5B).

Note: Additional detail concerning site history is available in the Phase 1 Reports completed for this property: Phase I Environmental Site Assessment (The Chazen Companies, 7/93) and Phase I Environmental Audit (Ecosystems Strategies, Inc., 1/96).

2.2 Areas of Concern (AOCs)

Based on the 1996 Phase I report and the field work described in Section 3 of the February 2002 Investigation Workplan, five areas of environmental concern were identified and addressed during this site investigation:

- AOC 1: The toluene-impacted soils left in place after excavation activities associated with the toluene USTs
- AOC 2: Potentially elevated lead and nickel concentrations in soil associated with the 550-gallon UST
- AOC 3: An area of possible organic contamination of soil and/or groundwater between Buildings 2 & 4
- AOC 4: Possible subsurface debris area west of the parking lot behind Building 7
- AOC 5: Possible fuel dispenser area (i.e., possible UST) at the northeast corner of Building 5.

Figure 2 shows the location of the above AOCs.

3.0 DESCRIPTION OF FIELD ACTIVITIES

Based on the approved Investigation Work Plan submitted to the NYSDEC, field sampling activities were undertaken July 17 and 18, 2002. Table 1 lists all samples collected and analyses performed. The following sections describe field activities performed at each AOC.

3.1 AOC-1: Toluene USTs

3.1.1 Off-site Disposal of USTs

The previously removed and cleaned-out USTs (two 2000-gallon, two 4,000-gallon and one 550-gallon) tanks were crushed and hauled to an off-site scrap dealer.

3.1.2 Soil Pile Consolidation

As per discussions with the NYSDEC ~~Case~~ PROJECT Manager, the various soil piles present on the site (containing excavated soil from the toluene UST removal) were consolidated into a single pile on the parking lot behind Building 7. The pile (approximately 60' x 80' x 4') was covered with a single, heavy-duty 100' x 100' tarp. ~ 700 yd^3.

3.1.3 Impacted Soil

Soils impacted by toluene were removed in October 2000 concurrent with the toluene UST removals. The excavation was backfilled with clean fill (brown clay and sand, minor gravel) topped with a layer of gravel. As discussed in the Investigation Work Plan, based on post-excavation sampling, areas with soils remaining above Recommended Soil Clean Objectives per NYSDEC TAGM 4046 (RSCOs) in the vicinity of the toluene

USTs include:

- Localized areas to the south of the excavation adjacent to the Building 5 foundation
- Vertically, below the excavation

These areas of toluene-impacted soils were addressed as follows:

Adjacent to Building 5: The total depth of the toluene UST excavation was approximately ~~eight~~ 8' feet; the bottom of the Building 5 foundation was not exposed. To assess whether toluene-impacted soils could be a source of toluene soil vapors below Building 5, soil vapor sampling was conducted as discussed in Section 3.1.4 below.

Vertical extent: To determine the vertical extent of toluene-impacted soils, four soil borings were advanced through the fill material and into the underlying clay at the locations shown on Figure 3. Soil samples were collected using a direct-push rig, as follows:

- The probe was advanced to a total depth of 16 feet. Continuous four-foot soil cores with dedicated plastic sleeves were collected.
- Soils were logged by the on-site geologist and screened using a PID meter (Appendix A - Soil Boring Logs).
- Soil core sampling and field screening with a PID meter continued until no evidence of contamination was noted.
- Based on the Investigation Work Plan, two soil samples were to be collected for laboratory analysis: one from the soil that showed the highest PID reading, and one from the bottom of the boring. This sampling protocol was inadvertently not followed, and samples were typically collected at the highest PID reading, and at the lowest positive PID reading. However, as discussed in Section 4.1.1, the objective of determining the depth of toluene impacts was met.

CONTAMINATION @ DEPTH ?

The samples for laboratory testing were analyzed for the NYSDEC STARS list of volatile organics. Results are summarized in Table 2, and discussed in Section 4.1.1.

3.1.4 Soil Vapor

To assess whether toluene-impacted soils could be a source of toluene vapors below the Building 5 concrete slab, four (4) borings were advanced through the concrete floor inside Building 5, at the locations shown on Figure 4. The choice of locations was made in consultation with Ms. Dawn Hetrick of the New York State Department of Health (NYSDOH).

At each sampling location, a 12-inch diameter hole was advanced through the concrete floor using an electric jack-hammer. Soils encountered below the slab include a 12-inch layer of soil/gravel mix overlying silty clay.

Soil vapor samples were collected using a hammer-driven probe. The probe is a hollow tube with sample ports shielded by the drive point and rod that is inside the tube. The probe was driven to a depth of 1.0-1.5 feet below the slab and the drive point removed (exposing the approximately 6" of perforations in the outside of the probe). The soil surface was sealed with a grout/water mixture around the probe shaft. (In boring 1, the probe was driven somewhat deeper, approximately 2.0-2.5 feet). The hose barb (leading to the sample ports) was connected to a vacuum pump that was adjusted to pump 0.1-0.2 liters per minute of air. After 3-4 minutes of purge pumping, the pump discharge was connected to a tedlar bag for sample collection.

DATA SUBMITTED TO DEC FOR REVIEW

Air samples were collected for laboratory analysis of benzene, toluene, ethylbenzene, m,p-xylene, and o-xylene. Results are summarized in Table 3, and discussed in Section 4.1.2.

DOWN-NFA REC'D

3.1.5 Groundwater

In order to determine if groundwater associated with AOC 1 is impacted by VOCs, groundwater samples were collected at locations on the south side of Building 5 as shown on Figure 5. These locations are in the presumed down-gradient direction, i.e., towards the Fishkill Creek. Samples were collected at or just below the water table.

At designated groundwater sampling locations, a direct-push rig was used to collect continuous four-foot soil cores using dedicated plastic sleeves. The soil in each core was described, and the soil screened using a PID. When saturated conditions were encountered, the rig was used to install a temporary monitoring well (a three-quarter inch PVC well casing with a 5-foot screen). At each groundwater sampling point, a groundwater grab sample was obtained using a disposal bailer.

TECHNIQUE WAS NOT ENTIRELY SUCCESSFUL - FURTHER WORK INSTRUCTIONS =

These samples were analyzed for the NYSDEC Stars list of volatile organics. Results are summarized on Table 4, and discussed in Section 4.1.3.

3.2 AOC-2: 550-Gallon UST

Potentially elevated lead and nickel concentrations associated with the 550-gallon UST were found based on post-excavation sampling performed concurrently with tank removal. In order to further evaluate this occurrence, a direct-push rig was used to collect continuous four-foot soil cores using dedicated sleeves at the three locations shown on Figure 6. Samples were collected for laboratory analysis of lead and nickel at 5 feet below grade (the approximate depth of the bottom of the tank) and at 8 feet below grade.

ADD TO REVIEW

In addition, two soil sampling locations were selected in the field for the collection of background near-surface soil samples. The locations were in the western portion of the site, away from any areas with disturbed soils. Soil samples were collected from 1' – 2' below ground surface, and analyzed for nickel and lead.

HILL GROUP

Results are summarized on Table 5 and discussed in Section 4.2.

3.3 AOC-3: Area between Buildings 2 and 4

At AOC 3, previous investigations indicated the presence of possible soil and/or groundwater impacts, likely from releases of mineral and/or lubricating oil reportedly stored in this vicinity (1996 Ecosystems Strategies, Inc. Phase 1 Report). To investigate AOC-3, a direct-push rig was used to collect continuous four-foot soil cores using dedicated sleeves at the approximate location shown on Figure 5. At this location, the following occurred:

The soil in each core was described, and the soil screened using a PID. The sample showing the highest PID reading (or visual evidence of contamination) was collected for laboratory analysis.

When saturated conditions were encountered, the rig was used to install a temporary monitoring well (a three-quarter inch PVC well casing with a 5-foot screen). A groundwater grab sample was obtained using a disposal bailer.

Soil and groundwater samples from this location were analyzed for volatile organics +10, semi-volatile organics +25, and PP metals. Metals were analyzed from both unfiltered and filtered groundwater samples (filtered by the laboratory). Results are summarized on Tables 4 and 6 and discussed in Section 4.3.

3.4 AOC-4: Debris Area

At AOC 4, three test pits were excavated with a backhoe to investigate suspected areas of subsurface debris. One soil sample from each test pit was collected, and soil samples for Volatile Organics +10, Semi-volatile Organics +25, PP metals, PCBs, pesticides and herbicides. Results are summarized on Table 6.

DEPTHS OF SAMPLES?

The Investigation Work Plan called for a groundwater sample downgradient from AOC-4, using a direct-push rig. However, at three locations, bedrock was encountered before groundwater; therefore no groundwater sample was obtained.

3.5 AOC-5: Possible Fuel Dispenser and UST

The Investigation Work Plan states that an investigation would be undertaken of a possible fuel dispenser area (and therefore UST) near the northeast corner of Building 5. When this area was inspected, the possible "fuel dispenser" was a former concrete pad with a "no smoking" sign on the wall above the pad. This area was investigated thoroughly by backhoe when the toluene tanks were removed in October 2000 (a pit approximately 8' deep was dug at this location). No evidence of a fuel dispenser or UST was discovered.✓

4.0 RESULTS

Analytical results and field observations are presented below. Laboratory analytical data packages are in Volume II, Appendix C.

4.1 AOC-1: Toluene USTs

4.1.1 Soils

Table 2 presents the soil sampling results associated with the determination of the vertical extent of toluene-impacted soil at the toluene UST area. Figure 3 shows the sampling locations with posted toluene results. Soil logs are located in Appendix A.

As discussed previously in Section 3.1.2, the sampling protocol outlined in the Investigation Work Plan was inadvertently not followed, and a sample for laboratory analysis was not collected from the bottom of each boring. However, field screening data was collected that delineated the vertical extent of toluene-impacted soil; therefore the objective of the sampling was met based on the data collected.

Table 2 shows both the laboratory analytical data and the field-collected photoionization detector (PID) results. As is apparent, there is a relatively poor correlation between PID readings and analytical results. This is due to the fact that samples for laboratory analysis were not necessarily collected at the same location as the PID readings, and that it is likely that toluene migration into the clay soils was irregular, such that toluene concentrations vary greatly over small distances (both vertically and horizontally).

However, note that in each boring, four consecutive non-detect readings from the PID were obtained for the last four feet of each boring, indicating a consistent depth of toluene impact of 12 feet. Based on the soil logs, between 7 and 8 feet of fill is in place, and therefore, between 4 and 5 feet of toluene-impacted soils (above RSCOs) are in place below the fill.

4.1.2 Soil Vapor

Table 3 presents the soil vapor sampling results from under Building 5. Toluene was detected at concentrations ranging from 1.4 to 12 parts per million by volume (ppmV). Note that no odors were apparent inside the building and the odor threshold of toluene (according to the USEPA Air Toxics Website) is 2.9 ppmV. The NIOSH Recommended Exposure Limit (REL) for toluene is 100 ppmV. The REL is a time-weighted average concentration for up to a 10-hour workday during a 40-hour week.

4.1.3 Groundwater

Table 4 shows groundwater data collected at the site. Samples TP-1 and TP-2 are associated with AOC-1. The location of these two groundwater samples is shown on Figure 5.

As can be seen, TP-2 showed non-detect for volatile organics, and TP-1 showed only a toluene detection of 0.26 µg/l, below the NYSDEC Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations ("TOGS 1.1.1") value of 5 µg/l.

4.2 AOC-2: 550-Gallon UST

Table 5 presents the analytical data associated with soil sampling at AOC-2; Figure 6 shows the sampling locations with posted values. Soil logs are in Appendix A.

Table 5 shows that site-specific background values for lead were 16 and 17.9 mg/kg; and for nickel were 30.2 mg/kg and 33.1 mg/kg. Lead concentrations for AOC-2 ranged from 10.8 mg/kg to 18.4 mg/kg; nickel concentrations for AOC-2 ranged from 19.9 mg/kg to 35.5 mg/kg. Comparison of the background concentrations with those obtained from AOC-2 show that the AOC-2 lead and nickel concentrations are consistent with site background concentrations.

Note: Although one lead concentration and two nickel concentrations from AOC-2 were slightly higher than the highest respective background concentration of those constituents, they are still consistent with the general magnitude of background values.

4.3 AOC-3: Area between Buildings 2 and 4

4.3.1 Soil

Table 6 presents the analytical data associated with soil sampling at AOC-3 (sample 3-SE-1); Figure 5 shows the sampling location. The soil log of 3-SE-1 is in Appendix A.

As shown on the soil log, oily soil was observed at the water table zone in boring 3-SE-1. The soil sample for boring 3-SE-1 was collected from this oily zone.

In spite of the presence of oil, the analytical results show the presence of no volatile or semi-volatile organic compounds. As discussed in Section 3.3, this oily material is likely mineral and/or lubricating oil, as described in the 1996 Phase 1 Report.

The presence of no target semi-volatile compounds is consistent with mineral oil, which consists entirely of aliphatic (straight and branched chained) hydrocarbons. In addition, according to the Phase 1 Report, four above-ground 3,000-gallon tanks contained the oil at AOC-3. It is more likely that mineral oil (which has numerous industrial process uses) would be stored in large quantities than a lubricating oil. (Note: numerous semi-volatile tentatively-identified compounds (TICs) were noted in the laboratory report (a total of 12.3 ppm of TICs). Most were identified as "alkanes" which is a broad class of hydrocarbon compounds that includes aliphatics.)

Table 6 shows the following metals elevated over RSCOs: chromium, copper and zinc. Note that chromium is within the range of New York State background concentrations, while copper is within the range of Eastern US background concentrations.

4.3.2 Groundwater

Table 4 presents the analytical data associated with groundwater sampling at AOC-3 (sample 3-SE-1); Figure 5 shows the sampling location.

During sample collection, no free phase oil was observed.

No volatile organics were detected, and the only semi-volatile organic compound detected was naphthalene at a concentration well below the TOGS 1.1.1 value.

Of the metals, nickel was detected in both filtered and unfiltered samples, below TOGS 1.1.1 values. Zinc was also detected in the unfiltered sample, below the TOGS 1.1.1 value.

4.4 AOC-4: Debris Area

4.4.1 Soil

Table 6 presents the analytical data associated with soil sampling at AOC-4 (samples TESTP-1, 2 & 3). Figure 5 shows the sampling location.

Materials encountered in each test pit were described in the tables below. Note that the "brown and white coarse fibers" are bulk processed fibers (either natural or synthetic) in loose bundles or clumps. In total, the three test pits unearthed an estimated 6 cubic yards of fibrous debris.

Test Pit 1 Description

Test Pit 1 (flat ground) (Sample depth = 2-3 feet, under a rusted metal 5-gallon pail)		
Depth Interval	**Soil Type**	**Comments**
0-1	Light brown silt with roots	Trace debris (glass, metal, fiber)
1-2	Light brown silt	Trace debris (glass, metal, fiber)
2-3	Light brown silt	75% debris (metal, brown and white coarse fibers)
3-4	(no soil)	100% debris (Brown and white coarse fibers)
4-5	(no soil)	100% debris (Brown and white coarse fibers)
5-6	(no soil)	100% debris (Brown and white coarse fibers)
6-7	Medium brown silty clay	Some rock fragments

Test Pit 1 Analytical Data

No volatile organics, herbicides or PCBs were detected. As shown in Table 6, several semi-volatile compounds were detected above RSCOs. These compounds are all polynuclear aromatic hydrocarbons (PAHs). These compounds are commonly found associated with asphalt, coal and coal ash (cinders). The concentrations detected (1 mg/kg – 4 mg/kg) could be explained by minor amounts of asphalt, coal or coal ash.

Of pesticides, 4,4'-DDT, Chlordane and Dieldrin were detected. Chlordane and 4,4'-DDT concentrations are below RSCOs. The Dieldrin concentration is slightly above the RSCO.

Of the metals, chromium, copper, lead, and zinc were detected above the RSCO, although the chromium concentration is only slightly elevated and is well within the Eastern States Background concentration for chromium. Copper, lead and zinc are all elevated above Eastern States background.

Generally speaking, the concentrations detected in the Test Pit 1 soil sample are consistent with urban fill.

Test Pit 2 Description

Test Pit 2 (flat ground) (Sample depth = 6-7 feet, under rusted metal debris)		
Depth Interval	**Soil Type**	**Comments**
0-1	Light brown silt with roots	Trace debris (glass, metal, fiber, wood)
1-2	Light brown silt	50% Debris (glass, metal, fiber)
2-3	Light brown silt	50% Debris (metal, fiber, rubber, wood)
3-4	Light brown silt	75% Debris (metal, fiber, rubber, wood)
4-5	Light brown silt	75% Debris (metal, masonry, wood)
5-6	Light brown silt	75% Debris (metal, masonry, wood)
6-7	Light brown silt	75% Debris (metal, rubber, masonry, wood)
7-8	Medium brown silty clay	50% Debris (metal, masonry, wood)
8-9	Medium brown silty clay	With rock fragments

Test Pit 2 Analytical Data

No volatile organics, herbicides or PCBs were detected. As shown in Table 6, several semi-volatile compounds were detected above RSCOs. These compounds are all PAHs. These compounds are commonly found associated with asphalt, coal and coal ash (cinders). The concentrations detected (less than 1 mg/kg) can be explained by minor amounts of asphalt, coal or coal ash.

Of pesticides, only Dieldrin was detected; the Dieldrin concentration is below the RSCO. Of the metals, beryllium chromium, copper, lead, and zinc were detected above the RSCO, although the chromium, copper and beryllium concentrations are within the

Eastern States Background concentrations for these compounds. Lead and zinc are elevated above Eastern States background.

Generally speaking, the concentrations present in the Test Pit 2 soil sample is consistent with urban fill.

Test Pit 3 Description

Test Pit 3 (slope from parking lot above) (Sample depth = 2-3 feet, under metal and rubber debris)		
Depth Interval	**Soil Type**	**Comments**
0-1	Light brown silt with roots	Trace debris (glass, metal, rubber)
1-2	Light brown silt	10% Debris (glass, metal)
2-3	Light brown silt	10% Debris (metal, rubber, wood)
3-4	Light brown silt	10% Debris (metal, masonry)
4-5	Light brown silt with roots	Trace debris (glass, metal, wood)
5-6	Medium brown silty clay	With rock fragments

Test Pit 3 Analytical Data

No volatile organics, semi-volatile organics, herbicides, pesticides or PCBs were detected. As shown in Table 6, several metals (beryllium, chromium, copper and zinc) were detected above RSCOs, although the beryllium, chromium and copper concentrations are within the Eastern States Background concentrations for these compounds. Only zinc is elevated above Eastern States background, but is at concentrations consistent with urban fill.

4.5 AOC-5: Possible Fuel Dispenser and UST

As discussed in Section 3.5, no sampling was performed at AOC-5 because it was determined that no fuel dispenser or UST was present.

5.0 QA/QC AND COMMUNITY AIR MONITORING

5.1 Equipment Decontamination Procedures

The only sampling equipment that required decontamination was the direct push point and rods. These were washed in an Alconox solution and rinsed with potable water in between each sampling location.

Sample cores used disposable sleeves and groundwater samples were collected using disposable bailers and tubing.

5.2 Analytical Laboratory

Integrated Analytical Laboratories, LLC (IAL, Certification No. 14751), Randolph, NJ was used for analytical services (except for the air samples which were analyzed by IAL's subcontractor, Air Toxics, Ltd.). IAL is NYSDOH ELAP CLP-certified, and produced Category B deliverables.

5.3 Sample Handling

All soil and groundwater samples were stored in laboratory-provided glassware, packed in an iced cooler, and accompanied by Chain of Custody documentation. The temperature in the cooler was monitored with a temperature blank.

5.4 QA/QC Sampling and Analysis

No field blanks were necessary because all sampling was performed with disposable equipment. One trip blank was utilized to assess possible sample contamination during sample transport. In addition to the trip blank, the laboratory utilizes method blanks and other control procedures to evaluate data quality.

The Quality Control Officer at IAL reviewed and signed all data reports to ensure that the reporting format met applicable requirements and that proper laboratory

No blank contamination or other QA/QC issues were identified by the laboratory's review.

5.5 Community Air Monitoring

Continuous monitoring for volatile organics and particulates was conducted during earth-intrusive activities (i.e., test pit excavation and soil pile consolidation). The following instruments were used:

- One MiniRae 2000 PID (volatile organics)
- Two (2) DR2000 Area Aerosol Monitors (particulates)

Volatile Organic Monitoring – Based on the New York State Department of Health guidelines, the low alarm of the MiniRae 2000 was set at 5 ppm, and the high alarm was set at 25 ppm. The instrument was placed in a downwind location of the excavation activities. Appendix B contains two data log records for the MiniRae 2000. One record is for the test pit excavations, and the other is for the soil pile consolidation.

For the test pit excavations, the one-minute average never exceeded 0.3 ppm (below the NYSDOH guidance value of 5 ppm as a level of potential concern). For the soil pile consolidation, the one-minute average typically did not exceed 2 ppm. However, on two occasions, one-minute averages were elevated. Based on field observations (i.e., no

toluene odors were noted), it is likely that these occasions involved construction equipment exhaust.

Particulate Monitoring – Based on the NYSDOH guidelines, the alarm for the DR2000 was set at 100 micrograms per cubic meter ($\mu g/m^3$), with 15-minute averaging. One meter was placed upwind of excavation activities, and one meter was placed downwind of excavation activities. Because the data-logging capability of the instruments were inadvertently not activated, no data log is available for this report. However, instrument readings were typically checked whenever the alarm sounded.

For the test pit excavations, the alarm sounded only on the instrument in the parking lot above the excavations, and only when a vehicle drove nearby. For the pile consolidation, the alarm frequently sounded. During numerous observations of the instrument, the 15-minute average never exceeded 100 $\mu g/m^3$; typical values were between 80 and 90 $\mu g/m^3$.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 AOC-1: Toluene USTs

Vertical Extent of Toluene-Impacted Soils

Conclusion: Between 7 and 8 feet of fill is present in the former excavation, underlain by between 4 and 5 feet of toluene-impacted soils (above RSCOs).

Recommendation: Because the toluene-impacted soil is not impacting groundwater and is covered by 7 to 8 feet of fill, no further action is recommended. HOW DEEP IS DEEP? 7 FROM @ 8' bgs → INSTITUTIONAL CONTROLS?

Toluene Vapors Under Building 5

S/F MP.?

Conclusion: Toluene vapors at concentrations of up to 12 ppmV are present beneath the floor of Building 5 (near the UST area).

Recommendation: Because the toluene vapor concentrations beneath the building are well below the NIOSH Recommended Exposure Limit (a time-weighted average concentration for up to a 10-hour workday during a 40-hour week), no further action is recommended. DRAW TO COMMENT

Groundwater

Conclusion: Groundwater downgradient from AOC-1 has not been significantly impacted by toluene (i.e., concentrations below applicable NYSDEC standards).

Recommendation: No further action.

FURTHER WORK INSTALLATION?

3 FOR DELINEATION?

6.2 AOC-2: 550-gallon UST

Conclusion: Previously-detected nickel and lead concentrations are consistent with site-specific background concentrations.

Recommendation: No further action. ✓

6.3 AOC-3: Area between Buildings 2 and 4

Soil

Conclusion: Although oily soils were observed in the water table zone from the soil boring at AOC-3, the laboratory analysis showed the presence of no volatile or semi-volatile organic compounds. This finding is consistent with the oil being mineral oil (one of the possibilities reported in the 1996 Phase 1 Report for the site).

Recommendation: No further action. ADD'L INVESTIGATION IN AREA GEOPROBE/ FARMWORKER / BACKHOE DELINEATE NATURE & EXTENT

6.4 AOC-4: Debris Area

Soil

Conclusion: The area adjacent to the parking lot behind Building 7 has been filled with miscellaneous debris and soil. Although some semi-volatile compounds and metals are above RSCOs, the concentrations are consistent with urban fill

Recommendation: Considering the commercial use of this property, no further action is recommended. ✓

Groundwater

Conclusion: Because of shallow bedrock between AOC-4 and Fishkill Creek, it was not possible to collect a groundwater sample using a direct push rig. Compounds of greatest concern for groundwater impacts (i.e., volatile organics) were not detected in the soil at AOC-4, and significant groundwater impacts associated with AOC-4 are not expected.

Recommendation: No further action. → FURTHER WORK / INSTALLATION REQ'D

6.5 AOC-5: Possible Fuel Dispenser and UST

Conclusion: This area was investigated thoroughly by back-hoe when the toluene tanks were removed in October 2000 (a pit approximately 8' deep was dug at this location). No evidence of a fuel dispenser or UST was discovered.

Recommendation: No further action. ✓

TABLES

HILL GROUP

Table 1
Analytical Sample Summary by AOC
Beacon Terminal, Beacon, New York

Sample Number	Lab ID	AOC #	Date	Matrix	Analyses Performed	Analytical Methods
1-NE-1	5396-001	AOC-1	7/17/2002	Soil	Stars VO	EPA 8260B
1-NE-2	5396-002	AOC-1	7/17/2002	Soil	Stars VO	EPA 8260B
1-NW-1	5396-019	AOC-1	7/17/2002	Soil	Stars VO	EPA 8260B
1-NW-2	5396-020	AOC-1	7/17/2002	Soil	Stars VO	EPA 8260B
1-SW-1	5396-003	AOC-1	7/18/2002	Soil	Stars VO	EPA 8260B
1-SW-2	5396-004	AOC-1	7/18/2002	Soil	Stars VO	EPA 8260B
1-SE-1	5396-005	AOC-1	7/18/2002	Soil	Stars VO	EPA 8260B
1-SE-2	5396-006	AOC-1	7/18/2002	Soil	Stars VO	EPA 8260B
TP-1	5396-011	AOC-1	7/18/2002	Groundwater	Stars VO	EPA 8260B
TP-2	5396-012	AOC-1	7/18/2002	Groundwater	Stars VO	EPA 8260B
AIR-1	5395-001	AOC-1	7/18/2002	Air	BTEX	TO-14 GC/MS
AIR-2	5395-002	AOC-1	7/18/2002	Air	BTEX	TO-14 GC/MS
AIR-3	5395-003	AOC-1	7/18/2002	Air	BTEX	TO-14 GC/MS
AIR-4	5395-004	AOC-1	7/18/2002	Air	BTEX	TO-14 GC/MS
2-S-5	5396-013	AOC-2	7/17/2002	Soil	Lead and Nickel	EPA 6020
2-S-8	5396-014	AOC-2	7/17/2002	Soil	Lead and Nickel	EPA 6020
2-W-5	5396-015	AOC-2	7/17/2002	Soil	Lead and Nickel	EPA 6020
2-W-8	5396-016	AOC-2	7/17/2002	Soil	Lead and Nickel	EPA 6020
2-N-5	5396-017	AOC-2	7/17/2002	Soil	Lead and Nickel	EPA 6020
2-N-8	5396-018	AOC-2	7/17/2002	Soil	Lead and Nickel	EPA 6020
BACKGROUND-1	5396-009	AOC-2	7/18/2002	Soil	Lead and Nickel	EPA 6020
BACKGROUND-2	5396-010	AOC-2	7/18/2002	Soil	Lead and Nickel	EPA 6020
3-SE-1	5396-007 5396-021	AOC-3	7/18/2002	Groundwater	VO+10, SVOCs+15, PP Metals	EPA 624; 625; 200.8/245.1; 6020/7471A
3-SE-1	5396-008	AOC-3	7/18/2002	Soil	V0+15, SVOCs+25, PP Metals	EPA 8260B; 8270C; 6020/7471A
TESTP-1	5398-003	AOC-4	7/17/2002	Soil	VO+15, SVOCs+25, PP Metals	EPA 8260B; 8270C; 8151A; 8082; 8081A; 6020/7471A
TESTP-2	5398-004	AOC-4	7/17/2002	Soil	VO+15, SVOCs+25, PP Metals	EPA 8260B; 8270C; 8151A; 8082; 8081A; 6020/7471A
TESTP-3	5398-005	AOC-4	7/17/2002	Soil	VO+15, SVOCs+25, PP Metals	EPA 8260B; 8270C; 8151A; 8082; 8081A; 6020/7471A
Trip Blank	5396-022			Aqueous	VO+10, SVOCs+15, PP Metals	EPA 8260

All analyses are reported with Category B deliverables in Volume II, Appendix C.
AOC-1, Toluene USTs
AOC-2, 550-Gallon UST
AOC-3, Area Between Buildings 2 & 4
AOC-4, Debris Area (west of parking lot)

Table 2
Soil Sampling Results for AOC 1
Beacon Terminal, Beacon NY
July 17 & 18, 2002

	1-NW			1-SW			1-NE			1-SE		
Depth (ft below grade)	Soil Type	PID	Toluene (mg/kg) [1.5]	Soil Type	PID	Toluene (mg/kg) [1.5]	Soil Type	PID	Toluene (mg/kg) [1.5]	Soil Type	PID	Toluene (mg/kg) [1.5]
1	Fill	0	-	Fill	0	-	Fill	0	-	Fill	0	-
2	Fill	0	-	Fill	0	-	Fill	0	-	Fill	0	-
3	Fill	0	-	Fill	0	-	Fill	0	-	Fill	0	-
4	Fill	0	-	Fill	0	-	Fill	0	-	Fill	0	-
5	Fill	0	-	Fill	0	-	Fill	0	-	Fill	0	-
6	Fill	0	-	Fill	0	-	Fill	0	-	Fill	5	-
7	Gray Clay	26	-	Fill	0	-	Fill	0	-	Gray Clay	186	-
8	Gray Clay	43	0.753	Gray Clay	4.5	**108**	Gray Clay	12.6	-	Gray Clay	260	**36.9**
9	Gray Clay	NR	-	Gray Clay	14	-	Gray Clay	3-4	-	Gray Clay		-
10	Gray Clay	9.8	-	Gray Clay	20	-	Gray Clay	34	0.0648	Gray Clay	50	-
11	Gray Clay	NR	-	Gray Clay	22	-	Gray Clay	6.3	-	Gray Clay		-
12	Gray Clay	2-3	**89.6**	Gray Clay	35	**128**	Gray Clay	1.2	0.00373	Gray Clay	6	0.354
13	Gray Clay	0	-	Gray Clay	0	-	Gray Clay	0	-	Gray Clay	0	-
14	Gray Clay	0	-	Gray Clay	0	-	Gray Clay	0	-	Gray Clay	0	-
15	Gray Clay	0	-	Gray Clay	0	-	Gray Clay	0	-	Gray Clay	0	-
16	Gray Clay	0	-	Gray Clay	0	-	Gray Clay	0	-	Gray Clay	0	-

Numbers in [brackets] are RSCOs (Recommended Soil Clean-up Objective per TAGM 4046)
All results are in mg/kg
NR = No Reading
Numbers in **bold** indicate exceedance of RSCO.

Table 3
Soil Vapor Sampling Results
Beneath Building 5
Beacon Terminal, Beacon, NY
July 18, 2002

Analyte	Air-1	Air-2	Air-3	Air-4
Benzene	ND	ND	ND	ND
Toluene	1.4	7.8	4.1	12
Ethylbenzene	ND	ND	ND	ND
m,p-Xylene	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND
All results in ppmV				

ppbv ?

< 30 ug/m^3

10 ppmv → 3,830 ug/m^3.

Table 4
Groundwater Sampling Results
Beacon Terminal, Beacon, NY
July 17 & 18, 2002

Analyte		Groundwater Standards & Guidelines[1]	TP-1[2]	TP-2[2]	3-SE-1[3]
VOCs	Toluene	5	0.26	ND	ND
	Other VOCs	-	ND	ND	ND
BNs	Naphthalene	10	NA	NA	0.153
	Other BNs	-	NA	NA	ND
Filtered Metals	Nickel	100	NA	NA	4.4
	Other metals	-	NA	NA	ND
Unfiltered Metals	Nickel	100	NA	NA	10
	Zinc	5000	NA	NA	22
	Other metals	-	NA	NA	ND

1. NYSDEC Division of Water Tecnical and Operational Guidance Series (1.1.1); Ambeient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 6/98

2. Associated with AOC-1

3. Associated with AOC-3

All results (and standards) in ug/l

ND = Not Detected

NA = Not Analyzed

VOCs = Volatile Organic Compounds (Stars)

BNs = Base Neutral Compounds

Table 5
Soil Sampling Results for AOC 2: 550-gallon UST
Beacon Terminal, Beacon NY
July 17 & 18, 2002

Sample Location	Depth (feet)	Lead	Nickel
2-S-5	5	14.4	30.9
2-S-8	8	10.8	19.9
2-W-5	5	14.3	28.6
2-W-8	8	15.6	**34.6**
2-N-5	5	14.5	32.2
2-N-8	8	18.4	**35.5**
BACKGROUND-1	1-2	16	30.2
BACKGROUND-2	1-2	17.9	33.1

SB = Site Background
All results are in mg/kg
Numbers in **bold** indicate exceedance of Site Background

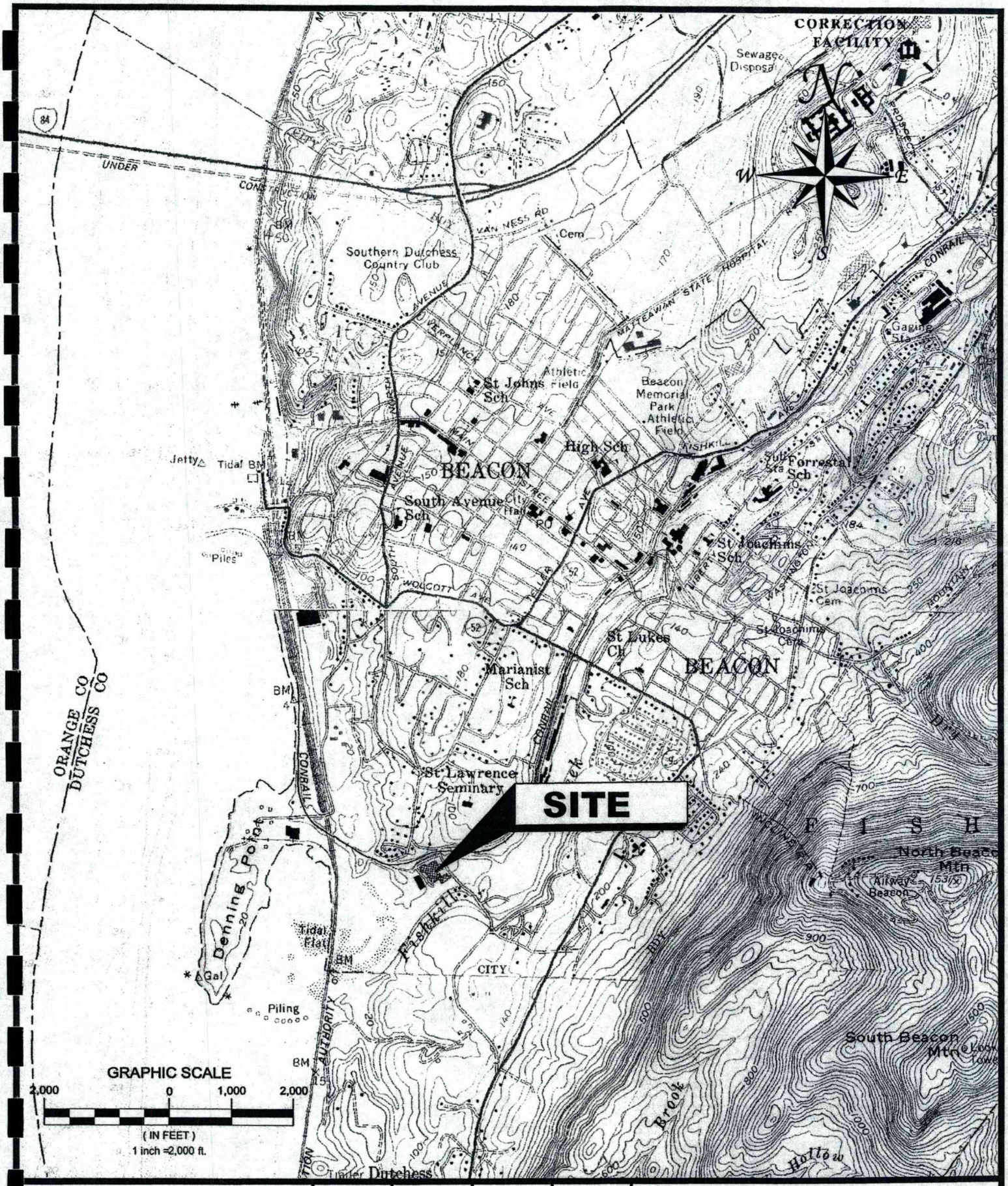
Table 6
Soil Sampling Results for AOCs 3 & 4
(Detected Compounds Only)
Beacon Terminal, Beacon NY
July 17 & 18, 2002

Compounds	RSCO	Eastern US Background (metals)	TESTP-1	TESTP-2	TESTP-3	3-SE-1
Semi-volatiles						
Naphthalene	13.0	-	0.0646	ND	ND	ND
Acenaphthylene	41.0	-	0.399	ND	ND	ND
Acenaphthene	50.0	-	0.132	ND	ND	ND
Fluorene	50.0	-	0.237	ND	ND	ND
Phenanthrene	50.0	-	2.160	0.334	ND	ND
Anthracene	50.0	-	0.776	0.0642	ND	ND
Carbazole	---	-	0.157	ND	ND	ND
Fluoranthene	50.0	-	5.430	0.646	ND	ND
Pyrene	50.0	-	5.580	0.827	ND	ND
3,3-Dimethylbenzidine	---	-	ND	2.740	ND	ND
Benzo[a]anthracene	0.224	-	**3.510**	**0.411**	ND	ND
Chrysene	0.4	-	**3.660**	**0.499**	ND	ND
Bis(2-Ethylhexyl)phthalate:	50.0	-	ND	.0856	ND	ND
Benzo[b]fluoranthene	1.1	-	**2.260**	0.263	ND	ND
Benzo[k]fluoranthene	1.1	-	**1.620**	0.196	ND	ND
Benzo[a]pyrene	0.061	-	**2.530**	**0.270**	ND	ND
Indeno[1,2,3-cd]pyrene	3.2	-	1.340	0.157	ND	ND
Dibenz[a,h]anthracene	0.014	-	**0.594**	ND	ND	ND
Benzo[g,h,i]perylene	50.0	-	1.350	0.167	ND	ND
Pesticides						
4,4'-DDT	2.1	-	ND	0.0102	ND	ND
Chlordane	0.54	-	ND	0.0341	ND	ND
Dieldrin	0.044	-	**0.0738**	0.0207	ND	NA
Metals						
Arsenic	7.5 or SB	3 - 12**	6.07	5.86	4.17	5.21
Beryllium:	0.16	0 - 1.75	ND	**0.689**	**0.622**	ND
Cadmium	10 or SB	0.1 - 1	0.348	0.654	ND	ND
Chromium	50 or SB	1.5 - 40**	**15.8**	**24.8**	**21.8**	**16.9**
Copper	25 or SB	1 - 50	**170**	**41.1**	**26.3**	**33.0**
Lead	SB*	4 - 61	**139**	**125**	13.4	13.6
Mercury	0.1	0.001 - 0.2	0.152	0.158	0.043	0.034
Nickel	13 or SB*	0.5 - 25	18.6	29.4	20.2	22.9
Zinc	20 or SB	9 - 50	**156**	**339**	**82.8**	**71.9**

No Volatile Organic Compounds, herbicides or PCBs were detected
All results are in mg/kg
RSCO = Recommended Soil Clean-up Objective per TAGM 4046
SB = Site Background
*Site specific background values: Lead = 16.0 - 17.9 ppm; Nickel = 30.2 - 33.1 ppm
** New York State Background
Numbers in bold indicate exceedance of RSCO.
NA = Not Analyzed for the compound.
ND = Not Detected above the method detection level.

FIGURES

HILL GROUP



HILL ENVIRONMENTAL GROUP, INC.
19 Brookside Avenue
Pennington, NJ 08534
Tel. (609) 730-1205
Fax. (609) 730-1222
www.hillenvironmentalgroup.com

Drawn By:	Date:	Last Revised:	Scale:
MAS	03/01/01	10/24/01	As Shown

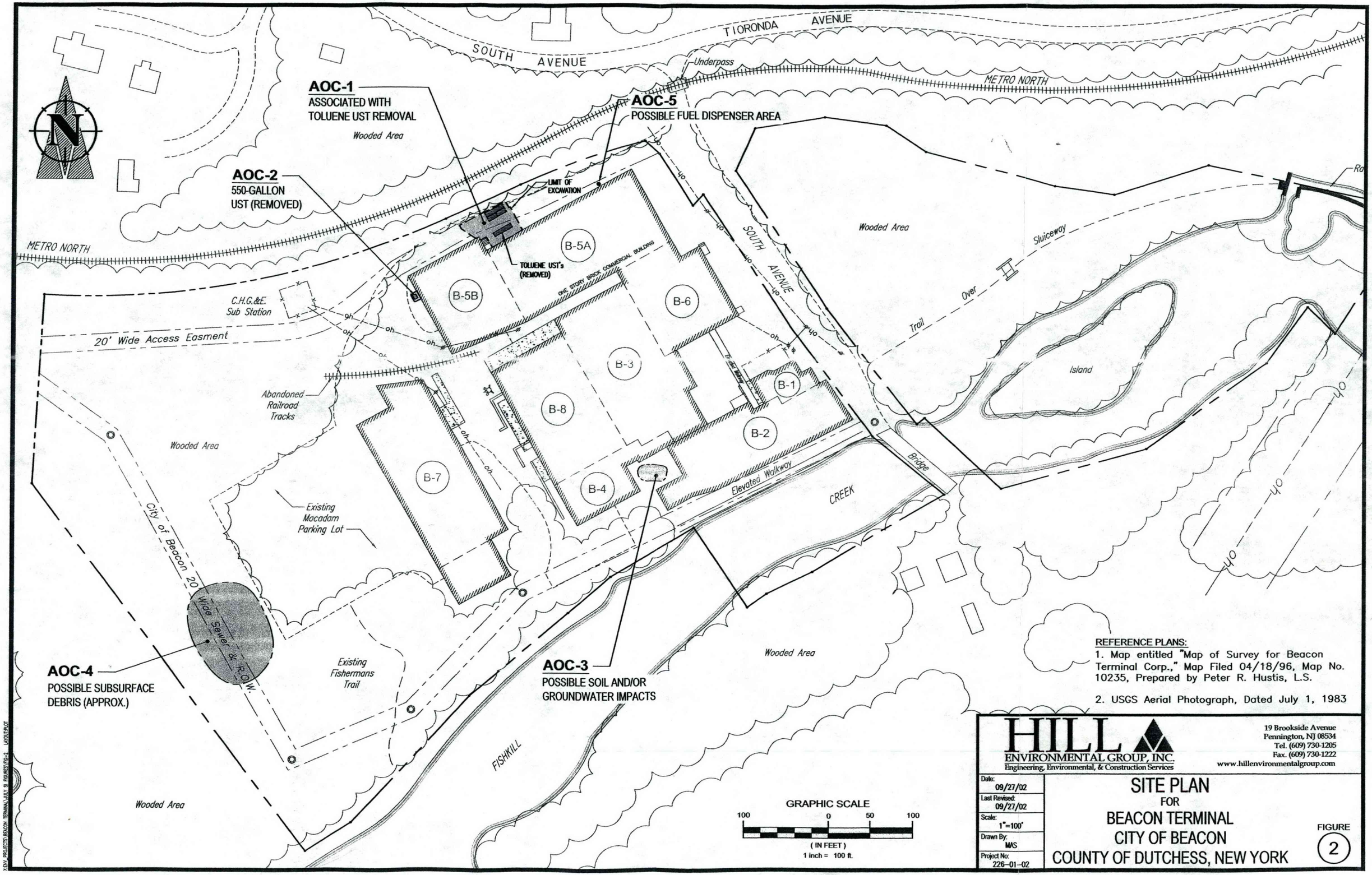
REFERENCE:

United States Department of the Interior
Geologic Survey, Beacon, New York, 1956

SITE LOCATION MAP

BEACON TERMINAL
CITY OF BEACON
DUTCHESS COUNTY, NEW YORK

FIGURE 1



REFERENCE PLANS:

1. Map entitled "Map of Survey for Beacon Terminal Corp.," Map Filed 04/18/96, Map No. 10235, Prepared by Peter R. Hustis, L.S.

2. USGS Aerial Photograph, Dated July 1, 1983

HILL ENVIRONMENTAL GROUP, INC.
Engineering, Environmental, & Construction Services

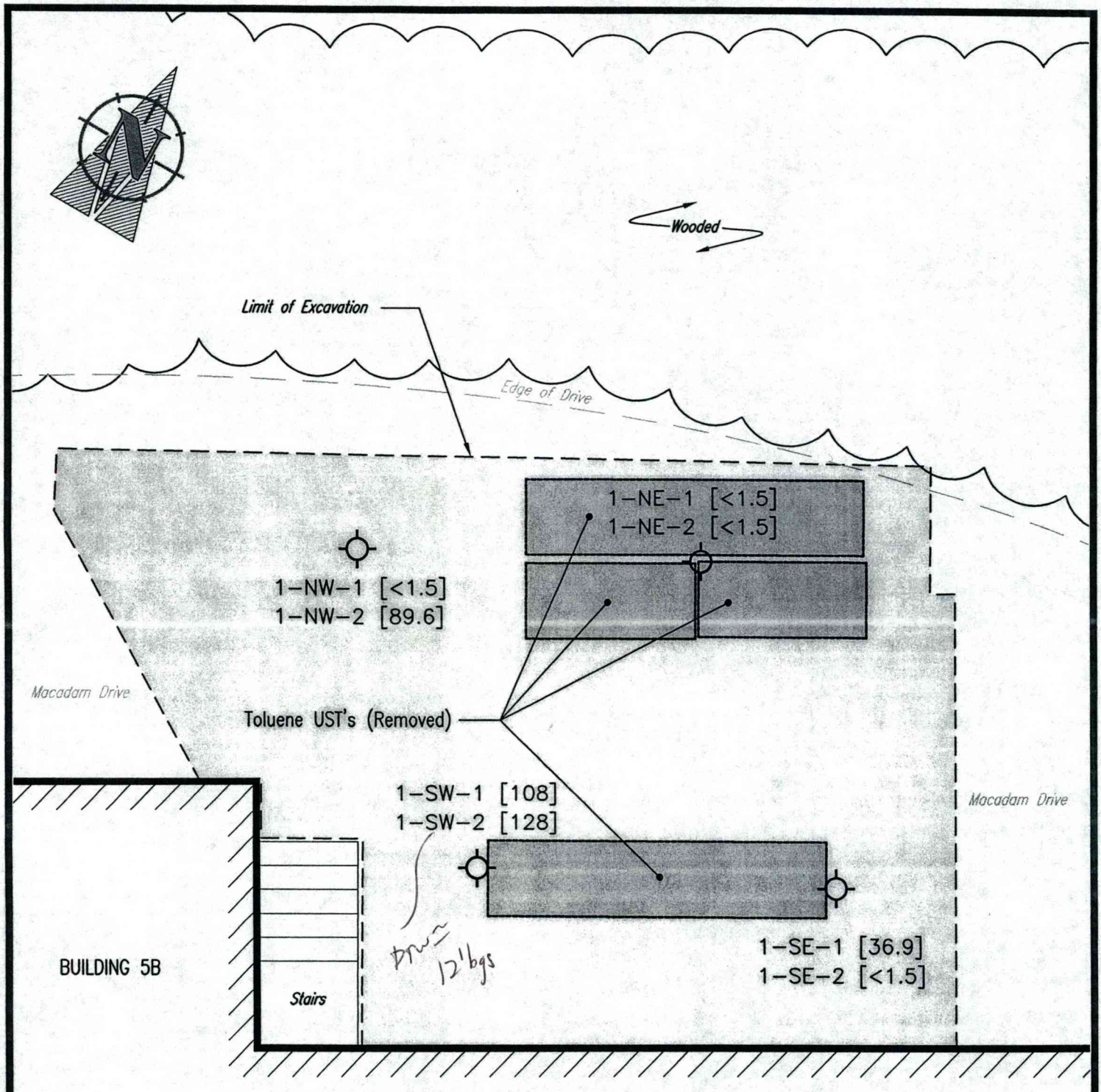
19 Brookside Avenue
Pennington, NJ 08534
Tel. (609) 730-1205
Fax. (609) 730-1222
www.hillenvironmentalgroup.com

Date:	09/27/02
Last Revised:	09/27/02
Scale:	1"=100'
Drawn By:	MAS
Project No:	226-01-02

SITE PLAN
FOR
BEACON TERMINAL
CITY OF BEACON
COUNTY OF DUTCHESS, NEW YORK

FIGURE 2

X:\ENV_PROJECTS\BEACON TERMINAL\JULY 9\FIGURES\FIG-2 LAYOUT.PLOT



SYMBOL LEGEND

Soil Boring

[36.9] Toluene Concentrations in mg/kg

GRAPHIC SCALE

10' 0 5' 10'

(IN FEET)

1 inch = 10' ft.

HILL ENVIRONMENTAL GROUP, INC.
Engineering, Environmental, & Construction Services

19 Brookside Avenue
Pennington, NJ 08534
Tel. (609) 730-1205
Fax. (609) 730-1222
www.hillenvironmentalgroup.com

Date:	09/27/02
Last Revised:	10/01/02
Scale:	1"=10'
Drawn By:	MAS
Project No:	226-01-02

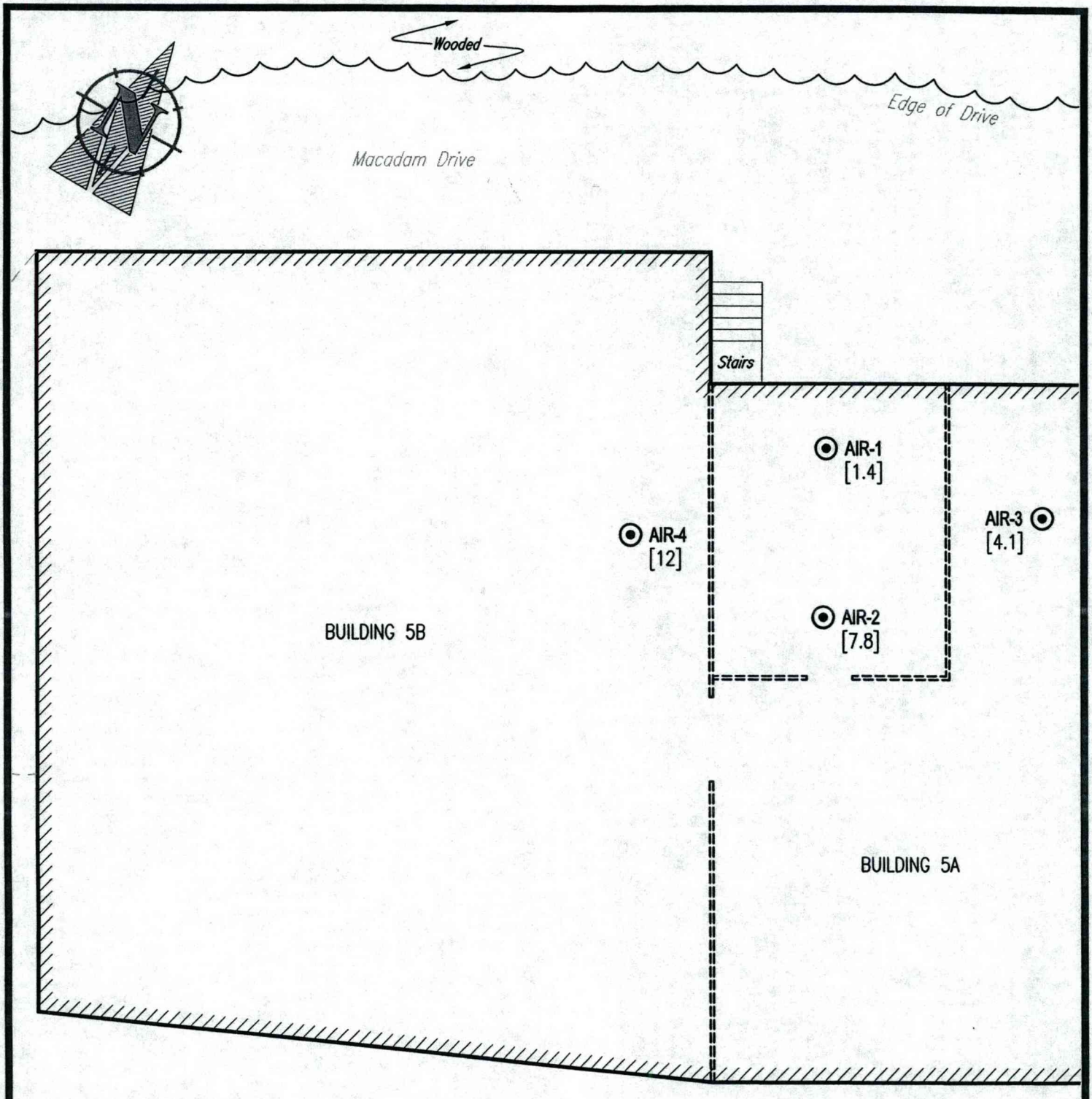
AOC-1 SOIL SAMPLING LOCATIONS AND RESULTS

FOR

BEACON TERMINAL
CITY OF BEACON
COUNTY OF DUTCHESS, NEW YORK

FIGURE 3

X:\ENV_PROJECTS\BEACON TERMINAL\DWG\JULY 5 FIGURES\FIG-3 LAYOUT.PLOT



SYMBOL LEGEND

⊙ Air Sample Location

[1.0] Toluene Concentrations (ppbV)

ppbV

GRAPHIC SCALE

20' 0 10' 20'

(IN FEET)

1 inch = 20' ft.

HILL ENVIRONMENTAL GROUP, INC.
Engineering, Environmental, & Construction Services

19 Brookside Avenue
Pennington, NJ 08534
Tel. (609) 730-1205
Fax. (609) 730-1222
www.hillenvironmentalgroup.com

Date:	09/30/02
Last Revised:	10/01/02
Scale:	1"=20'
Drawn By:	MAS
Project No:	226-01-02

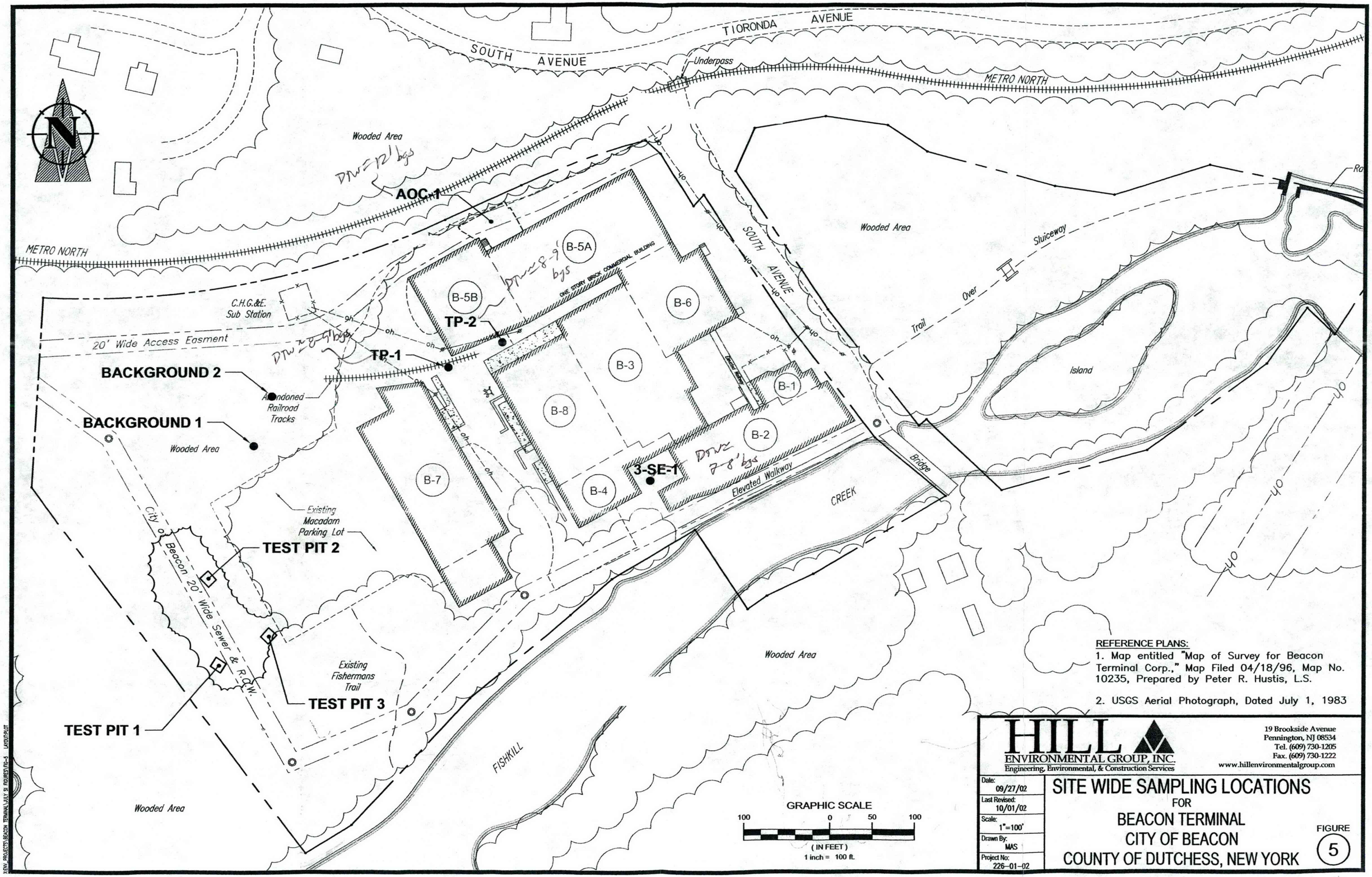
SOIL VAPOR SAMPLE LOCATIONS AND RESULTS

FOR

BEACON TERMINAL
CITY OF BEACON
COUNTY OF DUTCHESS, NEW YORK

FIGURE 4

X:\ENV_PROJECTS\BEACON TERMINAL\DWG\JULY SI FIGURES\FIG-4 LAYOUT.PLOT



REFERENCE PLANS:

1. Map entitled "Map of Survey for Beacon Terminal Corp.," Map Filed 04/18/96, Map No. 10235, Prepared by Peter R. Hustis, L.S.

2. USGS Aerial Photograph, Dated July 1, 1983

HILL ENVIRONMENTAL GROUP, INC.
Engineering, Environmental, & Construction Services

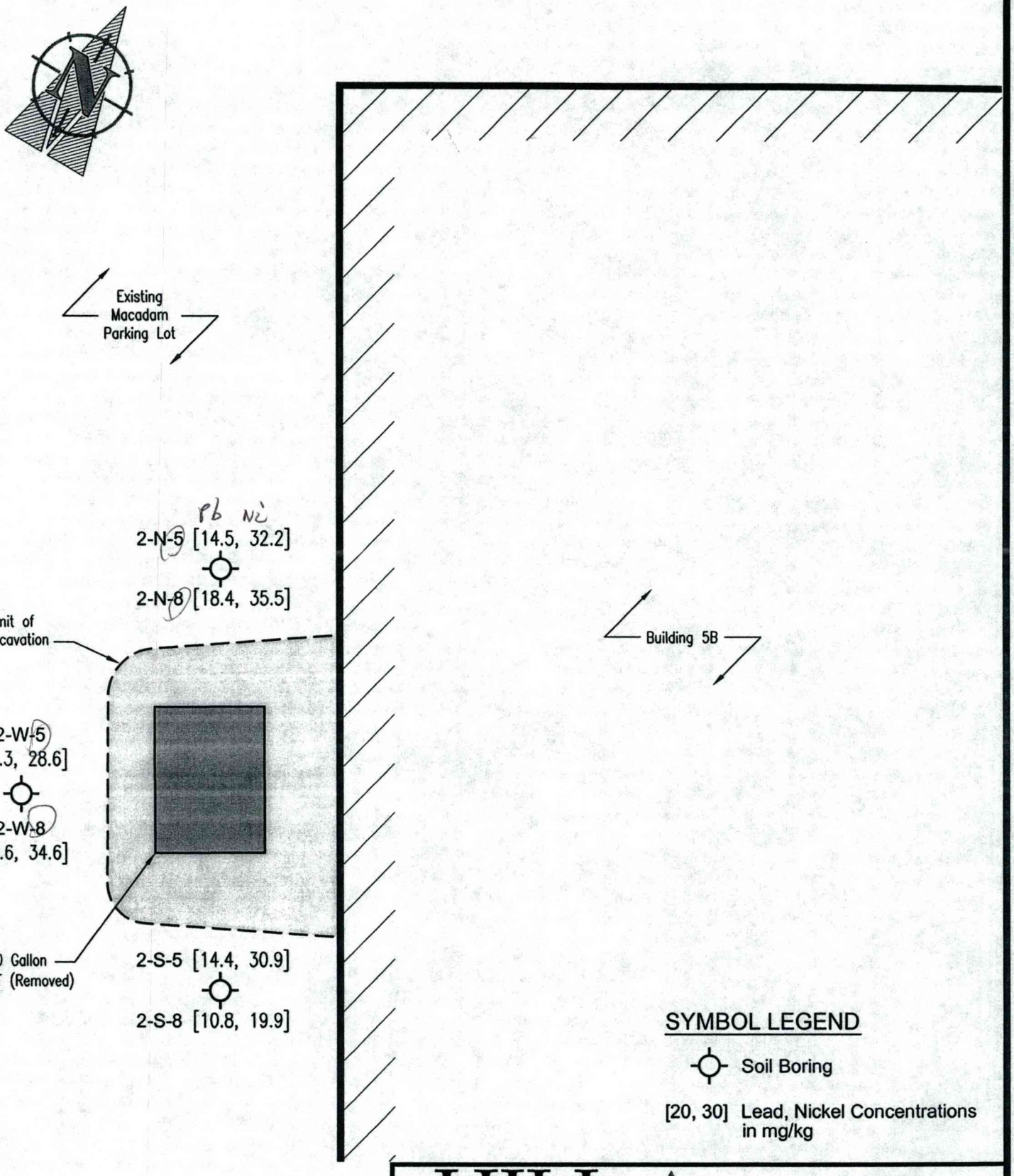
19 Brookside Avenue
Pennington, NJ 08534
Tel. (609) 730-1205
Fax. (609) 730-1222
www.hillenvironmentalgroup.com

Date:	09/27/02
Last Revised:	10/01/02
Scale:	1"=100'
Drawn By:	MAS
Project No:	226-01-02

SITE WIDE SAMPLING LOCATIONS
FOR
BEACON TERMINAL
CITY OF BEACON
COUNTY OF DUTCHESS, NEW YORK

FIGURE 5

K:\ENV_PROJECTS\BEACON TERMINAL\MAY'S PROPERTY\FIG-5 LAYOUT.PLOT



HILL ENVIRONMENTAL GROUP, INC.
Engineering, Environmental, & Construction Services
19 Brookside Avenue
Pennington, NJ 08534
Tel. (609) 730-1205
Fax. (609) 730-1222
www.hillenvironmentalgroup.com

Date:	09/27/02
Last Revised:	10/01/02
Scale:	1"=5'
Drawn By:	MAS
Project No:	226-01-02

AOC-2 SOIL SAMPLING LOCATIONS AND RESULTS

FOR

BEACON TERMINAL
CITY OF BEACON
COUNTY OF DUTCHESS, NEW YORK

FIGURE 6

X:\ENV_PROJECTS\BEACON TERMINAL\DWG\JULY SI FIGURES\R2-6 LAYOUT-PLOT

APPENDICES

HILL GROUP

APPENDIX A

Soil Boring Logs

HILL GROUP

SOIL BORING LOG
HILL ENVIRONMENTAL
GROUP, INC.

SITE: Beacon Terminal **AOC-1 1-SW-1,2**
DATE: 7/18/02
DRILLING METHOD: Geoprobe
DEPTH TO WATER: None TIME: 1220
INSTALLATION: Soil sampling

SHEET 1 OF: 1
JOB NO.: 2260103
DRILLER: LMS (Jay)
LICENSE NO.:
LOGGED BY: LC

TIME	CASING BLOWS	SAMPLE DESCRIPTION	DEPTH (FT)	REMARKS
				PID readings
		Fill		0
				0
				0
1220		Fill with gravel	4	0
				0
				0
		Gray clay 1-SW-2 (8')		4.5
1230		Gray clay	8	14
				20
				22
1245		1-SW-1 (12')		35
		Moist gray clay	12	0
				0
				0
1250			16	0

SOIL BORING LOG
HILL ENVIRONMENTAL
GROUP, INC.

SITE: Beacon Terminal **AOC-1 1-SE-1,2**
DATE: 7/18/02
DRILLING METHOD: Geoprobe
DEPTH TO WATER: None TIME: 1120
INSTALLATION: Soil sampling

SHEET 1 OF: 1
JOB NO.: 2260103
DRILLER: LMS (Jay)
LICENSE NO.:
LOGGED BY: LC

TIME	CASING BLOWS	SAMPLE DESCRIPTION	DEPTH (FT)	REMARKS
				PID readings
		Fill		0
		Red brick pieces		0
				0
1120		Brown clay	4	0
				5
		Gray clay		186
		1-SE-1 (8')		260
1130		Gray/brown clay	8	
				50
		1-SE-2 (12')		6
1140		Gray clay	12	0
				0
				0
1150			16	0

SOIL BORING LOG
HILL ENVIRONMENTAL
GROUP, INC.

SITE: Beacon Terminal **AOC-1 1-NW-1,2**
DATE: 7/17/02
DRILLING METHOD: Geoprobe
DEPTH TO WATER: None TIME: 1600
INSTALLATION: Soil sampling

SHEET 1 OF: 1
JOB NO.: 2260103
DRILLER: LMS (Jay)
LICENSE NO.:
LOGGED BY: LC

TIME	CASING BLOWS	SAMPLE DESCRIPTION	DEPTH (FT)	REMARKS
				PID readings
		Rocky fill material		0
				0
				0
1600		Moist Brown clay	4	0
				0
				0
		Gray clay		26
1610		Gray clay 1-NW-1 (8')	8	43
				9.8
				2-3
1620		Gray clay 1-NW-2 (12')	12	0
				0
				0
				0
1630			16	

SOIL BORING LOG
HILL ENVIRONMENTAL
GROUP, INC.

SITE: Beacon Terminal **AOC-1 1-NE-1,2**
DATE: 7/17/02
DRILLING METHOD: Geoprobe
DEPTH TO WATER: None TIME: 1600
INSTALLATION: Soil sampling

SHEET 1 OF: 1
JOB NO.: 2260103
DRILLER: LMS (Jay)
LICENSE NO.:
LOGGED BY: LC

TIME	CASING BLOWS	SAMPLE DESCRIPTION	DEPTH (FT)	REMARKS
				PID readings
		Fill		0
				0
				0
1640		Fill with gravel	4	0
				0
				0
				0
1650		Gray clay	8	12.6
		1-NE-1 (10')		3-4
				34
				6.3
1700		1-NE-2 (12')	12	1.2
		Moist gray clay		0
				0
1710			16	0

SOIL BORING LOG
HILL ENVIRONMENTAL
GROUP, INC.

SITE: Beacon Terminal **AOC-1 TP-1**
DATE: 1/17/02
DRILLING METHOD: Geoprobe
DEPTH TO WATER: 20' TIME: 8:30
INSTALLATION: Temporary Point

SHEET 1 OF: 1
JOB NO.: 2260103
DRILLER: LMS (Jay)
LICENSE NO.:
LOGGED BY: LC

TIME	CASING BLOWS	SAMPLE DESCRIPTION	DEPTH (FT)	REMARKS
		Asphalt (0-3')		PID readings
				0
				0
8:30		brownish/gray clay	4	0
				0
		brownish/gray clay		0
				0
8:35				0
			8	0
		moist brownish/gray clay		0
				0
8:40				0
			12	0
		moist brownish/gray clay		0
8:45				0
			16	0
				0
		moist clay, some silt.		0
		same, very moist		0
9:00				0
		Very moist gray/brown clay with bedrock	20	0
		(black, friable) pieces.	21	Set temp.well

SOIL BORING LOG
HILL ENVIRONMENTAL
GROUP, INC.

SITE: Beacon Terminal **AOC-1 TP-2**
DATE: 1/18/02
DRILLING METHOD: Geoprobe
DEPTH TO WATER: 20' TIME: 1400
INSTALLATION: Temporary Point

SHEET 1 OF: 1
JOB NO.: 2260103
DRILLER: LMS (Jay)
LICENSE NO.:
LOGGED BY: LC

TIME	CASING BLOWS	SAMPLE DESCRIPTION	DEPTH (FT)	REMARKS
		Fill – bricks, gravel, soil		PID readings
				0
				0
1400				0
			4	0
		brownish/gray clay, some gravel		0
				0
1410		moist brwn clay		0
		very moist brownish/gray clay	8	0
				0
				0
1420		stiff brwn clay		0
			12	0
		moist brownish/gray clay		0
1430				0
		very moist brwn clay		0
		moist Gray clay	16	0
				0
		very moist		0
1440				0
		very moist gray clay	20	Set temp.well

SOIL BORING LOG
HILL ENVIRONMENTAL
GROUP, INC.

SITE: Beacon Terminal **AOC-2 2-N-5,8**
DATE: 7/17/02
DRILLING METHOD: Geoprobe
DEPTH TO WATER: None TIME: 1400
INSTALLATION: Soil sampling

SHEET 1 OF: 1
JOB NO.: 2260103
DRILLER: LMS (Jay)
LICENSE NO.:
LOGGED BY: LC

TIME	CASING BLOWS	SAMPLE DESCRIPTION	DEPTH (FT)	REMARKS
1400		Asphalt, rock pieces		PID Readings
				0
				0
		Brown/gray clay	4	0
1415		2-N-5 (5')	5	0
				0
		Gray clay		0
1420		2-N-8 (8')	8	0
				0
				0
1430		Gray clay	12	0

SOIL BORING LOG
HILL ENVIRONMENTAL
GROUP, INC.

SITE: Beacon Terminal **AOC-2 2-S-5,8**
DATE: 7/17/02
DRILLING METHOD: Geoprobe
DEPTH TO WATER: None TIME: 12:00
INSTALLATION: Soil sampling

SHEET 1 OF: 1
JOB NO.: 2260103
DRILLER: LMS (Jay)
LICENSE NO.:
LOGGED BY: LC

TIME	CASING BLOWS	SAMPLE DESCRIPTION	DEPTH (FT)	REMARKS
12:00		Asphalt, rock pieces		PID Readings
				0
				0
		Brown/gray clay	4	0
12:20		2-S-5 (5')	5	0
				0
		Gray Clay		0
12:30		2-S-8 (8')	8	0
				0
				0
12:40		Gray clay	12	0

SOIL BORING LOG
HILL ENVIRONMENTAL
GROUP, INC.

SITE: Beacon Terminal **AOC-2 2-W-5,8**
DATE: 7/17/02
DRILLING METHOD: Geoprobe
DEPTH TO WATER: None TIME: 12:50
INSTALLATION: Soil sampling

SHEET 1 OF: 1
JOB NO.: 2260103
DRILLER: LMS (Jay)
LICENSE NO.:
LOGGED BY: LC

TIME	CASING BLOWS	SAMPLE DESCRIPTION	DEPTH (FT)	REMARKS
12:50		Asphalt, rock pieces		PID Readings
				0
				0
		Brown/gray clay	4	0
1305		2-W-5 (5')	5	0
				0
		Gray Clay		0
1310		2-W-8 (8')	8	0
				0
				0
		Gray clay		0
1320			12	

SOIL BORING LOG
HILL ENVIRONMENTAL
GROUP, INC.

SITE: Beacon Terminal **AOC-3 3-SE-1**
DATE: 7/18/02
DRILLING METHOD: Geoprobe
DEPTH TO WATER: 8' TIME: 9:00
INSTALLATION: Temporary Well Point and Soil Sampling

SHEET 1 OF: 1
JOB NO.: 2260103
DRILLER: LMS (Jay)
LICENSE NO.:
LOGGED BY: LC

TIME	CASING BLOWS	SAMPLE DESCRIPTION	DEPTH (FT)	REMARKS
900		Asphalt, rock pieces,		PID Readings
		gravel		0
				0
		Silty clay	4	0
910		Gray clay	5	5.8
		3-SE-1 (soil and water)		Oily
		Moist gray clay with gravel		
920		Wet gray sand	8	
930		Refusal	12	

APPENDIX B

Photoionization Detector Data Log

HILL GROUP

Instrument: MiniRAE 2000 (PGM7600) Serial Number: 005159
User ID: 00000001 Site ID: 00000041
Data Points: 373 Gas Name: Isobutylene Sample Period: 60 sec
Last Calibration Time: 07/12/2002 08:17

Measurement Type:	Min(ppm)	Avg(ppm)	Max(ppm)
High Alarm Levels:	25.0	25.0	25.0
Low Alarm Levels:	5.0	5.0	5.0

PID Log
Test Pit Excavation

Line#	Date Time	Min(ppm)	Avg(ppm)	Max(ppm)
1	07/17/2002 05:37	-----	0.0	0.0
2	07/17/2002 05:38	-----	0.0	0.0
3	07/17/2002 05:39	-----	0.0	0.0
4	07/17/2002 05:40	-----	0.0	0.0
5	07/17/2002 05:41	-----	0.0	0.0
6	07/17/2002 05:42	-----	0.0	0.0
7	07/17/2002 05:43	-----	0.0	0.0
8	07/17/2002 05:44	-----	0.0	0.0
9	07/17/2002 05:45	-----	0.0	0.0
10	07/17/2002 05:46	-----	0.0	0.0
11	07/17/2002 05:47	-----	0.0	0.0
12	07/17/2002 05:48	-----	0.2	4.6
13	07/17/2002 05:49	-----	0.3	6.2L
14	07/17/2002 05:50	-----	0.3	4.7
15	07/17/2002 05:51	-----	0.1	4.7
16	07/17/2002 05:52	-----	0.3	6.6L
17	07/17/2002 05:53	-----	0.4	6.4L
18	07/17/2002 05:54	-----	0.3	6.5L
19	07/17/2002 05:55	-----	0.1	4.5
20	07/17/2002 05:56	-----	0.3	6.5L
21	07/17/2002 05:57	-----	0.1	6.5L
22	07/17/2002 05:58	-----	0.3	6.0L
23	07/17/2002 05:59	-----	0.2	6.0L
24	07/17/2002 06:00	-----	0.3	4.6
25	07/17/2002 06:01	-----	0.2	4.3
26	07/17/2002 06:02	-----	0.3	5.1L
27	07/17/2002 06:03	-----	0.3	4.1
28	07/17/2002 06:04	-----	0.2	4.0
29	07/17/2002 06:05	-----	0.3	4.8
30	07/17/2002 06:06	-----	0.2	3.1
31	07/17/2002 06:07	-----	0.2	5.1L
32	07/17/2002 06:08	-----	0.2	6.0L
33	07/17/2002 06:09	-----	0.0	3.1
34	07/17/2002 06:10	-----	0.3	5.6L
35	07/17/2002 06:11	-----	0.2	6.1L
36	07/17/2002 06:12	-----	0.0	0.8
37	07/17/2002 06:13	-----	0.1	2.6
38	07/17/2002 06:14	-----	0.0	2.0
39	07/17/2002 06:15	-----	0.2	3.6
40	07/17/2002 06:16	-----	0.2	4.1
41	07/17/2002 06:17	-----	0.3	5.5L
42	07/17/2002 06:18	-----	0.0	1.5
43	07/17/2002 06:19	-----	0.0	0.8
44	07/17/2002 06:20	-----	0.1	1.1
45	07/17/2002 06:21	-----	0.1	1.2
46	07/17/2002 06:22	-----	0.1	1.1
47	07/17/2002 06:23	-----	0.1	1.2
48	07/17/2002 06:24	-----	0.1	1.3
49	07/17/2002 06:25	-----	0.1	1.5
50	07/17/2002 06:26	-----	0.0	1.0
51	07/17/2002 06:27	-----	0.1	1.8
52	07/17/2002 06:28	-----	0.1	1.9
53	07/17/2002 06:29	-----	0.1	1.8
54	07/17/2002 06:30	-----	0.2	4.6

55	07/17/2002 06:31	-----	0.1	1.8
56	07/17/2002 06:32	-----	0.0	2.1
57	07/17/2002 06:33	-----	0.1	1.6
58	07/17/2002 06:34	-----	0.1	2.4
59	07/17/2002 06:35	-----	0.0	1.8
60	07/17/2002 06:36	-----	0.0	1.7
61	07/17/2002 06:37	-----	0.1	2.0
62	07/17/2002 06:38	-----	0.0	2.0
63	07/17/2002 06:39	-----	0.0	0.6
64	07/17/2002 06:40	-----	0.0	2.4
65	07/17/2002 06:41	-----	0.0	2.6
66	07/17/2002 06:42	-----	0.0	0.5
67	07/17/2002 06:43	-----	0.0	1.2
68	07/17/2002 06:44	-----	0.1	2.0
69	07/17/2002 06:45	-----	0.0	1.7
70	07/17/2002 06:46	-----	0.0	0.6
71	07/17/2002 06:47	-----	0.0	1.7
72	07/17/2002 06:48	-----	0.0	0.8
73	07/17/2002 06:49	-----	0.0	1.2
74	07/17/2002 06:50	-----	0.1	2.3
75	07/17/2002 06:51	-----	0.0	2.4
76	07/17/2002 06:52	-----	0.0	1.9
77	07/17/2002 06:53	-----	0.0	2.6
78	07/17/2002 06:54	-----	0.0	0.7
79	07/17/2002 06:55	-----	0.0	1.4
80	07/17/2002 06:56	-----	0.0	0.0
81	07/17/2002 06:57	-----	0.0	4.5
82	07/17/2002 06:58	-----	0.0	3.3
83	07/17/2002 06:59	-----	0.0	2.9
84	07/17/2002 07:00	-----	0.1	4.1
85	07/17/2002 07:01	-----	0.1	3.4
86	07/17/2002 07:02	-----	0.0	2.0
87	07/17/2002 07:03	-----	0.0	3.0
88	07/17/2002 07:04	-----	0.0	0.0
89	07/17/2002 07:05	-----	0.0	0.0
90	07/17/2002 07:06	-----	0.0	0.0
91	07/17/2002 07:07	-----	0.0	1.1
92	07/17/2002 07:08	-----	0.0	0.0
93	07/17/2002 07:09	-----	0.0	0.8
94	07/17/2002 07:10	-----	0.0	0.0
95	07/17/2002 07:11	-----	0.0	0.3
96	07/17/2002 07:12	-----	0.0	0.0
97	07/17/2002 07:13	-----	0.0	0.0
98	07/17/2002 07:14	-----	0.0	0.0
99	07/17/2002 07:15	-----	0.0	0.0
100	07/17/2002 07:16	-----	0.0	0.0
101	07/17/2002 07:17	-----	0.0	0.0
102	07/17/2002 07:18	-----	0.0	0.0
103	07/17/2002 07:19	-----	0.1	7.0L
104	07/17/2002 07:20	-----	0.2	7.4L
105	07/17/2002 07:21	-----	0.0	1.3
106	07/17/2002 07:22	-----	0.1	2.8
107	07/17/2002 07:23	-----	0.0	1.4
108	07/17/2002 07:24	-----	0.1	6.3L
109	07/17/2002 07:25	-----	0.1	6.6L
110	07/17/2002 07:26	-----	0.0	0.0
111	07/17/2002 07:27	-----	0.0	0.0
112	07/17/2002 07:28	-----	0.0	0.0
113	07/17/2002 07:29	-----	0.0	0.0
114	07/17/2002 07:30	-----	0.0	0.0
115	07/17/2002 07:31	-----	0.0	0.0
116	07/17/2002 07:32	-----	0.1	5.2L
117	07/17/2002 07:33	-----	0.0	3.5
118	07/17/2002 07:34	-----	0.0	0.0
119	07/17/2002 07:35	-----	0.0	0.0

120	07/17/2002 07:36	-----	0.0	0.0
121	07/17/2002 07:37	-----	0.0	0.0
122	07/17/2002 07:38	-----	0.0	0.0
123	07/17/2002 07:39	-----	0.0	0.0
124	07/17/2002 07:40	-----	0.0	0.0
125	07/17/2002 07:41	-----	0.0	0.0
126	07/17/2002 07:42	-----	0.0	0.0
127	07/17/2002 07:43	-----	0.0	0.0
128	07/17/2002 07:44	-----	0.0	0.0
129	07/17/2002 07:45	-----	0.0	0.0
130	07/17/2002 07:46	-----	0.0	0.0
131	07/17/2002 07:47	-----	0.0	0.0
132	07/17/2002 07:48	-----	0.0	0.0
133	07/17/2002 07:49	-----	0.0	0.0
134	07/17/2002 07:50	-----	0.0	0.0
135	07/17/2002 07:51	-----	0.0	0.0
136	07/17/2002 07:52	-----	0.0	0.0
137	07/17/2002 07:53	-----	0.0	0.0
138	07/17/2002 07:54	-----	0.0	0.0
139	07/17/2002 07:55	-----	0.0	0.0
140	07/17/2002 07:56	-----	0.0	0.0
141	07/17/2002 07:57	-----	0.0	0.0
142	07/17/2002 07:58	-----	0.0	0.0
143	07/17/2002 07:59	-----	0.0	0.0
144	07/17/2002 08:00	-----	0.0	0.0
145	07/17/2002 08:01	-----	0.0	0.0
146	07/17/2002 08:02	-----	0.0	0.0
147	07/17/2002 08:03	-----	0.0	0.0
148	07/17/2002 08:04	-----	0.0	0.0
149	07/17/2002 08:05	-----	0.0	0.0
150	07/17/2002 08:06	-----	0.0	0.0
151	07/17/2002 08:07	-----	0.0	0.0
152	07/17/2002 08:08	-----	0.0	0.0
153	07/17/2002 08:09	-----	0.0	0.0
154	07/17/2002 08:10	-----	0.0	0.0
155	07/17/2002 08:11	-----	0.0	0.0
156	07/17/2002 08:12	-----	0.0	0.0
157	07/17/2002 08:13	-----	0.0	0.0
158	07/17/2002 08:14	-----	0.0	0.0
159	07/17/2002 08:15	-----	0.0	0.0
160	07/17/2002 08:16	-----	0.0	0.0
161	07/17/2002 08:17	-----	0.0	0.0
162	07/17/2002 08:18	-----	0.0	0.0
163	07/17/2002 08:19	-----	0.0	0.0
164	07/17/2002 08:20	-----	0.0	0.0
165	07/17/2002 08:21	-----	0.0	0.0
166	07/17/2002 08:22	-----	0.0	0.0
167	07/17/2002 08:23	-----	0.0	0.0
168	07/17/2002 08:24	-----	0.0	0.0
169	07/17/2002 08:25	-----	0.0	0.0
170	07/17/2002 08:26	-----	0.0	0.0
171	07/17/2002 08:27	-----	0.0	0.0
172	07/17/2002 08:28	-----	0.0	0.0
173	07/17/2002 08:29	-----	0.0	0.0
174	07/17/2002 08:30	-----	0.0	0.0
175	07/17/2002 08:31	-----	0.0	0.0
176	07/17/2002 08:32	-----	0.0	0.0
177	07/17/2002 08:33	-----	0.0	0.0
178	07/17/2002 08:34	-----	0.0	0.0
179	07/17/2002 08:35	-----	0.0	0.0
180	07/17/2002 08:36	-----	0.0	0.0
181	07/17/2002 08:37	-----	0.0	0.0
182	07/17/2002 08:38	-----	0.0	0.0
183	07/17/2002 08:39	-----	0.0	0.0
184	07/17/2002 08:40	-----	0.0	0.0

185	07/17/2002 08:41	-----	0.0	0.0
186	07/17/2002 08:42	-----	0.0	0.0
187	07/17/2002 08:43	-----	0.0	0.0
188	07/17/2002 08:44	-----	0.0	0.0
189	07/17/2002 08:45	-----	0.0	0.0
190	07/17/2002 08:46	-----	0.0	0.0
191	07/17/2002 08:47	-----	0.0	0.0
192	07/17/2002 08:48	-----	0.0	0.0
193	07/17/2002 08:49	-----	0.0	0.0
194	07/17/2002 08:50	-----	0.0	0.0
195	07/17/2002 08:51	-----	0.0	0.0
196	07/17/2002 08:52	-----	0.0	0.0
197	07/17/2002 08:53	-----	0.0	0.0
198	07/17/2002 08:54	-----	0.0	0.0
199	07/17/2002 08:55	-----	0.0	0.0
200	07/17/2002 08:56	-----	0.0	0.0
201	07/17/2002 08:57	-----	0.0	0.0
202	07/17/2002 08:58	-----	0.0	0.0
203	07/17/2002 08:59	-----	0.0	0.0
204	07/17/2002 09:00	-----	0.0	0.0
205	07/17/2002 09:01	-----	0.0	0.0
206	07/17/2002 09:02	-----	0.0	0.0
207	07/17/2002 09:03	-----	0.0	0.0
208	07/17/2002 09:04	-----	0.0	0.0
209	07/17/2002 09:05	-----	0.0	0.0
210	07/17/2002 09:06	-----	0.0	0.0
211	07/17/2002 09:07	-----	0.0	0.0
212	07/17/2002 09:08	-----	0.0	0.0
213	07/17/2002 09:09	-----	0.0	0.0
214	07/17/2002 09:10	-----	0.0	0.0
215	07/17/2002 09:11	-----	0.0	0.0
216	07/17/2002 09:12	-----	0.0	0.0
217	07/17/2002 09:13	-----	0.0	0.0
218	07/17/2002 09:14	-----	0.0	0.0
219	07/17/2002 09:15	-----	0.0	0.0
220	07/17/2002 09:16	-----	0.0	0.0
221	07/17/2002 09:17	-----	0.0	0.0
222	07/17/2002 09:18	-----	0.0	0.0
223	07/17/2002 09:19	-----	0.0	0.0
224	07/17/2002 09:20	-----	0.0	0.0
225	07/17/2002 09:21	-----	0.0	0.0
226	07/17/2002 09:22	-----	0.0	0.0
227	07/17/2002 09:23	-----	0.0	0.0
228	07/17/2002 09:24	-----	0.0	0.0
229	07/17/2002 09:25	-----	0.0	0.0
230	07/17/2002 09:26	-----	0.0	1.7
231	07/17/2002 09:27	-----	0.0	1.1
232	07/17/2002 09:28	-----	0.0	0.0
233	07/17/2002 09:29	-----	0.0	1.3
234	07/17/2002 09:30	-----	0.0	0.0
235	07/17/2002 09:31	-----	0.0	0.0
236	07/17/2002 09:32	-----	0.0	0.0
237	07/17/2002 09:33	-----	0.0	0.0
238	07/17/2002 09:34	-----	0.0	0.0
239	07/17/2002 09:35	-----	0.0	0.0
240	07/17/2002 09:36	-----	0.0	0.0
241	07/17/2002 09:37	-----	0.0	0.0
242	07/17/2002 09:38	-----	0.0	0.0
243	07/17/2002 09:39	-----	0.0	0.0
244	07/17/2002 09:40	-----	0.0	0.0
245	07/17/2002 09:41	-----	0.0	0.0
246	07/17/2002 09:42	-----	0.0	0.0
247	07/17/2002 09:43	-----	0.0	0.0
248	07/17/2002 09:44	-----	0.0	0.0
249	07/17/2002 09:45	-----	0.0	0.0

250	07/17/2002 09:46	-----	0.0	0.0
251	07/17/2002 09:47	-----	0.0	0.0
252	07/17/2002 09:48	-----	0.0	0.0
253	07/17/2002 09:49	-----	0.0	0.0
254	07/17/2002 09:50	-----	0.0	0.0
255	07/17/2002 09:51	-----	0.0	0.0
256	07/17/2002 09:52	-----	0.0	0.0
257	07/17/2002 09:53	-----	0.0	0.0
258	07/17/2002 09:54	-----	0.0	0.0
259	07/17/2002 09:55	-----	0.0	0.0
260	07/17/2002 09:56	-----	0.0	0.0
261	07/17/2002 09:57	-----	0.0	0.0
262	07/17/2002 09:58	-----	0.0	0.0
263	07/17/2002 09:59	-----	0.0	0.0
264	07/17/2002 10:00	-----	0.0	0.0
265	07/17/2002 10:01	-----	0.0	0.0
266	07/17/2002 10:02	-----	0.0	0.0
267	07/17/2002 10:03	-----	0.0	0.0
268	07/17/2002 10:04	-----	0.0	0.0
269	07/17/2002 10:05	-----	0.0	0.0
270	07/17/2002 10:06	-----	0.0	0.0
271	07/17/2002 10:07	-----	0.0	0.0
272	07/17/2002 10:08	-----	0.0	0.0
273	07/17/2002 10:09	-----	0.0	0.0
274	07/17/2002 10:10	-----	0.0	0.0
275	07/17/2002 10:11	-----	0.0	0.0
276	07/17/2002 10:12	-----	0.0	0.0
277	07/17/2002 10:13	-----	0.0	0.0
278	07/17/2002 10:14	-----	0.0	0.0
279	07/17/2002 10:15	-----	0.0	0.0
280	07/17/2002 10:16	-----	0.0	0.0
281	07/17/2002 10:17	-----	0.0	0.0
282	07/17/2002 10:18	-----	0.0	0.0
283	07/17/2002 10:19	-----	0.0	0.0
284	07/17/2002 10:20	-----	0.0	0.0
285	07/17/2002 10:21	-----	0.0	0.0
286	07/17/2002 10:22	-----	0.0	0.0
287	07/17/2002 10:23	-----	0.0	0.0
288	07/17/2002 10:24	-----	0.0	0.0
289	07/17/2002 10:25	-----	0.0	0.0
290	07/17/2002 10:26	-----	0.0	0.0
291	07/17/2002 10:27	-----	0.0	0.0
292	07/17/2002 10:28	-----	0.0	0.0
293	07/17/2002 10:29	-----	0.0	0.0
294	07/17/2002 10:30	-----	0.0	0.0
295	07/17/2002 10:31	-----	0.0	0.0
296	07/17/2002 10:32	-----	0.0	0.0
297	07/17/2002 10:33	-----	0.0	0.0
298	07/17/2002 10:34	-----	0.0	0.0
299	07/17/2002 10:35	-----	0.0	0.0
300	07/17/2002 10:36	-----	0.0	0.0
301	07/17/2002 10:37	-----	0.0	0.0
302	07/17/2002 10:38	-----	0.0	0.0
303	07/17/2002 10:39	-----	0.0	0.0
304	07/17/2002 10:40	-----	0.0	0.0
305	07/17/2002 10:41	-----	0.0	0.0
306	07/17/2002 10:42	-----	0.0	0.0
307	07/17/2002 10:43	-----	0.0	0.0
308	07/17/2002 10:44	-----	0.0	0.0
309	07/17/2002 10:45	-----	0.0	0.0
310	07/17/2002 10:46	-----	0.0	0.0
311	07/17/2002 10:47	-----	0.0	0.0
312	07/17/2002 10:48	-----	0.0	0.0
313	07/17/2002 10:49	-----	0.0	0.0
314	07/17/2002 10:50	-----	0.0	0.0

315	07/17/2002 10:51	-----	0.0	0.0
316	07/17/2002 10:52	-----	0.0	0.0
317	07/17/2002 10:53	-----	0.0	0.0
318	07/17/2002 10:54	-----	0.0	0.0
319	07/17/2002 10:55	-----	0.0	0.0
320	07/17/2002 10:56	-----	0.0	0.0
321	07/17/2002 10:57	-----	0.0	0.0
322	07/17/2002 10:58	-----	0.0	0.0
323	07/17/2002 10:59	-----	0.0	0.0
324	07/17/2002 11:00	-----	0.0	0.0
325	07/17/2002 11:01	-----	0.0	0.0
326	07/17/2002 11:02	-----	0.0	0.0
327	07/17/2002 11:03	-----	0.0	0.0
328	07/17/2002 11:04	-----	0.0	0.0
329	07/17/2002 11:05	-----	0.0	0.0
330	07/17/2002 11:06	-----	0.0	0.0
331	07/17/2002 11:07	-----	0.0	0.0
332	07/17/2002 11:08	-----	0.0	0.0
333	07/17/2002 11:09	-----	0.0	0.0
334	07/17/2002 11:10	-----	0.0	0.0
335	07/17/2002 11:11	-----	0.0	0.0
336	07/17/2002 11:12	-----	0.0	0.0
337	07/17/2002 11:13	-----	0.0	0.0
338	07/17/2002 11:14	-----	0.0	0.0
339	07/17/2002 11:15	-----	0.0	0.0
340	07/17/2002 11:16	-----	0.0	0.0
341	07/17/2002 11:17	-----	0.0	0.0
342	07/17/2002 11:18	-----	0.0	0.0
343	07/17/2002 11:19	-----	0.0	0.0
344	07/17/2002 11:20	-----	0.0	0.0
345	07/17/2002 11:21	-----	0.0	0.0
346	07/17/2002 11:22	-----	0.0	0.0
347	07/17/2002 11:23	-----	0.0	0.0
348	07/17/2002 11:24	-----	0.0	0.0
349	07/17/2002 11:25	-----	0.0	0.0
350	07/17/2002 11:26	-----	0.0	0.0
351	07/17/2002 11:27	-----	0.0	0.0
352	07/17/2002 11:28	-----	0.0	0.0
353	07/17/2002 11:29	-----	0.0	0.0
354	07/17/2002 11:30	-----	0.0	0.0
355	07/17/2002 11:31	-----	0.0	0.0
356	07/17/2002 11:32	-----	0.0	0.0
357	07/17/2002 11:33	-----	0.0	0.0
358	07/17/2002 11:34	-----	0.0	0.0
359	07/17/2002 11:35	-----	0.0	0.0
360	07/17/2002 11:36	-----	0.0	0.0
361	07/17/2002 11:37	-----	0.0	0.0
362	07/17/2002 11:38	-----	0.0	0.0
363	07/17/2002 11:39	-----	0.0	0.0
364	07/17/2002 11:40	-----	0.0	0.0
365	07/17/2002 11:41	-----	0.0	0.0
366	07/17/2002 11:42	-----	0.0	0.0
367	07/17/2002 11:43	-----	0.0	0.0
368	07/17/2002 11:44	-----	0.0	0.0
369	07/17/2002 11:45	-----	0.0	0.0
370	07/17/2002 11:46	-----	0.0	0.0
371	07/17/2002 11:47	-----	0.0	0.0
372	07/17/2002 11:48	-----	0.0	0.0
373	07/17/2002 11:49	-----	0.0	0.0

Instrument: MiniRAE 2000 (PGM7600) Serial Number: 005159
User ID: 00000001 Site ID: 00000041
Data Points: 248 Gas Name: Isobutylene Sample Period: 60 sec
Last Calibration Time: 07/18/2002 06:10

Measurement Type:	Min(ppm)	Avg(ppm)	Max(ppm)
High Alarm Levels:	25.0	25.0	25.0
Low Alarm Levels:	5.0	5.0	5.0

Line#	Date Time	Min(ppm)	Avg(ppm)	Max(ppm)
1	07/18/2002 06:12	-----	2.3	5.8L
2	07/18/2002 06:13	-----	1.9	7.7L
3	07/18/2002 06:14	-----	1.6	5.0
4	07/18/2002 06:15	-----	1.5	6.0L
5	07/18/2002 06:16	-----	1.8	6.1L
6	07/18/2002 06:17	-----	1.5	4.5
7	07/18/2002 06:18	-----	1.3	5.8L
8	07/18/2002 06:19	-----	1.6	5.8L
9	07/18/2002 06:20	-----	1.8	6.2L
10	07/18/2002 06:21	-----	1.5	5.8L
11	07/18/2002 06:22	-----	2.0	8.9L
12	07/18/2002 06:23	-----	1.5	6.1L
13	07/18/2002 06:24	-----	1.5	9.3L
14	07/18/2002 06:25	-----	1.6	6.6L
15	07/18/2002 06:26	-----	1.5	7.6L
16	07/18/2002 06:27	-----	1.5	8.9L
17	07/18/2002 06:28	-----	1.5	9.4L
18	07/18/2002 06:29	-----	1.2	7.3L
19	07/18/2002 06:30	-----	1.5	6.5L
20	07/18/2002 06:31	-----	1.4	9.4L
21	07/18/2002 06:32	-----	1.0	5.0
22	07/18/2002 06:33	-----	1.4	6.6L
23	07/18/2002 06:34	-----	1.2	8.5L
24	07/18/2002 06:35	-----	1.2	6.9L
25	07/18/2002 06:36	-----	1.1	6.5L
26	07/18/2002 06:37	-----	0.8	4.0
27	07/18/2002 06:38	-----	1.0	4.7
28	07/18/2002 06:39	-----	1.3	9.4L
29	07/18/2002 06:40	-----	1.1	5.7L
30	07/18/2002 06:41	-----	0.3	6.2L
31	07/18/2002 06:42	-----	0.1	1.4
32	07/18/2002 06:43	-----	0.1	4.4
33	07/18/2002 06:44	-----	0.7	4.9
34	07/18/2002 06:45	-----	0.4	3.3
35	07/18/2002 06:46	-----	0.3	2.7
36	07/18/2002 06:47	-----	0.3	2.1
37	07/18/2002 06:48	-----	0.3	2.1
38	07/18/2002 06:49	-----	0.4	2.3
39	07/18/2002 06:50	-----	0.3	2.3
40	07/18/2002 06:51	-----	0.6	2.6
41	07/18/2002 06:52	-----	0.4	4.5
42	07/18/2002 06:53	-----	0.3	3.1
43	07/18/2002 06:54	-----	0.3	2.4
44	07/18/2002 06:55	-----	0.5	4.9
45	07/18/2002 06:56	-----	0.5	4.4
46	07/18/2002 06:57	-----	0.3	3.1
47	07/18/2002 06:58	-----	0.4	4.3
48	07/18/2002 06:59	-----	0.3	4.0
49	07/18/2002 07:00	-----	0.4	4.8
50	07/18/2002 07:01	-----	0.3	2.1
51	07/18/2002 07:02	-----	0.4	2.9
52	07/18/2002 07:03	-----	0.4	3.4
53	07/18/2002 07:04	-----	0.5	4.1
54	07/18/2002 07:05	-----	0.4	3.6

PID Log
Soil Pile Consolidation

55	07/18/2002 07:06	-----	0.5	3.2
56	07/18/2002 07:07	-----	0.5	7.4L
57	07/18/2002 07:08	-----	0.3	2.8
58	07/18/2002 07:09	-----	0.5	6.4L
59	07/18/2002 07:10	-----	0.4	3.2
60	07/18/2002 07:11	-----	0.4	7.1L
61	07/18/2002 07:12	-----	0.7	5.8L
62	07/18/2002 07:13	-----	0.7	5.3L
63	07/18/2002 07:14	-----	0.3	5.1L
64	07/18/2002 07:15	-----	0.5	4.9
65	07/18/2002 07:16	-----	0.7	5.1L
66	07/18/2002 07:17	-----	0.4	4.0
67	07/18/2002 07:18	-----	0.6	6.0L
68	07/18/2002 07:19	-----	0.4	3.5
69	07/18/2002 07:20	-----	29.8H	798.4H
70	07/18/2002 07:21	-----	108.6H	1461.8H
71	07/18/2002 07:22	-----	0.6	3.3
72	07/18/2002 07:23	-----	1137.6H	9999.0H
73	07/18/2002 07:24	-----	203.4H	702.5H
74	07/18/2002 07:25	-----	32.2H	125.2H
75	07/18/2002 07:26	-----	6.7L	24.8L
76	07/18/2002 07:27	-----	1.3	11.5L
77	07/18/2002 07:28	-----	1.2	15.5L
78	07/18/2002 07:29	-----	5.7L	97.0H
79	07/18/2002 07:30	-----	1.0	10.8L
80	07/18/2002 07:31	-----	1.5	11.3L
81	07/18/2002 07:32	-----	0.6	5.1L
82	07/18/2002 07:33	-----	0.2	3.3
83	07/18/2002 07:34	-----	0.2	1.9
84	07/18/2002 07:35	-----	0.4	3.6
85	07/18/2002 07:36	-----	0.3	3.7
86	07/18/2002 07:37	-----	0.2	3.6
87	07/18/2002 07:38	-----	0.1	2.4
88	07/18/2002 07:39	-----	0.2	6.9L
89	07/18/2002 07:40	-----	0.2	3.6
90	07/18/2002 07:41	-----	0.1	2.9
91	07/18/2002 07:42	-----	0.2	2.6
92	07/18/2002 07:43	-----	0.1	2.9
93	07/18/2002 07:44	-----	0.2	3.6
94	07/18/2002 07:45	-----	0.4	3.4
95	07/18/2002 07:46	-----	0.1	4.7
96	07/18/2002 07:47	-----	0.1	1.7
97	07/18/2002 07:48	-----	0.2	6.3L
98	07/18/2002 07:49	-----	0.1	1.6
99	07/18/2002 07:50	-----	0.1	4.0
100	07/18/2002 07:51	-----	0.1	1.5
101	07/18/2002 07:52	-----	0.0	2.7
102	07/18/2002 07:53	-----	0.0	1.5
103	07/18/2002 07:54	-----	0.0	1.2
104	07/18/2002 07:55	-----	0.1	3.8
105	07/18/2002 07:56	-----	0.0	0.7
106	07/18/2002 07:57	-----	0.0	1.5
107	07/18/2002 07:58	-----	0.1	5.4L
108	07/18/2002 07:59	-----	0.1	3.3
109	07/18/2002 08:00	-----	0.3	15.9L
110	07/18/2002 08:01	-----	0.6	14.8L
111	07/18/2002 08:02	-----	0.5	24.3L
112	07/18/2002 08:03	-----	0.1	2.5
113	07/18/2002 08:04	-----	0.0	0.8
114	07/18/2002 08:05	-----	0.3	20.6L
115	07/18/2002 08:06	-----	0.0	1.5
116	07/18/2002 08:07	-----	0.1	4.7
117	07/18/2002 08:08	-----	0.5	20.7L
118	07/18/2002 08:09	-----	0.0	0.0
119	07/18/2002 08:10	-----	0.0	0.0

120	07/18/2002 08:11	-----	0.0	2.6
121	07/18/2002 08:12	-----	0.0	0.1
122	07/18/2002 08:13	-----	0.0	0.7
123	07/18/2002 08:14	-----	5.1L	63.1H
124	07/18/2002 08:15	-----	0.0	0.4
125	07/18/2002 08:16	-----	12.2L	132.6H
126	07/18/2002 08:17	-----	18.6L	82.6H
127	07/18/2002 08:18	-----	19.8L	114.5H
128	07/18/2002 08:19	-----	4.3	28.5H
129	07/18/2002 08:20	-----	0.0	2.7
130	07/18/2002 08:21	-----	7.4L	42.6H
131	07/18/2002 08:22	-----	0.2	7.7L
132	07/18/2002 08:23	-----	0.0	0.7
133	07/18/2002 08:24	-----	0.0	0.0
134	07/18/2002 08:25	-----	0.1	7.5L
135	07/18/2002 08:26	-----	0.0	0.0
136	07/18/2002 08:27	-----	0.0	0.0
137	07/18/2002 08:28	-----	0.0	1.0
138	07/18/2002 08:29	-----	0.0	0.0
139	07/18/2002 08:30	-----	0.0	0.0
140	07/18/2002 08:31	-----	0.1	6.7L
141	07/18/2002 08:32	-----	0.0	0.0
142	07/18/2002 08:33	-----	0.0	0.0
143	07/18/2002 08:34	-----	0.2	8.4L
144	07/18/2002 08:35	-----	0.0	0.0
145	07/18/2002 08:36	-----	0.1	6.6L
146	07/18/2002 08:37	-----	0.0	0.4
147	07/18/2002 08:38	-----	0.0	0.7
148	07/18/2002 08:39	-----	0.0	0.0
149	07/18/2002 08:40	-----	0.0	0.3
150	07/18/2002 08:41	-----	0.0	2.1
151	07/18/2002 08:42	-----	0.0	0.0
152	07/18/2002 08:43	-----	0.0	0.0
153	07/18/2002 08:44	-----	0.0	0.0
154	07/18/2002 08:45	-----	0.0	0.9
155	07/18/2002 08:46	-----	0.0	0.0
156	07/18/2002 08:47	-----	0.0	0.0
157	07/18/2002 08:48	-----	0.0	0.0
158	07/18/2002 08:49	-----	0.0	0.0
159	07/18/2002 08:50	-----	0.0	0.0
160	07/18/2002 08:51	-----	0.0	0.0
161	07/18/2002 08:52	-----	0.0	0.0
162	07/18/2002 08:53	-----	0.0	0.0
163	07/18/2002 08:54	-----	0.0	0.0
164	07/18/2002 08:55	-----	0.0	0.0
165	07/18/2002 08:56	-----	0.0	0.0
166	07/18/2002 08:57	-----	0.0	0.0
167	07/18/2002 08:58	-----	0.0	0.0
168	07/18/2002 08:59	-----	0.0	0.0
169	07/18/2002 09:00	-----	0.0	0.0
170	07/18/2002 09:01	-----	0.0	0.0
171	07/18/2002 09:02	-----	0.0	0.0
172	07/18/2002 09:03	-----	0.0	0.0
173	07/18/2002 09:04	-----	0.0	0.0
174	07/18/2002 09:05	-----	0.0	0.0
175	07/18/2002 09:06	-----	0.0	0.0
176	07/18/2002 09:07	-----	0.0	0.0
177	07/18/2002 09:08	-----	0.0	0.0
178	07/18/2002 09:09	-----	0.0	0.0
179	07/18/2002 09:10	-----	0.0	0.0
180	07/18/2002 09:11	-----	0.0	0.0
181	07/18/2002 09:12	-----	0.0	0.0
182	07/18/2002 09:13	-----	0.0	0.0
183	07/18/2002 09:14	-----	0.0	0.0
184	07/18/2002 09:15	-----	0.0	0.0

185	07/18/2002 09:16	-----	0.0	0.0
186	07/18/2002 09:17	-----	0.0	0.0
187	07/18/2002 09:18	-----	0.0	3.1
188	07/18/2002 09:19	-----	0.0	0.0
189	07/18/2002 09:20	-----	0.0	0.0
190	07/18/2002 09:21	-----	0.0	1.3
191	07/18/2002 09:22	-----	0.0	0.0
192	07/18/2002 09:23	-----	0.0	0.0
193	07/18/2002 09:24	-----	0.1	9.8L
194	07/18/2002 09:25	-----	0.1	5.0
195	07/18/2002 09:26	-----	0.0	1.6
196	07/18/2002 09:27	-----	0.1	8.3L
197	07/18/2002 09:28	-----	0.0	1.2
198	07/18/2002 09:29	-----	0.5	11.5L
199	07/18/2002 09:30	-----	0.0	0.0
200	07/18/2002 09:31	-----	0.2	8.8L
201	07/18/2002 09:32	-----	0.0	3.6
202	07/18/2002 09:33	-----	0.0	0.0
203	07/18/2002 09:34	-----	0.2	12.1L
204	07/18/2002 09:35	-----	0.0	0.0
205	07/18/2002 09:36	-----	0.5	10.8L
206	07/18/2002 09:37	-----	0.0	2.1
207	07/18/2002 09:38	-----	0.0	2.1
208	07/18/2002 09:39	-----	0.0	0.0
209	07/18/2002 09:40	-----	0.4	9.7L
210	07/18/2002 09:41	-----	0.0	0.0
211	07/18/2002 09:42	-----	0.0	0.0
212	07/18/2002 09:43	-----	0.1	6.2L
213	07/18/2002 09:44	-----	0.0	0.0
214	07/18/2002 09:45	-----	0.1	7.7L
215	07/18/2002 09:46	-----	0.0	0.0
216	07/18/2002 09:47	-----	0.4	7.0L
217	07/18/2002 09:48	-----	0.0	0.0
218	07/18/2002 09:49	-----	0.0	0.0
219	07/18/2002 09:50	-----	0.5	11.7L
220	07/18/2002 09:51	-----	0.0	0.0
221	07/18/2002 09:52	-----	0.0	0.0
222	07/18/2002 09:53	-----	0.0	0.0
223	07/18/2002 09:54	-----	0.3	10.5L
224	07/18/2002 09:55	-----	0.6	11.4L
225	07/18/2002 09:56	-----	0.0	2.1
226	07/18/2002 09:57	-----	0.1	5.5L
227	07/18/2002 09:58	-----	0.2	8.1L
228	07/18/2002 09:59	-----	0.1	5.8L
229	07/18/2002 10:00	-----	0.0	2.1
230	07/18/2002 10:01	-----	0.2	5.8L
231	07/18/2002 10:02	-----	0.1	6.5L
232	07/18/2002 10:03	-----	0.0	0.9
233	07/18/2002 10:04	-----	0.0	0.1
234	07/18/2002 10:05	-----	0.0	0.2
235	07/18/2002 10:06	-----	0.0	0.0
236	07/18/2002 10:07	-----	0.0	0.0
237	07/18/2002 10:08	-----	0.0	0.0
238	07/18/2002 10:09	-----	0.0	0.0
239	07/18/2002 10:10	-----	0.0	0.0
240	07/18/2002 10:11	-----	0.0	0.0
241	07/18/2002 10:12	-----	0.0	0.0
242	07/18/2002 10:13	-----	0.0	0.0
243	07/18/2002 10:14	-----	0.0	0.0
244	07/18/2002 10:15	-----	0.0	0.0
245	07/18/2002 10:16	-----	0.0	0.0
246	07/18/2002 10:17	-----	0.0	0.0
247	07/18/2002 10:18	-----	0.0	0.0
248	07/18/2002 10:19	-----	0.0	0.0