NORTHROP GRUMMAN

BETHPAGE FACILITY

DRAFT

PHASE II SITE ASSESSMENT - PLANT 1

MAY 2001

Dvirka and Bartilucci
CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, PC.

PHASE II SITE ASSESSMENT
PLANT 1

Prepared For:

NORTHROP GRUMMAN CORPORATION
BETHPAGE, NEW YORK

Prepared By:

DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
WOODBURY, NEW YORK

MAY 2001

NORTHROP GRUMMAN CORPORATION
PHASE II SITE ASSESSMENT
PLANT 1
BETHPAGE, NEW YORK

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Section 1

1.0 INTRODUCTION

This document presents the results of the Phase II Site Assessment undertaken for the Northrop Grumman Corporation (NGC) property known as Plant 1, located on the southwest of the Long Island Rail Road (LIRR) tracks and northwest of Sheridan Avenue in Bethpage. in Bethpage, New York. A site location map and site plan are presented on Figures 1-1 and 1-2, respectively. The Plant 1 parcel (Tax I.D. Number: Section 46, Block 323, Lot 15) consists of the irregularly shaped area shown on Figure 1-2. The area is currently owned by NGC and comprises a total of approximately 22.5 acres.

The site is located within an area zoned "Industrial." Areas northwest and west are also zoned "Industrial," while areas immediately northeast, east and southeast are predominantly zoned residential. In 1995, the Town of Oyster Bay rezoned the parcel of land immediately southwest of the Plant 1 property from an "H" Industrial District Zone to "S-2" or Golden Age District. Further southwest, commercial zoning is found along Central Avenue. For the purpose of this report, the property line, which runs parallel to the LIRR tracks, will be referred to as "north" when discussing the location of on-site structures.

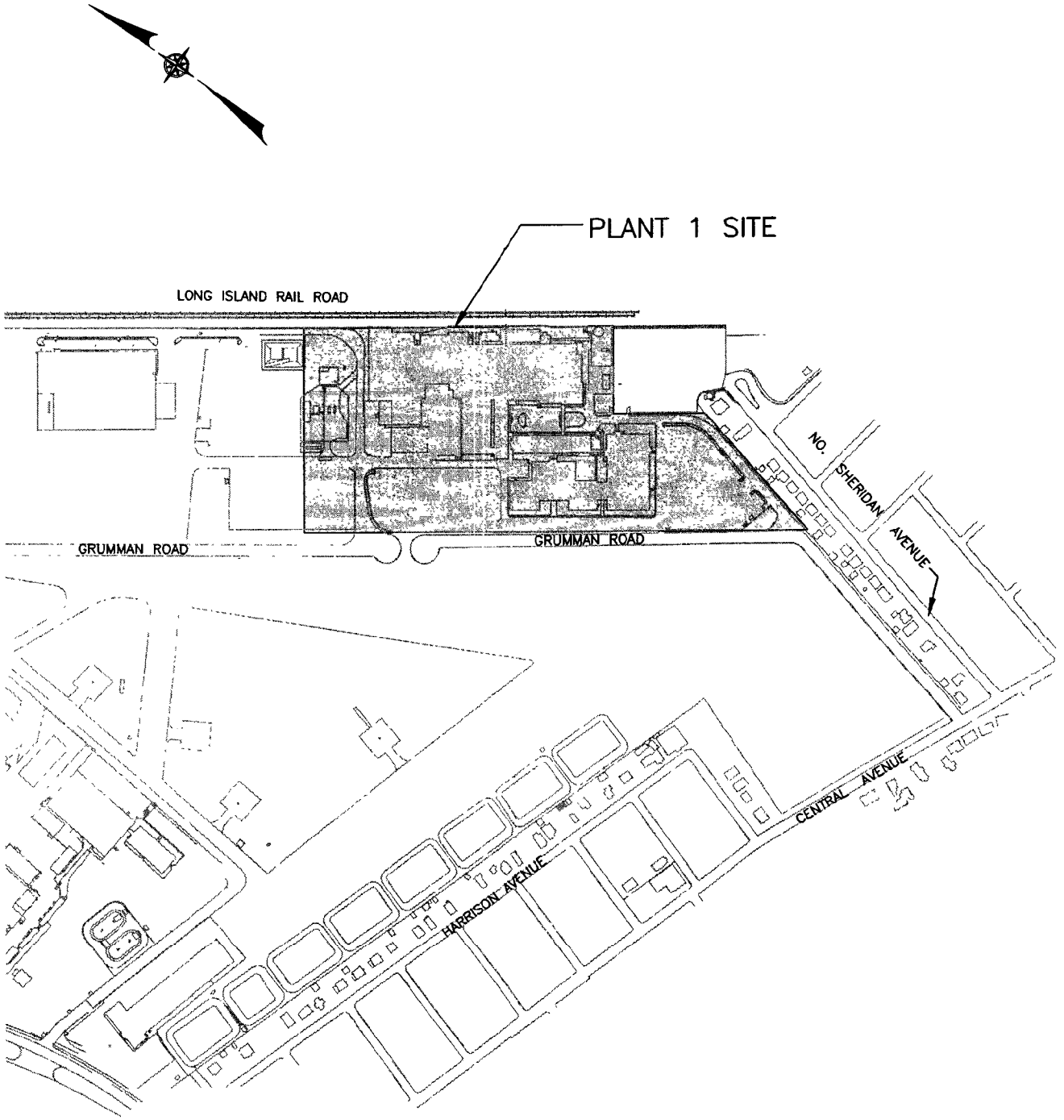
The majority of the site is paved and/or occupied by structures. The topography of the site is generally level and is approximately 110 feet above mean sea level with depth to groundwater approximately 45 feet below grade. There are storm water catch basins located throughout the site, and the direction of surface drainage varies with location. The Soil Conservation Service (SCS) classifies the majority of the soils on-site as Urban Land, as shown in the Nassau County Soil Survey (1987 edition). Urban Land is defined as an area with at least 85 percent asphalt, concrete or other impervious building material, with most of the remaining small areas of soil being well drained Riverhead, Hempstead or Enfield soils, or excessively drained Udipsaments. The Nassau County Soil Survey indicates that most areas of Urban Land are nearly level or gently sloping. The remaining portion of the site is identified as Urban Land - Riverhead complex, which is a combination of urbanized areas and very deep, well-drained Riverhead soils.

The results of the 1999 Phase I Site Assessment at Plant 1 were used to identify potential areas of environmental concern (AOCs) both inside and outside of the building. The Plant 1 AOCs requiring investigation as part of the United States Environmental Protection Agency (USEPA) Underground Injection Control (UIC) Program are documented under a separate Phase II Site Assessment entitled "UIC Phase II Site Assessment - Plant 1," dated June 2001 which was prepared by Dvirka and Bartilucci Consulting Engineers (D&B). This Phase II Site Assessment documents the investigation activities and findings for AOCs that were determined not to be regulated by the USEPA UIC Program based on the design and status (i.e., previously closed) of the structures associated with each AOC.

This Phase II Site Assessment was conducted in four phases. The results from the first phase of sampling and analysis were used to identify those areas where additional investigation was warranted. The supplemental investigation and delineation sampling and analysis was performed during three subsequent phases of the project.

Section 2 of this document describes the scope of work and field program which was performed during September 2000 through March 2001. The findings of the Phase II Site Assessment, on an AOC-by-AOC basis, are described in Section 3. Section 4 provides conclusions and recommendations regarding the program.

Supporting data related to the Phase II Site Assessment program at Plant 1 are presented in appendices to this document. Geophysical surveys performed as part of the Phase II Site Assessment are included in Appendix A. Logs for the Phase II Site Assessment soil borings are included in Appendix B and tables summarizing the analytical results of samples collected during the Phase II Site Assessment are included in Appendix C.



NORTHROP GRUMMAN CORPORATION
BETHPAGE, NEW YORK
PLANT 1

SITE LOCATION MAP

Dvirka and Bartilucci
Consulting Engineers
A Division of William F. Cosulich Associates, P.C.

FIGURE 1-1

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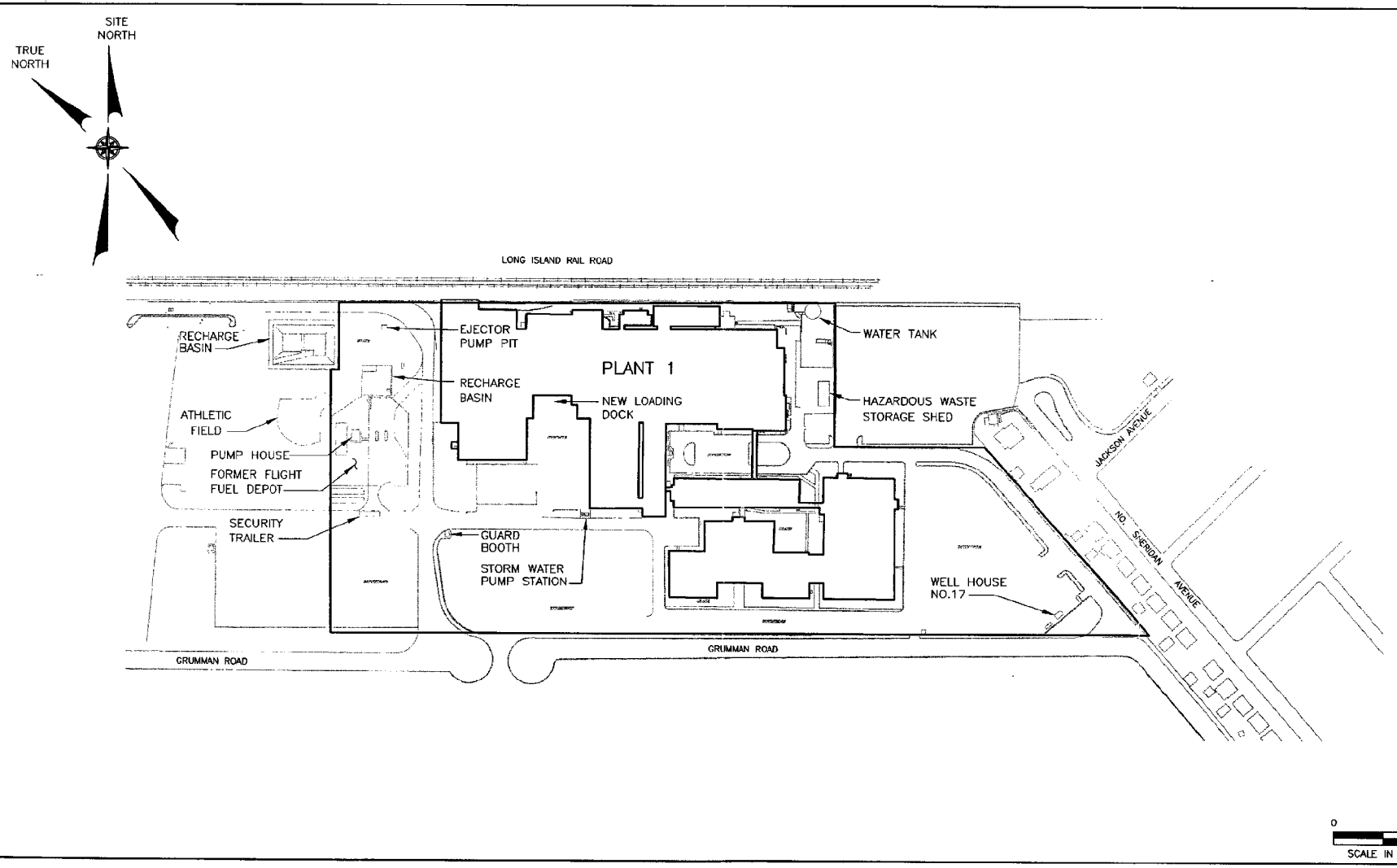

NORTHROP GRUMMAN CORPORATION
BETHPAGE NEW YORK
PLANT 1

SITE PLAN

FIGURE 1–2

Dvirka and Bartilucci
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Section 2

2.0 SCOPE OF WORK AND FIELD ACTIVITIES

2.1 Scope of Work

The results of the Phase I Site Assessment at Plant 1 were used to identify potential AOCs both within the interior and exterior of the building. As discussed in Section 1, this report addresses only those AOCs that were determined not to be regulated by the USEPA UIC Program. The AOCs investigated as part of this Phase II Site Assessment are shown on Figures 2-1 (interior areas) and 2-2 (exterior areas) and are summarized in Tables 2-1 (interior areas) and 2-2 (exterior areas). The information in these tables includes the AOC designation, the number of borings and samples completed for each AOC, and the analytical parameters for each sample. The interior and exterior programs were conducted concurrently. Interior and exterior sample locations are shown on Figures 2-3 and 2-4, respectively.

2.2 Field Program

This section provides a description of the field activities conducted as part of the Phase II Site Assessment at the Plant 1 site. Work performed during the Phase II Site Assessment included geophysical surveys and collection and analysis of soil and groundwater samples. Descriptions of the procedures used during these activities are included in Sections 2.2.1 (Geophysical Surveys), 2.2.2 (Soil Sampling), and 2.2.3 (Groundwater Monitoring Well Installation and Sampling).

2.2.1 Geophysical Surveys

In order to locate former structures and sample locations at eleven potential AOCs, NAEVA Geophysics Inc. (NAEVA) of Tappan, New York was subcontracted to perform geophysical surveys. Ground penetrating radar (GPR) techniques and an electromagnetic metal-detector were used to perform the geophysical surveys. The areas investigated by NAEVA are summarized below:

TABLE 2-1
NORTHROP GRUMMAN CORPORATION
PLANT 1
PHASE II SITE ASSESSMENT FIELD ACTIVITIES
BUILDING INTERIOR

AOC No.	Area of Environmental Concern	Soil Boring/Probe ID No.	Soil Sampling Interval (depth bgs)	Soil Borings			Soil Probes		No. of Samples and Analyses*							Comments
				No. of HSA Borings	No. of Split Spoon Soil Samples	Total Footage	No. of Soil Probes	No. of Soil Probe Samples	1. RCRA Metals	2. VOCs	3. SVOCs	4. TCLP STARS	5. PCBs	6. Glycols	7. Pests/Herbs	
I02	Former Paint Spray Room	I02 B01	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
I03	Former Paint Storage Room	I03 B01	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
I04	Former Storage Building Former Dry Wells	I04 B01	8' -10'	--	--	--	1	1	1	1	1	--	1	--	--	No remaining evidence of pool. AOC located directly under a support column. Boring placed within 5' of AOC
		I04 B02	--	--	--	--	--	--	--	--	--	--	--	--	--	No remaining evidence of pool. This pool is shared by I4 and I5. Therefore, this pool was targeted under I05-B01.
I05	Former Dry Well Area	I05 B01	8' -10', 20'-22'	--	--	--	1	7	2	2	2	--	2	--	--	Pool was backfilled. This pool is shared by I4 and I5.
		E43 B02	6' - 8', 14'-16'	--	--	--	1	5	2	2	2	--	2	--	--	No remaining evidence of pool. Actually located in an exterior location. This boring was also targeted immediately adjacent E43 B02.
I06	Former Paint Shop	I06 B01	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
		I06 B02	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--		Targeted AOC was the room.
I07	Former Paint Tunnel	I07 B01	3' - 5', 5'-7'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a concrete sump that discharged to an AST
		I07 B01N8	3' - 5', 5'-7'	--	--	--	1	2	2	--	--	--	--	--	--	Boring 8' N of sump, which formerly discharged to an AST.
		I07 B01S8	3' - 5', 5'-7'	--	--	--	1	2	2	--	--	--	--	--	--	Boring 8' S of sump, which formerly discharged to an AST
		I07 B01W5	3' - 5', 5'-7'	--	--	--	1	2	2	--	--	--	--	--	--	Boring 5' W of sump, which formerly discharged to an AST.
		I07 B01E8	5'-7'	--	--	--	1	2	1	--	--	--	--	--	--	Boring 8' E of sump, which formerly discharged to an AST.
		I07 B02	1' - 3', 3'-5'	--	--	--	1	2	2	2	2		--	--	--	Targeted AOC was a concrete "tunnel".
		I07 B03	5' - 7', 7'-9'	--	--	--	1	2	2	2	2	--	--	--	--	Boring added to program based on the identification of a former north-south backfilled concrete trench.
I08	Boiler Room Former Dry Well	I08 B01	2' - 4', 9'-11'	--	--	--	1	5	2	2	2	--	2	--	--	No remaining evidence of dry well.
I09	Former Hammer Shop	I09 B01	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
I10	Paint Shop Former Dry Well	I10 B01	4' - 6', 10'-12'	--	--	--	1	5	2	2	2	--	2	--	--	No remaining evidence of dry well.
I11	Former Paint Shop Booths and Paint Tunnel	I11 B01	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
		I11 B02	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
		I11 B03	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
		I11 B04	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
		I11 B05	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
		I11 B06	0' - 2', 2'-4' (1)	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a concrete pit. Added to program based on the visual identification of this structure as being associated with a paint curtain
		I11 B07	1.5'-3.5', 3.5'-5.5' (1)	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a concrete pit.
I12	Former Alodine Room	I12 B01	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
		I12 B02	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
		I12 B03	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
		I12 B04	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
		I12 B05	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.

TABLE 2-1
NORTHROP GRUMMAN CORPORATION
PLANT 1
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BUILDING INTERIOR

AOC No.	Area of Environmental Concern	Soil Boring/Probe ID No.	Soil Sampling Interval (depth bgs)	Soil Borings			Soil Probes		No. of Samples and Analyses*							Comments
				No. of HSA Borings	No. of Split Spoon Soil Samples	Total Footage	No. of Soil Probes	No. of Soil Probe Samples	1. RCRA Metals	2. VOCs	3. SVOCs	4. TCLP STARS	5. PCBs	6. Glycols	7. Pests/Herbs	
I13	Former Downspout Dry Wells	I13 B01	2'-4', 8'-9'	--	--	--	1	4	2	2	2	--	2	--	--	No remaining evidence of dry well. Located in cafeteria
		I13 B02	2'-4', 6'-7'	--	--	--	1	5	2	2	2	--	2	--	--	No remaining evidence of dry well.
I14	Five Former Leaching Pools	B01	--	--	--	--	--	--	--	--	--	--	--	--	--	Located under FROM building. Not technically feasible due to targeted depth. Removed from sampling program.
		B02	--	--	--	--	--	--	--	--	--	--	--	--	--	Located under FROM building. Not technically feasible due to targeted depth. Removed from sampling program.
		B03	--	--	--	--	--	--	--	--	--	--	--	--	--	Located under FROM building. Not technically feasible due to targeted depth. Removed from sampling program.
		B04	--	--	--	--	--	--	--	--	--	--	--	--	--	Located under FROM building. Not technically feasible due to targeted depth. Removed from sampling program.
		B05	--	--	--	--	--	--	--	--	--	--	--	--	--	Located under FROM building. Not technically feasible due to targeted depth. Removed from sampling program.
I15	Expansion of Leaching Pools at AOC I15	B01	--	--	--	--	--	--	--	--	--	--	--	--	--	Located under FROM building. Not technically feasible due to targeted depth. Removed from sampling program.
		B02	--	--	--	--	--	--	--	--	--	--	--	--	--	Located under FROM building. Not technically feasible due to targeted depth. Removed from sampling program.
		B03	--	--	--	--	--	--	--	--	--	--	--	--	--	Located under FROM building. Not technically feasible due to targeted depth. Removed from sampling program.
		B04	--	--	--	--	--	--	--	--	--	--	--	--	--	Located under FROM building. Not technically feasible due to targeted depth. Removed from sampling program.
I16	Former Heat Treat Room	I16 B01	--	--	--	--	--	--	--	--	--	--	--	--	--	Refusal - could not collect samples. Also targeted with I16-B02.
		I16 B02	1'-3', 3 5'-5.5', 5.5'-7.5' (1)	--	--	--	1	3	3	3	3	--	3	--	--	Targeted AOC was a concrete pit. Refusal encountered at 3' bgs during first attempt. Second attempt was made where samples were collected below pit bottom.
I17	Former Paint Mixing Room	I17 B01	1' - 3', 3'-5'	--	--		1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
		I17 B02	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
I18	RHIC Magnet Utility Trenches	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Inspection did not reveal compromised integrity. No samples collected.
I19	Material Stock Room	I19 B01	1' - 3', 3'-5'	--		--	1	2	2	2	2	--	--	--	--	Targeted AOC was the room.
I21	Five Former Machine Pits	I21 B01	2'-4', 4'-6'	--	--	--	2	4	2	2	2	--	--	--	--	Targeted AOC was a previously backfilled concrete pit.
		I21 B02	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a previously backfilled concrete pit.
		I21 B03	5' - 7', 7'-9'	--	--	--	2	2	2	2	2	--	--	--	--	Targeted AOC was a previously backfilled concrete pit.
		I21 B04	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a previously backfilled concrete pit.
		I21 B05	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a previously backfilled concrete pit.
I22	Former Tanks in Former RHIC Magnet Area	B01	--	--	--	--	--	--	--	--	--	--	--	--	--	According to NGC, USTs never existed in this area. Boring eliminated in consultation w/ NGC.
		B02	--	--	--	--	--	--	--	--	--	--	--	--	--	According to NGC, USTs never existed in this area. Boring eliminated in consultation w/ NGC.
		B03	--	--	--	--	--	--	--	--	--	--	--	--	--	According to NGC, USTs never existed in this area. Boring eliminated in consultation w/ NGC.
I23	Pump Station "B"	I23 B01	0'-2, 2'-4' (1)	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a sump with a concrete bottom. Required NGC removal of standing water.
I24	Floor Drains, Slop Sinks, Trench Drains and Pits/Sumps	--	--	--	--	--	--	--	--	--	--	--	--	--	--	The discharge point of drainage features are documented in a separate report entitled "Discharge Determination Report - Plant 1", dated May 2001.

TABLE 2-1
NORTHROP GRUMMAN CORPORATION
PLANT 1
PHASE II SITE ASSESSMENT FIELD ACTIVITIES
BUILDING INTERIOR

AOC No.	Area of Environmental Concern	Soil Boring/Probe ID No.	Soil Sampling Interval (depth bgs)	Soil Borings			Soil Probes		No. of Samples and Analyses*							Comments
				No. of HSA Borings	No. of Split Spoon Soil Samples	Total Footage	No. of Soil Probes	No. of Soil Probe Samples	1. RCRA Metals	2. VOCs	3. SVOCs	4. TCLP STARS	5. PCBs	6. Glycols	7. Pests/Herbs	
I25	Wood Block Flooring	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
I26	Hallway Adjacent to Former Alodine Room	I26 B01	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was a concrete trench (solid bottom).
		I26 B02	1.5'-3.5', 3.5'-5.5'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was a concrete trench (solid bottom).
I28	Air Handling Unit Room	I28 B01	2' -4', 4'-6'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a solid bottom sump within a concrete pit.
I30	Former Storage Building	I30 B01	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was a room.
		I30 B02	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was a room.
		I30 B03	1' - 3', 3'-5'	--	--	--	1	4	2	2	2	--	2	--	--	Targeted AOC was a room.
		I30 B03N8	1'-3', 3'-5'	--	--	--	1	2	--	--	2	--	--	--	--	Boring located 8' N of initial boring.
		I30 B03S8	1'-3', 3'-5'	--	--	--	1	2	--	--	2	--	--	--	--	Boring located 8' S of initial boring.
		I30 B03W8	1'-3', 3'-5'	--	--	--	1	2	--	--	2	--	--	--	--	Boring located 8' W of initial boring.
		I30 B03E8	1'-3', 3'-5'	--	--	--	1	2	--	--	2	--	--	--	--	Boring located 8' E of initial boring.
		I30 B03S12	0'-2', 4'-6', 8'-10'	--	--	--	1	5	--	--	3	--	--	--	--	Boring located 12' S of initial boring.
		I30 B03W12	0'-2', 4'-6', 8'-10'	--	--	--	1	5	--	--	3	--	--	--	--	Boring located 12' W of initial boring.
		I30 B03E12	0'-2', 4'-6', 8'-10'	--	--	--	1	5	--	--	3	--	--	--	--	Boring located 12' E of initial boring.
		I30 B04	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was a room.
		I30 B05	6'-8', 8'-10'	--	--	--	2	22	2	2	2	--	2	--	--	Targeted AOC was a room.
		I30 B06	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was a room.
		I30 B07	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was area potentially subject to former surface releases. Added to program based on discovery of machine shop slop sink discharge to grade.
I31	Refrigeration/Air Conditioning Room	I31 B01	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a room.
		I31 B02	2' - 4', 4'-6'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a room.
I32	Hangar 1	I32 B01	1'-3', 3'-5'	--	--	--	2	2	2	2	2	--	2	2	2	Targeted AOC was a room.
		I32 B02	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	2	2	2	Targeted AOC was a room.
		I32 B03	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	2	2	2	Targeted AOC was a room.
		I32 B04	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	2	2	2	Targeted AOC was a room.
I33	Storage Area in Office Area East of Hangar 2	I33 B01	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a room.
I34	"Old" Ejection Pits	I34 B01	4' - 6', 6'-8'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was a concrete pit (solid bottom) in a weight room.
		I34 B02	2' - 6'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was a concrete pit (solid bottom) in a utility room.
		I34 B03	--	--	--	--	--	--	--	--	--	--	--	--	--	Boring removed from program - deemed unnecessary (AOC was an aboveground "tub"). This boring was transferred to I38.
I35	Transformer Rooms	I35 B01	1'-3', 3'-5'	--	--	--	1	2	--	--	--	--	2	--	--	Targeted AOC was a room.
		I35 B02	1'-3', 3'-5'	--	--	--	1	2	--	--	--	--	2	--	--	Targeted AOC was a room.

TABLE 2-1
NORTHROP GRUMMAN CORPORATION
PLANT 1
PHASE II SITE ASSESSMENT FIELD ACTIVITIES
BUILDING INTERIOR

AOC No.	Area of Environmental Concern	Soil Boring/Probe ID No.	Soil Sampling Interval (depth bgs)	Soil Borings			Soil Probes		No. of Samples and Analyses*							Comments
				No. of HSA Borings	No. of Split Spoon Soil Samples	Total Footage	No. of Soil Probes	No. of Soil Probe Samples	1. RCRA Metals	2. VOCs	3. SVOCs	4. TCLP STARS	5. PCBs	6. Glycols	7. Pests/Herbs	
I36	Former Router Room	I36 B01	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a room.
		I36 B02	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a room.
I37	Machine Shop (previously referred to as Former Upholstery Room)	I37 B01	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a room.
I37	Machine Shop (previously referred to as Former Upholstery Room) (continued)	I37 B02	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a room.
I38	Boiler Room	I38 B01	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a room.
		I38 B02	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a room.
I39	Former Facility Maintenance Area	I39 B01	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a room.
		I39 B02	1'-3', 3'-5'	--	--	--	2	2	2	2	2	--	--	--	--	Targeted AOC was a room.
I40	Hangar 2	I40 B01	2' - 4', 4'-6'	--	--	--	2	2	2	2	2	--	2	2	--	Targeted AOC was a room.
		I40 B02	--	--	--	--	--	--	--	--	--	--	--	--	--	Targeted AOC was a room. Could not penetrate concrete w/ portable equipment (inaccessible w/ truck). Technically not practical.
		I40 B03	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	2	2	--	Targeted AOC was a room.
		I40 B04	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	2	2	--	Targeted AOC was a room.
		I40 B05	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	2	2	--	Targeted AOC was a room.
		I40 B06	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	2	2	--	Targeted AOC was a room.
I41	Random Locations of Historic Manufacturing Operations	I41 B01	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was a room. Placed in location of former "Hydraulics" area (in vicinity of column I13 and I14).
		I41 B02	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was a room. Placed in location of former "Drivmatic and Brake/Press Dept" (in vicinity of column E16).
		I41 B03	1'-3', 3'-5'	--	--	--	4	4	2	2	2	--	2	--	--	Targeted AOC was a room. Placed in location of former "Drivmatic and Brake/Press Dept" (in vicinity of column E17).
		I41 B04	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was a room. Placed in location of former "Shear, Saw and Router Dept" (in vicinity of column E26).
		I41 B05	1'-3', 3'-5'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was a room. Placed in location of former "Bench/Layout Area Dept" (in vicinity of column E30 and E31).
		I41 B06	--	--	--	--	--	--	--	--	--	--	--	--	--	No additional areas appeared to warrant further investigation.
		I41 B07	--	--	--	--	--	--	--	--	--	--	--	--	--	No additional areas appeared to warrant further investigation.
		I41 B08	--	--	--	--	--	--	--	--	--	--	--	--	--	No additional areas appeared to warrant further investigation.
		I41 B09	--	--	--	--	--	--	--	--	--	--	--	--	--	No additional areas appeared to warrant further investigation.
		I41 B10	--	--	--	--	--	--	--	--	--	--	--	--	--	No additional areas appeared to warrant further investigation
I42	Paint Shop Dry Well in Former Hammer Shop	I42 B01	8' - 10'	--	--	--	1	2	2	2	2	--	2	--	--	No remaining evidence of dry well.

TABLE 2-1
NORTHROP GRUMMAN CORPORATION
PLANT 1
PHASE II SITE ASSESSMENT FIELD ACTIVITIES
BUILDING INTERIOR

AOC No.	Area of Environmental Concern	Soil Boring/Probe ID No.	Soil Sampling Interval (depth bgs)	Soil Borings			Soil Probes		No. of Samples and Analyses*							Comments
				No. of HSA Borings	No. of Split Spoon Soil Samples	Total Footage	No. of Soil Probes	No. of Soil Probe Samples	1. RCRA Metals	2. VOCs	3. SVOCs	4. TCLP STARS	5. PCBs	6. Glycols	7. Pests/Herbs	
I43	Dry Wells in Former Carpentry Shop	I43 B01	8' - 10', 14'-16'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a backfilled dry well.
		I43 B01A	10'-12', 12'-14'	--	--	--	1	2	2	--	--	--	--	--	--	Boring advanced within AOC (backfilled drywell).
		I43 B02	11'-13, 13'-15'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a backfilled dry well (void encountered 8'-11').
I43	Dry Wells in Former Carpentry Shop (continued)	I43 B02A	15'-17', 17'-19', 19'-21'	--	--	--	1	3	--	--	3	--	--	--	--	Boring advanced within AOC (backfilled drywell).
I44	Canopy Trim Fixture Drain Hole/Sump Pit	I44 B01	4' - 6', 6'-8'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was a concrete pit (solid floor). Pit floor is 4' 3" deep.
I45	Waste Collection Station Adjacent to Canopy Drain/Sump Pit	I45 B01	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC had a solid bottom.
I46	Former "Spot Weld Rinse Tank" (In vicinity of column E6)	I46 B01	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	--	--	--	--
I47	RHIC Magnet Pumping Units	I47 B01	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	--	--	--	--
		I47 B02	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	--	--	--	--
D17	Pit in Room Adjacent to South Side of Former Carpentry Shop	D17 B01	0'-2', 2'-4', 4'-6'	--	--	--	1	3	3	--	3	--	--	--	--	--

*** Target Constituents/Analytical Methods**

1. RCRA Metals (Method 6010/7471)
2. Volatile Organic Compounds (Method 8260) incl those listed in STARS
3. Semivolatile Organic Compounds (Method 8270) incl. those listed in STARS
4. STARS Table 2 VOCs and SVOCs by TCLP
5. Polychlorinated Biphenyls (PCBs) (Method 8082)
6. Select Glycols (Method 8015)
7. Pesticides and Herbicides (Methods 8081/8151)

Notes:

(-) Below bottom of sump, pit or trench
-- Not applicable

TABLE 2-2
NORTHROP GRUMMAN CORPORATION
PLANT 1
PHASE II SITE ASSESSMENT FIELD ACTIVITIES
BUILDING EXTERIOR

AOC No.	Area of Environmental Concern	Soil Boring/Probe ID No.	Soil Sampling Interval (depth bgs)	Soil Borings			Soil Probes		No. of Samples and Analyses*						GPR Survey	Comments
				No. of HSA Borings	No. of Split Spoon Soil Samples	Total Footage	No. of Soil Probe Setups	No. of Soil Probes	1. RCRA Metals	2. VOCs	3. SVOCs	4. TCLP STARS	5. PCBs	6. Glycols		
E01	Former Settling Tanks/Leaching Pools	E01 B01	14'-16', 20'-22'	--	--	--	1	5	2	2	2	--	2	--	■	Targeted AOC was a backfilled pool. AOC was located on and/or adjacent to LIPA markout. Closest "clear" adjacent area within 10' of AOC was targeted.
		E02 B02	12'-14', 20'-22'	--	--	--	1	5	2	2	2	--	2	--	■	Targeted AOC was a backfilled pool.
		E01 B03	12'-14', 20'-22'	--	--	--	1	5	2	2	2	--	2	--	■	Targeted AOC was a backfilled pool.
		E01 B04	12'-14', 20'-22'	--	--	--	1	5	2	2	2	--	2	--	■	Targeted AOC was a backfilled pool.
		E01 B05	12'-14', 18'-20'	--	--	--	1	5	2	2	2	--	2	--	■	Targeted AOC was a backfilled pool.
		E01 B06	12'-14', 20'-22'	1	6	22	--	--	2	2	2	--	2	--	■	Targeted AOC was a former Imhoff tank (solid bottom).
		E01 B07	12'-14', 20'-22'	1	6	22	--	--	2	2	2	--	2	--	■	Targeted AOC was a former Imhoff tank (solid bottom). Encountered refusal during first attempt with Geoprobe.
		E01 B08	18'-20', 24'-26'	1	6	26	--	--	2	2	2	--	2	--	■	Targeted AOC was a former Imhoff tank (solid bottom).
		E01 B09	16'-18', 24'-26'	1	5	26	--	--	2	2	2	--	2	--	■	Targeted AOC was a former Imhoff tank (solid bottom).
		E01 B10	--	--	--	--	--	--	--	--	--	--	--	--	■	Added to program based on GPR findings. Located on and/or adjacent to LIPA markout. Could not locate any "clear" areas within 10' of AOC. Deemed not technically practical.
		E01 B11	12'-14', 20'-22'	--	--	--	1	5	2	2	2	--	2	--	■	Targeted AOC was a backfilled pool. Added to program based on GPR findings.
		E01 B12	12'-14', 20'-22'	--	--	--	1	5	2	2	2	--	2	--	■	Targeted AOC was a backfilled pool. Added to program based on GPR findings.
		E01 B13	12'-14', 20'-22'	--	--	--	1	5	2	2	2	--	2	--	■	Targeted AOC was a backfilled pool. Added to program based on GPR findings.
		E01 B14	12'-14', 18'-20'	--	--	--	1	5	2	2	2	--	2	--	■	Targeted AOC was a backfilled pool. Added to program based on GPR findings.
E02	Six Former Leaching Pools	E02 B01	12' 14', 20' 22'	1	6	22	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E02 B02	6' - 8', 14'-16'	1	5	16	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E02 B03	12'-14', 20'-22'	1	6	22	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E02 B04	12'-14', 24'-26'	1	9	26	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E02 B05	--	--	--	--	--	--	--	--	--	--	--	--	■	Located on and/or adjacent to LIPA markout. Could not locate any "clear" areas within 10' of AOC. Deemed not technically practical.
		E02 B06	--	--	--	--	--	--	--	--	--	--	--	--	■	Located on and/or adjacent to LIPA markout. Could not locate any "clear" areas within 10' of AOC. Deemed not technically practical.
E03	Former Heat Treat Drainage Wells	E03 B01	16' - 18', 22'-24'	--	--	--	2	9	2	2	2	--	2	--	■	Targeted AOC was a backfilled pool.
		E03 B02	14' - 16', 20'-22'	--	--	--	1	8	2	2	2	--	2	--	■	Targeted AOC was a backfilled pool.
E04	Former Dry Well	E04 B01	8' - 10', 18'-20'	--	--	--	1	6	2	2	2	--	--	--	■	GPR inconclusive. No remaining evidence of pool.
E06	Leaching Pool Area	E06 B01	10'-12', 20-22'	1	7	22	--	--	2	2	2	--	--	--	■	No remaining evidence of pool.
		E06 B02	10'-12', 20-22'	1	7	22	--	--	2	2	2	--	--	--	■	No remaining evidence of pool.
		E06 B03	10'-12', 20'-22'	1	7	22	--	--	2	2	2	--	--	--	■	No remaining evidence of pool.
		E06 B04	10'-12', 20'-22'	1	7	22	--	--	2	2	2	--	--	--	■	No remaining evidence of pool.
		E06 B05	3'-5', 12'-14'	1	6	16	--	--	2	2	2	--	--	--	■	Targeted AOC was backfilled (suspected distribution box).

TABLE 2-2
NORTHROP GRUMMAN CORPORATION
PLANT 1
PHASE II SITE ASSESSMENT FIELD ACTIVITIES
BUILDING EXTERIOR

AOC No.	Area of Environmental Concern	Soil Boring/Probe ID No.	Soil Sampling Interval (depth bgs)	Soil Borings			Soil Probes		No. of Samples and Analyses*						GPR Survey	Comments
				No. of HSA Borings	No. of Split Spoon Soil Samples	Total Footage	No. of Soil Probe Setups	No. of Soil Probes	1. RCRA Metals	2. VOCs	3. SVOCs	4. TCLP STARS	5. PCBs	6. Glycols		
E06	Leaching Pool Area (continued)	E06 B06	8' - 10', 16'-18'	--	--	--	1	5	2	2	2	--	--	--	■	Targeted AOC was backfilled (suspected distribution box).
		E06 B09	10' -12', 20'-22'	--	--	--	1	7	2	2	2	--	--	--	■	No remaining evidence of pool. Targeted AOC located inside building.
		E06 B10	--	--	--	--	--	--	--	--	--	--	--	--	■	Not technically feasible due to targeted depth, located inside building
		E06 B11	--	--	--	--	--	--	--	--	--	--	--	--	■	Not technically feasible due to targeted depth, located inside building.
		E06 B12	--	--	--	--	--	--	--	--	--	--	--	--	■	Not technically feasible due to targeted depth, located inside building.
		E06 B13	--	--	--	--	--	--	--	--	--	--	--	--	■	Not technically feasible due to targeted depth, located inside building.
E07	Nine Leaching Pools	E07 B01	14' -16', 18'-20'	1	5	20	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool
		E07 B02	12' -14', 16'-18'	1	5	20	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E07 B03	11' -13', 19'-21'	1	5	21	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E07 B04	11' 13', 19' 21'	1	5	21	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E07 B05	15' -17', 19'-21'	1	5	21	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E07 B06	11' -13', 19'-21'	1	5	21	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E07 B07	11' 13', 19' 21'	1	5	21	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E07 B09	11' -13', 19'-21'	1	5	21	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E07 B10	11' -13', 19'-21'	1	5	21	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool Added to program based on GPR findings.
		E07 B11	11' -13', 19' 21'	1	5	21	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool. Added to program based on GPR findings.
		E07 B12	11' -13', 19'-21'	1	5	21	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool. Added to program based on GPR findings.
		E07 B13	11' -13', 19'-21'	1	5	21	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool. Added to program based on GPR findings
		E07 B14	9' - 11', 18'-20'	1	5	15	--	--	2	2	2	--	--	--	■	Targeted AOC was a suspected distribution box (previously backfilled). Added to program based on GPR findings.
E08	Former Leaching Field with Twenty Leaching Pools	E08 B01	6' - 8', 14'-16'	1	5	16	--	--	2	2	2	--	--	--	■	No remaining evidence of pool.
		E08 B02	6' - 8', 14'-16'	1	5	16	--	--	2	2	2	--	--	--	■	No remaining evidence of pool.
		E08 B03	8' - 10', 14'-16'	1	5	16	--	--	2	2	2	--	--	--	■	No remaining evidence of pool.
		E08 B04	10' - 12', 14'-16'	1	5	16	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E08 B05	14' - 16', 22'-24'	1	7	24	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E08 B06	8' - 10', 14'-16'	1	5	16	--	--	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E08 B07	8' - 10', 14'-16'	1	5	16	--	--	2	2	2	--	--	--	■	No remaining evidence of pool.
		E08 B08	10' - 12', 20'-22'	--	--	--	1	8	2	2	2	--	--	--	■	No remaining evidence of pool.
		E08 B09	10' - 12', 20'-22'	--	--	--	1	8	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E08 B10	8' - 10', 16'-18'	--	--	--	1	6	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E08 B11	6' - 8', 14'-16'	--	--	--	1	5	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.

TABLE 2-2
NORTHROP GRUMMAN CORPORATION
PLANT 1
PHASE II SITE ASSESSMENT FIELD ACTIVITIES
BUILDING EXTERIOR

AOC No.	Area of Environmental Concern	Soil Boring/Probe ID No.	Soil Sampling Interval (depth bgs)	Soil Borings			Soil Probes		No. of Samples and Analyses*						GPR Survey	Comments
				No. of HSA Borings	No. of Split Spoon Soil Samples	Total Footage	No. of Soil Probe Setups	No. of Soil Probes	1. RCRA Metals	2. VOCs	3. SVOCs	4. TCLP STARS	5. PCBs	6. Glycols		
E08	Former Leaching Field with Twenty Leaching Pools (continued)	E08 B12	12' - 14', 18'-20'	--	--		1	7	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E08 B14	8' - 10', 16'-18'	--	--	--	1	6	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool.
		E08 B15	--	--	--	--	--	--	--	--	--	--	--	--	■	Not technically feasible, located in office area.
		E08 B16	--	--	--	--	--	--	--	--	--	--	--	--	■	Not technically feasible, located in office area.
		E08 B17	--	--	--	--	--	--	--	--	--	--	--	--	■	Not technically feasible, located in office area.
		E08 B18	--	--	--	--	--	--	--	--	--	--	--	--	■	Not technically feasible, located in office area.
		E08 B19	--	--	--	--	--	--	--	--	--	--	--	--	■	Not technically feasible, located in office area.
		E08 B20	--	--	--	--	--	--	--	--	--	--	--	--	■	No. technically feasible, located in office area.
E09	Former Coal Storage Bin	E09 B01	0' - 2', 6'-8'	--	--	--	1	4	2	--	2	--	--	--	--	--
E10	Seven Former Leaching Pools	E10 B01	13' - 15', 21'-23'	1	5	23	--	--	2	2	2	--	--	--	■	No remaining evidence of pool. Initially attempted with Geoprobe, but encountered refusal.
		E10 B02	11' - 13', 19'-21'	1	5	21	--	--	2	2	2		--	--	■	No remaining evidence of pool. Initially attempted with Geoprobe, but encountered refusal.
		E10 B03	12' - 14', 20'-22'	--	--	--	1	7	2	2	2	--	--	--	■	No remaining evidence of pool.
		E10 B04	11' - 13', 19'-21'	--	--	--	1	5	2	2	2	--	--	--	■	No remaining evidence of pool.
		E10 B05	10' - 12', 16'-18'	--	--		1	6	2	2	2	--	--	--	■	No remaining evidence of pool.
		E10 B06	10' - 12', 16'-18'	--	--	--	1	6	2	2	2	--	--	--	■	No remaining evidence of pool.
		E10 B08	6' - 10', 14'-16'	--	--	--	1	5	2	2	2	--	--	--	■	Targeted AOC was a backfilled pool. Added to program based on GPR findings. Encountered refusal in first attempt.
E12	Former Dry Well	E12 B01	10' - 12', 18'-20'	--	--	--	1	5	2	2	2	--	--	--	■	No remaining evidence of pool GPR inconclusive
E13	Former Drum Storage Area	E13 B01	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	2	--	--	--
		E13 B02	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	--	--	--
		E13B02N5	0' - 2', 2'-4'	--	--	--	1	2	--	--	2	--	--	--	--	Probe located 5' N of initial boring.
		E13B02S5	0' - 2', 2'-4'	--	--	--	1	2	--	--	2	--	--	--		Probe located 5' S of initial boring.
		E13B02W8	0' - 2', 2'-4'	--	--	--	1	2	--	--	2	--	--	--	--	Probe located 8' W of initial boring.
		E13B02E8	0' - 2', 2'-4'	--	--	--	1	2	--	--	2	--	--	--	--	Probe located 8' E of initial boring.
		E13B02NE10	0' - 2', 2'-4'	--	--	--	1	2	--	--	2	--	--	--	--	Probe located 10' NE of initial boring.
		E13B02NE20	0' - 2', 2'-4'	--	--	--	1	2	--	--	2	--	--	--	--	Probe located 20' S of initial boring.
		E13B02W12	0' - 2', 2'-4'	--	--	--	1	2	--	--	2	--	--	--	--	Probe located 12' W of initial boring.
		E13B02E12	0' - 2', 2'-4'	--	--	--	1	2	--	--	2	--	2	--	--	Probe located 12' E of initial boring.
E17	Ejector Pit	--	--	--	--	--	--	--	--	--	--	--	--	--	--	This area was investigated as part of AOC D15.
E18	Existing On-site Recharge Basin	E18 B01	0' - 2', 2'-4' (1)	--	--	--	1	2	2	2	2	--	2	--	--	--
		E18 B02	0' - 2', 2'-4' (1)	--	--	--	1	2	2	2	2	--	2	--	--	--

TABLE 2-2
NORTHROP GRUMMAN CORPORATION
PLANT 1
PHASE II SITE ASSESSMENT FIELD ACTIVITIES
BUILDING EXTERIOR

AOC No.	Area of Environmental Concern	Soil Boring/Probe ID No.	Soil Sampling Interval (depth bgs)	Soil Borings			Soil Probes		No. of Samples and Analyses*						GPR Survey	Comments
				No. of HSA Borings	No. of Split Spoon Soil Samples	Total Footage	No. of Soil Probe Setups	No. of Soil Probes	1. RCRA Metals	2. VOCs	3. SVOCs	4. TCLP STARS	5. PCBs	6. Glycols		
E19	Former On-site Recharge Basin	E19 B01	8' - 10', 18'-20'	--	--	--	1	7	2	2	2	--	2	--	--	--
E20	Unidentified Pit	E20 B01	2' - 4', 4'-6'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was a concrete pit (solid bottom).
E21	Former AST and Salvage Area	E21 B01	0' - 2', 2'-4'	--	--	--	1	2	--	2	--	--	--	--	--	--
		E21 B02	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	--	--	--
		E21 B03	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	--	--	--
		E21 B04	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	--	--	--
		E21 B05	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	--	--	--
E22	Material Storage Area	E22 B01	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	2	--	--
		E22 B02	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	2	--	--
		E22 B03	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	2	--	--
		E22 B04	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	2	--	--
E23	Grated Dry Well	E23 B01	--	--	--	--	--	--	--	--	--	--	--	--	--	Targeted AOC was actually a trench (solid bottom). Encountered refusal. Could not achieve required depth of sampling intervals.
E25	Former Concrete Sump Pit	E25 B01	5'-7', 7'-9'	--	--	--	1	5	2	2	2	--	2	2	■	GPR inconclusive.
E26	Former Flight Fuel Depot	--	--	--	--	--	--	--	--	--	--	--	--	--	--	NGC is addressing this AOC under a separate program.
E27	Location of Former Trichloroethylene Tank	E27 B01	1'-3', 3'-5'	--	--	--	1	2	--	2	--	--	--	--	--	--
E28	Boiler Room UST	--	--	--	--	--	--	--	--	--	--	--	--	--	■	GPR inconclusive (no need for UST closure program)
E29	Floor Drains Outside Former Facility Maint Area and Inside Pump House	--	--	--	--	--		--	--	--	--	--	--	--	--	The discharge point of drainage features are documented in a separate report entitled "Discharge Determination Report - Plant 1", dated May 2001
E30	Pump Station "A"	E30 B01	13'-15', 15'-17'	--	--	--	1	3	2	2	2	--	--	--	--	Targeted AOC was a backfilled sump beneath pedestrian bridge. Encountered refusal during first attempt at 13' bgs. Targeted adjacent location.
E32	Catch Basins (Vicinity of Pump House/Water Tank)	E32 B01	6' - 8', 8'-10'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was an active structure with solid bottom. Targeted adjacent location.
		E32 B02	6' - 8', 8'-10'	--	--	--	1	2	2	2	2	--	--	--	--	Targeted AOC was an active structure with solid bottom. Targeted adjacent location.
E33	Former Tank 1111 (Between Hangars 1 and 2)	E33 B01	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	--	--	--	--
E34	Courtyard Between Hangars 1 and 2	E34 B01	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	2	2	--	Targeted AOC was an area, as opposed to a structure.
		E34 B02	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	2	2	--	Targeted AOC was an area, as opposed to a structure.
		E34 B03	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	2	--	Targeted AOC was an area, as opposed to a structure.
		E34 B04	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	2	--	Targeted AOC was an area, as opposed to a structure.
E35	Area West of Hangar 1	E35 B01	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was an area, as opposed to a structure.
		E35 B02	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was an area, as opposed to a structure.
E36	Former Drainage Swale (N of Maint. Area)	E36 B01	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was an area, as opposed to a structure.

TABLE 2-2
NORTHROP GRUMMAN CORPORATION
PLANT 1
PHASE II SITE ASSESSMENT FIELD ACTIVITIES
BUILDING EXTERIOR

AOC No.	Area of Environmental Concern	Soil Boring/Probe ID No.	Soil Sampling Interval (depth bgs)	Soil Borings			Soil Probes		No. of Samples and Analyses*						GPR Survey	Comments
				No. of HSA Borings	No. of Split Spoon Soil Samples	Total Footage	No. of Soil Probe Setups	No. of Soil Probes	1. RCRA Metals	2. VOCs	3. SVOCs	4. TCLP STARS	5. PCBs	6. Glycols		
E36	Former Drainage Swale (N of Maint. Area) (continued)	E36 B02	1' - 3', 3'-5'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was an area, as opposed to a structure
E37	Former Discoloration (SE Parking Area)	E37 B01	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was an area, as opposed to a structure.
		E37 B02	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was an area, as opposed to a structure.
E38	Boiler Room Exterior Former Dry Well	E38 B01	10' - 12', 20'-22'	--	--	--	1	7	2	2	2	--	2	--	--	No remaining evidence of pool.
E39	Dry Well Outside Former Facility Maintenance Area	E39 B01	8' - 10', 20'-22'	--	--	--	1	5	2	2	2	--	2	--	--	No remaining evidence of pool.
E40	Distribution Pit in Transformer Area	E40 B01	--	--	--	--	--	--	--	--	--	--	--	--	--	Visual inspection of pit did not reveal presence of compromised integrity.
E41	Dry Well Outside Former Paint Tunnel	E41 B01	8' - 10', 18'-20'	--	--	--	1	7	2	2	2	--	2	--	--	No remaining evidence of pool.
E42	Unidentified Pit Outside Boiler Room	E42 B01	3' - 5', 5'-7'	--	--	--	1	2	2	2	2	--	2	--	--	Targeted AOC was a concrete pit (solid bottom).
E43	Former 2,000 Gal Gas USTs (4) South of Refrig/AC Room	E43 B01	6' - 8', 14'-16'	--	--	--	1	5	2	2	2	-	--	--	--	--
		E43 B02	--	--	--	--	--	--	--	--	--	--	--	--	--	AOC targeted under IS E43B02 due to close proximity.
E44	Former Gas Pump House S of Refrig/AC Room	E44 B01	0' - 2', 2'-4'	--	--	--	1	2	2	2	2	--	--	--	--	--
E45	UST Outside Former Boiler Room Near Former Coal Storage Bin	E45 B01	--	--	--	--	--	--	--	--	--	--	--	--	--	Encountered refusal, could not collect samples at appropriate depth
--	Fill Material Within Abandoned Leaching Pools	E01 B05	5'-7'	--	--	--	1	1	--	--	--	--	1	--	--	Added to program at NGC's request.
		F07 B11	5'-7'	--	--	--	1	1	--	--	--	--	1	--	--	Added to program at NGC's request.
		E08 B09	6'-7'	--	--	--	1	1	--	--	--	--	1	--	--	Added to program at NGC's request.
D12	Dry Well Northwest of the Boiler Room	D12 B01	--	--	--	--	--	--	--	--	--	--	--	--	--	No samples collected due to metal at bottom of drainage feature.
D14	LIPA Pit/Sump	D14 B01	5'-7', 7'-9', 9'-11'	--	--	--	1	3	3	--	3	--	--	--	--	Boring advanced within AOC.
D15	Square Ejector Pit North of Recharge Basin	D15 B01	6'-8', 10'-12', 14'-16', 17'-19', 19'-21'	--	--	--	1	5	5	--	5	--	--	--	--	Soil boring was advanced immediately adjacent to the ejector pit off northeast corner.
--	Groundwater Sampling	--	--	--	--	--	--	--	6	5	5	--	5	--	--	--

*** Target Constituents/Analytical Methods**

1. RCRA Metals (Method 6010/7471)
2. Volatile Organic Compounds (Method 8260) incl. those listed in STARS
3. Semivolatile Organic Compounds (Method 8270) incl. those listed in STARS
4. STARS Table 2 VOCs and SVOCs by TCLP
5. Polychlorinated Biphenyls (PCBs) (Method 8082)
6. Select Glycols (Method 8015)

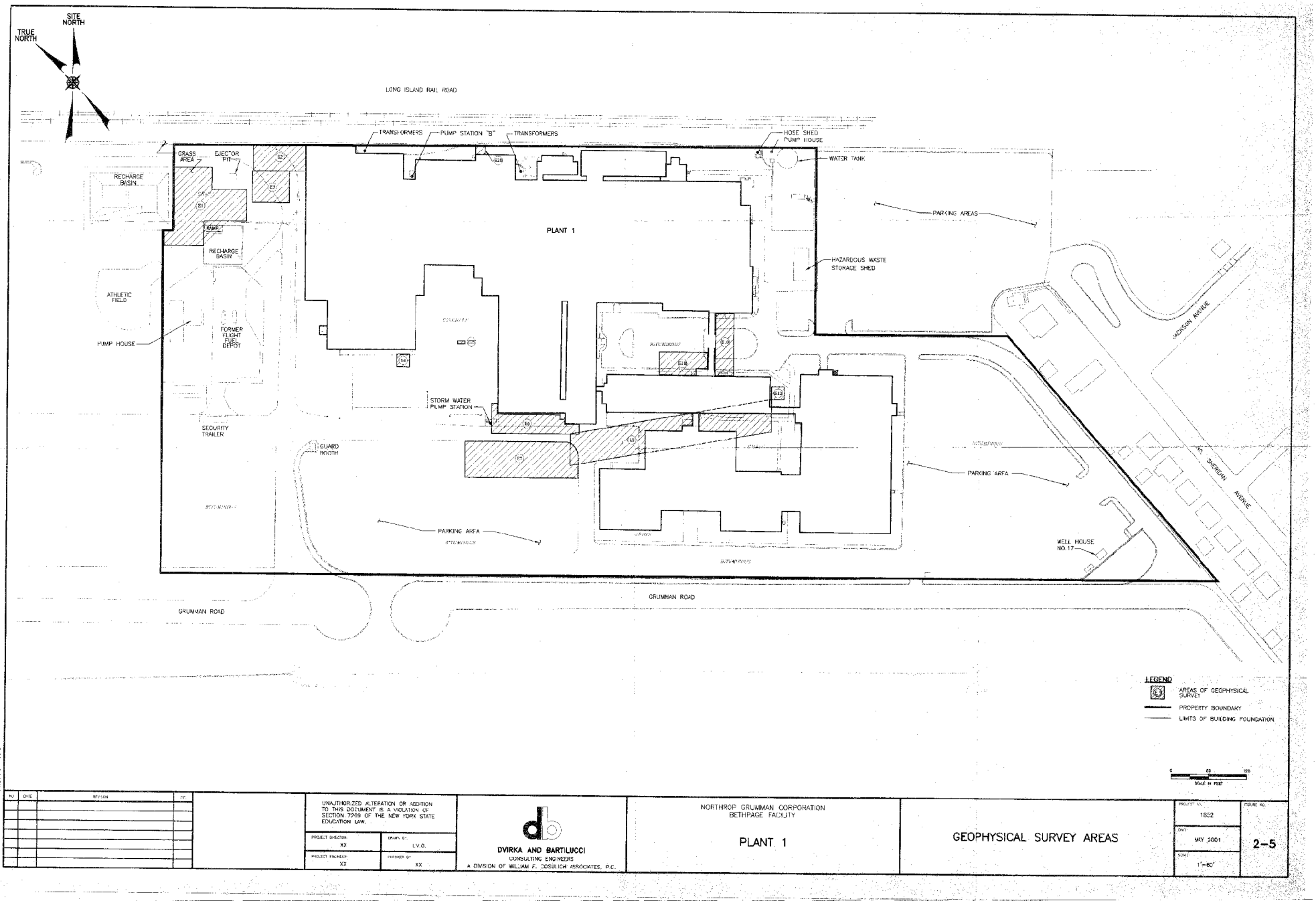
Notes:

(1) Below bottom of chamber, dry well, pit, catch basin or recharge basin
--: Not applicable

- E1 - Former Settling Tanks/Leaching Pools;
- E2 - Six Former Leaching Pools;
- E3 - Former Heat Treat Drainage Wells;
- E4 - Former Dry Well;
- E6 - Leaching Pool Area;
- E7 - Nine Leaching Pools;
- E8 - Former Leaching Field with Twenty Leaching Pools;
- E10 - Seven Former Leaching Pools;
- E12 - Former Dry Well;
- E25 - Former Concrete Sump Pit; and
- E28 - Boiler Room UST

The locations of these areas are shown on Figure 2-5.

Each AOC that was not paved with reinforced concrete was initially investigated utilizing a Fisher TW-6 Pipe and Cable Locator (electromagnetic metal-detector). The instrument was carried over the areas in a series of closely spaced parallel traverses. A GPR survey was then conducted in those areas that exhibited metal-detector anomalies. GPR data was collected along traverses centered over the anomalies. GPR data profiles were collected over a grid of parallel lines spaced 3 to 5 feet apart for AOCs which did not exhibit any metal-detector anomalies or AOCs paved with reinforced concrete. The data profiles were then examined for evidence of reflections that could be associated with subsurface features. This data were used to locate soil borings that were advanced in these areas. A more detailed description of the methods and instruments used during the geophysical survey is included in the report from NAEVA, in Appendix A.



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DVIRKA AND BARTILUCCI CONSULTING ENGINEERS
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

NORTHROP GRUMMAN CORPORATION
BETHPAGE FACILITY

PLANT 1

GEOPHYSICAL SURVEY AREAS

PROJECT NO.	1852
DATE	MAY 2001
SCALE	1"=60'
FIGURE NO.	2-5

2.2.2 Soil Sampling

This section provides a description of the procedures used to collect soil samples during the Phase II Site Assessment at Plant 1. Dedicated field books, which are available in the project file, provide documentation of the daily field activities conducted at the site during the field program.

The interior soil probes were advanced utilizing Geoprobe tooling and either an electric hammer-drill or, where access allowed, truck-mounted Simco 200 Earthprobe. At exterior locations, soil samples were collected utilizing a truck-mounted hollow stem auger drill rig (CME 55 or CME 75) with Geoprobe tooling, a truck-mounted Simco 200 Earthprobe with Geoprobe tooling or manual advancement of Geoprobe tooling using an electric hammer-drill.

The Geoprobe tooling consisted of drill rods and either a 1.5-inch outside diameter by 2-foot long or a 2-inch outside diameter by 4-foot long soil probe sampler. A clear polyethylene terephthalate-G (PETG) sample tube liner, dedicated to each soil probe sample, was used to contain the sample within the sampler. Each soil probe was advanced utilizing the hammer-drill, Earthprobe or drill rig's 140-pound hammer to drive the soil probe sampler, sample tube liner and drill rods to the desired depth. The soil probe sampler was retrieved using a mechanical floor jack, the Earthprobe or the drill rig.

All soil samples collected were geologically characterized, inspected for staining, discoloration or odors, and screened for volatile organic compounds (VOCs) using an organic vapor analyzer equipped with a photoionization detector (PID). This information is included on the soil boring logs in Appendix B.

During the advancing of soil probes, a PID was used to monitor VOCs in the workers' breathing zone and at the boreholes. Air monitoring results are documented in the project field books. The PID was calibrated on at least a daily basis, using isobutylene gas at a concentration of 100 parts per million in air. Equipment calibration was documented in the project field books.

Material to be sent for laboratory analysis was placed in laboratory-supplied sample bottles, which were immediately stored in an iced cooler for subsequent transport to the laboratory under Chain of Custody procedures. Any excess sample material not required for analysis was returned to the borehole from which it came. The remainder of the borehole was filled with clean sand and/or bentonite pellets. Each borehole was restored at grade with the same material that was originally in place. That is, asphalt areas were restored with asphalt, concrete areas were restored with concrete and grass covered areas were restored with soil or sand. Where manholes were encountered, the covers were replaced after sampling had been completed.

All non-dedicated sampling equipment was decontaminated between sample locations. Decontamination procedures consisted of:

- External wash with a solution of non-phosphate detergent and potable water;
- Potable water rinse; and
- Distilled/deionized water rinse.

Decontamination fluids were contained for proper off-site transportation and disposal by NGC.

2.2.3 Groundwater Monitoring Well Installation and Sampling

Four groundwater monitoring wells were installed at the Plant 1 site to assess potential impact to groundwater. The approximate locations of the groundwater monitoring wells are shown on Figure 2-4.

The monitoring wells were installed utilizing a CME-55 rotary drill rig equipped with 4 1/4-inch hollow stem augers. All equipment, including the 4 1/4-inch hollow stem augers, was decontaminated utilizing a high-pressure steam cleaner. All decontamination water was contained in 55-gallon DOT drums for proper disposal. Each monitoring well was installed to a depth of approximately 55 feet below grade. Well construction logs are presented in Appendix B. Fifteen feet of 2-inch diameter 0.010 slot schedule 40 flush joint threaded PVC screen and 2-inch

diameter Schedule 40 flush joint thread PVC riser pipe was utilized for the well construction. All drill cuttings and well development water were contained in 55-gallon DOT drums for proper off-site transportation and disposal by NGC. Number 1 Morie well gravel was utilized for the well screen annulus. The remainder of the annular void was filled with hydrated bentonite pellets and a cement and bentonite grout mix was installed as a seal. Subsequent well development activities reduced the turbidity of the well water to less than 50 NTU's, with the exception of monitoring wells PLT1MW-01 and PLT1GM-14. As a result, the laboratory filtered and conducted dissolved metals analysis for groundwater samples collected from monitoring wells PLT1MW-01 and PLT1GM-14.

In addition, two existing groundwater monitoring wells (PLT1GM-14 and PIT-INFFTMWD) located at the Plant 1 site (see Figure 2-4) were sampled along with the newly installed wells.

Section 3

3.0 FINDINGS

As previously described, the Phase II Site Assessment consisted of sampling at 37 interior AOCs and 35 exterior AOCs. The samples collected as part of the interior and exterior investigations are summarized on Tables 2-1 and 2-2, respectively. Sample locations are shown on Figures 2-3 (interior locations), and 2-4 (exterior locations).

Analytical results for all samples analyzed during the Phase II Site Assessment are summarized in tables included in Appendix C. Analytical results were screened against site-specific criteria for the Plant 1 site. These guidance values were approved by the NYSDEC and utilized for other investigation programs conducted at NGC Plants 5 and 12. The site-specific guidance values developed and utilized for the Plants 5 and 12 investigation/remediation programs consisted of a combination of USEPA Soil Screening Levels (SSLs), Technical and Administrative Guidance Memorandum (TAGM) 4046 criteria and other guidance selected for major technical, environmental and land use considerations. The technical rationale for the development and implementation of the Plant 1 site-specific criteria is summarized in a document entitled "Non-UIC Remediation Plan - Plant 1," dated May 2001. The Plant 1 site-specific criteria is listed below:

Constituent of Concern	Comparison Value
SVOCs (ug/kg or ppb)	
Total CaPAHs	10,000
Total PAHs	100,000
Total SVOCs	500,000
Metals (mg/kg or ppm)	
Arsenic	20
Barium	5,500
Cadmium	78
Cadmium (total)	390
Chromium (hexavalent)	390
Mercury	23
Lead	400

Constituent of Concern	Comparison Value
Selenium	390
Silver	390
PCBs (ug/kg or ppb)	
Total PCBs (subsurface soil)	10,000

Although there are no NYSDEC TAGM criteria for glycols (i.e., ethylene glycol and propylene glycol), discussions with NYSDEC representatives indicate that a level of 50,000 ug/kg has been utilized. Analytical results for pesticides/herbicides were screened against the NYSDEC criteria provided in Appendix A of TAGM 4046. In addition, groundwater results were compared to the NYSDEC Class GA groundwater standards.

3.1 Interior Investigation

As previously discussed, the Phase II Site Assessment interior investigation activities were conducted at the following areas at the site:

- Former Paint Spray Room (I02)
- Former Paint Storage Room (I03)
- Former Storage Building Former Dry Wells (I04)
- Former Dry Well Area (I05)
- Former Paint Shop (I06)
- Former Paint Tunnel (I07)
- Boiler Room Former Dry Well (I08)
- Former Hammer Shop (I09)
- Paint Shop Former Dry Well (I10)
- Former Paint Shop Booths and Paint Tunnel (I11)
- Former Alodine Room (I12)
- Former Downspout Dry Wells (I13)
- Former Heat Treat Room (I16)
- Former Paint Mixing Room (I17)
- Material Stock Room (I19)
- Five Former Machine Pits (I21)
- Pump Station "B" (I23)
- Hallway Adjacent to Former Alodine Room (I26)
- Air Handling Unit Room (I28)

- Former Storage Building (I30)
- Refrigeration/Air Conditioning Room (I31)
- Hangar 1 (I32)
- Storage Area in Office Area East of Hangar 2 (I33)
- "Old" Ejection Pits (I34)
- Transformer Rooms (I35)
- Former Router Room (I36)
- Machine Shop (previously referred to as Former Upholstery Room) (I37)
- Boiler Room (I38)
- Former Facility Maintenance Area (I39)
- Hangar 2 (I40)
- Random Locations of Historic Manufacturing Operations (I41)
- Paint Shop Dry Well in Former Hammer Shop (I42)
- Dry Wells in Former Carpentry Shop (I43)
- Canopy Trim Fixture Drain Hole/Sump Pit (I44)
- Waste Collection Station Adjacent to Canopy Drain/Sump Pit (I45)
- Former "Spot Weld Rinse Tank" (In vicinity of column E6) (I46)
- RHIC Magnet Pumping Units (I47)
- Pit in Room Adjacent to South Site of former Carpentry Shop (D17)

An area-by-area discussion of the Initial Phase II Site Assessment interior investigation activity findings is presented below.

3.1.1 Former Paint Spray Room (I02)

Two soil samples were collected at soil boring location I02B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for total carcinogenic polycyclic aromatic hydrocarbons (CaPAHs), total polycyclic aromatic hydrocarbons (PAHs) and total semivolatile organic compounds (SVOCs) of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.2 Former Paint Storage Room (I03)

Two soil samples were collected at soil boring location I03B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals

  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Volatile Organic Compounds

  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for total CaPAHs, total PAHs and total SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.3 Former Storage Building Former Dry Wells (I04)

One soil sample was collected at soil boring location I04B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2, C-3 and C-4 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for total CaPAHs, total PAHs and total SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.1.4 Former Dry Well Area (I05)

Four soil samples were collected at soil boring locations I05B01 and E43B02, during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2, C-3 and C-4 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for total CaPAHs, total PAHs and total SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.1.5 Former Paint Shop (I06)

Four soil samples were collected at soil boring locations I06B01 and I06B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2, C-3 and C-4 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for total CaPAHs, total PAHs and total SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.1.6 Former Paint Tunnel (I07)

Thirteen soil samples were collected at soil boring locations I07B01, I07B01N8, I07B01S8, I07B01W5, I07B01E8, I07B02, I07B03 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are

presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - Chromium and lead were detected in soil sample I07B01 (3'-5') at concentrations of 2,370 mg/kg and 613 mg/kg, respectively, which exceeded the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for total CaPAHs, total PAHs and total SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.7 Boiler Room Former Dry Well (I08)

Two soil samples were collected at soil boring location I08B01 the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2, C-3 and C-4 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.1.8 Former Hammer Shop (I09)

Two soil samples were collected at soil boring location I09B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.9 Paint Shop Former Dry Well (I10)

Two soil samples were collected at soil boring location I10B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2, C-3 and C-4 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.1.10 Former Paint Shop Booths and Paint Tunnel (I11)

Fourteen soil samples were collected at soil boring locations I11B01, I11B02, I11B03, I11B04, I11B05, I11B06 and I11B07 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.11 Former Alodine Room (I12)

Ten soil samples were collected at soil boring locations I12B01, I12B02, I12B03, I12B04 and I12B05 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals

  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Volatile Organic Compounds

  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.12 Former Downspout Dry Wells (I13)

Four soil samples were collected at soil boring locations I13B01 and I13B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2, C-3 and C-4 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.1.13 Former Heat Treat Room (I16)

Three soil samples were collected at soil boring location I16B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2, C-3 and C-4 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.1.14 Former Paint Mixing Room (I17)

Four soil samples were collected at soil boring locations I17B01 and I17B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.15 Material Stock Room (I19)

Two soil samples were collected at soil boring location I19B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3, Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.16 Five Former Machine Pits (I21)

Ten soil samples were collected at soil boring locations I21B01, I21B02, I21B03, I21B04, and I21B05 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.17 Pump Station "B" (I23)

Two soil samples were collected at soil boring location I23B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.18 Hallway Adjacent to Former Alodine Room (I26)

Four soil samples were collected at soil boring locations I26B01 and I26B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2, C-3 and C-4 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

- PCBs

  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.1.19 Air Handling Unit Room (I28)

Two soil samples were collected at soil boring location I28B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals

  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Volatile Organic Compounds

  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.20 Former Storage Building (I30)

Thirty-one soil samples were collected at soil boring locations I30B01, I30B02, I30B03, I30B03N8, I30B03S8, I30B03W8, I30B03E8, I30B03S12, I30B03W12, I30B03E12, I30B04, I30B05, I30B06 and I30B07 during the Phase II Site Assessment field investigation. Soil

samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2, C-3 and C-4 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - *Total* CaPAHs and *total* PAHs were detected in soil sample I30B03 (1'-3') at concentrations of 83,820 ug/kg and 186,120 ug/kg, respectively, which exceeded the Plant 1 site-specific criteria. *Total* CaPAHs, *total* PAHs and *total* SVOCs were detected in soil sample I30B03S8 (1'-3') at concentrations of 320,900 ug/kg, 712,300 ug/kg and 712, 460 ug/kg, respectively, which exceeded the Plant 1 site-specific criteria. *Total* CaPAHs were detected in soil sample I30B03E8 (1'-3') at a concentration of 25,650 ug/kg which exceeded the Plant 1 site-specific criteria.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.1.21 Refrigeration/Air Conditioning Room (I31)

Four soil samples were collected at soil boring locations I31B01 and I31B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.22 Hangar 1 (I32)

Eight soil samples were collected at soil boring locations I32B01, I32B02, I32B03 and I32B04 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2, C-3, C-4, C-5, and C-6 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Glycols
  - Elevated levels of glycols were not detected.
- Pesticides/Herbicides
  - Elevated levels of pesticides/herbicides were not detected.

3.1.23 Storage Area in Office Area East of Hangar 2 (I33)

Two soil samples were collected at soil boring location I33B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.24 "Old" Ejection Pits (I34)

Four soil samples were collected at soil boring locations I34B01 and I34B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2, C-3 and C-4 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.1.25 Transformer Rooms (I35)

Four soil samples were collected at soil boring locations I35B01 and I35B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Table C-4 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.1.26 Former Router Room (I36)

Four soil samples were collected at soil boring locations I36B01 and I36B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table

2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.27 Machine Shop (previously referred to as Former Upholstery Room) (I37)

Four soil samples were collected at soil boring locations I37B01 and I37B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.28 Boiler Room (I38)

Four soil samples were collected at soil boring locations I38B01 and I38B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.29 Former Facility Maintenance Area (I39)

Four soil samples were collected at soil boring locations I39B01 and I39B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Volatile Organic Compounds

  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.30 Hangar 2 (I40)

Ten soil samples were collected at soil boring locations I40B01, I40B03, I40B04, I40B05 and I40B06 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2, C-3, C-4 and C-5 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals

  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Volatile Organic Compounds

  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

- PCBs

  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Glycols

  - Elevated levels of glycols were not detected.

3.1.31 Random Locations at Historic Manufacturing Operations (I41)

Ten soil samples were collected at soil boring locations I41B01, I41B02, I41B03, I41B04 and I41B05 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2, C-3 and C-4 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.1.32 Paint Shop Dry Well in Former Hammer Shop (I42)

Two soil samples were collected at soil boring location I42B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2, C-3 and C-4 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Volatile Organic Compounds

  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

- PCBs

  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.1.33 Dry Wells in Former Carpentry Shop (I43)

Nine soil samples were collected at soil boring locations I43B01, I43B01A, I43B02 and I43B02A during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals

  - Chromium and lead were detected in soil sample I43B01 (8'-10') at concentrations of 1,060 mg/kg and 1,470 mg/kg, respectively, which exceeded the Plant 1 site-specific criteria.

- Volatile Organic Compounds

  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - *Total* CaPAHs were detected in soil sample I43B02 (13'-15') at a concentration of 10,064 ug/kg which exceeded the Plant 1 site-specific criteria.

3.1.34 Canopy Trim Fixture Drain Hole/Sump Pit (I44)

Two soil samples were collected at soil boring location I44B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.35 Waste Collection Station Adjacent to Canopy Drain/Sump Pit (I45)

Two soil samples were collected at soil boring location I45B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2, C-3 and C-4 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

- PCBs

  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.1.36 Former "Spot Weld Rinse Tank" (In vicinity of column E6) (I46)

Two soil samples were collected at soil boring location I46B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals

  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Volatile Organic Compounds

  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.37 RHIC Magnet Pumping Units (I47)

Four soil samples were collected at soil boring locations I47B01 and I47B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table

2-1. The analytical results are presented on Tables C-1, C-2 and C-3 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.1.38 Pit in Room Adjacent to South Side of Former Carpentry Shop (D17)

Three soil samples were collected at soil boring location D17B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7 and C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.2 Exterior Investigation

As previously discussed, the Phase II Site Assessment exterior investigation activities were conducted at the following areas at the site:

- Former Settling Tanks/Leaching Pools (E01)
- Six Former Leaching Pools (E02)
- Former Heat Treat Drainage Wells (E03)
- Former Dry Well (E04)
- Leaching Pool Area (E06)
- Nine Leaching Pools (E07)
- Former Leaching Field with Twenty Leaching Pools (E08)
- Former Coal Storage Bin (E09)
- Seven Former Leaching Pools (E10)
- Former Dry Well (E12)
- Former Drum Storage Area (E13)
- Existing On-site Recharge Basin (E18)
- Former On-site Recharge Basin (E19)
- Unidentified Pit (E20)
- Former AST and Salvage Area (E21)
- Material Storage Area (E22)
- Former Concrete Sump Pit (E25)
- Location of Former Trichloroethylene Tank (E27)
- Pump Station "A" (E30)
- Catch Basins (Vicinity of Pump House/Water Tank) (E32)
- Former Tank 1111 (Between Hangars 1 and 2) (E33)
- Courtyard Between Hangars 1 and 2 (E34)
- Area West of Hangar 1 (E35)
- Former Drainage Swale (North of Maint. Area) (E36)
- Former Discoloration (Southeast Parking Area) (E37)
- Boiler Room Exterior Former Dry Well (E38)
- Dry Well Outside Former Facility Maintenance Area (E39)
- Dry Well Outside Former Paint Tunnel (E41)
- Unidentified Pit Outside Boiler Room (E42)
- Former 2,000 Gal Gas USTs (4) South of Refrig./AC Room (E43)
- Former Gas Pump House South of Refrig./AC Room (E44)
- Fill Material Within Abandoned Leaching Pools
- LIPA Pit/Sump (D14)
- Square Ejector Pit North of Recharge Basin (D15)

An area-by-area discussion of the Phase II Site Assessment exterior investigation activity findings is presented below.

3.2.1 Former Settling Tanks/Leaching Pools (E01)

Twenty-six soil samples were collected at soil boring locations E01B01, E01B02, E01B03, E01B04, E01B05, E01B06, E01B07, E01B08, E01B09, E01B11, E01B12, E01B13 and E01B14 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9 and C-10 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.2.2 Six Former Leaching Pools (E02)

Eight soil samples were collected at soil boring locations E02B01, E02B02, E02B03 and E02B04 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8 and C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.2.3 Former Heat Treat Drainage Wells (E03)

Four soil samples were collected at soil boring locations E03B01 and E01B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9 and C-10 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.2.4 Former Dry Well (E04)

Two soil samples were collected at soil boring location E04B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8 and C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.2.5 Leaching Pool Area (E06)

Fourteen soil samples were collected at soil boring locations E06B01, E06B02, E06B03, E06B04, E06B05, E06B06 and E06B09 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8 and C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.2.6 Nine Leaching Pools (E07)

Twenty-six soil samples were collected at soil boring locations E07B01, E07B02, E07B03, E07B04, E07B05, E07B06, E07B07, E07B09, E07B10, E07B11, E07B12, E07B13 and E07B14 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8 and C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.2.7 Former Leaching Field with Twenty Leaching Pools (E08)

Twenty-six soil samples were collected at soil boring locations E08B01, E08B02, E08B03, E08B04, E08B05, E08B06, E08B07, E08B08, E08B09, E08B10, E08B11, E08B12 and E08B14 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.2.8 Former Coal Storage Bin (E09)

Two soil samples were collected at soil boring location E09B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7 and C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - Lead was detected in soil sample E09B01 (0'-2') at a concentration of 834 mg/kg which exceeded the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.2.9 Seven Former Leaching Pools (E10)

Fourteen soil samples were collected at soil boring locations E10B01, E10B02, E10B03, E10B04, E10B05, E10B06 and E10B07 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8 and C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals

  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Volatile Organic Compounds

  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.2.10 Former Dry Well (E12)

Two soil samples were collected at soil boring location E12B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8 and C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.2.11 Former Drum Storage Area (E13)

Twenty soil samples were collected at soil boring locations E13B01, E13B02, E13B02N5, E13B02S5, E13B02W8, E13B02E8, E13B02NE10, E13B02NE20, E13B02W12 and E13B02E12 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9 and C-10 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - *Total* CaPAHs were detected in soil sample E13B02 (0'-2') at a concentration of 30,420 ug/kg which exceeded the Plant 1 site-specific criteria.

- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.2.12 Existing On-site Recharge Basin (E18)

Four soil samples were collected at soil boring locations E18B01 and E18B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9 and C-10 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.2.13 Former On-site Recharge Basin (E19)

Two soil samples were collected at soil boring location E19B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9 and C-10 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.2.14 Unidentified Pit (E20)

Two soil samples were collected at soil boring location E20B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9 and C-10 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

- PCBs

  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.2.15 Former AST and Salvage Area (E21)

Ten soil samples were collected at soil boring locations E21B01, E21B02, E21B03, E21B04 and E21B05 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9 and C-10 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals

  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Volatile Organic Compounds

  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

- PCBs

  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.2.16 Material Storage Area (E22)

Eight soil samples were collected at soil boring locations E22B01, E22B02, E22B03 and E22B04 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9, C-10 and C-11 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Glycols
  - Elevated levels of glycols were not detected.

3.2.17 Former Concrete Sump Pit (E25)

Two soil samples were collected at soil boring location E25B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9, C-10 and C-11 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Glycols
  - Elevated levels of glycols were not detected.

3.2.18 Location of Former Trichloroethylene Tank (E27)

Two soil samples were collected at soil boring location E27B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Table C-8 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.2.19 Pump Station "A" (E30)

Two soil samples were collected at soil boring location E30B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8 C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.2.20 Catch Basins (Vicinity of Pump House/Water Tank) (E32)

Four soil samples were collected at soil boring locations E32B01 and E32B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8 and C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.2.21 Former Tank 1111 (Between Hangars 1 and 2) (E33)

Two soil samples were collected at soil boring location E33B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8 and C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals

  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Volatile Organic Compounds

  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.2.22 Courtyard Between Hangars 1 and 2 (E34)

Eight soil samples were collected at soil boring locations E34B01, E34B02, E34B03 and E34B04 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9, C-10 and C-11 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Glycols
  - Elevated levels of glycols were not detected.

3.2.23 Area West of Hangar 1 (E35)

Four soil samples were collected at soil boring locations E35B01 and E35B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9 and C-10 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

- PCBs

  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.2.24 Former Drainage Swale (North of Maint. Area) (E36)

Four soil samples were collected at soil boring locations E36B01 and E36B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9 and C-10 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals

  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Volatile Organic Compounds

  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

- PCBs

  - *Total* PCBs were detected at a concentration of 13,000 ug/kg in soil sample E36B02 (3'-5') which exceeded the Plant 1 site-specific criteria.

3.2.25 Former Discoloration (Southeast Parking Area) (E37)

Four soil samples were collected at soil boring locations E37B01 and E37B02 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9 and C-10 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.2.26 Boiler Room Exterior Former Dry Well (E38)

Two soil samples were collected at soil boring location E38B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9 and C-10 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Volatile Organic Compounds

  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

- PCBs

  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.2.27 Dry Well Outside Former Facility Maintenance Area (E39)

Two soil samples were collected at soil boring location E39B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9 and C-10 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals

  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Volatile Organic Compounds

  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.2.28 Dry Well Outside Former Paint Tunnel (E41)

Two soil samples were collected at soil boring location E41B01 the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9 and C-10 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.2.29 Unidentified Pit Outside Boiler Room (E42)

Two soil samples were collected at soil boring location E42B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8, C-9 and C-10 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.
- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.2.30 Former 2,000 Gallon Gas USTs (4) South of Refrig./AC Room (E43)

Two soil samples were collected at soil boring location E43B01 the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8 and C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Volatile Organic Compounds
  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.2.31 Former Gas Pump House South of Refrig./AC Room (E44)

Two soil samples were collected at soil boring location E44B01 the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7, C-8 and C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals

  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Volatile Organic Compounds

  - VOCs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.2.32 Fill Material Within Abandoned Leaching Pools

Three soil samples were collected at soil boring locations E01B05, E07B11 and E08B09 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Table C-10 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- PCBs
  - PCBs were not detected at concentrations exceeding the Plant 1 site-specific criteria.

3.2.33 LIPA Pit/Sump (D14)

Three soil samples were collected at soil boring location D14B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7 and C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - RCRA metals were not detected at concentrations exceeding the Plant 1 site-specific criteria.
- Semivolatile Organic Compounds
  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.2.34 Square Ejector Pit North of Recharge Basin (D15)

Five soil samples were collected at soil boring location D15B01 during the Phase II Site Assessment field investigation. Soil samples were analyzed as described on Table 2-2. The analytical results are presented on Tables C-7 and C-9 in Appendix C. Exceedances of the Plant 1 site-specific criteria are summarized below:

- RCRA Metals
  - Chromium was detected at a concentration of 584 mg/kg in soil sample D15B01 (19'-21') which exceeded the Plant 1 site-specific criteria.

- Semivolatile Organic Compounds

  - The Plant 1 site-specific criteria for *total* CaPAHs, *total* PAHs and *total* SVOCs of 10,000 ug/kg, 100,000 ug/kg and 500,000 ug/kg were not exceeded.

3.3 Groundwater Investigation

As previously discussed in Section 2, four shallow groundwater monitoring wells (PLT1MW-01, 02, 03, and 04) were installed at the Plant 1 site to determine whether shallow groundwater has been impacted. In addition, groundwater samples were collected from two existing monitoring wells (PLT1GM-14 and PIT-INFFTMWD) and analyzed as part of the Phase II Site Assessment. The groundwater samples listed above were analyzed for RCRA metals (Methods 6010/7471), VOCs (Method 8260), SVOCs (Method 8270), and PCBs (Method 8082). Due to elevated turbidity levels of monitoring wells PLT1MW-01 and PLT1GM-14, the laboratory filtered and conducted dissolved metals analysis for groundwater samples collected from these wells. Groundwater sample PLT1GM-14 was only analyzed for dissolved and undissolved RCRA metals due to the fact that this well had been recently sampled as part of a separate investigation. The analytical results of the groundwater sample are presented on Tables C-12 through C-15 in Appendix C and are summarized as follows:

- RCRA Metals

  - RCRA metals were not detected above NYSDEC Class GA groundwater standards/guidance values for the dissolved and undissolved analyses.

- VOCs

  - VOCs were not detected above NYSDEC Class GA groundwater standards/ guidance values.

- SVOCs

  - SVOCs were not detected above NYSDEC Class GA groundwater standards/ guidance values.

- PCBs
  - Total PCBs were not detected above NYSDEC Class GA groundwater standards/ guidance values.

3.4 Data Validation

Soil and water samples were collected as part of the site investigation at the Northrop Grumman Plant 1 site. The samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), PCBs, pesticides, glycols and/or RCRA metals, depending on sample location. All sample analyses were performed by Chemtech Consulting Group Inc., a subcontractor Dvirka and Bartilucci Consulting Engineers. Chemtech performed the sample analyses in accordance with USEPA SW-846 – Methodologies and NYSDEC Analytical Services Protocol (ASP) Quality Assurance/Quality Control (QA/QC) requirements.

The data packages submitted by Chemtech have been reviewed for contractual compliance and completeness. Twenty percent of the analytical results have been reviewed for calculation and transcription errors to yield a "20 percent validation" as stipulated in the work plan. The findings of the validation process are summarized below.

All sample analyses were performed within the method specified holding times.

Several samples required reanalysis due to surrogate recoveries and/or internal standard area counts being outside QC limits. Both sets of data were reviewed and the results for the most compliant set were placed on the data summary tables to be used for environmental assessment purposes.

Reanalysis of several samples at secondary dilutions was required due to compound concentrations exceeding the instrument calibration range. The results taken from the diluted runs have been flagged "D" on the data summary tables.

No problems were found with the sample results. All results have been deemed valid and usable for environmental assessment purposes.

Section 4

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based upon the findings of the Phase II Site Assessment field investigation program discussed in Sections 3, conclusions and recommendations are presented in this section regarding the need for further investigation or remediation activities, if necessary, at the Plant 1 property.

As previously stated in Section 3, the analytical results of the Phase II Site Assessment were compared to site-specific criteria that were developed for the Plant 1 site, consistent with previous investigations at Plants 5 and 12. The technical rationale for the development and implementation of the Plant 1 site-specific criteria is summarized in a document entitled "Non-UIC Remediation Plan - Plant 1," dated May 2001.

Conclusions and recommendations for no further action, additional investigation and/or remediation activities at areas of environmental concern are presented in Sections 4.1, 4.2 and 4.3. A summary of recommendations for additional investigation or remediation are shown in Table 4-1. Areas of concern which are recommended for additional investigation or remediation are illustrated in Figure 4-1.

4.1 Interior Investigation

4.1.1 Former Paint Spray Room (I02)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.2 Former Paint Storage Room (I03)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

TABLE 4
Northrop Grumman Corporation
Plant 1
PHASE II SITE ASSESSMENT
SUMMARY OF RECOMMENDATIONS

			Additional Sampling and Analysis			Remediation		
Areas of Concern (AOCs)	Initial Boring Location	Drawing No.	Number of Soil Borings	Number of Soil Samples	Description	Area of Excavation	Depth of Excavation	Endpoint Sample Analysis and Method
Former Paint Tunnel	I07B01	4-2	--	--	--	130 square feet 80 square feet	0 to 3 feet bgs 0 to 5 feet bgs	--
Former Storage Building	I30B03	4-3	--	--	--	400 square feet	0 to 3 feet bgs	--
Dry Well in Former Carpentry Shop	I43B01	4-4	--	--	--	8 foot diameter	from 8 to 10 feet bgs	--
	I43B02	4-4	--	--	--	8 foot diameter	from 13 to 15 feet bgs	--
Former Coal Storage Bin	E09B01	4-5	4	11	Advance boring adjacent to E09B01 and collect soil samples from 2 to 6 feet bgs for lead analysis Advance 3 borings 5 feet north, east and west to 6 feet bgs. Collect soil samples from 0 to 6 feet bgs for lead analysis.	--	--	--
Former Drum Storage Area	E13B02	4-6	--	--	--	144 square feet	0 to 2 feet bgs	--
Former Drainage Swale (North of Maintenance Area)	E36B02	4-7	5	33	Advance boring adjacent to E36B02 and collect soil samples from 5 to 15 feet bgs for PCBs analysis. Advance 4 borings 5 feet north, south, east and west to 15 feet bgs. Collect soil samples from 1 to 15 feet bgs for PCBs analysis.	--	--	--
Square Ejector Pit North of Recharge Basin	D15B01	4-8	8	63	Advance one boring adjacent to boring D15B01 to a depth of 31 feet and collect samples from 21 to 31 feet for chromium analysis. Advance three borings eight feet north, eight feet east and 10 feet northwest of boring D15B01 to a depth of 30 feet and collect samples form 10 to 30 feet for chromium analysis Advance two borings along west and south pit wall to 30 feet and collect samples from 10 to 30 feet for chromium analysis. Advance two borings within the pit to 8 feet and collect samples for chromium analysis.	--	--	--

Notes:

bgs: below ground surface.

--: Not applicable.

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4.1.3 Former Storage Building Former Dry Wells (I04)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.4 Former Dry Well Area (I05)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.5 Former Paint Shop (I06)

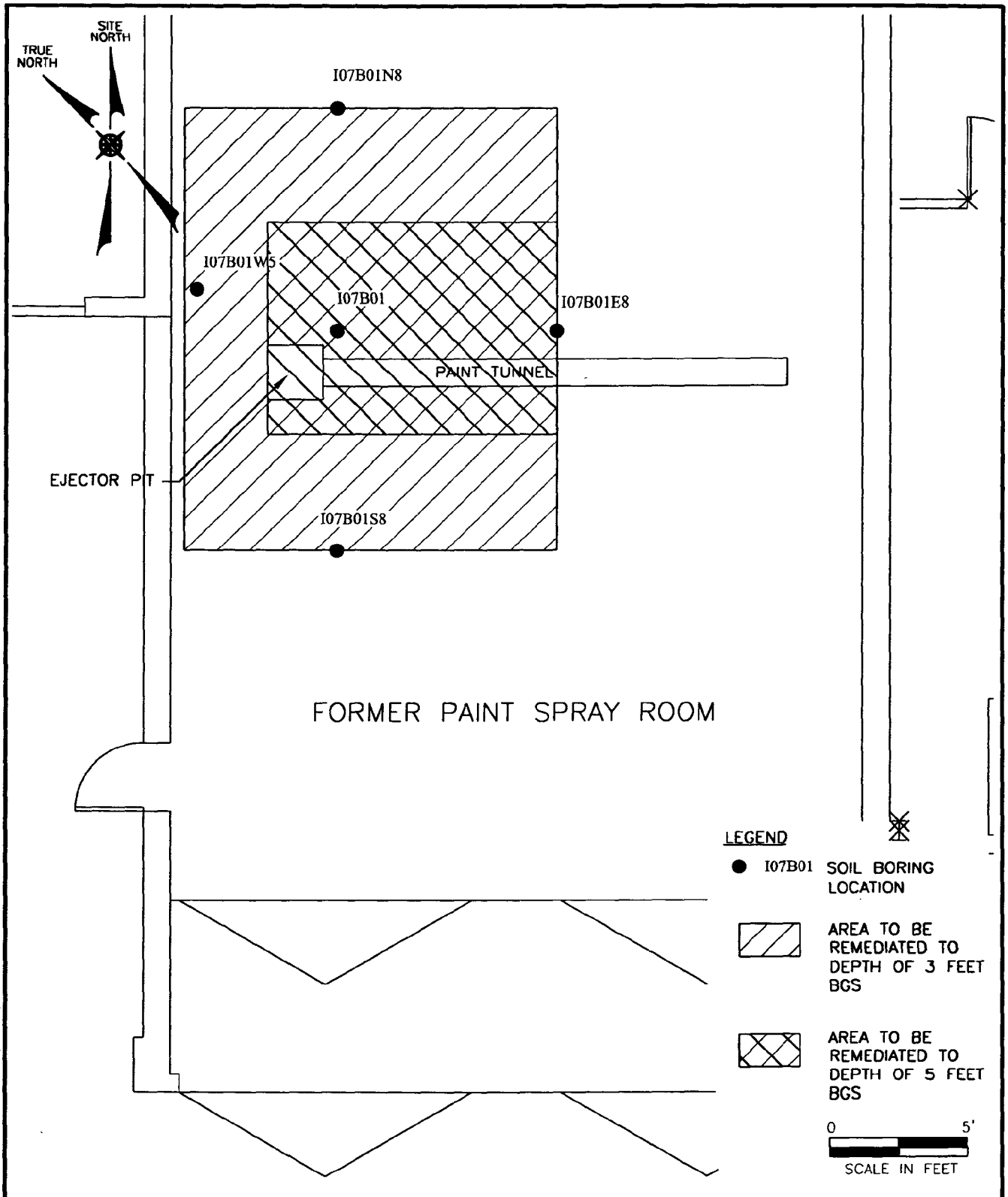
Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.6 Former Paint Tunnel (I07)

As discussed in Section 3, chromium and lead were detected in soil sample I07B01 (3'-5') at concentrations of 2,370 mg/kg and 613 mg/kg, respectively, which exceeded the Plant 1 site-specific criteria. Consequently, remediation is warranted in the vicinity of soil boring location I07B01. The vertical and horizontal extent of soil excavation for proper off-site transportation and disposal is shown on Figure 4-2.

4.1.7 Boiler Room Former Dry Well (I08)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.



Dvirka and Bartilucci Consulting Engineers

NORTHROP GRUMMAN CORPORATION
PLANT 1

RECOMMENDATION FOR REMEDIATION FORMER PAINT TUNNEL

D&B JOB NO. **1852**

FIGURE **4-2**

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4.1.8 Former Hammer Shop (I09)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.9 Paint Shop Former Dry Well (I10)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.10 Former Paint Shop Booths and Paint Tunnel (I11)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.11 Former Alodine Room (I12)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.12 Former Downspout Dry Wells (I13)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.13 Former Heat Treat Room (I16)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.14 Former Paint Mixing Room (I17)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.15 Material Stock Room (I19)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.16 Five Former Machine Pits (I21)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.17 Pump Station "B" (I23)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.18 Hallway Adjacent to Former Alodine Room (I26)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.19 Air Handling Unit Room (I28)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.20 Former Storage Building (I30)

As discussed in Section 3, *total* CaPAHs and *total* PAHs were detected in soil sample I30B03 (1'-3') at concentrations of 83,820 ug/kg and 186,120 ug/kg, respectively which exceeded the Plant 1 site specific criteria. *Total* CaPAHs, *total* PAHs and *total* SVOCs were also detected in soil sample I30B03S8 (1'-3') at concentrations of 320,900 ug/kg, 712,300 ug/kg and 712, 460 ug/kg, respectively which exceeded the Plant 1 site specific criteria. In addition, *total* CaPAHs were detected in soil sample I30B03E8 (1'-3') at a concentration of 25,650 ug/kg which exceeded the Plant 1 site specific criteria.. Consequently, remediation is warranted in the vicinity of soil boring locations I30B03, I30B03S8 and I30B03E8. The vertical and horizontal extent of soil excavation for proper off-site transportation and disposal is shown on Figure 4-3.

4.1.21 Refrigeration/Air Conditioning Room (I31)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.22 Hangar 1 (I32)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.23 Storage Area in Office Area East of Hangar 2 (I33)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.24 "Old" Ejection Pits (I34)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

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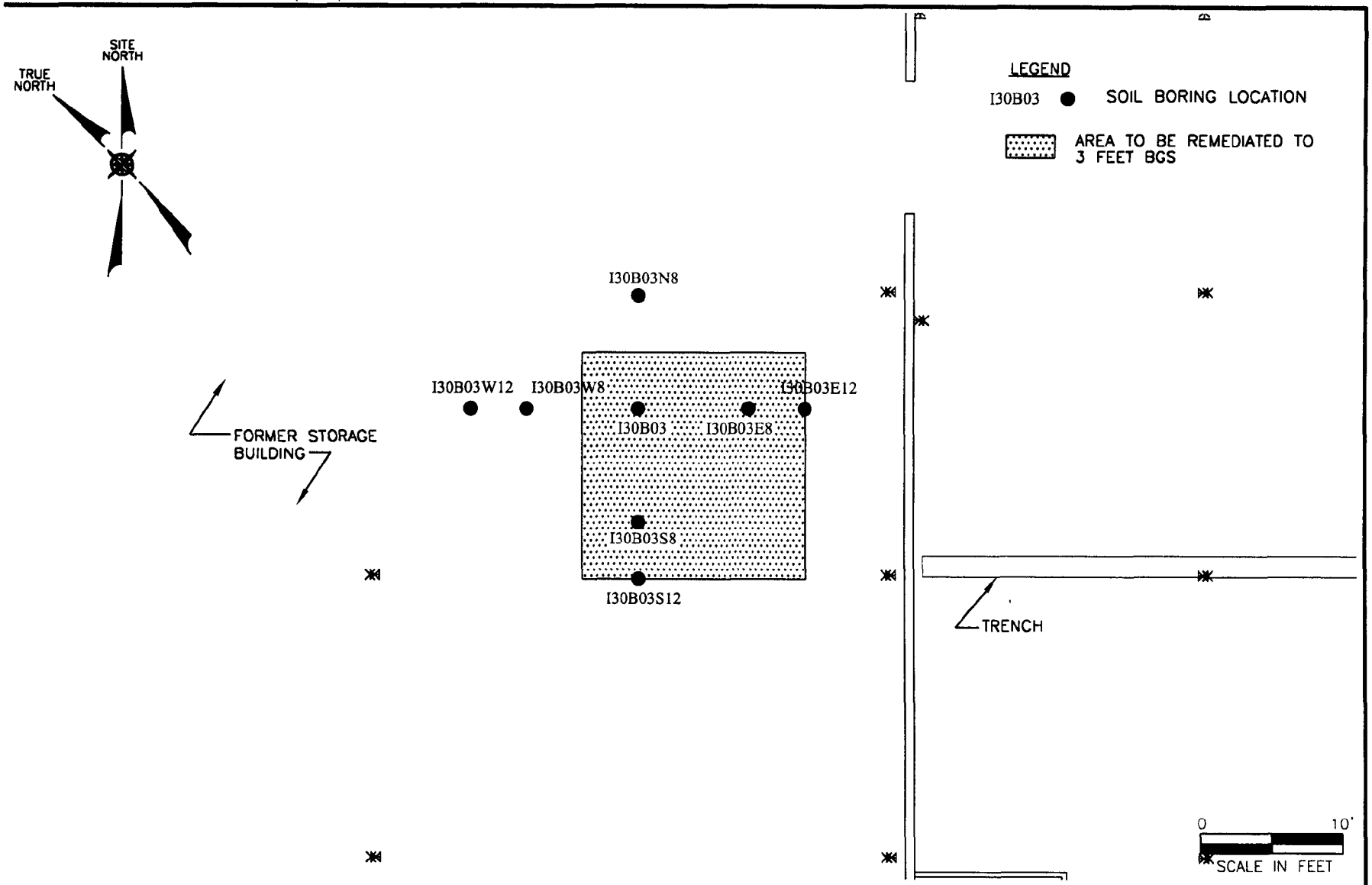

Dvirka and Bartilucci Consulting Engineers

NORTHROP GRUMMAN CORPORATION
PLANT 1

RECOMMENDATION FOR REMEDIATION FORMER STORAGE BUILDING

D&B JOB NO. **1852**

FIGURE **4-3**

NYSDEC 107380

4.1.25 Transformer Rooms (I35)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.26 Former Router Room (I36)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.27 Machine Shop (previously referred to as Former Upholstery Room) (I37)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.28 Boiler Room (I38)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.29 Former Facility Maintenance Area (I39)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.30 Hangar 2 (I40)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.31 Random Locations of Historic Manufacturing Operations (I41)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.32 Paint Shop Dry Well in Former Hammer Shop (I42)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.33 Dry Wells in Former Carpentry Shop (I43)

As discussed in Section 3, chromium and lead were detected in soil sample I43B01 (8'-10') at concentrations of 1,060 mg/kg and 1,470 mg/kg, respectively which exceeded the Plant 1 site-specific criteria. In addition, *total* CaPAHs were detected in soil sample I43B02 (13'-15') at a concentration of 10,064 ug/kg which exceeded the Plant 1 site specific criteria. Consequently, remediation is warranted in the vicinity of soil boring locations I43B01 and I43B02. The vertical and horizontal extent of soil excavation for proper off-site transportation and disposal is shown on Figure 4-4. It should be noted that dry wells I43B01 and I43B02 are backfilled to grade. Therefore, it has been assumed that the overburden material will be excavated and stockpiled for re-use as backfill material. The impacted soil from 8 to 10 feet bgs and 13 to 15 feet for dry wells I43B01 and I43B02, respectively, will be excavated for proper off-site transportation and disposal.

4.1.34 Canopy Trim Fixture Drain Hole/Sump Pit (I44)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

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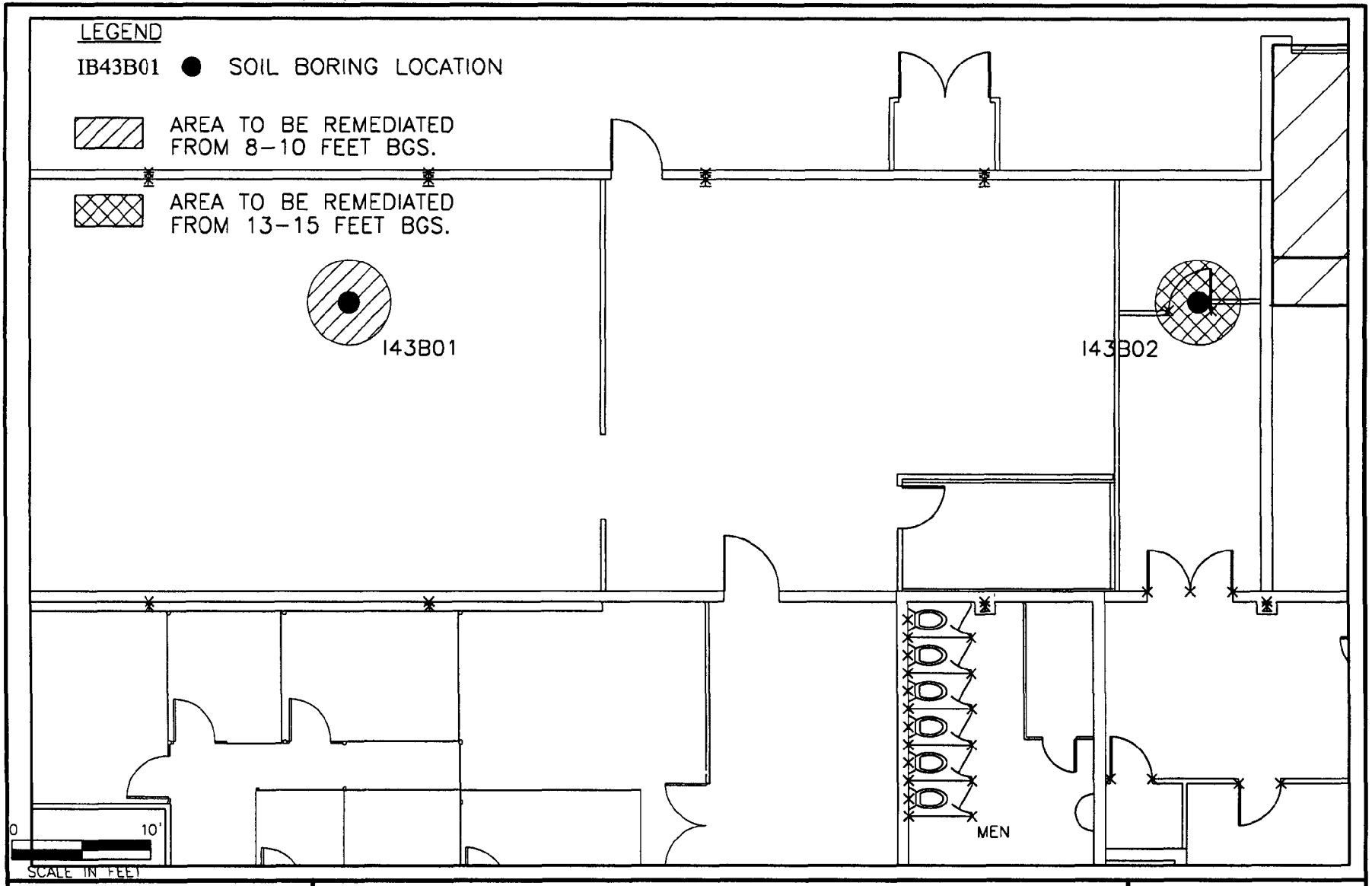

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NORTHROP GRUMMAN CORPORATION
PLANT 1
RECOMMENDATION FOR REMEDIATION
DRY WELLS IN FORMER CARPENTRY SHOP

D&B JOB NO. **1852**

FIGURE **4-4**

NYSDEC 107383

4.1.35 Waste Collection Station Adjacent to Canopy Drain/Sump Pit (I45)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.36 Former "Spot Weld Rinse Tank" (In vicinity of column E6) (I46)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.37 RHIC Magnet Pumping Units (I47)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.1.38 Pit in Room Adjacent to South Side of Former Carpentry Shop (D17)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2 Exterior Investigation

4.2.1 Former Settling Tanks/Leaching Pools (E01)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.2 Six Former Leaching Pools (E02)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.3 Former Heat Treat Drainage Wells (E03)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.4 Former Dry Well (E04)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.5 Leaching Pool Area (E06)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.6 Nine Leaching Pools (E07)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.7 Former Leaching Field with Twenty Leaching Pools (E08)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.8 Former Coal Storage Bin (E09)

As discussed in Section 3, lead was detected in soil sample E09B01 (0'-2') at a concentration of 834 mg/kg which exceeded the Plant 1 site-specific criteria. However, the horizontal and vertical extent of impacted soil has not been fully determined. Consequently,

further sampling and analysis is warranted. It is therefore recommended to advance one soil boring immediately adjacent to soil boring E09B01 to a depth of 6 feet below grade. Continuous 2-foot soil samples should be collected from the 2 to 6-foot interval for lead analysis by Method 6010. In addition, it is recommended to advance three soil borings 5 feet north, east and west of soil boring E09B01 to a depth of 6 feet below grade. Continuous 2-foot soil samples should be collected from each these three soil borings for lead analysis by Method 6010. The recommended soil sample locations for AOC E09 are shown on Figure 4-5.

4.2.9 Seven Former Leaching Pools (E10)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.10 Former Dry Well (E12)

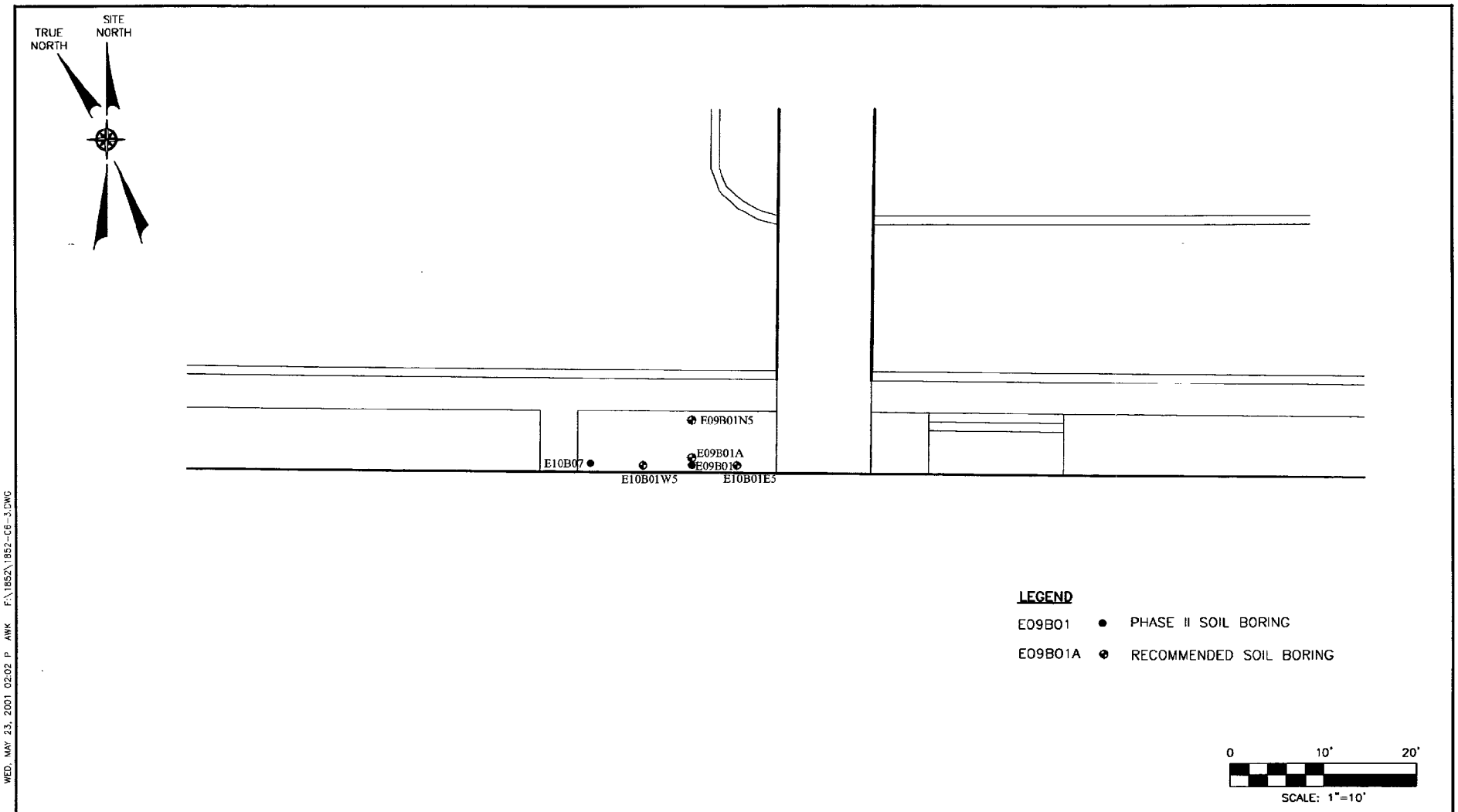
Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.11 Former Drum Storage Area (E13)

As discussed in Section 3, *total* CaPAHs were detected in soil sample E13B02 (0'-2') at a concentration of 30,420 ug/kg which exceeded the Plant 1 site specific criteria. Consequently, remediation is warranted in the vicinity of soil boring location E13B02. The vertical and horizontal extent of soil excavation for proper off-site transportation and disposal is shown on Figure 4-6.

4.2.12 Existing On-site Recharge Basin (E18)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.



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Dvirka and Bartilucci
Consulting Engineers
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BETHPAGE NEW YORK
PLANT 1

RECOMMENDATION FOR ADDITIONAL INVESTIGATION
FORMER COAL STORAGE BIN

FIGURE 4-5

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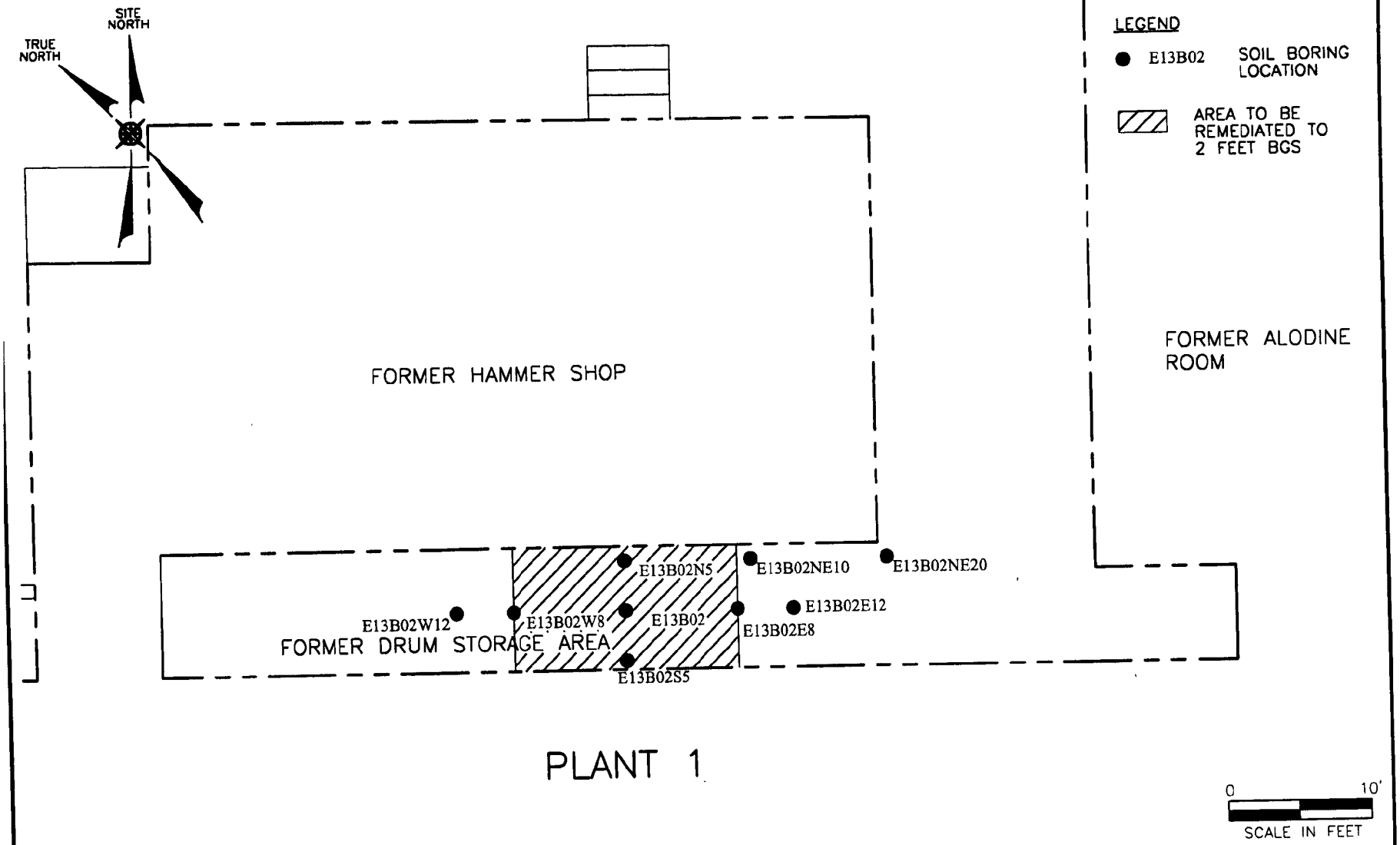


Dvirka and Bartilucci Consulting Engineers

NORTHROP GRUMMAN CORPORATION
PLANT 1

RECOMMENDATION FOR REMEDIATION FORMER DRUM STORAGE AREA

D&B JOB NO. **1852**

FIGURE **4-6**

4.2.13 Former On-site Recharge Basin (E19)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.14 Unidentified Pit (E20)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.15 Former AST and Salvage Area (E21)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.16 Material Storage Area (E22)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.17 Former Concrete Sump Pit (E25)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.18 Location of Former Trichloroethylene Tank (E27)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.19 Pump Station "A" (E30)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.20 Catch Basins (Vicinity of Pump House/Water Tank) (E32)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.21 Former Tank 1111 (Between Hangars 1 and 2) (E33)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.22 Courtyard Between Hangars 1 and 2 (E34)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.23 Area West of Hangar 1 (E35)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.24 Former Drainage Swale (North of Maint. Area) (E36)

As discussed in Section 3, *total* PCBs were detected at a concentration of 13,000 ug/kg in soil sample E36B02 (3'-5') which exceeded the Plant 1 site-specific criteria. However, the horizontal and vertical extent of impacted soil has not been fully determined. Consequently, further sampling and analysis is warranted. It is therefore recommended to advance one soil

boring immediately adjacent to soil boring E36B02 to a depth of 15 feet below grade. Continuous 2-foot soil samples should be collected from the 5 to 15-foot interval for PCBs analysis by Method 8082. In addition, it is recommended to advance four soil borings 5 feet north, south, east and west of soil boring E36B02 to a depth of 15 feet below grade. Continuous 2-foot soil samples should be collected from 1 to 15 feet from each these four soil borings for PCBs analysis by Method 8082. The recommended soil sample locations for AOC E36B02 are shown on Figure 4-7.

4.2.25 Former Discoloration (Southeast Parking Area) (E37)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.26 Boiler Room Exterior Former Dry Well (E38)

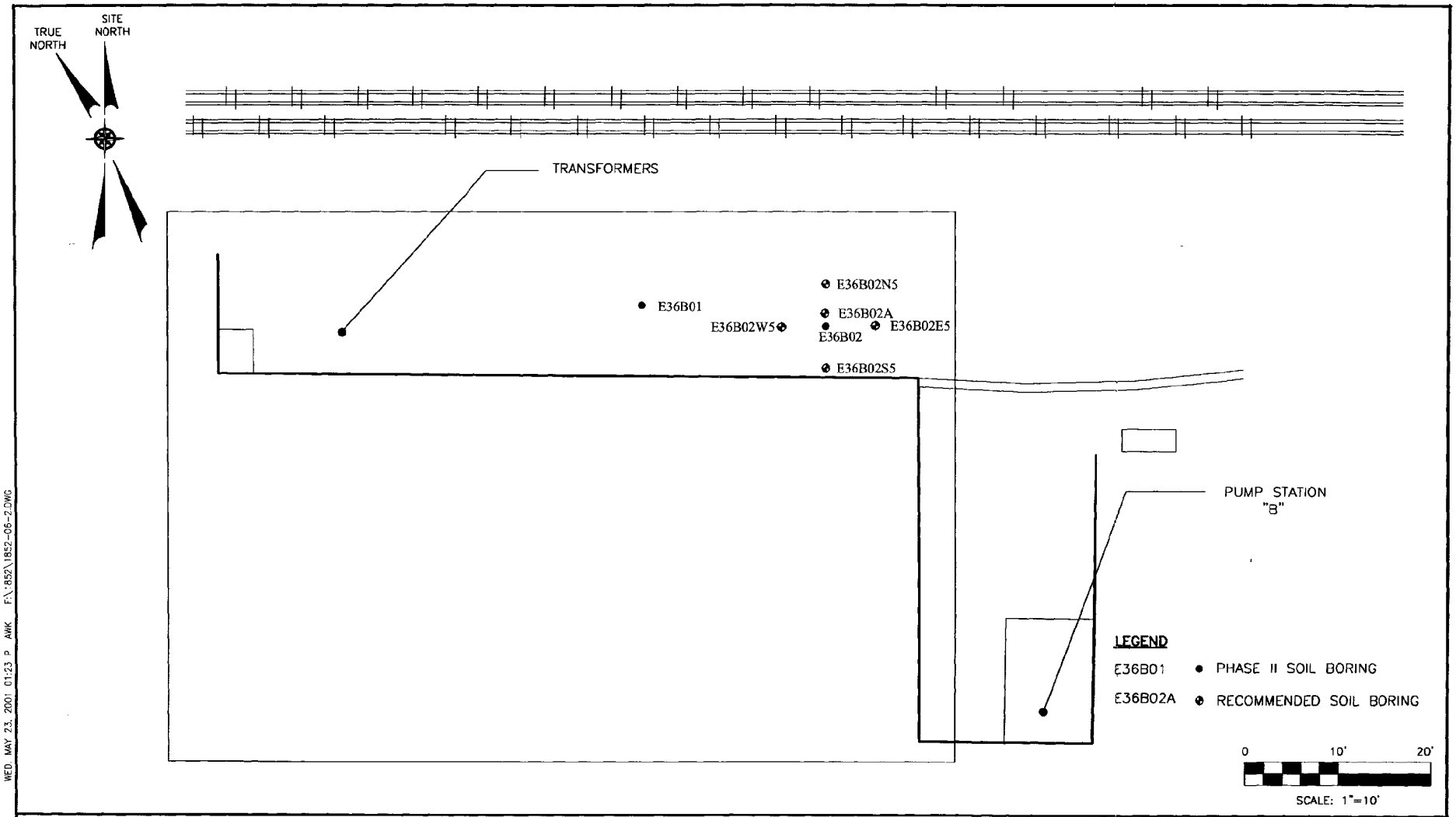
Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.27 Dry Well Outside Former Facility Maintenance Area (E39)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.28 Dry Well Outside Former Paint Tunnel (E41)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.



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NORTHROP GRUMMAN CORPORATION
BETHPAGE NEW YORK
PLANT 1

RECOMMENDATION FOR ADDITIONAL INVESTIGATION
FORMER DRAINAGE SWALE

FIGURE 4-7

4.2.29 Unidentified Pit Outside Boiler Room (E42)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.30 Former 2,000 Gal Gas USTs (4) South of Refrig./AC Room (E43)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.31 Former Gas Pump House South of Refrig./AC Room (E44)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.32 Fill Material Within Abandoned Leaching Pools

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.33 LIPA Pit/Sump (D14)

Based on the results of the Phase II Site Assessment, it appears that further investigation or remediation is not warranted.

4.2.34 Square Ejector Pit North of Recharge Basin (D15)

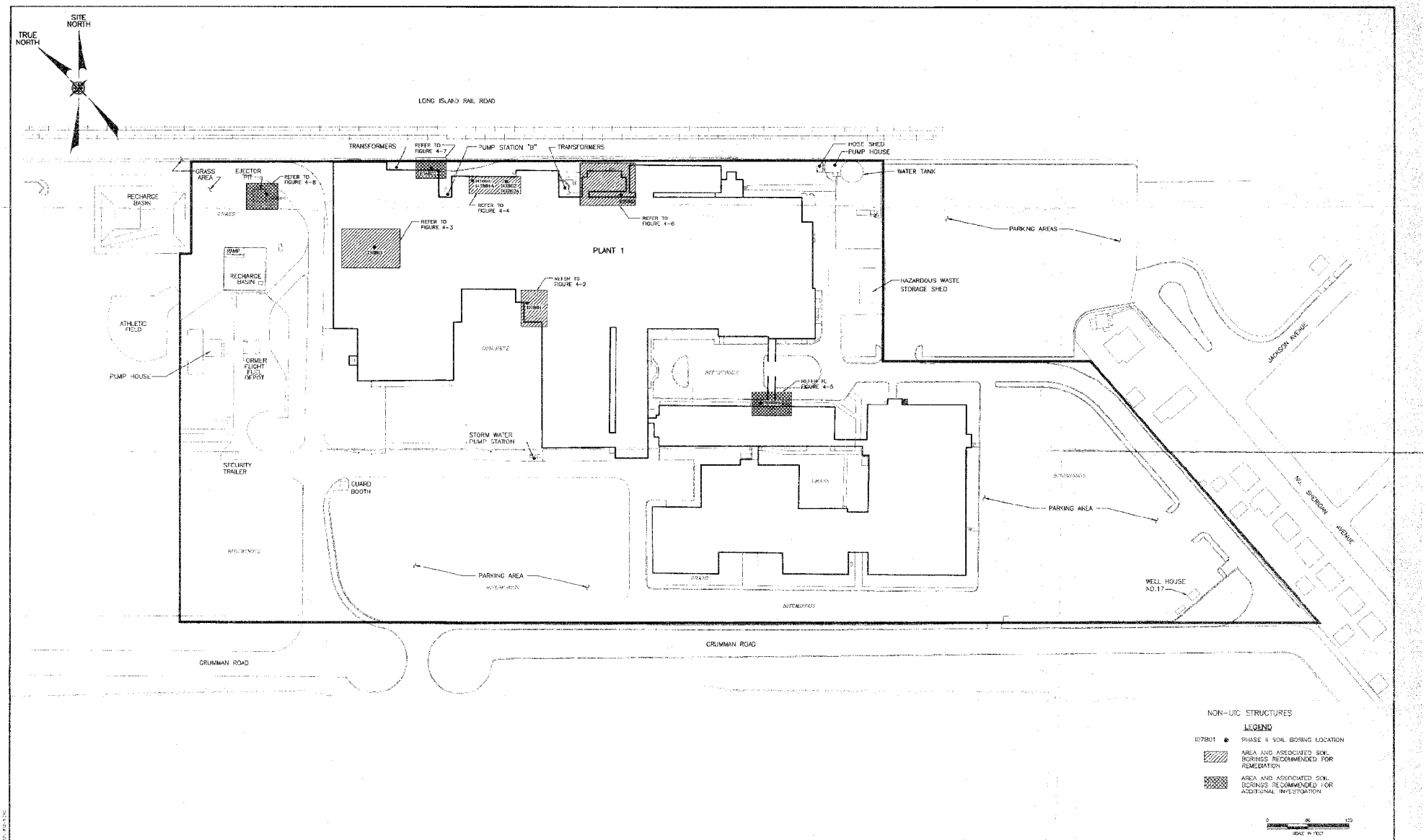
As discussed in Section 3, chromium was detected at a concentration of 584 mg/kg in soil sample D15B01 (19'-21') which exceeded the Plant 1 site-specific criteria. However, the horizontal and vertical extent of impacted soil has not been fully determined. Consequently, further sampling and analysis is warranted. It is therefore recommended to advance one soil

boring immediately adjacent to soil boring D15B01 to a depth of 31 feet below grade. Continuous 2-foot soil samples should be collected from the 21 to 31-foot interval for chromium analysis by Method 6010. In addition, it is recommended to advance three soil borings 8 feet north, 8 feet east and 10 feet northwest of soil boring E36B02 to a depth of 30 feet below grade. Continuous 2-foot soil samples should be collected from 10 to 30 feet from each these three soil borings for chromium analysis by Method 6010. It is also recommended to advance a soil boring adjacent to the west and south walls of the ejector pit to a depth of 30 feet. Continuous 2-foot soil samples should be collected from 10 to 30 feet from each these soil borings for chromium analysis by Method 6010.

Since soil samples have not been previously collected from beneath the ejector pit, it is recommended to pump out all liquid and sludge from the pit to facilitate sampling. Two soil borings should be advanced through the bottom of the pit, at locations to be determined in the field, to a depth of approximately 8 feet. Continuous 2-foot soil samples should be collected from 0 to 8 feet below the bottom of the pit from each these soil borings for chromium analysis by Method 6010. All recommended soil sample locations for AOC D15B01 are shown on Figure 4-8.

4.3 Groundwater Investigation

As previously discussed in Section 3, four shallow groundwater monitoring wells (PLT1MW-01, 02, 03, and 04) were installed at the Plant 1 site to determine whether shallow groundwater has been impacted. In addition, groundwater samples were collected from two existing monitoring wells (PLT1GM-14 and PIT-INFFTMWD) and analyzed as part of the Phase II Site Assessment. The groundwater samples listed above were analyzed for RCRA metals (Methods 6010/7471), VOCs (Method 8260), SVOCs (Method 8270), and PCBs (Method 8082). Due to elevated turbidity levels of monitoring wells PLT1MW-01 and PLT1GM-14, the laboratory filtered and conducted dissolved metals analysis for groundwater samples collected from these wells. Groundwater sample PLT1GM-14 was analyzed for dissolved and undissolved RCRA metals due to the fact that this well had been recently sampled as part of a separate investigation. The analytical groundwater results presented in Section 3 did not indicate



NO.	DATE	REVISION	BY

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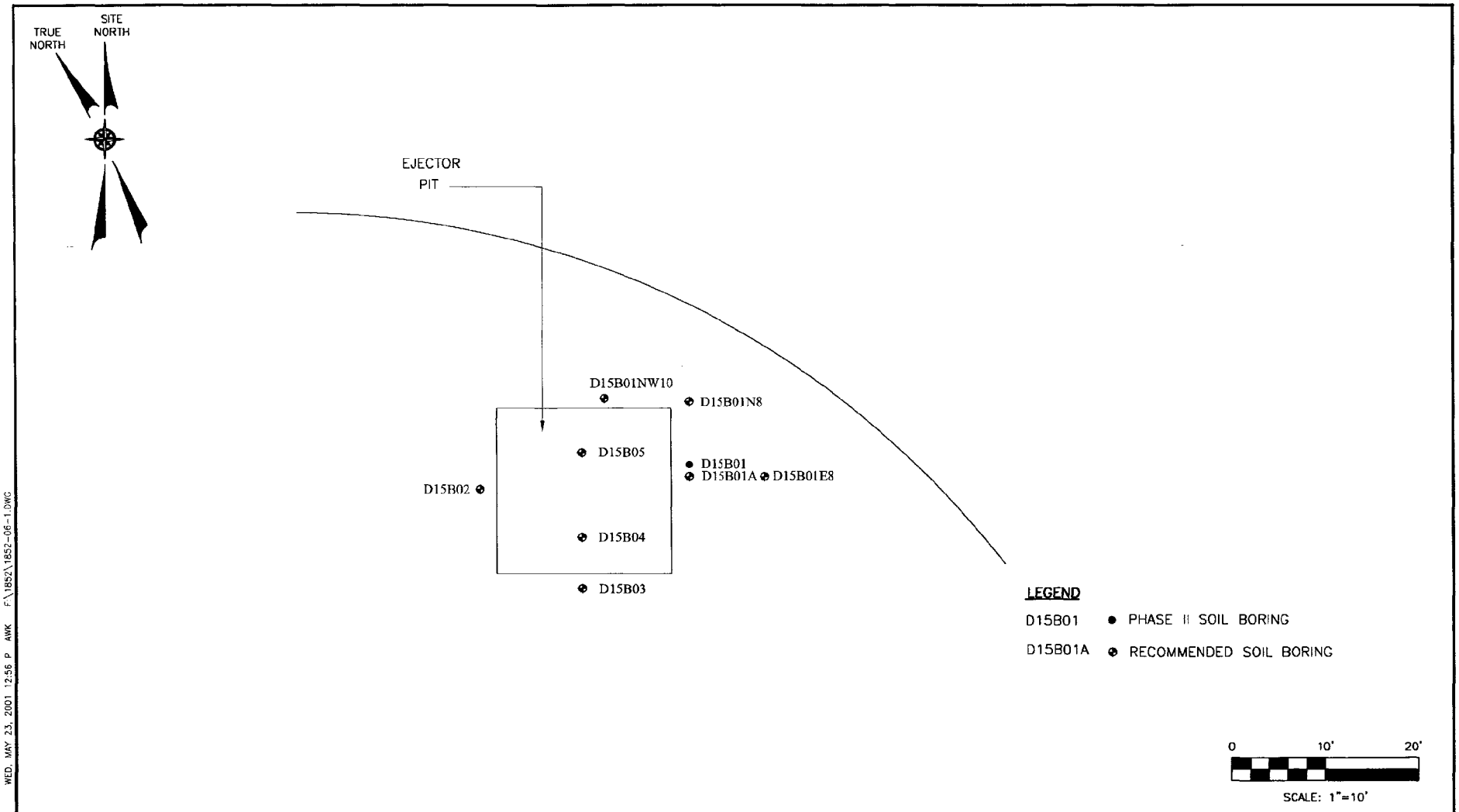
A DIVISION OF WILLIAM F. COSULICH ASSOCIATES, P.C.

NORTHROP GRUMMAN CORPORATION
BETHPAGE, NEW YORK

PLANT 1

AREAS OF CONCERN RECOMMENDED FOR ADDITIONAL INVESTIGATION OR REMEDIATION

PROJECT NO. 1852
DATE MAY 2003
SCALE 1"=80'
DRAWING NO. 4-1



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NORTHROP GRUMAN CORPORATION
BETHPAGE NEW YORK
PLANT 1

RECOMMENDATION FOR ADDITIONAL INVESTIGATION
SQUARE EJECTOR PIT NORTH OF RECHARGE BASIN

FIGURE 4-8

any exceedances of the NYSDEC Class GA groundwater standards/guidance values. As a result, further investigation or remediation with respect to groundwater at the Plant 1 site does not appear to be warranted at this time.

Appendix A

APPENDIX A

GEOPHYSICAL SURVEYS

NAEVA GEOPHYSICS INC.
A SUBSIDIARY OF NORTH AMERICAN EXPLORATION OF VIRGINIA INC.
Subsurface Geophysical Surveys

GPR
MAGNETICS
ELECTROMAGNETICS
SEISMICS
RESISTIVITY
UTILITY LOCATION
BOREHOLE LOGGING
BOREHOLE CAMERA
STAFF SUPPORT

Results of Geophysical Investigation

Portions of a Northrop Grumman Corporation Facility: Plant 1
South Oyster Bay Road
Bethpage, New York

Prepared for: Dvirka and Bartilucci Consulting Engineers
Woodbury, New York

Date of Investigation: September 18 through 20, 2000

Prepared by:

Mark E. Weis
Project Manager
NAEVA Geophysics, Inc.
50 North Harrison Avenue, Suite 11
Congers, NY 10920

NEW YORK
P.O. Box 576
Tappan
New York 10983
(914) 268-1800
(914) 268-1802 Fax

VIRGINIA
P.O. Box 7325
Charlottesville
Virginia 22906
(804) 978-3187
(804) 973-9791 Fax

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Introduction

Methods

Results

Figure 1 Areas of Geophysical Investigation at Environmental Areas Of Concern E1, E2, and E3, Northrop Grumman Plant 1, Bethpage, New York

Figure 2 Area of Geophysical Investigation at Environmental Area Of Concern E4, Northrop Grumman Plant 1, Bethpage, New York

Figure 3 Area of Geophysical Investigation at Environmental Area Of Concern E6, Northrop Grumman Plant 1, Bethpage, New York

Figure 4 Area of Geophysical Investigation at Environmental Area Of Concern E7, Northrop Grumman Plant 1, Bethpage, New York

Figure 5 Area of Geophysical Investigation at Environmental Area Of Concern E8, Northrop Grumman Plant 1, Bethpage, New York

Figure 6 Area of Geophysical Investigation at Environmental Area Of Concern E10, Northrop Grumman Plant 1, Bethpage, New York

Figure 7 Area of Geophysical Investigation at Environmental Area Of Concern E12, Northrop Grumman Plant 1, Bethpage, New York

Figure 8 Area of Geophysical Investigation at Environmental Area Of Concern E25, Northrop Grumman Plant 1, Bethpage, New York

Figure 9 Area of Geophysical Investigation at Environmental Area Of Concern E28, Northrop Grumman Plant 1, Bethpage, New York

Results of Geophysical Investigation
Portions of a Northrop Grumman Facility: Plant 1
South Oyster Bay Road
Bethpage, New York

Introduction

On September 18 through 20, 2000, NAEVA Geophysics Inc. conducted geophysical investigations on 11 portions of the Northrop Grumman facility located in Bethpage, New York. The purpose of these investigations was to locate detectable subsurface features such as leaching pools, dry wells, sumps and settling tanks, and underground storage tanks (USTs) that were suspected of being present at the site. The areas of concern and their associated suspected subsurface targets, as outlined by the Dvirka and Bartilucci site representative, are listed below.

E1	Former settling tanks/leaching pools
E2	Six former leaching pools
E3	Four former heat treat drainage wells
E4	Former dry well
E6	Leaching pool area
E7	Nine leaching pools
E8	Former leaching field with 20 leaching pools
E10	Seven former leaching pools
E12	Former dry well
E25	Former concrete sump pit
E28	Boiler room UST

Methods

The equipment selected for this investigation included: a Fisher TW-6 Pipe and Cable Locator (a type of electromagnetic metal-detector) and a GSSI SIR-3 ground penetrating radar (GPR) system with a 300 MHz antenna.

Each Area of Concern (AOC) that was not paved with reinforced concrete was initially investigated using the TW-6. The instrument was carried over the areas in a series of closely spaced parallel traverses to identify buried metallic objects that could represent metal or reinforced concrete features such as manhole covers, foundations, or the suspected UST.

Surface conditions permitting, GPR was used to investigate each metal-detector anomaly in an attempt to better characterize its source. GPR data was collected along traverses centered over the anomalies. In AOCs where

no metal-detector anomalies were found, as well as those areas paved with reinforced concrete (where the metal-detector can not be used), GPR data profiles were collected over a grid of parallel lines spaced 3 to 5 feet apart covering all accessible portions of the AOC. The data profiles were then examined for evidence of reflections that could be interpreted as being caused by the expected targets in each AOC.

Each detected feature was marked-out on the ground using florescent pink spray paint, and in non-paved areas, pin flags. The locations of subsurface features were measured from permanent aboveground features and used to produce scaled site maps for each AOC (see Figures 1 through 9).

Results

The results for each AOC are discussed separately below. In all discussions, compass directions are relative to Site North, which is approximately 45 degrees east of True North. GPR depth of penetration throughout the area of investigation was estimated to be approximately 3 to 4 feet in soil covered and asphalt-paved areas and less than 2 feet in areas paved with reinforced concrete.

E 1 Eight leaching pools and a large approximately 45 by 47-foot former settling tank were identified at this site. Two additional leaching pools, whose expected locations were obscured by metallic surface debris, probably also exist. An 8 by 19-foot rectangular subsurface vault, which may be part of an in-use sewer system, is located east of the former settling tank, outside of the AOC.

The reported system layout for the leaching pools in this AOC was two north/south lines about 30 feet apart, each comprised of five leaching pools. The lids to the southernmost leaching pools of each line (E1-1 and E1-2) are exposed at the surface. Three buried leaching pool covers were delineated, at intervals of approximately 30 feet, north of each of these two exposed covers. The western line of pools is located roughly 3 feet east of the property line fence. A steel plate covers the expected location of the northeastern leaching pool E1-10. A Northrop Grumman employee stated that this plate covers a sinkhole. It is surmised that the sinkhole may represent a collapsed leaching pool. No metal lid was detected at E1-9, the expected location of the northwest leaching pool; however, the site was covered by metal signs and a stack of cast iron catch basin grates, which limited our investigative efforts.

E 2 The apparent lids to four suspected leaching pools were identified beneath the asphalt at this site. Two additional leaching pools may also exist. Three of these buried covers (labeled E2-1 through E2-3 on the site map) are located in an east/west row spaced about 25 feet apart, 5 feet south of the AOC. The fourth suspected lid is in the western portion of the AOC, about 20 feet south of the fence. The GPR data profiles collected over each of these four anomalies showed flat metallic objects within 2 feet of the surface.

A circular blemish in the asphalt surface at location E2-5 correlates to the expected location of a reported leaching pool. The metal-detector gave no indication of a buried manhole cover at this location. The GPR data profile collected over this area showed evidence of a subsurface structure, but gave no conclusive evidence as to its identity.

Anomaly E2-6 correlates to the expected location of a sixth leaching pool. The metal-detector gave a very weak response at this location, however this response may be associated with subsurface electric lines that traverse this site. The GPR data profiles collected over this area detected the electric lines, but showed no evidence of a subsurface structure.

E 3 One suspected manhole cover was identified beneath the asphalt within the borders of this AOC. In addition, three metal-detector anomalies were identified south of the AOC. The suspected manhole cover (E3-1) is indicated by a circular patch in the asphalt adjacent to the curb line near the center of the AOC. The three metal-detector anomalies (labeled E3-2 through E3-4 on the site map) are located between 5 and 30 feet south of the AOC. The GPR data profiles collected over anomalies E3-2 and E3-3 showed flat metallic objects within 2 feet of the surface. The GPR data profiles collected over E3-3 gave no indications as to the source of this anomaly. This anomaly elicited a much smaller response from the metal-detector than the other anomalies did.

E 4 NAEVA found no evidence of the former dry well that was suspected to exist at this location. The metal-detector gave no indications of buried metallic dry well covers. The GPR data profiles, which were collected at a 3-foot line spacing across this AOC, showed no anomalous reflective images that could be interpreted as be caused by a dry well.

E 6 Using GPR, four possible abandoned leaching pools were identified beneath the asphalt at this site. The four anomalies are located, along with two storm drain associated dry wells, in an east/west row

spaced roughly 20 feet apart, approximately 20 feet south of the building. A storm drain line runs across these anomalies and through the two storm drain manholes. This linear arrangement suggests that the two storm drain dry wells may have originally been part of the leaching pool system.

The TW-6 detected buried metal at only the eastern anomaly. The GPR data profiles, which were collected over the AOC at a 5-foot line spacing, confirmed a shallow metallic object at the center of the eastern anomaly and showed evidence of disturbed soil or possible subsurface structures at each of the three western anomalies.

E 7 The apparent lids to 13 suspected leaching pools were identified beneath the asphalt within this AOC. An 8 by 8-foot rectangular metal-detector anomaly that may represent an abandoned settling tank was also identified.

The GPR data profiles collected over the 13 suspected leaching pools showed flat metallic objects believed to be steel leaching pool lids just below the asphalt surface at each location. The GPR data profiles collected over the possible settling tank gave no further information as to the nature of this anomaly. Similarly, the GPR gave no significant insight into the cause of an irregularly shaped metal-detector anomaly located at the northern entrance to the parking lot. Based upon the TW-6's response, it is believed that this anomaly is probably caused by buried metallic debris.

E 8 NAEVA found no evidence of the 20 former leaching pools that were suspected to exist within this AOC. The metal-detector gave no indications of buried metallic dry well covers. The GPR data profiles, which were collected at a 3-foot line spacing in the courtyard portion of this AOC and a 5-foot line spacing in the parking lot portion, showed no anomalous reflective images that could be interpreted as being caused by leaching pools. GPR data was not collected over the active roadway portion of this AOC due to safety concerns.

E 10 This AOC was divided into two portions, one on either side of the elevated walkway that crosses the site. A former septic tank and leach pool were expected in the eastern portion of the AOC and six former leaching pools were expected in the western portion.

Seven metal-detector anomalies were identified beneath the grass within the borders of the eastern portion of this AOC, however, only two of these anomalies, E10-1 and E10-2, coincide with the expected locations of the

suspected former septic tank and leaching pool. The GPR data profiles collected over the seven anomalies showed evidence of buried metallic objects but gave no indications as to the character of the anomalies. Anomaly E10-7 elicited a much smaller response from the metal-detector than the other anomalies did.

No evidence of the six pools suspected to exist in the western portion of the AOC was seen. The TW-6 indicated the presence of one buried metallic object in the northeast corner of this portion of the AOC, but the apparent linear nature of this anomaly is more consistent with buried metallic debris than with a leaching pool. The GPR data profiles, which were collected east/west at a 5-foot line spacing across this area, showed no anomalous reflective images that could be interpreted as be caused by leaching pools.

E 12 NAEVA found no evidence of a former dry well within this AOC. The metal-detector gave no indications of buried metallic dry well covers. The GPR data profiles, which were collected at a 5-foot line spacing across the AOC, showed no anomalous reflective images that could be interpreted as be caused by a dry well. It should be noted that the lid to a dry well is exposed at the surface just outside of the area of investigation, 6 feet north of the AOC's northeast corner.

E 25 NAEVA found no evidence of the concrete sump pit that was suspected to exist at this location, however site conditions severely impacted our investigation. The reinforced concrete pavement prevented the use of the metal-detector and limited the GPR's depth of penetration to less than 1-foot.

E 28 NAEVA found no evidence of an abandoned UST within this AOC. The metal-detector gave no indications of large buried metallic objects. The GPR data profiles, which were collected at a 4-foot line spacing both north/south and east/west across the AOC, showed no hyperbolic reflections typically indicative of an underground storage tank.

Former product and return lines, which were exposed at the base of the generator located inside the boiler room, were traced using a utility locating instrument. These lines both exit the west side of the building above grade. This would tend to indicate that the tank associated with these lines would have been above ground.

A vault and a vent pipe were noted adjacent to the building, about 5 feet east of the AOC, but stored materials blocked access to them. The relatively large diameter of the vent pipe suggests that they may be associated with a sewer system rather than the suspected UST.

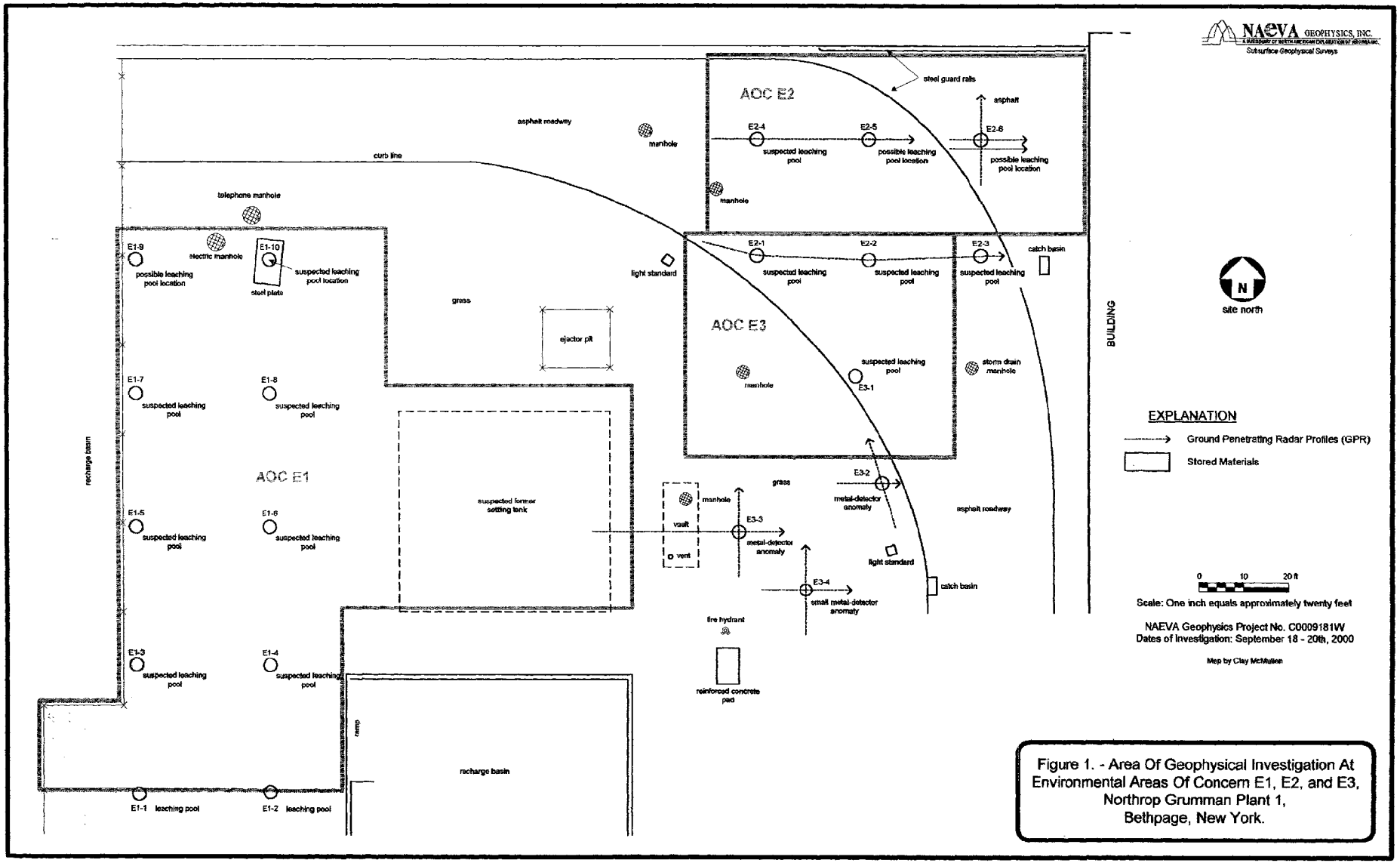

Figure 1. - Area Of Geophysical Investigation At Environmental Areas Of Concern E1, E2, and E3, Northrop Grumman Plant 1, Bethpage, New York.

Figure 2 - Area of Geophysical Investigation at Environmental Area Of Concern E4, Northrop Grumman Plant 1, Bethpage, New York.

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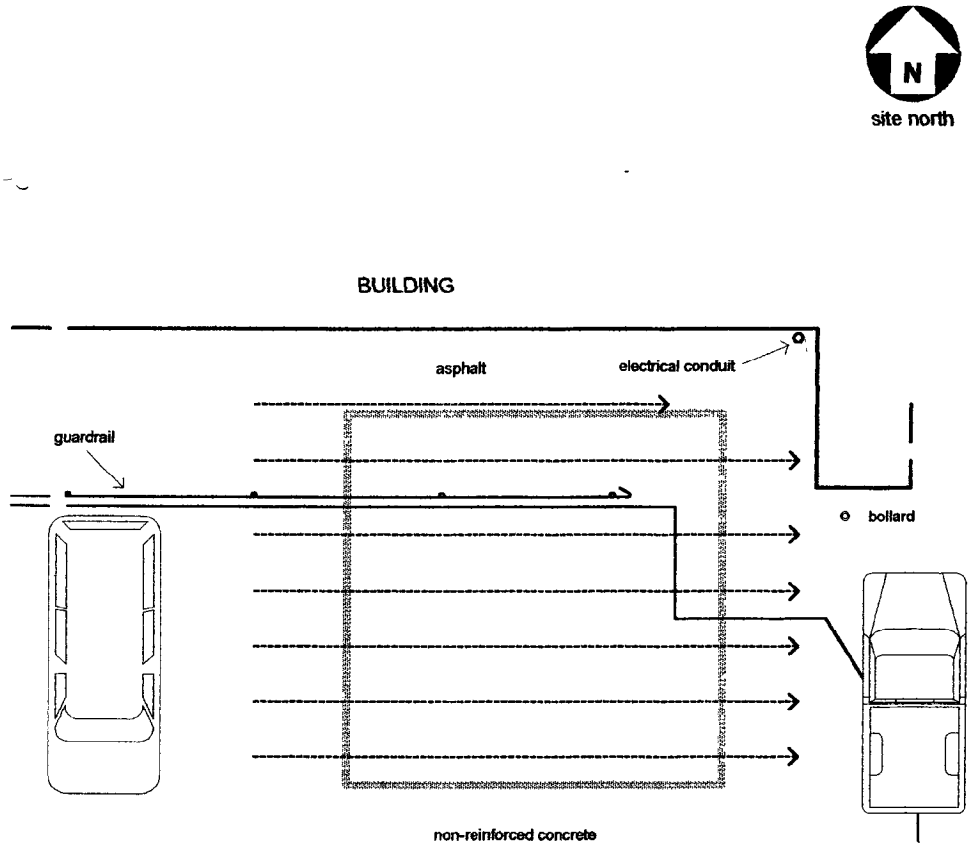

Scale: One inch equals approximately ten feet

NAEVA Geophysics Project No. C0009181W
Dates of Investigation: September 18 - 20, 2000
Map by Clay McMullen

EXPLANATION

Ground Penetrating Radar Data Profiles

Area Of Concern

Figure 3. - Area of Geophysical Investigation at Environmental Area Of Concern E6, Northrop Grumman Plant 1, Bethpage, New York.

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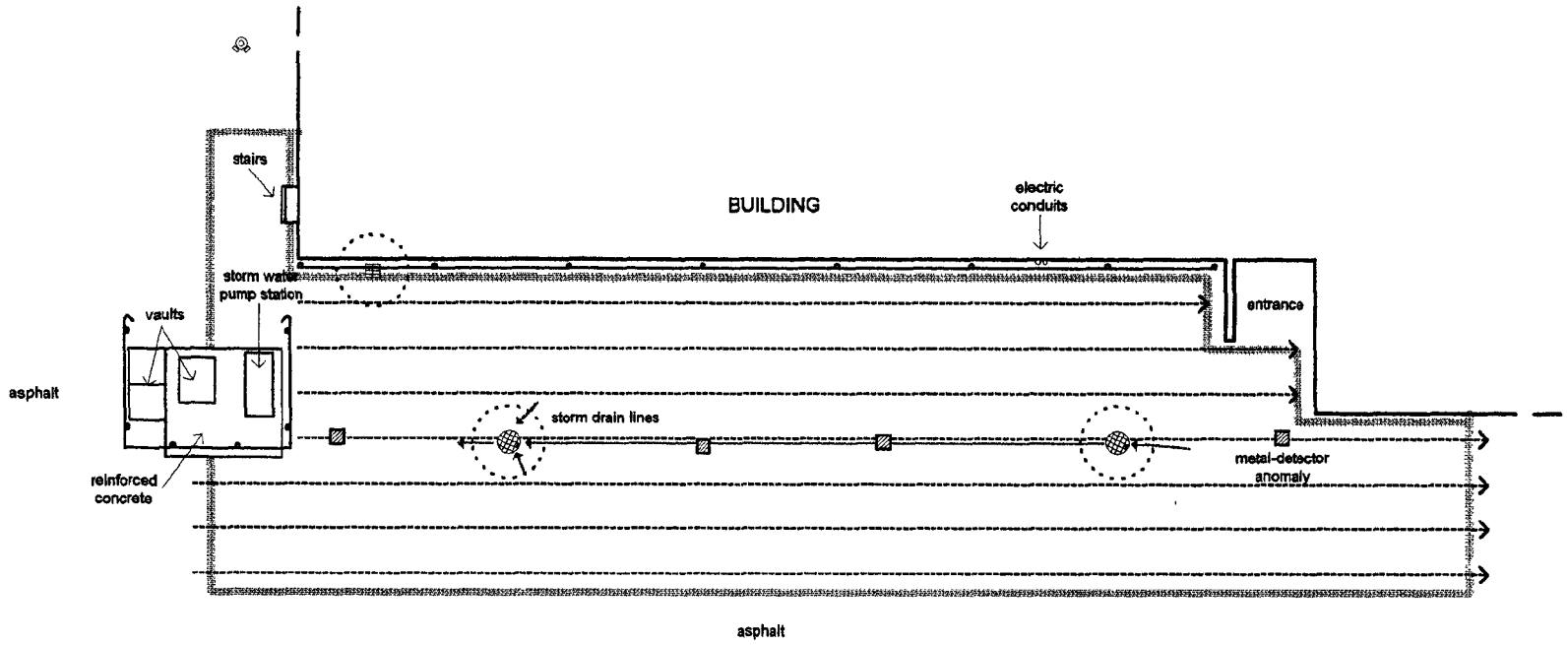

0 10 20 ft

Scale: One inch equals approximately twenty feet

NAEVA Geophysics Project No. C0009181W
Dates of Investigation: September 18 - 20, 2000
Map by Clay McMullen

N
site north

EXPLANATION

- Area of concern
- Ground Penetrating Radar Data Profiles
- Guardrail
- Possible Leaching Pools
- Fire Hydrant
- Catch Basin and Dry Well
- Manhole to Storm Drain Dry Well

Figure 4. - Area of Geophysical Investigation at Environmental Area Of Concern E7, Northrop Grumman Plant 1, Bethpage, New York.

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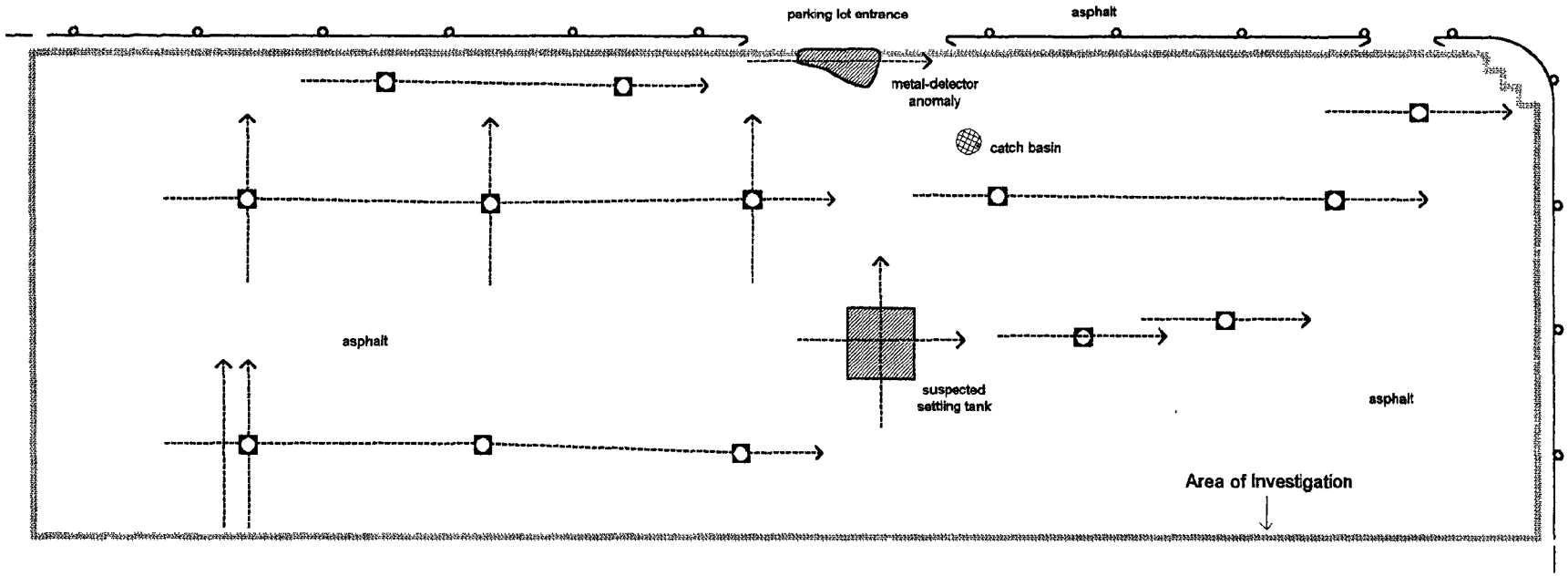

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Scale: One inch equals approximately twenty feet

NAEVA Geophysics Project No. C0009181W
Dates of Investigation: September 18 - 20, 2000
Map by Clay McMullen

N
site north

EXPLANATION

- Suspected Leach Pool
- Ground Penetrating Radar Data Profiles
- Guardrail
- Metal-detector Anomaly

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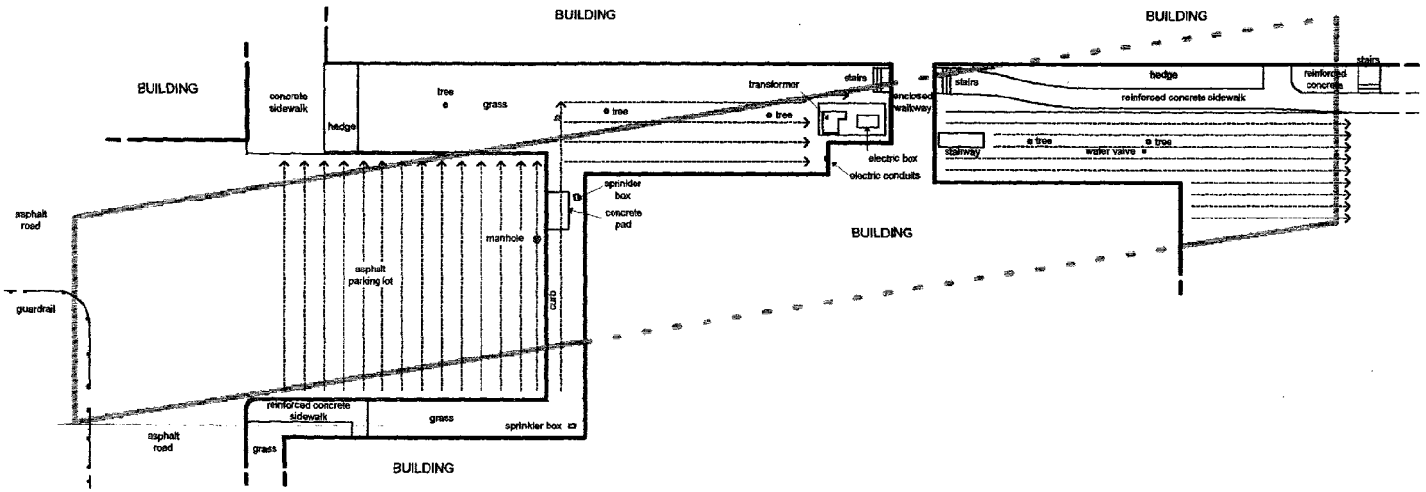
Subsurface Geophysical Surveys

site north



0 10 20 30 ft
Scale. One inch equals approximately thirty feet

NAEVA Geophysics Project No. C0009181W
Date of Investigation: September 18 - 20th, 2000
Map by Clay McMullen

EXPLANATION

- Fire Hydrant
- Manhole
- Area of Geophysical Investigation
- Ground Penetrating Radar Data Profiles

Figure 5 - Area of Geophysical Investigation at Environmental Area Of Concern E8, Northrop Grumman Plant 1, Bethpage, New York.

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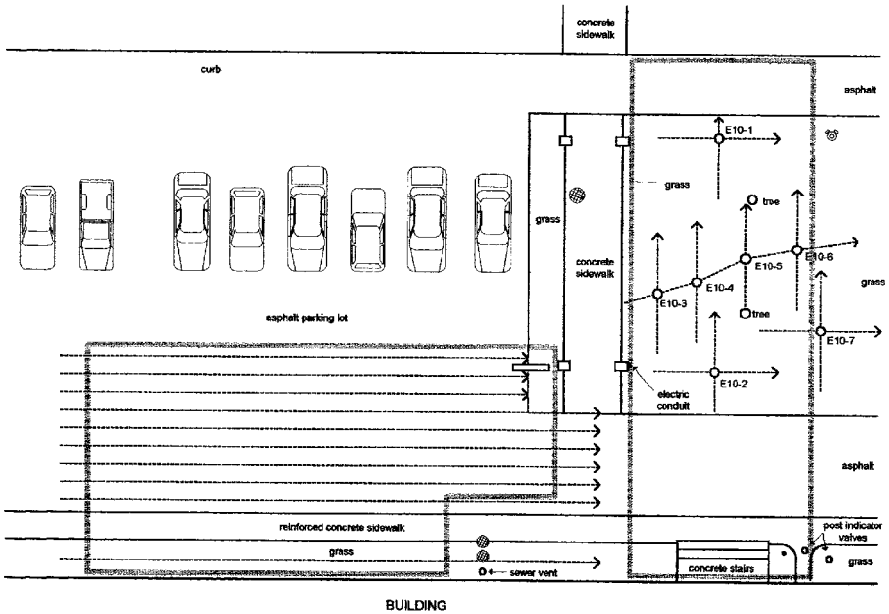


EXPLANATION

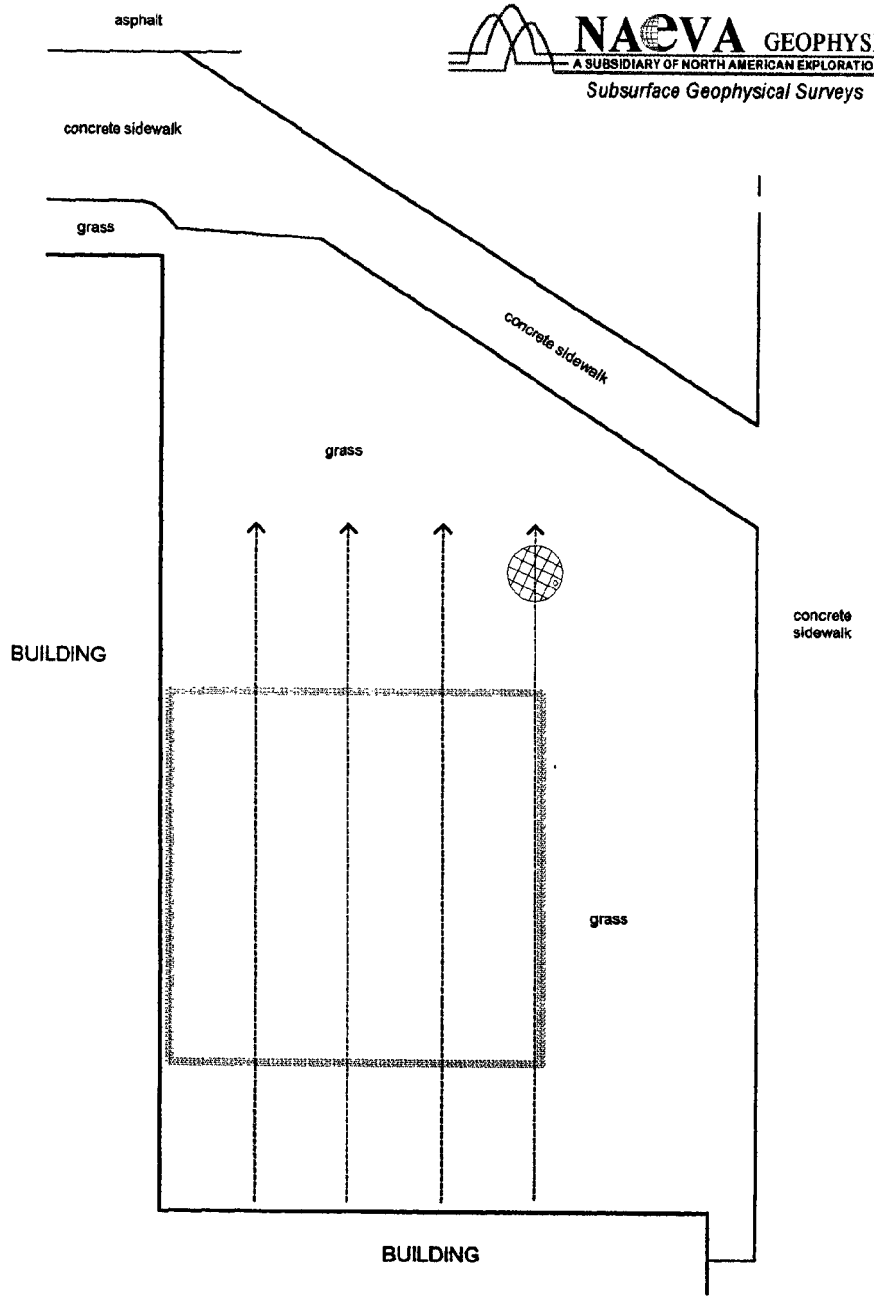
- Ground Penetrating Radar Profiles
- Area of Geophysical Investigation
- Fire Hydrant
- Sewer Manhole Cover
- Metal Detector Anomaly
- Footings for Overhead Walkway

Scale: One inch equals approximately twenty feet

NAEVA Geophysics Project No. C0009181W
Date of Investigation: September 18 - 20, 2000
Map by Clay McMullen

Figure 6 - Area of Geophysical Investigation at Environmental Area Of Concern Area E10, Northrop Grumman Plant 1, Bethpage, New York.

Figure 7 - Area of Geopysical Investigation at Environmental Area Of Concern E12, Northrop Grumman Plant 1, Bethpage, New York.



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Subsurface Geophysical Surveys

N
site north

0 5 10 ft
Scale: One inch equals approximately ten feet

NAEVA Geophysics Project No. C0009181W
Dates of Investigation: September 18 - 20, 2000
Map by Clay McMullen

EXPLANATION

----------→ Ground Penetrating Radar Data Profiles

Area of Concern

Manhole

Figure 8. - Area of Geophysical Investigation at Environmental Area Of Concern E25, Northrop Grumman Plant 1, Bethpage, New York.

site north

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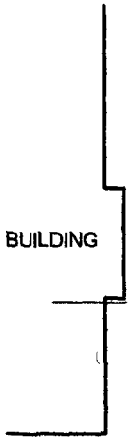
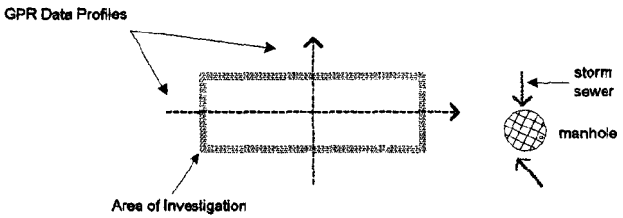
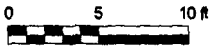
A SUBSIDIARY OF NORTH AMERICAN EXPLORATION OF VIRGINIA INC.
Subsurface Geophysical Surveys





reinforced concrete

reinforced concrete



Scale: One inch equals approximately ten feet

NAEVA Geophysics Project No. C0009181W
Dates of Investigation: September 18-20, 2000
Map by Clay McMullen

asphalt

Figure 9 - Area of Geophysical Investigation at Environmental Area Of Concern E28, Northrop Grumman Plant 1, Bethpage New York.

NAEVA GEOPHYSICS, INC.
A SUBSIDIARY OF NORTH AMERICAN EXPLORATION OF VIRGINIA INC.
Subsurface Geophysical Surveys

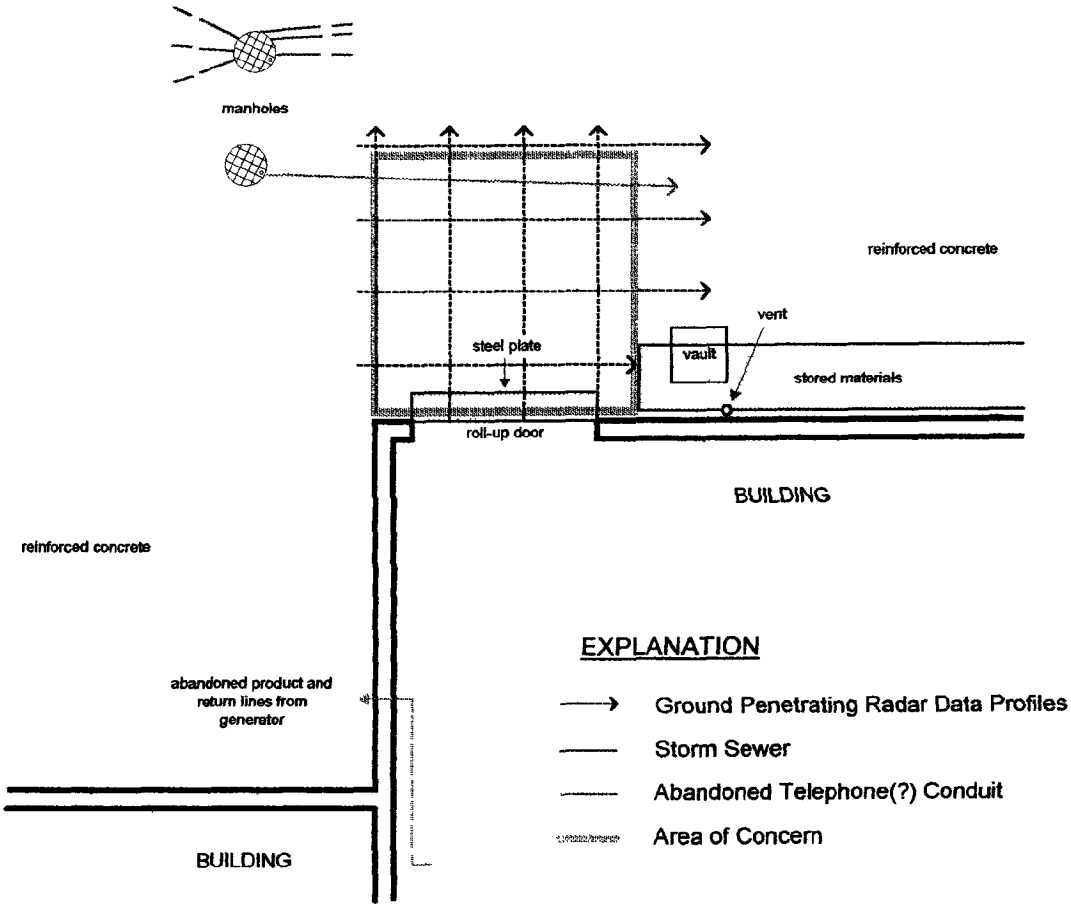
0 5 10 ft

Scale: One inch equals approximately ten feet

site north

NAEVA Geophysics Project No. C0009181W
Dates of Investigation: September 18 - 20, 2000

Map by Clay McMullen



Appendix B

APPENDIX B

BORING LOGS

Dvirka and Bartilucci
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Project No.: 1852 **Boring No.:** I02B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 19, 2000

Geologist: Keith Robbins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 19, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	20	15.0	0-20": Brown-light orange SILT, some fine to medium SAND, trace GRAVEL, well sorted, damp
3-5	2	GP	--	20	15-20	0-20": Tan-brown, coarse SAND and fine to medium GRAVEL, poorly sorted, trace FINES, dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 12" thick concrete at grade

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Project No.: 1852 **Boring No.:** I03B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 19, 2000

Geologist: Keith Robbins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 19, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	20	50-100	0-20": Brown SILT, trace fine to medium SAND, fine GRAVEL, damp
3-5	2	GP	--	--	--	Light brown-tan, medium to coarse SAND, some fine subrounded GRAVEL, dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 7" thick concrete at grade
Rain falling outside. Interior background PID readings of 3-5 ppm may be due to high humidity,

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Project No.: 1852 **Boring No.:** I04B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 17, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 17, 2000

Boring Completion Depth: 10 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample				PID (ppm)	Lithology Description
	Sample No.	Type	Blows (Per 6")	Rec. (inches)		
8-10	1	GP	--	24	0.0	0-24": Brown to tan to orange SAND with GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target former dry well. Manual drilling efforts prohibited deeper sample collection.

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Project No.: 1852 **Boring No.:** I05B01
Project Location: Bethpage, NY **Sheet** 1 of 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 2, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 2, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
8-12	1	GP	--	38	0.0	0-10": Brown SILT and fine to medium SAND, dry, no odors 10"-13": Gray-brown SILT and CLAY, trace fine to medium SAND, dry, no odor 13"-35": Gray-brown to orange SILT and fine to coarse SAND, moist to dry, trace fine to coarse GRAVEL, dry, no odor 35"-38": Orange-brown, fine to coarse SAND, little fine to coarse GRAVEL, trace SILT, dry, no odor
12-16	2	GP	--	42	0.0	0-42": Orange-brown, fine to coarse SAND, little fine to coarse GRAVEL, trace SILT, dry, no odor
16-20	3	GP	--	40	0.0	0-40": Orange-brown, fine to coarse SAND, little fine to coarse GRAVEL, trace SILT, dry, no odor
20-22	4	GP	--	--	0.0	Orange-brown, fine to coarse SAND, little fine to coarse GRAVEL, trace SILT, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within leaching pool which is "open" to 3' below grade

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Project No.: 1852 **Boring No.:** I06B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 21, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 21, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	17	0.0	0-1": Brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor 1"-17": Orange-brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor
3-5	2	GP	--	20	0.0	0"-20": Orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 8" thick concrete at grade

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Project No.: 1852 **Boring No.:** I06B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 21, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 21, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	22	0.0	0-10": Brown-black SILT and fine to coarse SAND, trace fine to medium GRAVEL, dry, no odor 10"-22": Brown SILT, some fine to medium SAND, trace fine to medium GRAVEL, dry, no odor
3-5	2	GP	--	18	0.0	0-10": Orange-brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odor 10"-18": Gray SILT and fine to medium SAND, trace fine to medium GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 7" thick concrete at grade

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Project No.: 1852 **Boring No.:** I07B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 29, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 29, 2000

Boring Completion Depth: 7 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
3-5	1	GP	--	22	0.0	0-15": Brown, fine to coarse SAND and SILT, dry, no odor
5-7	2	GP	--	15	0.0	0-2": Brown, fine to coarse SAND and SILT, dry, no odor 2"-15": Orange-brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted adjacent to a 32" deep pit through a 6" thick concrete floor

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Project No.: 1852 **Boring No.:** I07B01N8
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: January 2, 2001

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: January 2, 2001

Boring Completion Depth: 7 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
3-5	1	GP	--	24	1.0	0-24": Brown to tan SAND and GRAVEL, trace SILT with a hint of green tint, no odor
5-7	2	GP	--	24	0.2	0-24": Brown to tan to orange coarse SAND and GRAVEL, trace SILT with slight green tint

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 3" thick concrete at grade

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Project No.: 1852 **Boring No.:** I07B01S8
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: January 3, 2001

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: January 3, 2001

Boring Completion Depth: 7 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
3-5	1	GP	--	24	0.0	0-24": Brown to tan SAND and GRAVEL, moist, no odor
5-7	2	GP	--	24	0.0	0-24": Brown to tan SAND and GRAVEL, some SILTY/CLAYEY material with a slight gray tint, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 3" thick concrete floor slab

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Project No.: 1852 **Boring No.:** I07B01E8
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: January 3, 2001

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: January 3, 2001

Boring Completion Depth: 7 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample		Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
	Sample No.	Type				
5-7	1	GP	--	24	0.2	0-24": Brown to tan SILTY/CLAYEY SAND with a gray tint, trace GRAVEL,moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted in a backfilled pit which has a 2" thick bottom and is covered by a 3" thick concrete floor slab.

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Project No.: 1852 **Boring No.:** I07B01W5
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: January 2, 2001

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: January 2, 2001

Boring Completion Depth: 7 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
3-5	1	GP	--	24	0.2	0-24": Brown to tan SAND and GRAVEL, trace SILT, moist, no odor
5-7	2	GP	--	24	0.8	0-24": Brown to tan to orange SAND and GRAVEL, trace green tint through a SILTY/CLAYEY layer in the 3'-5' sample interval, moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 3" thick concrete at grade

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Project No.: 1852 **Boring No.:** I07B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 21, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 21, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	24	0.0	0-24": Brown to orange-brown, SILT and fine to coarse SAND, trace fine to medium GRAVEL, dry, no odor
3-5	2	GP	--	16	0.0	0-2": Brown to orange-brown, SILT and fine to coarse SAND, trace fine to medium GRAVEL, dry, no odor 2"-16": Orange-brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 2" thick concrete at grade

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Project No.: 1852 **Boring No.:** I07B03
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 17, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 17, 2000

Boring Completion Depth: 9 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
5-7	1	GP	--	24	35.0	0-24": Tan SAND wth gray staining, slight odor
7-9	2	GP	--	24	25.0	0-24": Brown to tan to orange SAND with a 3" gray stained layer at 7' below grade

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target beneath a back-filled former 4'-3" deep pit running north-south within the former Paint Tunnnel.

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Project No.: 1852 **Boring No.:** I08B01
Project Location: Bethpage, NY **Sheet** 1 of 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 26, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 26, 2000

Boring Completion Depth: 11 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
2-4	1	GP	--	18	0.0	0-4": Brown SILT and fine to medium SAND, trace fine GRAVEL, dry, no odor
						4"-18": Orange-brown, fine to coarse SAND,
						trace SILT, trace fine GRAVEL, dry, no odor
4-6	2	GP	--	22	0.0	0-22": Orange-brown, fine to coarse SAND,
						trace SILT, trace fine GRAVEL, dry, no odor
6-8	3	GP	--	20	0.0	0-20": Orange-brown, fine to coarse SAND,
						trace SILT, trace fine GRAVEL, dry, no odor
8-10	4	GP	--	21	0.0	0-21": Orange-brown, fine to coarse SAND,
						trace SILT, trace fine GRAVEL, dry, no odor
10-11	5	GP	--	10	0.0	0-10": Orange-brown, fine to coarse SAND,
						trace SILT, trace fine GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade
refusal noted at 11' below grade

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Project No.: 1852 **Boring No.:** I09B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 26, 2000

Geologist: Keith Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 26, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	18	0.00	0-18": Brown SILT, some CLAY, trace fine to medium SAND, dry, no odor
3-5	2	GP	--	22	0.0	0-3": Brown SILT, some CLAY, trace fine to medium SAND, dry, no odor 3"-22": Orange-brown, fine to medium SAND, trace SILT, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete below wood block floor

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Project No.: 1852 **Boring No.:** I10B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 25, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 25, 2000

Boring Completion Depth: 12 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
2-4	1	GP	--	15	0.0	0-15": Brown to orange-brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, moist, no odors, occasional brick pieces
4-6	2	GP	--	22	0.0	0-22": Orange-brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, moist, no odors
6-8	3	GP	--	22	0.0	0-22": Orange-brown to tan, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, moist, no odors
8-10	4	GP	--	24	0.0	0-24": Orange-brown to tan, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, moist, no odors
10-12	5	GP	--	24	0.0	0-24": Brown to orange-brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, moist, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 2" thick concrete at grade

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Project No.: 1852 **Boring No.:** I11B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 22, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 22, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	24	0.1	0-24": Brown, SILT, some fine to medium SAND, trace fine GRAVEL, dry, no odors
3-5	2	GP	--	24	0.0	0-2": Brown, SILT, some fine to medium SAND, trace fine GRAVEL, dry, no odors 2"-24": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** I11B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 22, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 22, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	24	0.0	0-4": Brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odors 4"-20": Brown, SILT and fine to medium SAND, dry, no odors 20"-24": Brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odors
3-5	2	GP	--	24	0.1	0-24": Tan to brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** I11B03
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 22, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 22, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	20	0.0	0-17": Brown, SILT and fine to medium SAND, dry, no odors 17"-20": Brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odors
3-5	2	GP	--	23	0.1	0-23": Tan to brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** I11B04
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 22, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 22, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	24	0.0	0-8": Brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odors 8"-13": Brown, SILT and fine to medium SAND, dry, no odors 13"-24": Brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odors
3-5	2	GP	--	21	0.1	0-21": Brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 7" thick concrete at grade

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Project No.: 1852 **Boring No.:** I11B05
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 28, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 28, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	22	0.0	0-12": Brown SILT, trace fine to medium SAND, dry, no odor 12"-22": Brown to tan, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor
3-5	2	GP	--	24	0.0	0-24": Brown to tan, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 8" thick concrete at grade

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Project No.: 1852 **Boring No.:** I11B06
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 16, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 16, 2000

Boring Completion Depth: 4 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	24	0.0	0-24": Brown to tan, SAND and GRAVEL
2-4	2	GP	--	12	1.2	0-12": Brown to tan, SAND and GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within a 27" deep pit with a 6" thick concrete bottom. Boring depths are from beneath bottom of pit.

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Project No.: 1852 **Boring No.:** I11B07
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 20, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 20, 2000

Boring Completion Depth: 5.5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1.5-3.5	1	GP	--	16	4.5	0-16": Brown/tan SAND and GRAVEL with a slight green tint and resin odor
3.5-5.5	2	GP	--	18	4.5	0-18": Dark brown, slightly rust color, stained SAND and GRAVEL, moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring advanced through the bottom of a 17" deep backfilled concrete pit with a 2" thick concrete bottom and a 1" thick concrete floor slab at grade

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Project No.: 1852 **Boring No.:** I12B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 21, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 21, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	22	0.0	0-22": Brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odors
3-5	2	GP	--	7	0.0	0-7": Brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** I12B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 21, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 21, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	24	0.0	0-24": Orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odors
3-5	2	GP	--	19	0.0	0-19": Orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 4" thick concrete at grade

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Project No.: 1852 **Boring No.:** I12B03
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 21, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 21, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	24	0.0	0-24": Brown, fine to medium SAND, some SILT, trace fine to medium GRAVEL, dry, no odors
3-5	2	GP	--	18	0.0	0-18": Brown, fine to medium SAND, some SILT, trace fine to medium GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** I12B04
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 21, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 21, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	17	0.0	0-17": Brown to orange-brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odors
3-5	2	GP	--	18	0.0	0-18": Brown to orange-brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** I12B05
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 21, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 21, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	24	0.1	0-24": Brown SILT and fine to medium SAND, trace fine to medium GRAVEL, dry, no odors
3-5	2	GP	--	20	0.0	0-20": Brown SILT and fine to medium SAND, trace fine to medium GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** I13B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 17, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 17, 2000

Boring Completion Depth: 9 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
2-4	1	GP	--	12	5.2	0-12": Brown to tan SANDY soil with CLAYEY/SILTY soil, pieces of broken brick, some minor staining, no odor
4-6	2	GP	--	3	12.2	0-3": Brick and broken concrete, brown to black SILTY material
6-8	3	GP	--	16	7.2	0-16": Brown to tan SAND with layers of brick, stone and SILT
8-9	4	GP	--	12	7.0	0-12": Brown to tan SAND

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target 2' to 12' beneath a backfilled former dry well beneath the existing Cafeteria floor. 5" thick tile and concrete floor at grade.

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Project No.: 1852 **Boring No.:** I13B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 20, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 20, 2000

Boring Completion Depth: 7 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
2-4	1	GP	--	20	0.0	0-20": Brown/tan/red SAND and GRAVEL, moist, no odors
4-6	2	GP	--	18	0.0	0-18": Light brown/red SAND and GRAVEL, moist, no odors
6-7	3	GP	--	12	0.0	0-12": Light brown/red SAND and GRAVEL, moist, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target a former dry well backfilled to grade. Boring conducted manually. Refusal encountered at 7' below grade.

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Project No.: 1852 **Boring No.:** I16B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 19, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 19, 2000

Boring Completion Depth: 7.5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
3.5-5.5	1	GP	--	12	0.5	0-12": Brown-tan, SAND and GRAVEL, trace staining, moist, no odors
5.5-7.5	2	GP	--	14	0.5	0-14": Brown-tan, SAND and GRAVEL, trace staining, moist, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring advanced through the bottom of a 2' deep backfilled concrete pit with a 13" thick concrete bottom and a 5" thick concrete floor slab at grade

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Project No.: 1852 **Boring No.:** I17B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 26, 2000

Geologist: Keith Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 26, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	19	0.0	0-19": Brown SILT, some CLAY, trace fine to medium SAND, dry, no odor
3-5	2	GP	--	20	0.0	0-2": Brown SILT, some CLAY, trace fine to medium SAND, dry, no odor 2"-20": Brown, fine to medium SAND, trace SILT, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 8" thick concrete at grade

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Project No.: 1852 **Boring No.:** I17B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 26, 2000

Geologist: Keith Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 26, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	18	0.0	0-4": Brown, fine to medium SAND, race SILT, dry, no odor
						4"-18": Brown SILT, little CLAY, trace fine to medium SAND, dry, no odor
3-5	2	GP	--	20	0.0	0-1": Brown SILT, little CLAY, trace fine to medium SAND, dry, no odor
						1"-20": Orange-brown, fine to medium SAND, trace SILT, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** I19B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 28, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 28, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	24	0.0	0-14": Orange-brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odor 14"-24": Brown SILT, trace CLAY, trace fine to medium SAND, moist, no odor
3-5	2	GP	--	19	0.0	0-2": Brown SILT, trace CLAY, trace fine to medium SAND, moist, no odor 2"-19": Orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete beneath wood block floor

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Project No.: 1852 **Boring No.:** I21B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 4, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 4, 2000

Boring Completion Depth: 6 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
2-4	1	GP	--	17	0.0	0-17": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
4-6	2	GP	--	24	0.0	0-24": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 8" thick concrete floor at grade
8" void below concrete floor

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Project No.: 1852 **Boring No.:** I21B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 3, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 3, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	15	0.0	0-15": Tan-brown to orange-brown, fine to medium SAND, trace to little SILT, trace fine to coarse GRAVEL, dry, no odor
3-5	2	GP	--	14	0.0	0-14": Tan-brown to orange-brown, fine to medium SAND, trace to little SILT, trace fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade
6" void beneath concrete

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Project No.: 1852 **Boring No.:** I21B03
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 4, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 4, 2000

Boring Completion Depth: 9 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
5-9	1	GP	–	27	0.0	0-27": Orange-brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, occasional concrete pieces, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 8" thick concrete at grade
No sample recovery from 1'-5' (sampler advanced by its own weight). Probehole open to 5' below grade

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Project No.: 1852 **Boring No.:** I21B04
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - **By:** MR
Phase II Site Assessment

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 4, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 4, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-5	1	GP	–	28	0.0	0-28": Orange-brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 4" thick concrete floor at grade
3" void below concrete floor

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Project No.: 1852 **Boring No.:** I21B05
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 3, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 3, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
1-5	1	GP	--	38	0.0	0-31": Brown SILT and fine to medium SAND, trace fine to medium GRAVEL, dry, no odor 31"-38": Tan to orange-brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 2" thick concrete at grade

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Project No.: 1852 **Boring No.:** I23B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 18, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 18, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	18	0.0	0-18": Light brown-orange, SAND and GRAVEL, slightly moist, no staining, no odors
3-5	2	GP	--	16	0.0	0-16": Light brown-orange, SAND and GRAVEL, slightly moist, no staining, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring advanced through the bottom of a 1' deep concrete sump with a 5" thick concrete bottom in the basement of Pump Station "B".

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Project No.: 1852 **Boring No.:** I26B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 22, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 22, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	20	0.1	0-7": Tan to brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odors 7"-20": Brown SILT, fine to medium SAND, dry, no odors
3-5	2	GP	--	20	0.0	0"-3": Brown SILT, fine to medium SAND, dry, no odors 3"-20": Orange-brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within 12" deep trench with a 4" thick concrete bottom

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Project No.: 1852 **Boring No.:** I26B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 22, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 22, 2000

Boring Completion Depth: 5.5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
1.5-3.5	1	GP	--	14	0.0	0-14": Brown, SILT and fine to medium SAND, trace fine to medium GRAVEL, moist, no odors
3.5-5.5	2	GP	--	24	0.2	0-8": Brown, SILT and fine to medium SAND, trace fine to medium GRAVEL, moist, no odors 8"-24": Brown to orange-brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within 12" deep trench with a 6" thick concrete bottom

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Project No.: 1852 **Boring No.:** I28B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 28, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 28, 2000

Boring Completion Depth: 6 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
2-4	1	GP	--	20	0.0	0-8": Brown, fine to medium SAND, little SILT, dry, no odor 8"-15": Brown SILT, little CLAY, trace fine to medium SAND, dry, no odor 15"-20": Tan to orange-brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor
4-6	2	GP	--	22	0.0	0-22": Tan to orange-brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted adjacent to 2' deep pit
6" thick concrete beneath wood block floor

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Project No.: 1852 **Boring No.:** I30B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 19, 2000

Geologist: Keith Robbins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 19, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample				PID (ppm)	Lithology Description
	Sample No.	Type	Blows (Per 6")	Rec. (inches)		
1-3	1	GP	–	14	5	0-14": Dark brown-orange, fine to medium SAND, some SILT, little fine GRAVEL, damp
3-5	2	GP	–	18	5-10	0-18": Brown-tan, fine to coarse subrounded and fine to coarse GRAVEL, poorly sorted, dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: concrete is 7" thick beneath wood block floor

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Project No.: 1852 **Boring No.:** I30B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 19, 2000

Geologist: Keith Robbins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 19, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	14	15	0-14": Brown-orange, coarse to medium SAND, some crushed subrounded fine GRAVEL, dry
3-5	2	GP	--	20	50	0-20": Brown, coarse to medium SAND, some crushed fine GRAVEL, poorly sorted, dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: concrete is 7" thick beneath wood block floor

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Project No.: 1852 **Boring No.:** I30B03
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 18, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 18, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	18	0.0	0-2": Brown-black SILT and fine-medium SAND, dry, no odor
					0.1	2"-18": Brown to orange-brown, fine-coarse SAND,
						trace SILT, little fine-medium GRAVEL, dry, no odor
3-5	2	GP	--	16	0.1	0-16": Brown to orange-brown, fine-coarse SAND,
						trace SILT, little fine-medium GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: concrete is 6" thick beneath wood block floor

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Project No.: 1852 **Boring No.:** I30B03S12
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 28, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 28, 2000

Boring Completion Depth: 10 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	18	0.0	0-12": Concrete dust and dark brown/black stained SILTY SAND and GRAVEL 12"-18": Dark brown/black stained SILTY SAND and GRAVEL
2-4	2	GP	--	20	0.0	0-20": Light brown to orange SAND and GRAVEL, trace SILT, semi-dry, no odors
4-6	3	GP	--	24	0.0	0-24": Light brown to tan to orange SAND and GRAVEL, dry, no odors
6-8	4	GP	--	24	0.0	0-24": Light brown to tan to orange SAND and GRAVEL, dry, no odors
8-10	5	GP	--	24	0.0	0-24": Light brown to orange SAND and GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 3" thick concrete beneath wood block floor

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Project No.: 1852 **Boring No.:** I30B03E12
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 28, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 28, 2000

Boring Completion Depth: 10 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	12	0.0	0-4": Concrete dust and dark SILTY SAND and GRAVEL
						4"-12": Dark brown SILTY SAND and GRAVEL, moist, no odor
2-4	2	GP	--	12	0.0	0-12": Brown to tan to orange SAND and GRAVEL, slightly moist, no odors
4-6	3	GP	--	24	0.0	0-14": Brown to tan to dark orange SAND and GRAVEL, no odors
						14"-24": Brown to tan slightly gray tinted SILTY CLAYEY material, no odors
6-8	4	GP	--	20	0.0	0-2": Brown to tan SILTY CLAYEY material, moist, no odors
						2"-20": Light brown to tan SAND and GRAVEL, dry, no odors
8-10	5	GP	--	20	0.0	0-20": Light brown to tan SAND and GRAVEL,
						little lenses of red tint, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 3" thick concrete beneath wood block floor

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Project No.: 1852 **Boring No.:** I30B03W12
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 28, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 28, 2000

Boring Completion Depth: 10 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	18	0.3	0-6": Concrete dust and rubble, trace SILT 6"-18": Dark brown SAND and GRAVEL, SILTY CLAYEY material, semi-moist
2-4	2	GP	--	12	0.0	0-12": Brown to tan SAND and GRAVEL, dry, no odors
4-6	3	GP	--	24	0.0	0-24": Light brown to tan SAND and GRAVEL, dry, no odors
6-8	4	GP	--	24	0.0	0-24": Light brown to tan SAND and GRAVEL, dry, no odors
8-10	5	GP	--	24	0.0	0-24": Light brown to tan SAND and GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 3" thick concrete beneath wood block floor

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Project No.: 1852 **Boring No.:** I30B04
Project Location: Bethpage, NY **Sheet** 1 of 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 19, 2000

Geologist: Keith Robbins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 19, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	–	20	10-30	0-20": Brown coarse to medium SAND, some GRAVEL, dry, no odor
3-5	2	GP	–	20	50-100	0-20": Brown to light orange, coarse to medium SAND, some GRAVEL, poorly sorted, dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: concrete is 7" thick beneath wood block floor
PID readings in borehole: 500-1000 ppm

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Project No.: 1852 **Boring No.:** I30B05
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 3, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 3, 2000

Boring Completion Depth: 10 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-8	1	GP	--	24	0.0	0-24": Tan to orange-brown to tan, fine to coarse SAND, trace SILT little fine to coarse GRAVEL, dry, no odor
8-10	2	GP	--	22	0.0	0-22": Tan to orange-brown to tan, fine to coarse SAND, trace SILT little fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 38" thick concrete below wood block floor
Possible void from 4'-6' below grade

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Project No.: 1852 **Boring No.:** I30B06
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 18, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 18, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	–	24	0.0	0-18": Brown SILT, trace fine-medium SAND, dry, no odor
					0.1	18"-24": Black SILT and fine to medium SAND, dry, no odor
					0.1	20"-24": Brown SILT, trace fine-medium SAND, dry, no odor
3-5	2	GP	–	18	0.0	0-3": Brown SILT, trace fine-medium SAND, dry, no odor
					0.0	3"-18": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: concrete is 7" thick at grade

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Project No.: 1852 **Boring No.:** I30B07
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 17, 2000

Geologist: Keith Robins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 17, 2000

Boring Completion Depth: 4 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	–	20	2.0	0-20": Dark brown, fine to coarse SAND, fine to medium GRAVEL, trace organics, dry to damp
2-4	2	GP	–	20	10.0	0-20": Brown to light orange, fine to coarse SAND, little fine GRAVEL, trace brown SILT, damp

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:

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Project No.: 1852 **Boring No.:** I31B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 18, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 18, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	20	0.1	0-20": Brown to orange-brown, fine-coarse SAND, some fine to medium GRAVEL, trace SILT, dry, no odor
3-5	2	GP	--	17	0.1	0-17": Brown to orange-brown, fine-coarse SAND, some fine to medium GRAVEL, trace SILT, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: concrete is 7" thick at grade

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Project No.: 1852 **Boring No.:** I31B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 18, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 18, 2000

Boring Completion Depth: 6 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
2-4	1	GP	--	22	0.0	0-22": Brown to orange-brown, fine-coarse SAND, trace SILT, some fine to medium GRAVEL, dry, no odor
4-6	2	GP	--	18	0.1	0-18": Brown to orange-brown, fine-coarse SAND, trace SILT, some fine to medium GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted through bottom of 2' deep pit

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Project No.: 1852 **Boring No.:** I32B01
Project Location: Bethpage, NY **Sheet** 1 of 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 19, 2000

Geologist: Keith Robbins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 19, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	–	24	5-15	0-24": Dark brown-orange SILT, trace fine GRAVEL, damp
3-5	2	GP	–	12	5-15	0-12": Light-tan SILT, little fine to medium SAND, trace fine GRAVEL, damp

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 8" thick concrete at grade
Rain falling outside. Interior background PID readings of 3-4 ppm may be due to high humidity,

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Project No.: 1852 **Boring No.:** I32B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 19, 2000

Geologist: Keith Robbins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 19, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	15	5-10	0-15": Dark brown-orange, coarse to fine SAND, some SILT, fine GRAVEL, poorly sorted, dry
3-5	2	GP	--	24	3-5	0-12": Brown-tan SILT, trace to little fine to medium SAND, fine GRAVEL, trace CLAY, damp

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 8" thick concrete at grade
Rain falling outside. Interior background PID readings of 3 ppm may be due to high humidity,

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Project No.: 1852 **Boring No.:** I30B02N8
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 20, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 20, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	–	24	0.0	0-6": Concrete dust 6"-18": Dark brown slightly stained SAND and GRAVEL, dry, no odor 18"-24": Brown to tan SAND and GRAVEL, dry, no odor
3-5	2	GP	–	18	0.0	0-18": Brown to tan SAND and GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 7" thick concrete beneath wood block floor

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Project No.: 1852 **Boring No.:** I30B02S8
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 20, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 20, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	24	0.0	0-8": Concrete dust 8"-16": Dark brown to black stained SAND and GRAVEL, dry, no odor 16"-24": Brown to tan SAND and GRAVEL, dry, no odor
3-5	2	GP	--	18	0.0	0-18": Brown to tan SAND and GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 7" thick concrete beneath wood block floor

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Project No.: 1852 **Boring No.:** I30B02E8
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 20, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 20, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	12	0.0	0-6": Concrete dust 6"-12": Brown to tan SANDY SILTY soil , no odor
3-5	2	GP	--	24	0.0	0-12": Brown to tan SANDY soil with a slight green tint, dry 12"-24": Brown to tan SAND, trace GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 7" thick concrete beneath wood block floor

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Project No.: 1852 **Boring No.:** I30B02W8
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 20, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 20, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	24	0.0	0-6": Light brown to tan to orange SAND and GRAVEL, dry, no odor 6"-24": Dark brown to tan SANDY soil with trace black staining, dry, no odor
3-5	2	GP	--	24	0.0	0-24": Light brown to tan SAND and GRAVEL with a trace green tint, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 7" thick concrete beneath wood block floor

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Project No.: 1852 **Boring No.:** I30B03N12
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 28, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 28, 2000

Boring Completion Depth: 10 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	15	1.1	0-7": Slightly stained SAND and GRAVEL, SILT and concrete dust, moist, no odor
						7"-15": Dark brown SAND and GRAVEL, dry, no odor
2-4	2	GP	--	12	0.8	0-12": Light brown to tan to orange SAND and GRAVEL, dry, no odors
4-6	3	GP	--	24	1.3	0-24": Light brown to tan SAND and GRAVEL with a 6" layer of gray tinted SILTY CLAY at bottom of sample interval, moist, no odors
6-8	4	GP	--	24	0.5	0-24": Light brown to tan SAND and GRAVEL with a 4" layer of gray tinted SILTY CLAY at top of sample interval, moist, no odors
8-10	5	GP	--	24	0.0	0-24": Very light brown to tan to orange SAND and GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 3" thick concrete beneath wood block floor

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Project No.: 1852 **Boring No.:** I32B03
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 20, 2000

Geologist: Keith Robbins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 20, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	20	0.0	0-20": Dark brown-orange, fine to medium SAND, little SILT, some fine GRAVEL, well sorted, dry to damp
3-5	2	GP	--	20	0.0	0-10": Tan-brown SILT, damp, fine SAND, trace GRAVEL 10"-20": Brown-orange, coarse to medium SAND and GRAVEL, dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 7" thick concrete at grade
Background PID = 0.0 ppm

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Project No.: 1852 **Boring No.:** I32B04
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 20, 2000

Geologist: Keith Robbins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 20, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	–	20	0.0	0-20": Dark brown-orange, medium SAND, some tan-brown SILT, damp
3-5	2	GP	–	15	0.0	0-15": Orange-brown SILT, some fine to medium SAND, fine GRAVEL, damp-dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:

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Project No.: 1852 **Boring No.:** I33B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 28, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 28, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	16	0.0	0-16": Brown to tan-brown, fine to medium SAND, trace SILT, little fine to medium GRAVEL, dry, no odor
3-5	2	GP	--	15	0.0	0-15": Brown to tan-brown, fine to medium SAND, trace SILT, little fine to medium GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete floor

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Project No.: 1852 **Boring No.:** I34B01
Project Location: Bethpage, NY ***Sheet 1 of 1***
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 29, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 29, 2000

Boring Completion Depth: 8 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
4-6	1	GP	--	22	0.0	0-18": Brown, fine to medium SAND, trace SILT, trace fine GRAVEL, dry, no odor
						18"-22": Orange-brown, fine to coarse SAND,
						trace SILT, little fine to coarse GRAVEL, dry, no odors
6-8	2	GP	--	15	0.0	0-15": Orange-brown, fine to coarse SAND,
						trace SILT, little fine to coarse GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted adjacent to a 4' deep pit

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Project No.: 1852 **Boring No.:** I34B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 29, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 29, 2000

Boring Completion Depth: 6 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
2-4	1	GP	--	20	0.0	0-16": Brown SILT, trace fine to medium SAND, dry, no odor
4-6	2	GP	--	22	0.0	0-2": Brown SILT, trace fine to medium SAND, dry, no odor 2"-22": Tan to orange-brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted adjacent (1' east) to 2' deep pit

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Project No.: 1852 **Boring No.:** I35B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 29, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 29, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	–	15	0.0	0-6": Brown, fine to coarse SAND, trace SILT, trace fine GRAVEL, dry, no odor
						6"-13": Brown SILT and CLAY, dry, no odor
						13"-15": Brown, fine to coarse SAND, trace SILT, trace fine GRAVEL,dry,no odor
3-5	2	GP	–	18	0.0	0-18": Brown, fine to coarse SAND, trace SILT, trace fine GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 8" thick concrete at grade

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Project No.: 1852 **Boring No.:** I35B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 29, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 29, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	16	0.0	0-16": Brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odor
3-5	2	GP	--	18	0.0	0-18": Brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** I36B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 22, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 22, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	–	18	0.0	0-18": Tan to brown, fine to medium SAND, trace SILT, trace fine GRAVEL, dry, no odors
3-5	2	GP	–	18	0.0	0-18": Tan to brown, fine to medium SAND, trace SILT, trace fine GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** I36B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 22, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 22, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	24	0.0	0-16": Tan-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odors 16"-24": Brown SILT, little to some fine to medium SAND, dry, no odor
3-5	2	GP	--	24	0.1	0-12": Brown SILT, little to some fine to medium SAND, dry, no odor 12"-24": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** I37B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 27, 2000

Geologist: Keith Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 27, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	22	0.0	0-4": Brown, fine to coarse SAND, trace SILT, trace fine GRAVEL, dry, no odor 4"-12": Brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor 12"-22": Orange-brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor
3-5	2	GP	--	18	0.0	0-6": Brown SILT and fine to medium SAND, dry, no odor 6"-18": Orange-brown, fine to coarse SAND, trace SILT, some fine to medium GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete below tile floor

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Project No.: 1852 **Boring No.:** I37B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 27, 2000

Geologist: Keith Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 27, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	24	0.0	0-19": Orange-brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor 19"-24": Brown SILT, trace fine to medium SAND, dry, no odors
3-5	2	GP	--	19	0.0	0-19": Brown SILT, trace fine to medium SAND, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete below tile floor

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Project No.: 1852 **Boring No.:** I38B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 26, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 26, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	–	20	0.0	0-20": Brown SILT and fine to medium SAND to fine GRAVEL, dry, no odors
3-5	2	GP	–	24	0.0	0-6": Brown SILT and fine to medium SAND to fine GRAVEL, dry, no odors 6"-24": Orange-brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** I38B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 26, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 26, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample		Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
	Sample No.	Type				
1-3	1	GP	--	18	0.0	0-5": Brown SILT and fine to medium SAND, dry, no odors 5"-13": Brown SILT, little fine to medium SAND, trace fine GRAVEL, dry, no odors 13"-18": Orange-brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odors
3-5	2	GP	--	20	0.0	0-5": Orange-brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odors 3"-20": Brown SILT, little CLAY, trace fine to medium SAND, dry, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 8" thick concrete at grade

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Project No.: 1852 **Boring No.:** I39B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 19, 2000

Geologist: Keith Robbins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 19, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	20	0.0	0-20": Brown-tan, fine SAND and SILT, trace fine GRAVEL, damp to dry
3-5	2	GP	--	15	5.0	0-15": Tan, medium to coarse SAND, some fine GRAVEL, poorly sorted, dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 12" thick concrete at grade

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Project No.: 1852 **Boring No.:** I39B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 19, 2000

Geologist: Keith Robbins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 19, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	13	5-15	0-13": Brown-orange, fine SAND, some SILT, fine crushed GRAVEL, dry
3-5	2	GP	--	20	5-10	0-20": Light brown-tan, coarse to medium SAND, some fine subrounded GRAVEL, trace FINES, dry, poorly sorted

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 12" thick concrete at grade

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Project No.: 1852 **Boring No.:** I40B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 4, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 4, 2000

Boring Completion Depth: 6 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
2-4	1	GP	–	17	0.0	0-2": Brown SILT, trace fine to medium SAND, dry, no odor
						2"-17": Orange-brown, fine to coarse SAND, trace SILT,
						trace fine to coarse GRAVEL, dry, no odor
4-6	2	GP	–	24	0.0	0-24": Orange-brown, fine to coarse SAND, trace SILT,
						trace fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 8" thick concrete at grade with an 8" thick layer of dirt/fill beneath then another 8" thick layer of concrete (i.e., an 8" deep backfilled pit)

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Project No.: 1852 **Boring No.:** I40B03
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 20, 2000

Geologist: Keith Robbins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 20, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	20	0.0	0-20": Dark brown-light orange, coarse to fine SAND, some subrounded fine GRAVEL, trace dark brown SILT (<6" thick), dry to damp
3-5	2	GP	--	--	0.0	Dark brown-orange, coarse to fine SAND, some subrounded GRAVEL, trace grayish SILT

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: approx. 12" thick concrete at grade

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Project No.: 1852 **Boring No.:** I40B04
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 20, 2000

Geologist: Keith Robbins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 20, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	20	0.0	0-20": Brown-orange, coarse to fine SAND, some subrounded GRAVEL, trace FINES, poorly sorted, dry
3-5	2	GP	--	20	0.0	0-20": Orange-brown, coarse to medium SAND, some fine GRAVEL, subrounded to subangular, poorly sorted, dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: approx. 5" to 7" thick concrete at grade

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Project No.: 1852 **Boring No.:** I40B05
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 20, 2000

Geologist: Keith Robbins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 20, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	20	0.0	12"-24": Dark brown, fine to coarse SAND, trace SILT 24"-36": Brown-light brown, coarse to medium SAND, some fine subounded GRAVEL, dry
3-5	2	GP	--	24	0.0	0-24": Brown-light orange, medium to coarse SAND, trace to little fine angular GRAVEL, trace FINES, well sorted, dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:

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Project No.: 1852 **Boring No.:** I40B06
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 20, 2000

Geologist: Keith Robbins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 20, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	20	0.0	0-20": Dark brown-orange, silty SAND, moist, trace coal black fragment FILL, some subrounded GRAVEL, trace clay, slightly cohesive
3-5	2	GP	--	22	0.0	0-22": Tan, coarse to medium SAND and angular fine GRAVEL, trace fine SANDS, poorly sorted, loose, dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: approx. 5" to 7" thick concrete at grade

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Project No.: 1852 **Boring No.:** I41B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 16, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 16, 2000

Boring Completion Depth: 4 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	8	2.4	0-8": Light brown to tan, fine SAND, trace GRAVEL
2-4	2	GP	--	18	3.6	0-18": Light brown to tan, fine SAND, trace GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 4" thick concrete at grade

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Project No.: 1852 **Boring No.:** I41B02
Project Location: Bethpage, NY **Sheet** 1 of 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 13, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 13, 2000

Boring Completion Depth: 7 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	18	0.0	0-18": Tan, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor
3-7	2	GP	--	20	0.0	0-20": Tan to orange-brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** I41B03
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 13, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 13, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	18	0.0	0-18": Brown, SILT and fine to coarse SAND, trace fine to coarse GRAVEL, dry, no odor
4-5	2	GP	--	4	0.0	0-2": Brown, SILT and fine to coarse SAND, trace fine to coarse GRAVEL, dry, no odor 2"-3": Brown, SILT and fine to medium SAND, moist, no odor 3"-4": Creosoted wood

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Void noted during probing from 3'-4' below grade. Three attempts with refusals noted at 5' below grade.

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Project No.: 1852 **Boring No.:** I41B04
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 13, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 13, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
1-3	1	GP	--	24	0.0	0-4": Brown, fine to medium SAND, trace SILT, dry, no odor 4"-11": Brown, SILT, trace fine SAND, dry, no odor 11"-24": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to medium GAVEL, dry, no odor
3-5	2	GP	--	24	0.0	0-24": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to medium GAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 5" thick concrete at grade

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Project No.: 1852 **Boring No.:** I41B05
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 13, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 13, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample		Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
	Sample No.	Type				
1-3	1	GP	--	24	0.0	0-24": Brown, SILT, little fine to medium SAND, occasional fine to medium GRAVEL, dry, no odor
3-5	2	GP	--	16	0.0	0-9": Brown, SILT, little fine to medium SAND, occasional fine to medium GRAVEL, dry, no odor 9"-16": Brown, SILT and fine SAND, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** I42B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 19, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 19, 2000

Boring Completion Depth: 10 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample		Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
	Sample No.	Type				
8-10	1	GP	--	24	0.0	0-24": Light brown-tan-orange, SAND and GRAVEL, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 4" thick concrete beneath wood block floor. Boring advanced manually to target beneath former dry well. Refusal encountered at 10' below grade.

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Project No.: 1852 **Boring No.:** I43B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 20, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 20, 2000

Boring Completion Depth: 16 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
8-10	1	GP	--	12	0.0	0-7": Dark brown/black SILTY stained SAND and GRAVEL
						7"-12": Dark brown/tan SAND and GRAVEL, moist, no odor
10-12	2	GP	--	6	0.0	0-6": Dark brown/tan SAND and GRAVEL, moist, no odor
12-14	3	GP	--	--	0.0	Dark brown/black stained SAND and GRAVEL, no odor
14-16	4	GP	--	18	0.0	0-9": Dark brown stained SAND and GRAVEL
						9"-18": Brown/tan SAND and GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target a former dry well backfilled to grade.

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Project No.: 1852 **Boring No.:** I43B01A
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 28, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 28, 2000

Boring Completion Depth: 14 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
10-12	1	GP	--	6	3.2	0-6": Dark brown with black stained SILTY moist SAND and GRAVEL, no odor
12-14	2	GP	--	6	2.8	0-6": Dark brown SAND and GRAVEL, moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target a former dry well backfilled to grade. Refer to soil boring I43B01 for other samples (8'-14' continuous) collected at this location.

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Project No.: 1852 **Boring No.:** I43B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 20, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 20, 2000

Boring Completion Depth: 15 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
11-13	1	GP	--	18	0.5	0-6": Dark brown/black stined SILTY sludge, wet
						6"-18": Dark brown/tan SAND and GRAVEL, moist, slight stained black
13-15	2	GP	--	15	12.0	0-15": Black SILTY/CLAYEY sludge, moist, petroleum odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target a former dry well backfilled to grade. Void encountered from approx. 8' to 11' below grade. Refusal encountered at 15' below grade.

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Project No.: 1852 **Boring No.:** I43B02A
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 27, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 27, 2000

Boring Completion Depth: 21 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
15-17	1	GP	--	14	2.0	0-14": Brown to tan SAND and GRAVEL, moist, no odor
17-19	2	GP	--	24	1.7	0-24": Brown to tan SAND and GRAVEL, slightly moist, no odor
19-21	3	GP	--	24	0.0	0-24": Light brown to tan SAND and GRAVEL, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target a former dry well backfilled to grade. Refer to soil boring I43B02 for shallow samples (11'-13' and 13'-15') collected at this location.

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Project No.: 1852 **Boring No.:** E43B02/I05B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 12, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 12, 2000

Boring Completion Depth: 16 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-10	1	GP	--	46	0.0	0-6": Orange-brown, fine to medium SAND, trace SILT, dry, no odor 6"-10": Brown, SILT, little fine to medium SAND, trace fine to medium GRAVEL, dry no odor, occasional asphalt pieces 10"-46": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
10-14	2	GP	--	38	0.0	0-38": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
14-16	3	GP	--	20	0.0	0-20": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:

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Project No.: 1852 **Boring No.:** I44B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 20, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 20, 2000

Boring Completion Depth: 8 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
4-6	1	GP	--	18	0.0	0-24": Light brown-tan-orange, SAND and GRAVEL, no odors
6-8	2	GP	--	16	0.0	0-24": Light brown-tan-orange, SAND and GRAVEL, no odors

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring advanced through the bottom of a 2'-3" deep backfilled concrete pit with a 9" thick concrete bottom and a 5" thick concrete floor slab at grade

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Project No.: 1852 **Boring No.:** I45B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 16, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 16, 2000

Boring Completion Depth: 4 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	24	0.0	0-24": Brown to tan SANDY SOIL with GRAVEL
2-4	2	GP	--	18	1.2	0-18": Brown to tan SANDY SOIL with GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 5" thick concrete at grade

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Project No.: 1852 **Boring No.:** I46B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 16, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 16, 2000

Boring Completion Depth: 4 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	8	7.5	0-6": Light brown to tan, fine SAND
2-4	2	GP	--	24	14.5	0-24": Light brown, fine SAND and CLAYEY/SILTY material, little GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 5" thick concrete at grade

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Project No.: 1852 **Boring No.:** I47B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 16, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 16, 2000

Boring Completion Depth: 4 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	18	1.5	0-18": Brown to tan, SAND and GRAVEL
2-4	2	GP	--	24	0.0	0-24": Light brown to tan, fine SAND wih GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** I47B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 16, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 16, 2000

Boring Completion Depth: 4 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample		Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
	Sample No.	Type				
0-2	1	GP	--	24	0.0	0-24": Light brown to tan, very fine SAND, trace GRAVEL with CLAYEY/SILTY material
2-4	2	GP	--	24	2.4	0-24": Light brown to tan, SAND, little GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 6" thick concrete at grade

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Project No.: 1852 **Boring No.:** E01B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 17, 2000

Geologist: Keith Robins
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 17, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
12-14	1	GP	--	24	0.0	0-12": Brown-orange coarse to medium SAND and fine to medium GRAVEL
						12"-24": Tan fine to medium well sorted SAND, damp
14-16	2	GP	--	20	0.0	0-20": Light brown-tan coarse to medium SAND, little GRAVEL, dry
16-18	2	GP	--	20	0.0	0-20": Brown-light orange coarse SAND and fine to coarse subrounded-subangular GRAVEL, damp
18-20	3	GP	--	24	0.0	0-6": Brown-orange coarse to medium SAND, little fine GRAVEL
						6"-12": Dark brown fine to coarse SAND, trace to little GRAVEL
						12"-15": Brown-orange gravelly coarse SAND
						15"-24": Tan fine SAND, trace fine GRAVEL
20-22	3	GP	--	20	0.0	0-20": Brown-tan coarse to medium SAND, little coarse to fine GRAVEL, damp-dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target backfilled former leaching pool.

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Project No.: 1852 **Boring No.:** E01B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 9, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 9, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
12-16	1	GP	–	46	0.0	0-15": Orange-brown, fine to medium SAND, little SILT, 0-9" moist, 9"-15" wet, no odor 15"-18": Back SILT and CLAY, moist, no odor 18"-46": Tan to orange-brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL
16-20	2	GP	–	30	0.0	0-30": Tan to orange-brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL
20-22	3	GP	–	23	0.0	0-23": Tan to orange-brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within backfilled former leaching pool which was "open' to 4.5' below grade

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Project No.: 1852 **Boring No.:** E01B03
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 9, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 9, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
12-16	1	GP	--	43	0.0	0-4": Gray-brown SILT and fine to medium SAND, wet, no odor
						4"-43": Tan-brown, fine to coarse SAND, trace SILT,
						occasional fine to coarse GRAVEL, moist, no odor
16-20	2	GP	--	41	0.0	0-41": Tan-brown, fine SAND, trace SILT, occasional
						fine to coarse GRAVEL, moist, no odor
20-22	3	GP	--	22	0.0	0-22": Tan-brown, fine SAND, trace SILT, occasional
						fine to coarse GRAVEL, moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within backfilled former leaching pool which was "open' to 3' below grade

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Project No.: 1852 **Boring No.:** E01B04
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 9, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 9, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
12-16	1	GP	--	48	0.2	0-9": Orange-brown SILT and fine to medium SAND, dry, no odor
						9"-15": Black SILT and CLAY, trace fine to medium SAND, dry, no odor
						15"-48": Brown, fine to coarse SAND, trace SILT,
						trace to little fine to coarse GRAVEL, dry, no odor
16-20	2	GP	--	34	0.0	0-34": Brown, fine to coarse SAND, trace SILT,
						trace to little fine to coarse GRAVEL, dry, no odor
20-22	3	GP	--	21	0.0	0-21": Brown, fine to coarse SAND, trace SILT, trace to little
						fine to coarse GRAVEL, moist to very moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within backfilled former leaching pool which was "open' to 4' below grade

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Project No.: 1852 **Boring No.:** E01B05
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 9, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 9, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
12-16	1	GP	--	45	0.0	0-22": Brown to tan-brown SILT and fine to medium, dry to moist, trace fine to medium GRAVEL, no odor 22"-45": Tan, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
16-20	2	GP	--	48	0.0	0-48": Tan, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
20-22	3	GP	--	24	0.0	0-24": Tan, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within backfilled former leaching pool which was "open' to 3' below grade

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Project No.: 1852 **Boring No.:** E01B06
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 11, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Auger
Drive Hammer Weight: N/A
Date Completed: October 11, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
12-14	1	SS	–	6	0.0	0-6": Tan-brown coarse to fine SAND, some fine to coarse GRAVEL, damp
14-16	2	SS	–	12	0.0	0-12": Tan-light brown fine to coarse SAND, little fine GRAVEL, well sorted, dry
16-18	3	SS	–	15	0.0	0-15": Tan-brown coarse to medium SAND, some fine to coarse GRAVEL, trace fine SAND, damp-dry
18-20	4	SS	–	18	0.0	0-18": Tan-brown fine to coarse SAND, some fine to coarse GRAVEL, dry-damp, poorly sorted
20-22	5	SS	–	20	0.0	0-20": Tan fine well rounded SAND well sorted, trace SILT, trace GRAVEL, damp-c

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within backfilled former settling tank.

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Project No.: 1852 **Boring No.:** E01B07
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 11, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Auger
Drive Hammer Weight: N/A
Date Completed: October 11, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
12-14	1	SS	--	6	0.0	0-6": Brown-light orange fine to coarse SAND, some fine GRAVEL, dry
14-16	2	SS	--	3	0.0	0-3": Brown-orange coarse to medium SAND, some fine to coarse GRAVEL, dry
16-18	3	SS	--	12	0.0	0-12": Tan fine to coarse SAND, some fine GRAVEL, trace orange-dark red coarse SAND
18-20	4	SS	--	--	--	Dark brown-brown coarse to fine SAND, some fine to coarse GRAVEL, damp
20-22	5	SS	--	--	--	Tan-light brown fine to medium SAND, trace fine GRAVEL, trace dark very fine SAND, SILT, damp

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within backfilled former settling tank.

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Project No.: 1852 **Boring No.:** E01B08
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 10, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Auger
Drive Hammer Weight: N/A
Date Completed: October 10, 2000

Boring Completion Depth: 26 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
16-18	1	SS	--	3	0.0	0-3": Dark brown fill
18-20	2	SS	--	20	0.0	0-12": Brown coarse SAND and fine to coarse GRAVEL, trace dark brown-red generally SAND
						12"-20": Tan very fine well sorted SAND, damp
20-22	3	SS	--	--	0.0	Tan well sorted fine SAND, little to trace drk brown SILT
22-24	4	SS	--	20	0.0	0-20": Brown-dark brown fine to medium SAND, some fine GRAVEL, trace SILT, damp, trace coarse SAND
24-26	5	SS	--	20	0.0	0-20": Tan-light brown fine to medium SAND with dark brown-red horizontal banning of fine SAND (iron), brown-gray very moist SILT at 25.5'-26'

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within backfilled former settling tank.

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Project No.: 1852 **Boring No.:** E01B09
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 10, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Auger
Drive Hammer Weight: N/A
Date Completed: October 10, 2000

Boring Completion Depth: 26 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample				PID (ppm)	Lithology Description
	Sample No.	Type	Blows (Per 6")	Rec. (inches)		
16-18	1	SS	--	12	0.0	0-12": Brown coarse SAND and fine to coarse GRAVEL, trace cobbles, poorly sorted, damp
18-20	2	SS	--	15	0.0	0-15": Tan-light brown, fine to coarse SAND, little fine to coarse GRAVEL, trace dark brown-red coarse damp SAND at 18.5'
20-22	3	SS	--	18	0.0	0-18": Tan-light orange fine to medium SAND, little fine GRAVEL, trace dark brown fine SAND, trace SILT, damp
22-24	4	SS	--	20	0.0	0-15": Tan-light brown very fine SAND, little SILT 15"-20": Brown-gray very fine SAND to SILT, damp
24-26	5	SS	--	--	0.0	Brown-light brown fine SAND, some SILT, trace coarse SAND, damp

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within backfilled former settling tank.

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Project No.: 1852 **Boring No.:** E01B11
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 10, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 10, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
12-16	1	GP	--	43	0.2	0-11": Orange-brown, fine-medium SAND, little SILT, dry 0-6", wet 6"-9", no odor
						11"-19": Gray-brown SILT and fine to medium SAND,
						trace fine GRAVEL, dry to moist, no odor
						19"-43": Tan, fine to coarse SAND, trace SILT,
						little fine to medium GRAVEL, dry, no odor
16-20	2	GP	--	40	0.1	0-40": Tan, fine to coarse SAND, trace SILT,
						little fine to medium GRAVEL, moist, no odor
20-22	3	GP	--	20	0.1	0-6": Tan, fine to coarse SAND, trace SILT,
						little fine to medium GRAVEL, wet, no odor
						6"-20": Orange-brown, fine to medium SAND and SILT, moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within backfilled former leaching pool which was "open' to 3' below grade

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Project No.: 1852 **Boring No.:** E01B12
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 13, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Auger
Drive Hammer Weight: N/A
Date Completed: October 13, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
12-14	1	SS	--	24	0-1	0-3": Black SILTY-SLUDGE, slight odor, wet with some GRAVEL
						3"-24": Tan-orange-brown coarse to medium SAND and angular GRAVEL, poorly sorted, damp
14-16	2	SS	--	20	0.0	0-20": Brown medium to fine SAND, trace SILT, trace GRAVEL, wet-moist
16-18	3	SS	--	12	0.0	0-12": Brown-tan coarse to medium SAND, very moist, some GRAVEL
18-20	4	SS	--	12	0.0	0-12": Brown-orange fine to medium SAND, trace fine GRAVEL, well sorted, damp
20-22	5	SS	--	24	0.0	0-24": Tan-brown fine SAND, trace brown-gray SILT, moist

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within former leaching pool which is "open" to 12' below grade.

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Project No.: 1852 **Boring No.:** E01B13
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 13, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Auger
Drive Hammer Weight: N/A
Date Completed: October 13, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
12-14	1	SS	--	24	0.0	0-6": Black dark SILT-SLUDGE material, slight unknown odor
						6"-24": Brown coarse SAND & abundant medium to coarse GRAVEL, very moist
14-16	2	SS	--	24	0.0	0-24": Tan-brown coarse to medium SAND, some fine
						to coarse subangular GRAVEL, trace FINES, poorly sorted
16-18	3	SS	--	--	0.0	Brown coarse to medium SAND, trace SILT, some
						fine to medium GRAVEL, moist-wet
18-20	4	SS	--	--	0.0	Brown coarse to medium SAND, trace SILT, some
						fine to medium GRAVEL, moist-wet
20-22	5	SS	--	20	0.0	0-20": Orange-tan fine to medium well sorted SAND, trace coarse SAND,
						trace SILT, damp-moist

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within backfilled former leaching pool.

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Project No.: 1852 **Boring No.:** E01B14
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 9, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 9, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample		Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
	Sample No.	Type				
12-16	1	GP	--	40	0.0	0-18": Orange-brown, fine to medium SAND, little SILT, dry, no odor
						18"-20": Gray-brown, fine to medium SAND, little SILT, dry, no odor
						20"-40": Brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
16-20	2	GP	--	39	0.0	0-39": Brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
20-22	3	GP	--	24	0.0	0-24": Brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within backfilled former leaching pool which was "open' to 2' below grade

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Project No.: 1852 **Boring No.:** E02B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 29, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 29, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
10-12	1	SS	--	12	0.0	0-12": Dark brown coarse to medium SAND, some subangular-subrounded GRAVEL, damp-moist, trace SILT
12-14	2	SS	--	6	0.0	0-6": Tan-brown coarse SAND, some subrounded GRAVEL, very moist
14-16	3	SS	--	3	0.0	0-3": Brown moist coarse SAND, fine GRAVEL
16-18	4	SS	--	15	0.0	0-12": Tan coarse and abundant fine to medium subrounded GRAVEL, lose 12"-15": Tan fine SAND, trace medium to coarse SAND, dry
18-20	5	SS	--	18	0.0	0-18": Tan fine to medium SAND, trace fine GRAVEL, well sorted, dry
20-22	6	SS	--	18	0.0	0-18": Tan coarse to medium SAND, some fine GRAVEL-crushed GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 9" thick asphalt at grade.
Boring conducted within backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E02B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 27, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 27, 2000

Boring Completion Depth: 16 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-8	1	SS	--	12	0.0	0-12": Dark brown SAND and GRAVEL, trace asphalt pieces
8-10	2	SS	--	2	0.0	0-2": Dark brown wet coarse SAND
10-12	3	SS	--	6	0.0	0-6": Dark brown medium to coarse SAND, fine GRAVEL, trace SILT, wet-moist
12-14	4	SS	--	6	0.0	0-6": Tan-brown coarse to medium SAND and GRAVEL
14-16	5	SS	--	6	0.0	0-6": Tan-brown coarse to medium SAND and fine GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 5" thick asphalt and 7" stone at grade.
Boring conducted within backfilled leaching pool .

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Project No.: 1852 **Boring No.:** E02B03
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 29, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 29, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
10-12	1	SS	--	20	0.0	0-20": Dark brown-light black coarse to medium moist to damp SAND, trace SILT, poorly sorted, some GRAVEL, loose
12-14	2	SS	--	14	0.0	0-6": Damp-very moist black-dark brown SAND, trace CLAY pieces, fine GRAVEL 6"-14": Brown-light orange SAND, fine GRAVEL, trace iron
14-16	3	SS	--	6	0.0	0-6": Brown-tan coarse SAND, some fine GRAVEL, trace dark brown gravelly SAND
16-18	4	SS	--	20	0.0	0-15": Tan-light brown coarse to medium SAND and fine GRAVEL 15"-20": Tan fine SAND, dry
18-20	5	SS	--	20	0.0	0-20": Tan fine to medium subrounded SAND, trace fine GRAVEL, well sorted, dry-damp
20-22	6	SS	--	18	0.0	0-12": Tan-light brown coarse to medium SAND, some fine GRAVEL 12"-18": Brown SILT, some fine SAND, damp

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 12" thick asphalt at grade.
Boring conducted within backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E02B04
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 29, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 29, 2000

Boring Completion Depth: 26 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-8	1	SS	--	6	0.0	0-6": Dark brown medium to coarse SAND, trace fine GRAVEL
8-10	2	SS	--	0	0.0	No recovery - probably backfill soil material
10-12	3	SS	--	0	0.0	No recovery - probably backfill soil material
12-14	4	SS	--	6	0.0	0-6": Tan-light brown coarse SAND and subrounded GRAVEL, poorly sorted, dry
14-16	5	SS	--	8	0.0	0-8": Tan-light brown coarse SAND and alot fine to medium GRAVEL, poorly sorted, damp
16-18	6	SS	--	20	0.0	0-6": Brown-light orange coarse to medium SAND and fine to coarse GRAVEL, poorly sorted, trace FINES, dry-damp
18-20	7	SS	--	15	0.0	0-15": Tan fine to medium well sorted SAND, trace brown SILT at 18', trace fine subrounded GRAVEL
20-22	8	SS	--	15	0.0	0-15": Tan fine to medium well sorted SAND, trace fine GRAVEL, trace coarse SAND, dry-damp
22-24	9	SS	--	24	5.0	0-12.5": Tan fine to medium SAND 12.5"-24": Brown-black SILT and very fine SAND
24-26	10	SS	--	20	5.0	0-10": Tan-brown fine SAND/SILT, trace black SILT, dry 10"-20": Brown-orange-tan fine SAND, trace fine GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 17" thick asphalt at grade.
Boring conducted within backfilled leaching pool which is "open" to 1' below grade.

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Project No.: 1852 **Boring No.:** E03B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 10, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 10, 2000

Boring Completion Depth: 24 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
8-12	1	GP	--	19	0.1	0-19": Brown SILT and fine to medium SAND, trace fine GRAVEL, moist, no odor
12-16	2	GP	--	18	0.1	0-18": Brown SILT and fine to medium SAND, trace fine GRAVEL, moist, no odor
16-20	3	GP	--	24	0.1	0-3": Brown SILT and fine to medium SAND, trace fine GRAVEL, moist, no odor 3"-9": Black SILT and CLAY, dry, no odor 9"-13": Gray-black, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor 13"-24": Tan-brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor
20-24	4	GP	--	46	0.1	0-8": Tan-brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor 8"-17": Tan SILT and fine to medium SAND, dry, no odor 17"-38": Tan, fine-medium SAND, little SILT, occ. iron banding, dry, no odor 38"-46": Tan to orange-brown, fine to coarse SAND, trace SILT, trace fine GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:

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Project No.: 1852 **Boring No.:** E03B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 10, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 10, 2000

Boring Completion Depth: 24 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
8-12	1	GP	--	22	0.0	0-22": Brown SILT and fine to medium SAND, trace fine GRAVEL, moist, no odor
12-16	2	GP	--	18	0.1	0-3": Brown SILT and fine to medium SAND, trace fine GRAVEL, moist, no odor 3"-9": Black SILT and CLAY, moist, no odor 9"-18": Gray-brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odor
16-20	3	GP	--	31	0.1	0-31": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odor
20-24	4	GP	--	48	0.1	0-24": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odor 24"-48": Tan, fine to medium SAND, little SILT, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Former backfilled leaching pool cover located approx. 8" below grade.

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Project No.: 1852 **Boring No.:** E04B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 12, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 12, 2000

Boring Completion Depth: 20 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
8-12	1	GP	–	46	0.0	0-18": Gray-brown SILT and CLAY, trace fine SAND, dry, no odor 18"-46": Orange-brown, fine to coarse SAND, trace SILT, some fine to coarse GRAVEL, dry, no odor
12-16	2	GP	–	40	0.0	0-40": Tan to orange-brown, fine to coarse SAND, trace SILT, some fine to coarse GRAVEL, dry, no odor
16-20	3	GP	–	41	0.0	0-41": Tan to orange-brown, fine to coarse SAND, trace SILT, some fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:

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Project No.: 1852 **Boring No.:** E06B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 2, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: October 2, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
8-10	1	SS	--	15	0.0	0-15": Tan well sorted fine to medium SAND, trace fin GRAVEL, dry-damp
10-12	2	SS	--	12	0.0	0-12": Brown-light orange medium to coarse SAND, little fine to medium GRAVEL, dry
12-14	3	SS	--	12	0.0	0-12": Tan-light brown coarse SAND and abundant fine to coarse subrounded GRAVEL, poorly sorted
14-16	4	SS	--	12	0.0	0-12": Tan-light brown coarse SAND, abundant fine to coarse angular-subrounded GRAVEL, poorly sorted, damp
16-18	5	SS	--	18	0.0	0-18": Tan fine to medium well sorted SAND, little white-rose color fine GRAVEL
18-20	6	SS	--	18	0.0	0-18": Tan-light brown fine to medium SAND, trace fine GRAVEL, coarse SAND, well sorted, damp
20-22	7	SS	--	15	0.0	0-18": Tan-brown fine to medium SAND, trace to little fine to medium GRAVEL, trace SILT, trace coarse SAND, well sorted, damp-dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:
Boring conducted to target backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E06B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 2, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: October 2, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
8-10	1	SS	--	12	0.0	0-12": Tan-brown-orange coarse to fine SAND, some fine to medium subrounded GRAVEL, dry-damp, poorly sorted at 8'-9'
10-12	2	SS	--	15	0.0	0-3": Crushed rock 3"-5": Dark brown SAND and GRAVEL 5"-15": Tan fine to coarse SAND, some fine-medium crushed GRAVEL, dry-damp
12-14	3	SS	--	15	0.0	0-15": Tan-light brown coarse SAND and abundant fine to medium subrounded-subangular GRAVEL, trace FINES, poorly sorted, dry
14-16	4	SS	--	20	0.0	0-20": Light brown coarse SAND and abundant fine to medium GRAVEL, subrounded-subangular, poorly sorted, trace fine-medium SAND, damp-moist
16-18	5	SS	--	15	0.0	0-15": Light brown coarse to medium SAND, some fine to coarse GRAVEL, poorly sorted, some crushed white stone, dry-damp, trace fine SAND
18-20	6	SS	--	6	0.0	0-6": Tan coarse to medium SAND, little white subrounded GRAVEL, trace fine SAND at 20'
20-22	7	SS	--	20	0.0	0-20": Light brown fine SAND, trace to little coarse SAND, little fine to medium GRAVEL, damp to moist

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:
Boring conducted to target backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E06B03
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 2, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: October 2, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
8-10	1	SS	--	12	0.0	0-12": Brown-light orange coarse SAND and fine to coarse GRAVEL angular-subrounded GRAVEL, poorly sorted, trace fine SAND, dry-damp
10-12	2	SS	--	15	0.0	0-12": Brown-tan coarse to medium SAND, some fine to coarse subrounded GRAVEL, poorly sorted, dry
12-14	3	SS	--	12	0.0	0-12": Tan coarse to fine SAND and fine to coarse GRAVEL, dry
14-16	4	SS	--	15	0.0	0-6": Tan-light brown fine to coarse SAND, little to trace GRAVEL 6"-15": Lt brown white crushed dry GRAVEL, coarse SAND, poorly sorted, trace fine
16-18	5	SS	--	12	0.0	0-12": Tan fine to coarse SAND, some white crushed GRAVEL, dry
18-20	6	SS	--	6	0.0	0-6": Tan fine to coarse SAND, trace to little fine to coarse GRAVEL, well sorted, damp-dry, contains more GRAVEL at 19'-20'
20-22	7	SS	--	20	0.0	0-20": Tan well sorted fine to medium SAND, trace SILT, trace fine GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:
Boring conducted to target backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E06B04
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 5, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: October 5, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
8-10	1	SS	--	6	0.0	0-6": Tan-brown medium to coarse SAND, some to little fine subrounded GRAVEL, dry
10-12	2	SS	--	15	0.0	0-15": Tan-light brown-tan coarse to medium SAND, some fine to coarse GRAVEL, trace dark brown-redish fine SAND
12-14	3	SS	--	24	0.0	0-24": Tan-brown coarse to medium SAND, little fine to coarse GRAVEL, trace dark brown-red very fine SAND, trace SILT at 13.5-14'
14-16	4	SS	--	15	0.0	0-15": Tan-light brown medium to coarse SAND and fine to coarse subrounded GRAVEL, dry-damp
16-18	5	SS	--	12	0.0	0-2": Coarse to fine GRAVEL 2"-10": Tan fine to medium SAND, trace fine to coarse subrounded GRAVEL 10"-12": Tan fine to medium SAND, dry, trace medium GRAVEL
18-20	6	SS	--	12	0.0	0-12": Tan medium to coarse SAND, some to little fine to coarse GRAVEL, trace FINES, dry
20-22	7	SS	--	15	0.0	0-15": Tan-light brown medium to coarse SAND, trace to little fine to coarse GRAVEL, trace fine SAND, damp, well sorted

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: <5" thick asphalt at grade.
Boring conducted to target backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E06B05
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 5, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: October 5, 2000

Boring Completion Depth: 16 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
3-5	1	SS	--	15	0.0	0-6": Brown-light black moist SILTY GRAVEL
						6"-15": Orange-tan coarse to medium SAND, little fine GRAVEL, trace fine SAND
6-8	2	SS	--	15	0.0	0-15": Brown coarse to medium SAND nd crushed subangular GRAVEL,
						trace fine SAND, dry, poorly sorted
8-10	3	SS	--	12	0.0	0-12": Brown-orange coarse to medium SAND
						and fine subrounded GRAVEL, damp
10-12	4	SS	--	15	0.0	0-15": Tan-light brown fine to coarse SAND, some fine to medium GRAVEL,
						more coarse GRAVEL at 11'-12'
12-14	5	SS	--	10	0.0	0-10": Tan-light brown fine to medium SAND, trace SILT,
						some to little fine GRAVEL
14-16	6	SS	--	3	0.0	0-3": Tan coare to medium SAND and fine to coarse GRAVEL, dry,
						large coarse pink GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:
Boring conducted adjacent to existing distribution chamber to target backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E06B06
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 10, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 10, 2000

Boring Completion Depth: 18 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
8-12	1	GP	--	32	--	0-32": Gray-black to orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, moist, no odor
12-16	2	GP	--	27	--	0-27": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, moist, no odor
16-18	3	GP	--	27	--	0-27": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Pool determined to have solid bottom. Boring conducted adjacent to leaching pool which is "open" to 6.5' below grade with approx. 5" water at bottom of pool.

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Project No.: 1852 **Boring No.:** E06B09
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 4, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 4, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample		Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
	Sample No.	Type				
6-10	1	GP	--	33	0.0	0-33": Orange-brown SILT and fine to medium SAND, trace fine to medium GRAVEL, dry, no odor
10-14	2	GP	--	27	0.0	0-13": Orange-brown SILT and fine to medium SAND, trace fine to medium GRAVEL, dry, no odor 13"-27": Orange-brown, fine to coarse SAND, trace SILT, some fine to coarse GRAVEL, dry, no odor
14-18	3	GP	--	43	0.0	0-43": Orange-brown, fine to coarse SAND, trace SILT, some fine to coarse GRAVEL, dry, no odor
18-22	4	GP	--	40	0.0	0-40": Orange-brown, fine to coarse SAND, trace SILT, some fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target former leaching pool. 8" thick concrete at grade followed by 15" of dirt/fill and 4" thick concrete.

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Project No.: 1852 **Boring No.:** E07B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 20, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 20, 2000

Boring Completion Depth: 20 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
10-12	1	SS	--	18	0.0	0-18": Light brown/orange poorly sorted fine to medium SAND, some SILT
12-14	2	SS	--	6	0.0	0-4": Light brown/orange poorly sorted fine to medium SAND, some SILT 4"-6": Dark brown/orange poorly sorted fine to medium SAND, some SILT, slightly moist
14-16	3	SS	--	16	0.0	0-16": Dark brown/orange poorly sorted fine to medium SAND, some SILT, slightly moist
16-18	4	SS	--	14	0.4	0-14": Dark brown/orange poorly sorted fine to medium SAND, some SILT, slightly moist
18-20	5	SS	--	12	0.0	0-12": Dark brown/orange poorly sorted fine to medium SAND, some SILT, slightly moist

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within backfilled leaching pool which is "open" to 1' below grade

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Project No.: 1852 **Boring No.:** E07B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 20, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 20, 2000

Boring Completion Depth: 18 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
10-12	1	SS	--	24	0.0	0-12": Light brown/orange moderately sorted fine to medium SAND, trace GRAVEL 12"-24": Brown/orange fine to medium SAND, some GRAVEL
12-14	2	SS	--	24	0.0	0-24": Brown/orange fine to medium SAND, some GRAVEL
14-16	3	SS	--	24	0.0	0-24": Brown/orange fine to medium SAND, some GRAVEL
16-18	4	SS	--	24	0.0	0-24": Light brown/beige poorly sorted fine to coarse SAND, trace to some GRAVEL

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 8" thick asphalt and1.5' sand fill at grade.
Boring conducted within backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E07B03
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 21, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 21, 2000

Boring Completion Depth: 21 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
11-13	1	SS	--	6	0.0	0-6": Tan-dark brown coarse SAND, some-little subrounded GRAVEL, poorly sorted, dry
13-15	2	SS	--	12	0.0	0-12": Tan coarse SAND and subrounded white GRAVEL, poorly sorted-loose, dry
15-17	3	SS	--	10	0.0	0-10": Tan coarse to medium SAND, little-some fine GRAVEL (1"-2"), dry
17-19	4	SS	--	20	0.0	0-20": Tan medium to coarse SAND and fine subrounded GRAVEL, trace fine SAND, poorly sorted, dry
19-21	5	SS	--	--	--	Tan fine to medium SAND, well sorted, little subrounded GRAVEL, dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 5" thick asphalt and 4'-8" sand fill at grade.
Boring conducted within backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E07B04
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 21, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 21, 2000

Boring Completion Depth: 21 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
11-13	1	SS	--	20	0.0	0-20": Tan coarse to medium subrounded SAND, little fine to medium subrounded GRAVEL, dry
13-15	2	SS	--	22	0.0	0-22": Tan-light brown coarse to medium SAND, some fine to coarse subrounded poorly sorted GRAVEL, trace fines. dry
15-17	3	SS	--	6	0.0	0-6": Crushed white pink stone at top, tan fine to medium SAND, little GRAVEL, trace coarse SAND, dry
17-19	4	SS	--	15	0.0	0-15": Light brown-tan coarse to medium SAND, some fine to coarse GRAVEL, crushed, porly sorted, damp. Brown SILT/fine SAND at 18.5'
19-21	5	SS	--	20	0.0	0-20": Light brown-tan medium to fine SAND well sorted, trace white fine GRAVEL, coarse SAND, damp, trace SILT

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 2" thick asphalt at grade.
Boring conducted within backfilled leaching pool which is "open" to 12" below grade.

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Project No.: 1852 **Boring No.:** E07B05
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 21, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 21, 2000

Boring Completion Depth: 21 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
11-13	1	SS	--	24	0.0	0-24": Tan-light brown medium to coarse SAND, little fine to medium GRAVEL, dry-damp
13-15	2	SS	--	12	0.0	0-12": Light brown medium to coarse SAND, little fine to coarse GRAVEL, dry-damp
15-17	3	SS	--	24	0.0	0-24": Brown-tan medium to coarse SAND, some subrounded GRAVEL, trace dark brown-black SILT and fine SAND at 16.5'
17-19	4	SS	--	--	0.0	Light tan-light brown fine to medium SAND, some subrounded coarse GRAVEL
19-21	5	SS	--	--	0.0	Light tan fine to medium SAND alternating with coarse SAND and fine GRAVEL back into tan fine SAND with dark brown fine SAND and SILT, dry-damp

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 5" thick asphalt at grade.
Boring conducted within backfilled leaching pool which is "open" to 2' below grade.

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Project No.: 1852 **Boring No.:** E07B06
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 22, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 22, 2000

Boring Completion Depth: 21 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
11-13	1	SS	--	20	0.0	0-10": Brown-light orange coarse to medium SAND, some subrounded GRAVEL, moist 10"-20": Tan-gray coarse SAND and subrounded GRAVEL with dark brown moist SAND/SILT
13-15	2	SS	--	12	0.0	0-12": Brown-dark brown moist-wet coarse to medium SAND, fine to coarse GRAVEL, trace SILT
15-17	3	SS	--	18	0.0	0-12": Tan coarse SAND and fine to medium subrounded GRAVEL 12"-18": Tan fine to medium SAND, moist, well sorted
17-19	4	SS	--	15	0.0	0-15": Tan coarse to medium SAND and fine to coarse subrounded GRAVEL, poorly sorted, moist
19-21	5	SS	--	15	0.0	0-15": Light tan-light brown fine to medium SAND, trace fine GRAVEL, damp

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 4" thick asphalt at grade.
Boring conducted within backfilled leaching pool which is "open" to 20" below grade.

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Project No.: 1852 **Boring No.:** E07B07
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Eminglon
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 22, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 22, 2000

Boring Completion Depth: 21 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
11-13	1	SS	--	24	0.0	0-24": Brown-orange medium to coarse well sorted SAND, some fine to coarse subrounded GRAVEL, dry-damp
13-15	2	SS	--	22	0.0	0-22": Brown-orange medium to coarse well sorted SAND, some fine to medium subrounded GRAVEL, damp
15-17	3	SS	--	6	0.0	0-6": Brown-orange medium to coarse SAND, little fine GRAVEL, damp
17-19	4	SS	--	6	0.0	0-6": Tan-light brown coarse to medium SAND and subrounded-subangular GRAVEL, poorly sorted, moist
19-21	5	SS	--	15	0.0	0-15": Tan-light brown medium to fine SAND, trace fine GRAVEL at top 19', brown-orange fine SAND (native) at 20.5', well sorted

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 2" thick asphalt and 4" thick concrete at grade. Boring conducted within backfilled leaching pool which is "open" to 1' below grade.

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Project No.: 1852 **Boring No.:** E07B09
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 22, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 22, 2000

Boring Completion Depth: 21 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
11-13	1	SS	--	24	0.0	0-6": Tan-brown coarse SAND 6"-12": Dark brown-black fine to medium SAND and GRAVEL, moist with brown 1" thick SILT 12"-24": Tan-light brown coarse SAND and crushed fine GRAVEL angular, poorly sorted, dry
13-15	2	SS	--	15	0.0	0-15": Brown-orange medium to coarse SAND, some subrounded GRAVEL, dry crushed GRAVEL at top
15-17	3	SS	--	6	0.0	0-6": Orange-brown coarse SAND and subrounded medium GRAVEL, dry, loose
17-19	4	SS	--	18	0.0	0-12": Tan-brown medium to coarse SAND, some fine GRAVEL, damp 12"-18": Tan fine SAND, damp
19-21	5	SS	--	20	0.0	0-8": Tan fine SAND, trace fine GRAVEL, dry 8"-20": Tan coarse-medium SAND, dry, some subrounded GRAVEL, poorly sorted

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 2" thick asphalt at grade.
Boring conducted within backfilled leaching pool which is "open" to 5' below grade.

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Project No.: 1852 **Boring No.:** E07B10
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 22, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 22, 2000

Boring Completion Depth: 21 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
11-13	1	SS	--	15	0.0	0-6": Dark brown-black SAND/GRAVEL, moist-damp
						6"-15": Brown coarse SAND and subrounded crushed GRAVEL, dry, loose
13-15	2	SS	--	24	0.0	0-12": Dark brown coarse SAND and GRAVEL
						12"-24": Tan coarse SAND and crushed white GRAVEL, loose, dry
15-17	3	SS	--	12	1.0	0-12": Dark brown-black-gray coarse SAND and
						fine GRAVEL, wet, slight septic odor
17-19	4	SS	--	20	0.0	0-20": Tan-light brown coarse to medium SAND, some to little fine GRAVEL,
						trace weathered crushed stone, trace FINES and SILT, damp
19-21	5	SS	--	15	1.0	0-20": Tan-light brown coarse to medium SAND, some to little
						fine to medium subrounded GRAVEL, damp

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted within backfilled leaching pool

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Project No.: 1852 **Boring No.:** E07B11
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 25, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 25, 2000

Boring Completion Depth: 21 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
5-7	1	SS	--	24	0.0	0-12.5": Brown-light tan coarse SAND, fine GRAVEL
						12.5"-24": Light tan-dark brown fine SAND, dry
11-13	2	SS	--	18	0.0	0-18": Tan-light brown coarse to medium SAND, some fine GRAVEL, dry
13-15	3	SS	--	12	0.0	0-12": Tan coarse SAND and fine to coarse GRAVEL, loose, dry-damp,
						crushed stone at 15'
15-17	4	SS	--	15	0.0	0-15": Tan medium to coarse SAND, some fine subrounded GRAVEL, dry-damp
17-19	5	SS	--	3	0.0	0-3": Brown fine to coarse SAND and 2" GRAVEL
19-21	6	SS	--	12	0.0	0-12": Tan-orange fine to coarse SAND, some to little fine GRAVEL, damp

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: <2" thick asphalt at grade.
Boring conducted within backfilled leaching pool.
5'-7' fill sample collected for waste characterization.

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Project No.: 1852 **Boring No.:** E07B12
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 25, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 25, 2000

Boring Completion Depth: 21 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
11-13	1	SS	--	18	0.0	0-3": Black-dark brown SILT, trace CLAY, damp 3"-18": Tan-brown coarse SAND, fine to coarse subrounded GRAVEL, dry
13-15	2	SS	--	18	0.0	0-18": Tan-light brown coarse to medium SAND and fine to coarse GRAVEL, poorly sorted, trace dark brown fine SAND, damp
15-17	3	SS	--	10	0.0	0-10": Brown-tan fine to coarse SAND, some coarse subrounded GRAVEL, dry
17-19	4	SS	--	15	0.0	0-15": Tan-light brown fine to coarse SAND, little fine GRAVEL, trace SILT, dry-damp
19-21	5	SS	--	12	0.0	0-12": Tan fine to medium SAND, some to little fine subrounded GRAVEL, well sorted, dry-damp, trace SILT

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 4" thick asphalt at grade.
Boring conducted within backfilled leaching pool which is "open" to 42" below grade.

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Project No.: 1852 **Boring No.:** E07B13
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 25, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 25, 2000

Boring Completion Depth: 21 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
11-13	1	SS	--	12	0.0	0-12": Tan medium to coarse SAND, some to little white subangular GRAVEL, trace SILT, damp, mroe crushed GRAVEL at 12.5" to 24"
13-15	2	SS	--	12	0.0	0-12": Tan-brown fine to coarse SAND and fine to coarse GRAVEL, poorly sorted, dry-damp
15-17	3	SS	--	15	0.0	0-15": Tan-light brown medium to coarse SAND, some fine to medium GRAVEL, trace fine SAND at 12" to 24", dry
17-19	4	SS	--	15	0.0	0-15": Tan-light brown fine to medium SAND, well sorted, little to trace GRAVEL, trace dark brown-red fine to medium SAND, trace SILT, dry
19-21	5	SS	--	24	0.0	0-24": Tan fine to coarse SAND, some fine GRAVEL, damp-dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 3" thick asphalt at grade.
Boring conducted within backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E07B14
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: September 25, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: September 25, 2000

Boring Completion Depth: 20 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
5-7	1	SS	--	15	0.0	0-15": Light orange-light brown medium to coarse SAND, little to some fine GRAVEL, dry
7-9	2	SS	--	20	0.0	0-20": Brown-orange-tan fine to coarse SAND and alot fine subangular GRAVEL, dry, poorly sorted
9-11	3	SS	--	12	0.0	0-12": Tan fine to medium SAND, trace fine GRAVEL, well sorted, trace dark brown fine SAND, trace SILT, dry-damp
11-13	4	SS	--	15	0.0	0-15": Tan-light brown medium to coarse SAND, well sorted, some fine to coarse GRAVEL, crushed angular GRAVEL, dry, more fine GRAVEL at 12'-13'
13-15	5	SS	--	15	0.0	0-6": Brown coarse SAND and fine GRAVEL 6"-8": Dark brown SAND and GRAVEL 8"-15": Tan coarse SAND and fine GRAVEL
16-18	6	SS	--	--	0.0	Brown-dark brown coarse SAND and subangular GRAVEL, poorly sorted, little fine to medium SAND, dry-damp
18-20	7	SS	--	--	0.0	Brown to tan fine to coarse SAND, some fine SAND, some GRAVEL, dry

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 10" thick asphalt at grade.
Boring conducted to target backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E08B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 3, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: October 3, 2000

Boring Completion Depth: 16 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-8	1	SS	--	15	0.0	0-15": Gray-light brown SILT, damp compact trace fine SAND, coarse GRAVEL , very damp-moist
8-10	2	SS	--	12	0.0	0-12": Gray -light brown SILT, trace GRAVEL 12"-24": Brown-light orange fine-coarse SAND, some fine to coarse GRAVEL, dry
10-12	3	SS	--	12	0.0	0-12": Tan-light brown-orange coarse SAND and fine to coarse GRAVEL, poorly sorted, dry
12-14	4	SS	--	12	0.0	0-12": Tan-light brown coarse SAND, some fine to coarse GRAVEL, trace fine to medium SAND, damp
14-16	5	SS	--	20	0.0	0-20": Tan-light brown medium to coarse SAND, some fine to coarse GRAVEL, subangular, crushed, dry, poorly sorted

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:
Boring conducted to target backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E08B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 3, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: October 3, 2000

Boring Completion Depth: 16 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-8	1	SS	--	22	0.0	0-22": Grayish-brown SILT, trace CLAY, compacted trace coarse SAND and fine GRAVEL
8-10	2	SS	–	24	0.0	0-24": Brown-orange coarse to fine SAND, some fine to coarse GRAVEL, poorly sorted, dry
10-12	3	SS	–	24	0.0	0-24": Tan-light brown coarse SAND and abundant fine to coarse GRAVEL, loose, poorly sorted, dry-damp
12-14	4	SS	–	20	0.0	0-20": Tan-light brown coarse to medium SAND, some fine to coarse GRAVEL, poorly sorted, trace FINES, damp
14-16	5	SS	–	15	0.0	0-15": Tan-light brown coarse to fine SAND, little to some GRAVEL, subrounded, dry-damp

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:
Boring conducted to target backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E08B03
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 3, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: October 3, 2000

Boring Completion Depth: 16 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-8	1	SS	--	15	0.0	0-22": Brown-orange coarse to fine SAND, some to little fine GRAVEL, trace SILT, dry
8-10	2	SS	--	20	0.0	0-20": Brown-orange medium to coarse SAND, little to some fine to coarse GRAVEL, dry
10-12	3	SS	--	15	0.0	0-10": Brown-orange medium to coarse SAND, trace GRAVEL, trace dark brown SILT 10"-15": Tan-light brown coarse to medium SAND and angular white GRAVEL, dry
12-14	4	SS	--	6	0.0	0-6": Tan-light brown coarse to medium SAND, little fine to coarse GRAVEL
14-16	5	SS	--	20	0.0	0-20": Tan-light brown coarse SAND and fine to coarse GRAVEL, poorly sorted, loose, subangular-subrounded

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:
Boring conducted to target backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E08B04
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 4, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: October 4, 2000

Boring Completion Depth: 16 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-8	1	SS	–	0	–	Soft material, no recovery
8-10	2	SS	–	0	–	Soft material, no recovery
10-12	3	SS	–	6	–	0-6": Brown-orange coarse SAND, very moist, poorly sorted with GRAVEL, soft
12-14	4	SS	–	2	–	0-2": Brown-orange coarse SAND, fine GRAVEL
14-16	5	SS	–	–	–	Tan coarse SAND and fine GRAVEL, subangular

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:
Boring conducted to target backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E08B05
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 4, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: October 4, 2000

Boring Completion Depth: 24 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	OVA (ppm)	Lithology Description
6-8	1	SS	--	6	0.0	0-6": Brown-gray SILTY SAND, little fine GRAVEL, moist, trace black fine SILT
8-12	2	SS	--	0	--	Void
12-14	3	SS	--	6	0.0	0-3": Dark brown soil 3"-6": Brown-orange coarse SAND, fine GRAVEL, dry
14-16	4	SS	--	20	0.0	0-20": Tan coarse SAND and fine poorly sorted GRAVEL, fine to medium SAND at bottom of sample interval
16-18	5	SS	--	6	0.0	0-6": Tan well sorted fine to medium SAND, trace coarse SAND, dry
18-20	6	SS	--	16	0.0	0-6": Tan well sorted fine to medium SAND and fine to coarse GRAVEL, poorly sorted, subrounded-subangular, damp
20-22	7	SS	--	15	0.0	0-15": Tan coarse to fine SAND, little fine to medium GRAVEL
22-24	8	SS	--	18	0.0	0-18": Tan-light brown coarse to fine SAND, little fine to coarse GRAVEL, 3 " trace dark brown CLAY seam at 23.5'

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:
Boring conducted to target backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E08B06
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 4, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: October 4, 2000

Boring Completion Depth: 16 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	OVA (ppm)	Lithology Description
6-8	1	SS	--	3	0.0	0-3": Brown-orange coarse SAND and fine GRAVEL
8-10	2	SS	--	12	0.0	0-12": Brown-orange coarse to medium SAND, some fine to coarse subrounded GRAVEL, loose, soft compaction
10-12	3	SS	--	15	0.0	0-15": Brown-orange coarse SAND, some subrounded GRAVEL
12-14	4	SS	--	20	0.0	0-10": Brown-orange coarse SAND, fine GRAVEL 10"-20": Tan coarse SAND, fine GRAVEL
14-16	5	SS	--	12	0.0	0-12": Tan coarse SAND and abundant fine to coarse subrounded angular GRAVEL, poorly sorted

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:
Boring conducted to target backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E08B07
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 5, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Augers
Drive Hammer Weight: N/A
Date Completed: October 5, 2000

Boring Completion Depth: 16 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-8	1	SS	--	12	0.0	0-12": Brown-orange coarse to fine SAND, some fine to coarse subrounded GRAVEL, trace SILT, dry-damp, orange well sorted fine SAND at 7.5'-8'
8-10	2	SS	--	20	0.0	0-10": Brown-orange fine to medium SAND, trace SILT, little fine GRAVEL 10"-20": Brown-tan coarse to medium SAND, some fine GRAVEL
10-12	3	SS	--	15	0.0	0-15": Brown-tan coarse to medium SAND and fine GRAVEL, trace fine SAND poorly sorted, dry
12-14	4	SS	--	12	0.0	0-6": Brown-orange medium to coarse SAND, fine to medium GRAVEL 6"-12": Tan coarse SAND in fine GRAVEL
14-16	5	SS	--	20	0.0	0-20": Tan-brown coare to medium SAND, damp, some fine to coarse GRAVEL, trace fine SAND

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: <5" thick asphalt at grade.
Boring conducted to target backfilled leaching pool.

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Project No.: 1852 **Boring No.:** E08B08
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 5, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 5, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-10	1	GP	--	39	0.0	0-15": Orange-brown, fine to medium SAND, little SILT, trace fine to coarse GRAVEL, dry, no odor 15"-26": Gray SILT and fine to medium SAND, trace fine to coarse GRAVEL, occasional asphalt and concrete pieces, dry, no odors 26"-28": Orange-brown, fine to medium SAND, little SILT, trace fine to coarse GRAVEL, dry, no odor 28"-39": Gray SILT and fine to medium SAND, trace fine to coarse GRAVEL, occasional asphalt and concrete pieces, dry, no odors
10-14	2	GP	--	19	0.0	0-3": Gray SILT and fine to medium SAND, trace fine to coarse GRAVEL, occasional asphalt and concrete pieces, dry, no odors 3"-11": Orange-brown, fine to medium SAND, some SILT, trace fine to medium GRAVEL, dry, no odor 11"-14": Asphalt pieces 14"-19": Orange-brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odor
14-18	3	GP	--	36	0.0	0-36": Orange-brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odor
18-20	4	GP	--	20	0.0	0-20": Orange-brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odor
20-22	5	GP	--	23	0.0	0-23": Orange-brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target former leaching pool

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Project No.: 1852 **Boring No.:** E08B09
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 5, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 5, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-10	1	GP	--	43	0.0	0-14": Brown SILT and fine to medium SAND, trace fine to medium GRAVEL, dry, no odor 14"-17": Concrete pieces 17"-43": Brown SILT and fine to medium SAND, trace fine to medium GRAVEL, dry, no odor
10-14	2	GP	--	30	0.0	0-18": Brown SILT and fine to medium SAND, trace fine to medium GRAVEL, dry, no odor 18"-30": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
14-18	3	GP	--	46	0.0	0-46": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
18-20	4	GP	--	23	0.0	0-23": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
20-22	5	GP	--	24	0.0	0-24": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target former leaching pool

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Project No.: 1852 **Boring No.:** E08B10
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 5, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 5, 2000

Boring Completion Depth: 18 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-10	1	GP	--	35	0.0	0-5": Gray-black SILT and fine to medium SAND, trace fine to coarse GRAVEL, trace concrete pieces, dry, no odor 5"-35": Orange-brown to tan, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odor
10-14	2	GP	--	34	0.0	0-34": Tan to brown to orange-brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odor
14-18	3	GP	--	46	0.0	0-46": Tan to brown to orange-brown, fine to coarse SAND, trace SILT, trace fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target former leaching pool

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Project No.: 1852 **Boring No.:** E08B11
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 5, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 5, 2000

Boring Completion Depth: 16 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-10	1	GP	--	43	0.0	0-8": Brown, fine to medium SAND, some SILT, trace fine to coarse GRAVEL, dry, no odor 8"-13": Dark brown SILT, trace fine to medium SAND, dry, no odor 13"-18": Brown, fine to medium SAND, some SILT, trace fine to coarse GRAVEL, dry, no odor 18"-24": Gray-brown, fine SAND and SILT, dry, no odor 24"-43": Orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
10-12	2	GP	--	24	0.0	0-24": Orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
12-14	3	GP	--	22	0.0	0-22": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
14-16	4	GP	--	24	0.0	0-24": Tan to orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target former leaching pool

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Project No.: 1852 **Boring No.:** E08B12
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 5, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 5, 2000

Boring Completion Depth: 20 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-10	1	GP	--	42	0.0	0-18": Tan, fine to medium SAND, some SILT, trace fine to coarse GRAVEL, dry, no odor 18"-26": Concrete pieces (possible leaching pool cover) 26"-42": Orange-brown to tan, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
10-14	2	GP	--	39	0.0	0-16": Orange-brown to tan, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor 16"-30": Concrete pieces and tan fine to coarse SAND 30"-39": Orange-brown to tan, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
14-16	3	GP	--	20	0.0	0-20": Orange-brown to tan, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
16-18	4	GP	--	20	0.0	0-20": Brown-tan to orange, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
18-20	5	GP	--	22	0.0	0-22": Brown-tan to orange, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target former leaching pool

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Project No.: 1852 **Boring No.:** E08B14
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 11, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 11, 2000

Boring Completion Depth: 18 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-10	1	GP	--	47	0.1	0-16": Orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor 16"-39": Gray to brown, SILT, some CLAY, trace fine to medum GRAVEL, dry, no odor 39"-47": Orange-brown, fine to coarse SAND, trace SILT, some fine to coarse GRAVEL, dry, no odor
10-14	2	GP	--	48	0.0	0-48": Tan to orange-brown, fine to coarse SAND, trace SILT, some fine to coarse GRAVEL, dry, no odor
14-16	3	GP	--	27	0.0	0-27": Tan to orange-brown, fine to coarse SAND, trace SILT, some fine to coarse GRAVEL, dry, no odor
16-18	3	GP	--	24	0.0	0-24": Tan to orange-brown, fine to coarse SAND, trace SILT, some fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring targeted backfilled former leaching pool

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Project No.: 1852 **Boring No.:** E09B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 2, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 2, 2000

Boring Completion Depth: 8 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
0-4	1	GP	--	32	0.0	0-3": Brown SILT and fine to medium SAND, trace fine GRAVEL, dry, no odor 3"-29": Brown to orange-brown, fine to medium SAND, trace SILT, trace fine GRAVEL, dry, no odor 29"-32": Brown SILT and fine-medium SAND, trace fine GRAVEL, moist, no odor
4-8	2	GP	--	24	0.0	0-24": Brown SILT and fine to medium SAND, trace fine GRAVEL, moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:

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Project No.: 1852 **Boring No.:** E10B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 12, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Auger
Drive Hammer Weight: N/A
Date Completed: October 12, 2000

Boring Completion Depth: 23 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
13-15	1	SS	--	15	0.0	0-15": Brown-tan medium to coarse SAND, little fine to coarse GRAVEL, trace gray SILTY CLAY, damp
15-17	2	SS	--	12	0.0	0-12": Tan coarse to medium SAND and fine to coarse subrounded-subangular GRAVEL, poorly sorted, damp-dry
17-19	3	SS	--	15	0.0	0-15": Light brown medium to coarse well sorted SAND, trace fine GRAVEL, fine SAND, damp
19-21	4	SS	--	15	0.0	0-15": Light brown-tan fine SAND, trace fine GRAVEL, coarse SAND, well sorted, damp
21-23	5	SS	--	18	0.0	0-18": Brown-tan fine to coarse SAND, some to little fine to medium GRAVEL, damp

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target backfilled former leaching pool.

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Project No.: 1852 **Boring No.:** E10B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: CME-55
Date Started: October 12, 2000

Geologist: Keith Robins
Drilling Method: Hollow Stem Auger
Drive Hammer Weight: N/A
Date Completed: October 12, 2000

Boring Completion Depth: 21 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 8 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
11-13	1	SS	--	15	0.0	0-15": Orange-tan coarse to fine SAND, little fine to medium GRAVEL, damp
13-15	2	SS	--	6	0.0	0-6": Tan coarse SAND and fine to coarse subrounded GRAVEL, poorly sorted, damp, trace medium SAND
15-17	3	SS	--	12	0.0	0-12": Tan fine to coarse SAND and fine to coarse subrounded pea size GRAVEL, dry-damp
17-19	4	SS	--	12	1.0	0-6": Brown-tan coarse to medium SAND and fine GRAVEL, trace fine SAND 6"-12": Light tan very fine SAND, trace SILT, damp
19-21	5	SS	--	15	0.0	0-15": Tan-light brown fine to coarse SAND, little to some medium GRAVEL damp, well sorted

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target backfilled former leaching pool.

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Project No.: 1852 **Boring No.:** E10B03
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 2, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 2, 2000

Boring Completion Depth: 22 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
12-16	1	GP	--	34	0.0	0-1": Gray, fine to coarse SAND, trace SILT little fine to coarse GRAVEL, dry, no odor 1"-34": Orange-brown to tan, fine to coarse SAND, trace SILT little fine to coarse GRAVEL, dry, no odor
16-20	2	GP	--	39	0.0	0-39": Orange-brown to tan, fine to coarse SAND, trace SILT little fine to coarse GRAVEL, dry, no odor
20-22	3	GP	--	--	0.0	Orange-brown to tan, fine to coarse SAND, trace SILT little fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Void from 8'-12' below grade
Boring conducted to target backfilled former leaching pool.

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Project No.: 1852 **Boring No.:** E10B04
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 11, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 11, 2000

Boring Completion Depth: 21 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
11-15	1	GP	--	38	0.0	0-4": Brown-black, SILT and CLAY, dry, no odor
						4"-38": Orange-brown to tan, fine to coarse SAND, trace SILT,
						little fine to coarse GRAVEL, dry, no odor
15-19	2	GP	--	39	0.0	0-39": Orange-brown to tan, fine to coarse SAND, trace SILT,
						little fine to coarse GRAVEL, dry, no odor
19-21	3	GP	--	24	0.0	0-24": Orange-brown to tan, fine to coarse SAND, trace SILT,
						little fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 7" thick concrete encountered 5" below grade.
11' void encountered beneath 7" thick concrete.
Boring conducted to target backfilled former leaching pool.

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Project No.: 1852 **Boring No.:** E10B05
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 2, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 2, 2000

Boring Completion Depth: 18 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample		Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
	Sample No.	Type				
6-10	1	GP	--	24	0.0	0-22": Brown SILT and fine to coarse SAND, trace fine GRAVEL, dry, no odor
						22"-24": Gray-brown SILT and CLAY, moist, no odor
10-14	2	GP	--	35	0.0	0-3": Gray-brown SILT and CLAY, moist, no odor
						3"-35": Orange-brown to tan, fine to coarse SAND, trace SILT,
						little fine to coarse GRAVEL, dry, no odor
14-18	3	GP	--	32	0.0	0-32": Orange-brown to tan, fine to coarse SAND, trace SILT,
						little fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:
Boring conducted to target backfilled former leaching pool.

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Project No.: 1852 **Boring No.:** E10B06
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 2, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 2, 2000

Boring Completion Depth: 18 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
6-10	1	GP	--	12	0.0	0-12": Brown SILT and fine to medium SAND, little fine to medium GRAVEL, dry, no odor
10-14	2	GP	--	30	0.0	0-4": Brown SILT and fine to medium SAND, little fine to medium GRAVEL, dry, no odor 4"-7": Brown-gray SILT and CLAY, dry, no odor 7"-30": Brown to orange-brown, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odor
14-18	3	GP	--	35	0.0	0-35": Tan, fine to coarse SAND, trace SILT, little fine to medium GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: Boring conducted to target backfilled former leaching pool. No cover found.

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Project No.: 1852 **Boring No.:** E10B08
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - **By:** MR
Phase II Site Assessment

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 11, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 11, 2000

Boring Completion Depth: 16 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
6-10	1	GP	--	27	0.1	0-27": Orange-brown, fine to medium SAND, some SILT, occasional fine to medium GRAVEL, dry, no odor
10-14	2	GP	--	45	0.0	0-45": Orange-brown, fine to medium SAND, some SILT, occasional fine to medium GRAVEL, dry, no odor
14-16	3	GP	--	24	0.0	0-24": Orange-brown, fine to medium SAND, some SILT, occasional fine to medium GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: approx. 2" thick concrete encountered at 3' below grade. Boring conducted to target backfilled former leaching pool.

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Project No.: 1852 **Boring No.:** E12B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: October 11, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: October 11, 2000

Boring Completion Depth: 20 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
10-14	1	GP	--	38	0.0	0-38": Orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
14-16	2	GP	--	24	0.1	0-24": Orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
16-18	3	GP	--	20	0.0	0-20": Orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor
18-20	4	GP	--	24	0.0	0-24": Orange-brown, fine to coarse SAND, trace SILT, little fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:

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Project No.: 1852 **Boring No.:** E13B01
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 25, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 25, 2000

Boring Completion Depth: 5 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample				PID (ppm)	Lithology Description
	Sample No.	Type	Blows (Per 6")	Rec. (inches)		
1-3	1	GP	--	20	0.0	0-1": Black SILT and CLAY, trace fine to medium SAND, dry, no odor 2"-19": Brown SILT and CLAY, trace fine to medium SAND, dry, no odor 19"-20": Brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor
3-5	2	GP	--	17	0.0	0-17": Orange-brown, fine to coarse SAND, trace SILT, trace fine to medium GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 5" thick concrete at grade

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Project No.: 1852 **Boring No.:** E13B02
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: September 25, 2000

Geologist: Ken Wenz
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: September 25, 2000

Boring Completion Depth: 4 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample No.	Soil Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	24	0.0	0-5": Gray to brown, fine to medium SAND, trace SILT, dry, no odor
						5"-24": Brown SILT and CLAY, fine to medium SAND, moist, no odor
2-4	2	GP	--	18	0.0	0-7": Brown SILT and CLAY, fine to medium SAND, moist, no odor
						7"-18": Orange-brown, fine to medium SAND, trace SILT,
						trace fine to coarse GRAVEL, dry, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes:

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Project No.: 1852 **Boring No.:** E13B02E8
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 27, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 27, 2000

Boring Completion Depth: 4 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	6	0.0	0-6": Dark brown SILTY CLAYEY material with some GRAVEL, moist, no odor
2-4	2	GP	--	8	0.0	0-8": Dark brown to tan to orange SAND and GRAVEL, moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 3" thick concrete at grade

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Project No.: 1852 **Boring No.:** E13B02E12
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 27, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 27, 2000

Boring Completion Depth: 4 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	8	0.4	0-8": Brown to tan SILTY CLAYEY material with some staining, moist, no odor
2-4	2	GP	--	8	0.2	0-8": Dark brown to tan to orange SAND and GRAVEL, moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 2" thick concrete at grade

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Project No.: 1852 **Boring No.:** E13B02N5
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 27, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 27, 2000

Boring Completion Depth: 4 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	6	0.0	0-6": Brown to tan SILTY CLAYEY SAND and GRAVEL, moist, no odor
2-4	2	GP	--	6	0.0	0-6": Brown to tan SILTY CLAYEY SAND and GRAVEL, moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 4" thick concrete at grade

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Project No.: 1852 **Boring No.:** E13B02NE10
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 27, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 27, 2000

Boring Completion Depth: 4 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Sample Type	Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	6	0.4	0-6": Brown to tan SILTY SANDY soil with GRAVEL, moist, no odor
2-4	2	GP	--	7	0.5	0-7": Brown to tan SILTY SANDY soil with GRAVEL, moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 5" thick concrete at grade

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Project No.: 1852 **Boring No.:** E13B02NE20
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 27, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 27, 2000

Boring Completion Depth: 4 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	8	0.2	0-8": Dark brown SAND and GRAVEL with SILTY CLAY, moist, no odor
2-4	2	GP	--	10	0.0	0-10": Brown SAND and GRAVEL, trace SILTY CLAY, moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 2" thick concrete at grade

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Project No.: 1852 **Boring No.:** E13B02S5
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 27, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 27, 2000

Boring Completion Depth: 4 ft.
Ground Surface Elevation: – ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample: Sample No.	Soil Sample: Sample Type	Soil Sample: Blows (Per 6")	Soil Sample: Rec. (inches)	PID (ppm)	Lithology Description
0-2	1	GP	--	10	0.0	0-6": Brown to tan SAND and GRAVEL, slightly moist, no odor
2-4	2	GP	--	8	0.0	0-8": Brown to tan SAND and GRAVEL, slightly moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: 2" thick concrete at grade

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Project No.: 1852 **Boring No.:** E13B02W12
Project Location: Bethpage, NY **Sheet** 1 **of** 1
Project Name: Plant 1 - Phase II Site Assessment **By:** MR

Drilling Contractor: Emington
Driller: W. Rowland
Drill Rig: Earthprobe
Date Started: December 27, 2000

Geologist: Mark Rauber
Drilling Method: Geoprobe
Drive Hammer Weight: N/A
Date Completed: December 27, 2000

Boring Completion Depth: 4 ft.
Ground Surface Elevation: -- ft.
Boring Diameter: 2 in.

Depth (ft.)	Soil Sample		Blows (Per 6")	Rec. (inches)	PID (ppm)	Lithology Description
	Sample No.	Type				
0-2	1	GP	--	12	0.0	0-12": Brown to tan SAND and GRAVEL, moist, no odor
2-4	2	GP	--	12	0.0	0-12": Brown to tan SAND and GRAVEL, moist, no odor

Sample Type:
SS = Split Spoon HA = Hand Auger GP = Geoprobe
CC = Concrete Core HP = Hydropunch

Notes: